



## MD600 Series Compact AC Drive Parameter Guide



Industrial  
Automation



Intelligent  
Elevator



New Energy  
Vehicle



Industrial  
Robot



Rail  
Transit



Data code 19012531A00

# Preface

## Introduction

The MD600 is a compact, general-purpose, and cost-effective AC drive for small automation equipment. Supporting Modbus RTU and CAN communication protocols, it features a compact size and high-performance open-loop vector control and can drive synchronous and asynchronous motors. The MD600 is widely used in small automation equipment in fields such as crystalline silicon, lithium battery, carpentry, logistics, cables, packaging, and machine tools.

This guide describes the parameter list and fault codes.

## More Data

Name	Data Code	Description
MD600 Series Compact AC Drive Quick Start Guide	19012337	This guide describes the installation and operation, common faults and troubleshooting, and parameter settings of the drive.
MD600 Series Compact AC Drive Hardware Guide	19012234	This guide describes product selection, mechanical design, electrical design, common EMC problems and solutions, and product certifications and standards.
MD600 Series Compact AC Drive Function Guide	19012238	This guide describes the basic function configuration, function application, communication configuration, troubleshooting, and parameters of the drive.
MD600 Series Compact AC Drive User Guide	PS00012434	This guide describes product selection, mechanical design, electrical design, quick installation and operation, function application, communication configuration, troubleshooting, common EMC problems and solutions, and product certifications and standards.

## Revision History

Date	Version	Software version	Description
2025-01-08	A00	Version:A0 Version Tag:A2- 22=L62.04/A2- 23=L62.04/A2- 24=000.00/A2- 25=000.00	First release

## Access To the Guide

This guide is not delivered with the product. You can obtain the PDF version by the following methods:

Do keyword search under Service and Support at <http://www.inovance.com>.

Scan the QR code on the product with your smart phone.

Scan the QR code below to install the app, where you can search for and download manuals.



## Warranty

Inovance provides warranty service within the warranty period (as specified in your order) for any fault or damage that is not caused by improper operation of the user. Maintenance will be charged after the warranty expires.

Within the warranty period, maintenance will be charged for the following damage:

Damage caused by operations not following the instructions in the user guide

Damage caused by fire, flood, or abnormal voltage

Damage caused by unintended use of the product

Damage caused by use beyond the specified scope of application of the product

Damage or secondary damage caused by force majeure (natural disaster, earthquake, and lightning strike)

The maintenance is charged according to the latest Price List of Inovance. If otherwise agreed upon, the terms and conditions in the agreement shall prevail.

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# 1 Parameter List

## F0: Basic Parameters

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-01	Motor control mode	0xF001	Refer to "Value"	2	Unsigned 16 bit	Shutdown change	Standard	-
	Value: 0: SVC 2: V/f							
	Description: It is used to set the motor control mode based on the application scenario and motor type. F0-01 is the mapping of d0-00 (Motor control mode) in group F. The two parameters have the same function.  Value description: 0: SVC, which stands for sensorless vector control. It is an open-loop vector control mode, which is applicable to high-performance control applications. In this case, one AC drive can drive only one motor. This mode applies to such loads as machine tools, centrifuges, wire drawing machines, and injection molding machines. Parameter auto-tuning is required in the SVC mode. The effect of the vector control mode is dependent on accurately tuned motor parameters. 2: V/f, which stands for voltage/frequency control. It is an open loop control mode based on constant voltage and frequency ratio. This mode is applicable to scenarios without high requirements on load control performance, such as fans and water pumps and scenarios without high requirements on accuracy of parameters. This mode is simply and easy to use. The dynamic performance of the V/f control mode is not as good as that of the SVC mode.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-02	Motor control method	0xF002	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	-
	Value: 0: Speed control 1: Torque control 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: This parameter set the motor control target according to the actual operating conditions. F0-02 is the mapping of d0-01 (Motor control mode) in group F. The two parameters have the same function.  Value description: 0: Speed control. Speed is the control target.							

	<p>1: Torque control. Torque is the control target.</p> <p>3 to 7: DI1 to DI5. The control target depends on the DI state. 0 means speed control and 1 means torque control.</p> <p>Other: B connector. The control target depends on the state of B connector. 0 means speed control and 1 means torque control.</p> <p>Additional information:</p> <p>Torque control is invalid in the V/f mode. The MD600 is in the speed control mode even if the torque control mode is set in the V/f mode.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-03	Main command source of control channel 1	0xF003	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	-
	<p>Value:</p> <p>0: Operating panel</p> <p>1: Terminal</p> <p>2: Communication</p> <p>3: User-defined</p>							
	<p>Description:</p> <p>This parameter is used to set the main command source of control channel 1. F0-03 is the mapping of b1-00 (Main command source of control channel 1) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: Operating panel. The LED operating panel or external operating panel is used as the main command source of control channel 1. You can control the motor by pressing RUN/STOP keys on the operating panel.</p> <p>1: Terminal. The terminal is used as the main command source of control channel 1. The DI can be assigned with different functions such as start/stop, forward/reverse run, jog, and multi-reference.</p> <p>2: Communication. Communication (such as Modbus) is used as the main command source of control channel 1. The AC drive needs to communicate with the host controller. You can input control commands through remote communication. This mode applies to remote control or centralized control of multiple equipment.</p> <p>3: User-defined. The user-defined control mode is used as the main command source of control channel 1. The control commands can be set by b1-01 to b1-09, ON_OFF1 (start/stop), OFF2 (coast to stop), and OFF3 (quick stop).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-07	Mode of terminal start/stop module A	0xF007	Refer to "Value"	3	Unsigned 16 bit	Shutdown change	Standard	-
	<p>Value:</p> <p>0: Disable</p> <p>1: IN1 for start</p> <p>2: IN1 for start; IN2 for direction</p> <p>3: IN1 for forward start; IN2 for reverse start</p> <p>4: IN1P (rising edge) for start; IN2 for stop</p> <p>5: IN1P (rising edge) for start; IN2 for stop; IN3 for direction</p> <p>6: IN1P (rising edge) for forward start; IN2P (rising edge) for reverse start; IN3 for stop</p>							
	<p>Description:</p>							

This parameter is used to set the mode of terminal start/stop module A. This parameter is valid for IN1/IN2/IN3 of the terminal functions. F0-07 is the mapping of b9-01 (Terminal start/stop module A mode) in group F. The two parameters have the same function.

Value description:

0: Disable. The mode is invalid, and IN1/IN2/IN3 are invalid.

1: IN1 for start.

In this mode, one DI is connected to set the IN1 function. IN1 is used to control start/stop in the forward direction.

2: IN1 for start and IN2 for direction.

In this mode, two DIs are connected to set the IN1/IN2 function. IN1 is used to control start/stop in the forward direction, and IN2 is used to control the running direction.

3: IN1 for forward start; IN2 for reverse start.

In this mode, two DIs are connected to set IN1/IN2 function. IN1 is used to control start/stop in the forward direction. IN2 is used to control start/stop in the reverse direction. When IN1 and IN2 signals are active at the same time, the drive stops.

4: IN1P (rising edge) for start; IN2 for stop.

In this mode, two DIs are connected to set IN1/IN2 function. IN1 (rising edge) is used to control start in the forward direction and IN2 is used to control stop.

5: IN1P (rising edge) for start; IN2 for stop; IN3 for direction.

In this mode, three DIs are connected to set IN1/IN2/IN3 function. IN1 (rising edge) is used to control start in the forward direction, IN2 is used to control stop, and IN3 is used to control the running direction.

6: IN1P (rising edge) for forward start; IN2P (rising edge) for reverse start; IN3 for stop.

In this mode, three DIs are connected to set IN1/IN2/IN3 function. IN1 (rising edge) is used to control start in the forward direction, IN2 is used to control start in the reverse direction, and IN3 is used to control stop.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	DI1 function selection	0xF00A	Refer to "Value"	1	Unsigned 16 bit	Shutdown change	Standard	-
F0-10	Value: 0: No function 1: Terminal start/stop module A_IN1 2: Terminal start/stop module A_IN2 3: Terminal start/stop module A_IN3 4: Terminal start/stop module A jog 1 (JOG1) 5: Terminal start/stop module A jog 2 (JOG2) 6: Function as UP key for frequency adjustment 7: Function as DOWN key for frequency adjustment 19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys 21: Acceleration/Deceleration inhibition 22: PID pause 23: Simple PLC state reset 29: Torque control inhibition 30: Pulse frequency input (valid only for DI4) 32: Immediate DC braking 33: NC input of external fault 34: Frequency modification enable 50: Current running time reset 61: Terminal start/stop module B_IN1 62: Terminal start/stop module B_IN2 63: Terminal start/stop module B_IN3 64: Terminal start/stop module B jog 1 (JOG1) 65: Terminal start/stop module B jog 2 (JOG2) 66: Forced to local control 67: Forced to terminal control 68: Forced to communication control							



8: Coast to stop	35: PID action direction inversion	69: Forced to user-defined control
9: Fault reset (RESET)	36: External stop terminal 1	70: Control channel selection
10: Running pause (terminal control)	38: PID integral pause	71: Setting channel selection
11: NO input of external fault	43: PID parameter switchover	72: Terminal module A/B selection
12: Multi-reference terminal 1	44: User-defined fault 1	77: Running enable (all modes)
13: Multi-reference terminal 2	45: User-defined fault 2	78: Forward running allowance
14: Multi-reference terminal 3	46: Switchover between speed control and torque control	79: Reverse running allowance
15: Multi-reference terminal 4	47: Emergency stop	80: Set RFG input to 0
16: Acceleration/Deceleration selection terminal 1	49: Deceleration DC braking	
17: Acceleration/Deceleration selection terminal 2		
<p>Description:</p> <p>This parameter is used to set the DI1 terminal function. If no special description is provided, the terminal function is level-triggered. F0-10 is the mapping of E0-00 (DI1 function selection) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: No function The DI terminal has no function.</p> <p>1: Terminal start/stop module A_IN1 The function (input 1 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>2: Terminal start/stop module A_IN2 The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>3: Terminal start/stop module A_IN3 The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>4: Terminal start/stop module A jog 1 (JOG1) When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>5: Terminal start/stop module A jog 2 (JOG2) When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>6: Function as UP key for frequency adjustment This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.</p> <p>6: Function as DOWN key for frequency adjustment This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating</p>		

the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.

8: Coast to stop

The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.

9: Fault reset (RESET)

The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.

10: Operation pause

When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault

When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys

When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive

pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).

45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).

46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.

50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

62: Terminal start/stop module B\_IN2

The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

63: Terminal start/stop module B\_IN3

The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

64: Terminal start/stop module B jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

65: Terminal start/stop module B jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

66: Forced to local control

When the terminal is active, the control mode is forced to local control.

67: Forced to terminal control

When the terminal is active, the control mode is forced to terminal control.

68: Forced to communication control

When the terminal is active, the control mode is forced to communication control.

69: Forced to user-defined control

When the terminal is active, the control mode is forced to the user-defined control mode.

70: Control channel selection

The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.

71: Setting channel selection

The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.

72: Terminal module A/B selection

The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.

76: Motor selection terminal 2 (reserved)

This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.

	<p>77: Running enable When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.</p> <p>78: Forward running allowance When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.</p> <p>79: Reverse running allowance When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.</p> <p>80: Set RFG input to 0 When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency reference is set to zero and the drive runs at 0 Hz.</p>																																																																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																																																									
	DI2 function selection	0xF00B	Refer to "Value"	4	Unsigned 16 bit	Shutdown change	Standard	-																																																									
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	<p>17: Acceleration/Deceleration selection terminal 2</p> <hr/> <p>Description :  This parameter is used to set the DI2 function. If no special description is provided, the terminal function is level-triggered. F0-11 is the mapping of E0-01 (DI2 function selection) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: No function  The DI has no function.</p> <p>1: Terminal start/stop module A_IN1  The function (input 1 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>2: Terminal start/stop module A_IN2  The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>3: Terminal start/stop module A_IN3  The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>4: Terminal start/stop module A jog 1 (JOG1)  When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>5: Terminal start/stop module A jog 2 (JOG2)  When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>6: Function as UP key for frequency adjustment  This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.</p> <p>6: Function as DOWN key for frequency adjustment  This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.</p> <p>8: Coast to stop  The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.</p> <p>9: Fault reset (RESET)  The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.</p> <p>10: Operation pause  When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID</p>
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parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault

When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys  
When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).

45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).

46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.

50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

62: Terminal start/stop module B\_IN2



<p>The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>63: Terminal start/stop module B_IN3</p> <p>The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>64: Terminal start/stop module B jog 1 (JOG1)</p> <p>When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>65: Terminal start/stop module B jog 2 (JOG2)</p> <p>When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>66: Forced to local control</p> <p>When the terminal is active, the control mode is forced to local control.</p> <p>67: Forced to terminal control</p> <p>When the terminal is active, the control mode is forced to terminal control.</p> <p>68: Forced to communication control</p> <p>When the terminal is active, the control mode is forced to communication control.</p> <p>69: Forced to user-defined control</p> <p>When the terminal is active, the control mode is forced to the user-defined control mode.</p> <p>70: Control channel selection</p> <p>The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.</p> <p>71: Setting channel selection</p> <p>The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.</p> <p>72: Terminal module A/B selection</p> <p>The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.</p> <p>76: Motor selection terminal 2 (reserved)</p> <p>This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.</p> <p>77: Running enable</p> <p>When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.</p> <p>78: Forward running allowance</p> <p>When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.</p> <p>79: Reverse running allowance</p> <p>When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.</p> <p>80: Set RFG input to 0</p> <p>When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency</p>
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command source is terminal control).

2: Terminal start/stop module A\_IN2

The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).

3: Terminal start/stop module A\_IN3

The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).

4: Terminal start/stop module A jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

5: Terminal start/stop module A jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

6: Function as UP key for frequency adjustment

This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.

6: Function as DOWN key for frequency adjustment

This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.

8: Coast to stop

The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.

9: Fault reset (RESET)

The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.

10: Operation pause

When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault

When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The

acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys  
When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17

(proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).

45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).

46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.

50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

62: Terminal start/stop module B\_IN2

The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

63: Terminal start/stop module B\_IN3

The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

64: Terminal start/stop module B jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

65: Terminal start/stop module B jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for

maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

66: Forced to local control  
When the terminal is active, the control mode is forced to local control.

67: Forced to terminal control  
When the terminal is active, the control mode is forced to terminal control.

68: Forced to communication control  
When the terminal is active, the control mode is forced to communication control.

69: Forced to user-defined control  
When the terminal is active, the control mode is forced to the user-defined control mode.

70: Control channel selection  
The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.

71: Setting channel selection  
The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.

72: Terminal module A/B selection  
The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.

76: Motor selection terminal 2 (reserved)  
This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.

77: Running enable  
When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.

78: Forward running allowance  
When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.

79: Reverse running allowance  
When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.

80: Set RFG input to 0  
When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency reference is set to zero and the drive runs at 0 Hz.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-13	DI4 function selection	0xF00D	Refer to "Value"	12	Unsigned 16 bit	Shutdown change	Standard	-
	Value: 0: No function 1: Terminal start/stop module A_IN1 2: Terminal start/stop module A_IN2 19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys 21: Acceleration/Deceleration 50: Current running time reset 61: Terminal start/stop module B_IN1 62: Terminal start/stop module B_IN2							

<p>3: Terminal start/stop module A_IN3</p> <p>4: Terminal start/stop module A jog 1 (JOG1)</p> <p>5: Terminal start/stop module A jog 2 (JOG2)</p> <p>6: Function as UP key for frequency adjustment</p> <p>7: Function as DOWN key for frequency adjustment</p> <p>8: Coast to stop</p> <p>9: Fault reset (RESET)</p> <p>10: Running pause (terminal control)</p> <p>11: NO input of external fault</p> <p>12: Multi-reference terminal 1</p> <p>13: Multi-reference terminal 2</p> <p>14: Multi-reference terminal 3</p> <p>15: Multi-reference terminal 4</p> <p>16: Acceleration/Deceleration selection terminal 1</p> <p>17: Acceleration/Deceleration selection terminal 2</p>	<p>inhibition</p> <p>22: PID pause</p> <p>23: Simple PLC state reset</p> <p>29: Torque control inhibition</p> <p>30: Pulse frequency input (valid only for DI4)</p> <p>32: Immediate DC braking</p> <p>33: NC input of external fault</p> <p>34: Frequency modification enable</p> <p>35: PID action direction inversion</p> <p>36: External stop terminal 1</p> <p>38: PID integral pause</p> <p>43: PID parameter switchover</p> <p>44: User-defined fault 1</p> <p>45: User-defined fault 2</p> <p>46: Switchover between speed control and torque control</p> <p>47: Emergency stop</p> <p>49: Deceleration DC braking</p>	<p>63: Terminal start/stop module B_IN3</p> <p>64: Terminal start/stop module B jog 1 (JOG1)</p> <p>65: Terminal start/stop module B jog 2 (JOG2)</p> <p>66: Forced to local control</p> <p>67: Forced to terminal control</p> <p>68: Forced to communication control</p> <p>69: Forced to user-defined control</p> <p>70: Control channel selection</p> <p>71: Setting channel selection</p> <p>72: Terminal module A/B selection</p> <p>77: Running enable (all modes)</p> <p>78: Forward running allowance</p> <p>79: Reverse running allowance</p> <p>80: Set RFG input to 0</p>
<p>Description:</p> <p>This parameter is used to set the DI4 function. If no special description is provided, the terminal function is level-triggered. F0-13 is the mapping of E0-03 (DI4 function selection) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: No function The DI has no function.</p> <p>1: Terminal start/stop module A_IN1 The function (input 1 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>2: Terminal start/stop module A_IN2 The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>3: Terminal start/stop module A_IN3 The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>4: Terminal start/stop module A jog 1 (JOG1) When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p>		

5: Terminal start/stop module A jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

6: Function as UP key for frequency adjustment

This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.

6: Function as DOWN key for frequency adjustment

This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.

8: Coast to stop

The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.

9: Fault reset (RESET)

The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.

10: Operation pause

When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault

When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys

When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause



	<p>PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.</p> <p>23: Simple PLC state reset When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.</p> <p>29: Torque control inhibition When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.</p> <p>30: Pulse frequency input This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.</p> <p>32: Immediate DC braking When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.</p> <p>33: NC input of external fault Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).</p> <p>34: Frequency modification enable When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.</p> <p>35: PID action direction inversion When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).</p> <p>36: External stop terminal 1 Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.</p> <p>38: PID integral pause When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.</p> <p>43: PID parameter switchover If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.</p> <p>44: User-defined fault 1 When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).</p> <p>45: User-defined fault 2 When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).</p> <p>46: Switchover between speed control and torque control The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control</p>
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mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop).

In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.

50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

62: Terminal start/stop module B\_IN2

The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

63: Terminal start/stop module B\_IN3

The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

64: Terminal start/stop module B jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

65: Terminal start/stop module B jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

66: Forced to local control

When the terminal is active, the control mode is forced to local control.

67: Forced to terminal control

When the terminal is active, the control mode is forced to terminal control.

68: Forced to communication control

When the terminal is active, the control mode is forced to communication control.

69: Forced to user-defined control

When the terminal is active, the control mode is forced to the user-defined control mode.

70: Control channel selection

The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is

selected. When the terminal is active, channel 2 is selected.

71: Setting channel selection  
The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.

72: Terminal module A/B selection  
The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.

76: Motor selection terminal 2 (reserved)  
This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.

77: Running enable  
When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.

78: Forward running allowance  
When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.

79: Reverse running allowance  
When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.

80: Set RFG input to 0  
When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency reference is set to zero and the drive runs at 0 Hz.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-14	DI5 function selection (for MD600A)	0xF00E	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	-
	Value: 0: No function 1: Terminal start/stop module A_IN1 2: Terminal start/stop module A_IN2 3: Terminal start/stop module A_IN3 4: Terminal start/stop module A jog 1 (JOG1) 5: Terminal start/stop module A jog 2 (JOG2) 6: Function as UP key for frequency adjustment 7: Function as DOWN key for frequency adjustment 8: Coast to stop 19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys 21: Acceleration/Deceleration inhibition 22: PID pause 23: Simple PLC state reset 29: Torque control inhibition 30: Pulse frequency input (valid only for DI4) 32: Immediate DC braking 33: NC input of external fault enable 34: Frequency modification 35: PID action direction inversion 50: Current running time reset 61: Terminal start/stop module B_IN1 62: Terminal start/stop module B_IN2 63: Terminal start/stop module B_IN3 64: Terminal start/stop module B jog 1 (JOG1) 65: Terminal start/stop module B jog 2 (JOG2) 66: Forced to local control 67: Forced to terminal control 68: Forced to communication control 69: Forced to user-defined control							

9: Fault reset (RESET)	36: External stop terminal 1	70: Control channel selection
10: Running pause (terminal control)	38: PID integral pause	71: Setting channel selection
11: NO input of external fault	43: PID parameter switchover	72: Terminal module A/B selection
12: Multi-reference terminal 1	44: User-defined fault 1	77: Running enable (all modes)
13: Multi-reference terminal 2	45: User-defined fault 2	78: Forward running allowance
14: Multi-reference terminal 3	46: Switchover between speed control and torque control	79: Reverse running allowance
15: Multi-reference terminal 4	47: Emergency stop	80: Set RFG input to 0
16: Acceleration/Deceleration selection terminal 1	49: Deceleration DC braking	
17: Acceleration/Deceleration selection terminal 2		
<p>Description:</p> <p>This parameter is used to set the DI5 function. If no special description is provided, the terminal function is level-triggered. F0-14 is the mapping of E0-04 (DI5 function selection) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: No function The DI has no function.</p> <p>1: Terminal start/stop module A_IN1 The function (input 1 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>2: Terminal start/stop module A_IN2 The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>3: Terminal start/stop module A_IN3 The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>4: Terminal start/stop module A jog 1 (JOG1) When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>5: Terminal start/stop module A jog 2 (JOG2) When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>6: Function as UP key for frequency adjustment This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.</p> <p>6: Function as DOWN key for frequency adjustment This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing</p>		

the decrement key.

8: Coast to stop

The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.

9: Fault reset (RESET)

The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.

10: Operation pause

When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault

When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys

When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).

45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).

46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop)

and then enters the DC braking state.

50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

62: Terminal start/stop module B\_IN2

The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

63: Terminal start/stop module B\_IN3

The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

64: Terminal start/stop module B jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

65: Terminal start/stop module B jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

66: Forced to local control

When the terminal is active, the control mode is forced to local control.

67: Forced to terminal control

When the terminal is active, the control mode is forced to terminal control.

68: Forced to communication control

When the terminal is active, the control mode is forced to communication control.

69: Forced to user-defined control

When the terminal is active, the control mode is forced to the user-defined control mode.

70: Control channel selection

The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.

71: Setting channel selection

The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.

72: Terminal module A/B selection

The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.

76: Motor selection terminal 2 (reserved)

This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.

77: Running enable

	<p>When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.</p> <p>78: Forward running allowance</p> <p>When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.</p> <p>79: Reverse running allowance</p> <p>When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.</p> <p>80: Set RFG input to 0</p> <p>When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency reference is set to zero and the drive runs at 0 Hz.</p>																																											
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																																				
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	<p>Description:</p> <p>This parameter is used to set the RO1 output function. When the function triggering conditions are met, the output signal is active; otherwise, the output signal is inactive. F0-17 is the mapping of E1-00 (RO1 output function selection) in group F, and the two parameters have the same function.</p> <p>Value description:</p> <p>0: No output The output terminal has no function.</p> <p>1: AC drive running When the AC drive is running with output frequency (can be 0), the terminal outputs an active signal.</p>																																											



2: Fault

When the AC drive stops due to a fault (coast to stop, stop at maximum capability, quick stop, or decelerate to stop), the terminal outputs an active signal.

3: Frequency level detection FDT1

When the running frequency is higher than the detection frequency, the terminal outputs an active signal. When the running frequency is lower than the result of the detection frequency minus the FDT hysteresis value (product of P0-34 and P0-35), the active signal is canceled.

4: Frequency reached

When the running frequency of the AC drive is within a certain range (target frequency  $\pm$  P0-38 x maximum frequency), the terminal outputs an active signal.

5: Operating at zero speed (invalid at stop)

When the output frequency is 0 during AC drive running, the terminal outputs an active signal. When the AC drive is in the stop state, the signal is inactive.

6: Motor overload alarm

Before the motor overload protection acts, the AC drive determines whether the motor load exceeds the overload alarm threshold according to the overload alarm coefficient (d1-47). The terminal outputs an active signal when the overload alarm threshold is exceeded. (For calculation of the alarm threshold, see the description of motor overload protection.)

7: AC drive overload alarm

The terminal outputs an active signal 10s before the AC drive overload protection acts.

11: Simple PLC cycle completed

The terminal outputs a pulse signal with the width of 250 ms when the simple PLC completes one cycle.

12: Cumulative running time reached

The terminal outputs an active signal when the cumulative running time of the AC drive exceeds the value set by P0-17 and P0-19.

14: Torque limited

The terminal outputs an active signal when the output torque of AC drive reaches the torque limit in the speed control mode.

15: Ready to run

The terminal outputs an active signal when the AC drive is ready for running without any fault after power-on.

17: Frequency upper limit reached

The frequency upper limit indicates the smaller between the maximum motor frequency and the value set by D1-04 and D1-07 (forward and reverse direction). The terminal outputs an active signal when the running frequency reaches the frequency upper limit.

18: Frequency lower limit reached (invalid at stop)

The frequency lower limit indicates the larger between the minimum motor frequency and the value set by D1-05 and D1-08 (forward and reverse direction). If P0-11 (operation mode when frequency reference < minimum motor frequency) is set to 1 (stop) and 3 (coast to stop), and the set target frequency is lower than C4-11, the drive does not run and the terminal outputs an inactive signal.

If P0-11 (operation mode when frequency reference < minimum motor frequency) is set to 0 (run at frequency lower limit) or 2 (run at zero speed), the set target frequency reaches the frequency lower limit, and the drive is running, the terminal outputs an active signal.

19: Undervoltage state

The terminal outputs an active signal when undervoltage occurs on the AC drive.

20: Communication setting

Whether the terminal is active is determined by the setpoint of communication address 0x2001 or 0x7312. (Writing to address 0x2001 requires compatibility mode (n0-12) to be enabled.)

23: Zero speed running 2 (valid at stop)

The terminal outputs an active signal when the AC drive is running and the output frequency is 0. The signal remains active even when the AC drive stops.

24: Cumulative power-on time reached

The terminal outputs an active signal when the cumulative power-on time (Ad-02/Ad-03) of the AC drive exceeds the cumulative power-on time threshold set by P0-16/P0-18.

25: Frequency level detection FDT2

When the running frequency is higher than the detection frequency, the terminal outputs an active signal. When the running frequency is lower than the result of the detection frequency minus the frequency detection hysteresis value (product of P0-36 and P0-37), the active signal is canceled.

26: Frequency 1 reached

When the running frequency of the AC drive is within the detection range set by P0-39 (Detection frequency 1), the terminal outputs an active signal. Frequency detection range:  $(P0-39 - P0-40) \times C4-10$  (maximum frequency) to  $(P0-39 + P0-40) \times C4-10$ .

27: Frequency 2 reached

When the running frequency of the AC drive is within the detection range set by P0-41 (Detection frequency 2), the terminal outputs an active signal. Frequency detection range:  $(P0-41 - P0-42) \times C4-10$  (maximum frequency) to  $(P0-41 + P0-42) \times C4-10$ .

28: Current 1 reached

When the output current of the AC drive is within the detection range set by P0-43 (Detection current 1), the terminal outputs an active signal. Current detection range =  $(P0-43 - P0-44) \times C4-03$  (rated motor current) to  $(P0-43 + P0-44) \times C4-03$ .

29: Current 2 reached

When the output current of the AC drive is within the detection range set by P0-45 (Detection current 2), the terminal outputs an active signal. Current detection range =  $(P0-45 - P0-46) \times C4-03$  (rated motor current) to  $(P0-45 + P0-46) \times C4-03$ .

30: Timing reached

On the condition that the timing function (P0-13) is enabled, the terminal outputs an active signal when the current running time of the AC drive reaches the timing value. The timing value is set by P0-14 and P0-15.

31: AI1 input limit exceeded

The terminal outputs an active signal when AI1 input value is higher than the value of E2-14 (AI1 input protection upper limit) or lower than the value of E2-15 (AI1 input protection lower limit).

32: Three-phase loss

The terminal outputs an active signal when the AC drive encounters three-phase loss.

33: Reverse running

The terminal outputs an active signal when the AC drive runs in the reverse direction.

34: Zero current state

When the output current of the AC drive is within the zero-current range for the time exceeding P0-48 (Zero current detection delay), the terminal outputs an active signal. Zero current detection range: 0 to  $P0-47 \times$  rated motor current.

35: AC drive overtemperature threshold reached

The terminal outputs an active signal when the inverter heatsink temperature reaches the AC drive overtemperature threshold (P0-33).

<p>36: Output current limit exceeded When the output current of the AC drive is greater than P0-49 (Output overcurrent threshold) for the time exceeding P0-50 (Output overcurrent detection delay), the terminal outputs an active signal.</p> <p>37: Frequency lower limit reached (valid at stop) The lower limit frequency indicates the larger between the minimum motor frequency and the value set by DI-05 and D1-08 (forward and reverse direction). When the set target frequency reaches the lower limit, the terminal outputs an active even in the stop state.</p> <p>38: Exception (fault/minor fault/alarm) When the AC drive encounters a fault, a minor fault, or an alarm, the terminal outputs an active signal.</p> <p>40: Current running time reached The terminal outputs an active signal when the current operation time of the AC drive is longer than the value of P0-20 (Current running time threshold).</p> <p>41: Fault (excluding undervoltage) When the AC drive encounters a fault (excluding undervoltage), the terminal outputs an active signal.</p> <p>43: Minor fault or alarm When the AC drive encounters a minor fault or an alarm, the terminal outputs an active signal. For fault protection action, refer to H1-00 to H1-13 (Operation at limited speed, limited power, limited current, and limited torque, output at alarm).</p> <p>Others: B connector The RO hardware output state is determined by the selected B connector state.</p>																																												
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is active; otherwise, the output signal is inactive. F0-21 is the mapping of E1-04 (DO1 output function selection (MD600A)) in group F. The two parameters have the same function.

Value description:

0: No output

The output terminal has no function.

1: AC drive running

When the AC drive is running with output frequency (can be 0), the terminal outputs an active signal.

2: Fault

When the AC drive stops due to a fault (coast to stop, stop at maximum capability, quick stop, or decelerate to stop), the terminal outputs the active signal.

3: Frequency level detection FDT1

When the running frequency is higher than the detection frequency, the terminal outputs an active signal. When the running frequency is lower than the result of the detection frequency minus the FDT hysteresis value (product of P0-34 and P0-35), the active signal is canceled.

4: Frequency reached

When the running frequency of the AC drive is within a certain range (target frequency  $\pm$  P0-38 x maximum frequency), the terminal outputs an active signal.

5: Operating at zero speed (invalid at stop)

When the output frequency is 0 during AC drive running, the terminal outputs an active signal. When the AC drive is in the stop state, the signal is inactive.

6: Motor overload alarm

Before the motor overload protection acts, the AC drive determines whether the motor load exceeds the overload alarm threshold according to the overload alarm coefficient (d1-47). The terminal outputs an active signal when the overload alarm threshold is exceeded. (For calculation of the alarm threshold, see the description of motor overload protection.)

7: AC drive overload alarm

The terminal outputs an active signal 10s before the AC drive overload protection acts.

11: Simple PLC cycle completed

The terminal outputs a pulse signal with the width of 250 ms when the simple PLC completes one cycle.

12: Cumulative running time reached

The terminal outputs an active signal when the cumulative running time of the AC drive exceeds the value set by P0-17 and P0-19.

14: Torque limited

The terminal outputs an active signal when the output torque of AC drive reaches the torque limit in the speed control mode.

15: Ready to run

The terminal outputs an active signal when the AC drive is ready for running without any fault after power-on.

17: Frequency upper limit reached

The frequency upper limit indicates the smaller between the maximum motor frequency and the value set by D1-04 and D1-07 (forward and reverse direction). The terminal outputs an active signal when the running frequency reaches the frequency upper limit.

18: Frequency lower limit reached (invalid at stop)

The frequency lower limit indicates the larger between the minimum motor frequency and the value set by D1-05 and D1-08 (forward and reverse direction). If P0-11 (operation mode when frequency reference < minimum motor frequency) is

set to 1 (stop) and 3 (coast to stop), and the set target frequency is lower than C4-11, the drive does not run and the terminal outputs an inactive signal.

If P0-11 (operation mode when frequency reference < minimum motor frequency) is set to 0 (run at frequency lower limit) or 2 (run at zero speed), the set target frequency reaches the frequency lower limit, and the drive is running, the terminal outputs an active signal.

19: Undervoltage state

The terminal outputs an active signal when undervoltage occurs on the AC drive.

20: Communication setting

Whether the terminal is active is determined by the setpoint of communication address 0x2001 or 0x7312. (Writing to address 0x2001 requires compatibility mode (n0-12) to be enabled.)

23: Zero speed running 2 (valid at stop)

The terminal outputs an active signal when the AC drive is running and the output frequency is 0. The signal remains active even when the AC drive stops.

24: Cumulative power-on time reached

The terminal outputs an active signal when the cumulative power-on time (Ad-02/Ad-03) of the AC drive exceeds the cumulative power-on time threshold set by P0-16/P0-18.

25: Frequency level detection FDT2

When the running frequency is higher than the detection frequency, the terminal outputs an active signal. When the running frequency is lower than the result of the detection frequency minus the frequency detection hysteresis value (product of P0-36 and P0-37), the active signal is canceled.

26: Frequency 1 reached

When the running frequency of the AC drive is within the detection range set by P0-39 (Detection frequency 1), the terminal outputs an active signal. Frequency detection range:  $(P0-39 - P0-40) \times C4-10$  (maximum frequency) to  $(P0-39 + P0-40) \times C4-10$ .

27: Frequency 2 reached

When the running frequency of the AC drive is within the detection range set by P0-41 (Detection frequency 2), the terminal outputs an active signal. Frequency detection range:  $(P0-41 - P0-42) \times C4-10$  (maximum frequency) to  $(P0-41 + P0-42) \times C4-10$ .

28: Current 1 reached

When the output current of the AC drive is within the detection range set by P0-43 (Detection current 1), the terminal outputs an active signal. Current detection range =  $(P0-43 - P0-44) \times C4-03$  (rated motor current) to  $(P0-43 + P0-44) \times C4-03$ .

29: Current 2 reached

When the output current of the AC drive is within the detection range set by P0-45 (Detection current 2), the terminal outputs an active signal. Current detection range =  $(P0-45 - P0-46) \times C4-03$  (rated motor current) to  $(P0-45 + P0-46) \times C4-03$ .

30: Timing reached

On the condition that the timing function (P0-13) is enabled, the terminal outputs an active signal when the current running time of the AC drive reaches the timing value. The timing value is set by P0-14 and P0-15.

31: AI1 input limit exceeded

The terminal outputs an active signal when AI1 input value is higher than the value of E2-14 (AI1 input protection upper limit) or lower than the value of E2-15 (AI1 input protection lower limit).

32: Three-phase loss

The terminal outputs an active signal when the AC drive encounters three-phase loss.

33: Reverse running  
The terminal outputs an active signal when the AC drive runs in the reverse direction.

34: Zero current state  
When the output current of the AC drive is within the zero-current range for the time exceeding P0-48 (Zero current detection delay), the terminal outputs an active signal. Zero current detection range: 0 to P0-47 x rated motor current.

35: AC drive overtemperature threshold reached  
The terminal outputs an active signal when the inverter heatsink temperature reaches the AC drive overtemperature threshold (P0-33).

36: Output current limit exceeded  
When the output current of the AC drive is greater than P0-49 (Output overcurrent threshold) for the time exceeding P0-50 (Output overcurrent detection delay), the terminal outputs an active signal.

37: Frequency lower limit reached (valid at stop)  
The lower limit frequency indicates the larger between the minimum motor frequency and the value set by DI-05 and DI-08 (forward and reverse direction). When the set target frequency reaches the lower limit, the terminal outputs an active even in the stop state.

38: Exception (fault/minor fault/alarm)  
When the AC drive encounters a fault, a minor fault, or an alarm, the terminal outputs an active signal.

40: Current running time reached  
The terminal outputs an active signal when the current operation time of the AC drive is longer than the value of P0-20 (Current running time threshold).

41: Fault (excluding undervoltage)  
When the AC drive encounters a fault (excluding undervoltage), the terminal outputs an active signal.

43: Minor fault or alarm  
When the AC drive encounters a minor fault or an alarm, the terminal outputs an active signal. For fault protection action, refer to H1-00 to H1-13 (Operation at limited speed, limited power, limited current, and limited torque, output at alarm).

Others: B connector  
The DO hardware output state is determined by the selected B connector state.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-22	DO2 function selection (for MD600A)	0xF016	Refer to "Value"	4	Unsigned 16 bit	Real time changes	Standard	-
	Value: 0: No output 1: AC drive running 2: Fault 3: Frequency level detection FDT1 4: Frequency reached 5: Zero speed running (invalid at stop) 6: Motor overload alarm 7: AC drive overload alarm 11: Simple PLC cycle completed 12: Cumulative running time 17: Frequency upper limit reached 18: Frequency lower limit reached (invalid at stop) 19: Undervoltage state 20: Communication setting 23: Zero speed running 2 (valid at stop) 24: Cumulative power-on time reached 25: Frequency level detection 31: AI1 input limit exceeded 32: Three-phase loss 33: Reverse running 34: Zero current state 35: AC drive overtemperature threshold reached 36: Output current limit exceeded 37: Frequency lower limit reached (valid at stop) 38: Exception (fault/minor fault/alarm)							

reached 14: Torque limited 15: Ready for RUN	FDT2 26: Frequency 1 reached 27: Frequency 2 reached 28: Current 1 reached 29: Current 2 reached 30: Timing reached	40: Current running time reached 41: Fault (excluding undervoltage) 43: Minor fault or alarm Others: B connector
<p>Description:</p> <p>This parameter is used to set the DO2 output function. When the function triggering conditions are met, the output signal is active; otherwise, the output signal is inactive. F0-22 is the mapping of E1-05 (DO2 output function selection (MD600A)) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: No output  The output terminal has no function.</p> <p>1: AC drive running  When the AC drive is running with output frequency (can be 0), the terminal outputs an active signal.</p> <p>2: Fault  When the AC drive stops due to a fault (coast to stop, stop at maximum capability, quick stop, or decelerate to stop), the terminal outputs the active signal.</p> <p>3: Frequency level detection FDT1  When the running frequency is higher than the detection frequency, the terminal outputs an active signal. When the running frequency is lower than the result of the detection frequency minus the FDT hysteresis value (product of P0-34 and P0-35), the active signal is canceled.</p> <p>4: Frequency reached  When the running frequency of the AC drive is within a certain range (target frequency <math>\pm</math> P0-38 x maximum frequency), the terminal outputs an active signal.</p> <p>5: Operating at zero speed (invalid at stop)  When the output frequency is 0 during AC drive running, the terminal outputs an active signal. When the AC drive is in the stop state, the signal is inactive.</p> <p>6: Motor overload alarm  Before the motor overload protection acts, the AC drive determines whether the motor load exceeds the overload alarm threshold according to the overload alarm coefficient (d1-47). The terminal outputs an active signal when the overload alarm threshold is exceeded. (For calculation of the alarm threshold, see the description of motor overload protection.)</p> <p>7: AC drive overload alarm  The terminal outputs an active signal 10s before the AC drive overload protection acts.</p> <p>11: Simple PLC cycle completed  The terminal outputs a pulse signal with the width of 250 ms when the simple PLC completes one cycle.</p> <p>12: Cumulative running time reached  The terminal outputs an active signal when the cumulative running time of the AC drive exceeds the value set by P0-17 and P0-19.</p> <p>14: Torque limited  The terminal outputs an active signal when the output torque of AC drive reaches the torque limit in the speed control mode.</p>		

15: Ready to run

The terminal outputs an active signal when the AC drive is ready for running without any fault after power-on.

17: Frequency upper limit reached

The frequency upper limit indicates the smaller between the maximum motor frequency and the value set by D1-04 and D1-07 (forward and reverse direction). The terminal outputs an active signal when the running frequency reaches the frequency upper limit.

18: Frequency lower limit reached (invalid at stop)

The frequency lower limit indicates the larger between the minimum motor frequency and the value set by D1-05 and D1-08 (forward and reverse direction). If P0-11 (operation mode when frequency reference < minimum motor frequency) is set to 1 (stop) and 3 (coast to stop), and the set target frequency is lower than C4-11, the drive does not run and the terminal outputs an inactive signal.

If P0-11 (operation mode when frequency reference < minimum motor frequency) is set to 0 (run at frequency lower limit) or 2 (run at zero speed), the set target frequency reaches the frequency lower limit, and the drive is running, the terminal outputs an active signal.

19: Undervoltage state

The terminal outputs an active signal when undervoltage occurs on the AC drive.

20: Communication setting

Whether the terminal is active is determined by the setpoint of communication address 0x2001 or 0x7312. (Writing to address 0x2001 requires compatibility mode (n0-12) to be enabled.)

23: Zero speed running 2 (valid at stop)

The terminal outputs an active signal when the AC drive is running and the output frequency is 0. The signal remains active even when the AC drive stops.

24: Cumulative power-on time reached

The terminal outputs an active signal when the cumulative power-on time (Ad-02/Ad-03) of the AC drive exceeds the cumulative power-on time threshold set by P0-16/P0-18.

25: Frequency level detection FDT2

When the running frequency is higher than the detection frequency, the terminal outputs an active signal. When the running frequency is lower than the result of the detection frequency minus the frequency detection hysteresis value (product of P0-36 and P0-37), the active signal is canceled.

26: Frequency 1 reached

When the running frequency of the AC drive is within the detection range set by P0-39 (Detection frequency 1), the terminal outputs an active signal. Frequency detection range:  $(P0-39 - P0-40) \times C4-10$  (maximum frequency) to  $(P0-39 + P0-40) \times C4-10$ .

27: Frequency 2 reached

When the running frequency of the AC drive is within the detection range set by P0-41 (Detection frequency 2), the terminal outputs an active signal. Frequency detection range:  $(P0-41 - P0-42) \times C4-10$  (maximum frequency) to  $(P0-41 + P0-42) \times C4-10$ .

28: Current 1 reached

When the output current of the AC drive is within the detection range set by P0-43 (Detection current 1), the terminal outputs an active signal. Current detection range =  $(P0-43 - P0-44) \times C4-03$  (rated motor current) to  $(P0-43 + P0-44) \times C4-03$ .

29: Current 2 reached

When the output current of the AC drive is within the detection range set by P0-45 (Detection current 2), the terminal outputs an active signal. Current detection range =  $(P0-45 - P0-46) \times C4-03$  (rated motor current) to  $(P0-45 + P0-46) \times C4-$



03.  
 30: Timing reached  
 On the condition that the timing function (P0-13) is enabled, the terminal outputs an active signal when the current running time of the AC drive reaches the timing value. The timing value is set by P0-14 and P0-15.

31: AI1 input limit exceeded  
 The terminal outputs an active signal when AI1 input value is higher than the value of E2-14 (AI1 input protection upper limit) or lower than the value of E2-15 (AI1 input protection lower limit).

32: Three-phase loss  
 The terminal outputs an active signal when the AC drive encounters three-phase loss.

33: Reverse running  
 The terminal outputs an active signal when the AC drive runs in the reverse direction.

34: Zero current state  
 When the output current of the AC drive is within the zero-current range for the time exceeding P0-48 (Zero current detection delay), the terminal outputs an active signal. Zero current detection range: 0 to P0-47 x rated motor current.

35: AC drive overtemperature threshold reached  
 The terminal outputs an active signal when the inverter heatsink temperature reaches the AC drive overtemperature threshold (P0-33).

36: Output current limit exceeded  
 When the output current of the AC drive is greater than P0-49 (Output overcurrent threshold) for the time exceeding P0-50 (Output overcurrent detection delay), the terminal outputs an active signal.

37: Frequency lower limit reached (valid at stop)  
 The lower limit frequency indicates the larger between the minimum motor frequency and the value set by DI-05 and DI-08 (forward and reverse direction). When the set target frequency reaches the lower limit, the terminal outputs an active even in the stop state.

38: Exception (fault/minor fault/alarm)  
 When the AC drive encounters a fault, a minor fault, or an alarm, the terminal outputs an active signal.

40: Current running time reached  
 The terminal outputs an active signal when the current operation time of the AC drive is longer than the value of P0-20 (Current running time threshold).

41: Fault (excluding undervoltage)  
 When the AC drive encounters a fault (excluding undervoltage), the terminal outputs an active signal.

43: Minor fault or alarm  
 When the AC drive encounters a minor fault or an alarm, the terminal outputs an active signal. For fault protection action, refer to H1-00 to H1-13 (Operation at limited speed, limited power, limited current, and limited torque, output at alarm).

Others: B connector  
 The DO hardware output state is determined by the selected B connector state.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-25	Frequency decimal place	0xF019	Refer to "Value"	2	Unsigned 16 bit	Shutdown change	Expansion	-
	Value: 1: One decimal place 2: Two decimal places							

	<p>Description :</p> <p>This parameter defines the number of decimal places of the frequency. F0-25 is the mapping of A0-70 (Frequency decimal place) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>1: One decimal place The frequency reference is accurate to 0.1 Hz.</p> <p>2: Two decimal places The frequency reference is accurate to 0.01 Hz.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
	Main frequency source	0xF01D	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-									
	<p>Value:</p> <table border="0"> <tr> <td>0: F0-30</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: F0-30	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
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5: HDI pulse	8: PID	Others: F connector															
F0-29	<p>Description :</p> <p>This parameter is used to set the main frequency source of set channel 1. F0-29 is the mapping of b5-00 (main frequency source) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: F0-30 keys on the keypad or the multi-functional input terminal functioning as the UP/DOWN key. When the AC drive is powered off and then powered on, whether the frequency adjusted by using UP/DOWN keys or multi-functional input terminal functioning as the UP/DOWN key is saved depends on the configuration of "retain values set by using UP/DOWN keys or multi-functional input terminal functioning as the UP/DOWN key". The "clear values adjusted by using UP/DOWN keys or multi-functional input terminal functioning as the UP/DOWN key" function of the DI allows you to clear values set by using UP/DOWN keys or multi-functional input terminal functioning as the UP/DOWN key.</p> <p>2: AI1 The frequency is input by current or voltage signal through the AI1. The frequency is calculated according to the preset AI curve.</p> <p>5: HDI pulse The frequency is set through the pulse frequency of the DI4. The frequency is calculated based on the curve of the relationship between the pulse frequency and the set frequency.</p> <p>6: Multi-reference When multi-reference is used as the frequency source, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 states, corresponding to 16 frequencies.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Multi-reference parameters are used to set the values of each frequency. The simple PLC module is used to set the running time and acceleration/deceleration time of each frequency. Up to 16 frequencies can be set.</p> <p>8: PID</p>																

The main frequency is set through PID.  
 9: Communication  
 The main frequency is set through communication. You can set the frequency through remote communication.  
 10: MD-BP-M potentiometer  
 The main frequency is set through the external MD-BP-M potentiometer.  
 Others: F connector  
 A parameter code is set for a floating-point connector, and the value of the connector is read as the main frequency reference. This mode is used for expansion besides the common sources.  
 Additional information:  
 The addresses for the frequency set by communication are 0x1000 (dedicated for Modbus) and 0x7310 (CAN and Modbus). When the frequency is written through communication by using address 0x1000, the setting option is set by n0-13. When the frequency is written through communication by using address 0x7310, the setting option is set by n0-14.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-30	Digital setting of main frequency	0xF01E	0.00 Hz to A2-17	50.00Hz	Unsigned 16 bit	Real time changes	Standard	-
	Description : This parameter is used to set the target frequency. It is valid only when the main frequency source is set to F0-30. F0-30 is the mapping of b5-01 (Digital setting of main frequency) in group F. The two parameters have the same function.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-31	Auxiliary frequency source	0xF01F	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-
	Value: 0: Disable 2: AI1 5: HDI pulse 6: Multi-reference 7: Simple PLC 8: PID 9: Communication 10: MD-BP-M potentiometer Others: F connector							
	Description : This parameter is used to set the auxiliary frequency source of set channel 1. F0-31 is the mapping of b5-02 (auxiliary frequency source) in group F. The two parameters have the same function.							
	Value description: 0: Disable The auxiliary frequency is set to 0. 2: AI1 The frequency is input by current or voltage signal through the AI1. The frequency is calculated according to the preset AI curve. 5: HDI pulse The frequency is set through the pulse frequency of the DI4. The frequency is calculated based on the curve of the relationship between the pulse frequency and the set frequency. 6: Multi-reference When multi-reference is used as the frequency source, combinations of different DI states correspond to different							

frequencies. The four multi-reference terminals can provide 16 states, corresponding to 16 frequencies.

7: Simple PLC  
 Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Multi-reference parameters are used to set the values of each frequency. The simple PLC module is used to set the running time and acceleration/deceleration time of each frequency. Up to 16 frequencies can be set.

8: PID  
 The auxiliary frequency is set through PID.

9: Communication  
 The auxiliary frequency is set through communication. You can set the frequency through remote communication.

10: MD-BP-M potentiometer  
 The auxiliary frequency is set through the external MD-BP-M potentiometer.

Others: F connector  
 A parameter code is set for a float connector, and the value of the connector is read as the auxiliary frequency reference. This mode is used for expansion besides the common sources.

Additional information:  
 The addresses for the frequency set by communication are 0x1000 (dedicated for Modbus) and 0x7310 (CAN and Modbus). When the frequency is written through communication by using address 0x1000, the setting option is set by n0-13. When the frequency is written through communication by using address 0x7310, the setting option is set by n0-14.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-32	Main and auxiliary frequency operation	0xF020	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-
	Value:							
	0: Main frequency + auxiliary frequency				3: Min. ( main frequency ,  auxiliary frequency )			
	1: Main frequency - auxiliary frequency				4: Main frequency x auxiliary frequency			
Description:								
This parameter is used to set the operation relationship between the main and auxiliary frequencies. The main frequency and auxiliary frequency are calculated in %. Multiply the calculation result by A2-04 (per-unit frequency base value) to obtain the frequency. F0-32 is the mapping of b5-03 (Main and auxiliary frequency operation) in group F. The two parameters have the same function.								
Value description:								
0: Main frequency + auxiliary frequency The operation result is the main frequency X plus the auxiliary frequency Y.								
1: Main frequency - auxiliary frequency The operation result is the main frequency X minus the auxiliary frequency Y.								
2: Max. ( main frequency ,  auxiliary frequency ) The operation result is the larger value between the absolute value of the main frequency X and the absolute value of the auxiliary frequency Y.								
3: Min. ( main frequency ,  auxiliary frequency ) The operation result is the smaller value between the absolute value of the main frequency X and the absolute value of								

	<p>the auxiliary frequency Y. 4: Main frequency x auxiliary frequency The operation result is the main frequency X multiplied by the auxiliary frequency Y.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
	Additional frequency source	0xF021	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-									
	<p>Value:</p> <table> <tbody> <tr> <td>0: Disable</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </tbody> </table>								0: Disable	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
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2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
F0-33	<p>Description:</p> <p>This parameter is used to set the additional frequency source of set channel 1. F0-33 is the mapping of b5-04 (Additional frequency source) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: Disable The additional frequency is set to 0.</p> <p>2: AI1 The frequency is input by current or voltage signal through the AI1. The frequency is calculated according to the preset AI curve.</p> <p>5: HDI pulse The frequency is set through the pulse frequency of the DI4. The frequency is calculated based on the curve of the relationship between the pulse frequency and the set frequency.</p> <p>6: Multi-reference When multi-reference is used as the frequency source, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 states, corresponding to 16 frequencies.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Multi-reference parameters are used to set the values of each frequency. The simple PLC module is used to set the running time and acceleration/deceleration time of each frequency. Up to 16 frequencies can be set.</p> <p>8: PID The additional frequency is set through PID.</p> <p>9: Communication The additional frequency is set through communication. When selecting the source, you can set the frequency through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.</p> <p>10: MD-BP-M potentiometer The additional frequency is set through the external MD-BP-M potentiometer.</p> <p>Others: F connector A parameter code is set for a floating-point connector, and the value of the connector is read as the additional frequency. This mode is used for expansion besides the common sources.</p> <p>Additional information:</p>																

<p>The addresses for the frequency set by communication are 0x1000 (dedicated for Modbus) and 0x7310 (CAN and Modbus). When the frequency is written through communication by using address 0x1000, the setting option is set by n0-13. When the frequency is written through communication by using address 0x7310, the setting option is set by n0-14. The additional frequency is superimposed on the frequency reference.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-34	Main frequency gain factor source	0xF022	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-
	<p>Value:</p> <p>0: 100%    6: Multi-reference    9: Communication</p> <p>2: AI1     7: Simple PLC     10: MD-BP-M potentiometer</p> <p>5: HDI pulse    8: PID    Others: F connector</p>							
	<p>Description:</p> <p>This parameter is used to set the main frequency gain factor source of set channel 1. F0-34 is the mapping of b5-05 (main frequency gain factor source) in group F. The two parameters have the same function.</p>							
	<p>Value description:</p> <p>0: 100%</p> <p>The gain factor of the main frequency is set to 100%.</p> <p>2: AI1</p> <p>The gain factor of the main frequency is input by using current or voltage signals at AI1 and calculated according to the preset AI curve.</p> <p>5: HDI pulse</p> <p>The gain factor of the main frequency is set by using the pulse frequency of the DI4 and calculated according to the corresponding mapping curve.</p> <p>6: Multi-reference</p> <p>When multi-reference is used as the source for the gain factor of the main frequency, different combinations of DI states correspond to different gain factors. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.</p> <p>7: Simple PLC</p> <p>Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.</p> <p>8: PID</p> <p>The gain factor of the main frequency reference is set through PID.</p> <p>9: Communication</p> <p>The gain factor of the main frequency is set through communication. When selecting the source, you can set the c main frequency through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.</p> <p>10: MD-BP-M potentiometer</p> <p>The gain factor of the main frequency is set through the external MD-BP-M potentiometer.</p> <p>Others: F connector</p> <p>A parameter code is set for a floating-point connector, and the value of the connector is read as the gain factor of the main</p>							

	<p>frequency. This mode is used for expansion besides the common sources.</p> <p>Additional information: The final main frequency is the current main frequency multiplied by the main frequency gain factor. For example, if the current main frequency is set to 50 Hz, b5-06 is set to communication, and the factor is set to 50%, the final main frequency is 25 Hz (50 x 50%).</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
	Auxiliary frequency gain factor source	0xF023	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-									
	<p>Value:</p> <table border="0"> <tr> <td>0: 100%</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: 100%	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
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2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
F0-35	<p>Description:</p> <p>This parameter is used to set the auxiliary frequency gain factor source of set channel 1. F0-35 is the mapping of b5-06 (Auxiliary frequency gain factor source) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: 100% The gain factor of the auxiliary frequency is set to 100%.</p> <p>2: AI1 The gain factor of the auxiliary frequency is input by using current or voltage signals at AI1 and calculated according to the preset AI curve.</p> <p>5: Pulse reference The gain factor of the auxiliary frequency is set by using the pulse frequency of the DI4 and calculated according to the corresponding mapping curve.</p> <p>6: Multi-reference When multi-reference is used as the source for the gain factor of the auxiliary frequency, different combinations of DI terminal states correspond to different gain factors. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.</p> <p>8: PID The gain factor of the auxiliary frequency reference is set through PID.</p> <p>9: Communication The gain factor of the auxiliary frequency reference is set through communication. When selecting the source, you can set the gain factor of the auxiliary frequency through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.</p> <p>10: MD-BP-M potentiometer The gain factor of the auxiliary frequency is set through the external MD-BP-M potentiometer.</p>																

	<p>Others: F connector</p> <p>A parameter code is set for a float connector, and the value of the connector is read as the gain factor of the auxiliary frequency. This mode is used for expansion besides the common sources.</p> <p>Additional information:</p> <p>The final auxiliary frequency is the current auxiliary frequency multiplied by the auxiliary frequency gain factor. For example, if the current auxiliary frequency is 50 Hz, b5-06 is set to communication, and the factor is 50%, the final auxiliary frequency is 25 Hz (50 x 50%).</p>															
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
	Multi-reference 0 setting mode	0xF026	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-								
	<p>Value:</p> <table border="0"> <tr> <td>0: F0-39</td> <td>4: HDI pulse</td> </tr> <tr> <td>1: AI1</td> <td>5: PID</td> </tr> <tr> <td>2: Reserved</td> <td>6: b5-01/b6-01 (digital setting of the main frequency of the effective set channel)</td> </tr> <tr> <td>3: MD-BP-M potentiometer</td> <td>Others: F connector</td> </tr> </table>								0: F0-39	4: HDI pulse	1: AI1	5: PID	2: Reserved	6: b5-01/b6-01 (digital setting of the main frequency of the effective set channel)	3: MD-BP-M potentiometer	Others: F connector
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1: AI1	5: PID															
2: Reserved	6: b5-01/b6-01 (digital setting of the main frequency of the effective set channel)															
3: MD-BP-M potentiometer	Others: F connector															
F0-38	<p>Description:</p> <p>This parameter sets the multi-reference 0 source. F0-38 is the mapping of b5-08 (Multi-reference 0 setting mode) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: F0-39 Multi-reference 0 is set by F0-39.</p> <p>1: AI1 Multi-reference 0 is input by current or voltage signal through the AI1. Multi-reference 0 is calculated according to the preset AI curve.</p> <p>2: Reserved</p> <p>3: MD-BP-M potentiometer The voltage signal is input through the MD-BP-M potentiometer and the corresponding per unit value is calculated according to the set curve.</p> <p>4: HDI pulse Multi-reference 0 is set through the pulse frequency of the DI4. The corresponding per unit value is calculated according to the curve of the relationship between the pulse frequency and the set frequency.</p> <p>5: PID Multi-reference 0 is set through PID.</p> <p>6: b5-01/b6-01 (digital setting of the main frequency of the effective set channel) Multi-reference 0 is set through b5-01/b6-01 (digital setting of main frequency). The corresponding frequency per unit value is calculated based on the frequency.</p> <p>Others: F connector</p> <p>A parameter code is set for a floating-point connector, and the value of the connector is read as the multi-reference 0. This mode is used for expansion besides the common sources.</p>															



	<p>Additional information: When the value of b8-02 (Multi-reference value unit selection) is not 0, the multi-reference 0 setting mode can be set only to 0 (b8-09). Other modes are invalid.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-39	Multi-reference 0	0xF027	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	-
	<p>Description: This parameter sets the multi-reference 0. The source of multi-reference 0 is selected through b8-08. Other multi-references are defined through digital settings of parameters. F0-39 is the mapping of b5-09 (multi-reference 0) in group F. The two parameters have the same function.</p> <p>Additional information: 1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints. 2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06). 3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction. 4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-40	Multi-reference 1	0xF028	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	-
	<p>Description: This parameter sets the multi-reference 2. F0-41 is the mapping of b5-11 (multi-reference 2) in group F. The two parameters have the same function.</p> <p>Additional information: 1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints. 2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06). 3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</p>							

	4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-41	Multi-reference 2	0xF029	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	-
	<p>Description:</p> <p>This parameter sets the multi-reference 2. F0-41 is the mapping of b5-11 (multi-reference 2) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</li> <li>2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</li> <li>3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</li> <li>4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-42	Multi-reference 3	0xF02A	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	-
	<p>Description:</p> <p>This parameter sets the multi-reference 3. F0-42 is the mapping of b5-12 (multi-reference 3) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</li> <li>2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</li> <li>3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</li> <li>4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</li> </ol>							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
F0-45	Ramp acceleration/deceleration mode	0xF02D	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-
	Value: 0: Linear acceleration/deceleration 1: S-curve acceleration/deceleration							
	Description: This parameter sets the ramp acceleration/deceleration mode. Select the mode according to working conditions. F0-45 is the mapping of b7-00 (Ramp acceleration/deceleration mode) in group F. The two parameters have the same function.  Value description: 0: Linear acceleration/deceleration The output frequency increases or decreases linearly. This mode applies to scenarios that have high requirements on start, stop, and deceleration. 1: S-curve acceleration/deceleration When the target frequency changes dynamically in real time, the output frequency increases or decreases based on the S-curve. This mode applies to scenarios requiring smooth operation and quick response in real time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-46	Base for ramp acceleration/deceleration time	0xF02E	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	-
	Value: 0: Rated frequency 1: Maximum frequency 2: 100 Hz 3: Frequency reference							
	Description: This parameter is used to set the base frequency for the ramp acceleration/deceleration time. F0-46 is the mapping of b7-01 (Base for ramp acceleration/deceleration time) in group F. The two parameters have the same function.  Value description: 0: Rated frequency The rated frequency is used as the base frequency for the ramp acceleration/deceleration time. 1: Maximum frequency The maximum frequency is used as the base frequency for the ramp acceleration/deceleration time. 2: 100 Hz The frequency of 100 Hz is used as the base frequency for the ramp acceleration/deceleration time. 3: Frequency reference The frequency reference is used as the base frequency for the ramp acceleration/deceleration time.							

	<p>Additional information:</p> <p>This parameter selects a base frequency for the acceleration/deceleration time. Acceleration time refers to the time required to accelerate from 0 to the base frequency. Similarly, deceleration time refers to the time required to decelerate from the base frequency to 0.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp 1 acceleration time	0xF030	0.0s to 6500.0s	20.0s	Unsigned 16 bit	Real time changes	Standard	-
F0-48	<p>Description :</p> <p>This parameter is used to set the first group of acceleration time. By default, the first group of acceleration/deceleration time is selected. F0-48 is the mapping of b7-04 (Ramp 1 acceleration time) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>This parameter indicates the time required for the output frequency to increase from 0 to the base frequency for the ramp acceleration/deceleration time (b7-01), which determines the accelerated speed during acceleration.</p> <p>The AC drive provides four groups of acceleration/deceleration time, which can be selected by using the parameter b7-02 or b7-03 or DI. This parameter defines the first group of acceleration time.</p> <p>Acceleration time setting requirements: The acceleration current must be limited below the overcurrent capacity of the AC drive, so as not to cause the AC drive to trip due to overcurrent stall.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp 1 deceleration time	0xF031	0.0s to 6500.0s	20.0s	Unsigned 16 bit	Real time changes	Standard	-
F0-49	<p>Description :</p> <p>This parameter is used to set the first group of deceleration time. By default, the first group of acceleration/deceleration time is selected. F0-49 is the mapping of b7-05 (ramp 1 deceleration time) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>This parameter indicates the time required for the output frequency to decrease from the base frequency for the ramp acceleration/deceleration time (b7-01) to 0, which determines the accelerated speed during deceleration.</p> <p>The AC drive provides four groups of acceleration/deceleration time, which can be selected by using the parameter b7-02 or b7-03 or DI. This parameter defines the first group of deceleration time.</p> <p>Deceleration time setting requirements: Set the deceleration time properly to avoid too large smoothing circuit voltage, so as not to cause the AC drive to trip due to overvoltage stall.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp 1 acceleration start arc	0xF032	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	-
F0-50	<p>Description :</p> <p>This parameter sets the running time according to the arc during ramp 1 acceleration start segment. F0-50 is the mapping</p>							

of b7-06 (Ramp 1 acceleration start arc) in group F. The two parameters have the same function.

Additional information:  
 This parameter defines the arc motion time of the output frequency acceleration start segment. It determines the jerk of the acceleration start segment arc. It is the first group of acceleration start arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.  
 This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the actual acceleration time to the frequency is 10s, arc motion applies in the first 2s and linear motion applies in the last 8s during acceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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	Ramp 1 acceleration end arc	0xF033	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	-
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Description:  
 This parameter sets the running time according to the arc during ramp 1 acceleration end segment. F0-51 is the mapping of b7-07 (Ramp 1 acceleration end arc) in group F. The two parameters have the same function.

Additional information:  
 This parameter defines the arc motion time of the output frequency acceleration end segment. It determines the jerk of the acceleration end segment arc. It is the first group of acceleration end arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.  
 This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the actual acceleration time to the frequency is 10s, linear motion applies in the first 8s and arc motion applies in the last 2s during acceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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	Ramp 1 deceleration start arc	0xF034	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	-
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Description:  
 This parameter sets the running time according to the arc during ramp 1 deceleration start segment. F0-52 is the mapping of b7-08 (Ramp 1 deceleration start arc) in group F. The two parameters have the same function.

Additional information:  
 This parameter defines the arc motion time of the output frequency deceleration start segment. It determines the jerk of the deceleration start segment arc. It is the first group of deceleration start arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.  
 This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the deceleration time from the frequency to 0 is 10s, arc motion applies in the first 2s and linear motion applies in the last 8s during deceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.

Param.	Name	Communication	Range	Default	Data type	Change	User	Effective
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		address				mode	authority	mode									
	Ramp 1 deceleration end arc	0xF035	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	-									
F0-53	<p>Description:</p> <p>This parameter sets the running time according to the arc during ramp 1 deceleration end segment. F0-53 is the mapping of b7-09 (Ramp 1 deceleration end arc) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>This parameter defines the arc motion time of the output frequency deceleration end segment. It determines the jerk of the deceleration end segment arc. It is the first group of deceleration end arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur. This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the deceleration time from the frequency to 0 is 10s, linear motion applies in the first 8s and arc motion applies in the last 2s during deceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
	Jog 1 frequency source	0xF038	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-									
F0-56	<p>Value:</p> <table border="0"> <tr> <td>0: F0-57</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table> <p>Description:</p> <p>This parameter sets the source of jog 1 frequency. F0-56 is the mapping of b5-07 (Jog 1 frequency source) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: Digital setting The jog 1 frequency is set through F0-57.</p> <p>2: AI1 The jog 1 frequency is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.</p> <p>5: HDI pulse The jog 1 frequency is set by using the pulse frequency of the DI4 and calculated according to the corresponding mapping curve.</p> <p>6: Multi-reference When multi-reference is used as the jog 1 frequency source, different combinations of DI terminal states correspond to different frequency references. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.</p>								0: F0-57	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
0: F0-57	6: Multi-reference	9: Communication															
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															

	<p>8: PID The jog 1 frequency is set through PID.</p> <p>9: Communication The jog 1 frequency is set through communication. When selecting the source, you can set the jog 1 frequency through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.</p> <p>10: MD-BP-M potentiometer The jog 1 frequency is set through the MD-BP-M potentiometer.</p> <p>Others: F connector A parameter code is set for a floating-point connector, and the value of the connector is read as the jog 1 frequency. This mode is used for expansion besides the common sources.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
F0-57	Digital setting of jog 1 frequency	0xF039	-50.00 Hz to 50.00 Hz	2.00Hz	Signed 16 bits	Real time changes	Standard	-									
	<p>Description : This parameter indicates the digital setting of jog 1 frequency. It is valid when F0-56 is set to 0. F0-57 is the mapping of b5-08 (Digital setting of jog 1 frequency) in group F. The two parameters have the same function.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
F0-58	Jog 2 frequency source	0xF03A	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-									
	<p>Value:</p> <table border="0"> <tr> <td>0: F0-59</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: F0-59	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
0: F0-59	6: Multi-reference	9: Communication															
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
	<p>Description : This parameter sets the source of jog 2 frequency. F0-58 is the mapping of b5-09 (Jog 2 frequency source) in group F. The two parameters have the same function.</p> <p>Value description: 0: Digital setting The jog 2 frequency is set through F0-59. 2: AI1 The jog 2 frequency is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve. 5: HDI pulse The jog 2 frequency is set by using the pulse frequency of the DI4 and calculated according to the corresponding mapping curve. 6: Multi-reference When multi-reference is used as the jog 2 frequency source, different combinations of DI terminal states correspond to different frequency references. The four multi-reference terminals can provide 16 state combinations, corresponding to</p>																

16 reference values.

7: Simple PLC  
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.

8: PID  
The jog 2 frequency is set through PID.

9: Communication  
The jog 2 frequency is set through communication. When selecting the source, you can set the jog 2 frequency through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.

10: MD-BP-M potentiometer  
The jog 2 frequency is set through the MD-BP-M potentiometer.

Others: F connector  
A parameter code is set for a floating-point connector, and the value of the connector is read as the jog 2 frequency. This mode is used for expansion besides the common sources.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-59	Digital setting of jog 2 frequency	0xF03B	-50.00 Hz to 50.00 Hz	-2.00Hz	Signed 16 bits	Real time changes	Standard	-
	Description: This parameter indicates the digital setting of jog 2 frequency. It is valid when F0-58 is set to 0. F0-59 is the mapping of b5-10 (Digital setting of jog 2 frequency) in group F. The two parameters have the same function.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-62	Jog ramp source	0xF03E	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-
	Value: 0: Normal operation ramp time 1: Jog ramp time							
	Description: This parameter sets the acceleration/deceleration time during jogging. F0-62 is the mapping of b7-31 (Jog ramp source) in group F. The two parameters have the same function.  Value description: 0: Normal operation ramp time The jog ramp time is the same as the normal operation ramp time. 1: Jog ramp time Jog ramp time is set separately through F0-63 and F0-64.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode



F0-63	Jog ramp acceleration time	0xF03F		20.00s	Unsigned 16 bit	Real time changes	Standard	-
	<p>Description :</p> <p>This parameter defines the time required for the output frequency to rise from 0 to F0-46 (base frequency for acceleration/deceleration) in jog mode. It determines the frequency rise rate in jog mode.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F0-64	Jog ramp deceleration time	0xF040	0.00s to 650.00s	20.00s	Unsigned 16 bit	Real time changes	Standard	-
	<p>Description :</p> <p>This parameter defines the time required for the output frequency to fall from F0-46 (base frequency for acceleration/deceleration time) to 0 in the jog mode. It determines the frequency fall rate in the jog mode. F0-64 is the mapping of b7-33 (Jog ramp deceleration time) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>Deceleration time setting requirements: Set the deceleration time properly to avoid too large smoothing circuit voltage, so as not to cause the AC drive to trip due to overvoltage stall.</p>							

## F1: Basic Motor Parameters

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F1-00	Motor type	0xF100	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Value:</p> <p>0: Common asynchronous motor 2: Permanent magnet synchronous motor</p> <p>Description :</p> <p>This parameter sets the motor type. F1-00 is the mapping of C4-00 (Motor type) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: Common asynchronous motor 2: Permanent magnet synchronous motor</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F1-01	Rated motor power	0xF101	0.1 kW to 1000.0 kW	3.7kW	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Description :</p> <p>This parameter is used to set the rated motor power in the unit of kW. F1-01 is the mapping of C4-01 (Rated motor power) in group F. The two parameters have the same function.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F1-03	Rated motor voltage	0xF103	1 V to 2000 V	380V	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : This parameter is used to set the rated motor voltage in the unit of V. F1-03 is the mapping of C4-03 (Rated motor voltage) in group F. The two parameters have the same function.							
F1-04	Rated motor current	0xF104	0.01 A to 655.35 A	9.00A	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : This parameter is used to set the rated motor current in the unit of A. F1-04 is the mapping of C4-04 (Rated motor current) in group F. The two parameters have the same function.							
F1-06	Rated motor frequency	0xF106	0.01 Hz to 599.00 Hz	50.00Hz	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : This parameter is used to set the rated motor frequency in the unit of Hz. F1-06 is the mapping of C4-06 (Rated motor frequency) in group F. The two parameters have the same function.							
F1-07	Rated motor speed	0xF107	1 rpm to 65535 rpm	1460rpm	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : This parameter is used to set the rated motor speed in the unit of rpm. F1-07 is the mapping of C4-07 (Rated motor speed) in group F. The two parameters have the same function.							
F1-10	Maximum motor frequency	0xF10A	C4-06 to 599.00 Hz	50.00Hz	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : This parameter is used to set the allowed maximum frequency of the motor in the unit of Hz. F1-10 is the mapping of C4-10 (Maximum motor frequency) in group F. The two parameters have the same function.							
F1-11	Minimum motor frequency	0xF10B	0.00 Hz to C4-10	0.00Hz	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : This parameter is used to set the allowed minimum frequency of the motor in the unit of Hz. F1-11 is the mapping of C4-							

	11 (Minimum motor frequency) in group F. The two parameters have the same function.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F1-12	Synchronous motor back EMF	0xF10C	0.0 V to 6553.5 V	300.0V	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter is used to set the effective value of the linear back EMF of the synchronous motor at rated speed. The value is obtained through auto-tuning. F1-12 is the mapping of C4-12 (Synchronous motor back EMF) in group F. The two parameters have the same function.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F1-13	Maximum motor current	0xF10D	0.0% to 1000.0%	1000.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the output current upper limit. 100% corresponds to the rated motor current. F1-13 is the mapping of d1-00 (Maximum motor current) in group F. The two parameters have the same function.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F1-14	Number of motor pole pairs (number of pole pairs/2)	0xF10E	0 to 128	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : This parameter defines the number of motor pole pairs. F1-14 is the mapping of Number of motor pole pairs (number of pole pairs/2) in group F. The two parameters have the same function.  Additional information: When this parameter is set to 0, the number is automatically calculated by the system and the effective value is displayed in F1-14.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F1-15	Number of effective motor pole pairs	0xF10F	0 to 128	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter displays the effective number of motor pole pairs. F1-15 is the mapping of C4-15 (Number of effective motor pole pairs) in group F. The two parameters have the same function.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F1-20	Stator resistance	0xF114	0.001 Ω to 65.535 Ω	1.204Ω	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the motor stator resistance, which can be obtained by auto-tuning. F1-20 is the mapping of C4-20 (Stator resistance) in group F. The two parameters have the same function.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F1-22	Asynchronous motor rotor resistance	0xF116	0.001 Ω to 65.535 Ω	0.908Ω	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the asynchronous motor rotor resistance, which can be obtained by auto-tuning. F1-22 is the mapping of C4-22 (Asynchronous motor rotor resistance) in group F. The two parameters have the same function.							
F1-24	Stator leakage inductance of asynchronous motor	0xF118	0.01 mH to 655.35 mH	5.28mH	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the asynchronous motor stator leakage inductance, which can be obtained by auto-tuning. F1-24 is the mapping of C4-24 (Stator leakage inductance of asynchronous motor) in group F. The two parameters have the same function.							
F1-28	Mutual inductance of asynchronous motor	0xF11C	0.1 mH to 6553.5 mH	156.8mH	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the asynchronous motor mutual inductance, which can be obtained by auto-tuning. F1-28 is the mapping of C4-28 (Asynchronous motor mutual inductance) in group F. The two parameters have the same function.							
F1-30	Asynchronous motor no-load current	0xF11E		4.20A	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : Asynchronous motor no-load current, which can be obtained by auto-tuning							
F1-32	Synchronous motor D-axis inductance	0xF120		5.28mH	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : Synchronous motor D-axis inductance, which can be obtained by auto-tuning							
F1-34	Synchronous motor Q-axis inductance	0xF122		5.28mH	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : Synchronous motor Q-axis inductance, which can be obtained by auto-tuning							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F1-48	Inertia ratio	0xF130	0.0% to 6553.5%	120.0%	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : This parameter indicates the ratio of motor inertia to internal inertia base value. F1-49 is the mapping of C4-62 (inertia ratio) in group F. The two parameters have the same function.							
F1-49	Electromechanical time constant	0xF131	0.01s to 655.35s	1.00s	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter defines the time for the motor to accelerate from 0 to the rated speed under rated torque and reflects the system inertia. It can be obtained through inertia auto-tuning and dynamic auto-tuning.							
F1-69	Motor parameter auto-tuning mode	0xF145	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value : 0: No auto-tuning 1: Static partial auto-tuning of the asynchronous motor 2: No-load dynamic auto-tuning of the asynchronous motor 3: Static complete auto-tuning of the asynchronous motor 4: Inertia auto-tuning 5: Dead zone auto-tuning 11: With-load auto-tuning of the synchronous motor 12: No-load dynamic complete auto-tuning of the synchronous motor 13: Static partial auto-tuning of the synchronous motor 14: UV gain deviation auto-tuning							
Description : This parameter sets the motor auto-tuning mode. F1-69 is the mapping of C2-00 (Motor parameter auto-tuning mode) in group F. The two parameters have the same function.								
Value description: 0: No auto-tuning No auto-tuning is performed. 1: Static partial auto-tuning of the asynchronous motor It applies to scenarios where the motor cannot be disconnected from the load and dynamic auto-tuning is not allowed. Some motor parameters are auto-tuned. Other parameters use default values. 2: No-load dynamic auto-tuning of the asynchronous motor It applies to scenarios where the motor can rotate at high speed without the load. It supports auto-tuning of all motor parameters under no-load and pure inertia load states. 3: Static complete auto-tuning of the asynchronous motor It applies to scenarios where the motor cannot be disconnected from loads and dynamic auto-tuning is not allowed. Some motor parameters are auto-tuned. The auto-tuning precision is better than that when F1-69 is set to 1.								

<p>4: Inertia auto-tuning</p> <p>This mode is applicable to scenarios requiring high-speed operation. Auto-tuning can be performed without load or with light load (below 80% of the rated load) or pure inertia load. Parameters such as inertia ratio is tuned.</p> <p>5: Dead zone auto-tuning</p> <p>This mode is used to tune the non-linear characteristics of the drive, thus improving the voltage output precision and operation efficiency.</p> <p>11: With-load auto-tuning of the synchronous motor</p> <p>This mode applies to scenarios where the motor cannot be disconnected from the load and dynamic auto-tuning is not allowed. Some motor parameters are auto-tuned. Other parameters use default values.</p> <p>12: No-load dynamic complete auto-tuning of the synchronous motor</p> <p>This mode applies to scenarios where the motor can rotate at high speed without the load. All motor parameters can be tuned.</p> <p>13: Static partial auto-tuning of the synchronous motor</p> <p>This mode applies to scenarios where the motor cannot be disconnected from the load and dynamic complete auto-tuning is not allowed. Some motor parameters are auto-tuned. The auto-tuning precision is better than that when the synchronous motor is tuned with load.</p> <p>14: UV gain deviation auto-tuning</p> <p>The sampling deviation between output phase currents is tuned.</p> <p>Specific auto-tuning parameters are set based on the setting of F1-68.</p> <p>Additional information:</p> <p>Dynamic auto-tuning and inertia auto-tuning are applicable to motors that can rotate without load. A motor is considered to be running without load when rotating without any noticeable load torque. The motor is not required to be disconnected from the load mechanism. Static auto-tuning is applicable to motors that cannot rotate.</p>
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## F2: Motor Control Parameters

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-02	Speed loop Kp in SVC mode	0xF202	0.00 to 100.00	5.00	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the speed loop proportional gain in the SVC mode. F2-02 is the mapping of d3-02 (Speed loop Kp in SVC mode) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>A larger value indicates a higher value of the speed loop gain and better speed following performance, but a greater possibility of oscillation.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-03	Speed loop Ti in SVC mode	0xF203	0.000s to 20.000s	0.127s	Unsigned 16 bit	Real time changes	Standard	Nothing

	<p>Description :</p> <p>This parameter sets the speed loop integral time in the SVC mode. F2-03 is the mapping of d3-03 (Speed loop Ti in SVC mode) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>A smaller value indicates a higher value of the speed loop gain and better speed following performance, but a greater possibility of oscillation.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Zero speed switchover frequency	0xF204	0.0% to d3-09	1.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
F2-04	<p>Description :</p> <p>This parameter sets the zero speed switchover frequency of the speed loop. F2-04 is the mapping of d3-06 (Zero speed switchover frequency) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>When the frequency reference is lower than this frequency, the effective speed loop parameters are adjusted with the corresponding correction factors on the basis of the original speed loop parameters.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Zero speed Kp correction factor	0xF205	0.0% to 1000.0%	100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
F2-05	<p>Description :</p> <p>This parameter sets the proportional correction factor of the speed loop at zero speed. F2-05 is the mapping of d3-07 (Zero speed Kp correction factor) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>When the frequency reference is lower than the zero speed switchover frequency, the effective speed loop proportional factor is adjusted with this parameter.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Zero speed Ti correction factor	0xF206	0.0% to 1000.0%	100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
F2-06	<p>Description :</p> <p>This parameter sets the integral correction factor of the speed loop at zero speed. F2-06 is the mapping of d3-08 (Zero speed Ti correction factor) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>When the frequency reference is lower than the zero speed switchover frequency, the effective speed loop integral factor is adjusted with this parameter.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

	Low speed switchover frequency	0xF207	0.0% to d3-12	10.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
F2-07	<p>Description :</p> <p>This parameter sets the low speed switchover frequency of the speed loop. F2-07 is the mapping of d3-09 (Low speed switchover frequency) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>When the actual speed is less than the low speed switchover frequency, the effective speed loop parameters are adjusted with the corresponding correction factors on the basis of the original speed loop parameters.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Low speed Kp correction factor	0xF208	0.0% to 1000.0%	100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
F2-08	<p>Description :</p> <p>This parameter sets the proportional correction factor of the speed loop at low speed. F2-08 is the mapping of d3-10 (Low speed Kp correction factor) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>When the actual speed is less than the low speed switchover frequency, the effective speed loop parameters are adjusted with the low speed correction factors. When the actual speed is greater than the high speed switchover frequency, the effective speed loop parameters are adjusted with the high speed correction factors. When the actual speed is between the low speed and the high speed, the speed loop correction factors vary linearly.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Low speed Ti correction factor	0xF209	0.0% to 1000.0%	20.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
F2-09	<p>Description :</p> <p>This parameter sets the integral correction factor of the speed loop at low speed. F2-09 is the mapping of d3-11 (Low speed Ti correction factor) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>When the actual speed is less than the low speed switchover frequency, the effective speed loop parameters are adjusted with the low speed correction factors. When the actual speed is greater than the high speed switchover frequency, the effective speed loop parameters are adjusted with the high speed correction factors. When the actual speed is between the low speed and the high speed, the speed loop correction factors vary linearly.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	High speed switchover frequency	0xF20A	d3-09 to 400.0%	100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
F2-10	<p>Description :</p> <p>This parameter sets the high speed switchover frequency of the speed loop. F2-10 is the mapping of d3-12 (High speed switchover frequency) in group F. The two parameters have the same function.</p>							



	<p>Additional information:</p> <p>When the actual speed is less than the low speed switchover frequency, the effective speed loop parameters are adjusted with the low speed correction factors. When the actual speed is greater than the high speed switchover frequency, the effective speed loop parameters are adjusted with the high speed correction factors. When the actual speed is between the low speed and the high speed, the speed loop correction factors vary linearly.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-11	High speed Kp correction factor	0xF20B	0.0% to 1000.0%	100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the proportional correction factor of the speed loop at high speed. F2-11 is the mapping of d3-13 (High speed Kp correction factor) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>When the actual speed is less than the low speed switchover frequency, the effective speed loop parameters are adjusted with the low speed correction factors. When the actual speed is greater than the high speed switchover frequency, the effective speed loop parameters are adjusted with the high speed correction factors. When the actual speed is between the low speed and the high speed, the speed loop correction factors vary linearly.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-12	High speed Ti correction factor	0xF20C	0.0% to 1000.0%	100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the integral correction factor of the speed loop at high speed. F2-12 is the mapping of d3-14 (High speed Ti correction factor) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>When the actual speed is less than the low speed switchover frequency, the effective speed loop parameters are adjusted with the low speed correction factors. When the actual speed is greater than the high speed switchover frequency, the effective speed loop parameters are adjusted with the high speed correction factors. When the actual speed is between the low speed and the high speed, the speed loop correction factors vary linearly.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-14	Motor running direction selection	0xF20E	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Value:</p> <p>0: Default direction</p> <p>1: Opposite to default direction</p>							
	<p>Description :</p> <p>This parameter is used to set the motor running direction. F2-14 is the mapping of d0-14 (Motor running direction selection) in group F. The two parameters have the same function.</p> <p>Value description:</p>							

	<p>0: Default direction The motor runs in the set direction.</p> <p>1: Opposite to default direction The motor runs in the direction opposite to the set direction.</p> <p>Additional information: Unlike the speed reverse function, the direction of the speed is not changed when the motor phase sequence is switched, but the actual running direction of the motor changes to the reverse direction.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-15	Start mode	0xF20F	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Direct start 1: Flying start 2: Reserved 3: Reserved</p>							
	<p>Description:</p> <p>This parameter is used to set the start mode of the motor. F2-15 is the mapping of d0-02 (Start mode) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: Direct start The drive starts directly. This mode applies to scenarios where the motor starts from a standstill state.</p> <p>1: Flying start In this mode, the drive first determines the motor rotation speed and direction, and then starts at the detected frequency of the motor. Select this mode when the motor is started during rotation. For other scenarios, select direct start.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-16	Flying start mode	0xF210	Refer to "Value"	4	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: From the stop frequency 1: From the mains frequency 2: From the maximum frequency 4: Magnetic field oriented flying start</p>							
	<p>Description:</p> <p>This parameter is used to set the flying start mode when the AC drive starts. F2-16 is the mapping of d0-03 (Flying start mode) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: From stop frequency</p>							

	<p>The current speed is searched from the last stop frequency. If external force drives the motor to a speed higher than the speed at stop, this mode is not applicable.</p> <p>1: From the mains frequency</p> <p>The current speed is searched from the mains frequency of 50 Hz. This mode is applicable to scenarios where the motor is restarted after stop for a long time.</p> <p>2: From the maximum frequency</p> <p>The current speed is searched from F1-10 (Maximum motor frequency). It is generally used for generating loads.</p> <p>4: Magnetic field oriented flying start</p> <p>The current speed is searched using magnetic field oriented flying start. The search speed is faster than the first three modes, but motor parameters need to be tuned. It is used for fast flying start in the V/f mode.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	OFF1 stop mode	0xF211	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
F2-17	<p>Value:</p> <p>0: Decelerate to stop</p> <p>1: Coast to stop</p> <p>2: Stop at maximum capability</p>							
	<p>Description:</p> <p>This parameter sets the OFF1 stop mode, that is, the default stop mode. F2-17 is the mapping of d0-04 (OFF1 stop mode) in group F. The two parameters have the same function.</p>							
	<p>Value description:</p> <p>0: Decelerate to stop</p> <p>Once the stop command is input, the AC drive decreases the output frequency to 0 and then stops based on the deceleration time. This mode is applicable to applications where the drive is used to drive large-inertia loads.</p> <p>1: Coast to stop</p> <p>Once the stop command is input, the AC drive immediately stops output. The motor then coasts to stop based on the mechanical inertia. This mode applies to small inertia loads and can also be used for emergency stop.</p> <p>2: Stop at maximum capability</p> <p>In this mode, the motor speed reference is set to 0 forcibly. The motor decelerates to 0 based on the maximum output capacity. The minimum deceleration time is fixed to 50 ms. The output torque or current may reach the limit value during deceleration. The output torque cannot be controlled during stop, which may damage the motor. Therefore, do not use this mode in normal scenarios.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Positive speed	0xF214	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
F2-20	<p>Value:</p> <p>0: Disable</p> <p>1: Enable</p> <p>3: DI1</p>							
	<p>5: DI3</p> <p>6: DI4</p> <p>7: DI5 (MD600A)</p>							

	4: DI2	Others: B connector
<p>Description :</p> <p>This parameter specifies whether forward operation is allowed for the drive. F2-20 is the mapping of d1-01 (Positive speed) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: Disable Forward operation is not allowed.</p> <p>1: Enable Forward operation is allowed.</p> <p>3 to 7: DI1 to DI5 Whether forward operation is allowed depends on the DI state.</p> <p>Others: B connector Whether forward operation is allowed depends on the B connector state.</p> <p>Additional information:</p> <p>After the DI is assigned with function 78 (Forward running allowed), the value of d1-01 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>		

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
	Negative speed	0xF215	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing								
F2-21	<p>Value:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">0: Disable</td> <td style="width: 50%;">5: DI3</td> </tr> <tr> <td>1: Enable</td> <td>6: DI4</td> </tr> <tr> <td>3: DI1</td> <td>7: DI5 (MD600A)</td> </tr> <tr> <td>4: DI2</td> <td>Others: B connector</td> </tr> </table>								0: Disable	5: DI3	1: Enable	6: DI4	3: DI1	7: DI5 (MD600A)	4: DI2	Others: B connector
	0: Disable	5: DI3														
	1: Enable	6: DI4														
3: DI1	7: DI5 (MD600A)															
4: DI2	Others: B connector															
<p>Description :</p> <p>This parameter specifies whether reverse operation is allowed for the drive. F2-21 is the mapping of d1-02 (Negative speed) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: Disable Reverse operation is not allowed.</p> <p>1: Enable Reverse operation is allowed.</p> <p>3 to 7: DI1 to DI5 Whether reverse operation is allowed depends on the DI state.</p> <p>Others: B connector Whether reverse operation is allowed depends on the B connector state.</p>																

	<p>Additional information: After the DI is assigned with function 79 (Reverse running allowed), the value of d1-02 value is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
F2-22	Digital setting of forward frequency upper limit 1	0xF216	F2-26 to 800.0%	800.0%	Unsigned 16 bit	Shutdown change	Standard	Nothing									
	<p>Description : This parameter limits the maximum operation frequency in the forward direction. It is a per-unit value based on the rated motor frequency, that is, 100% indicates the rated motor frequency. F2-22 is the mapping of d1-03 (Digital setting of forward frequency upper limit) in group F. The two parameters have the same function.</p> <p>Additional information: The effective frequency upper limit in the forward direction is the smaller value between F2-22 and F2-24.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
F2-23	Digital setting of reverse frequency upper limit 1	0xF217	-800.0% to F2-27	- 800.0%	Signed 16 bits	Shutdown change	Standard	Nothing									
	<p>Description : This parameter limits the maximum operation frequency in the reverse direction. It is a per-unit value based on the rated motor frequency, that is, 100% indicates the rated motor frequency. F2-23 is the mapping of d1-04 (Digital setting of reverse frequency upper limit) in group F. The two parameters have the same function.</p> <p>Additional information: The effective frequency upper limit in the reverse direction is the smaller value between F2-23 and F2-25.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
F2-24	Source selection of forward frequency upper limit 2	0xF218	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value:</p> <table border="0"> <tr> <td>0: 800%</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: 800%	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
	0: 800%	6: Multi-reference	9: Communication														
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
<p>Description : This parameter is used to select the source to set the frequency upper limit in the forward direction. It is a per-unit value based on the rated motor frequency, that is, 100% indicates the rated motor frequency. F2-24 is the mapping of d1-05 (Forward frequency upper limit selection) in group F. The two parameters have the same function.</p>																	

Value description:

0: 800%  
Set the forward frequency upper limit to 800%.

2: AI1  
The forward frequency upper limit is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.

5: HDI pulse  
The forward frequency upper limit is set through the pulse frequency of the DI4 and calculated based on the curve of the relationship between the pulse frequency and the set frequency.

6: Multi-reference  
When multi-reference is used as the forward frequency upper limit source, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 forward frequency upper limits.

7: Simple PLC  
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each forward frequency upper limit is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each frequency reference and supports up to 16 references.

8: PID  
The forward frequency upper limit is set through PID.

9: Communication  
The forward frequency upper limit is set through remote communication.

10: MD-BP-M potentiometer  
The forward frequency upper limit is set through the external MD-BP-M potentiometer.

Others: F connector  
The frequency upper limit is set through the F connector.

Additional information:  
The effective frequency upper limit in the forward direction is the smaller value between F2-22 and F2-24.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-25	Source selection of reverse frequency upper limit 2	0xF219	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value:							
	0: -800% 1: Opposite to forward frequency upper limit 2: AI1 5: HDI pulse	6: Multi-reference 7: Simple PLC 8: PID	9: Communication 10: MD-BP-M potentiometer Others: F connector					
	Description:	This parameter is used to select the source to set the frequency upper limit in the reverse direction. F2-25 is the mapping of d1-06 (Reverse frequency upper limit selection) in group F. The two parameters have the same function.						

Value description:

0: -800%

Set the reverse frequency upper limit to -800%.

1: Opposite to forward frequency upper limit

The reverse frequency upper limit is opposite to the value of d1-03 (Digital setting of forward frequency upper limit).

2: AI1

The reverse frequency upper limit is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.

5: HDI pulse

The reverse frequency upper limit is set through the pulse frequency of the DI4 and calculated based on the curve of the relationship between the pulse frequency and the set frequency.

6: Multi-reference

When multi-reference is used as the reverse frequency upper limit source, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reverse frequency upper limits.

7: Simple PLC

Simple PLC is a multi-speed operation command that can control the operation time and acceleration and deceleration time. Each reverse frequency upper limit is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each frequency reference and supports up to 16 references.

8: PID

The reverse frequency upper limit is set through PID.

9: Communication

The reverse frequency upper limit is set through remote communication.

10: MD-BP-M potentiometer

The reverse frequency upper limit is set through the external MD-BP-M potentiometer.

Others: F connector

The reverse frequency upper limit is set through the F connector.

Additional information:

The effective frequency upper limit in the reverse direction is the smaller value between F2-23 and F2-25.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-26	Digital setting of forward frequency 1 lower limit	0xF21A	0.0% to F2-22	0.0%	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description: This parameter limits the minimum operation frequency in the forward direction. It is a per-unit value based on the rated motor frequency, that is, 100% indicates the rated motor frequency. F2-26 is the mapping of d1-07 (Digital setting of forward frequency lower limit) in group F. The two parameters have the same function.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-27	Digital setting of	0xF21B	F2-23 to	0.0%	Signed 16	Shutdown	Standard	Nothing

	reverse frequency 1 lower limit		0.0%		bits	change											
<p>Description :</p> <p>This parameter limits the minimum operation frequency in the reverse direction. It is a per-unit value based on the rated motor frequency, that is, 100% indicates the rated motor frequency. F2-27 is the mapping of d1-08 (Digital setting of reverse frequency lower limit) in group F. The two parameters have the same function.</p>																	
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
F2-30	Digital setting of torque upper limit 1	0xF21E	0.0% to 800.0%	180.0%	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Description :</p> <p>This parameter limits the positive maximum output torque. It is a per-unit value based on the rated motor torque. F2-30 is the mapping of d1-09 (Digital setting of torque upper limit 1) in group F. The two parameters have the same function.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
F2-31	Digital setting of reverse torque upper limit	0xF21F		- 180.0%	Signed 16 bits	Real time changes	Standard	Nothing									
	<p>Description :</p> <p>This parameter limits the negative maximum output torque. It is a per-unit value based on the rated motor torque.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
F2-32	Source selection of torque upper limit 2	0xF220	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">0: 800%</td> <td style="width: 33%;">6: Multi-reference</td> <td style="width: 33%;">9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: 800%	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
	0: 800%	6: Multi-reference	9: Communication														
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
<p>Description :</p> <p>This parameter defines the source of the forward torque upper limit. The final limit is determined by F2-32 or F2-30, whichever is smaller. F2-32 is the mapping of d1-11 (Source selection of torque upper limit 2) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: 800% Set the forward torque limit to 800%.</p> <p>2: AI1 The forward torque limit is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.</p> <p>5: HDI pulse The forward torque limit is set through the pulse frequency of the DI4. The corresponding per unit value is calculated based on the curve of the relationship between the pulse frequency and the set frequency.</p>																	



6: Multi-reference  
 When multi-reference is used as the forward torque limit source, combinations of different DI states correspond to different forward torque limits. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 forward torque limits.

7: Simple PLC  
 Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each forward torque limit is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each frequency reference and supports up to 16 references.

8: PID  
 The forward torque limit is set through PID. PID control is a common method of process control. By performing proportional, integral, and derivative operations on the difference between the feedback signal and the target signal of the controlled variable, and adjusting the output frequency of the AC drive, a closed-loop system is formed to stabilize the controlled variable at the target level.

9: Communication  
 The forward torque limit is set through communication. When selecting the source, you can set the forward torque limit through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.

10: MD-BP-M potentiometer  
 The forward torque limit is set through the MD-BP-M potentiometer.

Others: F connector  
 A parameter code is set for a floating-point connector, and the value of the connector is read as the forward torque limit . This mode is used for expansion besides the common sources.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-33	Source selection of torque lower limit 2	0xF221	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value:							
	0: -800%	6: Multi-reference	9: Communication					
	1: Opposite to torque upper limit 2	7: Simple PLC	10: MD-BP-M potentiometer					
Description :								
This parameter defines the source of the reverse torque lower limit. The final limit is determined by F2-32 or F2-31, whichever is smaller. F2-33 is the mapping of d1-12 (Source selection of torque lower limit 2) in group F. The two parameters have the same function.								
0: 800%								
Set the forward torque limit to 800%.								
1: Opposite to torque upper limit 2								
The torque lower limit is opposite to the value of F2-32 (Source selection of torque upper limit 2).								
2: AI1								
The reverse torque limit is input by using current or voltage signals at the AI1 and calculated according to the preset AI								

curve.

5: HDI pulse  
The reverse torque limit is set through the pulse frequency of the DI4. The corresponding per unit value is calculated based on the curve of the relationship between the pulse frequency and the set frequency.

6: Multi-reference  
When multi-reference is used as the reverse torque limit, combinations of different DI states correspond to different reverse torque limits. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reverse torque limits.

7: Simple PLC  
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reverse torque limit is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each frequency reference and supports up to 16 references.

8: PID  
The reverse torque limit is set through PID. PID control is a common method of process control. By performing proportional, integral, and derivative operations on the difference between the feedback signal and the target signal of the controlled variable, and adjusting the output frequency of the AC drive, a closed-loop system is formed to stabilize the controlled variable at the target level.

9: Communication  
The reverse torque limit is set through communication. When selecting the source, you can set the reverse torque limit through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.

10: MD-BP-M potentiometer  
The reverse torque limit is set through the MD-BP-M potentiometer.

Others: F connector  
A parameter code is set for a floating-point connector, and the value of the connector is read as the reverse torque limit. This mode is used for expansion besides the common sources.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Overexcitation gain (V/f)	0xF224	0% to 200%	90%	Unsigned 16 bit	Real time changes	Standard	-
F2-36	<p>Description:</p> <p>This parameter sets the overexcitation gain in the V/f control mode. F2-36 is the mapping of d0-41 (Overexcitation gain (V/f)) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>This parameter is effective when the asynchronous motor is decelerating and the bus voltage is approaching the overvoltage point in the V/f control mode. When entering the overexcitation state, the drive increases the output voltage and the motor exciting current, therefore intensifying loss and reducing the motor deceleration time. The larger the value, the better the excitation performance. However, a large value may cause overcurrent.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-37	Overcurrent suppression	0xF225	Refer to "Value"	1	Unsigned 16 bit	Shutdown change	Standard	-

	<p>Value:</p> <p>0: Disable</p> <p>1: Enable</p>							
	<p>Description:</p> <p>This parameter sets whether to enable overcurrent suppression. F2-37 is the mapping of d2-26 (Overcurrent suppression) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: Disable</p> <p>1: Enable</p> <p>Additional information:</p> <p>In the V/f mode, when the drive output current reaches the threshold set by d2-27, the drive slows down the acceleration or reduces the operation frequency to prevent continuous current rising, thus suppressing the occurrence of overcurrent.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-38	Overcurrent suppression point	0xF226		200%	Unsigned 16 bit	Shutdown change	Standard	-
	<p>Description:</p> <p>This parameter specifies the threshold current that triggers overcurrent suppression, based on the motor rating. The actually effective overcurrent suppression point is determined by this parameter or A3-05 (AC drive maximum current), whichever is smaller.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-39	Overvoltage suppression	0xF227	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	-
	<p>Value:</p> <p>0: Disable</p> <p>1: Enable</p>							
	<p>Description:</p> <p>This parameter sets whether to enable overvoltage. F2-39 is the mapping of d1-54 (overvoltage suppression) in group F. The two parameters have the same function.</p> <p>Value description:</p> <p>0: Disable</p> <p>1: Enable</p> <p>After the overvoltage suppression function is enabled, the bus voltage rise is suppressed by limiting the generating torque or actual deceleration speed of the motor to prevent overvoltage. In this case, the deceleration time is longer than the setting value.</p> <p>Additional information:</p> <p>When a braking resistor, braking unit, or energy feedback unit is used, set this parameter to 0. Otherwise, the deceleration time may be prolonged.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
F2-40	Overvoltage suppression action voltage	0xF228	330.0 V to 800.0 V	770.0V	Unsigned 16 bit	Real time changes	Standard	-
	<p>Description:</p> <p>This parameter sets the bus voltage for effective overvoltage suppression. The effective value is displayed in d1-56. F2-40 is the mapping of d1-55 (Overvoltage suppression action voltage) in group F. The two parameters have the same function.</p> <p>Additional information:</p> <p>Too large value may lead to overvoltage.</p>							

## A0: Parameter Management

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
A0-00	Parameter initialization	0xA000	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing								
	<p>Value:</p> <table border="0"> <tr> <td>0: No operation</td> <td>4: Back up current user parameters</td> </tr> <tr> <td>1: Restore factory settings (excluding motor parameters)</td> <td>5: Clear fault information</td> </tr> <tr> <td>2: Clear records</td> <td>501: Restore backup user parameters</td> </tr> <tr> <td>3: Restore factory settings (including motor parameters)</td> <td>503: Restore factory settings (including motor parameters) and clear records</td> </tr> </table>								0: No operation	4: Back up current user parameters	1: Restore factory settings (excluding motor parameters)	5: Clear fault information	2: Clear records	501: Restore backup user parameters	3: Restore factory settings (including motor parameters)	503: Restore factory settings (including motor parameters) and clear records
	0: No operation	4: Back up current user parameters														
1: Restore factory settings (excluding motor parameters)	5: Clear fault information															
2: Clear records	501: Restore backup user parameters															
3: Restore factory settings (including motor parameters)	503: Restore factory settings (including motor parameters) and clear records															
<p>Description:</p> <p>0: No operation</p> <p>1: Except for the factory parameters, motor parameters, and records, all other functional parameters of the AC drive are reset to the factory settings.</p> <p>2: Fault records, accumulative running time, accumulative power-on time, and accumulative power consumption of the AC drive are cleared.</p> <p>3: Except for the factory parameters and records, all other functional parameters of the AC drive are reset to the factory settings. This differs from mode 1 in that the motor parameters are also restored.</p> <p>4: Parameter settings of the current user are backed up. This is equivalent to setting A0-09 to 400.</p> <p>501: Parameter settings backed up by setting A0-00 to 4 are restored. This is equivalent to setting A0-08 to 500.</p> <p>503: Except for the factory parameters, all other functional parameters of the AC drive are reset to the factory settings. This differs from mode 3 in that the records are cleared.</p> <p>The factory parameters include model parameters and factory AI/AO correction parameters. The records include fault records, cumulative running time, and cumulative power-on time.</p>																

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A0-10	System parameter access level	0xA00A	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Standard	Effective in real time
	Value: 0: Standard 1: Expansion 2: Expert 3: Manufacturer							
	Description: This parameter sets the parameter level that you can access.  Value description: 0: Standard You are allowed to access the standard-level parameters, that is, the basic function parameters, which is the default permission. 1: Expansion You are allowed to access the expansion-level parameters, which mainly include motor expansion function parameters, such as user-defined parameters and frequency detection parameters. 2: Expert You are allowed to access the expert-level parameters. You can set passwords and complex motor performance commissioning parameters. 3: Manufacturer You are allowed to access the manufacturer-level parameters, which are locked by password. Only the manufacturer can access this kind of parameters and the manufacturer can access all parameters.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A0-11	Parameter access level setting	0xA00B	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Effective in real time
	Value: 0: Standard 1: Expansion 2: Expert							
	Description: This parameter sets the parameter level that you can access.  Value description: 0: Standard							

<p>Standard-level parameters can be accessed.</p> <p>1: Expansion</p> <p>Expansion-level parameters can be accessed.</p> <p>2: Expert</p> <p>Expert-level parameters can be accessed.</p> <p>Additional information:</p> <p>If the expert password status (A0-23) is locked, you cannot switch directly to expert level.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A0-14	Expert password status	0xA00E	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value:</p> <p>0: Invalid (no expert password assigned)</p> <p>1: Locked (expert password set)</p> <p>2: Unlocked (expert password set)</p>							
	<p>Description:</p> <p>This parameter displays the current expert password status.</p> <p>0: Invalid (no expert password assigned)</p> <p>The expert password is set to 0. That is, no expert password is set. In this case, you can switch the expert level directly through A0-11.</p> <p>1: Locked (expert password set)</p> <p>The expert password is set, and the expert level parameter is locked. You need to enter the correct expert password to switch to the expert level through A0-11.</p> <p>2: Unlocked (expert password set)</p> <p>The expert password is set and the correct expert password is entered. You can switch to the expert level directly through A0-11.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A0-15	Expert password input	0xA00F	0 to 65535	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter is used to input the expert password.</p> <p>Additional information:</p> <p>If the data entered through A0-15 is consistent with the expert password set in A0-16, you can unlock the expert-level parameter.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A0-16	Expert password setting	0xA010	0 to 65535	0	Unsigned 16 bit	Real time changes	专家	Nothing
	<p>Description :</p> <p>This parameter sets the expert password. If this parameter is set to 0, the expert password is invalid. If this parameter is set to a non-zero value, the expert password is valid.</p> <p>Additional information:</p> <p>If the expert password is set, you need to enter the correct expert password through A0-15 before switching to the expert-level parameter through A0-11. If you enter the password incorrectly, you cannot enter the expert level.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A0-20	Manufacturer password status	0xA014	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value:</p> <p>1: Locked 2: Unlocked</p>							
	<p>Description :</p> <p>This parameter displays the current manufacturer password status.</p> <p>Value description:</p> <p>1: Locked The current factory password is locked. You cannot be switched to the manufacturer level.</p> <p>2: Unlocked The current factory password is unlocked, and the system has been switched to the manufacturer level.</p> <p>Additional information:</p> <p>After the correct manufacturer password is entered through A0-21, the manufacturer password is unlocked and the system automatically switches to the manufacturer level. A0-10 displays the manufacturer.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A0-21	Manufacturer password input	0xA015	0 to 65535	0	Unsigned 16 bit	Real time changes	Expansion	Effective in real time
	<p>Description :</p> <p>This parameter indicates the manufacturer password input window which is used to enter the manufacturer password.</p>							

	<p>Additional information: After the correct manufacturer password is entered through A0-21, the manufacturer password is unlocked and the system automatically switches to the manufacturer level. A0-10 displays the manufacturer.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Exit manufacturer level	0xA016	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Effective in real time
A0-22	<p>Value: 0: No operation 1: Exit</p>							
	<p>Description: This parameter sets whether to exit the manufacturer level manually.</p> <p>Value description: 0: No operation No operation is performed. 1: Exit The manufacturer level is exited and the level set by A0-11 is switched.</p> <p>Additional information: Automatic clearing is performed after the manufacturer level is exited.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Parameter lock status	0xA01E	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Standard	Effective in real time
A0-30	<p>Value: 0: Parameter lock disabled (parameter lock not set) 1: Parameter lock locked (parameter lock enabled and locked) 2: Parameter lock unlocked (parameter lock enabled and unlocked)</p>							
	<p>Description: This parameter displays the current parameter lock status.</p> <p>Options: 0: Parameter lock disabled (parameter lock not set). The parameter lock is set to 0, that is, no parameter lock is set. In this status, the parameter lock is disabled. 1: Parameter lock locked (parameter lock enabled and locked). The parameter lock has been set and locked. You need to enter the correct parameter lock to unlock it. 2: Parameter lock unlocked (parameter lock enabled and unlocked). The parameter lock has been set and the correct</p>							



	parameter lock has been entered, so the parameter lock is unlocked.							
	Notes: 1. The parameter lock is enabled when A0-31 is set to a non-zero value. 2. When the parameter lock is locked, you need to enter the correct parameter lock to access the parameter list.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Parameter lock setting	0xA01F	0 to 65535	0	Unsigned 16 bit	Real time changes	Standard	Effective in real time
A0-31	<p>Description :</p> <p>This parameter sets the parameter lock. If the parameter lock is set to 0, the parameter lock is inactive. If the parameter lock is set to a value other than 0, the parameter lock is active.</p> <p>Additional information:</p> <p>1. If the value of A0-31 non-zero, the parameter lock takes effect. 2. When the parameter lock is in the locked state, you need to enter the correct parameter lock to access the parameter list.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Unlock effective time of parameter lock	0xA020	60s to 65535s	3600s	Unsigned 16 bit	Real time changes	Standard	Effective in real time
A0-32	<p>Description :</p> <p>This parameter sets the effective time of the parameter lock in the unlocked status after the parameter lock is activated and the correct parameter lock is entered.</p> <p>Additional information:</p> <p>The parameter lock is automatically locked after the unlock time exceeds the effective time. You need to enter the correct parameter lock again to unlock the parameter.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Lock parameter lock	0xA021	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Effective in real time
A0-33	<p>Value:</p> <p>0: No operation 1: Lock</p> <p>Description :</p> <p>This parameter sets whether to lock the parameter lock manually.</p>							

	<p>Value description:  0: No operation  No operation is performed.  1: Lock  The parameter lock is locked.</p> <p>Additional information:  1. The parameter lock is valid when A0-31 is not 0.  2. After A0-33 is set to 1, you do not need to wait for the time set by A0-32, and the parameter lock is locked immediately.  You need to enter the correct parameter lock again to unlock the parameter.  3. Automatic clearing is performed after parameter lock is locked.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Clear backed-up parameter	0xA025	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
A0-37	<p>Value:  0: No operation  500: Clear all user backed-up parameters  1000: Clear all motor backed-up parameters</p> <p>Description:  This parameter sets the backed-up parameters to be cleared.</p> <p>Value description:  0: No operation  500: Clear all user backed-up parameters  All user parameters backed up by setting A0-39 to a value ranging from 400 to 406 are cleared.  1000: Clear all motor backed-up parameters  All motor parameters backed up by setting A0-39 to a value ranging from 1011 to 1201 are cleared.</p> <p>Additional information: After the parameter operation is completed, this parameter is automatically restored to 0.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Backed-up parameter restoration	0xA026	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
A0-38	<p>Value:  0: No operation  500: Restore user backed-up parameter  501: Restore user macro backed-</p> <p>2031: Restore motor macro backed-up parameter 3 to motor 1  2041: Restore motor macro backed-up parameter 4 to motor 1</p> <p>2121: Restore motor macro backed-up parameter 12 to motor 1  2131: Restore motor macro backed-up parameter 13 to motor 1</p>							

up parameter 1	2051: Restore motor macro	2141: Restore motor macro
502: Restore user macro backed-up parameter 2	backed-up parameter 5 to motor 1	backed-up parameter 14 to motor 1
up parameter 2	2061: Restore motor macro	2151: Restore motor macro
503: Restore user macro backed-up parameter 3	backed-up parameter 6 to motor 1	backed-up parameter 15 to motor 1
up parameter 3	2071: Restore motor macro	2161: Restore motor macro
504: Restore user macro backed-up parameter 4	backed-up parameter 7 to motor 1	backed-up parameter 16 to motor 1
up parameter 4	2081: Restore motor macro	2171: Restore motor macro
505: Restore user macro backed-up parameter 5	backed-up parameter 8 to motor 1	backed-up parameter 17 to motor 1
up parameter 5	2091: Restore motor macro	2181: Restore motor macro
506: Restore user macro backed-up parameter 6	backed-up parameter 9 to motor 1	backed-up parameter 18 to motor 1
up parameter 6	2101: Restore motor macro	2191: Restore motor macro
2011: Restore motor macro	backed-up parameter 10 to motor 1	backed-up parameter 19 to motor 1
backed-up parameter 1 to motor 1	2111: Restore motor macro	2201: Restore motor macro
2021: Restore motor macro	backed-up parameter 11 to motor 1	backed-up parameter 20 to motor 1
backed-up parameter 2 to motor 1		

Description:  
This parameter sets the backed-up parameters to be restored.

Value description:  
0: No operation  
500 to 506: Restore user backed-up parameters  
User backed-up parameter restoration corresponds to user parameter backup, for example:  
When A0-38 is set to 500, the user parameters backed up by setting A0-39 to 400 are restored.  
When A0-38 is set to 501, the user parameters backed up by setting A0-39 to 401 are restored.  
When A0-38 is set to 502, the user parameters backed up by setting A0-39 to 402 are restored.  
2011 to 2201: Restore motor backed-up parameters  
Motor backed-up parameter restoration corresponds to motor parameter backup, for example:  
When A0-38 is set to 2011, motor 1 parameters backed up by setting A0-39 to 1011 are restored to group 1 motor parameters.  
When A0-38 is set to 2021, motor 1 parameters backed up by setting A0-39 to 1021 are restored to group 1 motor parameters.  
When A0-38 is set to 2031, motor 1 parameters backed up by setting A0-39 to 1031 are restored to group 1 motor parameters.  
When A0-38 is set to 2041, motor 1 parameters backed up by setting A0-39 to 1041 are restored to group 1 motor parameters, and so on.

Additional information: After the parameter operation is completed, this parameter is automatically restored to 0.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A0-39	User backup	0xA027	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing

Value:		
0: No operation	1031: Back up motor 1	1121: Back up motor 1
400: Back up user parameters	parameters to address 3	parameters to address 12
401: Back up user macro parameters to address 1	1041: Back up motor 1 parameters to address 4	1131: Back up motor 1 parameters to address 13
402: Back up user macro parameters to address 2	1051: Back up motor 1 parameters to address 5	1141: Back up motor 1 parameters to address 14
403: Back up user macro parameters to address 3	1061: Back up motor 1 parameters to address 6	1151: Back up motor 1 parameters to address 15
404: Back up user macro parameters to address 4	1071: Back up motor 1 parameters to address 7	1161: Back up motor 1 parameters to address 16
405: Back up user macro parameters to address 5	1081: Back up motor 1 parameters to address 8	1171: Back up motor 1 parameters to address 17
406: Back up user macro parameters to address 6	1091: Back up motor 1 parameters to address 9	1181: Back up motor 1 parameters to address 18
1011: Back up motor 1 parameters to address 1	1101: Back up motor 1 parameters to address 10	1191: Back up motor 1 parameters to address 19
1021: Back up motor 1 parameters to address 2	1111: Back up motor 1 parameters to address 11	1201: Back up motor 1 parameters to address 20

Description:

This parameter sets the parameters to be backed up.

Value description:

0: No operation

400 to 406: Back up user parameters

A separate user backup parameter storage area is set up in the EEPROM, and the area is divided into seven independent spaces. During user parameter backup, parameters that are different from the factory settings are stored to the corresponding spaces, for example:

When A0-39 is set to 400, user parameters are stored into space 0.

When A0-39 is set to 401, user parameters are stored into space 1.

When A0-39 is set to 402, user parameters are stored into space 2, and so on.

1011 to 1204: Back up motor parameters

A separate motor backup parameter storage area is set up in the EEPROM, and the area is divided into independent spaces corresponding to different groups of motor parameters. Each group of motor parameters can be backed up into 20 different copies, for example:

When A0-39 is set to 1011, the 1st group of motor parameters are stored into the 1st storage space of motor 1.

When A0-39 is set to 1021, the 1st group of motor parameters are stored into the 2nd storage space of motor 1.

When A0-39 is set to 1031, the 1st group of motor parameters are stored into the 3rd storage space of motor 1, and so on.

Additional information: After the parameter operation is completed, this parameter is automatically restored to 0.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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A0-44	Parameter write protection	0xA02C	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing																											
	Value: 0: Disable 1: Enable																																		
	Description: This parameter determines whether the AC drive parameters can be modified.  0: Disable The parameter can be modified. 1: Enable The parameter cannot be modified.  Note: You can set this function when you want the set parameter to remain unchanged. The setting of A0-44 does not apply to A3-00 (AC drive model).																																		
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																											
A0-47	Parameter group display on operating panel	0xA02F	Refer to "Value"	0xFFFF	Unsigned 16 bit	Real time changes	Standard	-																											
	Value:																																		
	<table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>Group F</td> <td>0: Hide 1: Display</td> </tr> <tr> <td>Bit 1</td> <td>Group A</td> <td>0: Display 1: Display</td> </tr> <tr> <td>Bit 2</td> <td>Group B</td> <td>0: Hide 1: Display</td> </tr> <tr> <td>Bit 3</td> <td>Group C</td> <td>0: Hide 1: Display</td> </tr> <tr> <td>Bit 4</td> <td>Group D</td> <td>0: Hide 1: Display</td> </tr> <tr> <td>Bit 5</td> <td>Reserved</td> <td>0: Hide 1: Display</td> </tr> <tr> <td>Bit 6</td> <td>Group E</td> <td>0: Hide 1: Display</td> </tr> <tr> <td>Bit 7</td> <td>Group H</td> <td>0: Hide 1: Display</td> </tr> </tbody> </table>								Bit	Name	Value	Bit 0	Group F	0: Hide 1: Display	Bit 1	Group A	0: Display 1: Display	Bit 2	Group B	0: Hide 1: Display	Bit 3	Group C	0: Hide 1: Display	Bit 4	Group D	0: Hide 1: Display	Bit 5	Reserved	0: Hide 1: Display	Bit 6	Group E	0: Hide 1: Display	Bit 7	Group H	0: Hide 1: Display
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Bit 7	Group H	0: Hide 1: Display																																	

	Bit 8	Reserved	0: Hide 1: Display					
	Bit 9	Group N	0: Hide 1: Display					
	Bit 10	Group O	0: Hide 1: Display					
	Bit 11	Group P	0: Hide 1: Display					
	Bit 12	Group L	0: Hide 1: Display					
	Bit 13	Group U	0: Display 1: Display					
	Bit 14	Reserved						
	Bit 15	Reserved						
<p>Description :</p> <p>This parameter determines whether to display the parameter group on the operating panel.</p> <p>Value description:</p> <p>If the value of the bit corresponding to a parameter group is 1, the parameter group is displayed on the operating panel. If the value of the bit corresponding to a parameter group is 0, the parameter group is not displayed on the operating panel.</p> <p>Additional information: The setting of A0-47 does not apply to group A and group U.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Frequency decimal place	0xA046	Refer to "Value"	2	Unsigned 16 bit	Shutdown change	Standard	Nothing
A0-70	<p>Value:</p> <p>1: One decimal place 2: Two decimal places</p>							
	<p>Description :</p> <p>This parameter defines the number of decimal places of frequency references.</p> <p>Value description:</p> <p>1: One decimal place The frequency reference is accurate to 0.1 Hz. 2: Two decimal places The frequency reference is accurate to 0.01 Hz.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
	Number of decimal places for load speed display (group U0)	0xA047	Refer to "Value"	2220	Unsigned 16 bit	Real time changes	Standard	Nothing																		
	Value:																									
	<table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>Decimal places of U0-14/U0-24</td> <td>0: No decimal place 1: One decimal place 2: Two decimal places</td> </tr> <tr> <td>Tens</td> <td>Decimal places of U0-19/U0-29</td> <td>1: One decimal place 2: Two decimal places</td> </tr> <tr> <td>Hundreds</td> <td>Decimal places of U0-30/U0-31</td> <td>0: No decimal place 1: One decimal place 2: Two decimal places</td> </tr> <tr> <td>Thousands</td> <td>Decimal places of U0-69</td> <td>1: One decimal place 2: Two decimal places</td> </tr> <tr> <td>Ten thousands</td> <td>Reserved</td> <td></td> </tr> </tbody> </table>								Bit	Name	Value	Ones	Decimal places of U0-14/U0-24	0: No decimal place 1: One decimal place 2: Two decimal places	Tens	Decimal places of U0-19/U0-29	1: One decimal place 2: Two decimal places	Hundreds	Decimal places of U0-30/U0-31	0: No decimal place 1: One decimal place 2: Two decimal places	Thousands	Decimal places of U0-69	1: One decimal place 2: Two decimal places	Ten thousands	Reserved	
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Ten thousands	Reserved																									
A0-71	<p>Description:</p> <p>This parameter sets the number of decimal places of parameters in group U0.</p> <p>Value description:</p> <p>The ones place of this parameter specifies the number of decimal places of U0-14/U0-24.</p> <p>0: No decimal place No decimal place is remained after the decimal point.</p> <p>1: One decimal place One decimal place is remained after the decimal point.</p> <p>2: Two decimal places Two decimal places are remained after the decimal point.</p> <p>The tens place of this parameter defines the number of decimal places of U0-19/U0-29.</p> <p>1: One decimal place One decimal place is remained after the decimal point.</p> <p>2: Two decimal places Two decimal places are remained after the decimal point.</p> <p>The hundreds place of this parameter defines the number of decimal places of U0-30/U0-31.</p> <p>0: No decimal place No decimal place is remained after the decimal point.</p> <p>1: One decimal place One decimal place is remained after the decimal point.</p> <p>2: Two decimal places</p>																									

	<p>Two decimal places are remained after the decimal point.  The thousands place of this parameter defines the number of decimal places of U0-69.  1: One decimal place  One decimal place is remained after the decimal point.  2: Two decimal places  Two decimal places are remained after the decimal point.</p>																									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
A0-72	Individualized parameter display	0xA048	Refer to "Value"	111	Unsigned 16 bit	Real time changes	Standard	Nothing																		
<p>Value:</p> <table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>User mode</td> <td>0: Hide user mode 1: Display user mode</td> </tr> <tr> <td>Tens</td> <td>Calibration mode</td> <td>0: Hide calibration mode 1: Display calibration mode</td> </tr> <tr> <td>Hundreds</td> <td>Error menu</td> <td>0: Hide error menu 1: Display error menu</td> </tr> <tr> <td>Thousands</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Ten thousands</td> <td>Reserved</td> <td></td> </tr> </tbody> </table>									Bit	Name	Value	Ones	User mode	0: Hide user mode 1: Display user mode	Tens	Calibration mode	0: Hide calibration mode 1: Display calibration mode	Hundreds	Error menu	0: Hide error menu 1: Display error menu	Thousands	Reserved		Ten thousands	Reserved	
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<p>Description:</p> <p>This parameter determines whether to display the user-defined menu (parameter group), user-modified menu (parameter group), and error menu (parameter group) on the operating panel.</p> <p>Value description:</p> <p>The ones place of this parameter is used to set whether the user-defined menu is displayed.  0: Hide user mode  The user-defined menu is hidden.  1: Display user mode  The user-defined menu is displayed.</p> <p>The tens place of this parameter is used to set whether the user-modified menu is displayed.  0: Hide calibration mode  The user-modified menu is hidden.  1: Display calibration mode  The user-modified menu is displayed.</p> <p>The hundreds place of this parameter is used to set whether the error menu is displayed.  0: Hide error menu  The error menu is hidden.  1: Display error menu</p>																										



	The error menu is displayed.
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## A1: Current faults and alarms

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-00	Active fault 1	0xA100	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates active fault 1. For example, if the operating panel displays E015.1, the value of this parameter is 15.1.							
A1-02	Active fault 2	0xA102	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates active fault 2. For example, if the operating panel displays E015.1, the value of this parameter is 15.1.							
A1-04	Active fault 3	0xA104		0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates active fault code 3. For example, the value of 151 indicates fault E15.1.							
A1-06	Active fault 4	0xA106	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates active fault 4. For example, if the operating panel displays E015.1, the value of this parameter is 15.1.							
A1-08	Active fault 5	0xA108	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates active fault 5. For example, if the operating panel displays E015.1, the value of this parameter is 15.1.							

A1-10	Active fault 6	0xA10A	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates active fault 6. For example, if the operating panel displays E015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-12	Active minor fault 1	0xA10C	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates active minor fault 1. For example, if the operating panel displays L015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-14	Active limit 2	0xA10E		0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates active limit code 2. For example, the value of 151 indicates the active limit of L15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-16	Active minor fault 3	0xA110	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates active minor fault 3. For example, if the operating panel displays L015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-18	Active minor fault 4	0xA112	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates active minor fault 4. For example, if the operating panel displays L015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-20	Active minor fault 5	0xA114	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates active minor fault 5. For example, if the operating panel displays L015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

A1-22	Active minor fault 6	0xA116	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates active minor fault 6. For example, if the operating panel displays L015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-24	Active alarm 1	0xA118	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter indicates active alarm 1. For example, if the operating panel displays A015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-26	Active alarm 2	0xA11A	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter indicates active alarm 2. For example, if the operating panel displays A015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-28	Active alarm 3	0xA11C	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter indicates active alarm 3. For example, if the operating panel displays A015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-30	Active alarm 4	0xA11E	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates active alarm 4. For example, if the operating panel displays A015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-32	Active alarm 5	0xA120	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates active alarm 5. For example, if the operating panel displays A015.1, the value of this parameter is 15.1.							
Param.	Name	Communication	Range	Default	Data type	Change mode	User	Effective

		address					authority	mode
A1-34	Active alarm 6	0xA122	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates active alarm 6. For example, if the operating panel displays A015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-36	Active prompt 1	0xA124	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates active prompt 1. For example, if the operating panel displays N015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-38	Active prompt 2	0xA126	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates active prompt 2. For example, if the operating panel displays N015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-40	Active prompt 3	0xA128	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates active prompt 3. For example, if the operating panel displays N015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-42	Active prompt 4	0xA12A	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates active prompt 4. For example, if the operating panel displays N015.1, the value of this parameter is 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-44	Active prompt 5	0xA12C	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates active prompt 5. For example, if the operating panel displays N015.1, the value of this parameter is 15.1.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A1-46	Active prompt 6	0xA12E	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates active prompt 6. For example, if the operating panel displays N015.1, the value of this parameter is 15.1.							

## A2: System information

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A2-00	Base value of per-unit voltage	0xA200	0.0 V to 6553.5 V	0.0V	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the base value of per-unit voltage, which is the rated motor voltage (C4-03).							
A2-01	Base value of per-unit current	0xA201	0.0 A to 6553.5 A	0.0A	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the base value of per-unit current, which is the rated motor current (C4-04).							
A2-02	Base value of per-unit speed	0xA202	0 rpm to 65535 rpm	0rpm	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the base value of per-unit speed. Base value of per-unit speed = (60 x Rated motor frequency C4-06)/Number of pole pairs							
A2-04	Base value of per-unit frequency	0xA204	0.0 Hz to 6553.5 Hz	0.0Hz	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the base value of per-unit frequency, which is the rated motor frequency (C4-06).							
A2-05	Base value of per-unit power	0xA205	0.00 kW to 655.35 kW	0.00kW	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description :							

	This parameter indicates the base value of per-unit power, which is the rated motor power (C4-01).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A2-06	Base value of per-unit torque	0xA206	0.00 N·m to 655.35 N·m	0.00N·m	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the base value of per-unit torque. Base value of per-unit torque = (Rated motor power x 60)/(2PI x Rated motor speed)							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A2-17	Effective value of maximum motor frequency	0xA211	0.00 Hz to 599.00 Hz	50.00Hz	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the maximum frequency in effect, with the number of its decimal places varying with that of the frequency.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A2-22	Performance major version	0xA216	0.00 to 655.35	0.00	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter displays the performance major version.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A2-23	Function major version	0xA217	0.00 to 655.35	0.00	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter displays the function major version.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A2-24	Performance sub-version	0xA218	0.00 to 655.35	0.00	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter displays the performance sub-version.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A2-25	Function sub-version	0xA219	0.00 to 655.35	0.00	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter displays the function sub-version.							

## A3: Model Information

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A3-02	Rated drive power	0xA302	0.0 kW to 6553.5 kW	4.0kW	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter displays the rated drive power.							
A3-03	Rated drive current	0xA303	0.0 A to 6553.5 A	9.5A	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter displays the rated drive current.							
A3-04	Rated drive voltage	0xA304	0 V to 65535 V	380V	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter displays the rated drive voltage.							
A3-05	Maximum drive current	0xA305	0% to 600%	150%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the maximum drive current. Output current upper limit of the AC drive = Maximum current of the AC drive x Rated current of the AC drive  Additional information: This parameter uses the rated AC drive current as the base value. The lower value between F1-13 and A3-05 is used as the effective current limit.							
A3-06	AC drive hardware type	0xA306	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Value: 0: MD600A (CAN version) 4: MD600S (Modbus version)							
	Description : This parameter displays the AC drive hardware type.							

	Value description: 0: MD600A (CAN version) The MD600 supports CAN communication. 4: MD600S (Modbus version) The MD600 supports Modbus communication.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A3-51	Module overtemperature threshold	0xA333	0°C to 65535°C	0°C	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter displays the overtemperature threshold of the AC drive. The value is automatically obtained based on the AC drive model (A3-00).  Additional information: When the detected module temperature exceeds this threshold, the drive overtemperature fault (E014.1) is reported.							

## A4: Hardware Configuration

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A4-00	Braking unit action voltage	0xA400	300.0 V to 820.0 V	760.0V	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : This parameter specifies the bus voltage threshold to open the braking transistor. The actually effective value is displayed in A4-01. When the motor has regenerative energy charging the bus to high voltage that exceeds this threshold, the braking transistor acts to release the bus energy through the external braking resistor to prevent overvoltage.  Additional information: The braking transistor will not act when the AC drive is in the stopped state. Models equipped with braking units include the 2.2 kW (380 V), 4.0 kW (380 V), 5.5 kW (380 V), 1.5 kW (220 V), and 2.2 kW (220 V) models.							
A4-01	Active braking unit action voltage	0xA401	300.0 V to 820.0 V	760.0V	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter displays the actually effective action voltage of the braking unit, which is set in A4-00.							
A4-02	Braking duty	0xA402	0% to	100%	Unsigned	Real time	Expansion	Nothing



	cycle		100%		16 bit	changes		
<p>Description :</p> <p>This parameter sets the braking duty cycle.</p> <p>Additional information:</p> <p>This parameter specifies the duty cycle of the braking unit. The braking unit is disabled when this parameter is set to 0, and normally open when this parameter is set to 100%.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Fan control mode	0xA40B	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
A4-11	<p>Value:</p> <p>0: Working during drive running (forward; working during drive shutdown when the temperature exceeds 42°C)</p> <p>1: Working continuously (forward)</p> <p>2: Working during drive running (forward and reverse; working during drive shutdown when the temperature exceeds 42°C)</p> <p>3: Working continuously (forward and reverse)</p> <p>4: Factory-defined mode 1</p> <p>5: Factory-defined mode 1</p>							
	<p>Description :</p> <p>This parameter sets the fan control mode.</p> <p>Value description:</p> <p>0: Working during drive running (forward; working during drive shutdown when the temperature exceeds 42°C)  Except for undervoltage state, the fan runs when the drive is running. When the drive is stopped, the fan runs if the heatsink temperature is higher than 42°C, and does not run if the heatsink temperature is lower than 40°C.</p> <p>1: Working continuously (forward)  Except for undervoltage state, the fan runs continuously.</p> <p>2: Working during drive running (forward and reverse; working during drive shutdown when the temperature exceeds 42°C)  Except for undervoltage state, the fan runs when the drive is running. When the drive is stopped, the fan runs if the heatsink temperature is higher than 42°C, and does not run if the heatsink temperature is lower than 40°C. While the fan is running, it first runs in the forward direction according to A4-14 (forward running time during forward and reverse running), and then runs in the reverse direction according to A4-15 (reverse running time during forward and reverse running). This cycle repeats continuously.</p> <p>3: Working continuously (forward and reverse) Except for undervoltage state, the fan runs continuously. While the fan is running, it first runs in the forward direction according to A4-14 (forward running time during forward and reverse running), and then runs in the reverse direction according to A4-15 (reverse running time during forward and reverse running). This cycle repeats continuously.</p> <p>4: Factory-defined mode 1  It is the mode used for factory test and is not recommended.</p> <p>5: Factory-defined mode 2  It is the mode used for factory test and is not recommended.</p>							

## A5: Carrier Frequency and Pulsing Configuration

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A5-00	Maximum carrier frequency	0xA500	0.0 kHz to 24.0 kHz	16.0kHz	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the maximum carrier frequency that can be set for the drive.</p> <p>Additional information:</p> <p>It is related to the motor control mode and model hardware.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A5-01	Set carrier frequency	0xA501	0.8 kHz to 20.0 kHz	4.0kHz	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter is used to adjust the carrier frequency of the AC drive. It helps reduce the motor noise, avoid the resonance of the mechanical system, and reduce the leakage current to the earth and interference generated by the AC drive.</p> <p>Additional information:</p> <p>The higher the value, the lower the motor noise and the lower the current ripple. However, a higher carrier frequency will derate the AC drive, and AC drive overload is more likely to occur.</p> <p>When the carrier frequency is low, high harmonics of the output current and power loss increase, and the motor temperature will rise.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A5-02	Active carrier frequency	0xA502	0.8 kHz to 20.0 kHz	4.0kHz	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Description :</p> <p>This parameter displays the actually effective carrier frequency of the drive.</p> <p>Additional information:</p> <p>The actually effective carrier frequency of the AC drive is also affected by the synchronization frequency and random</p>							

PWM.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A5-03	DPWM switchover frequency	0xA503	5.0 Hz to 6000.0 Hz	2000.0Hz	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the DPWM switchover frequency.</p> <p>Additional information:</p> <p>When the drive output frequency exceeds the switchover frequency, the drive switches to the five-segment pulsing mode. This mode helps reduce switching loss without compromising control frequency. However, it may lead to a moderate increase in current harmonics.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A5-04	Dead-zone compensation mode	0xA504	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value:</p> <p>0: No compensation 1: Compensation mode 1</p> <p>Description :</p> <p>This parameter sets the dead-zone compensation mode.</p> <p>Value description:</p> <p>0: No compensation No compensation is performed. 1: Compensation mode 1 Compensation mode 1 applies.</p> <p>Dead zone compensation can compensate the voltage loss caused by the dead zone time of the bridge arm and alleviate the current waveform distortion at high carrier frequency and low speed.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A5-05	Cut-off frequency for dead zone compensation	0xA505	0.0 Hz to 600.0 Hz	600.0Hz	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the cut-off frequency for dead zone compensation.</p>							

	Additional information: When the drive output frequency exceeds this frequency, dead zone compensation is disabled.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A5-06	Overmodulation coefficient	0xA506	0.0% to 110.0%	103.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the overmodulation coefficient. It is used together with the bus voltage filter time to improve the performance of the motor magnetic field.</p> <p>Additional information:</p> <p>Increasing the voltage overmodulation coefficient can enhance the voltage output capacity and effectively improve the load capacity of the motor in the flux weakening region. However, this can increase the output current distortion.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A5-08	PWM command word	0xA508	Refer to "Value"	0x0022	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value:							
		Bit	Name			Value		
		Bit 0	Carrier frequency adjustment with temperature			0: Disable 1: Enable		
		Bit 1	Carrier frequency adjustment with synchronous frequency			0: Disable 1: Enable		
		Bit 2	Synchronous modulation			0: Disable 1: Enable		
		Bit 3	Reserved					
		Bit 4	Output voltage calculation mode			0: High speed 1: High accuracy		
		Bit 5	Overmodulation mode			0: Amplitude 1: Phase		
		Bit 6	Common mode suppression			0: Disable 1: Enable		
		Bit 7	DPWN carrier frequency processing			0: Disable 1: Enable		
	Bit 8	Reserved						
	Bit 9	Reserved						
	Bit 10	Reserved						

Bit 11	Reserved		
Bit 12	Reserved		
Bit 13	Reserved		
Bit 14	Reserved		
Bit 15	Reserved		

Description :

This parameter sets the PWM command word.

Value description:

Bit 0: Carrier frequency adjustment with temperature

0: Disable

1: Enable

With this function enabled, when the temperature of the drive module approaches the over-temperature threshold, reduce the carrier frequency continuously and gradually to cool down the AC drive. This function is effective only for asynchronous motors.

Bit 1: Carrier frequency adjustment with synchronous frequency

0: Disable

1: Enable

When the output frequency is lower than the value of A5-10, the carrier frequency is limited by A5-12 and A5-13. When the output frequency is higher than the value of A5-10 plus A5-09, the effective carrier frequency is the set carrier frequency.

Bit 2: Synchronous modulation

0: Disable

1: Enable

There is no proportional relationship between the asynchronous modulation carrier frequency and the synchronous frequency.

Bit 3: Reserved

Bit 4: Output voltage calculation mode

0: High speed

1: High accuracy

Bit 5: Overmodulation mode

0: Amplitude

The amplitude mode features higher output voltage capability but more distortion.

1: Phase

The phase mode features lower output voltage capability but less distortion.

Bit 6: Common mode suppression

0: Disable

1: Enable

Common mode suppression can suppress the leakage current caused by common mode voltage and reduce electromagnetic interference.

Bit 7: DPWM carrier frequency processing

0: Disable

	<p>1: Enable</p> <p>In the DPWM mode, the effective carrier frequency is equal to the set carrier frequency.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A5-09	Hysteresis for carrier frequency adjustment with synchronous frequency	0xA509	0.0 Hz to 100.0 Hz	3.0Hz	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the hysteresis for carrier frequency adjustment with synchronous frequency</p> <p>Additional information:</p> <p>After carrier frequency adjustment with synchronous frequency is enabled (bit 1 of A5-08), when the output frequency is lower than the value of A5-10, the carrier frequency will be limited by A5-12 or A5-13. When the output frequency is higher than the value of A5-10 plus A5-09, the effective carrier frequency will reach the set carrier frequency.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A5-10	Start frequency for carrier frequency adjustment with synchronous frequency	0xA50A	0.0 Hz to 600.0 Hz	5.0Hz	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the start frequency for carrier frequency adjustment with synchronous frequency.</p> <p>Additional information:</p> <p>After carrier frequency adjustment with synchronous frequency is enabled (bit 1 of A5-08), when the output frequency is lower than the value of A5-10, the carrier frequency will be limited by A5-12 or A5-13. When the output frequency is higher than the value of A5-10 plus A5-09, the effective carrier frequency will reach the set carrier frequency.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A5-11	Random PWM depth	0xA50B		0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This function can turn the sharp electromagnetic noise of the motor caused by the carrier frequency into a relatively soft "rustling" sound. Setting this parameter to 0 disables this function. A larger value means better noise improvement. This parameter is effective only in V/f mode.</p>							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
A5-12	Low speed carrier upper limit (non-SVC)	0xA50C		6.0kHz	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description : After carrier frequency adjustment with synchronous frequency is enabled (bit 1 of A5-08 (PWM command word)), when the output frequency is lower than the setting of A5-10, the carrier frequency will be limited by A5-12 or A5-13. When the output frequency is higher than (A5-10 + A5-09), the effective carrier frequency will reach the carrier frequency reference. This parameter is effective in non-SVC mode.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A5-13	Carrier frequency upper limit at low speed (SVC)	0xA50D	0.8 kHz to 8.0 kHz	2.0kHz	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description : This parameter sets the carrier frequency limit at low speed in the SVC mode.  Additional information: 1. This parameter is effective only in the SVC mode. 2. After carrier frequency adjustment with synchronous frequency is enabled (bit 1 of A5-08), when the output frequency is lower than the value of A5-10, the carrier frequency will be limited by A5-12 or A5-13. When the output frequency is higher than the value of A5-10 plus A5-09, the effective carrier frequency will reach the set carrier frequency.							

## A6: Operating Panel and Display

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A6-01	STOP/RES key function	0xA601	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Valid only in operating panel control mode 1: Valid for ON_OFF1 command (start/stop) 2: Valid for OFF2 command (coast to stop) 3: Valid for OFF3 command (quick stop)							
	Description : This parameter is used to set the condition for the STOP/RESET key to take effect.							

	<p>Value description:</p> <p>0: Valid only in operating panel control mode The STOP/RESET key is valid only in the operating panel control mode.</p> <p>1: Valid for ON_OFF1 command (start/stop) The STOP/RESET key is valid in any operation mode and the AC drive stops according to the stop mode set by ON_OFF1 command (start/stop).</p> <p>2: Valid for OFF2 command (coast to stop) The STOP/RESET key is valid in any operation mode and the AC drive stops according to the stop mode set by OFF2 command (coast to stop).</p> <p>3: Valid for OFF3 command (quick stop) The STOP/RESET key is valid in any operation mode and the AC drive stops according to the stop mode set by OFF3 command (quick stop).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Parameter 1 displayed on LED operating panel during operation	0xA603	Refer to "Value"	0x1F	Unsigned 16 bit	Real time changes	Standard	Nothing
A6-03	Value:							
	Bit 0	Operation frequency (Hz)	0: Not displayed 1: Displayed					
	Bit 1	Frequency reference (Hz)	0: Not displayed 1: Displayed					
	Bit 2	Bus voltage (V)	0: Not displayed 1: Displayed					
	Bit 3	Output voltage (V)	0: Not displayed 1: Displayed					
	Bit 4	Output current (A)	0: Not displayed 1: Displayed					
	Bit 5	Output power (kW)	0: Not displayed 1: Displayed					
	Bit 6	Output torque (%)	0: Not displayed 1: Displayed					
	Bit 7	DI state	0: Not displayed 1: Displayed					
	Bit 8	DO state	0: Not displayed 1: Displayed					
Bit 9	AI1 voltage (V)	0: Not displayed 1: Displayed						



Bit 10	Reserved	
Bit 11	MD-BP-M potentiometer voltage (V)	0: Not displayed 1: Displayed
Bit 12	Reserved	0: Not displayed 1: Displayed
Bit 13	Reserved	0: Not displayed 1: Displayed
Bit 14	Load speed	0: Not displayed 1: Displayed
Bit 15	PID reference	0: Not displayed 1: Displayed

Description:

This parameter sets parameter 1 displayed on the LED operating panel during operation.

Value description:

Bit 0: Operation frequency (Hz)

0: Not displayed

1: Displayed

Bit 1: Frequency reference (Hz)

0: Not displayed

1: Displayed

Bit 2: Bus voltage (V)

0: Not displayed

1: Displayed

Bit 3: Output voltage (V)

0: Not displayed

1: Displayed

Bit 4: Output current (A)

0: Not displayed

1: Displayed

Bit 5: Output power (kW)

0: Not displayed

1: Displayed

Bit 6: Output torque (%)

0: Not displayed

1: Displayed

Bit 7: DI state

0: Not displayed

1: Displayed

Bit 8: DO state

0: Not displayed

<p>1: Displayed          Bit 9: AI1 voltage (V)          0: Not displayed          1: Displayed          Bit 10: Reserved          Bit 11: MD-BP-M potentiometer voltage (V)          0: Not displayed          1: Displayed          Bit 12: Reserved          Bit 13: Reserved          Bit 14: Load speed display          0: Not displayed          1: Displayed          Bit 15: PID reference          0: Not displayed          1: Displayed</p> <p>Additional information:          This parameter specifies which parameters can be viewed (by pressing the left and right shift keys) on the LED operating panel when the AC drive is running. The value 1 of a bit indicates that the parameter is displayed, and the value 0 of the bit indicates that the parameter is hidden. (Reserved bits are not displayed.)</p>									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
A6-04	Parameter 2 displayed on LED operating panel during operation	0xA604	Refer to "Value"	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing	
	Value:								
		<b>Bit</b>	<b>Name</b>	<b>Value</b>					
		Bit 0	PID feedback	0: Not displayed 1: Displayed					
		Bit 1	PLC stage	0: Not displayed 1: Displayed					
		Bit 2	HDI input pulse frequency (kHz)	0: Not displayed 1: Displayed					
		Bit 3	Operation frequency 2 (Hz)	0: Not displayed 1: Displayed					
	Bit 4	Remaining running time	0: Not displayed 1: Displayed						
	Bit 5	AI1 voltage before correction (V)	0: Not displayed 1: Displayed						

Bit 6	Free mapping 0	0: Not displayed 1: Displayed
Bit 7	Free mapping 1	0: Not displayed 1: Displayed
Bit 8	Motor speed	0: Not displayed 1: Displayed
Bit 9	Current power-on time (hour)	0: Not displayed 1: Displayed
Bit 10	Current running time (min.)	0: Not displayed 1: Displayed
Bit 11	HDI input pulse frequency (Hz)	0: Not displayed 1: Displayed
Bit 12	Communication setting value	0: Not displayed 1: Displayed
Bit 13	Reserved	
Bit 14	Main frequency X display	0: Not displayed 1: Displayed
Bit 15	Auxiliary frequency Y display	0: Not displayed 1: Displayed

Description :

This parameter sets parameter 2 displayed on the LED operating panel during operation.

Value description:

Bit 0: PID feedback

0: Not displayed

1: Displayed

Bit 1: PLC stage

0: Not displayed

1: Displayed

Bit 2: HDI input pulse frequency (kHz)

0: Not displayed

1: Displayed

Bit 3: Operation frequency 2 (Hz)

0: Not displayed

1: Displayed

Bit 4: Remaining running time

0: Not displayed

1: Displayed

Bit 5: AI1 voltage before correction (V)

0: Not displayed

1: Displayed

<p>Bit 6: Free mapping 0  0: Not displayed  1: Displayed  Bit 7: Free mapping 1  0: Not displayed  1: Displayed  Bit 8: Motor speed  0: Not displayed  1: Displayed  Bit 9: Current power-on time (hour)  0: Not displayed  1: Displayed  Bit 10: Current running time (min.)  0: Not displayed  1: Displayed  Bit 11: HDI input pulse frequency (Hz)  0: Not displayed  1: Displayed  Bit 12: Communication setting value  0: Not displayed  1: Displayed  Bit 13: Reserved  Bit 14: Main frequency X display  0: Not displayed  1: Displayed  Bit 15: Auxiliary frequency Y display  0: Not displayed  1: Displayed</p> <p>Additional information:  This parameter specifies which parameters can be viewed (by pressing the left and right shift keys) on the LED operating panel when the AC drive is running. The value 1 of a bit indicates that the parameter is displayed, and the value 0 of the bit indicates that the parameter is hidden. (Reserved bits are not displayed.)</p>													
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode					
A6-05	Parameter displayed on LED operating panel at stop	0xA605	Refer to "Value"	0x13	Unsigned 16 bit	Real time changes	Standard	Nothing					
	Value: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Bit</th> <th style="width: 55%;">Name</th> <th style="width: 30%;">Value</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>								Bit	Name	Value		
Bit	Name	Value											

Bit 0	Frequency reference (Hz)	0: Not displayed 1: Displayed
Bit 1	Bus voltage (V)	0: Not displayed 1: Displayed
Bit 2	DI state	0: Not displayed 1: Displayed
Bit 3	DO state	0: Not displayed 1: Displayed
Bit 4	AI1 voltage (V)	0: Not displayed 1: Displayed
Bit 5	Reserved	
Bit 6	MD-BP-M potentiometer voltage (V)	0: Not displayed 1: Displayed
Bit 7	Reserved	
Bit 8	Reserved	
Bit 9	PLC stage	0: Not displayed 1: Displayed
Bit 10	Load speed	0: Not displayed 1: Displayed
Bit 11	PID reference	0: Not displayed 1: Displayed
Bit 12	HDI input pulse reference (kHz)	0: Not displayed 1: Displayed
Bit 13	Reserved	
Bit 14	Free mapping 0	0: Not displayed 1: Displayed
Bit 15	Free mapping 1	0: Not displayed 1: Displayed

Description :

This parameter sets parameter displayed on the LED operating panel at stop.

Value description:

Bit 0: Frequency reference (Hz)

0: Not displayed

1: Displayed

Bit 1: Bus voltage (V)

0: Not displayed

1: Displayed

Bit 2: DI state

0: Not displayed

<p>1: Displayed          Bit 3: DO state          0: Not displayed          1: Displayed          Bit 4: AI1 voltage (V)          0: Not displayed          1: Displayed          Bit 5: Reserved          Bit 6: MD-BP-M potentiometer voltage (V)          0: Not displayed          1: Displayed          Bit 7: Reserved          Bit 8: Reserved          Bit 9: PLC stage          0: Not displayed          1: Displayed          Bit 10: Load speed          0: Not displayed          1: Displayed          Bit 11: PID reference          0: Not displayed          1: Displayed          Bit 12: HDI input pulse reference (kHz)          0: Not displayed          1: Displayed          Bit 13: Reserved          Bit 14: Free mapping 0          0: Not displayed          1: Displayed          Bit 15: Free mapping 1          0: Not displayed          1: Displayed</p> <p>Additional information:          This parameter specifies which parameters can be viewed (by pressing the left and right shift keys) on the LED operating panel when the AC drive is stopped. The value 1 of a bit indicates that the parameter is displayed, and the value 0 of the bit indicates that the parameter is hidden. (Reserved bits are not displayed.)</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A6-40	MD-BP-M potentiometer dead zone width	0xA628		1.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing

	<p>Description :</p> <p>This parameter defines the dead zone width of the external operating panel potentiometer. Output in this width is 0.0%. This aims to eliminate fluctuations around zero.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A6-45	Commissioning software activation	0xA62D	Refer to "Value"	1	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	<p>Value:</p> <p>0: Disable</p> <p>1: Enable</p>							
	<p>Description :</p> <p>This parameter sets whether to activate the commissioning software.</p> <p>Value description:</p> <p>0: Disable</p> <p>Activating the commissioning software is disabled.</p> <p>1: Enable</p> <p>Activating the commissioning software is enabled.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A6-46	Setting of speed controlled by commissioning software	0xA62E	-800.0% to 800.0%	100.0%	Signed 16 bits	Real time changes	专家	Nothing
	<p>Description :</p> <p>This parameter sets the speed controlled by the commissioning software.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A6-47	Setting of jog 1 speed controlled by commissioning software	0xA62F	-100.0% to 100.0%	4.0%	Signed 16 bits	Real time changes	专家	Nothing
	<p>Description :</p> <p>This parameter sets the jog 1 speed controlled by the commissioning software.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
A6-48	Setting of jog 2 speed controlled by	0xA630	-100.0% to	-4.0%	Signed 16	Real time	专家	Nothing

	commissioning software		100.0%		bits	changes		
	Description: This parameter sets the jog 2 speed controlled by the commissioning software.							

## Ad: Statistic Function

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-00	Cumulative running time (hour)	0xAD00	0 h to 65535 h	0h	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter displays the cumulative running time (hour).							
Ad-01	Cumulative running time (second)	0xAD01	0s to 3599s	0s	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter displays the cumulative running time (second).							
Ad-02	Cumulative power-on time (hour)	0xAD02	0 h to 65535 h	0h	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter displays the cumulative power-on time (hour).							
Ad-03	Cumulative power-on time (second)	0xAD03	0s to 3599s	0s	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter displays the cumulative power-on time (second).							
Ad-04	Cumulative power consumption	0xAD04	0 kWh to 65535 kWh	0kWh	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter displays the cumulative power consumption (kWh).							



	Description : This parameter displays the cumulative power consumption.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-05	Auxiliary calculation 1 of cumulative power consumption	0xAD05	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the auxiliary calculation 1 of the cumulative power consumption.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-06	Auxiliary calculation 2 of cumulative power consumption	0xAD06	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the auxiliary calculation 2 of the cumulative power consumption.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-07	Cumulative power consumption (kWh)	0xAD07	0.0 kWh to 6553.5 kWh	0.0kWh	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the cumulative power consumption in the unit of kWh. When the cumulative power consumption reaches 999.9 kWh, the high bit of the cumulative power consumption is increased by 1. This value is retentive upon power failure.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-08	Cumulative power consumption (MWh)	0xAD08	0 MWh to 65535 MWh	0MWh	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the cumulative power consumption in the unit of MWh. It is retentive at power failure.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-09	Cumulative energy auxiliary calculation 1	0xAD09	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the time (hour) for auxiliary calculation of cumulative energy (kW h).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-10	Cumulative energy auxiliary calculation 2	0xAD0A	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description :							

	This parameter indicates the power (kW) for auxiliary calculation of accumulative energy (kW · h).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-11	Cumulative saved energy (kWh)	0xAD0B	0.0kWh to 999.9kWh	0.0kWh	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the cumulative energy saved during operation in the unit of KWh.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-12	Cumulative saved energy (MWh)	0xAD0C	0 MWh to 999 MWh	0MWh	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the cumulative energy saved during operation in the unit of MWh.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-13	Cumulative saved energy (GWh)	0xAD0D	0 GWh to 65535 GWh	0GWh	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the cumulative energy saved during operation in the unit of GWh.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-14	Cumulative amount of savings	0xAD0E	0.0 to 999.9	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the portion of cumulative amount of savings not exceeding thousand during operation.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-15	Cumulative amount of savings (K)	0xAD0F	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the portion of cumulative amount of savings exceeding thousand during operation.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-16	Cumulative CO2 emission reduction (ton)	0xAD10	0.0 to 999.9	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the portion of cumulative CO2 emission reduction not exceeding one thousand tons during operation.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

Ad-17	Cumulative CO2 emission reduction (kiloton)	0xAD11	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the portion of cumulative CO2 emission reduction exceeding one thousand tons during operation.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-18	Energy tax rate 1	0xAD12	0.0 to 6553.5	0.0	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description: This parameter sets user-defined energy tax rate 1, which is used for amount conversion.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-19	Energy tax rate 2	0xAD13	0.0 to 6553.5	0.0	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description: This parameter sets user-defined energy tax rate 2, which is used for amount conversion.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-20	Tax rate selection	0xAD14	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Value: 0: Energy tax rate 1 1: Energy tax rate 2							
	Description: This parameter sets the tax rate.  Value description: 0: Energy tax rate 1 1: Energy tax rate 2							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-21	Currency unit	0xAD15	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Value: 0: RMB 1: EUR 2: USD							
	Description: This parameter sets the currency unit.							

	Value description: 0: RMB 1: EUR 2: USD							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-22	CO2 conversion factor	0xAD16	0.000 to 65.535	0.000	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description: This parameter sets the conversion factor for CO2 emissions.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-23	Reference power	0xAD17	0.0 kW to 6553.5 kW	0.0kW	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description: This parameter sets the theoretical operating power.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ad-24	Reset of cumulative energy calculation	0xAD18	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Value: 0: No operation 1: Reset							
	Description: This parameter sets whether to reset the energy calculation.  Value description: 0: No operation 1: Reset							

## AE: User-defined Parameters

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-00	User-defined parameter 0	0x2F00	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description: This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.							

	<p>Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	User-defined parameter 1	0x2F01	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
AE-01	<p>Description : This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	User-defined parameter 2	0x2F02	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
AE-02	<p>Description : This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	User-defined parameter 3	0x2F03	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
AE-03	<p>Description : This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

AE-04	User-defined parameter 4	0x2F04	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-05	User-defined parameter 5	0x2F05	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-06	User-defined parameter 6	0x2F06	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-07	User-defined parameter 7	0x2F07	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p>							

	<p>Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	User-defined parameter 8	0x2F08	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
AE-08	<p>Description : This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	User-defined parameter 9	0x2F09	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
AE-09	<p>Description : This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	User-defined parameter 10	0x2F0A	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
AE-10	<p>Description : This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

AE-11	User-defined parameter 11	0x2F0B	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-12	User-defined parameter 12	0x2F0C	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-13	User-defined parameter 13	0x2F0D	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-14	User-defined parameter 14	0x2F0E	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p>							



	<p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-15	User-defined parameter 15	0x2F0F		0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This group of parameters is a user-defined parameter group. Users can select the parameters they need from all parameters and summarize them into the AE group for ease of viewing and modification.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-16	User-defined parameter 16	0x2F10	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-17	User-defined parameter 17	0x2F11	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-18	User-defined parameter 18	0x2F12	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p>							

	<p>Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-19	User-defined parameter 19	0x2F13	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description : This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-20	User-defined parameter 20	0x2F14	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description : This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-21	User-defined parameter 21	0x2F15	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description : This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
	User-defined parameter 22	0x2F16	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
AE-22	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	User-defined parameter 23	0x2F17	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
AE-23	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	User-defined parameter 24	0x2F18	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
AE-24	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	User-defined parameter 25	0x2F19	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
AE-25	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p>							

	<p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-26	User-defined parameter 26	0x2F1A	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-27	User-defined parameter 27	0x2F1B	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.</p> <p>Additional information:</p> <p>This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-28	User-defined parameter 28	0x2F1C		0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This group of parameters is a user-defined parameter group. Users can select the parameters they need from all parameters and summarize them into the AE group for ease of viewing and modification.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-29	User-defined parameter 29	0x2F1D	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-</p>							

	31.  Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-30	User-defined parameter 30	0x2F1E	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description : This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.  Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
AE-31	User-defined parameter 31	0x2F1F	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description : This parameter sets the user-defined parameter. A total of 32 user-defined parameters can be set through AE-00 and AE-31.  Additional information: This group of parameters is user-defined. You can select required parameters from all parameters and summarize them into the AE group for ease of viewing and modification. To view user-defined parameters, long-press the Back key to switch to the -USER menu.							

## b0: Command Channel Configuration

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b0-02	Control channel selection	0xB002	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Control channel 1 1: Control channel 2 5: DI3 6: DI4							

	3: DI1 4: DI2	7: DI5 (MD600A) Others: B connector	
<p>Description :</p> <p>This parameter sets the control channel. The value 0 indicates that control channel 1 is selected and the value 1 indicates that control channel 2 is selected.</p> <p>Value description:</p> <p>0: Control channel 1 Control channel 1 is selected.</p> <p>1: Control channel 2 Control channel 2 is selected.</p> <p>3 to 7: DI1 to DI5 Which control channel is selected depends on the terminal state of the DI.</p> <p>Other: B connector Which control channel is selected depends on the B connector.</p> <p>Additional information:</p> <p>After the DI function is set to 70 (Control channel selection), the value of b0-02 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>			

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Reference channel selection	0xB003	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
b0-03	<p>Value:</p> <p>0: Reference channel 1 1: Reference channel 2 3: DI1 4: DI2</p> <p>5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector</p>							
	<p>Description :</p> <p>This parameter sets the reference channel. The value 0 indicates that reference channel 1 is selected and the value 1 indicates that reference channel 2 is selected.</p> <p>Value description:</p> <p>0: Reference channel 1 Reference channel 1 is selected.</p> <p>1: Reference channel 2 Reference channel 2 is selected.</p> <p>3 to 7: DI1 to DI5 Which reference channel is selected depends on the terminal state of the DI.</p> <p>Other: B connector Which reference channel is selected depends on the B connector.</p>							

	<p>Additional information:</p> <p>After the DI function is set to 71 (Reference channel selection), the value of b0-03 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>
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## b1: Control Channel 1 Main Command Word

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b1-00	Main command source of control channel 1	0xB100	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Value:</p> <p>0: Operating panel 1: Terminal 2: Communication 3: User-defined</p>							
	<p>Description:</p> <p>This parameter is used to set the main command source of control channel 1.</p> <p>Value description:</p> <p>0: Operating panel. The LED operating panel or external operating panel is used as the main command source of control channel 1. You can control the motor by pressing RUN/STOP keys on the operating panel.</p> <p>1: Terminal. Terminal is used as the main command source of control channel 1. Operation commands are input using the DI of the AC drive. The DI can be assigned with different functions such as start/stop, forward/reverse run, jog, and multi-reference.</p> <p>2: Communication. Communication (such as Modbus) is used as the main command source of control channel 1. The AC drive needs to communicate with the host controller. You can input control commands through remote communication. This mode applies to remote control or centralized control of multiple equipment.</p> <p>3: User-defined. The user-defined control mode is used as the main command source of control channel 1. The control commands can be set by b1-01 to b1-09, ON_OFF1 (start/stop), OFF2 (coast to stop), and OFF3 (quick stop).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b1-01	User-defined ON_OFF1 (start/stop) source	0xB101	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Disable 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector</p>							
	<p>Description:</p> <p>This parameter sets the user-defined ON_OFF1 (start/stop) source. The bit signal value 0 indicates STOP, and the bit</p>							

	<p>signal value 1 indicates RUN.</p> <p>Value description:  0: Disable  This parameter is invalid.  3 to 7: DI1 to DI5  The signal source depends on the DI state.  Others: B connector  The signal source is the B connector.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b1-02	User-defined OFF2 (coast to stop) source 1	0xB102	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Valid 5: DI3 1: Invalid 6: DI4 3: DI1 7: DI5 (MD600A) 4: DI2 Others: B connector							
	Description: This parameter sets the user-defined OFF2 (coast to stop) source 1 The bit signal value 0 indicates that the coast to stop function is valid, and the bit signal value 1 indicates that the coast to stop function is invalid. Value description: 0: Valid OFF2 (coast to stop) is valid. 1: Invalid OFF2 (coast to stop) is invalid. 3 to 7: DI1 to DI5 The signal source depends on the DI state. Others: B connector The signal source is the B connector. Additional information: There are three sources for OFF2 (coast to stop) of control channel 1, b1-02, b2-00, and b2-01. If any one source is active, the OFF2 command is active.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b1-03	User-defined OFF3 (quick stop) source 1	0xB103	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Valid 5: DI3 1: Invalid 6: DI4 3: DI1 7: DI5 (MD600A)							



	4: DI2 Others: B connector							
	<p>Description :</p> <p>This parameter sets the user-defined OFF3 (quick stop) source 1. The bit signal value 0 indicates that the quick stop function is valid, and the bit signal value 1 indicates that the quick stop function is invalid.</p> <p>Value description:</p> <p>0: Valid OFF3 (quick stop) is valid.</p> <p>1: Invalid OFF3 (quick stop) is invalid.</p> <p>3 to 7: DI1 to DI5 The signal source depends on the DI state.</p> <p>Others: B connector The signal source is the B connector.</p> <p>Additional information:</p> <p>There are three sources for OFF3 (quick stop) of control channel 1, b1-03, b2-02, and b2-03. If any one source is active, the OFF3 command is active.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Self-defined running permission command source	0xB104	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Inhibit running 5: DI3 1: Allow running 6: DI4 3: DI1 7: DI5 (MD600A) 4: DI2 Others: B connector</p>							
b1-04	<p>Description :</p> <p>This parameter sets the self-defined running permission command source. The bit signal value 0 indicates that running is inhibited, and the bit signal value 1 indicates that running is allowed.</p> <p>Value description:</p> <p>0: Inhibit running 1: Allow running 3 to 7: DI1 to DI5 Whether running is allowed depends on the terminal state of the DI.</p> <p>Others: B connector Whether running is allowed depends on the B connector.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b1-05	User-defined fault reset source 1	0xB105	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing

	Value: 0: Disable 1: Enable 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) others: B connector							
	Description: This parameter defines source 1 of the fault reset command for user-defined channel 1. The fault reset command is valid when any of the three sources is active high.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	User-defined jog 1 command source	0xB106	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
b1-06	Value: 0: Invalid 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: This parameter sets the user-defined jog 1 command source. The bit signal value 0 indicates invalid command, and the bit signal value 1 indicates valid command.							
	Value description: 0: Invalid The jog command is invalid. 3 to 7: DI1 to DI5 Whether the jog command is valid depends on the terminal state of the DI. Other: B connector Whether the jog command is valid depends on the B connector.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	User-defined jog 2 command source	0xB107	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
b1-07	Value: 0: Invalid 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: This parameter sets the user-defined jog 2 command source. The bit signal value 0 indicates invalid command, and the bit signal value 1 indicates valid command.							
	Value description: 							



	<p>The AC drive responds to the operation command that arrives first.</p> <p>1: Jog preferred</p> <p>The jog command can interrupt normal running.</p> <p>2: Priority for ON_OFF1 (start/stop)</p> <p>Normal operation commands can interrupt jogging.</p>
--	--

## b2: Control Channel 1 Auxiliary Command Word

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b2-00	OFF2 (coast to stop) source 2	0xB200	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Valid 1: Invalid 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: This parameter sets the OFF2 (coast to stop) source 2. The bit signal value 0 indicates that the coast to stop function is valid, and the bit signal value 1 indicates that the coast to stop function is invalid.  Value description: 0: Valid OFF2 (coast to stop) is valid. 1: Invalid OFF2 (coast to stop) is invalid. 3 to 7: DI1 to DI5 The signal source depends on the DI state. Others: B connector The signal source is the B connector.  Additional information: There are three sources of OFF2 (coast to stop), b1-02, b2-00, and b2-01. If any source is valid, OFF2 (coast to stop) command is valid. After the DI function is set to 8 (Coast to stop), the value of b2-00 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b2-01	OFF2 (coast to stop) source 3	0xB201	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing

<p>Value:</p> <table border="0"> <tr> <td>0: Valid</td> <td>5: DI3</td> </tr> <tr> <td>1: Invalid</td> <td>6: DI4</td> </tr> <tr> <td>3: DI1</td> <td>7: DI5 (MD600A)</td> </tr> <tr> <td>4: DI2</td> <td>Others: B connector</td> </tr> </table>									0: Valid	5: DI3	1: Invalid	6: DI4	3: DI1	7: DI5 (MD600A)	4: DI2	Others: B connector
0: Valid	5: DI3															
1: Invalid	6: DI4															
3: DI1	7: DI5 (MD600A)															
4: DI2	Others: B connector															
<p>Description:</p> <p>This parameter sets the OFF2 (coast to stop) source 3. The bit signal value 0 indicates that the coast to stop function is valid, and the bit signal value 1 indicates that the coast to stop function is invalid.</p> <p>Value description:</p> <p>0: Valid OFF2 (coast to stop) is valid.</p> <p>1: Invalid OFF2 (coast to stop) is invalid.</p> <p>3 to 7: DI1 to DI5 The signal source depends on the DI state.</p> <p>Others: B connector The signal source is the B connector.</p> <p>Additional information:</p> <p>There are three sources of OFF2 (coast to stop), b1-02, b2-00, and b2-01. If any source is valid, OFF2 (coast to stop) command is valid.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
b2-02	OFF3 (quick stop) source 2	0xB202	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing								
	<p>Value:</p> <table border="0"> <tr> <td>0: Valid</td> <td>5: DI3</td> </tr> <tr> <td>1: Invalid</td> <td>6: DI4</td> </tr> <tr> <td>3: DI1</td> <td>7: DI5 (MD600A)</td> </tr> <tr> <td>4: DI2</td> <td>Others: B connector</td> </tr> </table>								0: Valid	5: DI3	1: Invalid	6: DI4	3: DI1	7: DI5 (MD600A)	4: DI2	Others: B connector
	0: Valid	5: DI3														
1: Invalid	6: DI4															
3: DI1	7: DI5 (MD600A)															
4: DI2	Others: B connector															
<p>Description:</p> <p>This parameter sets the OFF3 (quick stop) source 2. The bit signal value 0 indicates that the quick stop function is valid, and the bit signal value 1 indicates that the quick stop function is invalid.</p> <p>Value description:</p> <p>0: Valid OFF3 (quick stop) is valid.</p> <p>1: Invalid OFF3 (quick stop) is invalid.</p> <p>3 to 7: DI1 to DI5 The signal source depends on the DI state.</p>																



	3: DI1 4: DI2	7: DI5 (MD600A) Others: B connector
<p>Description :</p> <p>This parameter sets the fault reset command source 2. The bit signal value 0 indicates invalid command, and the bit signal value 1 indicates valid command.</p> <p>Value description:</p> <p>0: Invalid The fault reset command source 2 is invalid.</p> <p>1: Valid The fault reset command source 2 is valid.</p> <p>3 to 7: DI1 to DI5 The signal source depends on the DI state.</p> <p>Others: B connector The signal source is the B connector.</p> <p>Additional information:</p> <p>There are three sources of the fault reset command, b1-05, b2-04, and b2-05. If any source is valid, the fault reset command is valid.</p> <p>After the DI function is set to 9 (Fault reset), the value of b2-04 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>		

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Fault reset command source 3	0xB205	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
b2-05	<p>Value:</p> <p>0: Invalid 1: Valid 3: DI1 4: DI2</p> <p>5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector</p>							
	<p>Description :</p> <p>This parameter sets the fault reset command source 3. The bit signal value 0 indicates invalid command, and the bit signal value 1 indicates valid command.</p> <p>Value description:</p> <p>0: Invalid The fault reset command source 3 is invalid.</p> <p>1: Valid The fault reset command source 3 is valid.</p> <p>3 to 7: DI1 to DI5 The signal source depends on the DI state.</p> <p>Others: B connector</p>							

The signal source is the B connector.

Additional information:  
 There are three sources of the fault reset command, b1-05, b2-04, and b2-05. If any source is valid, the fault reset command is valid.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b2-06	Ramp inhibition command source	0xB206	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Valid 5: DI3 1: Invalid 6: DI4 3: DI1 7: DI5 (MD600A) 4: DI2 Others: B connector							
	Description: This parameter sets the ramp inhibition command source. When "active low" applies, the RFG output is set to zero. The bit signal value 0 indicates invalid command, and the bit signal value 1 indicates valid command.  Value description: 0: Valid The ramp inhibition command is valid. 1: Invalid The ramp inhibition command is invalid. 3 to 7: DI1 to DI5 The signal source depends on the DI state. Others: B connector The signal source is the B connector.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b2-07	Ramp pause command source	0xB207	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Valid 5: DI3 1: Invalid 6: DI4 3: DI1 7: DI5 (MD600A) 4: DI2 Others: B connector							
	Description: This parameter sets the ramp pause command source. When "active low" applies, RFG calculation pauses to maintain the current output. The bit signal value 0 indicates invalid command, and the bit signal value 1 indicates valid command.  Value description: 0: Valid							



<p>The ramp pause command is valid.  1: Invalid  The ramp pause command is invalid.  3 to 7: DI1 to DI5  The signal source depends on the DI state.  Others: B connector  The signal source is the B connector.</p> <p>Additional information:  After the DI function is set to 21 (Acceleration/Deceleration inhibition), the value of b2-07 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
b2-08	Source of setting ramp reference to 0	0xB208	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing								
	<p>Value:</p> <table border="0"> <tr> <td>0: Valid</td> <td>5: DI3</td> </tr> <tr> <td>1: Invalid</td> <td>6: DI4</td> </tr> <tr> <td>3: DI1</td> <td>7: DI5 (MD600A)</td> </tr> <tr> <td>4: DI2</td> <td>Others: B connector</td> </tr> </table>								0: Valid	5: DI3	1: Invalid	6: DI4	3: DI1	7: DI5 (MD600A)	4: DI2	Others: B connector
	0: Valid	5: DI3														
1: Invalid	6: DI4															
3: DI1	7: DI5 (MD600A)															
4: DI2	Others: B connector															
<p>Description:</p> <p>This parameter sets the source of setting the RFG input to 0. When "active low" applies, the RFG input is set to zero. The bit signal value 0 indicates invalid command, and the bit signal value 1 indicates valid command.</p> <p>Value description:</p> <p>0: Valid  The source of setting ramp reference to 0 is valid.</p> <p>1: Invalid  The source of setting ramp reference to 0 is invalid.</p> <p>3 to 7: DI1 to DI5  The signal source depends on the DI state.</p> <p>Others: B connector  The signal source is the B connector.</p> <p>Additional information:  After the DI function is set to 80 (Set RFG input to 0), the value of b2-08 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>																

### b3: Control Channel 2 Main Command Word

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b3-00	Control channel 2 main command source	0xB300	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Operating panel 1: Terminal 2: Communication 3: User-defined							
	Description: This parameter selects a command source for control channel 2. 0: Operating panel - Control by the LED or SOP 1: Terminal - Control by the DI terminal (selecting a function for the terminal) 2: Communication - Control by Modbus or other communication 3: User-defined - Selecting a terminal for ON_OFF1 (start/stop), OFF2 (coast to stop), or OFF3 (quick stop)							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b3-01	User-defined ON_OFF1 (start/stop) source	0xB301	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Invalid 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: This parameter sets the user-defined ON_OFF1 (start/stop) source. The bit signal value 0 indicates STOP, and the bit signal value 1 indicates RUN.  Value description: 0: Disable This parameter is invalid. 3 to 7: DI1 to DI5 The signal source depends on the DI state. Others: B connector The signal source is the B connector.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b3-02	User-defined OFF2 (coast to stop) source 1	0xB302	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Valid 1: Invalid 5: DI3 6: DI4							

	3: DI1		7: DI5 (MD600A)					
	4: DI2		Others: B connector					
<p>Description :</p> <p>This parameter sets the user-defined OFF2 (coast to stop) source 1 The bit signal value 0 indicates that the coast to stop function is valid, and the bit signal value 1 indicates that the coast to stop function is invalid.</p> <p>Value description:</p> <p>0: Valid OFF2 (coast to stop) is valid.</p> <p>1: Invalid OFF2 (coast to stop) is invalid.</p> <p>3 to 7: DI1 to DI5 The signal source depends on the DI state.</p> <p>Others: B connector The signal source is the B connector.</p> <p>Additional information:</p> <p>There are three sources for OFF2 (coast to stop) of control channel 2, b3-02, b4-00, and b4-01. If any one source is active, the OFF2 command is active.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	User-defined OFF3 (quick stop) source 1	0xB303	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Valid</p> <p>1: Invalid</p> <p>3: DI1</p> <p>4: DI2</p> <p>5: DI3</p> <p>6: DI4</p> <p>7: DI5 (MD600A)</p> <p>Others: B connector</p>							
b3-03	<p>Description:</p> <p>This parameter sets the user-defined OFF3 (quick stop) source 1. The bit signal value 0 indicates that the quick stop function is valid, and the bit signal value 1 indicates that the quick stop function is invalid.</p> <p>Value description:</p> <p>0: Valid OFF3 (quick stop) is valid.</p> <p>1: Invalid OFF3 (quick stop) is invalid.</p> <p>3 to 7: DI1 to DI5 The signal source depends on the DI state.</p> <p>Others: B connector The signal source is the B connector.</p> <p>Additional information:</p>							



Whether the self-defined fault reset command is valid depends on the terminal state of the DI.  
 Others: B connector  
 Whether the self-defined fault reset command is valid depends on the B connector.

Additional information:  
 There are three sources for the self-defined fault reset command of control channel 2, b1-05, b2-04, and b2-05. If any one source is valid, and the self-defined fault reset command is valid.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b3-06	User-defined jog 1 command source	0xB306	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Invalid 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: This parameter sets the user-defined jog 1 command source. The bit signal value 0 indicates invalid command, and the bit signal value 1 indicates valid command.  Value description: 0: Invalid The jog command is invalid. 3 to 7: DI1 to DI5 Whether the jog command is valid depends on the terminal state of the DI. Other: B connector Whether the jog command is valid depends on the B connector.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b3-07	User-defined jog 2 command source	0xB307	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Invalid 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: This parameter sets the user-defined jog 2 command source. The bit signal value 0 indicates invalid command, and the bit signal value 1 indicates valid command.  Value description: 0: Invalid							



	<p>1: Jog preferred The jog command can interrupt normal running.</p> <p>2: Priority for ON_OFF1 (start/stop) Normal operation commands can interrupt jogging.</p>
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## b4: Control Channel 2 Auxiliary Command Word

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b4-00	OFF2 (coast to stop) source 2	0xB400	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Valid                                 5: DI3</p> <p>1: Invalid                               6: DI4</p> <p>3: DI1                                   7: DI5 (MD600A)</p> <p>4: DI2                                  Others: B connector</p>							
	<p>Description:</p> <p>This parameter sets the OFF2 (coast to stop) source 2. The bit signal value 0 indicates that the coast to stop function is valid, and the bit signal value 1 indicates that the coast to stop function is invalid.</p> <p>Value description:</p> <p>0: Valid OFF2 (coast to stop) is valid.</p> <p>1: Invalid OFF2 (coast to stop) is invalid.</p> <p>3 to 7: DI1 to DI5 The signal source depends on the DI state.</p> <p>Others: B connector The signal source is the B connector.</p> <p>Additional information:</p> <p>There are three sources of OFF2 (coast to stop), b3-02, b4-00, and b4-01. If any source is valid, OFF2 (coast to stop) command is valid.</p> <p>After the DI function is set to 8 (Coast to stop), the value of b4-00 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b4-01	OFF2 (coast to stop) source 3	0xB401	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value:							

	0: Valid	5: DI3						
	1: Invalid	6: DI4						
	3: DI1	7: DI5 (MD600A)						
	4: DI2	Others: B connector						
<p>Description :</p> <p>This parameter sets the OFF2 (coast to stop) source 3. The bit signal value 0 indicates that the coast to stop function is valid, and the bit signal value 1 indicates that the coast to stop function is invalid.</p> <p>Value description:</p> <p>0: Valid OFF2 (coast to stop) is valid.</p> <p>1: Invalid OFF2 (coast to stop) is invalid.</p> <p>3 to 7: DI1 to DI5 The signal source depends on the DI state.</p> <p>Others: B connector The signal source is the B connector.</p> <p>Additional information:</p> <p>There are three sources of OFF2 (coast to stop), b3-02, b4-00, and b4-01. If any source is valid, OFF2 (coast to stop) command is valid.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	OFF3 (quick stop) source 2	0xB402	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
b4-02	<p>Value:</p> <p>0: Valid</p>							
	<p>1: Invalid</p>							
	<p>3: DI1</p>							
<p>4: DI2</p>								
<p>5: DI3</p>								
<p>6: DI4</p>								
<p>7: DI5 (MD600A)</p>								
<p>Others: B connector</p>								
<p>Description :</p> <p>This parameter sets the OFF3 (quick stop) source 2. The bit signal value 0 indicates that the quick stop function is valid, and the bit signal value 1 indicates that the quick stop function is invalid.</p> <p>Value description:</p> <p>0: Valid OFF3 (quick stop) is valid.</p> <p>1: Invalid OFF3 (quick stop) is invalid.</p> <p>3 to 7: DI1 to DI5 The signal source depends on the DI state.</p> <p>Others: B connector The signal source is the B connector.</p>								



	<p>Additional information:</p> <p>There are three sources of OFF3 (quick stop), b3-03, b4-02, and b4-03. If any source is valid, OFF3 (quick stop) command is valid. After the DI function is set to 47 (Emergency stop), the value of b4-02 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b4-03	OFF3 (quick stop) source 3	0xB403	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Valid 1: Invalid 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector</p>							
	<p>Description:</p> <p>This parameter sets the OFF3 (quick stop) source 3. The bit signal value 0 indicates that the quick stop function is valid, and the bit signal value 1 indicates that the quick stop function is invalid.</p>							
	<p>Value description:</p> <p>0: Valid OFF3 (quick stop) is valid. 1: Invalid OFF3 (quick stop) is invalid. 3 to 7: DI1 to DI5 The signal source depends on the DI state. Others: B connector The signal source is the B connector.</p> <p>Additional information:</p> <p>There are three sources of OFF3 (quick stop), b3-03, b4-02, and b4-03. If any source is valid, OFF3 (quick stop) command is valid.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b4-04	Fault reset command source 2	0xB404	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Invalid 1: Valid 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector</p>							
	<p>Description:</p>							

This parameter sets the fault reset command source 2. The bit signal value 0 indicates invalid command, and the bit signal value 1 indicates valid command.

Value description:  
 0: Invalid  
 The fault reset command source 2 is invalid.  
 1: Valid  
 The fault reset command source 2 is valid.  
 3 to 7: DI1 to DI5  
 The signal source depends on the DI state.  
 Others: B connector  
 The signal source is the B connector.

Additional information:  
 There are three sources of the fault reset command, b3-05, b4-04, and b4-05. If any source is valid, the fault reset command is valid.  
 After the DI function is set to 9 (Fault reset), the value of b4-04 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b4-05	Fault reset command source 3	0xB405	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Invalid 1: Valid 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: This parameter sets the fault reset command source 3. The bit signal value 0 indicates invalid command, and the bit signal value 1 indicates valid command. Value description: 0: Invalid The fault reset command source 2 is invalid. 1: Valid The fault reset command source 2 is valid. 3 to 7: DI1 to DI5 The signal source depends on the DI state. Others: B connector The signal source is the B connector. Additional information:							

	There are three sources of the fault reset command, b3-05, b4-04, and b4-05. If any source is valid, the fault reset command is valid.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b4-06	Ramp inhibition command source	0xB406	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Valid 5: DI3 1: Invalid 6: DI4 3: DI1 7: DI5 (MD600A) 4: DI2 Others: B connector							
	Description: This parameter sets the ramp inhibition command source. When "active low" applies, the RFG output is set to zero. The bit signal value 0 indicates invalid command, and the bit signal value 1 indicates valid command. Value description: 0: Valid The ramp inhibition command is valid. 1: Invalid The ramp inhibition command is invalid. 3 to 7: DI1 to DI5 The signal source depends on the DI state. Others: B connector The signal source is the B connector.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b4-07	Ramp pause command source	0xB407	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Valid 5: DI3 1: Invalid 6: DI4 3: DI1 7: DI5 (MD600A) 4: DI2 Others: B connector							
	Description: This parameter sets the ramp pause command source. When "active low" applies, RFG calculation pauses to maintain the current output. The bit signal value 0 indicates invalid command, and the bit signal value 1 indicates valid command. Value description: 0: Valid The ramp pause command is valid. 1: Invalid The ramp pause command is invalid.							

	<p>3 to 9: DI1 to DI7 The signal source depends on the DI state. Others: B connector The signal source is the B connector.</p> <p>Additional information: After the DI function is set to 21 (Acceleration/Deceleration inhibition), the value of b4-07 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>															
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
	Source of setting ramp reference to 0	0xB408	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing								
	<p>Value:</p> <table border="0"> <tr> <td>0: Valid</td> <td>5: DI3</td> </tr> <tr> <td>1: Invalid</td> <td>6: DI4</td> </tr> <tr> <td>3: DI1</td> <td>7: DI5 (MD600A)</td> </tr> <tr> <td>4: DI2</td> <td>Others: B connector</td> </tr> </table>								0: Valid	5: DI3	1: Invalid	6: DI4	3: DI1	7: DI5 (MD600A)	4: DI2	Others: B connector
0: Valid	5: DI3															
1: Invalid	6: DI4															
3: DI1	7: DI5 (MD600A)															
4: DI2	Others: B connector															
b4-08	<p>Description:</p> <p>This parameter sets the source of setting the RFG input to 0. When “active low” applies, the RFG input target is set to zero. The bit signal value 0 indicates invalid command, and the bit signal value 1 indicates valid command.</p> <p>Value description:</p> <p>0: Valid The source of setting ramp reference to 0 is valid.</p> <p>1: Invalid The source of setting ramp reference to 0 is invalid.</p> <p>3 to 7: DI1 to DI5 The signal source depends on the DI state.</p> <p>Others: B connector The signal source is the B connector.</p> <p>Additional information: After the DI function is set to 80 (Set RFG input to 0), the value of b4-08 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>															

## b5: Setting Channel 1

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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b5-00	Main frequency source	0xB500	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">0: b5-01</td> <td style="width: 33%;">6: Multi-reference</td> <td style="width: 33%;">9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: b5-01	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
	0: b5-01	6: Multi-reference	9: Communication														
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
<p>Description:</p> <p>This parameters sets the main frequency source.</p> <p>Value description:</p> <p>0: b5-01 keys on the keypad or the multi-functional input terminal functioning as the UP/DOWN key. When the AC drive is powered off and then powered on, whether the frequency adjusted by using UP/DOWN keys or multi-functional input terminal functioning as the UP/DOWN key is saved depends on the configuration of "retain values set by using UP/DOWN keys or multi-functional input terminal functioning as the UP/DOWN key". The "clear values adjusted by using UP/DOWN keys or multi-functional input terminal functioning as the UP/DOWN key" function of the DI allows you to clear values set by using UP/DOWN keys or multi-functional input terminal functioning as the UP/DOWN key.</p> <p>2: AI1 The frequency is input by current or voltage signal through the AI1. The frequency is calculated according to the preset AI curve.</p> <p>5: HDI pulse The frequency is set through the pulse frequency of the DI4. The frequency is calculated based on the curve of the relationship between the pulse frequency and the set frequency.</p> <p>6: Multi-reference When multi-reference is used as the frequency source, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 states, corresponding to 16 frequencies.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Multi-reference parameters are used to set the values of each frequency. The simple PLC module is used to set the running time and acceleration/deceleration time of each frequency. Up to 16 frequencies can be set.</p> <p>8: PID The main frequency is set through PID.</p> <p>9: Communication The main frequency is set through communication. You can set the frequency through remote communication.</p> <p>10: MD-BP-M potentiometer The main frequency is set through the external MD-BP-M potentiometer.</p> <p>Others: F connector A parameter code is set for a floating-point connector, and the value of the connector is read as the multi-reference 0. This mode is used for expansion besides the common sources.</p> <p>Additional information: The addresses for the frequency set by communication are 0x1000 (dedicated for Modbus) and 0x7310 (CAN and Modbus). When the frequency is written through communication by using address 0x1000, the setting option is set by n0-</p>																	

	13. When the frequency is written through communication by using address 0x7310, the setting option is set by n0-14.																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
b5-01	Digital setting of main frequency	0xB501	0.00 Hz to A2-17	50.00Hz	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Description :</p> <p>This parameter is used to set the target frequency. It is valid only when the main frequency source is set to digital setting.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
b5-02	Auxiliary frequency source	0xB502	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value :</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">0: Disable</td> <td style="width: 33%;">6: Multi-reference</td> <td style="width: 33%;">9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: Disable	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
	0: Disable	6: Multi-reference	9: Communication														
	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer														
5: HDI pulse	8: PID	Others: F connector															
<p>Description :</p> <p>This parameter sets the auxiliary frequency source.</p>																	
<p>Value description:</p> <p>0: Disable The auxiliary frequency is set to 0.</p> <p>2: AI1 The frequency is input by current or voltage signal through the AI1. The frequency is calculated according to the preset AI curve.</p> <p>5: HDI pulse The frequency is set through the pulse frequency of the DI4. The frequency is calculated based on the curve of the relationship between the pulse frequency and the set frequency.</p> <p>6: Multi-reference When multi-reference is used as the frequency source, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 states, corresponding to 16 frequencies.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Multi-reference parameters are used to set the values of each frequency. The simple PLC module is used to set the running time and acceleration/deceleration time of each frequency. Up to 16 frequencies can be set.</p> <p>8: PID The auxiliary frequency is set through PID.</p> <p>9: Communication The auxiliary frequency is set through communication. You can set the frequency through remote communication.</p> <p>10: MD-BP-M potentiometer The auxiliary frequency is set through the external MD-BP-M potentiometer.</p> <p>Others: F connector A parameter No. is set for a float connector, and the value of the connector is read as the auxiliary frequency reference.</p>																	

	<p>This mode is used for expansion besides the common sources.</p> <p>Additional information:  The addresses for the frequency set by communication are 0x1000 (dedicated for Modbus) and 0x7310 (CAN and Modbus). When the frequency is written through communication by using address 0x1000, the setting option is set by n0-13. When the frequency is written through communication by using address 0x7310, the setting option is set by n0-14.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Main and auxiliary frequency operation	0xB503	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Main frequency + auxiliary frequency                    3: Min. ( main frequency ,  auxiliary frequency )  1: Main frequency - auxiliary frequency                    4: Main frequency x auxiliary frequency  2: Max. ( main frequency ,  auxiliary frequency )</p>							
	<p>Description:</p> <p>This parameter is used to set the operation relationship between the main and auxiliary frequencies. The main frequency and auxiliary frequency are calculated in %. Multiply the calculation result by A2-04 (per-unit frequency base value) to obtain the frequency.</p> <p>Value description:</p> <p>0: Main frequency + auxiliary frequency  The operation result is the main frequency X plus the auxiliary frequency Y.</p> <p>1: Main frequency - auxiliary frequency  The operation result is the main frequency X minus the auxiliary frequency Y.</p> <p>2: Max. ( main frequency ,  auxiliary frequency )  The operation result is the larger value between the absolute value of the main frequency X and the absolute value of the auxiliary frequency Y.</p> <p>3: Min. ( main frequency ,  auxiliary frequency )  The operation result is the smaller value between the absolute value of the main frequency X and the absolute value of the auxiliary frequency Y.</p> <p>4: Main frequency x auxiliary frequency  The operation result is the main frequency X multiplied by the auxiliary frequency Y.</p>							
b5-03								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Additional frequency source	0xB504	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Disable    6: Multi-reference    9: Communication  2: AI1    7: Simple PLC    10: MD-BP-M potentiometer  5: HDI pulse    8: PID    Others: F connector</p>							
	<p>Description:</p> <p>This parameter sets the additional frequency source.</p>							
b5-04								

<p>Value description:</p> <p>0: Disable The additional frequency is set to 0.</p> <p>2: AI1 The frequency is input by current or voltage signal through the AI1. The frequency is calculated according to the preset AI curve.</p> <p>5: Pulse reference The frequency is set by using the pulse frequency input through the DI terminal. The frequency is calculated according to the curve that maps pulse frequencies to frequency references.</p> <p>6: Multi-reference When multi-reference is used as the frequency source, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 states, corresponding to 16 frequencies.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Multi-reference parameters are used to set the values of each frequency. The simple PLC module is used to set the running time and acceleration/deceleration time of each frequency. Up to 16 frequencies can be set.</p> <p>8: PID The additional frequency is set through PID.</p> <p>9: Communication The additional frequency is set through communication. When selecting the source, you can set the frequency through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.</p> <p>10: MD-BP-M potentiometer The additional frequency is set through the external MD-BP-M potentiometer.</p> <p>Others: F connector A parameter code is set for a floating-point connector, and the value of the connector is read as the additional frequency. This mode is used for expansion besides the common sources.</p> <p>Additional information: The addresses for the frequency set by communication are 0x1000 (dedicated for Modbus) and 0x7310 (CAN and Modbus). When the frequency is written through communication by using address 0x1000, the setting option is set by n0-13. When the frequency is written through communication by using address 0x7310, the setting option is set by n0-14. The additional frequency is superimposed on the frequency reference.</p>																	
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
b5-05	Main frequency reference gain factor source	0xB505	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value:</p> <table border="0"> <tr> <td>0: 100%</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: Pulse reference</td> <td>8: PID</td> <td>others: F connector</td> </tr> </table>								0: 100%	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: Pulse reference	8: PID	others: F connector
	0: 100%	6: Multi-reference	9: Communication														
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: Pulse reference	8: PID	others: F connector															
<p>Description:</p> <p>0: 100% The gain factor of main frequency reference is set to 100%.</p>																	



2: AI1  
The gain factor of main frequency reference is input by using current or voltage signals at the AI1 terminal and calculated according to the preset AI curve.

5: Pulse reference  
The gain factor of main frequency reference is set by using the pulse frequency input through the DI terminal. It is calculated according to the corresponding mapping curve.

6: Multi-reference  
When multi-reference is used as the source for the gain factor of main frequency reference, different combinations of DI terminal states correspond to different gain factors. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.

7: Simple PLC  
The simple PLC provides multi-speed run commands that can control the running time and acceleration/deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.

8: PID  
PID is selected as the source for the gain factor of main frequency reference. PID control is a common method of process control. By performing proportional, integral, and derivative operations on the difference between the feedback signal and the target signal of the controlled variable, and adjusting the output frequency of the AC drive, a closed-loop system is formed to stabilize the controlled variable at the target level.

9: Communication  
The gain factor of main frequency reference is set through communication. The gain factor of main frequency reference can be input through remote communication. The AC drive must be equipped with a communication card to implement communication with the host controller. This mode applies to remote control or centralized control of multiple equipment.

10: MD-BP-M potentiometer  
The source for the gain factor of main frequency reference is the input through the external MD-BP-M potentiometer.

Others: F connector  
A float-point connector parameter is set and the value of the connector is read as the gain factor of main frequency reference. This mode is used for expansion besides the common sources.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-06	Auxiliary frequency gain factor source	0xB506	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value:							
	0: 100%	6: Multi-reference	9: Communication					
	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer					
Description:								
This parameter sets the auxiliary frequency gain factor source.								
Value description:								
0: 100%								
The gain factor of the auxiliary frequency is set to 100%.								

<p>2: AI1 The gain factor of the auxiliary frequency is input by using current or voltage signals at AI1 and calculated according to the preset AI curve.</p> <p>5: Pulse reference The gain factor of the auxiliary frequency is set by using the pulse frequency of the DI4 and calculated according to the corresponding mapping curve.</p> <p>6: Multi-reference When multi-reference is used as the source for the gain factor of the auxiliary frequency, different combinations of DI terminal states correspond to different gain factors. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.</p> <p>8: PID The gain factor of the auxiliary frequency reference is set through PID.</p> <p>9: Communication The gain factor of the auxiliary frequency reference is set through communication. When selecting the source, you can set the gain factor of the auxiliary frequency through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.</p> <p>10: MD-BP-M potentiometer The gain factor of the auxiliary frequency is set through the external MD-BP-M potentiometer.</p> <p>Others: F connector A parameter code is set for a float connector, and the value of the connector is read as the gain factor of the auxiliary frequency. This mode is used for expansion besides the common sources.</p> <p>Additional information: The final auxiliary frequency is the current auxiliary frequency multiplied by the auxiliary frequency gain factor. For example, if the current auxiliary frequency is 50 Hz, b5-06 is set to communication, and the factor is 50%, the final auxiliary frequency is 25 Hz (50 x 50%).</p>																	
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
b5-07	Jog 1 frequency source	0xB507	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value:</p> <table border="0"> <tr> <td>0: b5-08</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: b5-08	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
	0: b5-08	6: Multi-reference	9: Communication														
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
<p>Description:</p> <p>This parameter sets the source of jog 1 frequency.</p> <p>Value description:</p> <p>0: b5-08</p>																	

The jog 1 frequency is set through b5-08.

2: AI1  
The jog 1 frequency is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.

5: HDI pulse  
The jog 1 frequency is set by using the pulse frequency of the DI4 and calculated according to the corresponding mapping curve.

6: Multi-reference  
When multi-reference is used as the jog 1 frequency source, different combinations of DI terminal states correspond to different frequency references. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.

7: Simple PLC  
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.

8: PID  
The jog 1 frequency is set through PID.

9: Communication  
The jog 1 frequency is set through communication. When selecting the source, you can set the jog 1 frequency through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.

10: Potentiometer MD-BP-M  
The jog 1 frequency is set through the MD-BP-M potentiometer.

Others: F connector  
A parameter code is set for a floating-point connector, and the value of the connector is read as the jog 1 frequency. This mode is used for expansion besides the common sources.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-08	Digital setting of jog 1 frequency	0xB508	-50.00 Hz to 50.00 Hz	2.00Hz	Signed 16 bits	Real time changes	Standard	Nothing
	Description: This parameter indicates the digital setting of jog 1 frequency. It is valid when b5-07 is set to 0.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-09	Jog 2 frequency source	0xB509	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: b5-10 2: AI1 5: HDI pulse 6: Multi-reference 7: Simple PLC 8: PID 9: Communication 10: MD-BP-M potentiometer Others: F connector							
	Description: This parameter sets the source of jog 2 frequency.							

Value description:

0: b5-10  
The jog 2 frequency is set through b5-10.

2: AI1  
The jog 2 frequency is input by using current or voltage signals at the AI1 terminal and calculated according to the preset AI curve.

5: HDI pulse  
The jog 2 frequency is set by using the pulse frequency of the DI4 and calculated according to the corresponding mapping curve.

6: Multi-reference  
When multi-reference is used as the jog 2 frequency source, different combinations of DI terminal states correspond to different frequency references. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.

7: Simple PLC  
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.

8: PID  
The jog 2 frequency is set through PID.

9: Communication  
The jog 2 frequency is set through communication. When selecting the source, you can set the jog 2 frequency through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.

10: Potentiometer MD-BP-M  
The jog 2 frequency is set through the MD-BP-M potentiometer.

Others: F connector  
A parameter code is set for a floating-point connector, and the value of the connector is read as the jog 2 frequency. This mode is used for expansion besides the common sources.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-10	Digital setting of jog 2 frequency	0xB50A	-50.00 Hz to 50.00 Hz	-2.00Hz	Signed 16 bits	Real time changes	Standard	Nothing
	Description: This parameter indicates the digital setting of jog 2 frequency. It is valid when b5-09 is set to 0.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-13	Torque reference source	0xB50D	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Digital setting                                      6: Multi-reference                                      9: Communication 2: AI1    7: Simple PLC    10: MD-BP-M potentiometer 5: HDI pulse    8: PID    Others: F connector							

Description :

This parameter sets the torque reference source.

0: Digital setting  
The torque reference source is digital setting.

2: AI1  
The torque reference is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.

5: HDI pulse  
The torque reference is set by using the pulse frequency input through the DI4 and calculated according to the corresponding mapping curve.

6: Multi-reference  
When multi-reference is used as the torque reference source, different combinations of DI terminal states correspond to different torque references. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.

7: Simple PLC  
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.

8: PID  
The torque reference is set through PID.

9: Communication  
The torque reference is set through communication. When selecting the source, you can set the torque through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.

10: Potentiometer MD-BP-M  
The torque reference is set through the MD-BP-M potentiometer.

Others: F connector  
A parameter code is set for a floating-point connector, and the value of the connector is read as the torque reference. This mode is used for expansion besides the common sources.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Torque reference digital setting	0xB50E	-800.0% to 800.0%	0.0%	Signed 16 bits	Real time changes	Standard	Nothing
b5-14	<p>Description :</p> <p>This parameter defines the torque reference in the torque control mode.</p> <p>Additional information:</p> <p>The torque is a relative value. 100.0% corresponds to the rated AC drive torque. The setpoint ranges from -800.0% to 800.0%, indicating that the maximum torque of the drive is eight times the rated torque of the motor. When the torque reference value is positive, the drive operates in the forward direction. When the torque reference value is negative, the drive operates in the reverse direction.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

b5-15	Torque reference gain factor	0xB50F	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">0: 100%</td> <td style="width: 33%;">6: Multi-reference</td> <td style="width: 33%;">9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: 100%	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
	0: 100%	6: Multi-reference	9: Communication														
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
<p>Description:</p> <p>This parameter sets the source of the torque reference gain factor.</p> <p>Value description:</p> <p>0: 100% The torque reference gain factor is set to 100%.</p> <p>2: AI1 The torque reference gain factor is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.</p> <p>5: HDI pulse The torque reference gain factor is set by using the pulse frequency input through the DI4 and calculated according to the corresponding mapping curve.</p> <p>6: Multi-reference When multi-reference is used as the source of torque reference gain factor, different combinations of DI terminal states correspond to different torque reference gain factors. The four multi-reference bit terminals can provide 16 state combinations, corresponding to 16 reference values.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.</p> <p>8: PID PID is selected as the source of torque reference gain factor. PID control is a common method of process control. By performing proportional, integral, and derivative operations on the difference between the feedback signal and the target signal of the controlled variable, and adjusting the output frequency of the AC drive, a closed-loop system is formed to stabilize the controlled variable at the target level.</p> <p>9: Communication The source of torque reference gain factor is communication. When selecting the source, you can set the torque reference gain factor through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.</p> <p>10: Potentiometer MD-BP-M The torque reference gain factor is set through the MD-BP-M potentiometer.</p> <p>Others: F connector A parameter code is set for a floating-point connector, and the value of the connector is read as the torque reference gain factor. This mode is used for expansion besides the common sources.</p>																	
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
b5-16	Torque filter time	0xB510	0 ms to	0ms	Unsigned	Real time	Standard	Nothing									

			10000 ms		16 bit	changes		
<p>Description :</p> <p>This parameter specifies the torque filter time.</p> <p>Additional information:</p> <p>This parameter can be used to filter out interference generated by the torque reference. Set this parameter according to the actual reference signal quality. The larger the value, the better the filtering effect, but the longer the torque reference delay.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-17	Torque acceleration time	0xB511	0.000s to 60.000s	0.000s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the torque acceleration time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-18	Torque deceleration time	0xB512	0.000s to 60.000s	0.000s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the torque deceleration time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-19	Speed limit source in torque mode	0xB513	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Digital setting 1: Speed channel</p>							
	<p>Description :</p> <p>This parameter sets the speed limit source.</p> <p>Value description:</p> <p>0: Digital setting In torque mode, the speed limit source is digital setting and the speed limit set by the "digital setting of speed limit" parameter takes effect.</p> <p>1: Speed channel The speed limit in the torque mode is set through the speed channel.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-20	Digital setting of speed limit in torque control mode	0xB514	-800.0% to 800.0%	0.0%	Signed 16 bits	Real time changes	Standard	Nothing
	<p>Description :</p>							

	This parameter takes effect when b5-20 is set to 0.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-21	Speed limit offset mode in torque mode	0xB515	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Bidirectional offset 1: Unidirectional offset 2: Overspeed control							
	Description: This parameter sets the speed limit offset mode in the torque mode.  Value description: 0: Bidirectional offset Torque is limited in both directions. 1: Unidirectional offset Torque is limited in only one direction. 2: Overspeed control Torque is limited by PI adjustment upon overspeed.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-22	Speed limit offset source in torque mode	0xB516	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Digital setting 2: AI1 5: HDI pulse 6: Multi-reference 7: Simple PLC 8: PID 9: Communication 10: MD-BP-M potentiometer Others: F connector							
	Description: This parameter sets the speed limit offset source.  Value description: 0: Digital setting The speed limit offset source is digital setting. 2: AI1 The speed limit offset is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve. 5: HDI pulse The speed limit offset is set by using the pulse frequency input through the DI4 and calculated according to the corresponding mapping curve. 6: Multi-reference When multi-reference is used as the speed limit offset source, different combinations of DI terminal states correspond to different speed limit offsets. The four multi-reference terminals can provide 16 state combinations, corresponding to 16							



reference values.

7: Simple PLC  
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.

8: PID  
PID is selected as the speed limit offset source.

9: Communication  
The speed limit offset source is communication. When selecting the source, you can set the speed limit offset through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.

10: MD-BP-M potentiometer  
The speed limit offset is set through the MD-BP-M potentiometer.

Others: F connector  
A parameter code is set for a floating-point connector, and the value of the connector is read as the speed limit offset. This mode is used for expansion besides the common sources.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-23	Digital setting of speed limit offset in torque mode	0xB517	0.0% to 800.0%	5.0%	Unsigned 16 bit	Real time changes	Standard	Nothing

Description:  
This parameter takes effect when b5-22 is set to 0 (Digital setting).

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-24	Source of supplementary torque reference 1	0xB518	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing

Value:

0: Digital setting	6: Multi-reference	9: Communication
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer
5: Pulse reference	8: PID	others: F connector

Description:

0: Digital setting  
The source of supplementary torque reference 1 is the "digital setting of supplementary torque reference 1".

2: AI1  
The supplementary torque reference 1 is input by using current or voltage signals at the AI1 terminal and calculated according to the preset AI curve.

5: Pulse reference  
The supplementary torque reference 1 is set by using the pulse frequency input through the DI terminal. It is calculated according to the corresponding mapping curve.

6: Multi-reference  
When multi-reference is used as the source of supplementary torque reference 1, different combinations of DI terminal

states correspond to different torque references. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.

7: Simple PLC

The simple PLC provides multi-speed run commands that can control the running time and acceleration/deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.

8: PID

PID is selected as the source of supplementary torque reference 1. PID control is a common method of process control. By performing proportional, integral, and derivative operations on the difference between the feedback signal and the target signal of the controlled variable, and adjusting the output frequency of the AC drive, a closed-loop system is formed to stabilize the controlled variable at the target level.

9: Communication

The source of supplementary torque reference 1 is communication. The supplementary torque reference 1 can be input through remote communication. The AC drive must be equipped with a communication card to implement communication with the host controller. This mode applies to remote control or centralized control of multiple equipment.

10: MD-BP-M potentiometer

The source of supplementary torque reference 1 is the input through the external MD-BP-M potentiometer.

Others: F connector

A float-point connector parameter is set and the value of the connector is read as the supplementary torque reference 1 source. This mode is used for expansion besides the common sources.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-25	Digital setting of additional torque reference 1	0xB519	-400.0% to 400.0%	0.0%	Signed 16 bits	Real time changes	Standard	Nothing
	Description: This parameter sets the additional torque reference 1							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-26	Source of additional torque reference 2	0xB51A	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: 0 2: All 5: HDI pulse 6: Multi-reference 7: Simple PLC 8: PID 9: Communication 10: MD-BP-M potentiometer Others: F connector							
	Description: This parameter sets the source of additional torque reference 2.  Value description: 0: 0 The source of additional torque reference 2 is set to 0.							

2: AI1  
The additional torque reference 2 is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.

5: HDI pulse  
The additional torque reference 2 is set by using the pulse frequency input through the DI4 and calculated according to the corresponding mapping curve.

6: Multi-reference  
When multi-reference is used as the source of additional torque reference 2, different combinations of DI terminal states correspond to different torque references. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.

7: Simple PLC  
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.

8: PID  
PID is selected as the source of additional torque reference 2.

9: Communication  
The source of additional torque reference 2 is communication. When selecting the source, you can set the additional torque reference 2 through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.

10: MD-BP-M potentiometer  
The source of additional torque reference 2 is the MD-BP-M potentiometer.

Others: F connector  
A parameter code is set for a floating-point connector, and the value of the connector is read as the additional torque reference 2. This mode is used for expansion besides the common sources.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b5-27	Additional torque reference 2 enable	0xB51B	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value:							
	0: Disable			5: DI3				
1: Enable			6: DI4					
3: DI1			7: DI5 (MD600A)					
4: DI2			Others: B connector					
Description:								
This parameter sets whether to enable additional torque reference 2. When this parameter is set to 0, additional torque reference 2 is disabled. When this parameter is set to 1, additional torque reference 2 is enabled.								
Value description:								
0: Disable Additional torque reference 2 is disabled.								
1: Enable Additional torque reference 2 is enabled.								
3 to 7: DI1 to DI5								

Whether additional torque reference 2 is enabled depends on the terminal state of the DI. Others: B connector Whether additional torque reference 2 is enabled depends on the B connector.
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## b6: Setting Channel 2

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
	Main frequency source	0xB600	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value:</p> <table border="0"> <tr> <td>0: b6-01</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: b6-01	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
0: b6-01	6: Multi-reference	9: Communication															
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
	<p>Description:</p> <p>This parameters sets the main frequency source.</p> <p>Value description:</p> <p>0: b6-01 keys on the keypad or the multi-functional input terminal functioning as the UP/DOWN key. When the AC drive is powered off and then powered on, whether the frequency adjusted by using UP/DOWN keys or multi-functional input terminal functioning as the UP/DOWN key is saved depends on the configuration of "retain values set by using UP/DOWN keys or multi-functional input terminal functioning as the UP/DOWN key". The "clear values adjusted by using UP/DOWN keys or multi-functional input terminal functioning as the UP/DOWN key" function of the DI allows you to clear values set by using UP/DOWN keys or multi-functional input terminal functioning as the UP/DOWN key.</p> <p>2: AI1 The frequency is input by current or voltage signal through the AI1. The frequency is calculated according to the preset AI curve.</p> <p>5: HDI pulse The frequency is set through the pulse frequency of the DI4. The frequency is calculated based on the curve of the relationship between the pulse frequency and the set frequency.</p> <p>6: Multi-reference When multi-reference is used as the frequency source, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 states, corresponding to 16 frequencies.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Multi-reference parameters are used to set the values of each frequency. The simple PLC module is used to set the running time and acceleration/deceleration time of each frequency. Up to 16 frequencies can be set.</p> <p>8: PID The main frequency is set through PID.</p> <p>9: Communication The main frequency is set through communication. You can set the frequency through remote communication.</p>																
b6-00																	

	<p>10: MD-BP-M potentiometer</p> <p>The main frequency is set through the external MD-BP-M potentiometer.</p> <p>Others: F connector</p> <p>A parameter code is set for a floating-point connector, and the value of the connector is read as the main frequency. This mode is used for expansion besides the common sources.</p> <p>Additional information:</p> <p>The addresses for the frequency set by communication are 0x1000 (dedicated for Modbus) and 0x7310 (CAN and Modbus). When the frequency is written through communication by using address 0x1000, the setting option is set by n0-13. When the frequency is written through communication by using address 0x7310, the setting option is set by n0-14.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
b6-01	Digital setting of main frequency	0xB601	0.00 Hz to A2-17	50.00Hz	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Description:</p> <p>This parameter is used to set the target frequency. It is valid only when the main frequency source is set to digital setting.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
b6-02	Auxiliary frequency source	0xB602	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value:</p> <table border="0" style="width: 100%;"> <tr> <td>0: Disable</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: Disable	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
	0: Disable	6: Multi-reference	9: Communication														
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
<p>Description:</p> <p>This parameter sets the auxiliary frequency source.</p> <p>Value description:</p> <p>0: Disable</p> <p>The auxiliary frequency is set to 0.</p> <p>2: AI1</p> <p>The frequency is input by current or voltage signal through the AI1. The frequency is calculated according to the preset AI curve.</p> <p>5: HDI pulse</p> <p>The frequency is set through the pulse frequency of the DI4. The frequency is calculated based on the curve of the relationship between the pulse frequency and the set frequency.</p> <p>6: Multi-reference</p> <p>When multi-reference is used as the frequency source, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 states, corresponding to 16 frequencies.</p> <p>7: Simple PLC</p> <p>Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Multi-reference parameters are used to set the values of each frequency. The simple PLC module is</p>																	

used to set the running time and acceleration/deceleration time of each frequency. Up to 16 frequencies can be set.

8: PID  
The auxiliary frequency is set through PID.

9: Communication  
The auxiliary frequency is set through communication. You can set the frequency through remote communication.

10: MD-BP-M potentiometer  
The auxiliary frequency is set through the external MD-BP-M potentiometer.

Others: F connector  
A parameter code is set for a float connector, and the value of the connector is read as the auxiliary frequency reference. This mode is used for expansion besides the common sources.

Additional information:  
The addresses for the frequency set by communication are 0x1000 (dedicated for Modbus) and 0x7310 (CAN and Modbus). When the frequency is written through communication by using address 0x1000, the setting option is set by n0-13. When the frequency is written through communication by using address 0x7310, the setting option is set by n0-14.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-03	Main and auxiliary frequency operation	0xB603	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Main frequency + auxiliary frequency                      3: Min. ( main frequency ,  auxiliary frequency ) 1: Main frequency - auxiliary frequency                      4: Main frequency x auxiliary frequency 2: Max. ( main frequency ,  auxiliary frequency )							
	Description: This parameter is used to set the operation relationship between the main and auxiliary frequencies. The main frequency and auxiliary frequency are calculated in %. Multiply the calculation result by A2-04 (per-unit frequency base value) to obtain the frequency.  Value description: 0: Main frequency + auxiliary frequency The operation result is the main frequency X plus the auxiliary frequency Y. 1: Main frequency - auxiliary frequency The operation result is the main frequency X minus the auxiliary frequency Y. 2: Max. ( main frequency ,  auxiliary frequency ) The operation result is the larger value between the absolute value of the main frequency X and the absolute value of the auxiliary frequency Y. 3: Min. ( main frequency ,  auxiliary frequency ) The operation result is the smaller value between the absolute value of the main frequency X and the absolute value of the auxiliary frequency Y. 4: Main frequency x auxiliary frequency The operation result is the main frequency X multiplied by the auxiliary frequency Y.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

	Additional frequency source	0xB604	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
b6-04	<p>Value:</p> <table border="0" style="width: 100%;"> <tr> <td>0: Disable</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: Disable	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
	0: Disable	6: Multi-reference	9: Communication														
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
<p>Description:</p> <p>This parameter sets the additional frequency source.</p> <p>Value description:</p> <p>0: Disable The additional frequency is set to 0.</p> <p>2: AI1 The frequency is input by current or voltage signal through the AI1. The frequency is calculated according to the preset AI curve.</p> <p>5: HDI pulse The frequency is set through the pulse frequency of the DI4. The frequency is calculated based on the curve of the relationship between the pulse frequency and the set frequency.</p> <p>6: Multi-reference When multi-reference is used as the frequency source, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 states, corresponding to 16 frequencies.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Multi-reference parameters are used to set the values of each frequency. The simple PLC module is used to set the running time and acceleration/deceleration time of each frequency. Up to 16 frequencies can be set.</p> <p>8: PID The additional frequency is set through PID.</p> <p>9: Communication The additional frequency is set through communication. When selecting the source, you can set the frequency through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.</p> <p>10: MD-BP-M potentiometer The additional frequency is set through the external MD-BP-M potentiometer.</p> <p>Others: F connector A parameter code is set for a floating-point connector, and the value of the connector is read as the additional frequency. This mode is used for expansion besides the common sources.</p> <p>Additional information: The addresses for the frequency set by communication are 0x1000 (dedicated for Modbus) and 0x7310 (CAN and Modbus). When the frequency is written through communication by using address 0x1000, the setting option is set by n0-13. When the frequency is written through communication by using address 0x7310, the setting option is set by n0-14. The additional frequency is superimposed on the frequency reference.</p>																	
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									

	Main frequency gain factor source	0xB605	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
b6-05	<p>Value:</p> <table border="0"> <tr> <td>0: 100%</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: 100%	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
	0: 100%	6: Multi-reference	9: Communication														
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
<p>Description:</p> <p>This parameter sets the main frequency reference gain factor source.</p> <p>Value description:</p> <p>0: 100% The gain factor of the main frequency is set to 100%.</p> <p>2: AI1 The gain factor of the main frequency is input by using current or voltage signals at AI1 and calculated according to the preset AI curve.</p> <p>5: HDI pulse The gain factor of the main frequency is set by using the pulse frequency of the DI4 and calculated according to the corresponding mapping curve.</p> <p>6: Multi-reference When multi-reference is used as the source for the gain factor of the main frequency, different combinations of DI states correspond to different gain factors. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.</p> <p>8: PID The gain factor of the main frequency reference is set through PID.</p> <p>9: Communication The gain factor of the main frequency is set through communication. When selecting the source, you can set the gain factor of the main frequency through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.</p> <p>10: MD-BP-M potentiometer The gain factor of the main frequency is set through the external MD-BP-M potentiometer.</p> <p>Others: F connector A parameter code is set for a floating-point connector, and the value of the connector is read as the gain factor of the main frequency. This mode is used for expansion besides the common sources.</p> <p>Additional information: The effective frequency is the result of the set frequency multiplied by the main frequency gain factor. For example, if the current main frequency is set to 50 Hz, b5-06 is set to communication, and the factor is set to 50%, the final main frequency is 25 Hz (50 x 50%).</p>																	
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									



	Auxiliary frequency gain factor source	0xB606	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value:</p> <table border="0"> <tr> <td>0: 100%</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: 100%	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
0: 100%	6: Multi-reference	9: Communication															
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
	<p>Description:</p> <p>This parameter sets the auxiliary frequency gain factor source.</p> <p>Value description:</p> <p>0: 100% The gain factor of the auxiliary frequency is set to 100%.</p> <p>2: AI1 The gain factor of the auxiliary frequency is input by using current or voltage signals at AI1 and calculated according to the preset AI curve.</p> <p>5: Pulse reference The gain factor of the auxiliary frequency is set by using the pulse frequency of the DI4 and calculated according to the corresponding mapping curve.</p> <p>6: Multi-reference When multi-reference is used as the source for the gain factor of the auxiliary frequency, different combinations of DI terminal states correspond to different gain factors. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.</p> <p>8: PID The gain factor of the auxiliary frequency reference is set through PID.</p> <p>9: Communication The gain factor of the auxiliary frequency reference is set through communication. When selecting the source, you can set the gain factor of the auxiliary frequency through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.</p> <p>10: MD-BP-M potentiometer The gain factor of the auxiliary frequency is set through the external MD-BP-M potentiometer.</p> <p>Others: F connector A parameter code is set for a float connector, and the value of the connector is read as the gain factor of the auxiliary frequency. This mode is used for expansion besides the common sources.</p> <p>Additional information: The final auxiliary frequency is the current auxiliary frequency multiplied by the auxiliary frequency gain factor. For example, if the current auxiliary frequency is 50 Hz, b5-06 is set to communication, and the factor is 50%, the final auxiliary frequency is 25 Hz (50 x 50%).</p>																
b6-06	Param.	Name	Communication	Range	Default	Data type	Change	User	Effective								

		address				mode	authority	mode									
	Jog 1 frequency source	0xB607	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
b6-07	<p>Value:</p> <table border="0"> <tr> <td>0: b6-08</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: b6-08	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
	0: b6-08	6: Multi-reference	9: Communication														
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
	<p>Description:</p> <p>This parameter sets the source of jog 1 frequency.</p> <p>Value description:</p> <p>0: b6-08 The jog 1 frequency is set through b6-08.</p> <p>2: AI1 The jog 1 frequency is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.</p> <p>5: HDI pulse The jog 1 frequency is set by using the pulse frequency of the DI4 and calculated according to the corresponding mapping curve.</p> <p>6: Multi-reference When multi-reference is used as the jog 1 frequency source, different combinations of DI terminal states correspond to different frequency references. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.</p> <p>8: PID The jog 1 frequency is set through PID.</p> <p>9: Communication The jog 1 frequency is set through communication. When selecting the source, you can set the jog 1 frequency through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.</p> <p>10: Potentiometer MD-BP-M The jog 1 frequency is set through the MD-BP-M potentiometer.</p> <p>Others: F connector A parameter code is set for a floating-point connector, and the value of the connector is read as the jog 1 frequency. This mode is used for expansion besides the common sources.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
b6-08	Digital setting of jog 1 frequency	0xB608	-50.00 Hz to 50.00 Hz	2.00Hz	Signed 16 bits	Real time changes	Standard	Nothing									
	Description:																

	This parameter indicates the digital setting of jog 1 frequency. It is valid when b5-07 is set to 0.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-09	Jog 2 frequency source	0xB609	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value:							
	0: b6-10		6: Multi-reference		9: Communication			
	2: AI1		7: Simple PLC		10: MD-BP-M potentiometer			
5: HDI pulse		8: PID		Others: F connector				
Description:								
This parameter sets the source of jog 2 frequency.								
Value description:								
0: b6-10 The jog 2 frequency is set through b6-10.								
2: AI1 The jog 2 frequency is input by using current or voltage signals at the AI1 terminal and calculated according to the preset AI curve.								
5: HDI pulse The jog 2 frequency is set by using the pulse frequency of the DI4 and calculated according to the corresponding mapping curve.								
6: Multi-reference When multi-reference is used as the jog 2 frequency source, different combinations of DI terminal states correspond to different frequency references. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.								
7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.								
8: PID The jog 2 frequency is set through PID.								
9: Communication The jog 2 frequency is set through communication. When selecting the source, you can set the jog 2 frequency through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.								
10: Potentiometer MD-BP-M The jog 2 frequency is set through the MD-BP-M potentiometer.								
Others: F connector A parameter code is set for a floating-point connector, and the value of the connector is read as the jog 2 frequency. This mode is used for expansion besides the common sources.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-10	Digital setting of jog 2	0xB60A	-50.00 Hz to 50.00	-2.00Hz	Signed 16	Real time	Standard	Nothing

	frequency		Hz		bits	changes		
Description : This parameter indicates the digital setting of jog 2 frequency. It is valid when b6-09 is set to 0.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Torque reference source	0xB60D	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
b6-13	Value:							
	0: Digital setting		6: Multi-reference		9: Communication			
2: AI1		7: Simple PLC		10: MD-BP-M potentiometer				
5: HDI pulse		8: PID		Others: F connector				
Description : This parameter sets the torque reference source.								
0: Digital setting The torque reference source is digital setting.								
2: AI1 The torque reference is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.								
5: HDI pulse The torque reference is set by using the pulse frequency input through the DI4 and calculated according to the corresponding mapping curve.								
6: Multi-reference When multi-reference is used as the torque reference source, different combinations of DI terminal states correspond to different torque references. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.								
7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.								
8: PID The torque reference is set through PID.								
9: Communication The torque reference is set through communication. When selecting the source, you can set the torque through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.								
10: Potentiometer MD-BP-M The torque reference is set through the MD-BP-M potentiometer.								
Others: F connector A parameter code is set for a floating-point connector, and the value of the connector is read as the torque reference. This mode is used for expansion besides the common sources.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

b6-14	Digital setting of torque reference	0xB60E		0%	Signed 16 bits	Real time changes	Standard	Nothing									
	Description : Digital setting of torque reference																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
b6-15	Torque reference gain factor	0xB60F	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value:</p> <table style="width:100%; border:none;"> <tr> <td style="width:33%;">0: 100%</td> <td style="width:33%;">6: Multi-reference</td> <td style="width:33%;">9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: 100%	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
0: 100%	6: Multi-reference	9: Communication															
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
	<p>Description :</p> <p>This parameter sets the source of the torque reference gain factor.</p> <p>Value description:</p> <p>0: 100% The torque reference gain factor is set to 100%.</p> <p>2: AI1 The torque reference gain factor is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.</p> <p>5: HDI pulse The torque reference gain factor is set by using the pulse frequency input through the DI4 and calculated according to the corresponding mapping curve.</p> <p>6: Multi-reference When multi-reference is used as the source of torque reference gain factor, different combinations of DI terminal states correspond to different torque reference gain factors. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.</p> <p>8: PID PID is selected as the source of torque reference gain factor. PID control is a common method of process control. By performing proportional, integral, and derivative operations on the difference between the feedback signal and the target signal of the controlled variable, and adjusting the output frequency of the AC drive, a closed-loop system is formed to stabilize the controlled variable at the target level.</p> <p>9: Communication The source of torque reference gain factor is communication. When selecting the source, you can set the torque reference gain factor through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.</p> <p>10: Potentiometer MD-BP-M The torque reference gain factor is set through the MD-BP-M potentiometer.</p>																

	<p>Others: F connector</p> <p>A parameter code is set for a floating-point connector, and the value of the connector is read as the torque reference gain factor. This mode is used for expansion besides the common sources.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-16	Torque filter time	0xB610	0 ms to 10000 ms	0ms	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter specifies the torque filter time.</p> <p>Additional information:</p> <p>This parameter can be used to filter out interference generated by the torque reference. Set this parameter according to the actual reference signal quality. The larger the value, the better the filtering effect, but the longer the torque reference delay.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-17	Torque acceleration time	0xB611	0.000s to 60.000s	0.000s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the torque acceleration time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-18	Torque deceleration time	0xB612	0.000s to 60.000s	0.000s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the torque deceleration time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-19	Speed limit source in torque mode	0xB613	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Digital setting</p> <p>1: Speed channel</p>							
	<p>Description:</p> <p>This parameter sets the speed limit source.</p> <p>Value description:</p> <p>0: Digital setting</p> <p>In torque mode, the speed limit source is digital setting and the speed limit set by the "digital setting of speed limit" parameter takes effect.</p> <p>1: Speed channel</p> <p>The speed limit in the torque mode is set through the speed channel.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-20	Digital setting of speed limit in torque control mode	0xB614	-800.0% to 800.0%	0.0%	Signed 16 bits	Real time changes	Standard	Nothing
	Description: This parameter takes effect when b6-19 is set to 0.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-21	Speed limit offset mode in torque mode	0xB615	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Bidirectional offset 1: Unidirectional offset 2: Overspeed control							
	Description: This parameter sets the speed limit offset mode in the torque mode.  Value description: 0: Bidirectional offset Torque is limited in both directions. 1: Unidirectional offset Torque is limited in only one direction. 2: Overspeed control Torque is limited by PI adjustment upon overspeed.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-22	Speed limit offset source in torque mode	0xB616	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Digital setting                      6: Multi-reference                      9: Communication 2: AI1                                      7: Simple PLC                              10: MD-BP-M potentiometer 5: HDI pulse                              8: PID                                      Others: F connector							
	Description: This parameter sets the speed limit offset source.  Value description: 0: Digital setting The speed limit offset source is digital setting. 2: AI1 The speed limit offset is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.							

5: HDI pulse  
The speed limit offset is set by using the pulse frequency input through the DI4 and calculated according to the corresponding mapping curve.

6: Multi-reference  
When multi-reference is used as the speed limit offset source, different combinations of DI terminal states correspond to different speed limit offsets. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.

7: Simple PLC  
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.

8: PID  
PID is selected as the speed limit offset source.

9: Communication  
The speed limit offset source is communication. When selecting the source, you can set the speed limit offset through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.

10: MD-BP-M potentiometer  
The speed limit offset is set through the MD-BP-M potentiometer.

Others: F connector  
A parameter code is set for a floating-point connector, and the value of the connector is read as the speed limit offset. This mode is used for expansion besides the common sources.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-23	Digital setting of speed limit offset in torque mode	0xB617	0.0% to 800.0%	5.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter takes effect when b6-22 is set to 0 (Digital setting).							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-24	Source of additional torque reference 1	0xB618	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Digital setting                                  6: Multi-reference                                  9: Communication 2: AI1    7: Simple PLC    10: MD-BP-M potentiometer 5: HDI pulse    8: PID    Others: F connector							
	Description: This parameter sets the source of additional torque reference 1.  Value description: 0: Digital setting The additional torque reference 1 is set through b6-25.							



2: AI1  
The additional torque reference 1 is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.

5: HDI pulse  
The additional torque reference 1 is set by using the pulse frequency input through the DI4 and calculated according to the corresponding mapping curve.

6: Multi-reference  
When multi-reference is used as the source of additional torque reference 1, different combinations of DI terminal states correspond to different torque references. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.

7: Simple PLC  
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.

8: PID  
PID is selected as the source of additional torque reference 1.

9: Communication  
The source of additional torque reference 1 is communication. When selecting the source, you can set the additional torque reference 1 through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.

10: MD-BP-M potentiometer  
The additional torque reference 1 is set through the MD-BP-M potentiometer.

Others: F connector  
A parameter code is set for a floating-point connector, and the value of the connector is read as the additional torque reference 1. This mode is used for expansion besides the common sources.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-25	Digital setting of additional torque reference 1	0xB619	-400.0% to 400.0%	0.0%	Signed 16 bits	Real time changes	Standard	Nothing
	Description: This parameter sets the additional torque reference 1							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-26	Source of additional torque reference 2	0xB61A	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: 0 2: AI1 5: HDI pulse 6: Multi-reference 7: Simple PLC 8: PID 9: Communication 10: MD-BP-M potentiometer Others: F connector							
	Description: This parameter sets the source of additional torque reference 2.							

Value description:

0: 0  
The source of additional torque reference 2 is set to 0.

2: AI1  
The additional torque reference 2 is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.

5: HDI pulse  
The additional torque reference 2 is set by using the pulse frequency input through the DI4 and calculated according to the corresponding mapping curve.

6: Multi-reference  
When multi-reference is used as the source of additional torque reference 2, different combinations of DI terminal states correspond to different torque references. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.

7: Simple PLC  
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.

8: PID  
PID is selected as the source of additional torque reference 2.

9: Communication  
The source of additional torque reference 2 is communication. When selecting the source, you can set the additional torque reference 2 through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.

10: MD-BP-M potentiometer  
The source of additional torque reference 2 is the MD-BP-M potentiometer.

Others: F connector  
A parameter code is set for a floating-point connector, and the value of the connector is read as the additional torque reference 2. This mode is used for expansion besides the common sources.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b6-27	Additional torque reference 2 enable	0xB61B	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Disable 1: Enable 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: This parameter sets whether to enable additional torque reference 2. When this parameter is set to 0, additional torque reference 2 is disabled. When this parameter is set to 1, additional torque reference 2 is enabled.  Value description:							

<p>0: Disable Additional torque reference 2 is disabled.</p> <p>1: Enable Additional torque reference 2 is enabled.</p> <p>3 to 7: DI1 to DI5 Whether additional torque reference 2 is enabled depends on the terminal state of the DI.</p> <p>Others: B connector Whether additional torque reference 2 is enabled depends on the B connector.</p>
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## b7: Ramp (Acceleration/Deceleration) Setting

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-00	Ramp acceleration/deceleration mode	0xB700	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Linear acceleration/deceleration 1: S-curve acceleration/deceleration							
	Description: This parameter sets the ramp acceleration/deceleration mode.  Value description: 0: Linear acceleration/deceleration The output frequency increases or decreases linearly. 1: S-curve acceleration/deceleration When the target frequency changes dynamically in real time, the output frequency increases or decreases based on the S-curve. This mode applies to scenarios requiring smooth operation and quick response in real time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-01	Base for ramp acceleration/deceleration time	0xB701	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Rated frequency 1: Maximum frequency 2: 100 Hz 3: Frequency reference							
	Description: This parameter sets the base frequency for ramp acceleration/deceleration time.							

Value description:  
 0: Rated frequency  
 The rated frequency is used as the base frequency for the ramp acceleration/deceleration time.  
 1: Maximum frequency  
 The maximum frequency is used as the base frequency for the ramp acceleration/deceleration time.  
 2: 100 Hz  
 The frequency of 100 Hz is used as the base frequency for the ramp acceleration/deceleration time.  
 3: Frequency reference  
 The frequency reference is used as the base frequency for the ramp acceleration/deceleration time.

Additional information:  
 This parameter selects a base frequency for the acceleration/deceleration time. Acceleration time refers to the time required to accelerate from 0 to the base frequency. Similarly, deceleration time refers to the time required to decelerate from the base frequency to 0.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp selection bit 0	0xB702	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
b7-02	Value:							
	0: 0		5: DI3					
	1: 1		6: DI4					
	3: DI1		7: DI5 (MD600A)					
4: DI2		Others: B connector						
Description:								
This parameter sets the ramp selection bit 0. Four groups of acceleration/deceleration time are available, which can be switched by the four states of bit 0 and bit 1 values of the ramp (RFG).								
Value description:								
0: 0 The value of ramp selection bit 0 is 0.								
1: 1 The value of ramp selection bit 0 is 1.								
3 to 7: DI1 to DI5 The value of ramp selection bit 0 depends on the terminal state of the DI.								
Others: B connector The value of ramp selection bit 0 depends on the B connector.								
Additional information:								
This parameter is invalid when b7-28 is set to 1 and b7-29 or b7-30 is set to a non-zero value.								
After the DI function is set to 16 (Acceleration/Deceleration selection terminal 1), the value of b7-02 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.								
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
	Ramp selection bit 1	0xB703	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
b7-03	Value: 0: 0 1: 1 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: This parameter sets the ramp selection bit 1. Four groups of acceleration/deceleration time are available, which can be switched by the four states of bit 0 and bit 1 values of the ramp (RFG).  Value description: 0: 0 The value of ramp selection bit 1 is 0. 1: 1 The value of ramp selection bit 1 is 1. 3 to 7: DI1 to DI5 The value of ramp selection bit 1 depends on the terminal state of the DI. Others: B connector The value of ramp selection bit 1 depends on the B connector.  Additional information: This parameter is invalid when b7-28 is set to 1 and b7-29 or b7-30 is set to a non-zero value. After the DI function is set to 17 (Acceleration/Deceleration selection terminal 2), the value of b7-03 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-04	Ramp 1 acceleration time	0xB704		20.0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter defines the time required for the output frequency to rise from 0 to the base frequency for acceleration/deceleration (b7-01). It determines the frequency rise rate. The AC drive supports time settings for four acceleration/deceleration schemes, which can be switched by using the corresponding parameters or DI terminals. This parameter defines the time of the first acceleration scheme.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-05	Ramp 1 deceleration time	0xB705	0.0s to 6500.0s	20.0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets ramp 1 deceleration time.							

	<p>Additional information:</p> <p>This parameter indicates the time required for the output frequency to decrease from the base frequency for the ramp acceleration/deceleration time (b7-01) to 0, which determines the accelerated speed during deceleration.</p> <p>The AC drive provides four groups of acceleration/deceleration time, which can be selected by using the parameter b7-02 or b7-03 or DI. This parameter defines the first group of deceleration time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-06	Ramp 1 acceleration start arc	0xB706	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the running time according to the arc during ramp 1 acceleration start segment.</p> <p>Additional information:</p> <p>This parameter defines the arc time of the output frequency acceleration start segment. It determines the jerk of the acceleration start segment arc. It is the start arc of the first acceleration scheme. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.</p> <p>This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the actual acceleration time to the frequency is 10s, arc motion applies in the first 2s and linear motion applies in the last 8s during acceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-07	Ramp 1 acceleration end arc	0xB707	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the running time according to the arc during ramp 1 acceleration end segment.</p> <p>Additional information:</p> <p>This parameter defines the arc time of the output frequency acceleration end segment. It determines the jerk of the acceleration end segment arc. It is the first group of acceleration end arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.</p> <p>This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the actual acceleration time to the frequency is 10s, linear motion applies in the first 8s and arc motion applies in the last 2s during acceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-08	Ramp 1 deceleration start arc	0xB708	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the running time according to the arc during ramp 1 deceleration start segment.</p>							

	<p>Additional information:</p> <p>This parameter defines the arc time of the output frequency deceleration start segment. It determines the jerk of the deceleration start segment arc. It is the first group of deceleration start arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.</p> <p>This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the deceleration time from the frequency to 0 is 10s, arc motion applies in the first 2s and linear motion applies in the last 8s during deceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp 1 deceleration end arc	0xB709	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
b7-09	<p>Description:</p> <p>This parameter sets the running time according to the arc during ramp 1 deceleration end segment.</p> <p>Additional information:</p> <p>This parameter defines the arc time of the output frequency deceleration end segment. It determines the jerk of the deceleration end segment arc. It is the first group of deceleration end arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.</p> <p>This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the deceleration time from the frequency to 0 is 10s, linear motion applies in the first 8s and arc motion applies in the last 2s during deceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp 2 acceleration time	0xB70a	0.0s to 6500.0s	20.0s	Unsigned 16 bit	Real time changes	Standard	Nothing
b7-10	<p>Description:</p> <p>This parameter sets ramp 2 acceleration time.</p> <p>Additional information:</p> <p>This parameter indicates the time required for the output frequency to increase from 0 to the base frequency for the ramp acceleration/deceleration time (b7-01), which determines the accelerated speed during acceleration.</p> <p>The AC drive provides four groups of acceleration/deceleration time, which can be selected by using the parameter b7-02 or b7-03 or DI. This parameter defines the first group of acceleration time.</p> <p>Acceleration time setting requirements: The acceleration current must be limited below the overcurrent capacity of the AC drive, so as not to cause the AC drive to trip due to overcurrent stall.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-11	Ramp 2 deceleration time	0xB70B	0.0s to 6500.0s	20.0s	Unsigned 16 bit	Real time changes	Standard	Nothing

	<p>Description :</p> <p>This parameter sets ramp 2 deceleration time.</p> <p>Additional information:</p> <p>This parameter indicates the time required for the output frequency to decrease from the base frequency for the ramp acceleration/deceleration time (b7-01) to 0, which determines the accelerated speed during deceleration.</p> <p>The AC drive provides four groups of acceleration/deceleration time, which can be selected by using the parameter b7-02 or b7-03 or DI. This parameter defines the first group of deceleration time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp 2 acceleration start arc	0xB70c	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
b7-12	<p>Description :</p> <p>This parameter sets the running time according to the arc during ramp 2 acceleration start segment.</p> <p>Additional information:</p> <p>This parameter defines the arc time of the output frequency acceleration start segment. It determines the jerk of the acceleration start segment arc. It is the first group of acceleration start arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.</p> <p>This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the actual acceleration time to the frequency is 10s, arc motion applies in the first 2s and linear motion applies in the last 8s during acceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp 2 acceleration end arc	0xB70d	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
b7-13	<p>Description :</p> <p>This parameter sets the running time according to the arc during ramp 2 acceleration end segment.</p> <p>Additional information:</p> <p>This parameter defines the arc time of the output frequency acceleration end segment. It determines the jerk of the acceleration end segment arc. It is the first group of acceleration end arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.</p> <p>This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the actual acceleration time to the frequency is 10s, linear motion applies in the first 8s and arc motion applies in the last 2s during acceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-14	Ramp 2 deceleration start arc	0xB70e	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing



	<p>Description :</p> <p>This parameter sets the running time according to the arc during ramp 2 deceleration start segment.</p> <p>Additional information:</p> <p>This parameter defines the arc time of the output frequency deceleration start segment. It determines the jerk of the deceleration start segment arc. It is the first group of deceleration start arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.</p> <p>This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the deceleration time from the frequency to 0 is 10s, arc motion applies in the first 2s and linear motion applies in the last 8s during deceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp 2 deceleration end arc	0xB70f	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
b7-15	<p>Description :</p> <p>This parameter sets the running time according to the arc during ramp 2 deceleration end segment.</p> <p>Additional information:</p> <p>This parameter defines the arc time of the output frequency deceleration end segment. It determines the jerk of the deceleration end segment arc. It is the end arc of the first deceleration scheme. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.</p> <p>This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the deceleration time from the frequency to 0 is 10s, linear motion applies in the first 8s and arc motion applies in the last 2s during deceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp 3 acceleration time	0xB710	0.00s to 650.00s	20.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
b7-16	<p>Description :</p> <p>This parameter sets ramp 3 acceleration time.</p> <p>Additional information:</p> <p>This parameter indicates the time required for the output frequency to increase from 0 to the base frequency for the ramp acceleration/deceleration time (b7-01), which determines the accelerated speed during acceleration.</p> <p>The AC drive provides four groups of acceleration/deceleration time, which can be selected by using the parameter b7-02 or b7-03 or DI. This parameter defines the first group of acceleration time.</p> <p>Acceleration time setting requirements: The acceleration current must be limited below the overcurrent capacity of the AC drive, so as not to cause the AC drive to trip due to overcurrent stall.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

b7-17	Ramp 3 deceleration time	0xB711	0.00s to 650.00s	20.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets ramp 3 deceleration time.</p> <p>Additional information:</p> <p>This parameter indicates the time required for the output frequency to decrease from the base frequency for the ramp acceleration/deceleration time (b7-01) to 0, which determines the accelerated speed during deceleration.</p> <p>The AC drive provides four groups of acceleration/deceleration time, which can be selected by using the parameter b7-02 or b7-03 or DI. This parameter defines the first group of deceleration time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-18	Ramp 3 acceleration start arc	0xB712	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the running time according to the arc during ramp 3 acceleration start segment.</p> <p>Additional information:</p> <p>This parameter defines the arc time of the output frequency acceleration start segment. It determines the jerk of the acceleration start segment arc. It is the first group of acceleration start arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.</p> <p>This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the actual acceleration time to the frequency is 10s, arc motion applies in the first 2s and linear motion applies in the last 8s during acceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-19	Ramp 3 acceleration end arc	0xB713	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the running time according to the arc during ramp 3 acceleration end segment.</p> <p>Additional information:</p> <p>This parameter defines the arc time of the output frequency acceleration end segment. It determines the jerk of the acceleration end segment arc. It is the first group of acceleration end arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.</p> <p>This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the actual acceleration time to the frequency is 10s, linear motion applies in the first 8s and arc motion applies in the last 2s during acceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

	Ramp 3 deceleration start arc	0xB714	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
b7-20	<p>Description :</p> <p>This parameter sets the running time according to the arc during ramp 3 deceleration start segment.</p> <p>Additional information:</p> <p>This parameter defines the arc time of the output frequency deceleration start segment. It determines the jerk of the deceleration start segment arc. It is the first group of deceleration start arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur. This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the deceleration time from the frequency to 0 is 10s, arc motion applies in the first 2s and linear motion applies in the last 8s during deceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp 3 deceleration end arc	0xB715	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
b7-21	<p>Description :</p> <p>This parameter sets the running time according to the arc during ramp 3 deceleration end segment.</p> <p>Additional information:</p> <p>This parameter defines the arc time of the output frequency deceleration end segment. It determines the jerk of the deceleration end segment arc. It is the first group of deceleration end arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur. This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the deceleration time from the frequency to 0 is 10s, linear motion applies in the first 8s and arc motion applies in the last 2s during deceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp 4 acceleration time	0xB716	0.00s to 650.00s	20.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
b7-22	<p>Description :</p> <p>This parameter sets ramp 4 acceleration time.</p> <p>Additional information:</p> <p>This parameter indicates the time required for the output frequency to increase from 0 to the base frequency for the ramp acceleration/deceleration time (b7-01), which determines the accelerated speed during acceleration. The AC drive provides four groups of acceleration/deceleration time, which can be selected by using the parameter b7-02 or b7-03 or DI. This parameter defines the first group of acceleration time.</p> <p>Acceleration time setting requirements: The acceleration current must be limited below the overcurrent capacity of the AC drive, so as not to cause the AC drive to trip due to overcurrent stall.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-23	Ramp 4 deceleration time	0xB717		20.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : Similar to b7-05, this parameter defines the time of the fourth deceleration scheme.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-24	Ramp 4 acceleration start arc	0xB718	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the running time according to the arc during ramp 4 acceleration start segment.  Additional information: This parameter defines the arc time of the output frequency acceleration start segment. It determines the jerk of the acceleration start segment arc. It is the first group of acceleration start arc. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur. This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the actual acceleration time to the frequency is 10s, arc motion applies in the first 2s and linear motion applies in the last 8s during acceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-25	Ramp 4 acceleration end arc	0xB719	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the running time according to the arc during ramp 4 acceleration end segment.  Additional information: This parameter defines the arc time of the output frequency acceleration end segment. It determines the jerk of the acceleration end segment arc. It is the end arc of the first acceleration scheme. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur. This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the actual acceleration time to the frequency is 10s, linear motion applies in the first 8s and arc motion applies in the last 2s during acceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-26	Ramp 4 deceleration start arc	0xB71a	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the running time according to the arc during ramp 4 deceleration start segment.							

	<p>Additional information:</p> <p>This parameter defines the arc time of the output frequency deceleration start segment. It determines the jerk of the deceleration start segment arc. It is the start arc of the first deceleration scheme. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.</p> <p>This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the deceleration time from the frequency to 0 is 10s, arc motion applies in the first 2s and linear motion applies in the last 8s during deceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp 4 deceleration end arc	0xB71B	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
b7-27	<p>Description:</p> <p>This parameter sets the running time according to the arc during ramp 4 deceleration end segment.</p> <p>Additional information:</p> <p>This parameter defines the arc time of the output frequency deceleration end segment. It determines the jerk of the deceleration end segment arc. It is the end arc of the first deceleration scheme. If the parameter value is too large, the acceleration/deceleration time will be prolonged. If the parameter value is too small, torque oscillation may occur.</p> <p>This function is active only when b7-00 is set to 1 (S curve acceleration/deceleration mode). For example, if this parameter is set to 2s and the deceleration time from the frequency to 0 is 10s, linear motion applies in the first 8s and arc motion applies in the last 2s during deceleration. In addition, the drive moves according to the set linear acceleration/deceleration time in the linear motion phase.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp 1/2 frequency switchover	0xB71c	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
b7-28	<p>Value:</p> <p>0: Disable 1: Enable</p> <p>Description:</p> <p>This parameter sets whether to enable the ramp 1/2 frequency switchover function. When this function is enabled, ramp selection bit 1 and bit 0 (b7-02 and b7-03) become invalid.</p> <p>Value description:</p> <p>0: Disable 1: Enable</p> <p>Additional information:</p> <p>This parameter is used together with b7-29 and b7-30 to use different acceleration/deceleration time or different accelerated speeds during acceleration/deceleration.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-29	Ramp 1/2 acceleration switchover frequency	0xB71d	0.0 Hz to A2-18	0.0Hz	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description : This parameter sets the ramp 1/2 acceleration switchover frequency. During acceleration, if the output frequency is greater than or equal to the value of b7-29, ramp 1 acceleration time is valid; otherwise, ramp 2 acceleration time is valid.							
b7-30	Ramp 1/2 deceleration switchover frequency	0xB71e	0.0 Hz to A2-18	0.0Hz	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description : This parameter sets the ramp 1/2 deceleration switchover frequency. During deceleration, if the output frequency is greater than or equal to the value of b7-30, ramp 1 deceleration time is valid; otherwise, ramp 2 deceleration time is valid.							
b7-31	Jog ramp source	0xB71f	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value : 0: Normal operation ramp time 1: Jog ramp time							
	Description : This parameter sets the jog ramp source.  Value description: 0: Normal operation ramp time The jog ramp time is the same as the normal operation acceleration/deceleration time. 1: Jog ramp time The jog ramp time is set separately through b7-32 and b7-33.							
b7-32	Jog ramp acceleration time	0xB720	0.00s to 650.00s	20.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter defines the time required for the output frequency to rise from 0 to F0-46 (base frequency for acceleration/deceleration time) in the jog mode. It determines the frequency rise rate in the jog mode.  Additional information: Acceleration time setting requirements: The acceleration current must be limited below the overcurrent capacity of the AC drive, so as not to cause the AC drive to trip due to overcurrent stall.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

b7-33	Jog ramp deceleration time	0xB721	0.00s to 650.00s	20.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter defines the time required for the output frequency to fall from F0-46 (base frequency for acceleration/deceleration time) to 0 in the jog mode. It determines the frequency fall rate in the jog mode.</p> <p>Additional information:</p> <p>Deceleration time setting requirements: Set the deceleration time properly to avoid too large smoothing circuit voltage, so as not to cause the AC drive to trip due to overvoltage stall.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-34	Deceleration time for quick stop	0xB722	0.00s to 650.00s	1.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter defines the time required for the output frequency to fall from the base frequency for acceleration/deceleration time (b7-01) to 0 during quick stop. It determines the frequency fall rate during quick stop.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-35	Start arc of quick stop	0xB723	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter defines the arc time of the output frequency deceleration start segment during quick stop. It determines the jerk of the deceleration start segment arc during quick stop.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-36	End arc of quick stop	0xB724	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter defines the arc time of the output frequency deceleration end segment during quick stop. It determines the jerk of the deceleration end segment arc during quick stop.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-37	Frequency acceleration time in torque control	0xB725	0.00s to 650.00s	20.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter defines the time required for the frequency to rise from 0 to the base frequency for acceleration/deceleration time (b7-01) in the torque control mode. The arc time is disabled in this mode.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-38	Frequency deceleration time in torque control	0xB726	0.00s to 650.00s	20.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p>							

	This parameter defines the time required for the frequency to fall from the base frequency for acceleration/deceleration time (b7-01) to 0 in the torque control mode. The arc time is disabled in this mode.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-39	Gain factor of ramp acceleration time	0xB727	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value:							
	0: 100%		6: Multi-reference		9: Communication			
	2: AI1		7: Simple PLC		10: MD-BP-M potentiometer			
5: HDI pulse		8: PID		Others: F connector				
Description:								
This parameter sets the ramp acceleration time gain factor. The actual ramp acceleration time equals the acceleration time multiplied by the gain factor, which can be adjusted in the range of 0 to 10 times.								
Value description:								
0: 100%								
The gain factor of the ramp acceleration time is 1. No gain applies.								
2: AI1								
The gain factor of the ramp acceleration time is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.								
5: HDI pulse								
The gain factor of the ramp acceleration time is set by using the pulse frequency input through the DI4 and calculated according to the corresponding mapping curve.								
6: Multi-reference								
When multi-reference is used as the gain factor of the ramp acceleration time, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.								
7: Simple PLC								
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.								
8: PID								
PID is selected as the source of the gain factor of the ramp acceleration time.								
9: Communication								
Communication is selected as the source of the gain factor of the ramp acceleration time. When selecting the source, you can set the gain factor of the ramp acceleration time through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.								
10: MD-BP-M potentiometer								
The MD-BP-M potentiometer is selected as the source of the gain factor of the ramp acceleration time.								
Others: F connector								
A parameter code is set for a floating-point connector, and the value of the connector is read as the gain factor of the ramp acceleration time. This mode is used for expansion besides the common sources.								
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective



		address				mode	authority	mode
b7-40	Gain factor of ramp deceleration time	0xB728	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value:							
	0: 100%                              6: Multi-reference                              9: Communication 2: AI1                                    7: Simple PLC                                    10: MD-BP-M potentiometer 5: HDI pulse                              8: PID    Others: F connector							
Description:								
This parameter sets the ramp deceleration time gain factor. The actual ramp deceleration time equals the deceleration time multiplied by the gain factor, which can be adjusted in the range of 0 to 10 times.								
Value description:								
0: 100%								
The gain factor of the ramp deceleration time is 1. No gain applies.								
2: AI1								
The gain factor of the ramp deceleration time is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.								
5: HDI pulse								
The gain factor of the ramp deceleration time is set by using the pulse frequency input through the DI4 and calculated according to the corresponding mapping curve.								
6: Multi-reference								
When multi-reference is used as the gain factor of the ramp deceleration time, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.								
7: Simple PLC								
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.								
8: PID								
PID is selected as the source of the gain factor of the ramp deceleration time.								
9: Communication								
Communication is selected as the source of the gain factor of the ramp deceleration time. When selecting the source, you can set the gain factor of the ramp deceleration time through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.								
10: MD-BP-M potentiometer								
The MD-BP-M potentiometer is selected as the source of the gain factor of the ramp deceleration time.								
Others: F connector								
A parameter code is set for a floating-point connector, and the value of the connector is read as the gain factor of the ramp deceleration time. This mode is used for expansion besides the common sources.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-41	Acceleration time gain factor at low speed	0xB729	1.0% to 1000.0%	100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing

<p>Description:</p> <p>This parameter sets the acceleration time gain factor at low speed. When the output frequency is lower than b7-42 (Low speed threshold), this parameter is valid. In this case, the time (original acceleration time x gain factor) is used as the actual acceleration time at low speed.</p> <p>Additional information:</p> <p>In case of a heavy load and high acceleration, acceleration at a high speed is normal but step loss may occur due to insufficient torque at a low speed. Alternatively, the acceleration rate is reduced to ensure stable running at a low speed, but the acceleration time is prolonged. Set a proportion between b7-41 (Acceleration time gain at low speed) and b7-42 (low speed threshold). In this case, the speed lower than b7-42 can be accelerated with a relatively slow acceleration rate, while the speed above b7-42 can be accelerated with a normal acceleration rate.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-42	Low-speed segment threshold	0xB72a		15.00%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>When the speed is lower than this threshold, the acceleration time gain factor of low-speed segment (b7-41) is valid.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-43	Ramp arc mode	0xB72B	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: In-continuous smoothing 1: Continuous smoothing</p>							
	<p>Description:</p> <p>This parameter sets the ramp arc mode.</p> <p>Value description:</p> <p>This parameter defines how the curve changes when the acceleration/deceleration trend changes.</p> <p>0: In-continuous smoothing When the acceleration/deceleration trend changes, the curve switches to the new target direction immediately.</p> <p>1: Continuous smoothing When the acceleration/deceleration trend changes, the curve follows the end arc of the current acceleration/deceleration segment and then switches to the reference direction.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-44	Forcibly change ramp output	0xB72c	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Disable 1: Enable 3: DI1 5: DI3 6: DI4 7: DI5 (MD600A)</p>							

	<p>4: DI2 Others: B connector</p>							
	<p>Description : This parameter sets whether to forcibly change ramp output. When this function is enabled, the ramp output is forced to be the value of b7-45.</p> <p>Value description: 0: Disable The ramp output is not forced to be the value of b7-45. 1: Enable The ramp output is forced to be the value of b7-45. 3 to 7: DI1 to DI5 Whether to forcibly change ramp output depends on the terminal state of the DI. Others: B connector Whether to forcibly change ramp output depends on the B connector.</p> <p>Additional information: When this function is enabled, the output frequency is forced to be the value of b7-45. For example, b7-45 is set to 0 (100%). After running, the output frequency is immediately forced to the frequency reference (50 Hz). You can observe the running frequency on the oscilloscope. The running frequency reaches the frequency reference directly.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Ramp output forced value	0xB72d	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: 100%    6: Multi-reference    9: Communication 2: AI1    7: Simple PLC    10: MD-BP-M potentiometer 5: HDI pulse                                       8: PID    Others: F connector</p>							
b7-45	<p>Description : This parameter specifies the forced value of ramp output. After b7-44 is enabled, the ramp output is forced to be the value set by this parameter.</p> <p>Value description: 0: 100% The forced value of the ramp output is 100%, that is, the ramp output is forced to the frequency reference. 2: AI1 The forced value of the ramp output is input through current or voltage signal at AI1 and calculated based on the set AI curve. 5: HDI pulse The forced value of the ramp output is set by using the pulse frequency input through the DI4 and calculated according to the corresponding mapping curve. 6: Multi-reference When multi-reference is used as the source of the ramp output forced value, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values. 7: Simple PLC</p>							

<p>Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each reference is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each reference and supports up to 16 references.</p> <p>8: PID PID is selected as the source of the ramp output forced value.</p> <p>9: Communication Communication is selected as the source of the ramp output forced value. When selecting the source, you can set the ramp output forced value through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.</p> <p>10: MD-BP-M potentiometer The MD-BP-M potentiometer is selected as the source of the ramp output forced value.</p> <p>Others: F connector A parameter code is set for a floating-point connector, and the value of the connector is read as the ramp output forced value. This mode is used for expansion besides the common sources.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-46	Ramp tracking	0xB72e	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value:</p> <p>0: Disable 1: Enable</p>							
	<p>Description:</p> <p>This parameter sets whether to enable ramp tracking. With this function enabled, when the torque reaches the limit and the deviation between the frequency reference and the feedback frequency is greater than b7-47 (ramp tracking error), the frequency reference is limited to the actual value plus the error.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b7-47	Ramp tracking error	0xB72f	0.0% to 100.0%	10.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter specifies the ramp tracking error.</p>							

## b8: Multi-reference Value

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-00	Currently effective multi-reference X	0xB800	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Value:</p>							
	0: Multi-reference 0	6: Multi-reference 6	11: Multi-reference 11					
1: Multi-reference 1	7: Multi-reference 7	12: Multi-reference 12						



4: DI2	Others: B connector
<p>Description: This parameter defines the source of the multi-reference bit 0. Multi-reference bit 0 to bit 3 are used together to support 16 multi-references in total.</p> <p>Value description: 0: 0 Multi-reference bit 0 is set to 0. 1: 1 Multi-reference bit 0 is set to 1. 3 to 7: DI1 to DI5 The value of multi-reference bit 0 depends on the terminal state of the DI. Others: B connector The value of multi-reference bit 0 depends on the B connector.</p> <p>Additional information: Parameters b8-03 (multi-reference bit 0), b8-04 (multi-reference bit 1), b8-05 (multi-reference bit 2), and b8-06 (multi-reference bit 3) are used together to support a total of 16 multi-references through binary values. For example, if bit 0 is set to 1, bit 1 is set to 1, bit 2 is set to 0, and bit 3 is set to 1, 0x1011 is obtained. That is, multi-reference 11 is selected. After the DI function is set to 12 (Multi-reference terminal 1), the value of b8-03 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>	

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
b8-04	Multi-reference bit 1	0xB804	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing								
	<p>Value:</p> <table border="0"> <tr> <td>0: 0</td> <td>5: DI3</td> </tr> <tr> <td>1: 1</td> <td>6: DI4</td> </tr> <tr> <td>3: DI1</td> <td>7: DI5 (MD600A)</td> </tr> <tr> <td>4: DI2</td> <td>Others: B connector</td> </tr> </table>								0: 0	5: DI3	1: 1	6: DI4	3: DI1	7: DI5 (MD600A)	4: DI2	Others: B connector
	0: 0	5: DI3														
1: 1	6: DI4															
3: DI1	7: DI5 (MD600A)															
4: DI2	Others: B connector															
<p>Description: This parameter defines the source of the multi-reference bit 1. Multi-reference bit 0 to bit 3 are used together to support 16 multi-references in total.</p> <p>Value description: 0: 0 Multi-reference bit 1 is set to 0. 1: 1 Multi-reference bit 1 is set to 1. 3 to 7: DI1 to DI5 The value of multi-reference bit 1 depends on the terminal state of the DI. Others: B connector</p>																

	<p>The value of multi-reference bit 1 depends on the B connector.</p> <p>Additional information: Parameters b8-03 (multi-reference bit 0), b8-04 (multi-reference bit 1), b8-05 (multi-reference bit 2), and b8-06 (multi-reference bit 3) are used together to support a total of 16 multi-references through binary values. For example, if bit 0 is set to 1, bit 1 is set to 1, bit 2 is set to 0, and bit 3 is set to 1, 0x1011 is obtained. That is, multi-reference 11 is selected. After the DI function is set to 13 (Multi-reference terminal 2), the value of b8-04 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>															
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
	Multi-reference bit 2	0xB805	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing								
b8-05	<p>Value:</p> <table border="0"> <tr> <td>0: 0</td> <td>5: DI3</td> </tr> <tr> <td>1: 1</td> <td>6: DI4</td> </tr> <tr> <td>3: DI1</td> <td>7: DI5 (MD600A)</td> </tr> <tr> <td>4: DI2</td> <td>Others: B connector</td> </tr> </table>								0: 0	5: DI3	1: 1	6: DI4	3: DI1	7: DI5 (MD600A)	4: DI2	Others: B connector
	0: 0	5: DI3														
	1: 1	6: DI4														
3: DI1	7: DI5 (MD600A)															
4: DI2	Others: B connector															
<p>Description:</p> <p>This parameter defines the source of the multi-reference bit 2. Multi-reference bit 0 to bit 3 are used together to support 16 multi-references in total.</p> <p>Value description:</p> <p>0: 0 Multi-reference bit 2 is set to 0.</p> <p>1: 1 Multi-reference bit 2 is set to 1.</p> <p>3 to 7: DI1 to DI5 The value of multi-reference bit 2 depends on the terminal state of the DI.</p> <p>Others: B connector The value of multi-reference bit 2 depends on the B connector.</p> <p>Additional information: Parameters b8-03 (multi-reference bit 0), b8-04 (multi-reference bit 1), b8-05 (multi-reference bit 2), and b8-06 (multi-reference bit 3) are used together to support a total of 16 multi-references through binary values. For example, if bit 0 is set to 1, bit 1 is set to 1, bit 2 is set to 0, and bit 3 is set to 1, 0x1011 is obtained. That is, multi-reference 11 is selected. After the DI function is set to 14 (Multi-reference terminal 3), the value of b8-05 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
b8-06	Multi-reference bit	0xB806	Refer to	0	Unsigned	Real time	Standard	Nothing								

	3		"Value"		16 bit	changes		
	Value: <p>0: 0 5: DI3</p> <p>1: 1 6: DI4</p> <p>3: DI1 7: DI5 (MD600A)</p> <p>4: DI2 Others: B connector</p>							
	Description: <p>This parameter defines the source of the multi-reference bit 3. Multi-reference bit 0 to bit 3 are used together to support 16 multi-references in total.</p> Value description: <p>0: 0</p> <p>Multi-reference bit 3 is set to 0.</p> <p>1: 1</p> <p>Multi-reference bit 3 is set to 1.</p> <p>3 to 7: DI1 to DI5</p> <p>The value of multi-reference bit 3 depends on the terminal state of the DI.</p> <p>Others: B connector</p> <p>The value of multi-reference bit 3 depends on the B connector.</p> Additional information: <p>Parameters b8-03 (multi-reference bit 0), b8-04 (multi-reference bit 1), b8-05 (multi-reference bit 2), and b8-06 (multi-reference bit 3) are used together to support a total of 16 multi-references through binary values. For example, if bit 0 is set to 1, bit 1 is set to 1, bit 2 is set to 0, and bit 3 is set to 1, 0x1011 is obtained. That is, multi-reference 11 is selected. After the DI function is set to 15 (Multi-reference terminal 4), the value of b8-06 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-08	Multi-reference 0 setting mode	0xB808	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: <p>0: b8-09 4: HDI pulse</p> <p>1: AI1 5: PID</p> <p>2: Reserved 6: b5-01/b6-01 (main frequency digital setting)</p> <p>3: MD-BP-M4 potentiometer Others: F connector</p>							
	Description: <p>This parameter sets the source of multi-reference 0.</p> Value description: <p>0: b8-09</p> <p>Multi-segment value 0 is set by b8-09.</p>							



1: AI1  
Multi-reference 0 is input by current or voltage signal through the AI1. Multi-reference 0 is calculated according to the preset AI curve.

2: Reserved

3: MD-BP-M potentiometer  
Multi-reference 0 is set by the MD-BP-M potentiometer.

4: HDI pulse  
The multi-reference 0 is set through the pulse frequency of the DI4. The per unit value is calculated based on the curve of the relationship between the pulse frequency and the frequency reference.

5: PID  
Multi-reference 0 is set through PID.

6: b5-01/b6-01 (main frequency digital setting)  
Multi-reference 0 is set through b5-01/b6-01 (main frequency digital setting). The corresponding frequency per unit value is calculated based on the frequency reference.

Others: F connector  
A parameter code is set for a floating-point connector, and the value of the connector is read as the main frequency. This mode is used for expansion besides the common sources.

Additional information:  
When the value of b8-02 (Multi-reference unit selection) is not 0, b8-08 (Multi-reference 0 setting mode) can be set only to 0. Other options of b8-08 are invalid.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Multi-reference 0	0xB809	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	Nothing
b8-09	<p>Description :</p> <p>This parameter sets the multi-reference 0. The source of multi-reference 0 is selected through b8-08. Other multi-references are defined through digital settings of parameters.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</li> <li>When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</li> <li>When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</li> <li>When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

b8-10	Multi-reference 1	0xB80A	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the multi-reference 1.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</li> <li>2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</li> <li>3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</li> <li>4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-11	Multi-reference value 2 (PLC stage 2)	0xB80B		0	Signed 16 bits	Real time changes	Standard	Nothing
	<p>Description :</p> <p>Same as above</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-12	Multi-reference 3	0xB80C	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the multi-reference 3.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</li> <li>2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</li> <li>3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</li> <li>4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also</li> </ol>							

	as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-13	Multi-reference 4	0xB80D	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the multi-reference 4.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</li> <li>2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</li> <li>3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</li> <li>4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-14	Multi-reference 5	0xB80E	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the multi-reference 5.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</li> <li>2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</li> <li>3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</li> <li>4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-15	Multi-reference 6	0xB80F	b8-43 to b8-	0.0	Signed 16	Real time	Standard	Nothing

			42		bits	changes		
<p>Description :</p> <p>This parameter sets the multi-reference 6.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</li> <li>2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</li> <li>3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</li> <li>4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</li> </ol>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Multi-reference 7	0xB810	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	Nothing
b8-16	<p>Description :</p> <p>This parameter sets the multi-reference 7.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</li> <li>2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</li> <li>3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</li> <li>4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Multi-reference 8	0xB811	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	Nothing
b8-17	<p>Description :</p> <p>This parameter sets the multi-reference 8.</p> <p>Additional information:</p>							

1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.
2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).
3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.
4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-18	Multi-reference 9	0xB812	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	Nothing
<p>Description: This parameter sets the multi-reference 9.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</li> <li>2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</li> <li>3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</li> <li>4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</li> </ol>								

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-19	Multi-reference 10	0xB813	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	Nothing
<p>Description: This parameter sets the multi-reference 10.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</li> <li>2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</li> </ol>								

	<p>3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</p> <p>4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-20	Multi-reference value 11 (PLC stage 11)	0xB814		0	Signed 16 bits	Real time changes	Standard	Nothing
	Description: Same as above							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-21	Multi-reference 12	0xB815	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	Nothing
	<p>Description: This parameter sets the multi-reference 12.</p> <p>Additional information:</p> <p>1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</p> <p>2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</p> <p>3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</p> <p>4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-22	Multi-reference 13	0xB816	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	Nothing
	<p>Description: This parameter sets the multi-reference 13.</p> <p>Additional information:</p> <p>1. The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</p>							

	<p>2. When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</p> <p>3. When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</p> <p>4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-23	Multi-reference 14	0xB817	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	Nothing
	<p>Description: This parameter sets the multi-reference 14.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</li> <li>When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</li> <li>When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</li> <li>When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-24	Multi-reference 15	0xB818	b8-43 to b8-42	0.0	Signed 16 bits	Real time changes	Standard	Nothing
	<p>Description: This parameter sets the multi-reference 15.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>The unit of the multi-reference is %. The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequency setpoints.</li> <li>When multi-reference is used to set the frequency, parameters b8-09 to b8-24 correspond to a total of 16 frequency references (0 to 15). A frequency reference is calculated as a percentage of the rated frequency rather than as a numerical frequency value. 100% corresponds to the rated motor frequency (C4-06).</li> <li>When multi-reference is used as the frequency source, the frequency reference is limited by C4-10 (maximum motor frequency) and d1-03 (digital setting of frequency upper limit in forward direction). To set the multi-reference to exceed 100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</li> </ol>							

	<p>100%, modify these two parameters first. The negative and positive values of the parameter determine the running direction. A negative value indicates the reverse direction.</p> <p>4. When output to a float-point connector, a multi-reference value can be used not only as a frequency reference, but also as a torque, voltage, or other reference. The value of 100% corresponds to the rated value.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-41	User-defined base value setting	0xB829	0.1 to 6553.0	100.0	Unsigned 16 bit	Shutdown change	Standard	Stop machine
	<p>Description :</p> <p>This parameter sets the user-defined base value of multi-reference. It is value only when b8-02 is set to 4 (User-defined).</p> <p>Additional information:</p> <p>If the base value is 100.0, and multi-reference 1 is set to 200.0, the actual effective output value of multi-reference 1 is 200% (200.0/100.0 x 100%).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-42	Multi-reference upper limit threshold	0xB82A	0.0 to 3000.0	3000.0	Signed 16 bits	Real time changes	Standard	Effective in real time
	<p>Description :</p> <p>This parameter set the upper limit threshold of the multi-reference.</p> <p>Additional information:</p> <p>You can set this parameter when you need to limit the upper and lower limits of the written multi-reference. For example, if b8-42 is set to 100.0, you cannot write a value greater than 100.0 to b8-09 (Multi-reference 0) to b8-24 (Multi-reference 15).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b8-43	Multi-reference lower limit threshold	0xB82B	-3000.0 to 0.0	- 3000.0	Signed 16 bits	Real time changes	Standard	Effective in real time
	<p>Description :</p> <p>This parameter set the lower limit threshold of the multi-reference.</p> <p>Additional information:</p> <p>You can set this parameter when you need to limit the upper and lower limits of the written multi-reference. For example, if b8-42 is set to -100.0, you cannot write a value smaller than -100.0 to b8-09 (Multi-reference 0) to b8-24 (Multi-reference 15).</p>							

## b9: Terminal Start/Stop Module



Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b9-00	Start/stop module A/B selection by terminal	0xB900	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Value:</p> <p>0: Module A 1: Module B Others: B connector</p>							
	<p>Description:</p> <p>This parameter sets the start/stop module by terminal. In the terminal control mode, select the start/stop module by terminal. If the start/stop module selection bit signal is 0, module A is selected. If the start/stop module selection bit signal is 1, module B is selected.</p> <p>Value description:</p> <p>0: Module A Start/stop module A by terminal is selected. 0: Module B Start/stop module B by terminal is selected. Others: B connector The value of this parameter is given by B connector.</p> <p>Additional information:</p> <p>After the DI function is set to 72 (Terminal module A/B selection), the value of b9-00 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b9-01	Mode of start/stop module A by terminal	0xB901	Refer to "Value"	3	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Value:</p> <p>0: Disable 1: IN1 for start 2: IN1 for start; IN2 for direction 3: IN1 for forward start; IN2 for reverse start 4: IN1P (rising edge) for start; IN2 for stop 5: IN1P (rising edge) for start; IN2 for stop; IN3 for direction 6: IN1P (rising edge) for forward start; IN2P (rising edge) for reverse start; IN3 for stop</p>							
	<p>Description:</p> <p>This parameter sets the mode of start/stop module A by terminal. This parameter is valid for IN1/IN2/IN3 of the terminal functions.</p> <p>Value description:</p> <p>0: Disable. The mode is invalid, and IN1/IN2/IN3 are invalid. 1: IN1 for start.</p>							

	<p>In this mode, one DI is connected to set the IN1 function. IN1 is used to control start/stop in the forward direction.  2: IN1 for start and IN2 for direction.</p> <p>In this mode, two DIs are connected to set the IN1/IN2 function. IN1 is used to control start/stop in the forward direction, and IN2 is used to control the running direction.  3: IN1 for forward start; IN2 for reverse start.</p> <p>In this mode, two DIs are connected to set IN1/IN2 function. IN1 is used to control start/stop in the forward direction. IN2 is used to control start/stop in the reverse direction. When IN1 and IN2 signals are active at the same, the drive stops.  4: IN1P (rising edge) for start; IN2 for stop</p> <p>In this mode, two DIs are connected to set the IN1/IN2 function. IN1 (rising edge) is used to control start in the forward direction, and IN2 is used to control stop.  5: IN1P (rising edge) for start; IN2 for stop; IN3 for direction</p> <p>In this mode, three DIs are connected to set the IN1/IN2/IN3 function. IN1 (rising edge) is used to control start in the forward direction, IN2 is used to control stop, and IN3 is used to control the running direction.  6: IN1P (rising edge) for forward start; IN2P (rising edge) for reverse start; IN3 for stop.</p> <p>In this mode, three DIs are connected to set the IN1/IN2/IN3 function. IN1 (rising edge) is used to control start in the forward direction, IN2 is used to control start in the reverse direction, and IN3 is used to control stop.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
b9-09	Mode of start/stop module B by terminal	0xB909	Refer to "Value"	3	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Disable 1: IN1 for start 2: IN1 for start; IN2 for direction 3: IN1 for forward start; IN2 for reverse start 4: IN1P (rising edge) for start; IN2 for stop 5: IN1P (rising edge) for start; IN2 for stop; IN3 for direction 6: IN1P (rising edge) for forward start; IN2P (rising edge) for reverse start; IN3 for stop							
	Description: It sets the mode of start/stop module B by terminal. This parameter is valid for IN1/IN2/IN3 of the terminal functions. Value description: 0: Disable. The mode is invalid, and IN1/IN2/IN3 are invalid. 1: IN1 for start. In this mode, one DI is connected to set the IN1 function. IN1 is used to control start/stop in the forward direction. 2: IN1 for start and IN2 for direction. In this mode, two DIs are connected to set the IN1/IN2 function. IN1 is used to control start/stop in the forward direction, and IN2 is used to control the running direction. 3: IN1 for forward start; IN2 for reverse start. In this mode, two DIs are connected to set IN1/IN2 function. IN1 is used to control start/stop in the forward direction. IN2 is used to control start/stop in the reverse direction. When IN1 and IN2 signals are active at the same, the drive stops. 4: IN1P (rising edge) for start; IN2 for stop. In this mode, two DIs are connected to set IN1/IN2 function. IN1 (rising edge) is used to control start in the forward direction and IN2 is used to control stop. 5: IN1P (rising edge) for start; IN2 for stop; IN3 for direction.							

	<p>In this mode, three DIs are connected to set IN1/IN2/IN3 function. IN1 (rising edge) is used to control start in the forward direction, IN2 is used to control stop, and IN3 is used to control the running direction.</p> <p>6: IN1P (rising edge) for forward start; IN2P (rising edge) for reverse start; IN3 for stop.</p> <p>In this mode, three DIs are connected to set the IN1/IN2/IN3 function. IN1 (rising edge) is used to control start in the forward direction, IN2 is used to control start in the reverse direction, and IN3 is used to control stop.</p>
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## C2: Auto-tuning and Self-check

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode												
	Motor parameter auto-tuning mode	0xC200	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing												
C2-00	<p>Value:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">0: No auto-tuning</td> <td style="width: 33%;">4: Inertia auto-tuning</td> <td style="width: 33%;">12: No-load dynamic complete auto-tuning of the synchronous motor</td> </tr> <tr> <td>1: Static partial auto-tuning of the asynchronous motor</td> <td>5: Dead zone auto-tuning</td> <td>11: With-load auto-tuning of the synchronous motor</td> </tr> <tr> <td>2: No-load dynamic auto-tuning of the asynchronous motor</td> <td></td> <td>13: Static partial auto-tuning of the synchronous motor</td> </tr> <tr> <td>3: Static complete auto-tuning of the asynchronous motor</td> <td></td> <td>14: UV gain deviation auto-tuning</td> </tr> </table>								0: No auto-tuning	4: Inertia auto-tuning	12: No-load dynamic complete auto-tuning of the synchronous motor	1: Static partial auto-tuning of the asynchronous motor	5: Dead zone auto-tuning	11: With-load auto-tuning of the synchronous motor	2: No-load dynamic auto-tuning of the asynchronous motor		13: Static partial auto-tuning of the synchronous motor	3: Static complete auto-tuning of the asynchronous motor		14: UV gain deviation auto-tuning
	0: No auto-tuning	4: Inertia auto-tuning	12: No-load dynamic complete auto-tuning of the synchronous motor																	
	1: Static partial auto-tuning of the asynchronous motor	5: Dead zone auto-tuning	11: With-load auto-tuning of the synchronous motor																	
2: No-load dynamic auto-tuning of the asynchronous motor		13: Static partial auto-tuning of the synchronous motor																		
3: Static complete auto-tuning of the asynchronous motor		14: UV gain deviation auto-tuning																		
<p>Description:</p> <p>This parameter sets the motor auto-tuning mode.</p>																				
<p>Value description:</p> <p>0: No auto-tuning No auto-tuning is performed.</p> <p>1: Static partial auto-tuning of the asynchronous motor It applies to scenarios where the motor cannot be disconnected from the load and dynamic auto-tuning is not allowed. Some motor parameters are auto-tuned. Other parameters use default values.</p> <p>2: No-load dynamic auto-tuning of the asynchronous motor It applies to scenarios where the motor can rotate at high speed without the load. It supports auto-tuning of all motor parameters under no-load and pure inertia load states.</p> <p>3: Static complete auto-tuning of the asynchronous motor It applies to scenarios where the motor cannot be disconnected from loads and dynamic auto-tuning is not allowed. Some motor parameters are auto-tuned. The auto-tuning precision is better than that when F1-69 is set to 1.</p> <p>4: Inertia auto-tuning This mode is applicable to scenarios requiring high-speed operation. Auto-tuning can be performed without load or with light load (below 80% of the rated load) or pure inertia load. Parameters such as inertia ratio is tuned.</p> <p>5: Dead zone auto-tuning This mode is used to tune the non-linear characteristics of the drive, thus improving the voltage output precision and</p>																				

operation efficiency.

11: With-load auto-tuning of the synchronous motor  
 This mode applies to scenarios where the motor cannot be disconnected from the load and dynamic auto-tuning is not allowed. Some motor parameters are auto-tuned. Other parameters use default values.

12: No-load dynamic complete auto-tuning of the synchronous motor  
 This mode applies to scenarios where the motor can rotate at high speed without the load. All motor parameters can be tuned.

13: Static partial auto-tuning of the synchronous motor  
 This mode applies to scenarios where the motor cannot be disconnected from the load and dynamic complete auto-tuning is not allowed. Some motor parameters are auto-tuned. Other parameters use default values.

14: UV gain deviation auto-tuning  
 The sampling deviation between output phase currents is tuned.  
 Specific auto-tuning parameters are set based on the setting of F1-68.

Additional information:  
 Dynamic auto-tuning and inertia auto-tuning are applicable to motors that can rotate without load. A motor is considered to be running without load when rotating without any noticeable load torque. The motor is not required to be disconnected from the load mechanism. Static auto-tuning is applicable to motors that cannot rotate.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Pre-start self-check configuration	0xC203	Refer to "Value"	0x0	Unsigned 16 bit	Shutdown change	Expansion	Nothing

Value:

Bit	Name	Value
Bit 0	IGBT shoot through self-check before start	0: Disable 1: Enable
Bit 1	Self-check on short circuit to ground before start	0: Disable 1: Enable
Bit 2	Phase loss self-check before start	0: Disable 1: Enable
Bit 3	Reserved	
Bit 4	Reserved	
Bit 5	Reserved	
Bit 6	Reserved	
Bit 7	Reserved	
Bit 8	Reserved	
Bit 9	Reserved	
Bit 10	Reserved	
Bit 11	Reserved	

	Bit 12	Reserved											
	Bit 13	Reserved											
	Bit 14	Reserved											
	Bit 15	Reserved											
<p>Description :</p> <p>This parameter sets the pre-start self-check configuration.</p> <p>Value description:</p> <p>Bit 0: IGBT shoot through self-check before start The drive performs the IGBT shoot through self-check before start.</p> <p>Bit 1: Self-check on short circuit to ground before start The drive performs the self-check on short circuit to ground before start.</p> <p>Bit 2: Phase loss self-check before start The drive performs the phase loss self-check before start.</p>													
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode					
C2-04	Manual self-check	0xC204	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Expansion	Nothing					
	<p>Value:</p> <p>0: No command 1: Self-check preparation</p>												
	<p>Description :</p> <p>This parameter sets the single self-check command.</p> <p>Value description:</p> <p>0: No command 1: Self-check preparation</p> <p>Additional information::</p> <p>Single static self-check does not cover the encoder and the motor does not rotate during the self-check process.</p>												
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode					
C2-06	Self-check upon power-on	0xC206	Refer to "Value"	0x000A	Unsigned 16 bit	Shutdown change	Expansion	Nothing					
	<p>Value:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Bit</th> <th style="width: 55%;">Name</th> <th style="width: 30%;">Value</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>								Bit	Name	Value		
Bit	Name	Value											

Bit 0	IGBT shoot through self-check upon power-on	0: Disable 1: Enable
Bit 1	Self-check on short circuit to ground upon power-on	0: Disable 1: Enable
Bit 2	Phase loss self-check before upon power-on	0: Disable 1: Enable
Bit 3	Inter-phase short circuit self-check upon power-on	0: Disable 1: Enable
Bit 4	Reserved	
Bit 5	Reserved	
Bit 6	Reserved	
Bit 7	Reserved	
Bit 8	Reserved	
Bit 9	Reserved	
Bit 10	Reserved	
Bit 11	Reserved	
Bit 12	Reserved	
Bit 13	Reserved	
Bit 14	Reserved	
Bit 15	Reserved	

Description :

This parameter sets the self-check upon power-on.

Value description:

Bit 0: IGBT shoot through self-check upon power-on

The drive performs IGBT shoot through self-check upon power-on.

Bit 1: Self-check on short circuit to ground upon power-on

The drive performs the self-check on short circuit to ground upon power-on.

Bit2: Phase loss self-check before upon power-on

The drive performs the phase loss self-check upon power-on.

Bit 3: Inter-phase short circuit self-check upon power-on

The drive performs the inter-phase short circuit self-check upon power-on.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C2-07	Direction selection	0xC207	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Default direction							

	1: Opposite to default direction							
	<p>Description:</p> <p>This parameter is used to set the motor running direction.</p> <p>Value description:</p> <p>0: Default direction</p> <p>The motor runs in the current direction.</p> <p>1: Opposite to default direction</p> <p>The motor runs in the direction opposite to the current direction.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C2-17	Auto-tuning acceleration time	0xC211	0.0s to 600.0s	20.0s	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the auto-tuning acceleration time.</p> <p>Specifically, this parameter defines the motor acceleration time during dynamic auto-tuning and has no effect on inertia auto-tuning.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C2-18	Auto-tuning deceleration time	0xC212	0.0s to 600.0s	20.0s	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the auto-tuning deceleration time.</p> <p>Specifically, this parameter defines the motor deceleration time during dynamic auto-tuning and has no effect on inertia auto-tuning.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C2-19	Parameter calculation	0xC213	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	<p>Value:</p> <p>0: Invalid</p> <p>1: Motor nameplate-based parameter calculation</p>							
	<p>Description:</p> <p>This parameter sets the motor nameplate-based parameter calculation.</p> <p>0: Invalid</p> <p>1: Motor nameplate-based parameter calculation</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C2-20	Confirmation of nameplate-based parameter calculation	0xC214	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Value: 0: Invalid 1: Valid							
	Description: This parameter sets whether to confirm the nameplate-based parameter calculation.  Value description: 0: Invalid 1: Valid  Additional information: This parameter specifies whether to confirm motor nameplate-based parameter calculation. Confirmed calculation results are updated and written into the basic parameter group of the motor.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C2-30	No load current vector auto-tuning	0xC21E	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable 1: Enable							
	Description: This parameter sets whether to enable no load current vector auto-tuning. This function can be enabled when the asynchronous motor cannot be disconnected from the load for auto-tuning.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C2-31	Speed source for no-load current vector auto-tuning	0xC21F	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: User-defined 1: Internally-defined							



	<p>Description :</p> <p>This parameter sets the speed source for no-load current vector auto-tuning. If this parameter is set to 0, the speed is given by the speed channel. If this parameter is set to 1, the speed is given internally by the system.</p>
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## C4: Basic Motor Parameters

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-00	Motor type	0xC400	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Value:</p> <p>0: Common asynchronous motor 2: Permanent magnet synchronous motor</p>							
	<p>Description :</p> <p>This parameter sets the motor type.</p> <p>Value description:</p> <p>0: Common asynchronous motor 2: Permanent magnet synchronous motor</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-01	Rated motor power	0xC401	0.1 kW to 1000.0 kW	3.7kW	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Description :</p> <p>This parameter is used to set the rated motor power in the unit of kW.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-03	Rated motor voltage	0xC403	1 V to 2000 V	380V	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Description :</p> <p>This parameter is used to set the rated motor voltage in the unit of V.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-04	Rated motor current	0xC404		9.00A	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Description :</p> <p>The rated current on the motor nameplate</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-06	Rated motor frequency	0xC406		50.00Hz	Unsigned	Shutdown	Standard	Nothing

					16 bit	change		
	Description : The rated frequency on the motor nameplate							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-07	Rated motor speed	0xC407		1460rpm	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : The rated speed on the motor nameplate							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-10	Maximum motor frequency	0xC40A		50.00Hz	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : Maximum allowed operation frequency of the motor							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-11	Minimum motor frequency	0xC40B	0.00 Hz to C4-10	0.00Hz	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : This parameter is used to set the allowed minimum frequency of the motor in the unit of Hz.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-12	Synchronous motor back EMF	0xC40C	0.0 V to 6553.5 V	300.0V	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter is used to set the effective value of the linear back EMF of the synchronous motor at rated speed. The value is obtained through no-load dynamic complete auto-tuning of the synchronous motor.  Additional information: If other synchronous motor auto-tuning methods are selected, set this parameter manually after auto-tuning is completed.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-13	Number of parallel motors	0xC40D	1 to 200	1	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : This parameter sets the number of parallel motors.  Additional information: When the drive operates with multiple identical motors, the rated motor parameters are set according to the individual							

	motor parameters, and the number of parallel motors is set by C4-13.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-14	Number of motor pole pairs (number of pole pairs/2)	0xC40E	0 to 128	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description: This parameter defines the number of motor pole pairs.  Additional information: When this parameter is set to 0, the number is automatically calculated by the system and the effective value is displayed in C4-15.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-15	Number of effective motor pole pairs	0xC40F	0 to 128	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter displays the effective number of motor pole pairs.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-20	Stator resistance	0xC414	0.001 Ω to 65.535 Ω	1.204Ω	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the motor stator resistance, which can be obtained by auto-tuning.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-22	Asynchronous motor rotor resistance	0xC416	0.001 Ω to 65.535 Ω	0.908Ω	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the asynchronous motor rotor resistance, which can be obtained by auto-tuning.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-24	Stator leakage inductance of asynchronous motor	0xC418	0.01 mH to 655.35 mH	5.28mH	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the asynchronous motor stator leakage inductance, which can be obtained by auto-tuning.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-28	Asynchronous motor mutual inductance	0xC41C	0.1 mH to 6553.5 mH	156.8mH	Unsigned 16 bit	Real time changes	Standard	Nothing

	<p>Description :</p> <p>This parameter sets the asynchronous motor mutual inductance, which can be obtained by auto-tuning.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-30	Asynchronous motor no-load current	0xC41E		4.20A	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>Asynchronous motor no-load current, which can be obtained by auto-tuning</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-32	Synchronous motor D-axis inductance	0xC420		5.28mH	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>Synchronous motor D-axis inductance, which can be obtained by auto-tuning</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-34	Synchronous motor Q-axis inductance	0xC422		5.28mH	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>Synchronous motor Q-axis inductance, which can be obtained by auto-tuning</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-62	Inertia ratio	0xC43E	0.0% to 6553.5%	120.0%	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the ratio of motor inertia to internal inertia base value.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-63	Electromechanical time constant	0xC43F	0.01s to 655.35s	1.00s	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Description :</p> <p>This parameter defines the time for the motor to accelerate from 0 to the rated speed under rated torque and reflects the system inertia. It can be obtained through inertia auto-tuning and dynamic auto-tuning.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C4-64	System rotation inertia	0xC440	0.01 kg · m <sup>2</sup> to 655.35 kg · m <sup>2</sup>	1.00kg · m <sup>2</sup>	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Description :</p> <p>This parameter displays the actual value of motor system inertia.</p>							

## C5: Motor Expansion Parameters

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-10	Speed point 1 of friction curve	0xC50A	0 rpm to 30000 rpm	15rpm	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description : This parameter sets speed point 1 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-11	Speed point 2 of friction curve	0xC50B	0 rpm to 30000 rpm	30rpm	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description : This parameter sets speed point 2 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-12	Speed point 3 of friction curve	0xC50C	0 rpm to 30000 rpm	60rpm	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description : This parameter sets speed point 3 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-13	Speed point 4 of friction curve	0xC50D	0 rpm to 30000 rpm	120rpm	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description : This parameter sets speed point 4 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-14	Speed point 5 of friction curve	0xC50E	0 rpm to 30000 rpm	150rpm	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description : This parameter sets speed point 5 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-15	Speed point 6 of friction curve	0xC50F	0 rpm to 30000 rpm	300rpm	Unsigned 16 bit	Shutdown change	Expansion	Nothing

	curve							
	Description : This parameter sets speed point 6 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-16	Speed point 7 of friction curve	0xC510	0 rpm to 30000 rpm	600rpm	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description : This parameter sets speed point 7 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-17	Speed point 8 of friction curve	0xC511	0 rpm to 30000 rpm	1200rpm	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description : This parameter sets speed point 8 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-18	Speed point 9 of friction curve	0xC512	0 rpm to 30000 rpm	1500rpm	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description : This parameter sets speed point 9 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-19	Speed point 10 of friction curve	0xC513	0 rpm to 30000 rpm	3000rpm	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description : This parameter sets speed point 10 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-20	Torque point 1 of friction curve	0xC514	-320.00 N · m to +320.00 N · m	0.00N · m	Signed 16 bits	Shutdown change	Expansion	Nothing
	Description : This parameter sets torque point 1 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-21	Torque point 2	0xC515	-320.00 N · m	0.00N · m	Signed 16	Shutdown	Expansion	Nothing

	of friction curve		to +320.00 N·m		bits	change		
	Description : This parameter sets torque point 2 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-22	Torque point 3 of friction curve	0xC516	-320.00 N·m to +320.00 N·m	0.00N·m	Signed 16 bits	Shutdown change	Expansion	Nothing
	Description : This parameter sets torque point 3 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-23	Torque point 4 of friction curve	0xC517	-320.00 N·m to +320.00 N·m	0.00N·m	Signed 16 bits	Shutdown change	Expansion	Nothing
	Description : This parameter sets torque point 4 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-24	Torque point 5 of friction curve	0xC518	-320.00 N·m to +320.00 N·m	0.00N·m	Signed 16 bits	Shutdown change	Expansion	Nothing
	Description : This parameter sets torque point 5 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-25	Torque point 6 of friction curve	0xC519	-320.00 N·m to +320.00 N·m	0.00N·m	Signed 16 bits	Shutdown change	Expansion	Nothing
	Description : This parameter sets torque point 6 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-26	Torque point 7 of friction curve	0xC51A	-320.00 N·m to +320.00 N·m	0.00N·m	Signed 16 bits	Shutdown change	Expansion	Nothing
	Description : This parameter sets torque point 7 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

C5-27	Torque point 8 of friction curve	0xC51B	-320.00 N·m to +320.00 N·m	0.00N·m	Signed 16 bits	Shutdown change	Expansion	Nothing
	Description : This parameter sets torque point 8 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-28	Torque point 9 of friction curve	0xC51C	-320.00 N·m to +320.00 N·m	0.00N·m	Signed 16 bits	Shutdown change	Expansion	Nothing
	Description : This parameter sets torque point 9 of the friction curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
C5-29	Torque point 10 of friction curve	0xC51D	-320.00 N·m to +320.00 N·m	0.00N·m	Signed 16 bits	Shutdown change	Expansion	Nothing
	Description : This parameter sets torque point 10 of the friction curve.							

## d0 Basic Motor Control

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-00	Motor control mode	0xD000	Refer to "Value"	2	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: SVC 2: V/f							
	Description : This parameter is used to set the motor control mode based on the application scenario and motor type.  Value description: 0: SVC It is the magnetic field oriented vector control mode without sensor. This mode features excellent dynamic performance and steady-state accuracy, but it is highly dependent on parameters and needs prior auto-tuning of motor parameters. 2: V/f							



	It is the open-loop control with the constant voltage-to-frequency ratio. This mode is not highly dependent on parameters. It is simple, reliable, and easy to use, but has poor dynamic performance compared with SVC.															
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
d0-01	Motor control method	0xD001	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing								
	<p>Value:</p> <table> <tr> <td>0: Speed control</td> <td>5: DI3</td> </tr> <tr> <td>1: Torque control</td> <td>6: DI4</td> </tr> <tr> <td>3: DI1</td> <td>7: DI5 (MD600A)</td> </tr> <tr> <td>4: DI2</td> <td>Others: B connector</td> </tr> </table>								0: Speed control	5: DI3	1: Torque control	6: DI4	3: DI1	7: DI5 (MD600A)	4: DI2	Others: B connector
	0: Speed control	5: DI3														
1: Torque control	6: DI4															
3: DI1	7: DI5 (MD600A)															
4: DI2	Others: B connector															
<p>Description:</p> <p>This parameter sets the motor control method.</p> <p>Value description:</p> <p>0: Speed control 1: Torque control 3 to 7: DI1 to DI5</p> <p>The control method depends on the terminal state of the DI. 0 indicates speed control and 1 indicates torque control.</p> <p>Others: B connector</p> <p>The control method depends on the status of B connector. 0 indicates speed control and 1 indicates torque control.</p> <p>Additional information:</p> <p>Torque control is invalid in the V/f mode.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
d0-02	Start mode	0xD002	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing								
	<p>Value:</p> <p>0: Direct start 1: Flying start 2: Reserved 3: Reserved</p>															
	<p>Description:</p> <p>This parameter is used to set the start mode of the motor.</p> <p>Value description:</p> <p>0: Direct start</p>															

	<p>The drive starts directly. This mode applies to scenarios where the motor starts from a standstill state.</p> <p>1: Flying start</p> <p>In this mode, the drive first determines the motor rotation speed and direction, and then starts at the detected frequency of the motor. Select this mode when the motor is started during rotation. For other scenarios, select direct start.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Flying start mode	0xD003	Refer to "Value"	4	Unsigned 16 bit	Real time changes	Standard	Nothing
d0-03	<p>Value:</p> <p>0: From the stop frequency</p> <p>1: From the mains frequency</p> <p>2: From the maximum frequency</p> <p>4: Magnetic field oriented flying start</p>							
	<p>Description:</p> <p>This parameter is used to set the flying start mode when the AC drive starts.</p>							
	<p>Value description:</p> <p>0: From stop frequency</p> <p>The current speed is searched from the last stop frequency. If external force drives the motor to a speed higher than the speed at stop, this mode is not applicable.</p> <p>1: From the mains frequency</p> <p>The current speed is searched from the mains frequency of 50 Hz. This mode is applicable to scenarios where the motor is restarted after stop for a long time.</p> <p>2: From the maximum frequency</p> <p>The current speed is searched from F1-10 (Maximum motor frequency). It is generally used for generating loads.</p> <p>4: Magnetic field oriented flying start</p> <p>The current speed is searched using magnetic field oriented flying start. The search speed is faster than the first three modes, but motor parameters need to be tuned. It is used for fast flying start in the V/f mode.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	OFF1 stop mode	0xD004	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
d0-04	<p>Value:</p> <p>0: Decelerate to stop</p> <p>1: Coast to stop</p> <p>2: Stop at maximum capability</p>							
	<p>Description:</p> <p>This parameter is used to set the OFF1 stop mode.</p>							

	<p>Value description:</p> <p>0: Decelerate to stop</p> <p>The stop mode is determined by the valid ramp settings.</p> <p>1: Coast to stop</p> <p>The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state.</p> <p>2: Stop at maximum capability</p> <p>In this mode, the motor speed reference is set to 0 forcibly. The motor decelerates to 0 based on the maximum output capacity. The minimum deceleration time is fixed to 50 ms. The output torque or current may reach the limit value during deceleration.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-05	OFF2 (coast to stop) mode	0xD005	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Value:							
	0: Coast to stop							
Description:								
This parameter displays the OFF2 stop mode. The default value is coast to stop. It is equivalent to the function of coast to stop assigned to a terminal and is used for operation interruption.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-06	OFF3 (quick stop) mode	0xD006	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value:							
	0: Quick stop 1: Stop at maximum capability							
	Description:							
This parameter defines the OFF3 (quick stop) stop mode.								
Value description:								
0: Quick stop								
It is equivalent to the function of emergency stop assigned to a terminal. The deceleration time is determined by b7-34/b7-35/b7-36.								
1: Stop at maximum capability								
In this mode, the motor speed reference is set to 0 forcibly. The motor decelerates to 0 based on the maximum output capacity. The minimum deceleration time is fixed to 50 ms. The output torque or current may reach the limit value during deceleration.								

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-07	Stop mode during running	0xD007	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: OFF1 stop mode  1: OFF2 (coast to stop)  2: OFF3 (quick stop)</p>							
	<p>Description:</p> <p>This parameter specifies the stop mode after the run enable signal is inactive. It is equivalent to the running-pause or running-enable function of the terminal.</p> <p>Value description:</p> <p>0: OFF1 stop mode  The stop mode is determined by d0-04.</p> <p>1: OFF2 (coast to stop)  The coast to stop mode applies.</p> <p>2: OFF3 (quick stop)  The stop mode is determined by d0-06.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-08	Stop mode in torque control	0xD008	Refer to "Value"	1	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Value:</p> <p>0: Coast to stop  1: Switch to speed control mode and then stop  2: Maintain torque control mode until zero speed and then block</p>							
	<p>Description:</p> <p>This parameter sets the stop mode in the torque control mode.</p> <p>Value description:</p> <p>0: Coast to stop  The drive coasts to stop and the drag system is in the free braking state.</p> <p>1: Switch to speed control mode and then stop  The drive switches to the speed control mode and stops according to the stop mode set in the current speed control mode.</p> <p>2: Maintain torque control mode until zero speed and then block  The speed limit in the torque mode is reduced to 0 according to the set deceleration time. However, the motor is still</p>							

	running in the torque mode. When the actual motor speed reaches 0, the motor stops. In this mode, the system must be able to pull the motor speed to zero. Otherwise, the motor may not stop.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-09	Zero-speed threshold (actual speed)	0xD009	0.1% to 200.0%	2.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter defines the zero-speed threshold for actual speed.</p> <p>Additional information:</p> <p>During deceleration to stop, when the actual speed is equal to or lower than this threshold for the time set by d0-10, the AC drive enters the stop state.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-10	Delay of stop at zero speed (actual speed)	0xD00A	0.00s to 10.00s	0.10s	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the duration in which the actual speed is equal to or lower than the threshold set by d0-09.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-11	Zero speed threshold (set speed)	0xD00B	0.0% to 200.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter defines the zero-speed threshold for actual speed.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. During deceleration to stop, when the actual speed is equal to or lower than this threshold for the time set by d0-10, the AC drive enters the stop state.</li> <li>2. When d0-10 is set to 0, the function is invalid.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-12	Delay of stop at zero speed (set speed)	0xD00C	0.00s to 655.35s	0.00s	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the duration in which the set speed is equal to or lower than the threshold set by d0-09.</p>							

	Additional information: When d0-12 is set to 0, the function is invalid.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-13	Start/Stop frequency following	0xD00D	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Disable 1: Enable 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: This parameter sets whether to enable the start/stop frequency following function.  Value description: 0: Disable The function disabled. 1: Enable The function enabled. 3 to 7: DI1 to DI5 Whether the function is enabled depends on the terminal state of the DI. Others: B connector Whether the function is enabled depends on the state of B connector.  Additional information: With the start/stop frequency following function enabled, when the drive stops during operation or restarts during deceleration to stop, the frequency reference starts acceleration/deceleration from the current feedback frequency.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-14	Motor running direction selection	0xD00E	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Default direction 1: Opposite to default direction							
	Description: This parameter is used to set the motor running direction.  Value description:							

	<p>0: Default direction The motor runs in the current direction.</p> <p>1: Opposite to default direction The motor runs in the direction opposite to the current direction.</p> <p>Additional information: Unlike the speed reverse function, the direction of the speed is not changed when the motor phase sequence is switched, but the actual running direction of the motor changes to the reverse direction.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Pre-excitation mode	0xD011	Refer to "Value"	1	Unsigned 16 bit	Shutdown change	Standard	Nothing
d0-17	<p>Value:</p> <p>0: Pre-excitation based on time 1: Pre-excitation based on the current reference 2: Pre-excitation based on the maximum current</p> <p>Description:</p> <p>This parameter selects a pre-excitation mode for an asynchronous motor in the vector control mode.</p> <p>Value description:</p> <p>0: Pre-excitation based on time After the excitation time before start reaches the time set by d0-18, the drive enters the normal running state. The excitation current reference is calculated by the system automatically.</p> <p>1: Pre-excitation based on the current reference Excite according to the current set by d0-19 before start. After the magnetic flux reaches the target value, the drive enters the normal running state.</p> <p>2: Pre-excitation based on the maximum current Before start, the system calculates the maximum current based on the rated drive current and the rated motor current. Excitation according to the maximum current can realize fast excitation and start.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Pre-excitation time	0xD012	1 ms to 30000 ms	1000ms	Unsigned 16 bit	Real time changes	Standard	Nothing
d0-18	<p>Description:</p> <p>This parameter sets the pre-excitation time for the asynchronous motor in the vector control mode.</p> <p>Additional information:</p> <p>This parameter is valid when d0-17 is set to 0.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-19	Pre-excitation current	0xD013	1% to 200%	100%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the pre-excitation current for the asynchronous motor in the vector control mode.  Additional information: 1. The current percentage is based on the rated motor current. 2. This parameter is valid when d0-17 is set to 1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-20	Demagnetization time	0xD014		0.50s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter is applicable to an asynchronous motor and defines the minimum delay before restart after shutdown. This delay is to wait for the asynchronous motor to demagnetize. If the delay is too short, it may lead to abnormalities such as flying start failure.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-23	Start frequency	0xD017	0.00 Hz to 10.00 Hz	0.00Hz	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the start frequency.  Additional information: The start frequency is output once the system is started. After the start frequency remains unchanged for a specified period, the drive accelerates according to RFG acceleration settings.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-24	Start frequency holding time	0xD018	0.0s to 1000.0s	0.0s	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description: This parameter sets the start frequency holding time.							



	Additional information: When d0-24 is set to 0, the start frequency holding function is invalid.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Start DC braking time	0xD019	0.0s to 100.0s	0.0s	Unsigned 16 bit	Shutdown change	Standard	Nothing
d0-25	<p>Description :</p> <p>This parameter sets the start DC braking time.</p> <p>Additional information:</p> <p>This parameter is valid in the direct startup mode (d0-02 set to 0). Setting this parameter to 0 disables the function. When this parameter is set to a non-zero value, the drive consistently outputs the DC current (d0-26) to generate braking force before starting the motor. When the duration set in d0-25 elapses, normal operation starts.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	DC braking current upon start	0xD01A	0% to 100%	50%	Unsigned 16 bit	Shutdown change	Standard	Nothing
d0-26	<p>Description :</p> <p>This parameter sets the DC braking current upon start. The larger the DC braking current, the stronger the braking force.</p> <p>Additional information:</p> <p>This current percentage is based on the rated motor current.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Start frequency of DC braking for stop	0xD01B	0.0 Hz to 600.0 Hz	0.0Hz	Unsigned 16 bit	Real time changes	Standard	Nothing
d0-27	<p>Description :</p> <p>This parameter sets the start frequency of DC braking for stop.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. During deceleration to stop, when the operation frequency falls below the value of d0-27, the drive blocks the output and sustains this state for the duration specified in d0-28. Then, the drive outputs the DC braking current specified in d0-30 for the duration specified in d0-29 and enters the shutdown state.</li> <li>2. This frequency must not be set too high; otherwise, overcurrent may occur on the drive.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

d0-28	Waiting time of DC braking for stop	0xD01C	0.0s to 100.0s	0.0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the waiting time of DC braking for stop.</p> <p>Additional information:</p> <p>During deceleration to stop, when the operation frequency falls to the value of d0-27, the drive blocks the output and sustains this state for the duration specified in d0-28. Then, the drive outputs the DC injection braking current specified in d0-30 for the duration specified in d0-29, and then enters the shutdown state. The time is to wait for the asynchronous motor to demagnetize. If the time is too short, overcurrent may easily occur.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-29	DC braking time for stop	0xD01D	0.0s to 100.0s	0.0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the DC braking time for stop.</p> <p>Additional information:</p> <p>During deceleration to stop, when the operation frequency falls to the value of d0-27, the drive blocks the output and sustains this state for the duration specified in d0-28. Then, the drive outputs the DC injection braking current specified in d0-30 for the duration specified in d0-29, and then enters the shutdown state. The value 0 indicates that the DC braking for stop function is disabled.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-30	DC braking current for stop	0xD01E	0% to 300%	50%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the DC braking current for stop.</p> <p>Additional information:</p> <p>During deceleration to stop, when the operation frequency falls to the value of d0-27, the drive blocks the output and sustains this state for the duration specified in d0-28. Then, the drive outputs the DC injection braking current specified in d0-30 for the duration specified in d0-29, and then enters the shutdown state. This current percentage is based on the rated motor current. A larger value means stronger braking force.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-31	Current loop Kp	0xD01F	0.1 to 2.0	1.0	Unsigned	Real time	Expansion	Nothing

	adjustment of DC braking				16 bit	changes		
	Description: This parameter sets the current loop Kp adjustment factor during DC braking.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-32	Current loop Ki adjustment of DC braking	0xD020	0.1 to 2.0	1.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description: This parameter sets the current loop Ti adjustment factor during DC braking.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Overexcitation selection (vector)	0xD027	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
d0-39	Value: 0: Inactive 1: Active							
	Description: This parameter sets whether the overexcitation gain in the SVC control mode is active.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Overexciting current (vector)	0xD028	0% to 150%	100%	Unsigned 16 bit	Real time changes	Standard	Nothing
d0-40	Description: This parameter sets the target current after overexcitation is activated in the vector mode.  Additional information: This current percentage is based on the rated motor current.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Overexcitation gain (V/f)	0xD029	0% to 200%	90%	Unsigned 16 bit	Real time changes	Standard	Nothing
d0-41	Description: This parameter sets the overexcitation gain in the V/f control mode.							

	<p>Additional information:</p> <p>This parameter is effective when the asynchronous motor is decelerating and the bus voltage is approaching the overvoltage point in the V/f control mode. When entering the overexcitation state, the drive increases the output voltage and the motor exciting current, therefore intensifying loss and reducing the motor deceleration time. The larger the value of this parameter, the better the overexcitation gain performance.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-43	Flying start speed	0xD02B	1 to 100	20	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the searching frequency step during flying start.</p> <p>Additional information:</p> <p>This parameter is valid when the flying start mode of the asynchronous motor in the V/f control mode is set to 0, 1, or 2.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-46	Flying start current	0xD02E	30% to 200%	80%	Unsigned 16 bit	Shutdown change	专家	Nothing
	<p>Description :</p> <p>This parameter sets the frequency sweeping target current for flying start.</p> <p>Additional information:</p> <p>This parameter is valid when the flying start mode of the asynchronous motor in the V/f control mode is set to 0, 1, or 2.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d0-70	Initial position detection of synchronous motor before start	0xD046	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	<p>Value:</p> <p>0: Detected every time upon operation  1: Not detected  2: Detected upon initial operation after power-on</p>							
	<p>Description :</p> <p>This parameter sets the detection mode of the initial position of the synchronous motor before start.</p> <p>Value description:</p> <p>0: Detected every time upon operation</p>							

	1: Not detected 2: Detected upon initial operation after power-on																												
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																					
d0-71	Initial position detection method of synchronous motor before start	0xD047	Refer to "Value"	2	Unsigned 16 bit	Shutdown change	Expansion	Nothing																					
	Value: 0: Pulse 1: High-frequency injection 2: Adaptive mode 3: Pre-positioning																												
	Description : This parameter sets the initial position detection method of the synchronous motor before start.  Value description: 0: Pulse The magnetic pole position is tuned by pulse before start. 1: High-frequency injection The magnetic pole position is tuned by high-frequency injection before start. 2: Adaptive mode Whether to enable high-frequency injection depends on the motor inductance. 3: Pre-positioning Make the motor stop at a fixed angle before start and then start the motor.																												
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																					
d0-72	Auto-tuning configuration before start	0xD048	Refer to "Value"	0x0	Unsigned 16 bit	Shutdown change	Expansion	Nothing																					
	Value:																												
	<table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Bit 1</td> <td>Quick auto-tuning of stator resistance</td> <td>0: Disable 1: Enable</td> </tr> <tr> <td>Bit 2</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Bit 3</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Bit 4</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Bit 5</td> <td>Reserved</td> <td></td> </tr> </tbody> </table>								Bit	Name	Value	Bit 0	Reserved		Bit 1	Quick auto-tuning of stator resistance	0: Disable 1: Enable	Bit 2	Reserved		Bit 3	Reserved		Bit 4	Reserved		Bit 5	Reserved	
	Bit	Name	Value																										
	Bit 0	Reserved																											
	Bit 1	Quick auto-tuning of stator resistance	0: Disable 1: Enable																										
	Bit 2	Reserved																											
Bit 3	Reserved																												
Bit 4	Reserved																												
Bit 5	Reserved																												

	Bit 6	Reserved											
	Bit 7	Reserved											
	Bit 8	Reserved											
	Bit 9	Reserved											
	Bit 10	Reserved											
	Bit 11	Reserved											
	Bit 12	Reserved											
	Bit 13	Reserved											
	Bit 14	Reserved											
	Bit 15	Reserved											
<p>Description :</p> <p>This parameter sets auto-tuning before start.</p> <p>Value description:</p> <p>Bit 01: Quick auto-tuning of stator resistance</p> <p>0: Disable</p> <p>1: Enable</p> <p>Stator resistance is tuned before start.</p>													
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode					
d0-75	Initial position detection current of synchronous motor	0xD04B	50% to 180%	80%	Unsigned 16 bit	Shutdown change	Expansion	Nothing					
	<p>Description :</p> <p>This parameter specifies the target current for magnetic pole position auto-tuning of the synchronous motor. A lower current setting means lower noise during detection. However, setting the current too low may cause inaccuracies in position detection.</p>												
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode					
d0-85	Low speed handling mode	0xD055	Refer to "Value"	0x0101	Unsigned 16 bit	Shutdown change	Expansion	Effective in real time					
	<p>Value:</p> <table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>Low speed processing for synchronous motor in V/f mode (reserved)</td> <td>0: None 1: Speed open-loop</td> </tr> </tbody> </table>								Bit	Name	Value	Ones	Low speed processing for synchronous motor in V/f mode (reserved)
Bit	Name	Value											
Ones	Low speed processing for synchronous motor in V/f mode (reserved)	0: None 1: Speed open-loop											

Tens	Low speed processing for synchronous motor in SVC mode	0: None 1: Speed open loop 2: Reserved
Hundreds	Low speed processing for synchronous motor in TLC mode (reserved)	0: None 1: Speed open loop 2: Reserved
Thousands	Low speed processing for asynchronous motor in SVC mode (reserved)	0: None 1: Speed open loop

**Description :**

This parameter sets the low speed open loop processing mode.

**Value description:**

Ones: Low speed processing for synchronous motor in V/f mode (reserved)

0: None

1: Speed open-loop

Tens: Low speed processing for synchronous motor in SVC mode

0: None

1: Speed open loop

2: Reserved

Hundreds: Low speed processing for synchronous motor in TLC mode (reserved)

0: None

1: Speed open loop

2: Reserved

Thousands: Low speed processing for asynchronous motor in SVC mode (reserved)

0: None

1: Speed open loop

**Additional information:**

With the function enabled, if the operation frequency is lower than the switchover frequency (d0-87), the drive outputs the current specified by d0-86. If the operation frequency is higher than the result of d0-87 plus and d0-88, the motor switches to the SVC mode or the synchronous motor switches to the V/f mode. The speed open loop function can improve the load capacity at low speed.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Speed open loop current	0xD056	0% to 250%	100%	Unsigned 16 bit	Real time changes	Standard	Nothing
d0-86	<p><b>Description :</b> This parameter sets the speed open loop current.</p> <p><b>Additional information:</b></p>							

	<p>If the speed open loop function is enabled and the operation frequency is lower than the switchover frequency (d0-87), the drive outputs the current specified by d0-86. If the operation frequency is higher than the result of d0-87 plus d0-88 for the time set by d0-89, the drive switches to normal operation. The speed open loop function can improve the load capacity at low speed.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Speed open loop switchover frequency	0xD057	0.0% to 100.0%	10.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
d0-87	<p>Description: This parameter sets the speed open loop switchover frequency.</p> <p>Additional information: If the speed open loop function is enabled and the operation frequency is lower than the switchover frequency (d0-87), the drive outputs the current specified by d0-86. If the operation frequency is higher than the result of d0-87 plus d0-88 for the time set by d0-89, the drive switches to normal operation. The speed open loop function can improve the load capacity at low speed.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Speed open loop switchover hysteresis	0xD058	0.0% to 100.0%	2.5%	Unsigned 16 bit	Real time changes	Standard	Nothing
d0-88	<p>Description: This parameter sets the speed open loop switchover hysteresis.</p> <p>Additional information: If the speed open loop function is enabled and the operation frequency is lower than the switchover frequency (d0-87), the drive outputs the current specified by d0-86. If the operation frequency is higher than the result of d0-87 plus d0-88 for the time set by d0-89, the drive switches to normal operation. The speed open loop function can improve the load capacity at low speed.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Speed open loop waiting time in SVC	0xD059	0.00s to 5.00s	0.50s	Unsigned 16 bit	Real time changes	Standard	Nothing
d0-89	<p>Description: This parameter sets the speed open loop waiting time in the SVC mode.</p> <p>Additional information: If the speed open loop function is enabled and the operation frequency is lower than the switchover frequency (d0-87), the drive outputs the current specified by d0-86. If the operation frequency is higher than the result of d0-87 plus d0-88</p>							



	for the time set by d0-89, the drive switches to normal operation. The speed open loop function can improve the load capacity at low speed.
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## d1: Motor Limit and Protection

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
d1-00	Maximum motor current	0xD100	0.0% to 1000.0%	1000.0%	Unsigned 16 bit	Real time changes	Standard	Nothing								
	<p>Description:</p> <p>This parameter sets the maximum motor current.</p> <p>Additional information:</p> <p>This current percentage is based on the rated motor current.</p>															
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
d1-01	Positive speed	0xD101	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing								
	<p>Value:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">0: Disable</td> <td style="width: 50%;">5: DI3</td> </tr> <tr> <td>1: Enable</td> <td>6: DI4</td> </tr> <tr> <td>3: DI1</td> <td>7: DI5 (MD600A)</td> </tr> <tr> <td>4: DI2</td> <td>Others: B connector</td> </tr> </table>								0: Disable	5: DI3	1: Enable	6: DI4	3: DI1	7: DI5 (MD600A)	4: DI2	Others: B connector
	0: Disable	5: DI3														
1: Enable	6: DI4															
3: DI1	7: DI5 (MD600A)															
4: DI2	Others: B connector															
<p>Description:</p> <p>This parameter specifies whether forward operation is allowed for the drive.</p> <p>Value description:</p> <p>0: Disable Forward operation is not allowed.</p> <p>1: Enable Forward operation is allowed.</p> <p>3 to 7: DI1 to DI5 Whether forward operation is allowed depends on the terminal state of the DI.</p> <p>Others: B connector Whether forward operation is allowed depends on the state of the B connector.</p> <p>Additional information:</p> <p>After the DI is assigned with function 78 (Forward running allowed), the value of d1-01 is automatically switched to the</p>																

	value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.															
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
d1-02	Negative speed	0xD102	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing								
	<p>Value:</p> <table border="0"> <tr> <td>0: Disable</td> <td>5: DI3</td> </tr> <tr> <td>1: Enable</td> <td>6: DI4</td> </tr> <tr> <td>3: DI1</td> <td>7: DI5 (MD600A)</td> </tr> <tr> <td>4: DI2</td> <td>Others: B connector</td> </tr> </table>								0: Disable	5: DI3	1: Enable	6: DI4	3: DI1	7: DI5 (MD600A)	4: DI2	Others: B connector
	0: Disable	5: DI3														
1: Enable	6: DI4															
3: DI1	7: DI5 (MD600A)															
4: DI2	Others: B connector															
<p>Description:</p> <p>This parameter specifies whether reverse operation is allowed for the drive.</p> <p>Value description:</p> <p>0: Disable Reverse operation is not allowed.</p> <p>1: Enable Reverse operation is allowed.</p> <p>3 to 7: DI1 to DI5 Whether reverse operation is allowed depends on the terminal state of the DI.</p> <p>Others: B connector Whether reverse operation is allowed depends on the state of the B connector.</p> <p>Additional information:</p> <p>After the DI is assigned with function 79 (Reverse running allowed), the value of d1-02 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
d1-03	Digital setting of forward frequency upper limit 1	0xD103	d1-07 to 800.0%	800.0%	Unsigned 16 bit	Shutdown change	Standard	Nothing								
	<p>Description:</p> <p>This parameter limits the maximum operation frequency in the forward direction. It is a per-unit value based on the rated motor frequency, that is, 100% indicates the rated motor frequency.</p> <p>Additional information:</p>															

	The effective frequency upper limit in the forward direction is the smaller value between d1-03 and d1-05.																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
d1-04	Digital setting of reverse frequency upper limit 1	0xD104	-800.0% to d1-08	-800.0%	Signed 16 bits	Shutdown change	Standard	Nothing									
	<p>Description:</p> <p>This parameter limits the maximum operation frequency in the reverse direction. It is a per-unit value based on the rated motor frequency, that is, 100% indicates the rated motor frequency.</p> <p>Additional information:</p> <p>The effective frequency upper limit in the reverse direction is the smaller value between d1-04 and d1-06.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
d1-05	Source selection of forward frequency upper limit 2	0xD105	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value:</p> <table border="0"> <tr> <td>0: 800%</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: 800%	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
	0: 800%	6: Multi-reference	9: Communication														
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
<p>Description:</p> <p>This parameter is used to select the source to set the frequency upper limit in the forward direction. It is a per-unit value based on the rated motor frequency, that is, 100% indicates the rated motor frequency.</p> <p>Value description:</p> <p>0: 800% Set the forward frequency upper limit to 800%.</p> <p>2: AI1 The forward frequency upper limit is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.</p> <p>5: HDI pulse The forward frequency upper limit is set through the pulse frequency of the DI4 and calculated based on the curve of the relationship between the pulse frequency and the set frequency.</p> <p>6: Multi-reference When multi-reference is used as the forward frequency upper limit source, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 forward frequency upper limits.</p> <p>7: Simple PLC</p>																	

<p>Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. Each forward frequency upper limit is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each frequency reference and supports up to 16 references.</p> <p>8: PID The forward frequency upper limit is set through PID.</p> <p>9: Communication The forward frequency upper limit is set through communication. You can set the forward frequency upper limit through remote communication.</p> <p>10: MD-BP-M potentiometer The forward frequency upper limit is set through the MD-BP-M potentiometer.</p> <p>Others: F connector The forward frequency upper limit is set through the F connector.</p> <p>Additional information: The effective frequency upper limit in the forward direction is the smaller value between d1-03 and d1-05.</p>																				
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode												
d1-06	Source selection of reverse frequency upper limit 2	0xD106	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing												
	<p>Value:</p> <table border="0"> <tr> <td>0: -800%</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>1: Opposite to forward frequency upper limit 2</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>2: AI1</td> <td>8: PID</td> <td>Others: F connector</td> </tr> <tr> <td>5: Pulse reference</td> <td></td> <td></td> </tr> </table>								0: -800%	6: Multi-reference	9: Communication	1: Opposite to forward frequency upper limit 2	7: Simple PLC	10: MD-BP-M potentiometer	2: AI1	8: PID	Others: F connector	5: Pulse reference		
	0: -800%	6: Multi-reference	9: Communication																	
1: Opposite to forward frequency upper limit 2	7: Simple PLC	10: MD-BP-M potentiometer																		
2: AI1	8: PID	Others: F connector																		
5: Pulse reference																				
<p>Description:</p> <p>This parameter limits the maximum operation frequency in the reverse direction. It is a per-unit value based on the rated motor frequency, that is, 100% indicates the rated motor frequency.</p> <p>Value description:</p> <p>0: -800% Set the reverse frequency upper limit to -800%.</p> <p>1: Opposite to forward frequency upper limit 2 Set the reverse frequency upper limit to the value opposite to d1-05.</p> <p>2: AI1 The reverse frequency upper limit is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.</p> <p>5: HDI pulse</p>																				

The reverse frequency upper limit is set through the pulse frequency of the DI4 and calculated based on the curve of the relationship between the pulse frequency and the set frequency.

6: Multi-reference  
When multi-reference is used as the reverse frequency upper limit source, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reverse frequency upper limits.

7: Simple PLC  
Simple PLC is a multi-speed operation command that can control the operation time and acceleration and deceleration time. Each reverse frequency upper limit is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each frequency reference and supports up to 16 references.

8: PID  
The reverse frequency upper limit is set through PID.

9: Communication  
The main frequency is set through communication. You can set the reverse frequency upper limit through remote communication.

10: MD-BP-M potentiometer  
The reverse frequency upper limit is set through the MD-BP-M potentiometer.

Others: F connector  
The reverse frequency upper limit is set through the F connector.

Additional information:  
The effective frequency upper limit in the reverse direction is the smaller value between d1-04 and d1-06.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-07	Digital setting of forward frequency lower limit 1	0xD107	0.0% to d1-03	0.0%	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description: This parameter limits the minimum operation frequency in the forward direction. It is a per-unit value based on the rated motor frequency, that is, 100% indicates the rated motor frequency.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-08	Digital setting of reverse frequency lower limit 1	0xD108	d1-04 to 0.0%	0.0%	Signed 16 bits	Shutdown change	Standard	Nothing
	Description: This parameter limits the minimum operation frequency in the reverse direction. It is a per-unit value based on the rated motor frequency, that is, 100% indicates the rated motor frequency.							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode									
d1-09	Digital setting of torque upper limit 1	0xD109	0.0% to 800.0%	180.0%	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Description :</p> <p>This parameter limits the positive maximum output torque. It is a per-unit value based on the rated motor torque.</p> <p>Additional information:</p> <p>The effective forward torque limit is the smaller value between d1-09 and d1-11.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
d1-10	Digital setting of torque lower limit 1	0xD10A	-800.0% to 0.0%	-180.0%	Signed 16 bits	Real time changes	Standard	Nothing									
	<p>Description :</p> <p>This parameter limits the negative maximum output torque. It is a per-unit value based on the rated motor torque.</p> <p>Additional information:</p> <p>The effective reverse torque limit is the smaller value between d1-10 and d1-12.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
d1-11	Source selection of torque upper limit 2	0xD10B	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value:</p> <table style="width:100%; border:none;"> <tr> <td style="width:33%;">0: 800%</td> <td style="width:33%;">6: Multi-reference</td> <td style="width:33%;">9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: 800%	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
	0: 800%	6: Multi-reference	9: Communication														
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
<p>Description :</p> <p>This parameter sets the forward torque limit source. It is the per unit value based on the rated motor torque.</p> <p>Value description:</p> <p>0: 800% Set the forward torque limit to 800%.</p> <p>2: AI1 The forward torque limit is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.</p> <p>5: HDI pulse The forward torque limit is set through the pulse frequency of the DI4. The corresponding per unit value is calculated</p>																	

based on the curve of the relationship between the pulse frequency and the set frequency.

6: Multi-reference  
When multi-reference is used as the forward torque limit source, combinations of different DI states correspond to different forward torque limits. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reverse torque limits.

7: Simple PLC  
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. The forward torque limit is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each frequency reference and supports up to 16 references.

8: PID  
The forward torque limit is set through PID.

9: Communication  
The forward torque limit is set through communication. You can set the forward torque limit through remote communication.

10: MD-BP-M potentiometer  
The forward torque limit is set through the MD-BP-M potentiometer.

Others: F connector  
The forward torque limit is set through the F connector.

Additional information:  
The effective forward torque limit is the smaller value between d1-09 and d1-11.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode															
	Source selection of torque lower limit 2	0xD10C	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing															
d1-12	<p>Value:</p> <table border="0"> <tr> <td>0: -800%</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>1: Opposite to torque upper limit 2</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>2</td> <td>8: PID</td> <td>Others: F connector</td> </tr> <tr> <td>2: AI1</td> <td></td> <td></td> </tr> <tr> <td>5: HDI pulse</td> <td></td> <td></td> </tr> </table>								0: -800%	6: Multi-reference	9: Communication	1: Opposite to torque upper limit 2	7: Simple PLC	10: MD-BP-M potentiometer	2	8: PID	Others: F connector	2: AI1			5: HDI pulse		
0: -800%	6: Multi-reference	9: Communication																					
1: Opposite to torque upper limit 2	7: Simple PLC	10: MD-BP-M potentiometer																					
2	8: PID	Others: F connector																					
2: AI1																							
5: HDI pulse																							
	<p>Description:</p> <p>This parameter sets the reverse torque limit source. It is the per unit value based on the rated motor torque.</p> <p>0: -800% Set the reverse torque limit to -800%.</p> <p>1: Opposite to torque upper limit 2 Set the reverse torque limit to the opposite value of torque upper limit 2 (d1-11).</p> <p>2: AI1 The reverse torque limit is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.</p>																						

5: HDI pulse  
The reverse torque limit is set through the pulse frequency of the DI4. The corresponding per unit value is calculated based on the curve of the relationship between the pulse frequency and the set frequency.

6: Multi-reference  
When multi-reference is used as the reverse torque limit, combinations of different DI states correspond to different reverse torque limits. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reverse torque limits.

7: Simple PLC  
Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. The reverse torque limit is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each frequency reference and supports up to 16 references.

8: PID  
The reverse torque limit is set through PID.

9: Communication  
The reverse torque limit is set through communication.

10: MD-BP-M potentiometer  
The reverse torque limit is set the MD-BP-M potentiometer.

Others: F connector  
The reverse frequency upper limit is set through the F connector.

Additional information:  
The effective reverse torque limit is the smaller value between d1-10 and d1-12.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-13	Motoring power limit 1	0xD10D	0.0% to 1000.0%	400.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter limits the output power of the motor in the motoring state. It is the per unit value based on the rated motor power.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-14	Generating power limit 1	0xD10E	0.0% to 1000.0%	400.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter limits the output power of the motor in the generating state. It is the per unit value based on the rated motor power.  Additional information: The effective generating power limit is the smaller value between generating power limit 1 and generating power limit 2.							



Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																																																				
d1-33	Motor protection	0xD121	Refer to "Value"	0x0080	Unsigned 16 bit	Real time changes	Expansion	Nothing																																																				
	Value:																																																											
	<table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>Reserved</td> <td>0: Disable 1: Enable</td> </tr> <tr> <td>Bit 1</td> <td>Current control error detection</td> <td>0: Disable 1: Enable</td> </tr> <tr> <td>Bit 2</td> <td>Motor step loss detection</td> <td>0: Disable 1: Enable</td> </tr> <tr> <td>Bit 3</td> <td>Reserved</td> <td>0: Disable 1: Enable</td> </tr> <tr> <td>Bit 4</td> <td>Synchronous motor instantaneous overcurrent protection</td> <td>0: Disable 1: Enable</td> </tr> <tr> <td>Bit 5</td> <td>Runaway protection</td> <td>0: Disable 1: Enable</td> </tr> <tr> <td>Bit 6</td> <td>Speed direction inversion protection</td> <td>0: Disable 1: Enable</td> </tr> <tr> <td>Bit 7</td> <td>Reserved</td> <td>0: Disable 1: Enable</td> </tr> <tr> <td>Bit 8</td> <td>Motor parameter error check</td> <td>0: Disable 1: Enable</td> </tr> <tr> <td>Bit 9</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Bit 10</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Bit 11</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Bit 12</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Bit 13</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Bit 14</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Bit 15</td> <td>Reserved</td> <td></td> </tr> </tbody> </table>									Bit	Name	Value	Bit 0	Reserved	0: Disable 1: Enable	Bit 1	Current control error detection	0: Disable 1: Enable	Bit 2	Motor step loss detection	0: Disable 1: Enable	Bit 3	Reserved	0: Disable 1: Enable	Bit 4	Synchronous motor instantaneous overcurrent protection	0: Disable 1: Enable	Bit 5	Runaway protection	0: Disable 1: Enable	Bit 6	Speed direction inversion protection	0: Disable 1: Enable	Bit 7	Reserved	0: Disable 1: Enable	Bit 8	Motor parameter error check	0: Disable 1: Enable	Bit 9	Reserved		Bit 10	Reserved		Bit 11	Reserved		Bit 12	Reserved		Bit 13	Reserved		Bit 14	Reserved		Bit 15	Reserved	
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Description :																																																												
This parameter sets the motor protection function.																																																												
Value description:																																																												
Bit 0: Reserved																																																												
0: Disabled																																																												
1: Enable																																																												

Bit 1: Current control error detection  
 0: Disable  
 1: Enable  
 For details, see descriptions of d1-87 (Current control error detection time).

Bit 2: Motor step loss detection  
 0: Disable  
 1: Enable  
 For details, see descriptions of d1-84 (Step loss fault detection time).

Bit 3: Reserved  
 0: Disable  
 1: Enable

Bit 4: Synchronous motor instantaneous overcurrent protection  
 0: Disable  
 1: Enable  
 For details, see descriptions of d1-50 (Synchronous motor instantaneous overcurrent threshold).

Bit 5: Runaway protection  
 0: Disable  
 1: Enable  
 For details, see descriptions of d1-91 (Asynchronous motor runaway protection time in SVC).

Bit 6: Speed direction inversion protection  
 0: Disable  
 1: Enable  
 For details, see descriptions of d1-41 (Speed reverse detection time).

Bit 7: Reserved  
 0: Disable  
 1: Enable

Bit 8: Motor parameter error check  
 0: Disable  
 1: Enable  
 Check whether the motor nameplate parameters and the auto-tuning parameters are abnormal. If abnormalities occur, an alarm will be reported after operation. If no fault is detected, disable the function.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-35	Overspeed protection	0xD123	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Disable 1: Enable							
	Description: This parameter sets whether to enable overspeed protection.							

	<p>Value description:  0: Disable  1: Enable  When the motor operation speed has been higher than the overspeed protection threshold (d1-37) for the time set by d1-36, E043.1 (Motor overspeed) is reported.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-36	Overspeed protection time	0xD124	0.0s to 60.0s	0.5s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:  This parameter sets the overspeed protection time. When the motor operation speed has been higher than the overspeed protection threshold (d1-37) for the time set by d1-36, E043.1 (Motor overspeed) is reported.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-37	Overspeed protection threshold	0xD125	0.0% to 50.0%	20.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:  This parameter sets the overspeed protection threshold. When the motor operation speed has been higher than the overspeed protection threshold (d1-37) for the time set by d1-36, E043.1 (Motor overspeed) is reported.</p> <p>Additional information:  This percentage is based on the rated motor speed.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-38	Excessive speed deviation protection	0xD126	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:  0: Disable  1: Enable</p>							
	<p>Description:  This parameter sets whether to enable excessive speed deviation protection.</p> <p>Value description:  0: Disable  1: Enable  When the motor operation speed deviates from the speed reference by a value greater than the overspeed deviation</p>							

	threshold (d1-40) for the overspeed deviation protection time (d1-39), E042.1 (Excessive speed deviation) is reported.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-39	Excessive speed deviation protection time	0xD127	0.0s to 60.0s	1.0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the excessive speed deviation protection time. When the motor operation speed deviates from the speed reference by a value greater than the overspeed deviation threshold (d1-40) for the overspeed deviation protection time (d1-39), E042.1 (Excessive speed deviation) is reported.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-40	Excessive speed deviation threshold	0xD128	0.0% to 50.0%	20.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the excessive speed deviation threshold. When the motor operation speed deviates from the speed reference by a value greater than the overspeed deviation threshold (d1-40) for the overspeed deviation protection time (d1-39), E042.1 (Excessive speed deviation) is reported.</p> <p>Additional information:</p> <p>This percentage is based on the rated motor speed.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-45	Motor overload protection	0xD12D	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value:</p> <p>0: Disable 1: Enable</p> <p>Description:</p> <p>This parameter sets whether to enable motor overload protection. When the cumulative motor overload reaches 100%, E011.1 (Motor overload) is reported.</p> <p>Value description:</p> <p>0: Disable 1: Enable</p>							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
	Motor overload protection coefficient	0xD12E	0.20 to 10.00	1.00	Unsigned 16 bit	Real time changes	Standard	Nothing
d1-46	<p>Description :</p> <p>This parameter sets the motor overload protection coefficient.</p> <p>Additional information:</p> <p>1. This parameter adjusts the rate at which the cumulative motor overload is accumulated. Increasing the value of this parameter under given current prolongs the time for reporting motor overload.</p> <p>2. You can check the motor overload through LC-33.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Motor overload alarm coefficient	0xD12F	50% to 100%	100%	Unsigned 16 bit	Real time changes	Standard	Nothing
d1-47	<p>Description :</p> <p>This parameter sets the motor pre-overload protection threshold.</p> <p>Additional information:</p> <p>When d1-45 (Motor overload protection) is set to 1 (Enable), the motor overload protection coefficient (d1-46) is set to a value less than 100%, and the motor cumulative overload the exceeds the value of d1-47, A111.1 (Pre-overload alarm) is reported.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Overvoltage suppression	0xD136	Refer to "Value"	1	Unsigned 16 bit	Shutdown change	Standard	Nothing
d1-54	<p>Value:</p> <p>0: Disable</p> <p>1: Enable</p> <p>Description :</p> <p>This parameter sets whether to enable overvoltage suppression.</p> <p>When a braking resistor, braking unit, or energy regenerative unit is used, set this parameter to 0. Otherwise, the deceleration time may be prolonged.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-55	Overvoltage suppression action	0xD137	330.0 V to 800.0 V	770.0V	Unsigned 16 bit	Real time changes	Standard	Nothing

	voltage							
	Description: This parameter sets the bus voltage for effective overvoltage suppression. The effective value is displayed in d1-56.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-56	Actually effective action voltage of overvoltage suppression	0xD138	330.0 V to 800.0 V	770.0V	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter displays the actually effective action voltage of overvoltage suppression. When the bus voltage exceeds the value of this parameter, overvoltage suppression applies.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-57	Overvoltage suppression Kp adjustment	0xD139	0% to 1000%	100%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description: This parameter defines the proportional coefficient of the overvoltage suppression control loop.  Additional information: The actual Kp gain is the result of Kp multiplied by overvoltage suppression Kp adjustment coefficient calculated by the loop. Increasing the value of this parameter improves the bus voltage control effect, but may result in output frequency fluctuations. When the output frequency fluctuates greatly in the overvoltage suppression status, reduce the value of this parameter appropriately.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-58	Overvoltage suppression Ki adjustment	0xD13A	0% to 1000%	100%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description: This parameter sets the integral coefficient of the overvoltage suppression control loop.  Additional information: Increasing the value of this parameter improves the bus voltage control effect, but may result in output frequency fluctuations. When the output frequency fluctuates greatly in the overvoltage suppression status, reduce the value of this							

	parameter appropriately.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-63	Undervoltage action selection	0xD13F	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: No action 1: Undervoltage suppression; normal operation continues after voltage recovery							
	Description: This parameter sets the action when the bus voltage reaches the undervoltage suppression point due to a power failure.  Value description: 0: No action 1: Undervoltage suppression; normal operation continues after voltage recovery The bus voltage is maintained at the undervoltage suppression point through motor deceleration for energy feedback. Therefore, the motor keeps running for a short period. If the bus voltage is restored during this period, the motor restores to the target speed based on the acceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-64	Undervoltage suppression action voltage	0xD140	190.0 V to 500.0 V	430.0V	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the undervoltage suppression action voltage.  Additional information: When the bus voltage is lower than the undervoltage suppression point due to a power failure, the AC drive acts according to the action set in d1-63.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-65	Actually effective action voltage of undervoltage suppression	0xD141	190.0 V to 500.0 V	430.0V	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter displays the actually effective action voltage of undervoltage suppression.							

	<p>Additional information: The actual operating voltage is internally limited when the undervoltage suppression voltage that does not match the model is set.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-66	Undervoltage suppression Kp adjustment	0xD142	0% to 1000%	100%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description: This parameter sets the proportion coefficient of the undervoltage suppression control loop.</p> <p>Additional information: Setting this parameter to a small value cannot maintain the bus voltage upon a power failure. When the motor speed is not zero, an undervoltage or overcurrent fault is reported. Increasing the value of this parameter improves the bus voltage control effect, but may result in output frequency fluctuations. When the output frequency fluctuates greatly in the undervoltage suppression status, reduce the value of this parameter appropriately.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-67	Undervoltage suppression Ki adjustment	0xD143	0% to 1000%	100%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description: This parameter sets the integral coefficient of the undervoltage suppression control loop.</p> <p>Additional information: Setting this parameter to a small value cannot maintain the bus voltage upon a power failure. When the motor speed is not zero, an undervoltage or overcurrent fault is reported. Increasing the value of this parameter improves the bus voltage control effect, but may result in output frequency fluctuations. When the output frequency fluctuates greatly in the undervoltage suppression status, reduce the value of this parameter appropriately.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-78	Three-phase loss protection	0xD14E	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value: 0: Disable</p>							



	1: Enable							
	<p>Description:</p> <p>This parameter sets the current threshold of output three-phase loss. When the current three-phase loss detection (bit 7 of d1-33) is enabled, the detection condition (d1-84) is met for the time set by d1-83 (Detection time for output three-phase loss), E030.1 (Output three-phase loss) is reported.</p> <p>Additional information:</p> <p>This parameter is available for synchronous motors. This percentage is based on the rated motor current.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-81	Detection time for output three-phase loss	0xD151	0.0s to 5.0s	1.0s	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the detection time for output three-phase loss.</p> <p>Additional information:</p> <p>When the current three-phase loss detection (bit 7 of d1-33) is enabled, the detection condition (d1-84) is met for the time set by d1-83 (Detection time for output three-phase loss), E030.1 (Output three-phase loss) is reported.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d1-82	Current threshold of three-phase output phase loss	0xD152		10.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter defines the threshold for determining phase loss of three-phase current. It is a per-unit value based on the rated motor current. See d1-81 (three-phase output phase loss detection time) for the method of use.</p>							

## d2 Motor V/f Control

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-00	V/f curve type	0xD200	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Value:</p> <p>0: Linear V/f</p> <p>1: Multi-point V/f</p>							

	10: V/f separation							
	<p>Description :</p> <p>This parameter set the V/f curve type.</p> <p>Value description:</p> <p>0: Linear V/f</p> <p>The output voltage and the output frequency maintain a constant proportional relationship.</p> <p>1: Multi-point V/f</p> <p>The relationship between the output voltage and output frequency conform to the set multi-point curve set through d2-02 to d2-04 and d2-08 to d2-10.</p> <p>2: V/f separation</p> <p>The output frequency and output voltage of the drive are independent of each other. Specific functions can be set through d2-47 to d2-53. The output frequency is determined by the frequency source, and the output voltage is determined by the V/f separation voltage source.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-01	Multi-point curve source	0xD201	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Three-point curve</p> <p>Description :</p> <p>This parameter sets the multi-point curve source.</p> <p>Value description:</p> <p>0: Three-point curve</p> <p>The V/f curve is set by d2-02 to d2-04 and d2-08 to d2-10.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-02	Frequency 1 on multi-point V/f curve	0xD202	0.0 Hz to d2-03	0.0Hz	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter defines frequency 1 on the multi-point V/f curve.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-03	Frequency 2 on multi-point V/f curve	0xD203	d2-02 to d2-04	0.0Hz	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter defines frequency 2 on the multi-point V/f curve.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-04	Frequency 3 on multi-point V/f curve	0xD204	d2-03 to 600.0 Hz	0.0Hz	Unsigned 16 bit	Real time changes	Standard	Nothing

	Description : This parameter defines frequency 3 on the multi-point V/f curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-08	Voltage 1 on multi-point V/f curve	0xD208	0.0 V to 1000.0 V	0.0V	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter defines voltage 1 on the multi-point V/f curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-09	Voltage 2 on multi-point V/f curve	0xD209	0.0 V to 1000.0 V	0.0V	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter defines voltage 2 on the multi-point V/f curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-10	Voltage 3 on multi-point V/f curve	0xD20A	0.0 V to 1000.0 V	0.0V	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter defines voltage 3 on the multi-point V/f curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-14	Manual torque boost value	0xD20E	0.0% to 100.0%	3.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the manual torque boost value.  Additional information: This parameter defines the voltage boost amount at zero speed in the V/f mode. Increasing the value of this parameter can improve the load capacity at low speed, but too large value may easily result in overcurrent, overload, or other problems. After the output frequency is increased to the cut-off frequency of torque boost (d2-15), the boost voltage is linearly reduced to 0.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-15	Cut-off frequency of torque boost	0xD20F	0.0% to 400.0%	100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the cut-off frequency of torque boost. When the operation frequency exceeds the cut-off frequency, manual torque boost is disabled.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

d2-16	Torque boost mode	0xD210	Refer to "Value"	2	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Manual boost 1: Automatic boost 2: Manual boost +automatic boost							
	Description: This parameter sets the torque boost mode.  Value description: 0: Manual boost The boost value at zero speed is the value of d2-14. After the speed increases, the manual boost value decreases linearly and decreases to 0 when the cut-off frequency is reached. 1: Automatic boost The boost voltage is calculated automatically based on motor parameters. In this mode, it is recommended to perform parameter auto-tuning to achieve the best result. 2: Manual boost + Automatic boost The final effective boost value is the sum of the manual boost value plus the automatic boost value.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-22	V/f oscillation suppression	0xD216	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable 1: Enable							
	Description: This parameter sets whether to enable V/f oscillation suppression.  Value description: 0: Disable V/f oscillation suppression is disabled. 1: Enable During motor operation, mechanical resonance causes system oscillation. In this case, you can set d2-22 to 1 to enable oscillation suppression for better control effect.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-23	V/f oscillation suppression gain	0xD217	0% to 400%	100%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description: This parameter sets the V/f oscillation suppression gain.  Additional information:							

	This parameter adjusts the intensity of V/f oscillation suppression. A larger value of this parameter means greater compensation, but setting it too large may result in overcompensation that can cause oscillation.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-26	Overcurrent suppression	0xD21A	Refer to "Value"	1	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Disable 1: Enable							
	Description: This parameter sets whether to enable overcurrent suppression.  Value description: 0: Disable 1: Enable  Additional information: In the V/f mode, when the drive output current reaches the threshold set by d2-27, the drive slows down the acceleration or reduces the operation frequency to prevent continuous current rising, thus suppressing the occurrence of overcurrent.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-27	Overcurrent suppression threshold	0xD21B	80% to 300%	200%	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description: This parameter specifies the current threshold that triggers overcurrent suppression.  Additional information: This percentage is based on the rated motor current. The actually effective overcurrent suppression threshold is determined by this parameter or A3-05 (AC drive maximum current), whichever is smaller.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-28	Overcurrent suppression Kp	0xD21C	1% to 500%	100%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description: This parameter defines the frequency adjustment Kp when overcurrent suppression is active.  Additional information: A larger value of this parameter means faster frequency adjustment and better acceleration following effect, but a greater possibility of oscillation.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-29	Overcurrent suppression Ti	0xD21D	10% to 1000%	100%	Unsigned 16 bit	Shutdown change	Expansion	Nothing

	<p>Description :</p> <p>This parameter defines the frequency adjustment Ki when overcurrent suppression is active.</p> <p>Additional information:</p> <p>A larger value of this parameter means faster frequency adjustment and better acceleration following effect, but a greater possibility of oscillation.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-35	V/f energy-saving control	0xD223	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value:</p> <p>0: Disable</p> <p>1: Enable</p>							
	<p>Description :</p> <p>This parameter sets whether to enable V/f energy-saving control.</p> <p>Value description:</p> <p>0: Disable</p> <p>1: Enable</p> <p>Output current and energy consumption of the asynchronous motor without load or with light load can be reduced.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-36	Cut-off frequency of V/f energy-saving control	0xD224	20% to 100%	30%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the cut-off frequency of V/f energy-saving control.</p> <p>Additional information:</p> <p>Energy-saving control can be enabled only when the operation frequency is greater than the cut-off frequency.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-41	Slip compensation mode	0xD229	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Value:</p> <p>0: Disable</p> <p>1: Enable</p>							
	<p>Description :</p> <p>This parameter sets whether to enable slip compensation mode.</p> <p>Value description:</p> <p>0: Disable</p> <p>Slip compensation is disabled.</p>							

	<p>1: Enable Slip compensation is enabled.</p> <p>Additional information: Due to slip inherent to asynchronous motors, speed errors exist during with-load operation in the V/f mode. After slip compensation is enabled, the frequency can be compensated based on the load size to improve the speed accuracy.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
d2-42	Slip compensation gain	0xD22A	0.0% to 200.0%	100.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing									
	<p>Description : This parameter sets the frequency for slip compensation adjustment.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
d2-43	Slip compensation filter time	0xD22B	0.1s to 10.0s	0.5s	Unsigned 16 bit	Shutdown change	Expansion	Nothing									
	<p>Description : This parameter sets the slip compensation filter time.</p> <p>Additional information: Longer filter time means a slower and smoother dynamic process of slip compensation.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
d2-47	Voltage upper limit for V/f separation	0xD22F	50.0% to 200.0%	100.0%	Unsigned 16 bit	Shutdown change	Standard	Nothing									
	<p>Description : This parameter sets the voltage upper limit for V/f separation.</p> <p>Additional information: This percentage is based on the rated motor voltage.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
d2-48	Voltage source for V/f separation	0xD230	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">0: d2-49</td> <td style="width: 33%;">6: Multi-reference</td> <td style="width: 33%;">9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: d2-49	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
	0: d2-49	6: Multi-reference	9: Communication														
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
<p>Description : This parameter defines the source of the target voltage in V/f separation mode.</p> <p>Value description:</p>																	

0: d2-49  
The V/f separation voltage is set by d2-49 (Voltage digital setting for V/f separation).

2: AI1  
The V/f separation voltage is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.

5: HDI pulse (DI4)  
The V/f separation voltage is set by using the pulse frequency input through the DI4. The frequency is calculated according to the curve that maps pulse frequencies to operation frequencies.

6: Multi-reference  
When multi-reference is used as the source of the V/f separation voltage, different combinations of DI terminal states correspond to different reference values. For details, see the multi-reference module.

7: Simple PLC  
The V/f separation voltage is set by simple PLC. For details, see the function description of simple PLC.

8: PID  
The V/f separation voltage is set by PID. For details, see the PID function description.

9: Communication  
The V/f separation voltage is set through communication. When selecting the source, you can set the V/f separation voltage through remote communication. It is applicable to scenarios requiring remote control or centralized control of multiple devices.

10: MD-BP-M potentiometer  
The V/f separation voltage is set by the MD-BP-M potentiometer.

Others: F connector  
A parameter code is set for a floating-point connector, and the value of the connector is read as the V/f separation voltage in speed control. This mode is used for expansion besides the common sources.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-49	Voltage digital setting for V/f separation	0xD231	0 V to C4-03	0V	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the voltage digital setting for V/f separation.  Additional information: This parameter is valid when the d2-48 (V/f separation voltage source) is set to 0.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-50	Voltage acceleration time for V/f separation	0xD232	0.0s to 1000.0s	0.0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter defines the time required for the output voltage to rise from 0 to the rated motor voltage.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-51	Voltage deceleration	0xD233	0.0s to	0.0s	Unsigned	Real time	Standard	Nothing



	time for V/f separation		1000.0s		16 bit	changes		
	Description : This parameter defines the time required for the output voltage to fall from the rated motor voltage to 0.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-52	Frequency RFG time for V/f separation	0xD234	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: RFG time forced to be 0 1: Preset RFG time							
	Description : This parameter sets the frequency RFG time for V/f separation.  Value description: 0: RFG time forced to be 0 The acceleration/deceleration time of frequency reference is set to 0 forcibly. 1: Preset RFG time Acceleration/Deceleration is performed based on the set time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d2-53	Stop mode for V/f separation	0xD235	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Frequency and voltage decline to 0 independently 1: Frequency declines to 0 after voltage declines to 0 2: Coast to stop							
	Description : This parameter sets the stop mode for V/f separation.  Value description 0: Frequency and voltage decline to 0 independently The frequency/voltage declines to 0 independently based on respective deceleration time. 1: Frequency declines to 0 after voltage declines to 0 The voltage declines to 0 based on the deceleration time. Then the frequency declines to 0 based on the deceleration time. 2: Coast to stop The voltage/frequency coasts to stop, regardless of the deceleration curve.							

### d3: Motor Speed Control

Param.	Name	Communication	Range	Default	Data type	Change	User	Effective
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		address				mode	authority	mode
d3-02	Speed loop Kp in SVC mode	0xD302	0.00 to 100.00	5.00	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the speed loop proportional gain in the SVC mode.  Additional information: A larger value indicates a higher value of the speed loop gain and better speed following performance, but a greater possibility of oscillation.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-06	Zero speed switchover frequency	0xD306	0.0% to d3-09	1.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the zero speed switchover frequency of the speed loop.  Additional information: When the speed reference is lower than this frequency, the effective speed loop parameters are adjusted with the corresponding correction factors on the basis of the original speed loop parameters.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-07	Zero speed Kp correction factor	0xD307		100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : When the speed reference is less than the zero speed switchover frequency, the effective speed loop Kp factor is adjusted with this parameter.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-08	Zero speed Ti correction factor	0xD308		100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : When the speed reference is less than the zero speed switchover frequency, the effective speed loop Ti factor is adjusted with this parameter.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-09	Low speed switchover frequency	0xD309		10.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : When the actual speed is less than the low speed switchover frequency, the effective speed loop parameters are adjusted with the corresponding correction factors on the basis of the original speed loop parameters.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

d3-10	Low speed Kp correction factor	0xD30A		100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>When the actual speed is less than the low speed switchover frequency, the effective speed loop parameters are adjusted with the low speed correction factors. When the actual speed is greater than the high speed switchover frequency, the effective speed loop parameters are adjusted with the high speed correction factors. When the actual speed is between the low speed and the high speed, the speed loop correction factors vary linearly.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-11	Low speed Ti correction factor	0xD30B	0.0% to 1000.0%	100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the integral correction factor of the speed loop at low speed.</p> <p>Additional information:</p> <p>When the actual speed is less than the low speed switchover frequency, the effective speed loop parameters are adjusted with the low speed correction factors. When the actual speed is greater than the high speed switchover frequency, the effective speed loop parameters are adjusted with the high speed correction factors. When the actual speed is between the low speed and the high speed, the speed loop correction factors vary linearly.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-12	High speed switchover frequency	0xD30C	d3-09 to 400.0%	20.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the high speed switchover frequency of the speed loop.</p> <p>Additional information:</p> <p>When the actual speed is less than the low speed switchover frequency, the effective speed loop parameters are adjusted with the low speed correction factors. When the actual speed is greater than the high speed switchover frequency, the effective speed loop parameters are adjusted with the high speed correction factors. When the actual speed is between the low speed and the high speed, the speed loop correction factors vary linearly.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-13	High speed Kp correction factor	0xD30D	0.0% to 1000.0%	100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the proportional correction factor of the speed loop at high speed.</p> <p>Additional information:</p> <p>When the actual speed is less than the low speed switchover frequency, the effective speed loop parameters are adjusted with the low speed correction factors. When the actual speed is greater than the high speed switchover frequency, the effective speed loop parameters are adjusted with the high speed correction factors. When the actual speed is between</p>							

	the low speed and the high speed, the speed loop correction factors vary linearly.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-14	High speed Ti correction factor	0xD30E	0.0% to 1000.0%	100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the integral correction factor of the speed loop at high speed.</p> <p>Additional information:</p> <p>When the actual speed is less than the low speed switchover frequency, the effective speed loop parameters are adjusted with the low speed correction factors. When the actual speed is greater than the high speed switchover frequency, the effective speed loop parameters are adjusted with the high speed correction factors. When the actual speed is between the low speed and the high speed, the speed loop correction factors vary linearly.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-21	Adaptive switchover lower limit of speed loop	0xD315	0.0% to 1000.0%	40.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the adaptive switchover lower limit of the speed loop.</p> <p>Additional information:</p> <p>When the speed loop Kp self-adaption source is valid and the value from the selected source is less than the value of d3-21 (Adaptive switchover lower limit of speed loop), the speed loop Kp is corrected with d3-24. When the value from the selected source is greater than the value of d3-22 (Adaptive switchover upper limit of speed loop), the speed loop Kp is corrected with d3-23. When the value from the selected source is in the range from d3-21 to d3-22, the Kp correction factor varies linearly in the range from d3-23 to d3-24.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-22	Adaptive switchover upper limit of speed loop	0xD316	0.0% to 1000.0%	100.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the adaptive switchover upper limit of the speed loop.</p> <p>Additional information:</p> <p>When the speed loop Kp self-adaption source is valid and the value from the selected source is less than the value of d3-21 (Adaptive switchover lower limit of speed loop), the speed loop Kp is corrected with d3-24. When the value from the selected source is greater than the value of d3-22 (Adaptive switchover upper limit of speed loop), the speed loop Kp is corrected with d3-23. When the value from the selected source is in the range from d3-21 to d3-22, the Kp correction factor varies linearly in the range from d3-23 to d3-24.</p>							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
d3-23	Adaptive correction upper limit of speed loop	0xD317	0.0% to 1000.0%	100.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the adaptive correction upper limit of the speed loop.</p> <p>Additional information:</p> <p>When the speed loop Kp self-adaption source is valid and the value from the selected source is less than the value of d3-21 (Adaptive switchover lower limit of speed loop), the speed loop Kp is corrected with d3-23. When the value from the selected source is greater than the value of d3-22 (Adaptive switchover upper limit of speed loop), the speed loop Kp is corrected with d3-24. When the value from the selected source is in the range from d3-21 to d3-22, the Kp correction factor varies linearly in the range from d3-23 to d3-24.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-24	Adaptive correction lower limit of speed loop	0xD318	0.0% to 1000.0%	100.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the adaptive correction lower limit of the speed loop.</p> <p>Additional information:</p> <p>When the speed loop Kp self-adaption source is valid and the value from the selected source is less than the value of d3-21 (Adaptive switchover lower limit of speed loop), the speed loop Kp is corrected with d3-23. When the value from the selected source is greater than the value of d3-22 (Adaptive switchover upper limit of speed loop), the speed loop Kp is corrected with d3-24. When the value from the selected source is in the range from d3-21 to d3-22, the Kp correction factor varies linearly in the range from d3-23 to d3-24.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-27	Droop	0xD31B	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Disable</p> <p>1: Enable</p>							
	<p>Description :</p> <p>This parameter sets whether to enable the droop function in the speed control mode.</p> <p>Value description:</p> <p>0: Disable</p> <p>1: Enable</p> <p>Additional information:</p>							

	When multiple motors are driving the same load, turning on this function enables load distribution among the motors. However, this will affect the speed accuracy.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-28	Droop source	0xD31C	Refer to "Value"	1	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Output torque 1: Torque reference 2: Speed adjustment output 3: Speed adjustment integral component							
	Description: This parameter specifies the droop source. Droop speed change = Droop source x Droop coefficient x Speed reference  Value description: 0: Output torque Select the actual output torque of the motor as the droop source. 1: Torque reference Select the final torque of the motor as the droop source. 2: Speed adjustment output Select the output of the speed loop as the droop source. 3: Speed adjustment integral component Select the integral item of the speed loop as the droop source.  Additional information: In the V/f control mode, d3-28 must be set to 0.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-29	Droop coefficient	0xD31D	0.0% to 50.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the droop coefficient.  Additional information: Droop speed change = Droop source x Droop coefficient x Speed reference The larger the droop coefficient, the greater the droop performance. However, the speed accuracy will be affected and speed oscillation will occur.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-33	Forcibly change speed loop integral	0xD321	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable							

1: Enable Others: B connector
<p>Description :</p> <p>This parameter determines whether to forcibly change the speed loop integral.</p> <p>Value description:</p> <p>0: Disable 1: Enable</p> <p>When this function is enabled, the speed loop integral is determined by d3-34 (Integral forced value source) and d3-35 (Digital setting of integral forced value).</p> <p>Others: B connector</p> <p>Whether to forcibly change speed loop integral depends on the value of the B connector.</p>

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-34	Integral forced value source	0xD322	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
<p>Value :</p> <p>0: Digital setting                                  6: Multi-reference                                  9: Communication 2: AI1    7: Simple PLC    10: MD-BP-M potentiometer 5: HDI pulse    8: PID    Others: F connector</p> <p>Description :</p> <p>This parameter sets the source of the speed loop integral forced value.</p> <p>Value description:</p> <p>0: Digital setting The integral forced value is set by d3-25.</p> <p>2: AI1 The integral forced value is input by using current or voltage signals at the AI1 and calculated according to the preset AI curve.</p> <p>5: HDI pulse The integral forced value is set through the pulse frequency of the DI4 and calculated based on the curve of the relationship between the pulse frequency and the set frequency.</p> <p>6: Multi-reference When multi-reference is used as the integral forced value source, combinations of different DI states correspond to different frequencies. The four multi-reference terminals can provide 16 state combinations, corresponding to 16 reference values.</p> <p>7: Simple PLC Simple PLC is a multi-reference operation command that can control the operation time and acceleration and deceleration time. The integral forced value is set through a multi-reference parameter. The simple PLC module sets the running time and acceleration/deceleration time for each frequency reference and supports up to 16 references.</p> <p>8: PID The integral forced value is set through PID. PID control is a common method of process control. By performing proportional, integral, and derivative operations on the difference between the feedback signal and the target signal of</p>								

	<p>the controlled variable, and adjusting the output frequency of the AC drive, a closed-loop system is formed to stabilize the controlled variable at the target level.</p> <p>9: Communication The integral forced value is set through communication. This mode applies to remote control or centralized control of multiple equipment.</p> <p>10: MD-BP-M potentiometer The integral forced value is set through MD-BP-M potentiometer.</p> <p>Others: F connector A parameter code is set for a floating-point connector, and the value of the connector is read as the integral forced value. This mode is used for expansion besides the common sources.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-35	Digital setting of integral forced value	0xD323	-800.0% to 800.0%	0.0%	Signed 16 bits	Real time changes	Expansion	Nothing
	<p>Description: This parameter sets the speed loop integral forced value.</p> <p>Additional information: When d3-33 (Forcibly change speed loop integral) is set to 1 (Enable) and d3-34 (Integral forced value source) is set to 0 (Digital setting), the output of the speed loop integral is the value of this parameter.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-38	Acceleration feedforward torque	0xD326	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value: 0: Disable 1: Enable</p> <p>Description: This parameter sets whether to enable acceleration feedforward torque. In the speed mode, enabling feedforward torque can significantly improve the acceleration following effect.</p> <p>Additional information: To ensure the feedforward effect, complete auto-tuning or inertia auto-tuning is required.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-39	Acceleration feedforward torque coefficient	0xD327	0.0% to 6553.0%	100.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description: This parameter sets the feedforward torque.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode



d3-40	Acceleration torque feedforward source	0xD328	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: RFG reference 1: Automatic calculation Others: F connector							
	Description: This parameter sets the acceleration torque feedforward source.  Value description: 0: RFG The speed reference is calculated by RFG module. You can use this option to achieve better performance of acceleration following. 1: Automatic calculation If the speed reference source is not the RFG module, this parameter must be set to "Automatic calculation".							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-46	Frequency reference filter time	0xD32E	0.0 ms to 100.0 ms	0.0ms	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description: This parameter sets the frequency reference filter time in the vector control mode.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-47	Feedback frequency filter time	0xD32F	0.0 ms to 100.0 ms	0.0ms	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description: This parameter sets the feedback frequency filter time in the vector control mode.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-48	Current low-pass filter time for torque reference	0xD330	0.0 ms to 100.0 ms	0.0ms	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	Description: This parameter sets the current low-pass filter time for the torque reference.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-55	Anti-load disturbance	0xD337	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable 1: Enable							

	<p>Description :</p> <p>This parameter sets whether anti-load disturbance is enabled. After this function is enabled, speed fluctuation under load disturbance can be reduced.</p> <p>Value description:</p> <p>0: Disable</p> <p>1: Enable</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-57	Anti-load disturbance bandwidth	0xD339	0.00 Hz to 300.00 Hz	0.00Hz	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the anti-load disturbance band width.</p> <p>Additional information:</p> <p>Load disturbance at the frequency within the bandwidth can be suppressed effectively. An excessively large bandwidth will easily cause oscillation.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d3-58	Anti-load disturbance coefficient	0xD33A	0.0% to 1000.0%	100.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter specifies the anti-load disturbance torque compensation coefficient.</p>							

## d4: Motor Current Control

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d4-00	Current loop D-axis Kp coefficient	0xD400	1% to 1000%	100%	Unsigned 16 bit	Real time changes	Expansion	Effective in real time
	<p>Description :</p> <p>This parameter sets the current loop D-axis Kp coefficient.</p> <p>Additional information:</p> <p>The larger the value, the faster the torque response. However, too large value may cause current oscillation.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d4-01	Current loop D-axis Ti coefficient	0xD401		100%	Unsigned 16 bit	Real time changes	Expansion	Effective in real time
	<p>Description :</p> <p>Current loop D-axis Ti coefficient</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d4-02	Current loop Q-axis Kp coefficient	0xD402	1% to 1000%	100%	Unsigned 16 bit	Real time changes	Expansion	Effective in real time
	Description : This parameter sets the current loop Q-axis Kp coefficient.  Additional information: The larger the value, the faster the torque response. However, too large value may cause current oscillation.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d4-03	Current loop Q-axis Ki coefficient	0xD403	1% to 1000%	100%	Unsigned 16 bit	Real time changes	Expansion	Effective in real time
	Description : This parameter sets the current loop Q-axis Ki coefficient.  Additional information: The larger the value, the faster the torque response. However, too large value may cause current oscillation.							

## d5: Motor Excitation Control

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d5-03	Rated flux adjustment factor	0xD503	50.0% to 200.0%	100.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description : This parameter sets the flux adjustment factor of the asynchronous motor.  Additional information: This parameter adjusts the operation flux of the asynchronous motor. Decreasing the value of this parameter will put the motor in the under-excitation state, while increasing the value will put the motor in the over-excitation state.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d5-17	Demagnetization current limit	0xD511	0% to 500%	300%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description : This parameter is used to limit the demagnetization current of synchronous motors to prevent faults such as overload.  Additional information: It is a percentage of the rated motor current.							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
d5-25	Asynchronous motor energy-saving control	0xD519	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Disable 1: Enable							
	Description: This parameter sets whether to enable energy saving for the asynchronous motor in the vector control mode.  Value description: 0: Disable Energy saving is disabled. 1: Enable Energy saving is enabled.  Additional information: After energy saving is enabled, the current in no-load or light-load mode can be reduced.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
d5-28	Flux lower limit in energy-saving control of asynchronous motor	0xD51C	10.0% to 100.0%	50.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description: This parameter sets the flux lower limit in energy-saving control of the asynchronous motor.  Additional information: This parameter defines the minimum flux allowed in energy-saving control. The smaller the value is, the more energy will be saved at no load. However, a small value will affect the dynamic response after the load is added.							

## E0: DI

Param.	Name	Communication	Range	Default	Data type	Change	User	Effective
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		address				mode	authority	mode																																																									
	DI1 function selection	0xE000	Refer to "Value"	1	Unsigned 16 bit	Shutdown change	Standard	-																																																									
E0-00	<p>Value:</p> <table border="0"> <tr> <td>0: No function</td> <td>19: Clear information set by</td> <td>50: Current running time reset</td> </tr> <tr> <td>1: Terminal start/stop module A_IN1</td> <td>UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys</td> <td>61: Terminal start/stop module B_IN1</td> </tr> <tr> <td>2: Terminal start/stop module A_IN2</td> <td>21: Acceleration/Deceleration inhibition</td> <td>62: Terminal start/stop module B_IN2</td> </tr> <tr> <td>3: Terminal start/stop module A_IN3</td> <td>22: PID pause</td> <td>63: Terminal start/stop module B_IN3</td> </tr> <tr> <td>4: Terminal start/stop module A jog 1 (JOG1)</td> <td>23: Simple PLC state reset</td> <td>64: Terminal start/stop module B jog 1 (JOG1)</td> </tr> <tr> <td>5: Terminal start/stop module A jog 2 (JOG2)</td> <td>29: Torque control inhibition</td> <td>65: Terminal start/stop module B jog 2 (JOG2)</td> </tr> <tr> <td>6: Function as UP key for frequency adjustment</td> <td>30: Pulse frequency input (valid only for DI4)</td> <td>66: Forced to local control</td> </tr> <tr> <td>7: Function as DOWN key for frequency adjustment</td> <td>32: Immediate DC braking</td> <td>67: Forced to terminal control</td> </tr> <tr> <td>8: Coast to stop</td> <td>33: NC input of external fault</td> <td>68: Forced to communication control</td> </tr> <tr> <td>9: Fault reset (RESET)</td> <td>34: Frequency modification enable</td> <td>69: Forced to user-defined control</td> </tr> <tr> <td>10: Running pause (terminal control)</td> <td>35: PID action direction inversion</td> <td>70: Control channel selection</td> </tr> <tr> <td>11: NO input of external fault</td> <td>36: External stop terminal 1</td> <td>71: Setting channel selection</td> </tr> <tr> <td>12: Multi-reference terminal 1</td> <td>38: PID integral pause</td> <td>72: Terminal module A/B selection</td> </tr> <tr> <td>13: Multi-reference terminal 2</td> <td>43: PID parameter switchover</td> <td>77: Running enable (all modes)</td> </tr> <tr> <td>14: Multi-reference terminal 3</td> <td>44: User-defined fault 1</td> <td>78: Forward running allowance</td> </tr> <tr> <td>15: Multi-reference terminal 4</td> <td>45: User-defined fault 2</td> <td>79: Reverse running allowance</td> </tr> <tr> <td>16: Acceleration/Deceleration selection terminal 1</td> <td>46: Switchover between speed control and torque control</td> <td>80: Set RFG input to 0</td> </tr> <tr> <td>17: Acceleration/Deceleration selection terminal 2</td> <td>47: Emergency stop</td> <td></td> </tr> <tr> <td></td> <td>49: Deceleration DC braking</td> <td></td> </tr> </table>								0: No function	19: Clear information set by	50: Current running time reset	1: Terminal start/stop module A_IN1	UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys	61: Terminal start/stop module B_IN1	2: Terminal start/stop module A_IN2	21: Acceleration/Deceleration inhibition	62: Terminal start/stop module B_IN2	3: Terminal start/stop module A_IN3	22: PID pause	63: Terminal start/stop module B_IN3	4: Terminal start/stop module A jog 1 (JOG1)	23: Simple PLC state reset	64: Terminal start/stop module B jog 1 (JOG1)	5: Terminal start/stop module A jog 2 (JOG2)	29: Torque control inhibition	65: Terminal start/stop module B jog 2 (JOG2)	6: Function as UP key for frequency adjustment	30: Pulse frequency input (valid only for DI4)	66: Forced to local control	7: Function as DOWN key for frequency adjustment	32: Immediate DC braking	67: Forced to terminal control	8: Coast to stop	33: NC input of external fault	68: Forced to communication control	9: Fault reset (RESET)	34: Frequency modification enable	69: Forced to user-defined control	10: Running pause (terminal control)	35: PID action direction inversion	70: Control channel selection	11: NO input of external fault	36: External stop terminal 1	71: Setting channel selection	12: Multi-reference terminal 1	38: PID integral pause	72: Terminal module A/B selection	13: Multi-reference terminal 2	43: PID parameter switchover	77: Running enable (all modes)	14: Multi-reference terminal 3	44: User-defined fault 1	78: Forward running allowance	15: Multi-reference terminal 4	45: User-defined fault 2	79: Reverse running allowance	16: Acceleration/Deceleration selection terminal 1	46: Switchover between speed control and torque control	80: Set RFG input to 0	17: Acceleration/Deceleration selection terminal 2	47: Emergency stop			49: Deceleration DC braking	
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command source is terminal control).

2: Terminal start/stop module A\_IN2

The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).

3: Terminal start/stop module A\_IN3

The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).

4: Terminal start/stop module A jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

5: Terminal start/stop module A jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

6: Function as UP key for frequency adjustment

This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.

6: Function as DOWN key for frequency adjustment

This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.

8: Coast to stop

The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.

9: Fault reset (RESET)

The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.

10: Operation pause

When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault

When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys  
When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).

45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).

46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.

50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

62: Terminal start/stop module B\_IN2

The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

63: Terminal start/stop module B\_IN3

The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

64: Terminal start/stop module B jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)



<p>65: Terminal start/stop module B jog 2 (JOG2)  When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>66: Forced to local control  When the terminal is active, the control mode is forced to local control.</p> <p>67: Forced to terminal control  When the terminal is active, the control mode is forced to terminal control.</p> <p>68: Forced to communication control  When the terminal is active, the control mode is forced to communication control.</p> <p>69: Forced to user-defined control  When the terminal is active, the control mode is forced to the user-defined control mode.</p> <p>70: Control channel selection  The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.</p> <p>71: Setting channel selection  The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.</p> <p>72: Terminal module A/B selection  The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.</p> <p>76: Motor selection terminal 2 (reserved)  This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.</p> <p>77: Running enable  When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.</p> <p>78: Forward running allowance  When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.</p> <p>79: Reverse running allowance  When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.</p> <p>80: Set RFG input to 0  When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency reference is set to zero and the drive runs at 0 Hz.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-01	DI2 function selection	0xE001	Refer to "Value"	4	Unsigned 16 bit	Shutdown change	Standard	-
	Value:							

0: No function	19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys	50: Current running time reset
1: Terminal start/stop module A_IN1	21: Acceleration/Deceleration inhibition	61: Terminal start/stop module B_IN1
2: Terminal start/stop module A_IN2	22: PID pause	62: Terminal start/stop module B_IN2
3: Terminal start/stop module A_IN3	23: Simple PLC state reset	63: Terminal start/stop module B_IN3
4: Terminal start/stop module A jog 1 (JOG1)	29: Torque control inhibition	64: Terminal start/stop module B jog 1 (JOG1)
5: Terminal start/stop module A jog 2 (JOG2)	30: Pulse frequency input (valid only for DI4)	65: Terminal start/stop module B jog 2 (JOG2)
6: Function as UP key for frequency adjustment	32: Immediate DC braking	66: Forced to local control
7: Function as DOWN key for frequency adjustment	33: NC input of external fault	67: Forced to terminal control
8: Coast to stop	34: Frequency modification enable	68: Forced to communication control
9: Fault reset (RESET)	35: PID action direction inversion	69: Forced to user-defined control
10: Running pause (terminal control)	36: External stop terminal 1	70: Control channel selection
11: NO input of external fault	38: PID integral pause	71: Setting channel selection
12: Multi-reference terminal 1	43: PID parameter switchover	72: Terminal module A/B selection
13: Multi-reference terminal 2	44: User-defined fault 1	77: Running enable (all modes)
14: Multi-reference terminal 3	45: User-defined fault 2	78: Forward running allowance
15: Multi-reference terminal 4	46: Switchover between speed control and torque control	79: Reverse running allowance
16: Acceleration/Deceleration selection terminal 1	47: Emergency stop	80: Set RFG input to 0
17: Acceleration/Deceleration selection terminal 2	49: Deceleration DC braking	

Description:

This parameter is used to set the DI2 function. If no special description is provided, the terminal function is level-triggered.

Value description:

0: No function

The DI has no function.

1: Terminal start/stop module A\_IN1

The function (input 1 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).

2: Terminal start/stop module A\_IN2

The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).

3: Terminal start/stop module A\_IN3

The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).

4: Terminal start/stop module A jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

5: Terminal start/stop module A jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

6: Function as UP key for frequency adjustment

This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.

6: Function as DOWN key for frequency adjustment

This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.

8: Coast to stop

The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.

9: Fault reset (RESET)

The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.

10: Operation pause

When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault

When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys

When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action

selection).

#### 45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).

#### 46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

#### 47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

#### 49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.

#### 50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

#### 61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

#### 62: Terminal start/stop module B\_IN2

The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

#### 63: Terminal start/stop module B\_IN3

The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

#### 64: Terminal start/stop module B jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

#### 65: Terminal start/stop module B jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

#### 66: Forced to local control

When the terminal is active, the control mode is forced to local control.  
67: Forced to terminal control  
When the terminal is active, the control mode is forced to terminal control.  
68: Forced to communication control  
When the terminal is active, the control mode is forced to communication control.  
69: Forced to user-defined control  
When the terminal is active, the control mode is forced to the user-defined control mode.  
70: Control channel selection  
The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.  
71: Setting channel selection  
The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.  
72: Terminal module A/B selection  
The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.  
76: Motor selection terminal 2 (reserved)  
This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.  
77: Running enable  
When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.  
78: Forward running allowance  
When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.  
79: Reverse running allowance  
When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.  
80: Set RFG input to 0  
When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency reference is set to zero and the drive runs at 0 Hz.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-02	DI3 function selection	0xE002	Refer to "Value"	9	Unsigned 16 bit	Shutdown change	Standard	-
	Value: 0: No function 1: Terminal start/stop module A_IN1 2: Terminal start/stop module A_IN2 19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys 21: Acceleration/Deceleration 50: Current running time reset 61: Terminal start/stop module B_IN1 62: Terminal start/stop module B_IN2							

<p>3: Terminal start/stop module A_IN3</p> <p>4: Terminal start/stop module A jog 1 (JOG1)</p> <p>5: Terminal start/stop module A jog 2 (JOG2)</p> <p>6: Function as UP key for frequency adjustment</p> <p>7: Function as DOWN key for frequency adjustment</p> <p>8: Coast to stop</p> <p>9: Fault reset (RESET)</p> <p>10: Running pause (terminal control)</p> <p>11: NO input of external fault</p> <p>12: Multi-reference terminal 1</p> <p>13: Multi-reference terminal 2</p> <p>14: Multi-reference terminal 3</p> <p>15: Multi-reference terminal 4</p> <p>16: Acceleration/Deceleration selection terminal 1</p> <p>17: Acceleration/Deceleration selection terminal 2</p>	<p>inhibition</p> <p>22: PID pause</p> <p>23: Simple PLC state reset</p> <p>29: Torque control inhibition</p> <p>30: Pulse frequency input (valid only for DI4)</p> <p>32: Immediate DC braking</p> <p>33: NC input of external fault</p> <p>34: Frequency modification enable</p> <p>35: PID action direction inversion</p> <p>36: External stop terminal 1</p> <p>38: PID integral pause</p> <p>43: PID parameter switchover</p> <p>44: User-defined fault 1</p> <p>45: User-defined fault 2</p> <p>46: Switchover between speed control and torque control</p> <p>47: Emergency stop</p> <p>49: Deceleration DC braking</p>	<p>63: Terminal start/stop module B_IN3</p> <p>64: Terminal start/stop module B jog 1 (JOG1)</p> <p>65: Terminal start/stop module B jog 2 (JOG2)</p> <p>66: Forced to local control</p> <p>67: Forced to terminal control</p> <p>68: Forced to communication control</p> <p>69: Forced to user-defined control</p> <p>70: Control channel selection</p> <p>71: Setting channel selection</p> <p>72: Terminal module A/B selection</p> <p>77: Running enable (all modes)</p> <p>78: Forward running allowance</p> <p>79: Reverse running allowance</p> <p>80: Set RFG input to 0</p>
<p>Description:</p> <p>This parameter is used to set the DI3 function. If no special description is provided, the terminal function is level-triggered.</p> <p>Value description:</p> <p>0: No function</p> <p>The DI has no function.</p> <p>1: Terminal start/stop module A_IN1</p> <p>The function (input 1 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>2: Terminal start/stop module A_IN2</p> <p>The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>3: Terminal start/stop module A_IN3</p> <p>The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>4: Terminal start/stop module A jog 1 (JOG1)</p> <p>When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for</p>		

maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

5: Terminal start/stop module A jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

6: Function as UP key for frequency adjustment

This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.

6: Function as DOWN key for frequency adjustment

This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.

8: Coast to stop

The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.

9: Fault reset (RESET)

The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.

10: Operation pause

When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault

When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys

When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the



drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).

45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).

46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.

50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

62: Terminal start/stop module B\_IN2

The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

63: Terminal start/stop module B\_IN3

The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

64: Terminal start/stop module B jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

65: Terminal start/stop module B jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

66: Forced to local control

When the terminal is active, the control mode is forced to local control.

67: Forced to terminal control

When the terminal is active, the control mode is forced to terminal control.

68: Forced to communication control

When the terminal is active, the control mode is forced to communication control.

69: Forced to user-defined control  
When the terminal is active, the control mode is forced to the user-defined control mode.

70: Control channel selection  
The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.

71: Setting channel selection  
The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.

72: Terminal module A/B selection  
The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.

76: Motor selection terminal 2 (reserved)  
This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.

77: Running enable  
When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.

78: Forward running allowance  
When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.

79: Reverse running allowance  
When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.

80: Set RFG input to 0  
When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency reference is set to zero and the drive runs at 0 Hz.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-03	DI4 function selection	0xE003	Refer to "Value"	12	Unsigned 16 bit	Shutdown change	Standard	-
	Value: 0: No function 1: Terminal start/stop module A_IN1 2: Terminal start/stop module A_IN2 3: Terminal start/stop module A_IN3 4: Terminal start/stop module A jog 1 (JOG1) 5: Terminal start/stop module A 19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys 21: Acceleration/Deceleration inhibition 22: PID pause 23: Simple PLC state reset 29: Torque control inhibition 30: Pulse frequency input (valid 50: Current running time reset 61: Terminal start/stop module B_IN1 62: Terminal start/stop module B_IN2 63: Terminal start/stop module B_IN3 64: Terminal start/stop module B jog 1 (JOG1) 65: Terminal start/stop module B							

<p>jog 2 (JOG2)</p> <p>6: Function as UP key for frequency adjustment</p> <p>7: Function as DOWN key for frequency adjustment</p> <p>8: Coast to stop</p> <p>9: Fault reset (RESET)</p> <p>10: Running pause (terminal control)</p> <p>11: NO input of external fault</p> <p>12: Multi-reference terminal 1</p> <p>13: Multi-reference terminal 2</p> <p>14: Multi-reference terminal 3</p> <p>15: Multi-reference terminal 4</p> <p>16: Acceleration/Deceleration selection terminal 1</p> <p>17: Acceleration/Deceleration selection terminal 2</p>	<p>only for DI4)</p> <p>32: Immediate DC braking</p> <p>33: NC input of external fault</p> <p>34: Frequency modification enable</p> <p>35: PID action direction inversion</p> <p>36: External stop terminal 1</p> <p>38: PID integral pause</p> <p>43: PID parameter switchover</p> <p>44: User-defined fault 1</p> <p>45: User-defined fault 2</p> <p>46: Switchover between speed control and torque control</p> <p>47: Emergency stop</p> <p>49: Deceleration DC braking</p>	<p>jog 2 (JOG2)</p> <p>66: Forced to local control</p> <p>67: Forced to terminal control</p> <p>68: Forced to communication control</p> <p>69: Forced to user-defined control</p> <p>70: Control channel selection</p> <p>71: Setting channel selection</p> <p>72: Terminal module A/B selection</p> <p>77: Running enable (all modes)</p> <p>78: Forward running allowance</p> <p>79: Reverse running allowance</p> <p>80: Set RFG input to 0</p>
<p>Description:</p> <p>This parameter is used to set the DI4 function. If no special description is provided, the terminal function is level-triggered.</p> <p>Value description:</p> <p>0: No function</p> <p>The DI has no function.</p> <p>1: Terminal start/stop module A_IN1</p> <p>The function (input 1 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>2: Terminal start/stop module A_IN2</p> <p>The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>3: Terminal start/stop module A_IN3</p> <p>The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>4: Terminal start/stop module A jog 1 (JOG1)</p> <p>When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>5: Terminal start/stop module A jog 2 (JOG2)</p> <p>When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p>		

6: Function as UP key for frequency adjustment

This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.

6: Function as DOWN key for frequency adjustment

This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.

8: Coast to stop

The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.

9: Fault reset (RESET)

The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.

10: Operation pause

When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault

When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys

When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).

45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).

46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.

50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

62: Terminal start/stop module B\_IN2

The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

63: Terminal start/stop module B\_IN3

The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

64: Terminal start/stop module B jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

65: Terminal start/stop module B jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

66: Forced to local control

When the terminal is active, the control mode is forced to local control.

67: Forced to terminal control

When the terminal is active, the control mode is forced to terminal control.

68: Forced to communication control

When the terminal is active, the control mode is forced to communication control.

69: Forced to user-defined control

When the terminal is active, the control mode is forced to the user-defined control mode.

70: Control channel selection

The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.

71: Setting channel selection  
The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.

72: Terminal module A/B selection  
The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.

76: Motor selection terminal 2 (reserved)  
This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.

77: Running enable  
When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.

78: Forward running allowance  
When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.

79: Reverse running allowance  
When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.

80: Set RFG input to 0  
When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency reference is set to zero and the drive runs at 0 Hz.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	DI5 function selection (for MD600A)	0xE004	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	-
E0-04	Value: 0: No function 1: Terminal start/stop module A_IN1 2: Terminal start/stop module A_IN2 3: Terminal start/stop module A_IN3 4: Terminal start/stop module A jog 1 (JOG1) 5: Terminal start/stop module A jog 2 (JOG2) 6: Function as UP key for frequency adjustment 7: Function as DOWN key for frequency adjustment 19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys 21: Acceleration/Deceleration inhibition 22: PID pause 23: Simple PLC state reset 29: Torque control inhibition 30: Pulse frequency input (valid only for DI4) 32: Immediate DC braking 33: NC input of external fault 34: Frequency modification enable 50: Current running time reset 61: Terminal start/stop module B_IN1 62: Terminal start/stop module B_IN2 63: Terminal start/stop module B_IN3 64: Terminal start/stop module B jog 1 (JOG1) 65: Terminal start/stop module B jog 2 (JOG2) 66: Forced to local control 67: Forced to terminal control 68: Forced to communication control							



<p>8: Coast to stop</p> <p>9: Fault reset (RESET)</p> <p>10: Running pause (terminal control)</p> <p>11: NO input of external fault</p> <p>12: Multi-reference terminal 1</p> <p>13: Multi-reference terminal 2</p> <p>14: Multi-reference terminal 3</p> <p>15: Multi-reference terminal 4</p> <p>16: Acceleration/Deceleration selection terminal 1</p> <p>17: Acceleration/Deceleration selection terminal 2</p>	<p>35: PID action direction inversion</p> <p>36: External stop terminal 1</p> <p>38: PID integral pause</p> <p>43: PID parameter switchover</p> <p>44: User-defined fault 1</p> <p>45: User-defined fault 2</p> <p>46: Switchover between speed control and torque control</p> <p>47: Emergency stop</p> <p>49: Deceleration DC braking</p>	<p>69: Forced to user-defined control</p> <p>70: Control channel selection</p> <p>71: Setting channel selection</p> <p>72: Terminal module A/B selection</p> <p>77: Running enable (all modes)</p> <p>78: Forward running allowance</p> <p>79: Reverse running allowance</p> <p>80: Set RFG input to 0</p>
<p>Description :</p> <p>This parameter is used to set the DI5 function. If no special description is provided, the terminal function is level-triggered.</p> <p>Value description:</p> <p>0: No function</p> <p>The DI has no function.</p> <p>1: Terminal start/stop module A_IN1</p> <p>The function (input 1 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>2: Terminal start/stop module A_IN2</p> <p>The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>3: Terminal start/stop module A_IN3</p> <p>The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>4: Terminal start/stop module A jog 1 (JOG1)</p> <p>When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>5: Terminal start/stop module A jog 2 (JOG2)</p> <p>When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>6: Function as UP key for frequency adjustment</p> <p>This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.</p> <p>6: Function as DOWN key for frequency adjustment</p>		

This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.

8: Coast to stop

The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.

9: Fault reset (RESET)

The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.

10: Operation pause

When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault

When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys

When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).

45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).

46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this

case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.

50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

62: Terminal start/stop module B\_IN2

The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

63: Terminal start/stop module B\_IN3

The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

64: Terminal start/stop module B jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

65: Terminal start/stop module B jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

66: Forced to local control

When the terminal is active, the control mode is forced to local control.

67: Forced to terminal control

When the terminal is active, the control mode is forced to terminal control.

68: Forced to communication control

When the terminal is active, the control mode is forced to communication control.

69: Forced to user-defined control

When the terminal is active, the control mode is forced to the user-defined control mode.

70: Control channel selection

The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.

71: Setting channel selection

The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.

72: Terminal module A/B selection

The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is

selected. When the terminal is active, terminal module B is selected.

76: Motor selection terminal 2 (reserved)

This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.

77: Running enable

When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.

78: Forward running allowance

When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.

79: Reverse running allowance

When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.

80: Set RFG input to 0

When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency reference is set to zero and the drive runs at 0 Hz.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																																										
	VDI1 function selection	0xE00A	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Expansion	-																																										
E0-10	<p>Value:</p> <table border="0"> <tr> <td>0: No function</td> <td>19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys</td> <td>50: Current running time reset</td> </tr> <tr> <td>1: Terminal start/stop module A_IN1</td> <td>21: Acceleration/Deceleration inhibition</td> <td>61: Terminal start/stop module B_IN1</td> </tr> <tr> <td>2: Terminal start/stop module A_IN2</td> <td>22: PID pause</td> <td>62: Terminal start/stop module B_IN2</td> </tr> <tr> <td>3: Terminal start/stop module A_IN3</td> <td>23: Simple PLC state reset</td> <td>63: Terminal start/stop module B_IN3</td> </tr> <tr> <td>4: Terminal start/stop module A jog 1 (JOG1)</td> <td>29: Torque control inhibition</td> <td>64: Terminal start/stop module B jog 1 (JOG1)</td> </tr> <tr> <td>5: Terminal start/stop module A jog 2 (JOG2)</td> <td>30: Pulse frequency input (valid only for DI4)</td> <td>65: Terminal start/stop module B jog 2 (JOG2)</td> </tr> <tr> <td>6: Function as UP key for frequency adjustment</td> <td>32: Immediate DC braking</td> <td>66: Forced to local control</td> </tr> <tr> <td>7: Function as DOWN key for frequency adjustment</td> <td>33: NC input of external fault</td> <td>67: Forced to terminal control</td> </tr> <tr> <td>8: Coast to stop</td> <td>34: Frequency modification enable</td> <td>68: Forced to communication control</td> </tr> <tr> <td>9: Fault reset (RESET)</td> <td>35: PID action direction inversion</td> <td>69: Forced to user-defined control</td> </tr> <tr> <td>10: Running pause (terminal control)</td> <td>36: External stop terminal 1</td> <td>70: Control channel selection</td> </tr> <tr> <td>11: NO input of external fault</td> <td>38: PID integral pause</td> <td>71: Setting channel selection</td> </tr> <tr> <td></td> <td>43: PID parameter switchover</td> <td>72: Terminal module A/B selection</td> </tr> <tr> <td></td> <td>44: User-defined fault 1</td> <td></td> </tr> </table>								0: No function	19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys	50: Current running time reset	1: Terminal start/stop module A_IN1	21: Acceleration/Deceleration inhibition	61: Terminal start/stop module B_IN1	2: Terminal start/stop module A_IN2	22: PID pause	62: Terminal start/stop module B_IN2	3: Terminal start/stop module A_IN3	23: Simple PLC state reset	63: Terminal start/stop module B_IN3	4: Terminal start/stop module A jog 1 (JOG1)	29: Torque control inhibition	64: Terminal start/stop module B jog 1 (JOG1)	5: Terminal start/stop module A jog 2 (JOG2)	30: Pulse frequency input (valid only for DI4)	65: Terminal start/stop module B jog 2 (JOG2)	6: Function as UP key for frequency adjustment	32: Immediate DC braking	66: Forced to local control	7: Function as DOWN key for frequency adjustment	33: NC input of external fault	67: Forced to terminal control	8: Coast to stop	34: Frequency modification enable	68: Forced to communication control	9: Fault reset (RESET)	35: PID action direction inversion	69: Forced to user-defined control	10: Running pause (terminal control)	36: External stop terminal 1	70: Control channel selection	11: NO input of external fault	38: PID integral pause	71: Setting channel selection		43: PID parameter switchover	72: Terminal module A/B selection		44: User-defined fault 1	
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<p>12: Multi-reference terminal 1  13: Multi-reference terminal 2  14: Multi-reference terminal 3  15: Multi-reference terminal 4  16: Acceleration/Deceleration selection terminal 1  17: Acceleration/Deceleration selection terminal 2</p>	<p>45: User-defined fault 2  46: Switchover between speed control and torque control  47: Emergency stop  49: Deceleration DC braking</p>	<p>77: Running enable (all modes)  78: Forward running allowance  79: Reverse running allowance  80: Set RFG input to 0</p>
<p>Description:  This parameter is used to set the VDI1 function. If no special description is provided, the terminal function is level-triggered.</p> <p>Value description:  0: No function  The DI has no function.</p> <p>1: Terminal start/stop module A_IN1  The function (input 1 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>2: Terminal start/stop module A_IN2  The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>3: Terminal start/stop module A_IN3  The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>4: Terminal start/stop module A jog 1 (JOG1)  When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>5: Terminal start/stop module A jog 2 (JOG2)  When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>6: Function as UP key for frequency adjustment  This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.</p> <p>6: Function as DOWN key for frequency adjustment  This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.</p> <p>8: Coast to stop  The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in</p>		

the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.

9: Fault reset (RESET)

The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.

10: Operation pause

When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault

When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys

When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive

outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).

45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).

46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.



50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

62: Terminal start/stop module B\_IN2

The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

63: Terminal start/stop module B\_IN3

The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

64: Terminal start/stop module B jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

65: Terminal start/stop module B jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

66: Forced to local control

When the terminal is active, the control mode is forced to local control.

67: Forced to terminal control

When the terminal is active, the control mode is forced to terminal control.

68: Forced to communication control

When the terminal is active, the control mode is forced to communication control.

69: Forced to user-defined control

When the terminal is active, the control mode is forced to the user-defined control mode.

70: Control channel selection

The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.

71: Setting channel selection

The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.

72: Terminal module A/B selection

The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.

76: Motor selection terminal 2 (reserved)

This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.

77: Running enable

	<p>When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.</p> <p>78: Forward running allowance</p> <p>When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.</p> <p>79: Reverse running allowance</p> <p>When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.</p> <p>80: Set RFG input to 0</p> <p>When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency reference is set to zero and the drive runs at 0 Hz.</p>																																																													
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																																																						
	VDI2 function selection	0xE00B	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Expansion	-																																																						
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<p>selection terminal 1  17: Acceleration/Deceleration  selection terminal 2</p>
<p>Description:  This parameter is used to set the VDI2 function. If no special description is provided, the terminal function is level-triggered.</p> <p>Value description:</p> <p>0: No function  The DI has no function.</p> <p>1: Terminal start/stop module A_IN1  The function (input 1 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>2: Terminal start/stop module A_IN2  The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>3: Terminal start/stop module A_IN3  The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>4: Terminal start/stop module A jog 1 (JOG1)  When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>5: Terminal start/stop module A jog 2 (JOG2)  When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>6: Function as UP key for frequency adjustment  This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.</p> <p>6: Function as DOWN key for frequency adjustment  This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.</p> <p>8: Coast to stop  The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.</p> <p>9: Fault reset (RESET)  The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.</p>

10: Operation pause

When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault

When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys

When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is

normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).

45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).

46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.

50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

	<p>61: Terminal start/stop module B_IN1 The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>62: Terminal start/stop module B_IN2 The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>63: Terminal start/stop module B_IN3 The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>64: Terminal start/stop module B jog 1 (JOG1) When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>65: Terminal start/stop module B jog 2 (JOG2) When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>66: Forced to local control When the terminal is active, the control mode is forced to local control.</p> <p>67: Forced to terminal control When the terminal is active, the control mode is forced to terminal control.</p> <p>68: Forced to communication control When the terminal is active, the control mode is forced to communication control.</p> <p>69: Forced to user-defined control When the terminal is active, the control mode is forced to the user-defined control mode.</p> <p>70: Control channel selection The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.</p> <p>71: Setting channel selection The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.</p> <p>72: Terminal module A/B selection The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.</p> <p>76: Motor selection terminal 2 (reserved) This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.</p> <p>77: Running enable When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.</p> <p>78: Forward running allowance When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.</p>
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This parameter is used to set the VDI3 function. If no special description is provided, the terminal function is level-triggered.

Value description:

0: No function

The DI has no function.

1: Terminal start/stop module A\_IN1

The function (input 1 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).

2: Terminal start/stop module A\_IN2

The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).

3: Terminal start/stop module A\_IN3

The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).

4: Terminal start/stop module A jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

5: Terminal start/stop module A jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

6: Function as UP key for frequency adjustment

This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.

6: Function as DOWN key for frequency adjustment

This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.

8: Coast to stop

The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.

9: Fault reset (RESET)

The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.

10: Operation pause

When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault



When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys

When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).

45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).

46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.

50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

62: Terminal start/stop module B\_IN2

The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the

command source is terminal control).

63: Terminal start/stop module B\_IN3

The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

64: Terminal start/stop module B jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

65: Terminal start/stop module B jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

66: Forced to local control

When the terminal is active, the control mode is forced to local control.

67: Forced to terminal control

When the terminal is active, the control mode is forced to terminal control.

68: Forced to communication control

When the terminal is active, the control mode is forced to communication control.

69: Forced to user-defined control

When the terminal is active, the control mode is forced to the user-defined control mode.

70: Control channel selection

The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.

71: Setting channel selection

The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.

72: Terminal module A/B selection

The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.

76: Motor selection terminal 2 (reserved)

This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.

77: Running enable

When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.

78: Forward running allowance

When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.

79: Reverse running allowance

When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.

80: Set RFG input to 0

When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency

	reference is set to zero and the drive runs at 0 Hz.																																																													
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																																																						
E0-13	VDI4 function selection	0xE00D	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Expansion	-																																																						
	<p>Value:</p> <table border="0"> <tr> <td>0: No function</td> <td>19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys</td> <td>50: Current running time reset</td> </tr> <tr> <td>1: Terminal start/stop module A_IN1</td> <td>21: Acceleration/Deceleration inhibition</td> <td>61: Terminal start/stop module B_IN1</td> </tr> <tr> <td>2: Terminal start/stop module A_IN2</td> <td>22: PID pause</td> <td>62: Terminal start/stop module B_IN2</td> </tr> <tr> <td>3: Terminal start/stop module A_IN3</td> <td>23: Simple PLC state reset</td> <td>63: Terminal start/stop module B_IN3</td> </tr> <tr> <td>4: Terminal start/stop module A jog 1 (JOG1)</td> <td>29: Torque control inhibition</td> <td>64: Terminal start/stop module B jog 1 (JOG1)</td> </tr> <tr> <td>5: Terminal start/stop module A jog 2 (JOG2)</td> <td>30: Pulse frequency input (valid only for DI4)</td> <td>65: Terminal start/stop module B jog 2 (JOG2)</td> </tr> <tr> <td>6: Function as UP key for frequency adjustment</td> <td>32: Immediate DC braking</td> <td>66: Forced to local control</td> </tr> <tr> <td>7: Function as DOWN key for frequency adjustment</td> <td>33: NC input of external fault</td> <td>67: Forced to terminal control</td> </tr> <tr> <td>8: Coast to stop</td> <td>34: Frequency modification enable</td> <td>68: Forced to communication control</td> </tr> <tr> <td>9: Fault reset (RESET)</td> <td>35: PID action direction inversion</td> <td>69: Forced to user-defined control</td> </tr> <tr> <td>10: Running pause (terminal control)</td> <td>36: External stop terminal 1</td> <td>70: Control channel selection</td> </tr> <tr> <td>11: NO input of external fault</td> <td>38: PID integral pause</td> <td>71: Setting channel selection</td> </tr> <tr> <td>12: Multi-reference terminal 1</td> <td>43: PID parameter switchover</td> <td>72: Terminal module A/B selection</td> </tr> <tr> <td>13: Multi-reference terminal 2</td> <td>44: User-defined fault 1</td> <td>77: Running enable (all modes)</td> </tr> <tr> <td>14: Multi-reference terminal 3</td> <td>45: User-defined fault 2</td> <td>78: Forward running allowance</td> </tr> <tr> <td>15: Multi-reference terminal 4</td> <td>46: Switchover between speed control and torque control</td> <td>79: Reverse running allowance</td> </tr> <tr> <td>16: Acceleration/Deceleration selection terminal 1</td> <td>47: Emergency stop</td> <td>80: Set RFG input to 0</td> </tr> <tr> <td>17: Acceleration/Deceleration selection terminal 2</td> <td>49: Deceleration DC braking</td> <td></td> </tr> </table>								0: No function	19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys	50: Current running time reset	1: Terminal start/stop module A_IN1	21: Acceleration/Deceleration inhibition	61: Terminal start/stop module B_IN1	2: Terminal start/stop module A_IN2	22: PID pause	62: Terminal start/stop module B_IN2	3: Terminal start/stop module A_IN3	23: Simple PLC state reset	63: Terminal start/stop module B_IN3	4: Terminal start/stop module A jog 1 (JOG1)	29: Torque control inhibition	64: Terminal start/stop module B jog 1 (JOG1)	5: Terminal start/stop module A jog 2 (JOG2)	30: Pulse frequency input (valid only for DI4)	65: Terminal start/stop module B jog 2 (JOG2)	6: Function as UP key for frequency adjustment	32: Immediate DC braking	66: Forced to local control	7: Function as DOWN key for frequency adjustment	33: NC input of external fault	67: Forced to terminal control	8: Coast to stop	34: Frequency modification enable	68: Forced to communication control	9: Fault reset (RESET)	35: PID action direction inversion	69: Forced to user-defined control	10: Running pause (terminal control)	36: External stop terminal 1	70: Control channel selection	11: NO input of external fault	38: PID integral pause	71: Setting channel selection	12: Multi-reference terminal 1	43: PID parameter switchover	72: Terminal module A/B selection	13: Multi-reference terminal 2	44: User-defined fault 1	77: Running enable (all modes)	14: Multi-reference terminal 3	45: User-defined fault 2	78: Forward running allowance	15: Multi-reference terminal 4	46: Switchover between speed control and torque control	79: Reverse running allowance	16: Acceleration/Deceleration selection terminal 1	47: Emergency stop	80: Set RFG input to 0	17: Acceleration/Deceleration selection terminal 2	49: Deceleration DC braking	
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17: Acceleration/Deceleration selection terminal 2	49: Deceleration DC braking																																																													
<p>Description:</p> <p>This parameter is used to set the VDI4 function. If no special description is provided, the terminal function is level-triggered.</p> <p>Value description:</p> <p>0: No function</p>																																																														

	<p>The DI has no function.</p> <p>1: Terminal start/stop module A_IN1 The function (input 1 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>2: Terminal start/stop module A_IN2 The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>3: Terminal start/stop module A_IN3 The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>4: Terminal start/stop module A jog 1 (JOG1) When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>5: Terminal start/stop module A jog 2 (JOG2) When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)</p> <p>6: Function as UP key for frequency adjustment This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.</p> <p>6: Function as DOWN key for frequency adjustment This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.</p> <p>8: Coast to stop The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.</p> <p>9: Fault reset (RESET) The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.</p> <p>10: Operation pause When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)</p> <p>11: NO input of external fault When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).</p> <p>12 to 15: Multi-reference terminals 1 to 4 Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to</p>
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define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys

When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).

45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).

46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.

50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

62: Terminal start/stop module B\_IN2

The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

63: Terminal start/stop module B\_IN3

The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

64: Terminal start/stop module B jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

65: Terminal start/stop module B jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

66: Forced to local control

When the terminal is active, the control mode is forced to local control.

67: Forced to terminal control

When the terminal is active, the control mode is forced to terminal control.

68: Forced to communication control

When the terminal is active, the control mode is forced to communication control.

69: Forced to user-defined control

When the terminal is active, the control mode is forced to the user-defined control mode.

70: Control channel selection

The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.

71: Setting channel selection

The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.

72: Terminal module A/B selection

The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.

76: Motor selection terminal 2 (reserved)

This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.

77: Running enable

When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.

78: Forward running allowance

When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.

79: Reverse running allowance

When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.

80: Set RFG input to 0

When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency reference is set to zero and the drive runs at 0 Hz.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-14	VDI5 function selection	0xE00E	Refer to	0	Unsigned	Shutdown	Expansion	-



		"Value"		16 bit	change		
Value:							
0: No function		19: Clear information set by		50: Current running time reset			
1: Terminal start/stop module A_IN1		UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys		61: Terminal start/stop module B_IN1			
2: Terminal start/stop module A_IN2		21: Acceleration/Deceleration inhibition		62: Terminal start/stop module B_IN2			
3: Terminal start/stop module A_IN3		22: PID pause		63: Terminal start/stop module B_IN3			
4: Terminal start/stop module A jog 1 (JOG1)		23: Simple PLC state reset		64: Terminal start/stop module B jog 1 (JOG1)			
5: Terminal start/stop module A jog 2 (JOG2)		29: Torque control inhibition		65: Terminal start/stop module B jog 2 (JOG2)			
6: Function as UP key for frequency adjustment		30: Pulse frequency input (valid only for DI4)		66: Forced to local control			
7: Function as DOWN key for frequency adjustment		32: Immediate DC braking		67: Forced to terminal control			
8: Coast to stop		33: NC input of external fault		68: Forced to communication control			
9: Fault reset (RESET)		34: Frequency modification enable		69: Forced to user-defined control			
10: Running pause (terminal control)		35: PID action direction inversion		70: Control channel selection			
11: NO input of external fault		36: External stop terminal 1		71: Setting channel selection			
12: Multi-reference terminal 1		38: PID integral pause		72: Terminal module A/B selection			
13: Multi-reference terminal 2		43: PID parameter switchover		77: Running enable (all modes)			
14: Multi-reference terminal 3		44: User-defined fault 1		78: Forward running allowance			
15: Multi-reference terminal 4		45: User-defined fault 2		79: Reverse running allowance			
16: Acceleration/Deceleration selection terminal 1		46: Switchover between speed control and torque control		80: Set RFG input to 0			
17: Acceleration/Deceleration selection terminal 2		47: Emergency stop					
		49: Deceleration DC braking					
Description:							
This parameter is used to set the VDI5 function. If no special description is provided, the terminal function is level-triggered.							
Value description:							
0: No function The DI has no function.							
1: Terminal start/stop module A_IN1 The function (input 1 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).							
2: Terminal start/stop module A_IN2 The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the							

command source is terminal control).

3: Terminal start/stop module A\_IN3

The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).

4: Terminal start/stop module A jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

5: Terminal start/stop module A jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

6: Function as UP key for frequency adjustment

This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.

6: Function as DOWN key for frequency adjustment

This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.

8: Coast to stop

The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.

9: Fault reset (RESET)

The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.

10: Operation pause

When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault

When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the

acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys  
When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).

45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).

46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.

50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

62: Terminal start/stop module B\_IN2

The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

63: Terminal start/stop module B\_IN3

The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

64: Terminal start/stop module B jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

65: Terminal start/stop module B jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for

maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

66: Forced to local control  
When the terminal is active, the control mode is forced to local control.

67: Forced to terminal control  
When the terminal is active, the control mode is forced to terminal control.

68: Forced to communication control  
When the terminal is active, the control mode is forced to communication control.

69: Forced to user-defined control  
When the terminal is active, the control mode is forced to the user-defined control mode.

70: Control channel selection  
The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.

71: Setting channel selection  
The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.

72: Terminal module A/B selection  
The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.

76: Motor selection terminal 2 (reserved)  
This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.

77: Running enable  
When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.

78: Forward running allowance  
When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.

79: Reverse running allowance  
When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.

80: Set RFG input to 0  
When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency reference is set to zero and the drive runs at 0 Hz.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-15	VDI6 function selection	0xE00F	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Expansion	-
	Value: 0: No function 1: Terminal start/stop module A_IN1 19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning 50: Current running time reset 61: Terminal start/stop module B_IN1							

2: Terminal start/stop module A_IN2	as the UP/DOWN keys	62: Terminal start/stop module B_IN2
3: Terminal start/stop module A_IN3	21: Acceleration/Deceleration inhibition	63: Terminal start/stop module B_IN3
4: Terminal start/stop module A jog 1 (JOG1)	22: PID pause	64: Terminal start/stop module B jog 1 (JOG1)
5: Terminal start/stop module A jog 2 (JOG2)	23: Simple PLC state reset	65: Terminal start/stop module B jog 2 (JOG2)
6: Function as UP key for frequency adjustment	29: Torque control inhibition	66: Forced to local control
7: Function as DOWN key for frequency adjustment	30: Pulse frequency input (valid only for DI4)	67: Forced to terminal control
8: Coast to stop	32: Immediate DC braking	68: Forced to communication control
9: Fault reset (RESET)	33: NC input of external fault	69: Forced to user-defined control
10: Running pause (terminal control)	34: Frequency modification enable	70: Control channel selection
11: NO input of external fault	35: PID action direction inversion	71: Setting channel selection
12: Multi-reference terminal 1	36: External stop terminal 1	72: Terminal module A/B selection
13: Multi-reference terminal 2	38: PID integral pause	77: Running enable (all modes)
14: Multi-reference terminal 3	43: PID parameter switchover	78: Forward running allowance
15: Multi-reference terminal 4	44: User-defined fault 1	79: Reverse running allowance
16: Acceleration/Deceleration selection terminal 1	45: User-defined fault 2	80: Set RFG input to 0
17: Acceleration/Deceleration selection terminal 2	46: Switchover between speed control and torque control	
	47: Emergency stop	
	49: Deceleration DC braking	
<p>Description:</p> <p>This parameter is used to set the VDI6 function. If no special description is provided, the terminal function is level-triggered.</p> <p>Value description:</p> <p>0: No function The DI has no function.</p> <p>1: Terminal start/stop module A_IN1 The function (input 1 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>2: Terminal start/stop module A_IN2 The function (input 2 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>3: Terminal start/stop module A_IN3 The function (input 3 of terminal start/stop module A) is determined by the terminal module mode (valid when the command source is terminal control).</p> <p>4: Terminal start/stop module A jog 1 (JOG1)</p>		

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

5: Terminal start/stop module A jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

6: Function as UP key for frequency adjustment

This function is used to increase the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the increment key. Deactivating the terminal is equivalent to releasing the increment key.

6: Function as DOWN key for frequency adjustment

This function is used to decrease the frequency and is valid when the main frequency source is digital setting. Activating the terminal is equivalent to pressing and holding the decrement key. Deactivating the terminal is equivalent to releasing the decrement key.

8: Coast to stop

The AC drive stops output to shut down. At this time, the power supply of the motor is cut off and the driving system is in the free braking state. When the terminal is valid, the drive immediately stops output and the load then coasts to stop based on the mechanical inertia.

9: Fault reset (RESET)

The terminal is used to reset faults of the AC drive (triggered at the rising edge). When the terminal is valid, it has the same function as the STOP/RES key on the keypad. Remote fault reset can be implemented through this function.

10: Operation pause

When the terminal is valid, the drive decelerates to stop with all running parameters memorized (such as PLC and PID parameters). When the terminal becomes inactive, the AC drive resumes its running state as recorded. (This function is valid when the command source is terminal control.)

11: NO input of external fault

When the terminal is valid, the AC drive is normal. Deactivating the terminal is equivalent to input of the external fault signal. When an external signal is sent to the drive, the drive reports E015.1, and acts according to the value of H1-02 (Fault protection action selection).

12 to 15: Multi-reference terminals 1 to 4

Multi-reference is selected as the main frequency source. States of the four terminals can be combined in 16 ways to define 16 speeds or 16 references. This function is applicable to scenarios that need only several frequency references instead of continuous adjustment of the AC drive operation frequency.

16 to 17: Acceleration/Deceleration selection terminals 1 to 2

Four groups of acceleration and deceleration time can be switched through four states of these two terminals. The acceleration time indicates the time required by the AC drive to accelerate from 0 Hz to the acceleration/deceleration time base frequency (F0-46). The deceleration time indicates the time required by the AC drive to decelerate from the acceleration/deceleration time base frequency (F0-46) to 0 Hz.

19: Clear information set by UP/DOWN keys on the operating panel or by terminals functioning as the UP/DOWN keys

When the main frequency source is digital setting, activating the terminal resets the frequency value adjusted by using the increment/decrement keys on the operating panel or by terminals functioning as the UP/DOWN keys to the value specified by b5-01 or b6-01.

21: Acceleration/Deceleration inhibition

Frequency adjustment is inhibited during operation unless a stop command is received. When the terminal is valid, the drive runs at the current operating frequency without being affected by external input frequency.

22: PID pause

PID calculation pauses to maintain the current output. When the terminal is active, the AC drive maintains the current PID output and no PID adjustment is performed. When the terminal is inactive, the PID calculation continues based on the current output.

23: Simple PLC state reset

When the terminal is active, the drive simple PLC resumes to the initial state, that is, the first setting value of the PLC.

29: Torque control inhibition

When the terminal is active, the AC drive switches from the torque control mode to the speed control mode. When the terminal is inactive, the AC drive resumes the torque control mode.

30: Pulse frequency input

This function is valid only when assigned to DI4. DI4 can be used as a high-speed digital input terminal (HDI) to receive pulse signals.

32: Immediate DC braking

When the terminal is active, the drive directly switches to the DC braking state. DC braking indicates that the drive outputs direct current to the stator winding of the asynchronous motor to form a static magnetic field, enabling the motor to brake with energy consumption. In this state, the rotor cuts the static magnetic field to generate braking torque, which stops the motor quickly.

33: NC input of external fault

Activating the terminal is equivalent to input of the external fault signal. When the terminal is inactive, the AC drive is normal. When an external signal is sent to the drive, the drive reports E015.2, and acts according to the value of H1-02 (Fault protection action selection).

34: Frequency modification enable

When the terminal is active, the RFG input frequency can be modified. When the terminal is inactive, the RFG input frequency cannot be modified.

35: PID action direction inversion

When the terminal is active, the PID action direction is opposite to the direction set by P2-01 (PID action direction).

36: External stop terminal 1

Activating the terminal is used to stop the drive, which functions the same as the STOP/RES key on the operating panel.

38: PID integral pause

When the terminal is active, the PID integral adjustment function pauses. However, the PID proportional and differential adjustment functions are still valid.

43: PID parameter switchover

If PID parameters are switched through the DI (P2-11 = 1), the PID parameters P2-14 (proportional gain Kp1), P2-15 (integral time Ti1), and P2-16 (differential time Td1) are used when the terminal is inactive; the PID parameters P2-17 (proportional gain Kp2), P2-18 (integral time Ti2), and P2-19 (differential time Td2) are used when the terminal is active.

44: User-defined fault 1

When the terminal is active, the AC drive reports E027.1, and acts according to the value of H1-04 (Fault protection action selection).

45: User-defined fault 2

When the terminal is active, the AC drive reports E027.2, and acts according to the value of H1-04 (Fault protection action selection).



selection).

#### 46: Switchover between speed control and torque control

The terminal is used to switch the AC drive between the speed control mode and the torque control mode. If F0-02 (speed/torque control mode) is set to 0, the torque control mode is used when the terminal is active, and the speed control mode is used when the terminal is inactive. When F0-02 (speed/torque control mode) is set to 1, the speed control mode is used when the terminal is active, and the torque control mode is used when the terminal is inactive.

#### 47: Emergency stop

When the terminal is active, the AC drive decelerates according to the setting of b7-34 (deceleration time for quick stop). In the V/f control mode, if the deceleration time for emergency stop is set to 0s, the AC drive decelerates according to the minimum unit time. The terminal does not need to remain closed. Emergency stop is triggered even if the terminal is closed for a very brief moment (longer than the filter time and delay time). Different from the general deceleration to stop function, the emergency stop input terminal is opened after the deceleration time for emergency stop expires. In this case, if the operation signal is still active, the drive will not restart. To restart the drive, disconnect the operation terminal and input the operation command again.

#### 49: Deceleration DC braking

When the terminal is active, the drive decelerates to the frequency set by d0-27 (Start frequency of DC braking for stop) and then enters the DC braking state.

#### 50: Current running time reset

The terminal is used to reset the current running time of the AC drive. If the current running time is shorter than the time (greater than 0) set by P0-17 and P0-19 and the terminal is active, the current running time is cleared. If the current running time is longer than or equal to the time (greater than 0) set by P0-17 and P0-19, the current running time is not cleared even if the terminal is active.

#### 61: Terminal start/stop module B\_IN1

The function (input 1 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

#### 62: Terminal start/stop module B\_IN2

The function (input 2 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

#### 63: Terminal start/stop module B\_IN3

The function (input 3 of terminal start/stop module B) is determined by the terminal module mode (valid when the command source is terminal control).

#### 64: Terminal start/stop module B jog 1 (JOG1)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 1. The operation frequency and direction are determined by the jog 1 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

#### 65: Terminal start/stop module B jog 2 (JOG2)

When the terminal is valid, the drive runs at a low speed for a short time in the jog mode 2. The operation frequency and direction are determined by the jog 2 frequency, and the default is positive frequency. This is typically used for maintenance and commissioning on site. (This function is valid when the command source is terminal control.)

#### 66: Forced to local control

When the terminal is active, the control mode is forced to local control.

#### 67: Forced to terminal control

When the terminal is active, the control mode is forced to terminal control.

68: Forced to communication control  
When the terminal is active, the control mode is forced to communication control.

69: Forced to user-defined control  
When the terminal is active, the control mode is forced to the user-defined control mode.

70: Control channel selection  
The terminal is used to switch between two control command channels. When the terminal is inactive, channel 1 is selected. When the terminal is active, channel 2 is selected.

71: Setting channel selection  
The terminal is used to select the setting channel. When the terminal is inactive, setting channel 1 is selected. When the terminal is active, setting channel 2 is selected.

72: Terminal module A/B selection  
The terminal is used to switch between two terminal modules. When the terminal is inactive, terminal module A is selected. When the terminal is active, terminal module B is selected.

76: Motor selection terminal 2 (reserved)  
This function is used together with function 41 (Motor selection terminal 1). Four groups of motor parameters can be selected through the four states of these two terminals.

77: Running enable  
When the terminal is active, the drive is allowed to run. When the terminal is inactive, the drive is not allowed to run or stops according to the mode set by d0-07.

78: Forward running allowance  
When the terminal is active, the frequency reference can be positive. When the terminal is inactive and the frequency reference is positive, the drive runs at 0 Hz.

79: Reverse running allowance  
When the terminal is active, the frequency reference can be negative. When the terminal is inactive and the frequency reference is negative, the drive runs at 0 Hz.

80: Set RFG input to 0  
When the terminal is active, the drive runs at the frequency reference. When the terminal is inactive, the target frequency reference is set to zero and the drive runs at 0 Hz.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-16	DI input filter time 1	0xE010	0.000s to 1.000s	0.010s	Unsigned 16 bit	Real time changes	Standard	-
	Description : This parameter defines filter time 1 for the AC drive to respond to changes in DI status.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-17	DI input filter time 2	0xE011	0.000s to 1.000s	0.010s	Unsigned 16 bit	Real time changes	Standard	-
	Description :							

	This parameter defines filter time 2 for the AC drive to respond to changes in DI status.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-18	DI input filter time selection	0xE012	Refer to "Value"	0x0	Unsigned 16 bit	Real time changes	Standard	-
	Value:							
	Bit 0	DI1 filter time	0: Filter time 1 1: Filter time 2					
	Bit 1	DI2 filter time	0: Filter time 1 1: Filter time 2					
	Bit 2	DI3 filter time	0: Filter time 1 1: Filter time 2					
	Bit 3	DI4 filter time	0: Filter time 1 1: Filter time 2					
	Bit 4	DI5 filter time (MD600A)	0: Filter time 1 1: Filter time 2					
	Bit 5	Reserved						
	Bit 6	Reserved						
	Bit 7	Reserved						
	Bit 8	Reserved						
	Bit 9	Reserved						
	Bit 10	Reserved						
	Bit 11	Reserved						
Bit 12	Reserved							
Bit 13	Reserved							
Bit 14	Reserved							
Bit 15	Reserved							
Description :								
This parameter sets which DI filter time takes effect.								
Value description:								
Bit 0: DI1 filter time								
Select DI1 filter time.								
0: Filter time 1								
DI1 filter time is set through E0-16.								
1: Filter time 2								
DI1 filter time is set through E0-17.								

Bit 1: DI2 filter time  
 Select DI2 filter time.  
 0: Filter time 1  
 DI2 filter time is set through E0-16.  
 1: Filter time 2  
 DI2 filter time is set through E0-17.

Bit 2: DI3 filter time  
 Select DI3 filter time.  
 0: Filter time 1  
 DI3 filter time is set through E0-16.  
 1: Filter time 2  
 DI3 filter time is set through E0-17.

Bit 3: DI4 filter time  
 Select DI4 filter time.  
 0: Filter time 1  
 DI4 filter time is set through E0-16.  
 1: Filter time 2  
 DI4 filter time is set through E0-17.

Bit 4: DI5 filter time  
 Select DI5 filter time.  
 0: Filter time 1  
 DI5 filter time is set through E0-16.  
 1: Filter time 2  
 DI5 filter time is set through E0-17.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-19	Step value of frequency adjustment by terminal functioning as UP/DOWN keys	0xE013	0.001 Hz/s to 65.535 Hz/s	1.000Hz/s	Unsigned 16 bit	Real time changes	Expansion	-
	Description : This parameter defines the step value when the frequency is adjusted by terminal functioning as UP/DOWN keys.  Additional information: When the DI functions as the UP or DOWN key, this parameter must be set (values of E0-00 to E0-15 are 6 or 7).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-20	DI1 switch-on delay time	0xE014	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Shutdown change	Standard	-

	<p>Description :</p> <p>This parameter defines the delay change coefficient when DI1 is switched on.</p> <p>Additional information:</p> <p>The parameter can be used together with the filter time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-21	DI1 switch-off delay time	0xE015	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Shutdown change	Standard	-
	<p>Description :</p> <p>This parameter defines the delay change coefficient when DI1 is switched off.</p> <p>Additional information:</p> <p>The parameter can be used together with the filter time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-22	DI2 switch-on delay time	0xE016	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Shutdown change	Standard	-
	<p>Description :</p> <p>This parameter defines the delay change coefficient when DI2 is switched on.</p> <p>Additional information:</p> <p>The parameter can be used together with the filter time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-23	DI2 switch-off delay time	0xE017	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Shutdown change	Standard	-
	<p>Description :</p> <p>This parameter defines the delay change coefficient when DI2 is switched off.</p> <p>Additional information:</p> <p>The parameter can be used together with the filter time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-24	DI3 switch-on delay time	0xE018	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Shutdown change	Standard	-

	<p>Description :</p> <p>This parameter defines the delay change coefficient when DI3 is switched on.</p> <p>Additional information:</p> <p>The parameter can be used together with the filter time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	DI3 switch-off delay time	0xE019	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Shutdown change	Standard	-
E0-25	<p>Description :</p> <p>This parameter defines the delay change coefficient when DI3 is switched off.</p> <p>Additional information:</p> <p>The parameter can be used together with the filter time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	DI4 switch-on delay time	0xE01A	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Shutdown change	Standard	-
E0-26	<p>Description :</p> <p>This parameter defines the delay change coefficient when DI4 is switched on.</p> <p>Additional information:</p> <p>The parameter can be used together with the filter time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	DI4 switch-off delay time	0xE01B	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Shutdown change	Standard	-
E0-27	<p>Description :</p> <p>This parameter defines the delay change coefficient when DI4 is switched off.</p> <p>Additional information:</p> <p>The parameter can be used together with the filter time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-28	DI5 switch-on delay time (MD600A)	0xE01C	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Shutdown change	Standard	-

	<p>Description :</p> <p>This parameter defines the delay change coefficient when DI5 is switched on.</p> <p>Additional information:</p> <p>The parameter can be used together with the filter time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-29	DI5 switch-off delay time (MD600A)	0xE01D	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Shutdown change	Standard	-
	<p>Description :</p> <p>This parameter defines the delay change coefficient when DI5 is switched off.</p> <p>Additional information:</p> <p>The parameter can be used together with the filter time.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-40	Set DI value to forced value	0xE028	Refer to "Value"	0x0	Unsigned 16 bit	Shutdown change	Expansion	-
	Value:							
	Bit 0	DI1	0: Hardware 1: Forced value					
	Bit 1	DI2	0: Hardware 1: Forced value					
	Bit 2	DI3	0: Hardware 1: Forced value					
	Bit 3	DI4	0: Hardware 1: Forced value					
	Bit 4	DI5 (MD600A)	0: Hardware 1: Forced value					
	Bit 5	Reserved						
	Bit 6	Reserved						
	Bit 7	Reserved						
	Bit 8	Reserved						
	Bit 9	Reserved						
Bit 10	Reserved							
Bit 11	Reserved							

	Bit 12	Reserved						
	Bit 13	Reserved						
	Bit 14	Reserved						
	Bit 15	Reserved						
<p>Description:</p> <p>This parameter specifies whether the source of DI1 to DI5 (in bit order) values is the forced value. When the value is 0, the source is hardware sampling. When the value is 1, the source is the forced value.</p> <p>Value description:</p> <p>Bit 0: DI1 0: Hardware 1: Forced value</p> <p>Bit 1: DI2 0: Hardware 1: Forced value</p> <p>Bit 2: DI3 0: Hardware 1: Forced value</p> <p>Bit 3: DI4 0: Hardware 1: Forced value</p> <p>Bit 4: DI5 (MD600A) 0: Hardware 1: Forced value</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	DI forced data	0xE038	Refer to "Value"	0x0	Unsigned 16 bit	Real time changes	Expansion	-
E0-56	Value:							
	Bit	Name	Value					
	Bit 0	DI1 setting	0: Inactive level 1: Active level					
	Bit 1	DI2 setting	0: Inactive level 1: Active level					
	Bit 2	DI3 setting	0: Inactive level 1: Active level					
	Bit 3	DI4/HDI setting	0: Inactive level 1: Active level					



Bit 4	DI5 setting (MD600A)	0: Inactive level 1: Active level
Bit 5	Reserved	0: Inactive level 1: Active level
Bit 6	Reserved	0: Inactive level 1: Active level
Bit 7	Reserved	0: Inactive level 1: Active level
Bit 8	Reserved	0: Inactive level 1: Active level
Bit 9	Reserved	0: Inactive level 1: Active level
Bit 10	VDI1 setting	0: Inactive level 1: Active level
Bit 11	VDI2 setting	0: Inactive level 1: Active level
Bit 12	VDI3 setting	0: Inactive level 1: Active level
Bit 13	VDI4 setting	0: Inactive level 1: Active level
Bit 14	VDI5 setting	0: Inactive level 1: Active level
Bit 15	VDI6 setting	0: Inactive level 1: Active level

Description :

This parameter sets the level status of the forced value of DI1 to DI5 and VDI1 to VDI6 (in bit order).

Value description:

Bit 0: DI1 setting

0: Inactive level

1: Active level

Bit 1: DI2 setting

0: Inactive level

1: Active level

Bit 2: DI3 setting

0: Inactive level

1: Active level

Bit 3: DI4/HDI setting

0: Inactive level

1: Active level

<p>Bit 4: DI5 setting (MD600A)</p> <p>0: Inactive level</p> <p>1: Active level</p> <p>Bit 5: Reserved</p> <p>0: Inactive level</p> <p>1: Active level</p> <p>Bit 6: Reserved</p> <p>0: Inactive level</p> <p>1: Active level</p> <p>Bit 7: Reserved</p> <p>0: Inactive level</p> <p>1: Active level</p> <p>Bit 8: Reserved</p> <p>0: Inactive level</p> <p>1: Active level</p> <p>Bit 9: Reserved</p> <p>0: Inactive level</p> <p>1: Active level</p> <p>Bit 10: VDI1 setting</p> <p>0: Inactive level</p> <p>1: Active level</p> <p>Bit 11: VDI2 setting</p> <p>0: Inactive level</p> <p>1: Active level</p> <p>Bit 12: VDI3 setting</p> <p>0: Inactive level</p> <p>1: Active level</p> <p>Bit 13: VDI4 setting</p> <p>0: Inactive level</p> <p>1: Active level</p> <p>Bit 14: VDI5 setting</p> <p>0: Inactive level</p> <p>1: Active level</p> <p>Bit 15: VDI6 setting</p> <p>0: Inactive level</p> <p>1: Active level</p> <p>Additional information:</p> <p>When the terminal bit of E0-56 is set to 1, the level is active and the DI input is unrelated to hardware.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E0-57	DI active mode	0xE039	Refer to	0x0	Unsigned	Real time	Standard	-

selection		"Value"		16 bit	changes																																																					
Value:																																																										
<table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>DI1 active mode</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 1</td> <td>DI2 active mode</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 2</td> <td>DI3 active mode</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 3</td> <td>DI4 active mode</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 4</td> <td>DI5 active mode (MD600A)</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 5</td> <td>Reserved</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 6</td> <td>Reserved</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 7</td> <td>Reserved</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 8</td> <td>Reserved</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 9</td> <td>Reserved</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 10</td> <td>VDI1 active mode</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 11</td> <td>VDI2 active mode</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 12</td> <td>VDI3 active mode</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 13</td> <td>VDI4 active mode</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 14</td> <td>VDI5 active mode</td> <td>0: Active high 1: Active low</td> </tr> <tr> <td>Bit 15</td> <td>VDI6 active mode</td> <td>0: Active high 1: Active low</td> </tr> </tbody> </table>								Bit	Name	Value	Bit 0	DI1 active mode	0: Active high 1: Active low	Bit 1	DI2 active mode	0: Active high 1: Active low	Bit 2	DI3 active mode	0: Active high 1: Active low	Bit 3	DI4 active mode	0: Active high 1: Active low	Bit 4	DI5 active mode (MD600A)	0: Active high 1: Active low	Bit 5	Reserved	0: Active high 1: Active low	Bit 6	Reserved	0: Active high 1: Active low	Bit 7	Reserved	0: Active high 1: Active low	Bit 8	Reserved	0: Active high 1: Active low	Bit 9	Reserved	0: Active high 1: Active low	Bit 10	VDI1 active mode	0: Active high 1: Active low	Bit 11	VDI2 active mode	0: Active high 1: Active low	Bit 12	VDI3 active mode	0: Active high 1: Active low	Bit 13	VDI4 active mode	0: Active high 1: Active low	Bit 14	VDI5 active mode	0: Active high 1: Active low	Bit 15	VDI6 active mode	0: Active high 1: Active low
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This parameter sets the active mode of DI1 to DI5 and VDI1 to VDI6 (in bit order).																																																										
Value description:																																																										

Bit 0: DI1 active mode  
0: Active high  
1: Active low  
Bit 1: DI2 active mode  
0: Active high  
1: Active low  
Bit 2: DI3 active mode  
0: Active high  
1: Active low  
Bit 3: DI4 active mode  
0: Active high  
1: Active low  
Bit 4: DI5 active mode (MD600A)  
0: Active high  
1: Active low  
Bit 5: Reserved  
0: Active high  
1: Active low  
Bit 6: Reserved  
0: Active high  
1: Active low  
Bit 7: Reserved  
0: Active high  
1: Active low  
Bit 8: Reserved  
0: Active high  
1: Active low  
Bit 9: Reserved  
0: Active high  
1: Active low  
Bit 10: VDI1 active mode  
0: Active high  
1: Active low  
Bit 11: VDI2 active mode  
0: Active high  
1: Active low  
Bit 12: VDI3 active mode  
0: Active high  
1: Active low  
Bit 13: VDI4 active mode  
0: Active high  
1: Active low  
Bit 14: VDI5 active mode

0: Active high 1: Active low Bit 15: VDI6 active mode 0: Active high 1: Active low
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## E1: DO/RO

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																																				
	RO1 function selection	0xE100	Refer to "Value"	2	Unsigned 16 bit	Real time changes	Standard	-																																				
E1-00	Value: <table border="0"> <tr> <td>0: No output</td> <td>17: Frequency upper limit reached</td> <td>31: AI1 input limit exceeded</td> </tr> <tr> <td>1: AC drive running</td> <td>18: Frequency lower limit reached (invalid at stop)</td> <td>32: Three-phase loss</td> </tr> <tr> <td>2: Fault</td> <td>19: Undervoltage state</td> <td>33: Reverse running</td> </tr> <tr> <td>3: Frequency level detection FDT1</td> <td>20: Communication setting</td> <td>34: Zero current state</td> </tr> <tr> <td>4: Frequency reached</td> <td>23: Zero speed running 2 (valid at stop)</td> <td>35: AC drive overtemperature threshold reached</td> </tr> <tr> <td>5: Zero speed running (invalid at stop)</td> <td>24: Cumulative power-on time reached</td> <td>36: Output current limit exceeded (valid at stop)</td> </tr> <tr> <td>6: Motor overload alarm</td> <td>25: Frequency level detection FDT2</td> <td>37: Frequency lower limit reached</td> </tr> <tr> <td>7: AC drive overload alarm</td> <td>26: Frequency 1 reached</td> <td>38: Exception (fault/minor fault/alarm)</td> </tr> <tr> <td>11: Simple PLC cycle completed</td> <td>27: Frequency 2 reached</td> <td>40: Current running time reached</td> </tr> <tr> <td>12: Cumulative running time reached</td> <td>28: Current 1 reached</td> <td>41: Fault (excluding undervoltage)</td> </tr> <tr> <td>14: Torque limited</td> <td>29: Current 2 reached</td> <td>43: Minor fault or alarm</td> </tr> <tr> <td>15: Ready for RUN</td> <td>30: Timing reached</td> <td>Others: B connector</td> </tr> </table>								0: No output	17: Frequency upper limit reached	31: AI1 input limit exceeded	1: AC drive running	18: Frequency lower limit reached (invalid at stop)	32: Three-phase loss	2: Fault	19: Undervoltage state	33: Reverse running	3: Frequency level detection FDT1	20: Communication setting	34: Zero current state	4: Frequency reached	23: Zero speed running 2 (valid at stop)	35: AC drive overtemperature threshold reached	5: Zero speed running (invalid at stop)	24: Cumulative power-on time reached	36: Output current limit exceeded (valid at stop)	6: Motor overload alarm	25: Frequency level detection FDT2	37: Frequency lower limit reached	7: AC drive overload alarm	26: Frequency 1 reached	38: Exception (fault/minor fault/alarm)	11: Simple PLC cycle completed	27: Frequency 2 reached	40: Current running time reached	12: Cumulative running time reached	28: Current 1 reached	41: Fault (excluding undervoltage)	14: Torque limited	29: Current 2 reached	43: Minor fault or alarm	15: Ready for RUN	30: Timing reached	Others: B connector
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	Description: This parameter is used to set the RO1 output function. When the function triggering conditions are met, the output signal is active; otherwise, the output signal is inactive.  Value description: 0: No output The output terminal has no function. 1: AC drive running When the AC drive is running with output frequency (can be 0), the terminal outputs an active signal.																																											

2: Fault

When the AC drive stops due to a fault (coast to stop, stop at maximum capability, quick stop, or decelerate to stop), the terminal outputs the active signal.

3: Frequency level detection FDT1

When the running frequency is higher than the detection frequency, the terminal outputs an active signal. When the running frequency is lower than the result of the detection frequency minus the FDT hysteresis value (product of P0-34 and P0-35), the active signal is canceled.

4: Frequency reached

When the running frequency of the AC drive is within a certain range (target frequency  $\pm$  P0-38 x maximum frequency), the terminal outputs an active signal.

5: Operating at zero speed (invalid at stop)

When the output frequency is 0 during AC drive running, the terminal outputs an active signal. When the AC drive is in the stop state, the signal is inactive.

6: Motor overload alarm

Before the motor overload protection acts, the AC drive determines whether the motor load exceeds the overload alarm threshold according to the overload alarm coefficient (d1-47). The terminal outputs an active signal when the overload alarm threshold is exceeded. (For calculation of the alarm threshold, see the description of motor overload protection.)

7: AC drive overload alarm

The terminal outputs an active signal 10s before the AC drive overload protection acts.

11: Simple PLC cycle completed

The terminal outputs a pulse signal with the width of 250 ms when the simple PLC completes one cycle.

12: Cumulative running time reached

The terminal outputs an active signal when the cumulative running time of the AC drive exceeds the value set by P0-17 and P0-19.

14: Torque limited

The terminal outputs an active signal when the output torque of AC drive reaches the torque limit in the speed control mode.

15: Ready to run

The terminal outputs an active signal when the AC drive is ready for running without any fault after power-on.

17: Frequency upper limit reached

The frequency upper limit indicates the smaller between the maximum motor frequency and the value set by D1-04 and D1-07 (forward and reverse direction). The terminal outputs an active signal when the running frequency reaches the frequency upper limit.

18: Frequency lower limit reached (invalid at stop)

The frequency lower limit indicates the larger between the minimum motor frequency and the value set by D1-05 and D1-08 (forward and reverse direction). If P0-11 (operation mode when frequency reference < minimum motor frequency) is set to 1 (stop) and 3 (coast to stop), and the set target frequency is lower than C4-11, the drive does not run and the terminal outputs an inactive signal.

If P0-11 (operation mode when frequency reference < minimum motor frequency) is set to 0 (run at frequency lower limit) or 2 (run at zero speed), the set target frequency reaches the frequency lower limit, and the drive is running, the terminal outputs an active signal.

19: Undervoltage state

The terminal outputs an active signal when undervoltage occurs on the AC drive.

20: Communication setting

Whether the terminal is active is determined by the setpoint of communication address 0x2001 or 0x7312. (Writing to address 0x2001 requires compatibility mode (n0-12) to be enabled.)

23: Zero speed running 2 (valid at stop)

The terminal outputs an active signal when the AC drive is running and the output frequency is 0. The signal remains active even when the AC drive stops.

24: Cumulative power-on time reached

The terminal outputs an active signal when the cumulative power-on time (Ad-02/Ad-03) of the AC drive exceeds the cumulative power-on time threshold set by P0-16/P0-18.

25: Frequency level detection FDT2

When the running frequency is higher than the detection frequency, the terminal outputs an active signal. When the running frequency is lower than the result of the detection frequency minus the frequency detection hysteresis value (product of P0-36 and P0-37), the active signal is canceled.

26: Frequency 1 reached

When the running frequency of the AC drive is within the detection range set by P0-39 (Detection frequency 1), the terminal outputs an active signal. Frequency detection range: (P0-39 – P0-40) x C4-10 (maximum frequency) to (P0-39 + P0-40) x C4-10.

27: Frequency 2 reached

When the running frequency of the AC drive is within the detection range set by P0-41 (Detection frequency 2), the terminal outputs an active signal. Frequency detection range: (P0-41 – P0-42) x C4-10 (maximum frequency) to (P0-41 + P0-42) x C4-10.

28: Current 1 reached

When the output current of the AC drive is within the detection range set by P0-43 (Detection current 1), the terminal outputs an active signal. Current detection range = (P0-43 – P0-44) x C4-03 (rated motor current) to (P0-43 + P0-44) x C4-03.

29: Current 2 reached

When the output current of the AC drive is within the detection range set by P0-45 (Detection current 2), the terminal outputs an active signal. Current detection range = (P0-45 – P0-46) x C4-03 (rated motor current) to (P0-45 + P0-46) x C4-03.

30: Timing reached

On the condition that the timing function (P0-13) is enabled, the terminal outputs an active signal when the current running time of the AC drive reaches the timing value. The timing value is set by P0-14 and P0-15.

31: AI1 input limit exceeded

The terminal outputs an active signal when AI1 input value is higher than the value of E2-14 (AI1 input protection upper limit) or lower than the value of E2-15 (AI1 input protection lower limit).

32: Three-phase loss

The terminal outputs an active signal when the AC drive encounters three-phase loss.

33: Reverse running

The terminal outputs an active signal when the AC drive runs in the reverse direction.

34: Zero current state

When the output current of the AC drive is within the zero-current range for the time exceeding P0-48 (Zero current detection delay), the terminal outputs an active signal. Zero current detection range: 0 to P0-47 x rated motor current.

35: AC drive overtemperature threshold reached

The terminal outputs an active signal when the inverter heatsink temperature reaches the AC drive overtemperature threshold (P0-33).

36: Output current limit exceeded

When the output current of the AC drive is greater than P0-49 (Output overcurrent threshold) for the time exceeding P0-50 (Output overcurrent detection delay), the terminal outputs an active signal.

37: Frequency lower limit reached (valid at stop)

The lower limit frequency indicates the larger between the minimum motor frequency and the value set by DI-05 and DI-08 (forward and reverse direction). When the set target frequency reaches the lower limit, the terminal outputs an active even in the stop state.

38: Exception (fault/minor fault/alarm)

When the AC drive encounters a fault, a minor fault, or an alarm, the terminal outputs an active signal.

40: Current running time reached

The terminal outputs an active signal when the current operation time of the AC drive is longer than the value of P0-20 (Current running time threshold).

41: Fault (excluding undervoltage)

When the AC drive encounters a fault (excluding undervoltage), the terminal outputs an active signal.

43: Minor fault or alarm

When the AC drive encounters a minor fault or an alarm, the terminal outputs an active signal. For fault protection action, refer to H1-00 to H1-13 (Operation at limited speed, limited power, limited current, and limited torque, output at alarm).

Others: B connector

The RO hardware output state is determined by the selected B connector state.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	DO1 function selection (for MD600A)	0xE104	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	-
E1-04	Value: 0: No output 1: AC drive running 2: Fault 3: Frequency level detection FDT1 4: Frequency reached 5: Zero speed running (invalid at stop) 6: Motor overload alarm 7: AC drive overload alarm 11: Simple PLC cycle completed 12: Cumulative running time reached 14: Torque limited 15: Ready for RUN 17: Frequency upper limit reached 18: Frequency lower limit reached (invalid at stop) 19: Undervoltage state 20: Communication setting 23: Zero speed running 2 (valid at stop) 24: Cumulative power-on time reached 25: Frequency level detection FDT2 26: Frequency 1 reached 27: Frequency 2 reached 31: AI1 input limit exceeded 32: Three-phase loss 33: Reverse running 34: Zero current state 35: AC drive overtemperature threshold reached 36: Output current limit exceeded 37: Frequency lower limit reached (valid at stop) 38: Exception (fault/minor fault/alarm) 40: Current running time reached 41: Fault (excluding undervoltage)							



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	Description: null							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E1-05	DO2 function selection (for MD600A)	0xE105	Refer to "Value"	4	Unsigned 16 bit	Real time changes	Standard	-
	Value: Same as"E1-04"							
	Description: Same as"E1-04"							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E1-16	RO1 switch-on delay time	0xE110	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Real time changes	Standard	-
	Description: This parameter sets the RO1 switch-on delay time. The RO outputs an active signal only after the set delay time elapses.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E1-17	RO1 switch-off delay time	0xE111	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Real time changes	Standard	-
	Description: This parameter sets the RO1 switch-off delay time. The RO outputs an active signal only after the set delay time elapses.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E1-24	DO1 switch-on delay time (MD600A)	0xE118	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Real time changes	Standard	-
	Description: This parameter sets the DO1 switch-on delay time. The DO outputs an active signal only after the set delay time elapses.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

E1-25	DO1 switch-off delay time (MD600A)	0xE119	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Real time changes	Standard	-																				
	Description : This parameter sets the DO1 switch-off delay time. The DO outputs an active signal only after the set delay time elapses.																											
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																				
E1-26	DO2 switch-on delay time (MD600A)	0xE11A	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Real time changes	Standard	-																				
	Description : This parameter sets the DO2 switch-on delay time. The DO outputs an active signal only after the set delay time elapses.																											
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																				
E1-27	DO2 switch-off delay time (MD600A)	0xE11B	0.0s to 3600.0s	0.0s	Unsigned 16 bit	Real time changes	Standard	-																				
	Description : This parameter sets the DO2 switch-off delay time. The DO outputs an active signal only after the set delay time elapses.																											
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																				
E1-36	DO/RO/VDO output source	0xE124	Refer to "Value"	0x0	Unsigned 16 bit	Real time changes	Expansion	-																				
	Value: <table border="1" data-bbox="269 1304 987 1879"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>RO1 output source</td> <td>0: Output function 1: Forced setpoint</td> </tr> <tr> <td>Bit 1</td> <td>Reserved</td> <td>0: Output function 1: Forced setpoint</td> </tr> <tr> <td>Bit 2</td> <td>Reserved</td> <td>0: Output function 1: Forced setpoint</td> </tr> <tr> <td>Bit 3</td> <td>Reserved</td> <td>0: Output function 1: Forced setpoint</td> </tr> <tr> <td>Bit 4</td> <td>DO1 output source (MD600A)</td> <td>0: Output function 1: Forced setpoint</td> </tr> <tr> <td>Bit 5</td> <td>DO2 output source (MD600A)</td> <td>0: Output function 1: Forced setpoint</td> </tr> </tbody> </table>								Bit	Name	Value	Bit 0	RO1 output source	0: Output function 1: Forced setpoint	Bit 1	Reserved	0: Output function 1: Forced setpoint	Bit 2	Reserved	0: Output function 1: Forced setpoint	Bit 3	Reserved	0: Output function 1: Forced setpoint	Bit 4	DO1 output source (MD600A)	0: Output function 1: Forced setpoint	Bit 5	DO2 output source (MD600A)
Bit	Name	Value																										
Bit 0	RO1 output source	0: Output function 1: Forced setpoint																										
Bit 1	Reserved	0: Output function 1: Forced setpoint																										
Bit 2	Reserved	0: Output function 1: Forced setpoint																										
Bit 3	Reserved	0: Output function 1: Forced setpoint																										
Bit 4	DO1 output source (MD600A)	0: Output function 1: Forced setpoint																										
Bit 5	DO2 output source (MD600A)	0: Output function 1: Forced setpoint																										

	Bit 6	Reserved	0: Output function 1: Forced setpoint														
	Bit 7	Reserved	0: Output function 1: Forced setpoint														
	Bit 8	Reserved	0: Output function 1: Forced setpoint														
	Bit 9	Reserved	0: Output function 1: Forced setpoint														
	Bit 10	VDO1 output source	0: Output function 1: Forced setpoint														
	Bit 11	VDO2 output source	0: Output function 1: Forced setpoint														
	Bit 12	VDO3 output source	0: Output function 1: Forced setpoint														
	Bit 13	VDO4 output source	0: Output function 1: Forced setpoint														
	Bit 14	VDO5 output source	0: Output function 1: Forced setpoint														
	Bit 15	VDO6 output source	0: Output function 1: Forced setpoint														
<p>Description:</p> <p>This parameter specifies the output sources of RO, DO, and VDO (in bit order).</p> <p>Value description:</p> <p>0: Output function The DO/RO/VDO output sources depend on the settings of E1-00, E1-04, E1-05, and E1-10 to E1-15.</p> <p>1: Forced setpoint The DO/RO/VDO output sources depend on the settings of E1-37.</p>																	
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
	DO/RO/VDO forced data	0xE125	Refer to "Value"	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing									
E1-37	<p>Value:</p> <table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>RO1 setting</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 1</td> <td>Reserved</td> <td>0: Low level 1: High level</td> </tr> </tbody> </table>								Bit	Name	Value	Bit 0	RO1 setting	0: Low level 1: High level	Bit 1	Reserved	0: Low level 1: High level
Bit	Name	Value															
Bit 0	RO1 setting	0: Low level 1: High level															
Bit 1	Reserved	0: Low level 1: High level															

Bit 2	Reserved	0: Low level 1: High level
Bit 3	Reserved	0: Low level 1: High level
Bit 4	DO1 setting (MD600A)	0: Low level 1: High level
Bit 5	DO2 setting (MD600A)	0: Low level 1: High level
Bit 6	Reserved	0: Low level 1: High level
Bit 7	Reserved	0: Low level 1: High level
Bit 8	Reserved	0: Low level 1: High level
Bit 9	Reserved	0: Low level 1: High level
Bit 10	VDO1 setting	0: Low level 1: High level
Bit 11	VDO2 setting	0: Low level 1: High level
Bit 12	VDO3 setting	0: Low level 1: High level
Bit 13	VDO4 setting	0: Low level 1: High level
Bit 14	VDO5 setting	0: Low level 1: High level
Bit 15	VDO6 setting	0: Low level 1: High level

**Description :**

This parameter is used to set the level state of the forced values of the RO, DO, and VDO (in bit order).

**Value description:**

0: Low level

The output of the RO, DO, and VDO is forced to be low-level.

1: High level

The output of the RO, DO, and VDO is forced to be high-level.

**Additional information:**

This parameter is valid when the corresponding bit of E1-36 is 1. In this case, the output is hardware-independent.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
E1-38	DO/RO/VDO polarity selection	0xE126	Refer to "Value"	0x0	Unsigned 16 bit	Real time changes	Standard	-	
	Value:								
		<b>Bit</b>	<b>Name</b>	<b>Value</b>					
		Bit 0	RO1	0: Positive logic 1: Negative logic					
		Bit 1	Reserved	0: Positive logic 1: Negative logic					
		Bit 2	Reserved	0: Positive logic 1: Negative logic					
		Bit 3	Reserved	0: Positive logic 1: Negative logic					
		Bit 4	DO1 (MD600A)	0: Positive logic 1: Negative logic					
		Bit 5	DO2 (MD600A)	0: Positive logic 1: Negative logic					
		Bit 6	Reserved	0: Positive logic 1: Negative logic					
		Bit 7	Reserved	0: Positive logic 1: Negative logic					
		Bit 8	Reserved	0: Positive logic 1: Negative logic					
		Bit 9	Reserved	0: Positive logic 1: Negative logic					
		Bit 10	VDO1	0: Positive logic 1: Negative logic					
		Bit 11	VDO2	0: Positive logic 1: Negative logic					
		Bit 12	VDO3	0: Positive logic 1: Negative logic					
		Bit 13	VDO4	0: Positive logic 1: Negative logic					
	Bit 14	VDO5	0: Positive logic 1: Negative logic						
	Bit 15	VDO6	0: Positive logic 1: Negative logic						

	<p>Description :</p> <p>This parameter sets the polarity of the RO, DO, and VDO (in bit order).</p> <p>Value description:</p> <p>0: Positive logic</p> <p>The output level of the RO, DO, and VDO is the positive logic.</p> <p>1: Negative logic</p> <p>The output level of the RO, DO, and VDO is the negative logic.</p>
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## E2: AI

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
E2-00	AI hardware source selection	0xE200	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing																		
	Value : <table border="1" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>AI1 source</td> <td>0: Hardware sampling 1: Forced value</td> </tr> <tr> <td>Tens</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Hundreds</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Thousands</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Ten thousands</td> <td>Reserved</td> <td></td> </tr> </tbody> </table>								Bit	Name	Value	Ones	AI1 source	0: Hardware sampling 1: Forced value	Tens	Reserved		Hundreds	Reserved		Thousands	Reserved		Ten thousands	Reserved	
	Bit	Name	Value																							
Ones	AI1 source	0: Hardware sampling 1: Forced value																								
Tens	Reserved																									
Hundreds	Reserved																									
Thousands	Reserved																									
Ten thousands	Reserved																									
<p>Description :</p> <p>This parameter specifies the AI hardware source.</p> <p>Value description:</p> <p>Ones: AI1 source</p> <p>0: Hardware sampling</p> <p>The AI value is given by hardware sampling.</p> <p>1: Forced value</p> <p>The AI value is forcibly set by parameter E2-01.</p>																										
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
E2-01	AI1 forced value	0xE201	-10.00 V t o 10.00 V	0.00V	Signed 16 bits	Real time changes	Standard	Nothing																		
	Description :																									

	<p>This parameter sets the AI1 forced value.</p> <p>Additional information: This parameter is valid when the ones place of E2-00 is set to 1.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	AI1 gain	0xE207	-10.00 to 10.00	1.00	Signed 16 bits	Real time changes	Standard	Nothing
E2-07	<p>Description: This parameter defines the gain multiplier of the AI1 analog sampling voltage.</p> <p>Additional information: This parameter is used together with E2-08 to amplify the AI1 input voltage and calculate the offset of the AI1 input voltage (<math>y=kx+b</math>).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	AI1 offset	0xE208	-10.00 V to 10.00 V	0.00V	Signed 16 bits	Real time changes	Standard	Nothing
E2-08	<p>Description: This parameter defines the offset of the AI1 analog sampling voltage.</p> <p>Additional information: This parameter is used together with E2-07 to amplify the AI1 input voltage and calculate the offset of the AI1 input voltage (<math>y=kx+b</math>).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	AI1 denoising threshold	0xE209	0.0% to 100.0%	0.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
E2-09	<p>Description: This parameter defines the AI1 denoising threshold.</p> <p>Additional information: For the per unit percentage of the AI1 input after the AI curve, if the absolute value of the difference between the current value and the last value is within the threshold, denoising is performed. That is, the percentage remains unchanged.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

E2-10	AI1 filter time	0xE20A	0.00s to 10.00s	0.10s	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter defines the software filter time for the AI1.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. Filtering applies directly on AI hardware sampling.</li> <li>2. The longer the AI filter time, the stronger the anti-interference capability and the slower the speed of response to analog detection. The shorter the AI filter time, the weaker the anti-interference capability and the faster the speed of response to analog detection.</li> <li>3. When on-site analog signals are prone to interference, you can increase the AI filter time to enhance the stability of the analog signals.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-11	AI1 zero-crossing threshold	0xE20B	0.0% to 100.0%	0.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter defines the AI1 zero crossing threshold. If the percentage calculated according to the AI curve per unit value does not exceed the threshold, the percentage is forced to be 0.0%. This parameter aims to eliminate fluctuations around zero.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-12	AI1 jump point	0xE20C	-800.0% to 800.0%	0.0%	Signed 16 bits	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter defines the AI1 jump point. If the percentage of the AI1 input after per unit calculate based on the curve is within the value ranging from E2-12 - E2-13 to E2-12 + E2-13, the value of the jump point will be output.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-13	AI1 jump amplitude	0xE20D	0.0% to 100.0%	0.1%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter defines the AI1 jump amplitude. If the percentage of the AI1 input after per unit calculate based on the curve is within the value ranging from E2-12 - E2-13 to E2-12 + E2-13, the value of the jump point will be output.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode



E2-14	AI1 input protection upper limit	0xE20E	E2-15 to 10.00 V	8.00V	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter defines the AI1 input protection upper limit. It is used to indicate whether AI1 input voltage is within the set range.</p> <p>Additional information:</p> <p>When the AI1 input voltage is higher than the value of E2-14 or lower than the value of E2-15, the DO outputs an active signal to indicate that AI1 input limit is exceeded. You can also set H1-14 to determine whether to report E154.3 (AI disconnection).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-15	AI1 input protection lower limit	0xE20F	0.00 V to E2-14	2.00V	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter defines the AI1 input protection lower limit. It is used to indicate whether AI1 input voltage is within the set range.</p> <p>Additional information:</p> <p>When the AI1 input voltage is higher than the value of E2-15 or lower than the value of E2-14, the DO outputs an active signal to indicate that AI1 input limit is exceeded. You can also set H1-14 to determine whether to report E154.3 (AI disconnection).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-34	AI input protection time	0xE222	0.00s to 1.00s	0.01s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the AI input protection time. When the AI input overlimit time is greater than or equal to the value of this parameter, the flag indicating AI input overlimit is set.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-35	High level judgment threshold when AI uses as DI	0xE223	5.5 V to 9.0 V	7.0V	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter defines the threshold for judging high level when the AI is used as the DI.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
E2-36	Low level judgment threshold when AI uses as DI	0xE224	1.0V to 4.5V	3.0V	Unsigned 16 bit	Real time changes	Standard	Nothing	
	Description : This parameter defines the threshold for judging low level when the AI is used as the DI.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
E2-37	AI polarity selection	0xE225	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing	
	Value:								
Description : This parameter sets the AI1 input polarity.  Value description: Ones: AI1 0: Normal value 1: Absolute value 2: Opposite to normal value 3: Opposite to absolute value									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
E2-38	AI curve selection	0xE226	Refer to "Value"	0x0111	Unsigned 16 bit	Real time changes	Expansion	Nothing	
	Value:								

Ones	AI1 curve selection	1: Curve 1 (two points, E2-40 to E2-43) 2: Curve 2 (two points, E2-44 to E2-47) 3: Curve 3 (two points, E2-48 to E2-51) 4: Curve 4 (four points, E2-52 to E2-59) 5: Curve 5 (four points, E2-60 to E2-67)
Tens	Reserved	1: Curve 1 (two points, E2-40 to E2-43) 2: Curve 2 (two points, E2-44 to E2-47) 3: Curve 3 (two points, E2-48 to E2-51) 4: Curve 4 (four points, E2-52 to E2-59) 5: Curve 5 (four points, E2-60 to E2-67)
Hundreds	MD-BP-M potentiometer curve selection	1: Curve 1 (two points, E2-40 to E2-43) 2: Curve 2 (two points, E2-44 to E2-47) 3: Curve 3 (two points, E2-48 to E2-51) 4: Curve 4 (four points, E2-52 to E2-59) 5: Curve 5 (four points, E2-60 to E2-67)

**Description:**

This parameter defines the input/output curve of AI1 and MD-BP-M potentiometers.

**Value description:**

Ones: AI1 curve selection

- 1: Curve 1 (two points, E2-40 to E2-43)
- 2: Curve 2 (two points, E2-44 to E2-47)
- 3: Curve 3 (two points, E2-48 to E2-51)
- 4: Curve 4 (four points, E2-52 to E2-59)
- 5: Curve 5 (four points, E2-60 to E2-67)

Tens: Reserved

- 1: Curve 1 (two points, E2-40 to E2-43)
- 2: Curve 2 (two points, E2-44 to E2-47)
- 3: Curve 3 (two points, E2-48 to E2-51)
- 4: Curve 4 (four points, E2-52 to E2-59)
- 5: Curve 5 (four points, E2-60 to E2-67)

Hundreds: MD-BP-M potentiometer curve selection

- 1: Curve 1 (two points, E2-40 to E2-43)
- 2: Curve 2 (two points, E2-44 to E2-47)
- 3: Curve 3 (two points, E2-48 to E2-51)
- 4: Curve 4 (four points, E2-52 to E2-59)
- 5: Curve 5 (four points, E2-60 to E2-67)

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-39	Selection when AI value < minimum input value	0xE227	Refer to "Value"	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing

Value:

Bit	Name	Value
Ones	Setting for AI1 value less than minimum input value	0: Reference corresponding to minimum input 1: 0.0%
Tens	Reserved	0: Reference corresponding to minimum input 1: 0.0%
Hundreds	Setting for MD-BP-M potentiometer input value less than minimum input value	0: Reference corresponding to minimum input 1: 0.0%

Description:  
This parameter defines the output when the AI1 and MD-BP-M potentiometer input is lower than the minimum input of the curve.

Value description:  
Ones: Setting for AI1 value less than minimum input value  
0: Reference corresponding to minimum input  
1: 0.0%  
Tens: Reserved  
0: Reference corresponding to minimum input  
1: 0.0%  
Hundreds: Setting for MD-BP-M potentiometer input value less than minimum input value  
0: Reference corresponding to minimum input  
1: 0.0%

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Minimum input of AI curve 1	0xE228	-10.00 V to 0 E2-42	0.00V	Signed 16 bits	Real time changes	Standard	Nothing

E2-40  
Description:  
This parameter sets the minimum input on the x-axis of the AI curve 1, that is, the minimum analog input voltage (or current).  
Additional information:  
1. The x axis of the AI curve represents the analog input voltage (or current), and the y axis represents the per unit percentage corresponding to the analog input voltage, which is determined by the AI function. For example, if the AI input is selected as the frequency source, the y-axis is the percentage corresponding to the rated motor frequency.  
2. Five AI curves are provided. Curves 1 to 3 are two-point curves. The two points are the minimum input point and maximum input point, and the relevant parameters are E2-40 to E2-51. Curves 4 and 5 are four-point curves. The four points are the minimum input point, maximum input point, and two inflection points, and the relevant parameters are E2-52 to E2-67.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-41	Percentage corresponding to minimum input of AI curve 1	0xE229	-800.0% to 800.0%	0.0%	Signed 16 bits	Real time changes	Standard	Nothing
	Description : This parameter sets the y axis of AI curve 1 minimum input, that is, the per unit percentage corresponding to the minimum analog input. Additional information: See E2-40.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-42	Maximum input of AI curve 1	0xE22A	E2-40 to 10.00 V	10.00V	Signed 16 bits	Real time changes	Standard	Nothing
	Description : This parameter sets the maximum input point on the x-axis of the AI curve 1, that is, the maximum analog input voltage (or current). Additional information: See E2-40.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-43	Percentage corresponding to maximum input of AI curve 1	0xE22B	-800.0% to 800.0%	100.0%	Signed 16 bits	Real time changes	Standard	Nothing
	Description : This parameter sets the y axis of AI curve 1 maximum input, that is, the per unit percentage corresponding to the maximum analog input. Additional information: See E2-40.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-44	Minimum input of AI curve 2	0xE22C	-10.00 V to 0 E2-46	0.00V	Signed 16 bits	Real time changes	Expansion	Nothing
	Description :							

	<p>This parameter sets the minimum input on the x-axis of the AI curve 2, that is, the minimum analog input voltage (or current).</p> <p>Additional information: See E2-40.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-45	Percentage corresponding to minimum input of AI curve 2	0xE22D	-800.0% to 800.0%	0.0%	Signed 16 bits	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the y axis of AI curve 2 minimum input, that is, the per unit percentage corresponding to the minimum analog input.</p> <p>Additional information: See E2-40.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-46	Maximum input of AI curve 2	0xE22E	E2-44 to 10.00 V	10.00V	Signed 16 bits	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the maximum input point on the x-axis of the AI curve 2, that is, the maximum analog input voltage (or current).</p> <p>Additional information: See E2-40.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-47	Percentage corresponding to maximum input of AI curve 2	0xE22F	-800.0% to 800.0%	100.0%	Signed 16 bits	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the y axis of AI curve 2 maximum input, that is, the per unit percentage corresponding to the maximum analog input.</p> <p>Additional information: See E2-40.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

E2-48	Minimum input of AI curve 3	0xE230	-10.00 V to 0 E2-50	0.00V	Signed 16 bits	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the minimum input on the x-axis of the AI curve 3, that is, the minimum analog input voltage (or current).</p> <p>Additional information:</p> <p>See E2-40.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-49	Percentage corresponding to minimum input of AI curve 3	0xE231	-800.0% to 800.0%	0.0%	Signed 16 bits	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the y axis of AI curve 3 minimum input, that is, the per unit percentage corresponding to the minimum analog input.</p> <p>Additional information:</p> <p>See E2-40.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-50	Maximum input of AI curve 3	0xE232	E2-48 to 10.00 V	10.00V	Signed 16 bits	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the maximum input point on the x-axis of the AI curve 3, that is, the maximum analog input voltage (or current).</p> <p>Additional information:</p> <p>See E2-40.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-51	Percentage corresponding to maximum input of AI curve 3	0xE233	-800.0% to 800.0%	100.0%	Signed 16 bits	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the y axis of AI curve 3 maximum input, that is, the per unit percentage corresponding to the maximum analog input.</p> <p>Additional information:</p>							

	See E2-40.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-52	Minimum input of AI curve 4	0xE234	-10.00 V to E2-54	0.00V	Signed 16 bits	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the minimum input on the x-axis of the AI curve 4, that is, the minimum analog input voltage (or current).</p> <p>Additional information:</p> <p>1. The x axis of the AI curve represents the analog input voltage (or current), and the y axis represents the per unit percentage corresponding to the analog input voltage. If the AI input is selected as the frequency source, y axis represents the percentage of the maximum frequency (C4-10).</p> <p>2. Five AI curves are provided. Curves 1 to 3 are two-point curves. The two points are the minimum input point and maximum input point, and the relevant parameters are E2-40 to E2-51. Curves 4 and 5 are four-point curves. The four points are the minimum input point, maximum input point, and two inflection points, and the relevant parameters are E2-52 to E2-67.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-53	Percentage corresponding to minimum input of AI curve 4	0xE235	-800.0% to 800.0%	0.0%	Signed 16 bits	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the y axis of AI curve 4 minimum input, that is, the per unit percentage corresponding to the minimum analog input.</p> <p>Additional information:</p> <p>See E2-40.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-54	Inflection point 1 input of AI curve 4	0xE236	E2-52 to E2-56	3.00V	Signed 16 bits	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the inflection point 1 on the x axis of AI curve 4, that is, the analog input voltage (or current).</p> <p>Additional information:</p> <p>See E2-40.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode



	Percentage corresponding to inflection point 1 input of AI curve 4	0xE237	-800.0% to 800.0%	30.0%	Signed 16 bits	Real time changes	Expansion	Nothing
E2-55	<p>Description :</p> <p>This parameter sets the y axis of AI curve 4 inflection point 1, that is, the per unit percentage corresponding to inflection point 1 analog input.</p> <p>Additional information:</p> <p>See E2-40.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Inflection point 2 input of AI curve 4	0xE238	E2-54 to E2-58	6.00V	Signed 16 bits	Real time changes	Expansion	Nothing
E2-56	<p>Description :</p> <p>This parameter sets the inflection point 2 on the x axis of AI curve 4, that is, the analog input voltage (or current).</p> <p>Additional information:</p> <p>See E2-40.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Percentage corresponding to inflection point 2 input of AI curve 4	0xE239	-800.0% to 800.0%	60.0%	Signed 16 bits	Real time changes	Expansion	Nothing
E2-57	<p>Description :</p> <p>This parameter sets the y axis of AI curve 4 inflection point 2, that is, the per unit percentage corresponding to inflection point 1 analog input.</p> <p>Additional information:</p> <p>See E2-40.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Maximum input of AI curve 4	0xE23A	E2-56 to 10.00 V	10.00V	Signed 16 bits	Real time changes	Expansion	Nothing
E2-58	<p>Description :</p> <p>This parameter sets the maximum input point on the x-axis of the AI curve 4, that is, the maximum analog input voltage (or current).</p>							

	Additional information: See E2-40.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-59	Percentage corresponding to maximum input of AI curve 4	0xE23B	-800.0% to 800.0%	100.0%	Signed 16 bits	Real time changes	Expansion	Nothing
	Description : This parameter sets the y axis of AI curve 4 maximum input, that is, the per unit percentage corresponding to the maximum analog input.  Additional information: See E2-40.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-60	Minimum input of AI curve 5	0xE23C	-10.00 V to 0 E2-62	-10.00V	Signed 16 bits	Real time changes	Expansion	Nothing
	Description : This parameter sets the minimum input on the x-axis of the AI curve 5, that is, the minimum analog input voltage (or current).  Additional information: See E2-40.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-61	Percentage corresponding to minimum input of AI curve 5	0xE23D	-800.0% to 800.0%	- 100.0%	Signed 16 bits	Real time changes	Expansion	Nothing
	Description : This parameter sets the y axis of AI curve 5 minimum input, that is, the per unit percentage corresponding to the minimum analog input.  Additional information: See E2-40.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E2-62	Inflection point 1 input of AI curve 5	0xE23E	E2-60 to E2-64	-3.00V	Signed 16 bits	Real time changes	Expansion	Nothing
	Description: This parameter sets the inflection point 1 on the x axis of AI curve 5, that is, the analog input voltage (or current).  Additional information: See E2-40.							
E2-63	Percentage corresponding to inflection point 1 input of AI curve 5	0xE23F	-800.0% to 800.0%	-30.0%	Signed 16 bits	Real time changes	Expansion	Nothing
	Description: This parameter sets the y axis of AI curve 5 inflection point 1, that is, the per unit percentage corresponding to inflection point 1 analog input.  Additional information: See E2-40.							
E2-64	Inflection point 2 input of AI curve 5	0xE240	E2-62 to E2-66	3.00V	Signed 16 bits	Real time changes	Expansion	Nothing
	Description: This parameter sets the inflection point 2 on the x axis of AI curve 5, that is, the analog input voltage (or current).  Additional information: See E2-40.							
E2-65	Percentage corresponding to inflection point 2 input of AI curve 5	0xE241	-800.0% to 800.0%	30.0%	Signed 16 bits	Real time changes	Expansion	Nothing

	<p>Description :</p> <p>This parameter sets the y axis of AI curve 5 inflection point 2, that is, the per unit percentage corresponding to inflection point 2 analog input.</p> <p>Additional information:</p> <p>See E2-40.</p>													
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode						
	Maximum input of AI curve 5	0xE242	E2-64 to 10.00 V	10.00V	Signed 16 bits	Real time changes	Expansion	Nothing						
E2-66	<p>Description :</p> <p>This parameter sets the maximum input point on the x-axis of the AI curve 5, that is, the maximum analog input voltage (or current).</p> <p>Additional information:</p> <p>See E2-40.</p>													
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode						
	Percentage corresponding to maximum input of AI curve 5	0xE243	-800.0% to 800.0%	100.0%	Signed 16 bits	Real time changes	Expansion	Nothing						
E2-67	<p>Description :</p> <p>This parameter sets the y axis of AI curve 5 maximum input, that is, the per unit percentage corresponding to the maximum analog input.</p> <p>Additional information:</p> <p>See E2-40.</p>													
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode						
	AI curve automatic adjustment	0xE244	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing						
E2-68	<p>Value:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Bit</th> <th style="width: 50%;">Name</th> <th style="width: 40%;">Value</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>								Bit	Name	Value			
Bit	Name	Value												

Ones	Point selection (for setting)	0: Disable 1: Point 1 2: Point 2 3: Point 3 4: Point 4
Tens	AI channel selection (for setting)	0: Disable 1: AI1
Hundreds	Enable control (for setting)	0: Disable 1: Enable
Thousands	X-point curve (for display)	0: The function is disabled or no channel is selected. 2: 2-point curve 4: 4-point curve
Ten thousands	Reserved	

Description :

This parameter sets the automatic AI curve correction function.

Value description:

Ones: Point selection (for setting)

Select a point on the operated curve.

0: Disable

1: Point 1

Select the first point on the correction curve.

2: Point 2

Select the second point on the correction curve.

3: Point 3

Select the third point on the correction curve.

4: Point 4

Select the fourth point on the correction curve.

Tens: AI channel selection (for setting)

Select the AI channel to be operated.

0: Disable

1: AI1

Select AI1 for correction.

Hundreds: Enable control (for setting)

Set whether to enable automatic curve correction.

0: Disable

Automatic curve correction is disabled.

1: Enable

Automatic curve correction is enabled.

Thousands: X-point curve (for display)

Set the curve type.

0: The function is disabled or no channel is selected.

<p>2: Two-point curve Select the two-point curve.</p> <p>4: Four-point curve Select the four-point curve.</p> <p>Ten thousands: Reserved</p>
--

### E3: AO

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode															
E3-00	AO1 output function selection	0xE300	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-															
	<p>Value:</p> <table border="0"> <tr> <td>0: Operation frequency</td> <td>5: Output voltage</td> <td>14: Output current (100.0% corresponds to 1000.0 A.)</td> </tr> <tr> <td>1: Frequency reference</td> <td>6: HDI input</td> <td>15: Bus voltage (100.0% corresponds to 1000.0 V.)</td> </tr> <tr> <td>2: Output current</td> <td>7: AI1</td> <td>16: Output torque (actual value)</td> </tr> <tr> <td>3: Output torque (absolute value)</td> <td>12: Communication setting</td> <td>Others: F connector</td> </tr> <tr> <td>4: Output power</td> <td>13: Motor speed</td> <td></td> </tr> </table>								0: Operation frequency	5: Output voltage	14: Output current (100.0% corresponds to 1000.0 A.)	1: Frequency reference	6: HDI input	15: Bus voltage (100.0% corresponds to 1000.0 V.)	2: Output current	7: AI1	16: Output torque (actual value)	3: Output torque (absolute value)	12: Communication setting	Others: F connector	4: Output power	13: Motor speed	
	0: Operation frequency	5: Output voltage	14: Output current (100.0% corresponds to 1000.0 A.)																				
1: Frequency reference	6: HDI input	15: Bus voltage (100.0% corresponds to 1000.0 V.)																					
2: Output current	7: AI1	16: Output torque (actual value)																					
3: Output torque (absolute value)	12: Communication setting	Others: F connector																					
4: Output power	13: Motor speed																						
<p>Description:</p> <p>This parameter sets the AO1 output function. After the corresponding function is selected, the AC drive calculates the per-unit percentage of the function variable and the corresponding output voltage is obtained after the AO curve.</p> <p>0: Operation frequency The AO outputs the ratio of the running frequency of the AC drive to the rated motor frequency as the voltage. (100.0% corresponds to rated motor frequency.)</p> <p>1: Frequency reference The AO outputs the ratio of the frequency reference of the AC drive to the rated motor frequency as the voltage. (100.0% corresponds to rated motor frequency.)</p> <p>2: Output current The AO outputs the ratio of the output current of the AC drive to the rated motor current as the voltage. (100.0% corresponds to two times the rated motor current.)</p> <p>3: Output torque (Absolute value) The AO outputs the ratio of the output torque of the AC drive to the rated motor torque as the voltage. (100.0% corresponds to two times the rated motor torque. It is the absolute value of the ratio.)</p> <p>4: Output power The AO outputs the ratio of the output power of the AC drive to the rated motor power as the voltage. (100.0% corresponds to two times the rated motor power.)</p> <p>5: Output voltage</p>																							

The AO outputs the ratio of the output voltage of the AC drive to the rated motor voltage as the voltage. (100.0% corresponds to 1.2 times the rated motor voltage.)

6: Pulse input  
The AO output voltage changes with the HDI input frequency. (50.0% corresponds to 20.0 kHz.)

7: AI1  
The AO output voltage changes with the AI1 input voltage. (100.0% corresponds to 10 V.)

12: Communication setting  
The AO outputs the ratio of the data written by 2002h/7313h address to the data written by 32767 as the voltage (100.0% corresponds to AO communication setting).

13: Motor speed  
The AO outputs the ratio of the motor speed to the speed corresponding to rated motor frequency as the voltage (100.0% corresponds to the speed corresponding to the rated frequency).

14: Output current  
The AO outputs the ratio of the output current of the AC drive to 1000 A as the voltage (100.0% corresponds to 1000.0 A).

15: Bus voltage  
The AO outputs the ratio of the bus voltage of the AC drive to 1000 V as the voltage (100.0% corresponds to 1000.0 V).

16: Output torque (actual value)  
The AO outputs the ratio of the output torque of the AC drive to the rated motor torque as the voltage. (100.0% corresponds to two times the rated motor torque, 50.0% corresponds to 0, and 0 corresponds to negative two times the rated motor torque.)

Others: F connector  
The AO outputs the value of the selected float point connector.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E3-03	AO polarity selection	0xE303	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-
	Value:							
	Ones	AO1 polarity selection	0: Normal value 1: Absolute value 2: Opposite to normal value 3: Opposite to absolute value					
	Tens	Reserved						
Thousands	Reserved							
Ten thousands	Reserved							
Description:								
This parameter sets the AO curve output polarity.								
Value description:								
0: Normal value								

	<p>The AO curve output value remains unchanged.</p> <p>1: Absolute value The absolute value of the AO curve output value is used.</p> <p>2: Opposite to normal value The opposite value of the AO curve output value is used.</p> <p>3: Opposite to absolute value The opposite value of the absolute value of the AO curve output value is used.</p>																									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
E3-04	AO curve selection	0xE304	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	-																		
	<p>Value:</p> <table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>AO1 curve</td> <td>0: Two-point curve 1: Gain+Offset</td> </tr> <tr> <td>Tens</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Hundreds</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Thousands</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Ten thousands</td> <td>Reserved</td> <td></td> </tr> </tbody> </table>								Bit	Name	Value	Ones	AO1 curve	0: Two-point curve 1: Gain+Offset	Tens	Reserved		Hundreds	Reserved		Thousands	Reserved		Ten thousands	Reserved	
	Bit	Name	Value																							
Ones	AO1 curve	0: Two-point curve 1: Gain+Offset																								
Tens	Reserved																									
Hundreds	Reserved																									
Thousands	Reserved																									
Ten thousands	Reserved																									
<p>Description:</p> <p>This parameter sets the AO curve type.</p> <p>Value description: 0: Two-point curve E3-05 to E3-08 are used to set the AO two-point curve. 1: Gain+Offset E3-17 to E3-18 are used to set the AO curve gain and offset.</p>																										
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
E3-05	Minimum input of AO1 curve	0xE305	-800.00% to E3-07	0.0%	Signed 16 bits	Real time changes	Standard	-																		
	<p>Description:</p> <p>This parameter sets the minimum input on the x-axis of the AO curve, that is, the per-unit percentage of the selected AO function.</p>																									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		



E3-06	Setting corresponding to AO1 curve minimum input	0xE306	0.00 V to 10.00 V	0.00V	Signed 16 bits	Real time changes	Standard	-
	Description: This parameter sets the y axis of AO1 curve minimum input, that is, the AO voltage.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E3-07	Maximum input of AO1 curve	0xE307	E3-05 to 800.0%	100.0%	Signed 16 bits	Real time changes	Standard	-
	Description: This parameter sets the maximum input on the x-axis of the AO curve, that is, the per-unit percentage of the selected AO function.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E3-08	Setting corresponding to AO1 curve maximum input	0xE308	0.00 V to 10.00 V	10.00V	Signed 16 bits	Real time changes	Standard	-
	Description: This parameter sets the y axis of AO1 curve maximum input, that is, the AO voltage.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E3-17	AO1 zero offset coefficient	0xE311	-100.0% to 100.0%	0.0%	Signed 16 bits	Real time changes	Expansion	-
	Description: This parameter sets the AO zero offset coefficient (b in the linear formula $Y=kX+b$ ), which is a percentage of 10 V or 20 mA.  Additional information: 1. This parameter is valid when E3-04 is set to 1. 2. On the AO curve, if "b" indicates the zero offset, "k" indicates the gain, and "X" indicates the standard output, the actual output "Y" is calculated as $Y = kX + b$ . 100% of the AO zero offset coefficient corresponds to 10 V or 20 mA. The standard output refers to the value corresponding to the analog output of 0 V to 10 V (or 0 mA to 20 mA) without zero offset or gain correction.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E3-18	AO1 gain	0xE312	-10.00 to 10.00	1.00	Signed 16 bits	Real time changes	Expansion	-

	<p>Description :</p> <p>This parameter sets the AO gain (k in the linear formula <math>Y=kX+b</math>), which is a percentage of 10 V or 20 mA.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. This parameter is valid when E3-04 is set to 1.</li> <li>2. On the AO curve, if "b" indicates the zero offset, "k" indicates the gain, and "X" indicates the standard output, the actual output "Y" is calculated as <math>Y = kX + b</math>. 100% of the AO zero offset coefficient corresponds to 10 V or 20 mA. The standard output refers to the value corresponding to the analog output of 0 V to 10 V (or 0 mA to 20 mA) without zero offset or gain correction.</li> </ol>																									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
E3-23	AO1 output offset	0xE317	-10.00 V to 10.00 V	0.00V	Signed 16 bits	Real time changes	Expansion	-																		
	<p>Description :</p> <p>This parameter sets the output offset voltage of the AO, that is, the voltage calculated through the AO curve plus the offset.</p>																									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
E3-26	AO hardware source selection	0xE31A	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	-																		
	<p>Value:</p> <table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>AO1 source</td> <td>0: Output function 1: Forced value</td> </tr> <tr> <td>Tens</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Hundreds</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Thousands</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Ten thousands</td> <td>Reserved</td> <td></td> </tr> </tbody> </table>								Bit	Name	Value	Ones	AO1 source	0: Output function 1: Forced value	Tens	Reserved		Hundreds	Reserved		Thousands	Reserved		Ten thousands	Reserved	
Bit	Name	Value																								
Ones	AO1 source	0: Output function 1: Forced value																								
Tens	Reserved																									
Hundreds	Reserved																									
Thousands	Reserved																									
Ten thousands	Reserved																									
	<p>Description :</p> <p>This parameter sets the AO hardware source.</p> <p>Value description:</p> <p>0: Output function The source is selected according to parameter E3-00.</p> <p>1: Forced value The forced value set by E3-27 is selected.</p>																									
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective																		

		address				mode	authority	mode
	AO1 forced value	0xE31B	0.00 V to 10.00 V	0.00V	Unsigned 16 bit	Real time changes	Expansion	-
E3-27	Description : This parameter sets the AO1 forced value.  Additional information: This parameter is valid when E3-26 is set to 1.							

## E4: HDI (DI4)

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	DI4/HDI type selection	0xE400	Refer to "Value"	1	Unsigned 16 bit	Cannot be changed	Standard	-
E4-00	Value: 0: HDI 1: DI  Description : This parameter defines the function assigned to DI4.  Value description: 0: HDI DI4 is used for as the HDI. 1: DI DI4 is used as the normal DI.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	HDI hardware source selection	0xE402	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	-
E4-02	Value: 0: Hardware sampling 1: Forced value  Description : This parameter specifies the HDI hardware source.							

	<p>Value description:  0: Hardware sampling  The HDI input source is the hardware sampling.  1: Forced value  The HDI input source is the forced value set by E4-03.</p>																									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
E4-03	HDI forced value	0xE403	0.00 kHz to 100.00 kHz	1.00kHz	Unsigned 16 bit	Real time changes	Expansion	-																		
	<p>Description :  This parameter sets the HDI forced value.</p> <p>Additional information:  This parameter is valid only when HDI input is enabled and E4-02 is set to 1.</p>																									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
E4-07	HDI curve setting	0xE407	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	-																		
	<p>Value:</p> <table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>HDI curve selection</td> <td>0: Two-point curve 1: Four-point curve</td> </tr> <tr> <td>Tens</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Hundreds</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Thousands</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Ten thousands</td> <td>Reserved</td> <td></td> </tr> </tbody> </table> <p>Description :  This parameter is used to select the HDI curve type, which is available in two-point curve or four-point curve.</p> <p>Value description:  0: Two-point curve  Select the two-point curve.  1: Four-point curve  Select the four-point curve.</p>								Bit	Name	Value	Ones	HDI curve selection	0: Two-point curve 1: Four-point curve	Tens	Reserved		Hundreds	Reserved		Thousands	Reserved		Ten thousands	Reserved	
Bit	Name	Value																								
Ones	HDI curve selection	0: Two-point curve 1: Four-point curve																								
Tens	Reserved																									
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Ten thousands	Reserved																									
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective																		

		address				mode	authority	mode
E4-08	HDI two-point curve minimum input	0xE408	0.00 kHz to E4-10	0.00kHz	Unsigned 16 bit	Real time changes	Standard	-
	<p>Description :</p> <p>This parameter sets the minimum input on the x axis of the HDI two-point curve, that is, the minimum pulse input frequency.</p> <p>Additional information:</p> <p>When the high-speed pulse function of the DI4 is used as the source of the main frequency, it is necessary to define a curve that maps pulse frequencies to frequency references. The frequency references are percentages of the rated motor frequency (C4-06). The x axis of the curve represents the pulse frequencies of the DI4, and the y axis represents the percentages of the rated motor frequency (C4-06). The curve is a two-point linear graph with two points: the minimum input point and the maximum input point. E4-08 corresponds to the minimum input point on the x axis, that is, the minimum pulse frequency.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E4-09	Percentage corresponding to HDI two-point curve minimum input	0xE409	-800.0% to 800.0%	0.0%	Signed 16 bits	Real time changes	Standard	-
	<p>Description :</p> <p>This parameter sets the y axis of the HDI two-point curve minimum input, that is, the per unit percentage corresponding to the minimum pulse input.</p> <p>Additional information:</p> <p>When the high-speed pulse function of the DI4 is used as the source of the main frequency, it is necessary to define a curve that maps pulse frequencies to frequency references. The frequency references are percentages of the rated motor frequency (C4-06). The x axis of the curve represents the pulse frequencies of the DI4, and the y axis represents the percentages of the rated motor frequency (C4-06). The curve is a two-point linear graph with two points: the minimum input point and the maximum input point. E4-09 corresponds to the y axis of the minimum pulse input, that is, the reference corresponding to the minimum pulse input frequency.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E4-10	HDI two-point curve maximum input	0xE40A	E4-08 to 20.00 kHz	20.00kHz	Unsigned 16 bit	Real time changes	Standard	-
	<p>Description :</p> <p>This parameter sets the maximum input on the x axis of the HDI two-point curve, that is, the maximum pulse input frequency.</p>							

	<p>Additional information:</p> <p>When the high-speed pulse function of the DI4 is used as the source of the main frequency, it is necessary to define a curve that maps pulse frequencies to frequency references. The frequency references are percentages of the rated motor frequency (C4-06). The x axis of the curve represents the pulse frequencies of the DI4, and the y axis represents the percentages of the rated motor frequency (C4-06). The curve is a two-point linear graph with two points: the minimum input point and the maximum input point. E4-10 corresponds to the x axis of the maximum pulse input, that is, the maximum input frequency of the pulse.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E4-11	Percentage corresponding to HDI two-point curve maximum input	0xE40B	-800.0% to 800.0%	100.0%	Signed 16 bits	Real time changes	Standard	-
	<p>Description :</p> <p>This parameter sets the y axis of the HDI two-point curve maximum input, that is, the per unit percentage corresponding to the maximum pulse input.</p> <p>Additional information:</p> <p>When the high-speed pulse function of the DI4 is used as the source of the main frequency, it is necessary to define a curve that maps pulse frequencies to frequency references. The frequency references are percentages of the rated motor frequency (C4-06). The x axis of the curve represents the pulse frequencies of the DI4, and the y axis represents the percentages of the rated motor frequency (C4-06). The curve is a two-point linear graph with two points: the minimum input point and the maximum input point. E4-11 corresponds to the y axis of the maximum pulse input, that is, the reference corresponding to the maximum pulse input frequency.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E4-12	HDI curve four-point minimum input	0xE40C	0.00 kHz to E4-14	0.00kHz	Unsigned 16 bit	Real time changes	Expansion	-
	<p>Description :</p> <p>This parameter sets the minimum input on the x axis of the HDI four-point curve, that is, the minimum pulse input frequency.</p> <p>Additional information:</p> <p>When the high-speed pulse function of the DI4 is used as the source of the main frequency, it is necessary to define a curve that maps pulse frequencies to frequency references. The frequency references are percentages of the rated motor frequency (C4-06). The x axis of the curve represents the pulse frequencies of the DI4, and the y axis represents the percentages of the rated motor frequency (C4-06). The curve is a four-point linear graph with four points: the minimum input point, two inflection points, and the maximum input point. E4-12 corresponds to the minimum input point on the x</p>							

	axis, that is, the minimum pulse frequency.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E4-13	Percentage corresponding to HDI four-point curve minimum input	0xE40D	-800.0% to 800.0%	-100.0%	Signed 16 bits	Real time changes	Expansion	-
	<p>Description :</p> <p>This parameter sets the y axis of the HDI four-point curve minimum input, that is, the per unit percentage corresponding to the minimum pulse input.</p> <p>Additional information:</p> <p>When the high-speed pulse function of the DI4 is used as the source of the main frequency, it is necessary to define a curve that maps pulse frequencies to frequency references. The frequency references are percentages of the rated motor frequency (C4-06). The x axis of the curve represents the pulse frequencies of the DI4, and the y axis represents the percentages of the rated motor frequency (C4-06). The curve is a four-point linear graph with four points: the minimum input point, two inflection points, and the maximum input point. E4-13 corresponds to the y axis of the minimum pulse input, that is, the reference corresponding to the minimum pulse input frequency.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E4-14	Inflection 1 input of HDI four-point curve	0xE40E	E4-12 to E4-16	5.00kHz	Unsigned 16 bit	Real time changes	Expansion	-
	<p>Description :</p> <p>This parameter sets the inflection point 1 on the x axis of the HDI four-point curve, that is, the pulse input frequency at the inflection point 1.</p> <p>Additional information:</p> <p>When the high-speed pulse function of the DI4 is used as the source of the main frequency, it is necessary to define a curve that maps pulse frequencies to frequency references. The frequency references are percentages of the rated motor frequency (C4-06). The x axis of the curve represents the pulse frequencies of the DI4, and the y axis represents the percentages of the rated motor frequency (C4-06). The curve is a four-point linear graph with four points: the minimum input point, two inflection points, and the maximum input point. This parameter corresponds to the x-axis of the inflection point 1, that is, the pulse input frequency at inflection point 1.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
E4-15	Percentage corresponding to inflection point 1 input of	0xE40F	-800.0% to 800.0%	-30.0%	Signed 16 bits	Real time changes	Expansion	-

	HDI four-point curve							
	<p>Description:</p> <p>This parameter sets the y axis of HDI four-point curve inflection point 1, that is, the per unit percentage corresponding to inflection point 1.</p> <p>Additional information:</p> <p>When the high-speed pulse function of the DI4 is used as the source of the main frequency, it is necessary to define a curve that maps pulse frequencies to frequency references. The frequency references are percentages of the rated motor frequency (C4-06). The x axis of the curve represents the pulse frequencies of the DI4, and the y axis represents the percentages of the rated motor frequency (C4-06). The curve is a four-point linear graph with four points: the minimum input point, two inflection points, and the maximum input point. E4-15 corresponds to the y axis of the inflection point 1, that is, the reference corresponding to the pulse input frequency at inflection point 1.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Inflection 2 input of HDI four-point curve	0xE410	E4-14 to E4-18	10.00kHz	Unsigned 16 bit	Real time changes	Expansion	-
E4-16	<p>Description:</p> <p>This parameter sets the inflection point 2 on the x axis of the HDI four-point curve, that is, the pulse input frequency at the inflection point 2.</p> <p>Additional information:</p> <p>When the high-speed pulse function of the DI4 is used as the source of the main frequency, it is necessary to define a curve that maps pulse frequencies to frequency references. The frequency references are percentages of the rated motor frequency (C4-06). The x axis of the curve represents the pulse frequencies of the DI4, and the y axis represents the percentages of the rated motor frequency (C4-06). The curve is a four-point linear graph with four points: the minimum input point, two inflection points, and the maximum input point. E4-16 corresponds to the x-axis of the inflection point 2, that is, the pulse input frequency at inflection point 2.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Percentage corresponding to inflection point 2 input of HDI four-point curve	0xE411	-800.0% to 800.0%	30.0%	Signed 16 bits	Real time changes	Expansion	-
E4-17	<p>Description:</p> <p>This parameter sets the y axis of HDI four-point curve inflection point 2, that is, the per unit percentage corresponding to inflection point 2.</p> <p>Additional information:</p> <p>When the high-speed pulse function of the DI4 is used as the source of the main frequency, it is necessary to define a</p>							



	curve that maps pulse frequencies to frequency references. The frequency references are percentages of the rated motor frequency (C4-06). The x axis of the curve represents the pulse frequencies of the DI4, and the y axis represents the percentages of the rated motor frequency (C4-06). The curve is a four-point linear graph with four points: the minimum input point, two inflection points, and the maximum input point. E4-17 corresponds to the y axis of the inflection point 2, that is, the reference corresponding to the pulse input frequency at inflection point 2.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Maximum input of HDI four-point curve	0xE412	E4-16 to 20.00 kHz	20.00kHz	Unsigned 16 bit	Real time changes	Expansion	-
E4-18	<p>Description :</p> <p>This parameter sets the maximum input on the x axis of the HDI four-point curve, that is, the maximum pulse input frequency.</p> <p>Additional information:</p> <p>When the high-speed pulse function of the DI4 is used as the source of the main frequency, it is necessary to define a curve that maps pulse frequencies to frequency references. The frequency references are percentages of the rated motor frequency (C4-06). The x axis of the curve represents the pulse frequencies of the DI4, and the y axis represents the percentages of the rated motor frequency (C4-06). The curve is a four-point linear graph with four points: the minimum input point, two inflection points, and the maximum input point. E4-18 corresponds to the x axis of the maximum pulse input, that is, the maximum pulse input frequency.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Percentage corresponding to maximum input of HDI four-point curve	0xE413	-800.0% to 800.0%	100.0%	Signed 16 bits	Real time changes	Expansion	-
E4-19	<p>Description :</p> <p>This parameter sets the y axis of HDI four-point curve maximum input, that is, the per unit percentage corresponding to the maximum pulse input.</p> <p>Additional information:</p> <p>When the high-speed pulse function of the DI4 is used as the source of the main frequency, it is necessary to define a curve that maps pulse frequencies to frequency references. The frequency references are percentages of the rated motor frequency (C4-06). The x axis of the curve represents the pulse frequencies of the DI4, and the y axis represents the percentages of the rated motor frequency (C4-06). The curve is a four-point linear graph with four points: the minimum input point, two inflection points, and the maximum input point. E4-19 corresponds to the y axis of the maximum pulse input, that is, the reference corresponding to the maximum pulse input frequency.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

E4-32	HDI filter time	0xE420	0.00s to 10.00s	0.10s	Unsigned 16 bit	Real time changes	Expansion	-																	
	<p>Description :</p> <p>The parameter is used to set the HDI software filter time.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. Filter the per-unit percentage of the pulse input after being calculated based on the HDI curve. Do not filter HDI sampling.</li> <li>2. When on-site signals are prone to interference, you can increase the HDI filter time to enhance the stability of the input to the per unit percentage.</li> </ol>																								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																	
E4-33	HDI polarity selection	0xE421	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-																	
	<p>Value :</p> <table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>HDI</td> <td>0: Normal value 1: Absolute value 2: Opposite to normal value 3: Opposite to absolute value</td> </tr> <tr> <td>Tens</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Hundreds</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Thousands</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Ten thousands</td> <td>Reserved</td> <td></td> </tr> </tbody> </table> <p>Description :</p> <p>This parameter sets the processing mode of HDI sampling values.</p> <p>Value description:</p> <p>Ones: HDI</p> <p>0: Normal value The per unit percentage of the HDI input value after being calculated based on the curve is used.</p> <p>1: Absolute value The absolute value of the percentage of the HDI input value after being calculated based on the curve is used.</p> <p>2: Opposite to normal value The opposite value of the per unit percentage of the HDI input value after being calculated based on the curve is used.</p> <p>3: Opposite to absolute value The absolute value of the per unit percentage of the HDI input value after being calculated based on the curve is obtained and then the opposite value of the absolute value is used.</p>								Bit	Name	Value	Ones	HDI	0: Normal value 1: Absolute value 2: Opposite to normal value 3: Opposite to absolute value	Tens	Reserved		Hundreds	Reserved		Thousands	Reserved		Ten thousands	Reserved
Bit	Name	Value																							
Ones	HDI	0: Normal value 1: Absolute value 2: Opposite to normal value 3: Opposite to absolute value																							
Tens	Reserved																								
Hundreds	Reserved																								
Thousands	Reserved																								
Ten thousands	Reserved																								

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																	
E4-34	HDI denoising threshold	0xE422	0.0% to 10.0%	0.0%	Unsigned 16 bit	Real time changes	Expansion	-																	
	<p>Description: This parameter sets the HDI denoising time.</p> <p>Additional information: For the per unit percentage of the HDI input after the HDI curve, if the absolute value of the difference between the current value and the last value is within the threshold, denoising is performed. That is, the percentage remains unchanged.</p>																								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																	
E4-35	HDI curve upper and lower limit selection	0xE423	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	-																	
	<p>Value:</p> <table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>HDI</td> <td>0: Limited 1: Not limited</td> </tr> <tr> <td>Tens</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Hundreds</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Thousands</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Ten thousands</td> <td>Reserved</td> <td></td> </tr> </tbody> </table> <p>Description: This parameter sets the output when the HDI input pulse is lower than the minimum input of the curve.</p> <p>Value description: Ones: HDI 0: Limited When the HDI input is lower than the minimum input of the curve, the curve per unit percentage is the value corresponding to the minimum input. 1: Not limited When the AI input voltage is lower than the minimum input of the curve, the interpolation calculation continues based on the curve slope.</p>								Bit	Name	Value	Ones	HDI	0: Limited 1: Not limited	Tens	Reserved		Hundreds	Reserved		Thousands	Reserved		Ten thousands	Reserved
Bit	Name	Value																							
Ones	HDI	0: Limited 1: Not limited																							
Tens	Reserved																								
Hundreds	Reserved																								
Thousands	Reserved																								
Ten thousands	Reserved																								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																	
E4-36	HDI impulse noise	0xE424	0 ms to	0ms	Unsigned	Real time	Expansion	-																	

			1000 ms		16 bit	changes		
<p>Description:</p> <p>This parameter sets the maintenance time of HDI impulse noise, whose threshold is 250 Hz.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. For HDI hardware sampling, if the absolute value of the difference between the current input and the last input is higher than the threshold of 250 Hz for the filter duration, the HDI signal input is normal.</li> <li>2. If the absolute value of the difference between the current input and the last input is below the threshold, the HDI signal is input.</li> </ol>								

## EE: Input and Output Correction (User)

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	AI1 measured voltage 1	0xEE00	-10.000 V to 10.000 V	2.000V	Signed 16 bits	Shutdown change	Expansion	Nothing
EE-00	<p>Description:</p> <p>This parameter indicates the AI1 measured voltage 1, that is, the voltage measured by the meter.</p> <p>Additional information:</p> <p>When analog voltage correction is conducted on AI1, a correction curve is obtained based on two points, which correspond to a measured voltage and a displayed voltage.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	AI1 displayed voltage 1	0xEE01	-10.000 V to 10.000 V	2.000V	Signed 16 bits	Shutdown change	Expansion	Nothing
EE-01	<p>Description:</p> <p>This parameter indicates the AI1 displayed voltage 1, which is the voltage before correction (U0-21).</p> <p>Additional information:</p> <p>When analog voltage correction is conducted on AI1, a correction curve is obtained based on two points, which correspond to a measured voltage and a displayed voltage.</p>							
Param.	Name	Communication	Range	Default	Data	Change	User	Effective

		address			type	mode	authority	mode
	AI1 measured voltage 2	0xEE02	-10.000 V to 10.000 V	8.000V	Signed 16 bits	Shutdown change	Expansion	Nothing
EE-02	<p>Description :</p> <p>This parameter indicates the AI1 measured voltage 2, that is, the voltage measured by the meter.</p> <p>Additional information:</p> <p>When analog voltage correction is conducted on AI1, a correction curve is obtained based on two points, which correspond to a measured voltage and a displayed voltage.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	AI1 displayed voltage 2	0xEE03	-10.000 V to 10.000 V	8.000V	Signed 16 bits	Shutdown change	Expansion	Nothing
EE-03	<p>Description :</p> <p>This parameter indicates the AI1 displayed voltage 2, which is the voltage before correction (U0-21).</p> <p>Additional information:</p> <p>When analog voltage correction is conducted on AI1, a correction curve is obtained based on two points, which correspond to a measured voltage and a displayed voltage.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Measured voltage 1 of MD-BP-M potentiometer	0xEE04	-10.000 V to 10.000 V	2.000V	Signed 16 bits	Shutdown change	Expansion	Nothing
EE-04	<p>Description :</p> <p>This parameter indicates the measured voltage 1 of the MD-BP-M potentiometer, that is, the voltage measured by the meter.</p> <p>Additional information:</p> <p>When analog voltage correction is performed on the external operating panel potentiometer, a correction curve is obtained based on two points, each of which corresponds to a measured voltage and a displayed voltage. The measured voltage is the voltage measured by the meter, and the displayed voltage is the MD-BP-M potentiometer voltage before correction.</p>							
Param.	Name	Communication	Range	Default	Data	Change	User	Effective

		address			type	mode	authority	mode
EE-05	Displayed voltage 1 of MD-BP-M potentiometer	0xEE05	-10.000 V to 10.000 V	2.000V	Signed 16 bits	Shutdown change	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the displayed voltage 1 of the MD-BP-M potentiometer, which is the voltage before correction (U0-57).</p> <p>Additional information:</p> <p>When analog voltage correction is performed on the external operating panel potentiometer, a correction curve is obtained based on two points, each of which corresponds to a measured voltage and a displayed voltage. The measured voltage is the voltage measured by the meter.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
EE-06	Measured voltage 2 of MD-BP-M potentiometer	0xEE06	-10.000 V to 10.000 V	8.000V	Signed 16 bits	Shutdown change	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the measured voltage 2 of the MD-BP-M potentiometer, that is, the voltage measured by the meter.</p> <p>Additional information:</p> <p>When analog voltage correction is performed on the external operating panel potentiometer, a correction curve is obtained based on two points, each of which corresponds to a measured voltage and a displayed voltage. The measured voltage is the voltage measured by the meter, and the displayed voltage is the MD-BP-M potentiometer voltage before correction.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
EE-07	Displayed voltage 2 of MD-BP-M potentiometer	0xEE07	-10.000 V to 10.000 V	8.000V	Signed 16 bits	Shutdown change	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the displayed voltage 2 of the MD-BP-M potentiometer, which is the voltage before correction (U0-57).</p> <p>Additional information:</p> <p>When analog voltage correction is performed on the external operating panel potentiometer, a correction curve is</p>							

	obtained based on two points, each of which corresponds to a measured voltage and a displayed voltage. The measured voltage is the voltage measured by the meter, and the displayed voltage is the MD-BP-M potentiometer voltage before correction.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	AO1 target voltage 1	0xEE0C	-10.000 V to 10.000 V	2.000V	Signed 16 bits	Shutdown change	Expansion	Nothing
EE-12	<p>Description :</p> <p>This parameter sets the AO1 target voltage 1, that is, the expected output voltage.</p> <p>Additional information:</p> <p>When analog voltage correction is carried out on AO1, a correction curve is formed through two points, which correspond to a target voltage and a measured voltage.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	AO1 measured voltage 1	0xEE0D	-10.000 V to 10.000 V	2.000V	Signed 16 bits	Shutdown change	Expansion	Nothing
EE-13	<p>Description :</p> <p>This parameter indicates the AO1 measured voltage 1, that is, the output voltage measured by the meter.</p> <p>Additional information:</p> <p>When analog voltage correction is carried out on AO1, a correction curve is formed through two points, which correspond to a target voltage and a measured voltage.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	AO1 target voltage 2	0xEE0E	-10.000 V to 10.000 V	8.000V	Signed 16 bits	Shutdown change	Expansion	Nothing
EE-14	<p>Description :</p> <p>This parameter sets the AO1 target voltage 2, that is, the expected output voltage.</p> <p>Additional information:</p> <p>When analog voltage correction is carried out on AO1, a correction curve is formed through two points, which correspond to a target voltage and a measured voltage.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
EE-15	AO1 measured voltage 2	0xEE0F	-10.000 V to 10.000 V	8.000V	Signed 16 bits	Shutdown change	Expansion	Nothing
	<p>Description:</p> <p>This parameter indicates the AO1 measured voltage 2, that is, the output voltage measured by the meter.</p> <p>Additional information:</p> <p>When analog voltage correction is carried out on AO1, a correction curve is formed through two points, which correspond to a target voltage and a measured voltage.</p>							

## H1: Fault Level Settings

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode															
H1-00	Fault protection action selection 0	0x8100	Refer to "Value"	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing															
	<p>Value:</p> <table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>Overcurrent (E002)</td> <td>0: Coast to stop</td> </tr> <tr> <td>Tens</td> <td>Overvoltage (E005)</td> <td>0: Coast to stop</td> </tr> <tr> <td>Hundreds</td> <td>Buffer fault (E008)</td> <td>0: Coast to stop</td> </tr> <tr> <td>Thousands</td> <td>Undervoltage (E009)</td> <td>0: Coast to stop</td> </tr> </tbody> </table>								Bit	Name	Value	Ones	Overcurrent (E002)	0: Coast to stop	Tens	Overvoltage (E005)	0: Coast to stop	Hundreds	Buffer fault (E008)	0: Coast to stop	Thousands	Undervoltage (E009)	0: Coast to stop
	Bit	Name	Value																				
Ones	Overcurrent (E002)	0: Coast to stop																					
Tens	Overvoltage (E005)	0: Coast to stop																					
Hundreds	Buffer fault (E008)	0: Coast to stop																					
Thousands	Undervoltage (E009)	0: Coast to stop																					
<p>Description:</p> <p>The ones, tens, hundreds, and thousands of this parameter are used to set protection actions upon different faults.</p> <p>Value description:</p> <p>Ones: Overcurrent (E002) 0: Coast to stop When the AC drive encounters overcurrent due to certain reasons, the operating panel displays E002 and the motor coasts to stop.</p> <p>Tens: Overvoltage (E005) 0: Coast to stop When the AC drive encounters overvoltage due to certain reasons, the operating panel displays E005 and the motor coasts to stop.</p> <p>Hundreds: Pre-charge fault (E008)</p>																							



0: Coast to stop  
 When the AC drive encounters a buffer fault due to certain reasons, the operating panel displays E008 and the motor coasts to stop.  
 Thousands: Undervoltage (E009)  
 0: Coast to stop  
 When the AC drive encounters undervoltage for some reason, the operating panel displays E009 and the motor coasts to stop.  
 Additional information:  
 Fault protection actions for overcurrent, overvoltage, pre-charge fault, and undervoltage set by this parameter cannot be changed. If the above fault occurs, the AC drive stops output and the motor coasts to stop.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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H1-01	Fault protection action selection 1	0x8101	Refer to "Value"	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
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Value:

Bit	Name	Value
Ones	Inverter overload (E010)	0: Coast to stop
Tens	Motor overload (E011)	0: Coast to stop
Hundreds	Phase loss on the input side (E012)	0: Coast to stop 1: Stop at maximum capability 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore
Thousands	Phase loss on the output side (E013)	0: Coast to stop

Description:  
 The ones, tens, hundreds, and thousands of this parameter are used to set protection actions upon different faults.

Value description:  
 Ones: Inverter overload (E010)  
 0: Coast to stop  
 When the AC drive encounters overload due to certain reasons, the operating panel displays E010 and the motor coasts to stop.  
 Tens: Motor overload (E011)  
 0: Coast to stop

When the AC drive encounters motor overload due to certain reasons, the operating panel displays E011 and the motor coasts to stop.

Hundreds: Phase loss on the input side (E012)

0: Coast to stop

When the AC drive encounters phase loss on the input side due to certain reasons, the operating panel displays E012 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters phase loss on the input side due to certain reasons, the operating panel displays E012 and the motor stops at the maximum capability.

2: Quick stop

When the AC drive encounters phase loss on the input side due to certain reasons, the operating panel displays E012 and the motor performs quick stop.

3: Decelerate to stop

When the AC drive encounters phase loss on the input side due to certain reasons, the operating panel displays E012 and the motor decelerates to stop.

9: Run with speed restriction

When the AC drive encounters phase loss on the input side due to certain reasons, the operating panel displays L012 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction

When the AC drive encounters phase loss on the input side due to certain reasons, the operating panel displays L012 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction

When the AC drive encounters phase loss on the input side due to certain reasons, the operating panel displays L012 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction

When the AC drive encounters phase loss on the input side due to certain reasons, the operating panel displays L012 and the AC drive runs with the torque limited to a certain range.

13: Alarm

When the AC drive encounters phase loss on the input side due to certain reasons, the operating panel displays A012 and the AC drive operates normally.

14: Prompt

When the AC drive encounters phase loss on the input side due to certain reasons, the operating panel displays N012 and the AC drive operates normally.

15: Ignore

When the AC drive encounters phase loss on the input side due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Thousands: Phase loss on the output side (E013)

0: Coast to stop

When the AC drive encounters phase loss on the output side due to certain reasons, the operating panel displays E013 and the motor coasts to stop.

Additional information:

Fault protection actions for inverter overload, motor overload, and phase loss on the output side set by this parameter

	cannot be changed. If the above fault occurs, the AC drive stops output and the motor coasts to stop. If a phase loss fault occurs on the input side, you can modify the fault protection action to make the AC drive act accordingly.																						
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode															
H1-02	Fault protection action selection 2	0x8102	Refer to "Value"	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing															
Value:																							
<table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>Drive overtemperature threshold reach (E014)</td> <td>0: Coast to stop</td> </tr> <tr> <td>Tens</td> <td>External fault (E015)</td> <td>0: Coast to stop 1: Stop at maximum capability 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore</td> </tr> <tr> <td>Hundreds</td> <td>Reserved</td> <td>0: Coast to stop</td> </tr> <tr> <td>Thousands</td> <td>Current sampling exception (E018)</td> <td>0: Coast to stop</td> </tr> </tbody> </table>									Bit	Name	Value	Ones	Drive overtemperature threshold reach (E014)	0: Coast to stop	Tens	External fault (E015)	0: Coast to stop 1: Stop at maximum capability 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore	Hundreds	Reserved	0: Coast to stop	Thousands	Current sampling exception (E018)	0: Coast to stop
Bit	Name	Value																					
Ones	Drive overtemperature threshold reach (E014)	0: Coast to stop																					
Tens	External fault (E015)	0: Coast to stop 1: Stop at maximum capability 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore																					
Hundreds	Reserved	0: Coast to stop																					
Thousands	Current sampling exception (E018)	0: Coast to stop																					
Description:																							
The ones, tens, and thousands of this parameter are used to set protection actions upon different faults.																							
Value description:																							
Ones: Drive overtemperature threshold reach (E014)																							
0: Coast to stop																							
When the AC drive encounters the drive overtemperature threshold reach fault due to certain reasons, the operating panel displays E014 and the motor coasts to stop.																							
Tens: External fault (E015)																							
0: Coast to stop																							
When the AC drive encounters an external fault due to certain reasons, the operating panel displays E015 and the motor coasts to stop.																							
1: Stop at maximum capability																							
When the AC drive encounters an external fault due to certain reasons, the operating panel displays E015 and the motor stops at the maximum capability.																							
2: Quick stop																							
When the AC drive encounters an external fault due to certain reasons, the operating panel displays E015 and the motor performs quick stop.																							

3: Decelerate to stop  
 When the AC drive encounters an external fault due to certain reasons, the operating panel displays E015 and the motor decelerates to stop.

9: Run with speed restriction  
 When the AC drive encounters an external fault due to certain reasons, the operating panel displays L015 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction  
 When the AC drive encounters an external fault due to certain reasons, the operating panel displays L015 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction  
 When the AC drive encounters an external fault due to certain reasons, the operating panel displays L015 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction  
 When the AC drive encounters an external fault due to certain reasons, the operating panel displays L015 and the AC drive runs with the torque limited to a certain range.

13: Alarm  
 When the AC drive encounters an external fault due to certain reasons, the operating panel displays A015 and the AC drive operates normally.

14: Prompt  
 When the AC drive encounters an external fault due to certain reasons, the operating panel displays N015 and the AC drive operates normally.

15: Ignore  
 When the AC drive encounters an external fault due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Thousands: Current sampling error (E018)

0: Coast to stop  
 When the AC drive encounters a current sampling fault due to certain reasons, the operating panel displays E018 and the motor coasts to stop.

Additional information:  
 Fault protection actions for drive overtemperature threshold reach and current sampling faults set by this parameter cannot be changed. If the above fault occurs, the AC drive stops output and the motor coasts to stop. If an external fault occurs, you can modify the fault protection action to make the AC drive act accordingly.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Fault protection action selection 3	0x8103	Refer to "Value"	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
H1-03	Value:							
	Bit	Name	Value					
	Ones	Parameter auto-tuning error (E019)	0: Coast to stop					
	Tens	Reserved	0: Coast to stop					

	Hundreds	EEPROM fault (E021)											
	Thousands	Reserved											
	<p>0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop</p> <p>0: Coast to stop</p>												
	<p>Description :</p> <p>The ones, tens, and thousands of this parameter are used to set protection actions upon different faults.</p> <p>Value description:</p> <p>Ones: Parameter auto-tuning error (E019)</p> <p>0: Coast to stop</p> <p>When the AC drive encounters a parameter auto-tuning error due to certain reasons, the operating panel displays E019 and the motor coasts to stop.</p> <p>Hundreds: EEPROM fault (E021)</p> <p>0: Coast to stop</p> <p>When the AC drive encounters the EEPROM fault due to certain reasons, the operating panel displays E021 and the motor coasts to stop.</p> <p>1: Stop at maximum capability</p> <p>When the AC drive encounters the EEPROM fault due to certain reasons, the operating panel displays E021 and the motor stops at the maximum capability.</p> <p>2: Quick stop</p> <p>When the AC drive encounters the EEPROM fault due to certain reasons, the operating panel displays E021 and the motor performs quick stop.</p> <p>3: Decelerate to stop</p> <p>When the AC drive encounters the EEPROM fault due to certain reasons, the operating panel displays E021 and the motor decelerates to stop.</p> <p>Additional information:</p> <p>Fault protection actions for the parameter auto-tuning error set by this parameter cannot be changed. If the above fault occurs, the AC drive stops output and the motor coasts to stop. If an EEPROM fault occurs, you can modify the fault protection action to make the AC drive act accordingly.</p>												
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode					
H1-04	Fault protection action selection 4	0x8104	Refer to "Value"	0xD000	Unsigned 16 bit	Real time changes	Expansion	Nothing					
	<p>Value:</p> <table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>Output short-circuited to ground (E023)</td> <td>0: Coast to stop</td> </tr> </tbody> </table>								Bit	Name	Value	Ones	Output short-circuited to ground (E023)
Bit	Name	Value											
Ones	Output short-circuited to ground (E023)	0: Coast to stop											

	Tens	Cumulative running time reach (E026)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore
	Hundreds	User-defined fault (E027)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore
	Thousands	User-defined alarm (E028)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore

**Description:**

The ones, tens, hundreds, and thousands of this parameter are used to set protection actions upon different faults.

**Value description:**

Ones: Output short-circuited to ground (E023)

0: Coast to stop

When the AC drive encounters an output short-circuited to ground fault due to certain reasons, the operating panel displays E023 and the motor coasts to stop.

Tens: Cumulative running time reach (E026)

0: Coast to stop

When the AC drive encounters a cumulative running time reach fault due to certain reasons, the operating panel displays E026 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters a cumulative running time reach fault due to certain reasons, the operating panel displays E026 and the motor stops at the maximum capability.

2: Quick stop

When the AC drive encounters a cumulative running time reach fault due to certain reasons, the operating panel displays E026 and the motor performs quick stop.

3: Decelerate to stop

When the AC drive encounters a cumulative running time reach fault due to certain reasons, the operating panel displays E026 and the motor decelerates to stop.

9: Run with speed restriction

When the AC drive encounters a cumulative running time reach fault due to certain reasons, the operating panel displays L026 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction

When the AC drive encounters a cumulative running time reach fault due to certain reasons, the operating panel displays L026 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction

When the AC drive encounters a cumulative running time reach fault due to certain reasons, the operating panel displays L026 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction

When the AC drive encounters a cumulative running time reach fault due to certain reasons, the operating panel displays L026 and the AC drive runs with the torque limited to a certain range.

13: Alarm

When the AC drive encounters a cumulative running time reach fault due to certain reasons, the operating panel displays A026 and the AC drive operates normally.

14: Prompt

When the AC drive encounters a cumulative running time reach fault due to certain reasons, the operating panel displays N026 and the AC drive operates normally.

15: Ignore

When the AC drive encounters a cumulative running time reach fault due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Hundreds: User-defined fault (E027)

0: Coast to stop

When the AC drive encounters a user-defined fault due to certain reasons, the operating panel displays E027 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters a user-defined fault due to certain reasons, the operating panel displays E027 and the motor stops at the maximum capability.

2: Quick stop

When the AC drive encounters a user-defined fault due to certain reasons, the operating panel displays E027 and the motor performs quick stop.

3: Decelerate to stop

When the AC drive encounters a user-defined fault due to certain reasons, the operating panel displays E027 and the motor decelerates to stop.

9: Run with speed restriction

When the AC drive encounters a user-defined fault due to certain reasons, the operating panel displays L027 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction

When the AC drive encounters a user-defined fault due to certain reasons, the operating panel displays L027 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction

When the AC drive encounters a user-defined fault due to certain reasons, the operating panel displays L027 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction

When the AC drive encounters a user-defined fault due to certain reasons, the operating panel displays L027 and the AC drive runs with the torque limited to a certain range.

13: Alarm

When the AC drive encounters a user-defined fault due to certain reasons, the operating panel displays L027 and the AC drive operates normally.

14: Prompt

When the AC drive encounters a user-defined fault due to certain reasons, the operating panel displays N027 and the AC drive operates normally.

15: Ignore

When the AC drive encounters a user-defined fault due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Thousands: User-defined alarm (E028)

0: Coast to stop

When the AC drive encounters a user-defined alarm due to certain reasons, the operating panel displays E028 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters a user-defined alarm due to certain reasons, the operating panel displays E028 and the motor stops at the maximum capability.

2: Quick stop

When the AC drive encounters a user-defined alarm due to certain reasons, the operating panel displays E028 and the motor performs quick stop.

3: Decelerate to stop

When the AC drive encounters a user-defined alarm due to certain reasons, the operating panel displays E028 and the motor decelerates to stop.

9: Run with speed restriction

When the AC drive encounters a user-defined alarm due to certain reasons, the operating panel displays L028 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction

When the AC drive encounters a user-defined alarm due to certain reasons, the operating panel displays L028 and the AC drive runs with the power limited to a certain range.



11: Run with current restriction  
 When the AC drive encounters a user-defined alarm due to certain reasons, the operating panel displays L028 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction  
 When the AC drive encounters a user-defined alarm due to certain reasons, the operating panel displays L028 and the AC drive runs with the torque limited to a certain range.

13: Alarm  
 When the AC drive encounters a user-defined alarm due to certain reasons, the operating panel displays A028 and the AC drive operates normally.

14: Prompt  
 When the AC drive encounters a user-defined alarm due to certain reasons, the operating panel displays N028 and the AC drive operates normally.

15: Ignore  
 When the AC drive encounters a user-defined alarm due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Additional information:  
 Fault protection actions for output short-circuited to ground faults set by this parameter cannot be changed. If the above fault occurs, the AC drive stops output and the motor coasts to stop. If the cumulative running time reach fault and user-defined fault occur, you can modify the fault protection action to make the AC drive act accordingly.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																																			
	Fault protection action selection 5	0x8105	Refer to "Value"	0xD000	Unsigned 16 bit	Real time changes	Expansion	Nothing																																			
H1-05	Value:																																										
	Ones	Cumulative power-on time reach (E029)	<table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>0: Coast to stop</td> </tr> <tr> <td></td> <td></td> <td>1: Stop at maximum capacity</td> </tr> <tr> <td></td> <td></td> <td>2: Quick stop</td> </tr> <tr> <td></td> <td></td> <td>3: Decelerate to stop</td> </tr> <tr> <td></td> <td></td> <td>9: Run with speed restriction</td> </tr> <tr> <td></td> <td></td> <td>10: Run with power restriction</td> </tr> <tr> <td></td> <td></td> <td>11: Run with current restriction</td> </tr> <tr> <td></td> <td></td> <td>12: Run with torque restriction</td> </tr> <tr> <td></td> <td></td> <td>13: Alarm</td> </tr> <tr> <td></td> <td></td> <td>14: Prompt</td> </tr> <tr> <td></td> <td></td> <td>15: Ignore</td> </tr> </tbody> </table>						Bit	Name	Value			0: Coast to stop			1: Stop at maximum capacity			2: Quick stop			3: Decelerate to stop			9: Run with speed restriction			10: Run with power restriction			11: Run with current restriction			12: Run with torque restriction			13: Alarm			14: Prompt		
Bit	Name	Value																																									
		0: Coast to stop																																									
		1: Stop at maximum capacity																																									
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		12: Run with torque restriction																																									
		13: Alarm																																									
		14: Prompt																																									
		15: Ignore																																									

	Tens	Three-phase loss (E030)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Display alarm 14: Prompt 15: Ignore
	Hundreds	PID fault (E031)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Display alarm 14: Prompt 15: Ignore
	Thousands	Parameter exception (E032)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Display alarm 14: Prompt 15: Ignore

Description:

The ones, tens, hundreds, and thousands of this parameter are used to set protection actions upon different faults.

Value description:

Ones: Cumulative power-on time reach (E029)

0: Coast to stop

When the AC drive encounters a cumulative power-on time reach fault due to certain reasons, the operating panel displays E029 and the motor coasts to stop.

1: Stop at maximum capability

<p>When the AC drive encounters a cumulative power-on time reach fault due to certain reasons, the operating panel displays E029 and the motor stops at the maximum capability.</p> <p>2: Quick stop</p> <p>When the AC drive encounters a cumulative power-on time reach fault due to certain reasons, the operating panel displays E029 and the motor performs quick stop.</p> <p>3: Decelerate to stop</p> <p>When the AC drive encounters a cumulative power-on time reach fault due to certain reasons, the operating panel displays E029 and the motor decelerates to stop.</p> <p>9: Run with speed restriction</p> <p>When the AC drive encounters a cumulative power-on time reach fault due to certain reasons, the operating panel displays L029 and the AC drive runs with the speed limited to a certain range.</p> <p>10: Run with power restriction</p> <p>When the AC drive encounters a cumulative power-on time reach fault due to certain reasons, the operating panel displays L029 and the AC drive runs with the power limited to a certain range.</p> <p>11: Run with current restriction</p> <p>When the AC drive encounters a cumulative power-on time reach fault due to certain reasons, the operating panel displays L029 and the AC drive runs with the current limited to a certain range.</p> <p>12: Run with torque restriction</p> <p>When the AC drive encounters a cumulative power-on time reach fault due to certain reasons, the operating panel displays L029 and the AC drive runs with the torque limited to a certain range.</p> <p>13: Alarm</p> <p>When the AC drive encounters a cumulative power-on time reach fault due to certain reasons, the operating panel displays A029 and the AC drive operates normally.</p> <p>14: Prompt</p> <p>When the AC drive encounters a cumulative power-on time reach fault due to certain reasons, the operating panel displays N029 and the AC drive operates normally.</p> <p>15: Ignore</p> <p>When the AC drive encounters a cumulative power-on time reach fault due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.</p> <p>Tens: Three-phase loss (E030)</p> <p>0: Coast to stop</p> <p>When the AC drive encounters three-phase loss due to certain reasons, the operating panel displays E030 and the motor coasts to stop.</p> <p>1: Stop at maximum capability</p> <p>When the AC drive encounters three-phase loss due to certain reasons, the operating panel displays E030 and the motor stops at the maximum capability.</p> <p>2: Quick stop</p> <p>When the AC drive encounters three-phase loss due to certain reasons, the operating panel displays E030 and the motor performs quick stop.</p> <p>3: Decelerate to stop</p> <p>When the AC drive encounters three-phase loss due to certain reasons, the operating panel displays E030 and the motor decelerates to stop.</p> <p>9: Run with speed restriction</p>
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<p>When the AC drive encounters three-phase loss due to certain reasons, the operating panel displays L030 and the AC drive runs with the speed limited to a certain range.</p> <p>10: Run with power restriction</p> <p>When the AC drive encounters three-phase loss due to certain reasons, the operating panel displays L030 and the AC drive runs with the power limited to a certain range.</p> <p>11: Run with current restriction</p> <p>When the AC drive encounters three-phase loss due to certain reasons, the operating panel displays L030 and the AC drive runs with the current limited to a certain range.</p> <p>12: Run with torque restriction</p> <p>When the AC drive encounters three-phase loss due to certain reasons, the operating panel displays L030 and the AC drive runs with the torque limited to a certain range.</p> <p>13: Alarm</p> <p>When the AC drive encounters three-phase loss due to certain reasons, the operating panel displays A030 and the AC drive operates normally.</p> <p>14: Prompt</p> <p>When the AC drive encounters three-phase loss due to certain reasons, the operating panel displays N030 and the AC drive operates normally.</p> <p>15: Ignore</p> <p>When the AC drive encounters three-phase loss due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.</p> <p>Hundreds: PID fault (E031)</p> <p>0: Coast to stop</p> <p>When the AC drive encounters the PID fault due to certain reasons, the operating panel displays E031 and the motor coasts to stop.</p> <p>1: Stop at maximum capability</p> <p>When the AC drive encounters the PID fault due to certain reasons, the operating panel displays E031 and the motor stops at the maximum capability.</p> <p>2: Quick stop</p> <p>When the AC drive encounters the PID fault due to certain reasons, the operating panel displays E031 and the motor performs quick stop.</p> <p>3: Decelerate to stop</p> <p>When the AC drive encounters the PID fault due to certain reasons, the operating panel displays E031 and the motor decelerates to stop.</p> <p>9: Run with speed restriction</p> <p>When the AC drive encounters the PID fault due to certain reasons, the operating panel displays L031 and the AC drive runs with the speed limited to a certain range.</p> <p>10: Run with power restriction</p> <p>When the AC drive encounters the PID fault due to certain reasons, the operating panel displays L031 and the AC drive runs with the power limited to a certain range.</p> <p>11: Run with current restriction</p> <p>When the AC drive encounters the PID fault due to certain reasons, the operating panel displays L031 and the AC drive runs with the current limited to a certain range.</p> <p>12: Run with torque restriction</p>
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<p>When the AC drive encounters the PID fault due to certain reasons, the operating panel displays L031 and the AC drive runs with the torque limited to a certain range.</p> <p>13: Alarm</p> <p>When the AC drive encounters the PID fault due to certain reasons, the operating panel displays A031 and the AC drive operates normally.</p> <p>14: Prompt</p> <p>When the AC drive encounters the PID fault due to certain reasons, the operating panel displays N031 and the AC drive operates normally..</p> <p>15: Ignore</p> <p>When the AC drive encounters the PID fault due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.</p> <p>Thousands: Parameter exception (E032)</p> <p>0: Coast to stop</p> <p>When the AC drive encounters a parameter exception due to certain reasons, the operating panel displays E032 and the motor coasts to stop.</p> <p>1: Stop at maximum capability</p> <p>When the AC drive encounters a parameter exception due to certain reasons, the operating panel displays E032 and the motor stops at the maximum capability.</p> <p>2: Quick stop</p> <p>When the AC drive encounters a parameter exception due to certain reasons, the operating panel displays E032 and the motor performs quick stop.</p> <p>3: Decelerate to stop</p> <p>When the AC drive encounters a parameter exception due to certain reasons, the operating panel displays E032 and the motor decelerates to stop.</p> <p>9: Run with speed restriction</p> <p>When the AC drive encounters a parameter exception due to certain reasons, the operating panel displays L032 and the AC drive runs with the speed limited to a certain range.</p> <p>10: Run with power restriction</p> <p>When the AC drive encounters a parameter exception due to certain reasons, the operating panel displays L032 and the AC drive runs with the power limited to a certain range.</p> <p>11: Run with current restriction</p> <p>When the AC drive encounters a parameter exception due to certain reasons, the operating panel displays L032 and the AC drive runs with the current limited to a certain range.</p> <p>12: Run with torque restriction</p> <p>When the AC drive encounters a parameter exception due to certain reasons, the operating panel displays L032 and the AC drive runs with the torque limited to a certain range.</p> <p>13: Alarm</p> <p>When the AC drive encounters a parameter exception due to certain reasons, the operating panel displays A032 and the AC drive operates normally.</p> <p>14: Prompt</p> <p>When the AC drive encounters a parameter exception due to certain reasons, the operating panel displays N032 and the AC drive operates normally.</p> <p>15: Ignore</p>
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	<p>When the AC drive encounters a parameter exception due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.</p> <p>Additional information:</p> <p>Fault protection actions for the cumulative power-on time reach fault, three-phase loss fault, parameter exception, and PID fault can be changed to enable the AC drive to act accordingly.</p>																						
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode															
H1-06	Fault protection action selection 6	0x8106	Refer to "Value"	0x00D0	Unsigned 16 bit	Real time changes	Expansion	Nothing															
<p>Value:</p> <table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>Reserved</td> <td>0: Coast to stop</td> </tr> <tr> <td>Tens</td> <td>Excessive speed deviation (E042)</td> <td>0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Display alarm 14: Prompt 15: Ignore</td> </tr> <tr> <td>Hundreds</td> <td>Motor overspeed (E043)</td> <td>0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Display alarm 14: Prompt 15: Ignore</td> </tr> <tr> <td>Thousands</td> <td>Reserved</td> <td>0: Coast to stop</td> </tr> </tbody> </table>									Bit	Name	Value	Ones	Reserved	0: Coast to stop	Tens	Excessive speed deviation (E042)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Display alarm 14: Prompt 15: Ignore	Hundreds	Motor overspeed (E043)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Display alarm 14: Prompt 15: Ignore	Thousands	Reserved	0: Coast to stop
Bit	Name	Value																					
Ones	Reserved	0: Coast to stop																					
Tens	Excessive speed deviation (E042)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Display alarm 14: Prompt 15: Ignore																					
Hundreds	Motor overspeed (E043)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Display alarm 14: Prompt 15: Ignore																					
Thousands	Reserved	0: Coast to stop																					
<p>Description:</p> <p>The tens and hundreds of this parameter are used to set protection actions upon different faults.</p> <p>Value description:</p> <p>Ones: Reserved</p>																							

Tens: Excessive speed deviation (E042)

0: Coast to stop

When the AC drive encounters excessive speed deviation due to certain reasons, the operating panel displays E042 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters excessive speed deviation due to certain reasons, the operating panel displays E042 and the motor stops at the maximum capability.

2: Quick stop

When the AC drive encounters excessive speed deviation due to certain reasons, the operating panel displays E042 and the motor performs quick stop.

3: Decelerate to stop

When the AC drive encounters excessive speed deviation due to certain reasons, the operating panel displays E042 and the motor decelerates to stop.

9: Run with speed restriction

When the AC drive encounters excessive speed deviation due to certain reasons, the operating panel displays L042 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction

When the AC drive encounters excessive speed deviation due to certain reasons, the operating panel displays L042 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction

When the AC drive encounters excessive speed deviation due to certain reasons, the operating panel displays L042 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction

When the AC drive encounters excessive speed deviation due to certain reasons, the operating panel displays L042 and the AC drive runs with the torque limited to a certain range.

13: Alarm

When the AC drive encounters excessive speed deviation due to certain reasons, the operating panel displays A042 and the AC drive operates normally.

14: Prompt

When the AC drive encounters excessive speed deviation due to certain reasons, the operating panel displays N042 and the AC drive operates normally.

15: Ignore

When the AC drive encounters excessive speed deviation due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Hundreds: Motor overspeed (E043)

0: Coast to stop

When the AC drive encounters motor overspeed due to certain reasons, the operating panel displays E043 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters motor overspeed due to certain reasons, the operating panel displays E043 and the motor stops at the maximum capability.

2: Quick stop

When the AC drive encounters motor overspeed due to certain reasons, the operating panel displays E043 and the motor

performs quick stop.

3: Decelerate to stop  
When the AC drive encounters motor overspeed due to certain reasons, the operating panel displays E043 and the motor decelerates to stop.

9: Run with speed restriction  
When the AC drive encounters motor overspeed due to certain reasons, the operating panel displays L043 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction  
When the AC drive encounters motor overspeed due to certain reasons, the operating panel displays L043 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction  
When the AC drive encounters motor overspeed due to certain reasons, the operating panel displays L043 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction  
When the AC drive encounters motor overspeed due to certain reasons, the operating panel displays L043 and the AC drive runs with the torque limited to a certain range.

13: Alarm  
When the AC drive encounters motor overspeed due to certain reasons, the operating panel displays A043 and the AC drive operates normally.

14: Prompt  
When the AC drive encounters motor overspeed due to certain reasons, the operating panel displays N043 and the AC drive operates normally.

15: Ignore  
When the AC drive encounters motor overspeed due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Thousands: Reserved

Additional information:  
Fault protection actions for the excessive speed deviation and motor overspeed faults can be changed to enable the AC drive to act accordingly.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H1-07	Fault protection action selection 7	0x8107	Refer to "Value"	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value:							
	Bit	Name		Value				
	Ones	Reserved		0: Coast to stop				
	Tens	Reserved		0: Coast to stop				
Hundreds	Magnetic pole position auto-tuning error (E051)		0: Coast to stop					
Thousands	Reserved		0: Coast to stop					



<p>Description :</p> <p>The hundreds of this parameter is used to set protection actions upon different faults.</p> <p>Value description:</p> <p>Hundreds: Magnetic pole position auto-tuning error (E051)</p> <p>0: Coast to stop</p> <p>When the AC drive encounters a magnetic pole position auto-tuning error due to certain reasons, the operating panel displays E051 and the motor coasts to stop.</p> <p>Additional information:</p> <p>Fault protection actions for the magnetic pole position auto-tuning error set by this parameter cannot be changed. If the above fault occurs, the AC drive stops output and the motor coasts to stop.</p>																							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode															
H1-08	Fault protection action selection 8	0x8108	Refer to "Value"	0x0	Unsigned 16 bit	Real time changes	Expansion	Nothing															
	<p>Value:</p> <table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>Self-check fault 1 (E056)</td> <td>0: Coast to stop</td> </tr> <tr> <td>Tens</td> <td>Self-check fault 2 (E057)</td> <td>0: Coast to stop</td> </tr> <tr> <td>Hundreds</td> <td>Self-check fault 3 (E058)</td> <td>0: Coast to stop</td> </tr> <tr> <td>Thousands</td> <td>Self-check fault 4 (E059)</td> <td>0: Coast to stop 1: Stop at maximum capability 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore</td> </tr> </tbody> </table>								Bit	Name	Value	Ones	Self-check fault 1 (E056)	0: Coast to stop	Tens	Self-check fault 2 (E057)	0: Coast to stop	Hundreds	Self-check fault 3 (E058)	0: Coast to stop	Thousands	Self-check fault 4 (E059)	0: Coast to stop 1: Stop at maximum capability 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore
	Bit	Name	Value																				
Ones	Self-check fault 1 (E056)	0: Coast to stop																					
Tens	Self-check fault 2 (E057)	0: Coast to stop																					
Hundreds	Self-check fault 3 (E058)	0: Coast to stop																					
Thousands	Self-check fault 4 (E059)	0: Coast to stop 1: Stop at maximum capability 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore																					
<p>Description :</p> <p>The ones, tens, hundreds, and thousands of this parameter are used to set protection actions upon different faults.</p> <p>Value description:</p> <p>Ones: Self-check fault 1 (E056)</p> <p>0: Coast to stop</p> <p>When the AC drive encounters self-check fault 1 due to certain reasons, the operating panel displays E056 and the motor coasts to stop.</p>																							

<p>Tens position: Self-check fault 2 (E057)</p> <p>0: Coast to stop</p> <p>When the AC drive encounters self-check fault 2 due to certain reasons, the operating panel displays E057 and the motor coasts to stop.</p> <p>Hundreds: Self-check fault 3 (E058)</p> <p>0: Coast to stop</p> <p>When the AC drive encounters self-check fault 3 due to certain reasons, the operating panel displays E058 and the motor coasts to stop.</p> <p>Thousands: Self-check fault 4 (E059)</p> <p>0: Coast to stop</p> <p>When the AC drive encounters self-check fault 4 due to certain reasons, the operating panel displays E059 and the motor coasts to stop.</p> <p>1: Stop at maximum capability</p> <p>When the AC drive encounters self-check fault 4 due to certain reasons, the operating panel displays E059 and the motor stops at the maximum capability.</p> <p>2: Quick stop</p> <p>When the AC drive encounters self-check fault 4 due to certain reasons, the operating panel displays E059 and the motor performs quick stop.</p> <p>3: Decelerate to stop</p> <p>When the AC drive encounters self-check fault 4 due to certain reasons, the operating panel displays E059 and the motor decelerates to stop.</p> <p>9: Run with speed restriction</p> <p>When the AC drive encounters self-check fault 4 due to certain reasons, the operating panel displays L059 and the AC drive runs with the speed limited to a certain range.</p> <p>10: Run with power restriction</p> <p>When the AC drive encounters self-check fault 4 due to certain reasons, the operating panel displays L059 and the AC drive runs with the power limited to a certain range.</p> <p>11: Run with current restriction</p> <p>When the AC drive encounters self-check fault 4 due to certain reasons, the operating panel displays L059 and the AC drive runs with the current limited to a certain range.</p> <p>12: Run with torque restriction</p> <p>When the AC drive encounters self-check fault 4 due to certain reasons, the operating panel displays L059 and the AC drive runs with the torque limited to a certain range.</p> <p>13: Alarm</p> <p>When the AC drive encounters self-check fault 4 due to certain reasons, the operating panel displays A059 and the AC drive operates normally.</p> <p>14: Prompt</p> <p>When the AC drive encounters self-check fault 4 due to certain reasons, the operating panel displays N059 and the AC drive operates normally.</p> <p>15: Ignore</p> <p>When the AC drive encounters self-check fault 4 due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.</p>
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	<p>Additional information:  Fault protection actions for self-check fault 1 to self-check fault 3 set by this parameter cannot be changed. If the above fault occurs, the AC drive stops output and the motor coasts to stop. Fault protection actions for self-check fault 4 set by this parameter can be changed to enable the AC drive to act accordingly.</p>																						
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode															
H1-09	Fault protection action selection 9	0x8109	Refer to "Value"	0xF000	Unsigned 16 bit	Real time changes	Expansion	Nothing															
	<p>Value:</p> <table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>Reserved</td> <td>0: Coast to stop</td> </tr> <tr> <td>Tens</td> <td>Reserved</td> <td>0: Coast to stop</td> </tr> <tr> <td>Hundreds</td> <td>Reserved</td> <td>0: Coast to stop</td> </tr> <tr> <td>Thousands</td> <td>Fan fault (E080)</td> <td> 0: Coast to stop  1: Stop at maximum capability  2: Quick stop  3: Decelerate to stop  9: Run with speed restriction  10: Run with power restriction  11: Run with current restriction  12: Run with torque restriction  13: Alarm  14: Prompt  15: Ignore </td> </tr> </tbody> </table>								Bit	Name	Value	Ones	Reserved	0: Coast to stop	Tens	Reserved	0: Coast to stop	Hundreds	Reserved	0: Coast to stop	Thousands	Fan fault (E080)	0: Coast to stop 1: Stop at maximum capability 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore
	Bit	Name	Value																				
Ones	Reserved	0: Coast to stop																					
Tens	Reserved	0: Coast to stop																					
Hundreds	Reserved	0: Coast to stop																					
Thousands	Fan fault (E080)	0: Coast to stop 1: Stop at maximum capability 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore																					
<p>Description:  The thousands of this parameter is used to set protection actions upon different faults.</p> <p>Value description:  Thousands: Fan fault (E080)  0: Coast to stop  When the AC drive encounters a fan fault due to certain reasons, the operating panel displays E080 and the motor coasts to stop.  1: Stop at maximum capability  When the AC drive encounters a fan fault due to certain reasons, the operating panel displays E080 and the motor stops at the maximum capability.  2: Quick stop  When the AC drive encounters a fan fault due to certain reasons, the operating panel displays E080 and the motor performs quick stop.  3: Decelerate to stop  When the AC drive encounters a fan fault due to certain reasons, the operating panel displays E080 and the motor</p>																							

decelerates to stop.

9: Run with speed restriction  
 When the AC drive encounters a fan fault due to certain reasons, the operating panel displays L080 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction  
 When the AC drive encounters a fan fault due to certain reasons, the operating panel displays L080 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction  
 When the AC drive encounters a fan fault due to certain reasons, the operating panel displays L080 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction  
 When the AC drive encounters a fan fault due to certain reasons, the operating panel displays L080 and the AC drive runs with the torque limited to a certain range.

13: Alarm  
 When the AC drive encounters a fan fault due to certain reasons, the operating panel displays A080 and the AC drive operates normally.

14: Prompt  
 When the AC drive encounters a fan fault due to certain reasons, the operating panel displays N080 and the AC drive operates normally.

15: Ignore  
 When the AC drive encounters a fan fault due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Additional information:  
 Fault protection actions for fan faults set by this parameter can be changed to enable the AC drive to act accordingly.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
H1-10	Fault protection action selection 10	0x810A	Refer to "Value"	0xF00	Unsigned 16 bit	Real time changes	Expansion	Nothing								
	Value:															
	<table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Ones</td> <td>Reserved</td> <td>0: Coast to stop</td> </tr> <tr> <td>Tens</td> <td>Reserved</td> <td>0: Coast to stop</td> </tr> </tbody> </table>		Bit	Name	Value	Ones	Reserved	0: Coast to stop	Tens	Reserved	0: Coast to stop					
Bit	Name	Value														
Ones	Reserved	0: Coast to stop														
Tens	Reserved	0: Coast to stop														

	Hundreds	Time sequence fault (E085)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore
	Thousands	Motor control exception 1 (E093)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore

**Description :**

The hundreds and thousands of this parameter are used to set protection actions upon different faults.

**Value description:**

Hundreds: Time sequence fault (E085)

0: Coast to stop

When the AC drive encounters the time sequence fault due to certain reasons, the operating panel displays E085 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters the time sequence fault due to certain reasons, the operating panel displays E085 and the motor stops at the maximum capability.

2: Quick stop

When the AC drive encounters the time sequence fault due to certain reasons, the operating panel displays E085 and the motor performs quick stop.

3: Decelerate to stop

When the AC drive encounters the time sequence fault due to certain reasons, the operating panel displays E085 and the motor decelerates to stop.

9: Run with speed restriction

When the AC drive encounters the time sequence fault due to certain reasons, the operating panel displays L085 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction

When the AC drive encounters the time sequence fault due to certain reasons, the operating panel displays L085 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction

When the AC drive encounters the time sequence fault due to certain reasons, the operating panel displays L085 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction

When the AC drive encounters the time sequence fault due to certain reasons, the operating panel displays L085 and the AC drive runs with the torque limited to a certain range.

13: Alarm

When the AC drive encounters the time sequence fault due to certain reasons, the operating panel displays A085 and the AC drive operates normally.

14: Prompt

When the AC drive encounters the time sequence fault due to certain reasons, the operating panel displays N085 and the AC drive operates normally.

15: Ignore

When the AC drive encounters the time sequence fault due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Thousands: Motor control exception 1 (E093)

0: Coast to stop

When the AC drive encounters motor control exception 1 due to certain reasons, the operating panel displays E093 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters motor control exception 1 due to certain reasons, the operating panel displays E093 and the motor stops at the maximum capability.

2: Quick stop

When the AC drive encounters motor control exception 1 due to certain reasons, the operating panel displays E093 and the motor performs quick stop.

3: Decelerate to stop

When the AC drive encounters motor control exception 1 due to certain reasons, the operating panel displays E093 and the motor decelerates to stop.

9: Run with speed restriction

When the AC drive encounters motor control exception 1 due to certain reasons, the operating panel displays L093 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction

When the AC drive encounters motor control exception 1 due to certain reasons, the operating panel displays L093 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction

When the AC drive encounters motor control exception 1 due to certain reasons, the operating panel displays L093 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction

When the AC drive encounters motor control exception 1 due to certain reasons, the operating panel displays L093 and the AC drive runs with the torque limited to a certain range.

<p>13: Alarm When the AC drive encounters motor control exception 1 due to certain reasons, the operating panel displays A093 and the AC drive operates normally.</p> <p>14: Prompt When the AC drive encounters motor control exception 1 due to certain reasons, the operating panel displays N093 and the AC drive operates normally.</p> <p>15: Ignore When the AC drive encounters motor control exception 1 due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.</p> <p>Additional information: Fault protection actions for time sequence fault and motor control exception 1 set by this parameter can be changed to enable the AC drive to act accordingly.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H1-11	Fault protection action selection 11	0x810B	Refer to "Value"	0xDDDD	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value:							
	Ones	Motor control exception 2 (E094)	<ul style="list-style-type: none"> <li>0: Coast to stop</li> <li>1: Stop at maximum capacity</li> <li>2: Quick stop</li> <li>3: Decelerate to stop</li> <li>9: Run with speed restriction</li> <li>10: Run with power restriction</li> <li>11: Run with current restriction</li> <li>12: Run with torque restriction</li> <li>13: Alarm</li> <li>14: Prompt</li> <li>15: Ignore</li> </ul>					
Tens	AC drive pre-overload (E110)	<ul style="list-style-type: none"> <li>0: Coast to stop</li> <li>1: Stop at maximum capacity</li> <li>2: Quick stop</li> <li>3: Decelerate to stop</li> <li>9: Run with speed restriction</li> <li>10: Run with power restriction</li> <li>11: Run with current restriction</li> <li>12: Run with torque restriction</li> <li>13: Alarm</li> <li>14: Prompt</li> <li>15: Ignore</li> </ul>						

Hundreds	Motor pre-overload (E111)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore
Thousands	Module pre-temperature (E114)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore

**Description :**  
The ones, tens, hundreds, and thousands of this parameter are used to set protection actions upon different faults.

**Value description:**  
Ones: Motor control error 2 (E094)

0: Coast to stop  
When the AC drive encounters motor control exception 2 due to certain reasons, the operating panel displays E094 and the motor coasts to stop.

1: Stop at maximum capability  
When the AC drive encounters motor control exception 2 due to certain reasons, the operating panel displays E094 and the motor stops at the maximum capability.

2: Quick stop  
When the AC drive encounters motor control exception 2 due to certain reasons, the operating panel displays E094 and the motor performs quick stop.

3: Decelerate to stop  
When the AC drive encounters motor control exception 2 due to certain reasons, the operating panel displays E094 and the motor decelerates to stop.

9: Run with speed restriction  
When the AC drive encounters motor control exception 2 due to certain reasons, the operating panel displays L094 and the AC drive runs with the speed limited to a certain range.



10: Run with power restriction

When the AC drive encounters motor control exception 2 due to certain reasons, the operating panel displays L094 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction

When the AC drive encounters motor control exception 2 due to certain reasons, the operating panel displays L094 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction

When the AC drive encounters motor control exception 2 due to certain reasons, the operating panel displays L094 and the AC drive runs with the torque limited to a certain range.

13: Alarm

When the AC drive encounters motor control exception 2 due to certain reasons, the operating panel displays A094 and the AC drive operates normally.

14: Prompt

When the AC drive encounters motor control exception 2 due to certain reasons, the operating panel displays N094 and the AC drive operates normally.

15: Ignore

When the AC drive encounters motor control exception 2 due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Tens: AC drive pre-overload (E110)

0: Coast to stop

When the AC drive encounters the AC drive pre-overload fault due to certain reasons, the operating panel displays E110 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters the AC drive pre-overload fault due to certain reasons, the operating panel displays E110 and the motor stops at the maximum capability.

2: Quick stop

When the AC drive encounters the AC drive pre-overload fault due to certain reasons, the operating panel displays E110 and the motor performs quick stop.

3: Decelerate to stop

When the AC drive encounters the AC drive pre-overload fault due to certain reasons, the operating panel displays E110 and the motor decelerates to stop.

9: Run with speed restriction

When the AC drive encounters the AC drive pre-overload fault due to certain reasons, the operating panel displays L110 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction

When the AC drive encounters the AC drive pre-overload fault due to certain reasons, the operating panel displays L110 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction

When the AC drive encounters the AC drive pre-overload fault due to certain reasons, the operating panel displays L110 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction

When the AC drive encounters the AC drive pre-overload fault due to certain reasons, the operating panel displays L110 and the AC drive runs with the torque limited to a certain range.

13: Alarm

When the AC drive encounters the AC drive pre-overload fault due to certain reasons, the operating panel displays A110 and the AC drive operates normally.

14: Prompt

When the AC drive encounters the AC drive pre-overload fault due to certain reasons, the operating panel displays N110 and the AC drive operates normally.

15: Ignore

When the AC drive encounters the AC drive pre-overload fault due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Hundreds: Motor pre-overload (E111)

0: Coast to stop

When the AC drive encounters the motor pre-overload fault due to certain reasons, the operating panel displays E111 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters the motor pre-overload fault due to certain reasons, the operating panel displays E111 and the motor stops at the maximum capability.

2: Quick stop

When the AC drive encounters the motor pre-overload fault due to certain reasons, the operating panel displays E111 and the motor performs quick stop.

3: Decelerate to stop

When the AC drive encounters the motor pre-overload fault due to certain reasons, the operating panel displays E111 and the motor decelerates to stop.

9: Run with speed restriction

When the AC drive encounters the motor pre-overload fault due to certain reasons, the operating panel displays L111 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction

When the AC drive encounters the motor pre-overload fault due to certain reasons, the operating panel displays L111 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction

When the AC drive encounters the motor pre-overload fault due to certain reasons, the operating panel displays L111 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction

When the AC drive encounters the motor pre-overload fault due to certain reasons, the operating panel displays L111 and the AC drive runs with the torque limited to a certain range.

13: Alarm

When the AC drive encounters the motor pre-overload fault due to certain reasons, the operating panel displays A111 and the AC drive operates normally.

14: Prompt

When the AC drive encounters the motor pre-overload fault due to certain reasons, the operating panel displays N111 and the AC drive operates normally.

15: Ignore

When the AC drive encounters the motor pre-overload fault due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Thousands: Module pre-temperature (E114)

0: Coast to stop  
When the AC drive encounters the module pre-temperature fault due to certain reasons, the operating panel displays E114 and the motor coasts to stop.

1: Stop at maximum capability  
When the AC drive encounters the module pre-temperature fault due to certain reasons, the operating panel displays E114 and the motor stops at the maximum capability.

2: Quick stop  
When the AC drive encounters the module pre-temperature fault due to certain reasons, the operating panel displays E114 and the motor performs quick stop.

3: Decelerate to stop  
When the AC drive encounters the module pre-temperature fault due to certain reasons, the operating panel displays E114 and the motor decelerates to stop.

9: Run with speed restriction  
When the AC drive encounters the module pre-temperature fault due to certain reasons, the operating panel displays L114 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction  
When the AC drive encounters the module pre-temperature fault due to certain reasons, the operating panel displays L114 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction  
When the AC drive encounters the module pre-temperature fault due to certain reasons, the operating panel displays L114 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction  
When the AC drive encounters the module pre-temperature fault due to certain reasons, the operating panel displays L114 and the AC drive runs with the torque limited to a certain range.

13: Alarm  
When the AC drive encounters the module pre-temperature fault due to certain reasons, the operating panel displays A114 and the AC drive operates normally.

14: Prompt  
When the AC drive encounters the module pre-temperature fault due to certain reasons, the operating panel displays N114 and the AC drive operates normally.

15: Ignore  
When the AC drive encounters the module pre-temperature fault due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Additional information:  
Fault protection actions for motor control exception 2, AC drive pre-overload, motor pre-overload, and module pre-temperature set by this parameter can be changed to enable the AC drive to act accordingly.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H1-12	Fault protection action selection 12	0x810C	Refer to "Value"	0x30F0	Unsigned 16 bit	Real time changes	Expansion	Nothing

Value:

Bit	Name	Value
Ones	Reserved	0: Coast to stop
Tens	AI/HDI disconnection (E154)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore
Hundreds	Automatic fault reset failure (E159)	0: Coast to stop
Thousands	Modbus communication timeout (E160)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore

Description:

The tens, hundreds, and thousands of this parameter are used to set protection actions upon different faults.

Value description:

Tens position: AI/HDI disconnection (E154)

0: Coast to stop

When the AC drive encounters the AI/HDI disconnection fault due to certain reasons, the operating panel displays E154 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters the AI/HDI disconnection fault due to certain reasons, the operating panel displays E154 and the motor stops at the maximum capability.

2: Quick stop

When the AC drive encounters the AI/HDI disconnection fault due to certain reasons, the operating panel displays E154 and the motor performs quick stop.

3: Decelerate to stop

When the AC drive encounters the AI/HDI disconnection fault due to certain reasons, the operating panel displays E154

and the motor decelerates to stop.

9: Run with speed restriction

When the AC drive encounters the AI/HDI disconnection fault due to certain reasons, the operating panel displays L154 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction

When the AC drive encounters the AI/HDI disconnection fault due to certain reasons, the operating panel displays L154 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction

When the AC drive encounters the AI/HDI disconnection fault due to certain reasons, the operating panel displays L154 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction

When the AC drive encounters the AI/HDI disconnection fault due to certain reasons, the operating panel displays L154 and the AC drive runs with the torque limited to a certain range.

13: Alarm

When the AC drive encounters the AI/HDI disconnection fault due to certain reasons, the operating panel displays A154 and the AC drive operates normally.

14: Prompt

When the AC drive encounters the AI/HDI disconnection fault due to certain reasons, the operating panel displays N154 and the AC drive operates normally.

15: Ignore

When the AC drive encounters the AI/HDI disconnection fault due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Hundreds: Automatic fault reset failure (E159)

0: Coast to stop

When the AC drive encounters an automatic fault reset failure due to certain reasons, the operating panel displays E159 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters an automatic fault reset failure due to certain reasons, the operating panel displays E159 and the motor stops at the maximum capability.

2: Quick stop

When the AC drive encounters an automatic fault reset failure due to certain reasons, the operating panel displays E159 and the motor performs quick stop.

3: Decelerate to stop

When the AC drive encounters an automatic fault reset failure due to certain reasons, the operating panel displays E159 and the motor decelerates to stop.

9: Run with speed restriction

When the AC drive encounters an automatic fault reset failure due to certain reasons, the operating panel displays L159 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction

When the AC drive encounters an automatic fault reset failure due to certain reasons, the operating panel displays L159 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction

When the AC drive encounters an automatic fault reset failure due to certain reasons, the operating panel displays L159

and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction

When the AC drive encounters an automatic fault reset failure due to certain reasons, the operating panel displays L159 and the AC drive runs with the torque limited to a certain range.

13: Alarm

When the AC drive encounters an automatic fault reset failure due to certain reasons, the operating panel displays A159 and the AC drive operates normally.

14: Prompt

When the AC drive encounters an automatic fault reset failure due to certain reasons, the operating panel displays N159 and the AC drive operates normally.

15: Ignore

When the AC drive encounters an automatic fault reset failure due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Thousands: Modbus communication timeout (E160)

0: Coast to stop

When the AC drive encounters the Modbus communication timeout fault due to certain reasons, the operating panel displays E160 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters the Modbus communication timeout fault due to certain reasons, the operating panel displays E160 and the motor stops at the maximum capability.

2: Quick stop

When the AC drive encounters the Modbus communication timeout fault due to certain reasons, the operating panel displays E160 and the motor performs quick stop.

3: Decelerate to stop

When the AC drive encounters the Modbus communication timeout fault due to certain reasons, the operating panel displays E160 and the motor decelerates to stop.

9: Run with speed restriction

When the AC drive encounters the Modbus communication timeout fault due to certain reasons, the operating panel displays L160 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction

When the AC drive encounters the Modbus communication timeout fault due to certain reasons, the operating panel displays L160 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction

When the AC drive encounters the Modbus communication timeout fault due to certain reasons, the operating panel displays L160 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction

When the AC drive encounters the Modbus communication timeout fault due to certain reasons, the operating panel displays L160 and the AC drive runs with the torque limited to a certain range.

13: Alarm

When the AC drive encounters the Modbus communication timeout fault due to certain reasons, the operating panel displays A160 and the AC drive operates normally.

14: Prompt

When the AC drive encounters the Modbus communication timeout fault due to certain reasons, the operating panel

displays N160 and the AC drive operates normally.  
 15: Ignore  
 When the AC drive encounters the Modbus communication timeout fault due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Additional information:  
 Fault protection actions for the AI/HDI disconnection fault, automatic fault reset failure, and Modbus communication timeout fault set by this parameter can be changed to enable the AC drive to act accordingly.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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H1-13	Fault protection action selection 13	0x810D	Refer to "Value"	0x0033	Unsigned 16 bit	Real time changes	Expansion	Nothing
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Value:

Bit	Name	Value
Ones	CAN open fault (E161)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore
Tens	CAN link fault (E162)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 9: Run with speed restriction 10: Run with power restriction 11: Run with current restriction 12: Run with torque restriction 13: Alarm 14: Prompt 15: Ignore
Hundreds	Reserved	0: Coast to stop
Thousands	Reserved	0: Coast to stop

Description:

The ones and tens of this parameter are used to set protection actions upon different faults.

Value description:

Ones: CAN open fault (E161)

0: Coast to stop

When the AC drive encounters the CAN open fault due to certain reasons, the operating panel displays E161 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters the CAN open fault due to certain reasons, the operating panel displays E161 and the motor stops at the maximum capability.

2: Quick stop

When the AC drive encounters the CAN open fault due to certain reasons, the operating panel displays E161 and the motor performs quick stop.

3: Decelerate to stop

When the AC drive encounters the CAN open fault due to certain reasons, the operating panel displays E161 and the motor decelerates to stop.

9: Run with speed restriction

When the AC drive encounters the CAN open fault due to certain reasons, the operating panel displays L161 and the AC drive runs with the speed limited to a certain range.

10: Run with power restriction

When the AC drive encounters the CAN open fault due to certain reasons, the operating panel displays L161 and the AC drive runs with the power limited to a certain range.

11: Run with current restriction

When the AC drive encounters the CAN open fault due to certain reasons, the operating panel displays L161 and the AC drive runs with the current limited to a certain range.

12: Run with torque restriction

When the AC drive encounters the CAN open fault due to certain reasons, the operating panel displays L161 and the AC drive runs with the torque limited to a certain range.

13: Alarm

When the AC drive encounters the CAN open fault due to certain reasons, the operating panel displays A161 and the AC drive operates normally.

14: Prompt

When the AC drive encounters the CAN open fault due to certain reasons, the operating panel displays N161 and the AC drive operates normally.

15: Ignore

When the AC drive encounters the CAN open fault due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.

Tens: CAN link fault (E162)

0: Coast to stop

When the AC drive encounters the CAN link fault due to certain reasons, the operating panel displays E162 and the motor coasts to stop.

1: Stop at maximum capability

When the AC drive encounters the CAN link fault due to certain reasons, the operating panel displays E162 and the motor stops at the maximum capability.



<p>2: Quick stop When the AC drive encounters the CAN link fault due to certain reasons, the operating panel displays E162 and the motor performs quick stop.</p> <p>3: Decelerate to stop When the AC drive encounters the CAN link fault due to certain reasons, the operating panel displays E162 and the motor decelerates to stop.</p> <p>9: Run with speed restriction When the AC drive encounters the CAN link fault due to certain reasons, the operating panel displays L162 and the AC drive runs with the speed limited to a certain range.</p> <p>10: Run with power restriction When the AC drive encounters the CAN link fault due to certain reasons, the operating panel displays L162 and the AC drive runs with the power limited to a certain range.</p> <p>11: Run with current restriction When the AC drive encounters the CAN link fault due to certain reasons, the operating panel displays L162 and the AC drive runs with the current limited to a certain range.</p> <p>12: Run with torque restriction When the AC drive encounters the CAN link fault due to certain reasons, the operating panel displays L162 and the AC drive runs with the torque limited to a certain range.</p> <p>13: Alarm When the AC drive encounters the CAN link fault due to certain reasons, the operating panel displays A162 and the AC drive operates normally.</p> <p>14: Prompt When the AC drive encounters the CAN link fault due to certain reasons, the operating panel displays N162 and the AC drive operates normally.</p> <p>15: Ignore When the AC drive encounters the CAN link fault due to certain reasons, the operating panel does not display any fault and the AC drive operates normally.</p> <p>Additional information: Fault protection actions for CAN open and CAN link faults set by this parameter can be changed to enable the AC drive to act accordingly.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H1-30	Settings of fault codes of group 1	0x811E	0.0 to 255.9	0.0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Description : This parameter specifies the fault code of group 1 whose fault level is to be edited.</p> <p>Additional information: Enter the main code and sub code of the fault. For example, fill in 80.1 and set H1-31 to 000FH. In this case, the fan fault is not displayed, but the AC drive can operate normally.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
H1-31	Settings of fault level for fault codes of group 1	0x811F	Refer to "Value"	0x000F	Unsigned 16 bit	Shutdown change	Standard	Nothing																		
	<p>Value:</p> <table border="0"> <tr> <td>0000H: Coast to stop</td> <td>0006H: Reserved</td> <td>000BH: Run with current restriction</td> </tr> <tr> <td>0001H: Stop at maximum capacity</td> <td>0007H: Reserved</td> <td>000CH: Run with torque restriction</td> </tr> <tr> <td>0002H: Quick stop</td> <td>0008H: Reserved</td> <td>0009H: Run with speed restriction</td> </tr> <tr> <td>0003H: Decelerate to stop</td> <td>000AH: Run with power restriction</td> <td>000DH: Alarm</td> </tr> <tr> <td>0004H: Reserved</td> <td></td> <td>000EH: Prompt</td> </tr> <tr> <td>0005H: Reserved</td> <td></td> <td>000FH: Ignore</td> </tr> </table>								0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction	0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction	0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction	0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm	0004H: Reserved		000EH: Prompt	0005H: Reserved		000FH: Ignore
	0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction																							
0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction																								
0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction																								
0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm																								
0004H: Reserved		000EH: Prompt																								
0005H: Reserved		000FH: Ignore																								
<p>Description:</p> <p>This parameter specifies the fault level of fault codes of group 1.</p> <p>Value description:</p> <p>0000H: Coast to stop When a fault occurs, the AC drive displays E and the motor coasts to stop.</p> <p>0001H: Stop at maximum capability When a fault occurs, the AC drive displays E and the motor stops at its maximum capacity.</p> <p>0002H: Quick stop When a fault occurs, the AC drive displays E and the motor performs quick stop.</p> <p>0003H: Decelerate to stop When a fault occurs, the AC drive displays E and the motor decelerates to stop.</p> <p>0009H: Run with speed restriction The AC drive displays L and continues running with speed restriction.</p> <p>000AH: Run with power restriction The AC drive displays L and continues running with power restriction.</p> <p>000BH: Run with current restriction The AC drive displays L and continues running with current restriction.</p> <p>000CH: Run with torque restriction The AC drive displays L and continues running with torque restriction.</p> <p>000DH: Alarm The AC drive displays alarm A, which has no effect on operation.</p> <p>000EH: Prompt The AC drive displays prompt N, which has no effect on operation.</p> <p>000FH: Ignore The AC drive ignores the fault.</p> <p>Additional information:</p>																										

	After H1-31 is set and the fault set by H1-30 is triggered, the drive/motor acts according to the value set by H1-31. The fault level setting adopts a white list, and only allowable levels can be set.																								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																	
H1-32	Settings of fault codes of group 2	0x8120	0.0 to 255.9	0.0	Unsigned 16 bit	Shutdown change	Standard	Nothing																	
	<p>Description :</p> <p>This parameter specifies the fault code of group 2 whose fault level is to be edited.</p> <p>Additional information:</p> <p>Enter the main code and sub code of the fault. For example, fill in 80.1 and set H1-31 to 000FH. In this case, the fan fault is not displayed, but the AC drive can operate normally.</p>																								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																	
H1-33	Settings of fault level for fault codes of group 2	0x8121	Refer to "Value"	0x000F	Unsigned 16 bit	Shutdown change	Standard	Nothing																	
	<p>Value:</p> <table border="0"> <tr> <td>0000H: Coast to stop</td> <td>0006H: Reserved</td> <td>000BH: Run with current restriction</td> </tr> <tr> <td>0001H: Stop at maximum capacity</td> <td>0007H: Reserved</td> <td>000CH: Run with torque restriction</td> </tr> <tr> <td>0002H: Quick stop</td> <td>0008H: Reserved</td> <td>0009H: Run with speed restriction</td> </tr> <tr> <td>0003H: Decelerate to stop</td> <td>000AH: Run with power restriction</td> <td>000DH: Alarm</td> </tr> <tr> <td>0004H: Reserved</td> <td></td> <td>000EH: Prompt</td> </tr> <tr> <td>0005H: Reserved</td> <td></td> <td>000FH: Ignore</td> </tr> </table> <p>Description :</p> <p>This parameter specifies the fault level of fault codes of group 2.</p> <p>Value description:</p> <p>0000H: Coast to stop When a fault occurs, the AC drive displays E and the motor coasts to stop.</p> <p>0001H: Stop at maximum capability When a fault occurs, the AC drive displays E and the motor stops at its maximum capacity.</p> <p>0002H: Quick stop When a fault occurs, the AC drive displays E and the motor performs quick stop.</p> <p>0003H: Decelerate to stop When a fault occurs, the AC drive displays E and the motor decelerates to stop.</p> <p>0009H: Run with speed restriction The AC drive displays L and continues running with speed restriction.</p>								0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction	0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction	0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction	0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm	0004H: Reserved		000EH: Prompt	0005H: Reserved	
0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction																							
0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction																							
0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction																							
0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm																							
0004H: Reserved		000EH: Prompt																							
0005H: Reserved		000FH: Ignore																							

000AH: Run with power restriction  
The AC drive displays L and continues running with power restriction.

000BH: Run with current restriction  
The AC drive displays L and continues running with current restriction.

000CH: Run with torque restriction  
The AC drive displays L and continues running with torque restriction.

000DH: Alarm  
The AC drive displays alarm A, which has no effect on operation.

000EH: Prompt  
The AC drive displays prompt N, which has no effect on operation.

000FH: Ignore  
The AC drive ignores the fault.

Additional information:  
When the exception code is set, the parameter automatically becomes the fault protection action currently in effect. The fault level setting adopts a white list, and only allowable levels can be set.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H1-34	Settings of fault codes of group 3	0x8122	0.0 to 255.9	0.0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : This parameter specifies the fault code of group 3 whose fault level is to be edited.  Enter the main code and sub code of the fault. For example, fill in 80.1 and set H1-31 to 000FH. In this case, the fan fault is not displayed, but the AC drive can operate normally.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H1-35	Settings of fault level for fault codes of group 3	0x8123	Refer to "Value"	0x000F	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value : 0000H: Coast to stop 0001H: Stop at maximum capacity 0002H: Quick stop 0003H: Decelerate to stop 0004H: Reserved 0005H: Reserved 0006H: Reserved 0007H: Reserved 0008H: Reserved 0009H: Run with speed restriction 000AH: Run with power restriction 000BH: Run with current restriction 000CH: Run with torque restriction 000DH: Alarm 000EH: Prompt 000FH: Ignore							
	Description :							

This parameter specifies the fault level of fault codes of group 3.

Value description:

0000H: Coast to stop  
When a fault occurs, the AC drive displays E and the motor coasts to stop.

0001H: Stop at maximum capability  
When a fault occurs, the AC drive displays E and the motor stops at its maximum capacity.

0002H: Quick stop  
When a fault occurs, the AC drive displays E and the motor performs quick stop.

0003H: Decelerate to stop  
When a fault occurs, the AC drive displays E and the motor decelerates to stop.

0009H: Run with speed restriction  
The AC drive displays L and continues running with speed restriction.

000AH: Run with power restriction  
The AC drive displays L and continues running with power restriction.

000BH: Run with current restriction  
The AC drive displays L and continues running with current restriction.

000CH: Run with torque restriction  
The AC drive displays L and continues running with torque restriction.

000DH: Alarm  
The AC drive displays alarm A, which has no effect on operation.

000EH: Prompt  
The AC drive displays prompt N, which has no effect on operation.

000FH: Ignore  
The AC drive ignores the fault.

Additional information:  
When the exception code is set, the parameter automatically becomes the fault protection action currently in effect. The fault level setting adopts a white list, and only allowable levels can be set.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Settings of fault codes of group 4	0x8124	0.0 to 255.9	0.0	Unsigned 16 bit	Shutdown change	Expansion	Nothing
H1-36	Description: This parameter specifies the fault code of group 4 whose fault level is to be edited.							
	Additional information: Enter the main code and sub code of the fault. For example, fill in 80.1 and set H1-31 to 000FH. In this case, the fan fault is not displayed, but the AC drive can operate normally.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

	Settings of fault level for fault codes of group 4	0x8125	Refer to "Value"	0x000F	Unsigned 16 bit	Shutdown change	Expansion	Nothing																		
	<p>Value:</p> <table border="0"> <tr> <td>0000H: Coast to stop</td> <td>0006H: Reserved</td> <td>000BH: Run with current restriction</td> </tr> <tr> <td>0001H: Stop at maximum capacity</td> <td>0007H: Reserved</td> <td>000CH: Run with torque restriction</td> </tr> <tr> <td>0002H: Quick stop</td> <td>0008H: Reserved</td> <td>0009H: Run with speed restriction</td> </tr> <tr> <td>0003H: Decelerate to stop</td> <td>000AH: Run with power restriction</td> <td>000DH: Alarm</td> </tr> <tr> <td>0004H: Reserved</td> <td></td> <td>000EH: Prompt</td> </tr> <tr> <td>0005H: Reserved</td> <td></td> <td>000FH: Ignore</td> </tr> </table>								0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction	0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction	0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction	0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm	0004H: Reserved		000EH: Prompt	0005H: Reserved		000FH: Ignore
0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction																								
0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction																								
0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction																								
0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm																								
0004H: Reserved		000EH: Prompt																								
0005H: Reserved		000FH: Ignore																								
H1-37	<p>Description:</p> <p>This parameter specifies the fault level of fault codes of group 4.</p> <p>Value description:</p> <p>0000H: Coast to stop When a fault occurs, the AC drive displays E and the motor coasts to stop.</p> <p>0001H: Stop at maximum capability When a fault occurs, the AC drive displays E and the motor stops at its maximum capacity.</p> <p>0002H: Quick stop When a fault occurs, the AC drive displays E and the motor performs quick stop.</p> <p>0003H: Decelerate to stop When a fault occurs, the AC drive displays E and the motor decelerates to stop.</p> <p>0009H: Run with speed restriction The AC drive displays L and continues running with speed restriction.</p> <p>000AH: Run with power restriction The AC drive displays L and continues running with power restriction.</p> <p>000BH: Run with current restriction The AC drive displays L and continues running with current restriction.</p> <p>000CH: Run with torque restriction The AC drive displays L and continues running with torque restriction.</p> <p>000DH: Alarm The AC drive displays alarm A, which has no effect on operation.</p> <p>000EH: Prompt The AC drive displays prompt N, which has no effect on operation.</p> <p>000FH: Ignore The AC drive ignores the fault.</p> <p>Additional information:</p> <p>When the exception code is set, the parameter automatically becomes the fault protection action currently in effect. The fault level setting adopts a white list, and only allowable levels can be set.</p>																									

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
H1-38	Settings of fault codes of group 5	0x8126	0.0 to 255.9	0.0	Unsigned 16 bit	Shutdown change	Expansion	Nothing																		
	<p>Description: This parameter specifies the fault code of group 5 whose fault level is to be edited.</p> <p>Additional information: Enter the main code and sub code of the fault. For example, fill in 80.1 and set H1-31 to 000FH. In this case, the fan fault is not displayed, but the AC drive can operate normally.</p>																									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
H1-39	Settings of fault level for fault codes of group 5	0x8127	Refer to "Value"	0x000F	Unsigned 16 bit	Shutdown change	Expansion	Nothing																		
	<p>Value:</p> <table border="0"> <tr> <td>0000H: Coast to stop</td> <td>0006H: Reserved</td> <td>000BH: Run with current restriction</td> </tr> <tr> <td>0001H: Stop at maximum capacity</td> <td>0007H: Reserved</td> <td>000CH: Run with torque restriction</td> </tr> <tr> <td>0002H: Quick stop</td> <td>0008H: Reserved</td> <td>0009H: Run with speed restriction</td> </tr> <tr> <td>0003H: Decelerate to stop</td> <td>000AH: Run with power restriction</td> <td>000DH: Alarm</td> </tr> <tr> <td>0004H: Reserved</td> <td></td> <td>000EH: Prompt</td> </tr> <tr> <td>0005H: Reserved</td> <td></td> <td>000FH: Ignore</td> </tr> </table>								0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction	0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction	0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction	0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm	0004H: Reserved		000EH: Prompt	0005H: Reserved		000FH: Ignore
	0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction																							
0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction																								
0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction																								
0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm																								
0004H: Reserved		000EH: Prompt																								
0005H: Reserved		000FH: Ignore																								
<p>Description: This parameter specifies the fault level of fault codes of group 5.</p> <p>Value description: 0000H: Coast to stop When a fault occurs, the AC drive displays E and the motor coasts to stop. 0001H: Stop at maximum capability When a fault occurs, the AC drive displays E and the motor stops at its maximum capacity. 0002H: Quick stop When a fault occurs, the AC drive displays E and the motor performs quick stop. 0003H: Decelerate to stop When a fault occurs, the AC drive displays E and the motor decelerates to stop. 0009H: Run with speed restriction The AC drive displays L and continues running with speed restriction. 000AH: Run with power restriction The AC drive displays L and continues running with power restriction.</p>																										

000BH: Run with current restriction  
The AC drive displays L and continues running with current restriction.

000CH: Run with torque restriction  
The AC drive displays L and continues running with torque restriction.

000DH: Alarm  
The AC drive displays alarm A, which has no effect on operation.

000EH: Prompt  
The AC drive displays prompt N, which has no effect on operation.

000FH: Ignore  
The AC drive ignores the fault.

Additional information:  
When the exception code is set, the parameter automatically becomes the fault protection action currently in effect. The fault level setting adopts a white list, and only allowable levels can be set.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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	Settings of fault codes of group 6	0x8128	0.0 to 255.9	0.0	Unsigned 16 bit	Shutdown change	Expansion	Nothing
H1-40	<p>Description:  This parameter specifies the fault code of group 6 whose fault level is to be edited.</p> <p>Additional information:  Enter the main code and sub code of the fault. For example, fill in 80.1 and set H1-31 to 000FH. In this case, the fan fault is not displayed, but the AC drive can operate normally.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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	Settings of fault level for fault codes of group 6	0x8129	Refer to "Value"	0x000F	Unsigned 16 bit	Shutdown change	Expansion	Nothing																		
H1-41	<p>Value:</p> <table border="0"> <tr> <td>0000H: Coast to stop</td> <td>0006H: Reserved</td> <td>000BH: Run with current restriction</td> </tr> <tr> <td>0001H: Stop at maximum capacity</td> <td>0007H: Reserved</td> <td>000CH: Run with torque restriction</td> </tr> <tr> <td>0002H: Quick stop</td> <td>0008H: Reserved</td> <td>0009H: Run with speed restriction</td> </tr> <tr> <td>0003H: Decelerate to stop</td> <td>000AH: Run with power restriction</td> <td>000DH: Alarm</td> </tr> <tr> <td>0004H: Reserved</td> <td></td> <td>000EH: Prompt</td> </tr> <tr> <td>0005H: Reserved</td> <td></td> <td>000FH: Ignore</td> </tr> </table> <p>Description:  This parameter specifies the fault level of fault codes of group 6.</p>								0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction	0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction	0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction	0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm	0004H: Reserved		000EH: Prompt	0005H: Reserved		000FH: Ignore
0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction																								
0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction																								
0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction																								
0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm																								
0004H: Reserved		000EH: Prompt																								
0005H: Reserved		000FH: Ignore																								



Value description:

0000H: Coast to stop  
When a fault occurs, the AC drive displays E and the motor coasts to stop.

0001H: Stop at maximum capability  
When a fault occurs, the AC drive displays E and the motor stops at its maximum capacity.

0002H: Quick stop  
When a fault occurs, the AC drive displays E and the motor performs quick stop.

0003H: Decelerate to stop  
When a fault occurs, the AC drive displays E and the motor decelerates to stop.

0009H: Run with speed restriction  
The AC drive displays L and continues running with speed restriction.

000AH: Run with power restriction  
The AC drive displays L and continues running with power restriction.

000BH: Run with current restriction  
The AC drive displays L and continues running with current restriction.

000CH: Run with torque restriction  
The AC drive displays L and continues running with torque restriction.

000DH: Alarm  
The AC drive displays alarm A, which has no effect on operation.

000EH: Prompt  
The AC drive displays prompt N, which has no effect on operation.

000FH: Ignore  
The AC drive ignores the fault.

Additional information:  
When the exception code is set, the parameter automatically becomes the fault protection action currently in effect. The fault level setting adopts a white list, and only allowable levels can be set.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Settings of fault codes of group 7	0x812A	0.0 to 255.9	0.0	Unsigned 16 bit	Shutdown change	Expansion	Nothing
H1-42	<p>Description :</p> <p>This parameter specifies the fault code of group 7 whose fault level is to be edited.</p> <p>Additional information:</p> <p>Enter the main code and sub code of the fault. For example, fill in 80.1 and set H1-31 to 000FH. In this case, the fan fault is not displayed, but the AC drive can operate normally.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

	Settings of fault level for fault codes of group 7	0x812B	Refer to "Value"	0x000F	Unsigned 16 bit	Shutdown change	Expansion	Nothing																		
	<p>Value:</p> <table border="0"> <tr> <td>0000H: Coast to stop</td> <td>0006H: Reserved</td> <td>000BH: Run with current restriction</td> </tr> <tr> <td>0001H: Stop at maximum capacity</td> <td>0007H: Reserved</td> <td>000CH: Run with torque restriction</td> </tr> <tr> <td>0002H: Quick stop</td> <td>0008H: Reserved</td> <td>0009H: Run with speed restriction</td> </tr> <tr> <td>0003H: Decelerate to stop</td> <td>000AH: Run with power restriction</td> <td>000DH: Alarm</td> </tr> <tr> <td>0004H: Reserved</td> <td></td> <td>000EH: Prompt</td> </tr> <tr> <td>0005H: Reserved</td> <td></td> <td>000FH: Ignore</td> </tr> </table>								0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction	0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction	0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction	0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm	0004H: Reserved		000EH: Prompt	0005H: Reserved		000FH: Ignore
0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction																								
0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction																								
0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction																								
0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm																								
0004H: Reserved		000EH: Prompt																								
0005H: Reserved		000FH: Ignore																								
H1-43	<p>Description:</p> <p>This parameter specifies the fault level of fault codes of group 7.</p> <p>Value description:</p> <p>0000H: Coast to stop When a fault occurs, the AC drive displays E and the motor coasts to stop.</p> <p>0001H: Stop at maximum capability When a fault occurs, the AC drive displays E and the motor stops at its maximum capacity.</p> <p>0002H: Quick stop When a fault occurs, the AC drive displays E and the motor performs quick stop.</p> <p>0003H: Decelerate to stop When a fault occurs, the AC drive displays E and the motor decelerates to stop.</p> <p>0009H: Run with speed restriction The AC drive displays L and continues running with speed restriction.</p> <p>000AH: Run with power restriction The AC drive displays L and continues running with power restriction.</p> <p>000BH: Run with current restriction The AC drive displays L and continues running with current restriction.</p> <p>000CH: Run with torque restriction The AC drive displays L and continues running with torque restriction.</p> <p>000DH: Alarm The AC drive displays alarm A, which has no effect on operation.</p> <p>000EH: Prompt The AC drive displays prompt N, which has no effect on operation.</p> <p>000FH: Ignore The AC drive ignores the fault.</p> <p>Additional information:</p> <p>When the exception code is set, the parameter automatically becomes the fault protection action currently in effect. The exception level setting adopts a white list, and only allowable levels can be set.</p>																									

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
H1-44	Settings of fault codes of group 8	0x812C	0.0 to 255.9	0.0	Unsigned 16 bit	Shutdown change	Expansion	Nothing																		
	<p>Description: This parameter specifies the fault code of group 8 whose fault level is to be edited.</p> <p>Additional information: Enter the main code and sub code of the fault. For example, fill in 80.1 and set H1-31 to 000FH. In this case, the fan fault is not displayed, but the AC drive can operate normally.</p>																									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
H1-45	Settings of fault level for fault codes of group 8	0x812D	Refer to "Value"	0x000F	Unsigned 16 bit	Shutdown change	Expansion	Nothing																		
	<p>Value:</p> <table border="0"> <tr> <td>0000H: Coast to stop</td> <td>0006H: Reserved</td> <td>000BH: Run with current restriction</td> </tr> <tr> <td>0001H: Stop at maximum capacity</td> <td>0007H: Reserved</td> <td>000CH: Run with torque restriction</td> </tr> <tr> <td>0002H: Quick stop</td> <td>0008H: Reserved</td> <td>0009H: Run with speed restriction</td> </tr> <tr> <td>0003H: Decelerate to stop</td> <td>000AH: Run with power restriction</td> <td>000DH: Alarm</td> </tr> <tr> <td>0004H: Reserved</td> <td></td> <td>000EH: Prompt</td> </tr> <tr> <td>0005H: Reserved</td> <td></td> <td>000FH: Ignore</td> </tr> </table>								0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction	0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction	0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction	0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm	0004H: Reserved		000EH: Prompt	0005H: Reserved		000FH: Ignore
	0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction																							
0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction																								
0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction																								
0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm																								
0004H: Reserved		000EH: Prompt																								
0005H: Reserved		000FH: Ignore																								
<p>Description: This parameter specifies the fault level of fault codes of group 8.</p> <p>Value description: 0000H: Coast to stop When a fault occurs, the AC drive displays E and the motor coasts to stop. 0001H: Stop at maximum capability When a fault occurs, the AC drive displays E and the motor stops at its maximum capacity. 0002H: Quick stop When a fault occurs, the AC drive displays E and the motor performs quick stop. 0003H: Decelerate to stop When a fault occurs, the AC drive displays E and the motor decelerates to stop. 0009H: Run with speed restriction The AC drive displays L and continues running with speed restriction. 000AH: Run with power restriction The AC drive displays L and continues running with power restriction.</p>																										

000BH: Run with current restriction  
The AC drive displays L and continues running with current restriction.

000CH: Run with torque restriction  
The AC drive displays L and continues running with torque restriction.

000DH: Alarm  
The AC drive displays alarm A, which has no effect on operation.

000EH: Prompt  
The AC drive displays prompt N, which has no effect on operation.

000FH: Ignore  
The AC drive ignores the fault.

Additional information:  
When the exception code is set, the parameter automatically becomes the fault protection action currently in effect. The fault level setting adopts a white list, and only allowable levels can be set.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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	Settings of fault codes of group 9	0x812E	0.0 to 255.9	0.0	Unsigned 16 bit	Shutdown change	Expansion	Nothing
H1-46	<p>Description:  This parameter specifies the fault code of group 9 whose fault level is to be edited.</p> <p>Additional information:  Enter the main code and sub code of the fault. For example, fill in 80.1 and set H1-31 to 000FH. In this case, the fan fault is not displayed, but the AC drive can operate normally.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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	Settings of fault level for fault codes of group 9	0x812F	Refer to "Value"	0x000F	Unsigned 16 bit	Shutdown change	Expansion	Nothing																		
H1-47	<p>Value:</p> <table border="0"> <tr> <td>0000H: Coast to stop</td> <td>0006H: Reserved</td> <td>000BH: Run with current restriction</td> </tr> <tr> <td>0001H: Stop at maximum capacity</td> <td>0007H: Reserved</td> <td>000CH: Run with torque restriction</td> </tr> <tr> <td>0002H: Quick stop</td> <td>0008H: Reserved</td> <td>0009H: Run with speed restriction</td> </tr> <tr> <td>0003H: Decelerate to stop</td> <td>000AH: Run with power restriction</td> <td>000DH: Display alarm</td> </tr> <tr> <td>0004H: Reserved</td> <td></td> <td>000EH: Prompt</td> </tr> <tr> <td>0005H: Reserved</td> <td></td> <td>000FH: Ignore</td> </tr> </table> <p>Description:  This parameter specifies the fault level of fault codes of group 9.</p>								0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction	0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction	0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction	0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Display alarm	0004H: Reserved		000EH: Prompt	0005H: Reserved		000FH: Ignore
0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction																								
0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction																								
0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction																								
0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Display alarm																								
0004H: Reserved		000EH: Prompt																								
0005H: Reserved		000FH: Ignore																								

Value description:

0000H: Coast to stop  
When a fault occurs, the AC drive displays E and the motor coasts to stop.

0001H: Stop at maximum capability  
When a fault occurs, the AC drive displays E and the motor stops at its maximum capacity.

0002H: Quick stop  
When a fault occurs, the AC drive displays E and the motor performs quick stop.

0003H: Decelerate to stop  
When a fault occurs, the AC drive displays E and the motor decelerates to stop.

0009H: Run with speed restriction  
The AC drive displays L and continues running with speed restriction.

000AH: Run with power restriction  
The AC drive displays L and continues running with power restriction.

000BH: Run with current restriction  
The AC drive displays L and continues running with current restriction.

000CH: Run with torque restriction  
The AC drive displays L and continues running with torque restriction.

000DH: Alarm  
The AC drive displays alarm A, which has no effect on operation.

000EH: Prompt  
The AC drive displays prompt N, which has no effect on operation.

000FH: Ignore  
The AC drive ignores the fault.

Additional information:  
When the exception code is set, the parameter automatically becomes the fault protection action currently in effect. The exception level setting adopts a white list, and only allowable levels can be set.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Settings of fault codes of group 10	0x8130	0.0 to 255.9	0.0	Unsigned 16 bit	Shutdown change	Expansion	Nothing
H1-48	<p>Description :</p> <p>This parameter specifies the fault code of group 10 whose fault level is to be edited.</p> <p>Additional information:</p> <p>Enter the main code and sub code of the fault. For example, fill in 80.1 and set H1-31 to 000FH. In this case, the fan fault is not displayed, but the AC drive can operate normally.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

	Settings of fault level for fault codes of group 10	0x8131	Refer to "Value"	0x000F	Unsigned 16 bit	Shutdown change	Expansion	Nothing																		
	<p>Value:</p> <table border="0"> <tr> <td>0000H: Coast to stop</td> <td>0006H: Reserved</td> <td>000BH: Run with current restriction</td> </tr> <tr> <td>0001H: Stop at maximum capacity</td> <td>0007H: Reserved</td> <td>000CH: Run with torque restriction</td> </tr> <tr> <td>0002H: Quick stop</td> <td>0008H: Reserved</td> <td>0009H: Run with speed restriction</td> </tr> <tr> <td>0003H: Decelerate to stop</td> <td>000AH: Run with power restriction</td> <td>000DH: Alarm</td> </tr> <tr> <td>0004H: Reserved</td> <td></td> <td>000EH: Prompt</td> </tr> <tr> <td>0005H: Reserved</td> <td></td> <td>000FH: Ignore</td> </tr> </table>								0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction	0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction	0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction	0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm	0004H: Reserved		000EH: Prompt	0005H: Reserved		000FH: Ignore
0000H: Coast to stop	0006H: Reserved	000BH: Run with current restriction																								
0001H: Stop at maximum capacity	0007H: Reserved	000CH: Run with torque restriction																								
0002H: Quick stop	0008H: Reserved	0009H: Run with speed restriction																								
0003H: Decelerate to stop	000AH: Run with power restriction	000DH: Alarm																								
0004H: Reserved		000EH: Prompt																								
0005H: Reserved		000FH: Ignore																								
H1-49	<p>Description:</p> <p>This parameter specifies the fault level of fault codes of group 10.</p> <p>Value description:</p> <p>0000H: Coast to stop When a fault occurs, the AC drive displays E and the motor coasts to stop.</p> <p>0001H: Stop at maximum capability When a fault occurs, the AC drive displays E and the motor stops at its maximum capacity.</p> <p>0002H: Quick stop When a fault occurs, the AC drive displays E and the motor performs quick stop.</p> <p>0003H: Decelerate to stop When a fault occurs, the AC drive displays E and the motor decelerates to stop.</p> <p>0009H: Run with speed restriction The AC drive displays L and continues running with speed restriction.</p> <p>000AH: Run with power restriction The AC drive displays L and continues running with power restriction.</p> <p>000BH: Run with current restriction The AC drive displays L and continues running with current restriction.</p> <p>000CH: Run with torque restriction The AC drive displays L and continues running with torque restriction.</p> <p>000DH: Alarm The AC drive displays alarm A, which has no effect on operation.</p> <p>000EH: Prompt The AC drive displays prompt N, which has no effect on operation.</p> <p>000FH: Ignore The AC drive ignores the fault.</p> <p>Additional information:</p> <p>When the exception code is set, the parameter automatically becomes the fault protection action currently in effect. The exception level setting adopts a white list, and only allowable levels can be set.</p>																									



H1-62	Maximum forward frequency in limited operation mode	0x813E	0.0% to 800.0%	100.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the maximum frequency in the forward direction under restricted operation conditions.</p> <p>Additional information:</p> <p>If H1-60 (Running with speed restriction) is set to 0, the AC drive runs at the maximum frequency in the forward direction upon a minor fault.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H1-63	Maximum reverse frequency in limited operation mode	0x813F	0.0% to 800.0%	100.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the maximum frequency in the reverse direction under restricted operation conditions.</p> <p>Additional information:</p> <p>If H1-60 (Running with speed restriction) is set to 0, the AC drive runs at the maximum frequency in the reverse direction upon a minor fault.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H1-64	Maximum motoring power limit	0x8140	0.0% to 400.0%	50.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the maximum frequency in the reverse direction under restricted operation conditions.</p> <p>Additional information:</p> <p>This parameter is used to set the maximum motoring power when the AC drive operates with limited power upon a minor fault.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H1-65	Maximum regenerative power in limited operation mode	0x8141	0.0% to 400.0%	50.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the maximum regenerative power under restricted operation conditions.</p>							



	<p>Additional information: This parameter is used to set the maximum regenerative power when the AC drive operates with limited power upon a minor fault.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H1-66	Maximum forward torque in limited operation mode	0x8142	0.0% to 400.0%	50.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description : This parameter sets the maximum torque in the forward direction under restricted operation conditions.</p> <p>Additional information: This parameter is used to set the maximum forward torque when the AC drive operates with limited torque upon a minor fault.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H1-67	Maximum reverse torque in limited operation mode	0x8143	0.0% to 400.0%	50.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description : This parameter sets the maximum torque in the reverse direction under restricted operation conditions.</p> <p>Additional information: This parameter is used to set the maximum reverse torque when the AC drive operates with limited torque upon a minor fault.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H1-68	Maximum current in limited operation mode	0x8144	0.0% to 400.0%	50.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description : This parameter sets the maximum current under restricted operation conditions.</p> <p>Additional information: This parameter is used to set the maximum current when the AC drive operates with limited current upon a minor fault.</p>							

## H2: User-Defined Fault

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-00	Source of external fault 1 (NO)	0x8200	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Inactive 1: Active Others: B connector</p>							
	<p>Description:</p> <p>This parameter sets the source of external fault 1 (NO).</p> <p>Value description:</p> <p>0: Inactive The drive does not report c (NO). 1: Active The drive reports E015.1 upon receiving external fault 1 (NO). Others: B connector Whether the drive reports the fault depends on the B connector.</p> <p>Additional information:</p> <p>1: This parameter sets the source of external fault 1 (NO). When this parameter is set to 1, the drive reports E015.1 upon receiving external fault 1. If external fault 1 does not need to be reported, set this parameter to 0 and reset the fault. 2. After the DI function is set to 11 (NO input of external fault), the value of H2-00 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>							
H2-01	Source of external fault 2 (NC)	0x8201	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Inactive 1: Active Others: B connector</p>							
	<p>Description:</p> <p>This parameter sets the source of external fault 2 (NC).</p> <p>Value description:</p> <p>0: Inactive The drive reports E015.2 upon receiving external fault 2 (NC). 1: Active</p>							

	<p>External fault 1 (NC) is not reported.</p> <p>Others: B connector</p> <p>Whether the drive reports the fault depends on the B connector.</p> <p>Additional information:</p> <p>1. This parameter sets the source of external fault 2 (NC). When this parameter is set to 0, the drive reports E015.2 upon receiving external fault 2. If external fault 2 does not need to be reported, set this parameter to 1 and reset the fault.</p> <p>2. After the DI function is set to 33 (NC input of external fault), the value of H2-01 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-02	Source of user-defined fault 1	0x8202	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Inactive</p> <p>1: Active</p> <p>Others: B connector</p>							
	<p>Description:</p> <p>This parameter sets the source of user-defined fault 1.</p> <p>Value description:</p> <p>0: Inactive</p> <p>The drive does not report user-defined fault 1.</p> <p>1: Active</p> <p>The drive reports E027.1 upon receiving user-defined fault 1.</p> <p>Others: B connector</p> <p>Whether the drive reports the fault depends on the B connector.</p> <p>Additional information:</p> <p>This parameter sets the source of user-defined fault 1. When this parameter is set to 1, E27.1 is reported.</p> <p>After the DI function is set to 44 (User-defined fault 1), the value of H2-02 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-03	Source of user-defined fault 2	0x8203	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Inactive</p> <p>1: Active</p> <p>Others: B connector</p>							

<p>Description :</p> <p>This parameter sets the source of user-defined fault 2.</p> <p>Value description:</p> <p>0: Inactive</p> <p>The drive does not report user-defined fault 2.</p> <p>1: Active</p> <p>The drive reports E027.2 upon receiving user-defined fault 2.</p> <p>Others: B connector</p> <p>Whether the drive reports the fault depends on the B connector.</p> <p>Additional information:</p> <p>This parameter sets the source of user-defined fault 2. When this parameter is set to 1, E27.2 is reported.</p> <p>After the DI function is set to 45 (User-defined fault 2), the value of H2-03 is automatically switched to the value of the corresponding DI connector parameter. The commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-04	Source of user-defined fault 3	0x8204	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value:</p> <p>0: Inactive</p> <p>1: Active</p> <p>Others: B connector</p>							
	<p>Description :</p> <p>This parameter sets the source of user-defined fault 3.</p> <p>Value description:</p> <p>0: Inactive</p> <p>The drive does not report user-defined fault 3.</p> <p>1: Active</p> <p>The drive reports E027.3 upon receiving user-defined fault 3.</p> <p>Others: B connector</p> <p>Whether the drive reports the fault depends on the B connector.</p> <p>Additional information:</p> <p>This parameter sets the source of user-defined fault 3. When this parameter is set to 1, E27.3 is reported.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-05	Source of user-defined fault 4	0x8205	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value:</p>							

	<p>0: Inactive 1: Active Others: B connector</p>							
	<p>Description: This parameter sets the source of user-defined fault 4.</p> <p>Value description: 0: Inactive The drive does not report user-defined fault 4. 1: Active The drive reports E027.4 upon receiving user-defined fault 4. Others: B connector Whether the drive reports the fault depends on the B connector.</p> <p>Additional information: This parameter sets the source of user-defined fault 4. When this parameter is set to 1, E27.4 is reported.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Source of user-defined fault 5	0x8206	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value: 0: Inactive 1: Active Others: B connector</p>							
H2-06	<p>Description: This parameter sets the source of user-defined fault 5.</p> <p>Value description: 0: Inactive The drive does not report user-defined fault 5. 1: Active The drive reports E027.5 upon receiving user-defined fault 5. Others: B connector Whether the drive reports the fault depends on the B connector.</p> <p>Additional information: This parameter sets the source of user-defined fault 5. When this parameter is set to 1, E27.5 is reported.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-07	Source of user-defined fault 6	0x8207	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value:</p>							

<p>0: Inactive 1: Active Others: B connector</p>								
<p>Description: This parameter sets the source of user-defined fault 6.</p> <p>Value description: 0: Inactive The drive does not report user-defined fault 6. 1: Active The drive reports E027.6 upon receiving user-defined fault 6. Others: B connector Whether the drive reports the fault depends on the B connector.</p> <p>Additional information: This parameter sets the source of user-defined fault 6. When this parameter is set to 1, E27.6 is reported.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-08	Source of user-defined fault 7	0x8208	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value: 0: Inactive 1: Active Others: B connector</p>							
	<p>Description: This parameter sets the source of user-defined fault 7.</p> <p>Value description: 0: Inactive The drive does not report user-defined fault 7. 1: Active The drive reports E027.7 upon receiving user-defined fault 7. Others: B connector Whether the drive reports the fault depends on the B connector.</p> <p>Additional information: This parameter sets the source of user-defined fault 7. When this parameter is set to 1, E27.7 is reported.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-09	Source of user-defined fault 8	0x8209	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value:</p>							

	<p>0: Inactive 1: Active Others: B connector</p>							
	<p>Description: This parameter sets the source of user-defined fault 8.</p> <p>Value description: 0: Inactive The drive does not report user-defined fault 8. 1: Active The drive reports E027.8 upon receiving user-defined fault 8. Others: B connector Whether the drive reports the fault depends on the B connector.</p> <p>Additional information: This parameter sets the source of user-defined fault 8. When this parameter is set to 1, E27.8 is reported.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Source of user-defined alarm 1	0x820A	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value: 0: Inactive 1: Active Others: B connector</p>							
H2-10	<p>Description: This parameter sets the source of user-defined alarm 1.</p> <p>Value description: 0: Inactive The drive does not report user-defined alarm 1. 1: Active The drive reports A028.1 upon receiving user-defined alarm 1. Others: B connector Whether the drive reports the alarm depends on the B connector.</p> <p>Additional information: This parameter sets the source of user-defined alarm 1. When this parameter is set to 1, A028.1 is reported.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-11	Source of user-defined alarm 2	0x820B	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p>							

<p>0: Inactive 1: Active Others: B connector</p>								
<p>Description: This parameter sets the source of user-defined alarm 2.</p> <p>Value description: 0: Inactive The drive does not report user-defined alarm 2. 1: Active The drive reports A028.2 upon receiving user-defined alarm 2. Others: B connector Whether the drive reports the alarm depends on the B connector.</p> <p>Additional information: This parameter sets the source of user-defined alarm 2. When this parameter is set to 1, A028.2 is reported.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-12	Source of user-defined alarm 3	0x820C	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value: 0: Inactive 1: Active Others: B connector</p>							
	<p>Description: This parameter sets the source of user-defined alarm 3.</p> <p>Value description: 0: Inactive The drive does not report user-defined alarm 3. 1: Active The drive reports A028.3 upon receiving user-defined alarm 3. Others: B connector Whether the drive reports the alarm depends on the B connector.</p> <p>Additional information: This parameter sets the source of user-defined alarm 3. When this parameter is set to 1, A028.3 is reported.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-13	Source of user-defined alarm 4	0x820D	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value:</p>							



<p>0: Inactive 1: Active Others: B connector</p>								
<p>Description: This parameter sets the source of user-defined alarm 4.</p> <p>Value description: 0: Inactive The drive does not report user-defined alarm 4. 1: Active The drive reports A028.4 upon receiving user-defined alarm 4. Others: B connector Whether the drive reports the alarm depends on the B connector.</p> <p>Additional information: This parameter sets the source of user-defined alarm 4. When this parameter is set to 1, A028.4 is reported.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-14	Source of user-defined alarm 5	0x820E	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value: 0: Inactive 1: Active Others: B connector</p>							
	<p>Description: This parameter sets the source of user-defined alarm 5.</p> <p>Value description: 0: Inactive The drive does not report user-defined alarm 5. 1: Active The drive reports A028.5 upon receiving user-defined alarm 5. Others: B connector Whether the drive reports the alarm depends on the B connector.</p> <p>Additional information: This parameter sets the source of user-defined alarm 5. When this parameter is set to 1, A028.5 is reported.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-15	Source of user-defined alarm 6	0x820F	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value:</p>							

<p>0: Inactive 1: Active Others: B connector</p>								
<p>Description: This parameter sets the source of user-defined alarm 6.</p> <p>Value description: 0: Inactive The drive does not report user-defined alarm 6. 1: Active The drive reports A028.6 upon receiving user-defined alarm 6. Others: B connector Whether the drive reports the alarm depends on the B connector.</p> <p>Additional information: This parameter sets the source of user-defined alarm 6. When this parameter is set to 1, A028.6 is reported.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-16	Source of user-defined alarm 7	0x8210	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value: 0: Inactive 1: Active Others: B connector</p>							
	<p>Description: This parameter sets the source of user-defined alarm 7.</p> <p>Value description: 0: Inactive The drive does not report user-defined alarm 7. 1: Active The drive reports A028.7 upon receiving user-defined alarm 7. Others: B connector Whether the drive reports the alarm depends on the B connector.</p> <p>Additional information: This parameter sets the source of user-defined alarm 7. When this parameter is set to 1, A028.7 is reported.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H2-17	Source of user-defined alarm 8	0x8211	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value:</p>							

	<p>0: Disable 1: Enable Others: B connector</p>
	<p>Description: This parameter sets the source of user-defined alarm 8.</p> <p>Value description: 0: Inactive The drive does not report user-defined alarm 8. 1: Active The drive reports A028.8 upon receiving user-defined alarm 8. Others: B connector Whether the drive reports the alarm depends on the B connector.</p> <p>Additional information: This parameter sets the source of user-defined alarm 8. When this parameter is set to 1, A028.8 is reported.</p>

### H3: Automatic Fault Reset/Restart

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-00	Automatic fault reset	0x8300	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value: 0: Disable 1: Enable</p>							
	<p>Description: This parameter sets whether to enable automatic fault reset.</p> <p>Value description: 0: Disable Automatic fault reset is disabled. 1: Enable Automatic fault reset is enabled.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-01	Number of automatic reset times upon fault	0x8301	0 to 100	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description: This parameter sets the number of automatic reset times upon a fault.</p>							

	<p>Additional information: When the value of H3-05 (Current fault reset times) exceeds the value of H3-01, the AC drive does not reset the fault automatically.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-02	Time for automatic reset upon fault	0x8302	0.1s to 600.0s	1.0s	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description : This parameter sets the duration from the time when the drive reports a fault to the time when automatic fault reset is performed.</p> <p>Additional information: This parameter sets the duration from the time when the drive reports a fault to the time when automatic fault reset is performed.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-03	Automatic reset terminated by manual reset	0x8303	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value: 0: Automatic reset is canceled. 1: Automatic reset continues.</p>							
	<p>Description : This parameter sets whether automatic reset can be terminated by manual reset during the automatic reset process.</p> <p>Value description: 0: Automatic reset is canceled. Automatic reset is terminated by manual reset. 1: Automatic reset continues. Automatic reset continues after manual reset.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-04	Time for restoring the number of automatic reset times	0x8304	0 min to 6000 min	10min	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description : This parameter sets the time for restoring the number of automatic reset times.</p> <p>Additional information: When this parameter is set to a non-zero value, the number of automatic reset times can be restored after the time set by H3-04 elapses. When this parameter is set to zero, automatic reset can be performed always.</p>							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
H3-05	Number of fault reset times	0x8305	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the number of times that fault reset is performed and cannot be edited. When manual reset is performed or the time set by H3-04 (Time for restoring the number of automatic reset times) elapses, the value of this parameter is reset to 0 automatically.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-06	Selection when the number of fault reset times is used up	0x8306	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value : 0: Restore the number of fault reset times 1: Do not restore the number of fault reset times							
	Description : This parameter sets whether the number of fault reset times is restored after used up.  Value description: 0: Restore the number of fault reset times When the number of automatic fault reset times is used up and the time for restoring the number of automatic fault reset times is reached, the number of automatic fault reset times is restored automatically. 1: Do not restore the number of fault reset times When the number of automatic fault resets is used up, the number of automatic fault reset times will not be restored automatically.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-07	Fault flag output selection	0x8307	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value : 0: No output during automatic fault reset 1: Output during automatic fault reset							
	Description : This parameter sets whether the fault flag is "output" during automatic fault reset.  Value description: 0: No output during automatic fault reset the fault flag is "no output" during automatic fault reset. 1: Output during automatic fault reset the fault flag is "output" during automatic fault reset.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

H3-13	Fault code 1 inhibited from automatic fault reset	0x830D	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
Description : This parameter specifies the fault code 1 that is inhibited from automatic fault reset.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-14	Fault code 2 inhibited from automatic fault reset	0x830E	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
Description : This parameter specifies the fault code 2 that is inhibited from automatic fault reset.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-15	Fault code 3 inhibited from automatic fault reset	0x830F	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
Description : This parameter specifies the fault code 3 that is inhibited from automatic fault reset.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-16	Fault code 4 inhibited from automatic fault reset	0x8310	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
Description : This parameter specifies the fault code 4 that is inhibited from automatic fault reset.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-17	Fault code 5 inhibited from automatic fault reset	0x8311	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
Description : This parameter specifies the fault code 5 that is inhibited from automatic fault reset.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-18	Fault code 6 inhibited from automatic fault reset	0x8312	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
Description : This parameter specifies the fault code 6 that is inhibited from automatic fault reset.								
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
H3-19	Fault code 7 inhibited from automatic fault reset	0x8313	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
Description : This parameter specifies the fault code 7 that is inhibited from automatic fault reset.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-20	Fault code 8 inhibited from automatic fault reset	0x8314	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
Description : This parameter specifies the fault code 8 that is inhibited from automatic fault reset.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-21	Fault code 9 inhibited from automatic fault reset	0x8315	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
Description : This parameter specifies the fault code 9 that is inhibited from automatic fault reset.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-22	Fault code 10 inhibited from automatic fault reset	0x8316	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
Description : This parameter specifies the fault code 10 that is inhibited from automatic fault reset.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-28	Restart after automatic fault reset	0x831C	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable 1: Enable							
	Description : This parameter sets whether restart is performed after automatic fault reset.  Value description: 0: Disable Restart is not performed after automatic fault reset. 1: Enable							

	Restart is performed after automatic fault reset.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-29	Restart delay after automatic fault reset	0x831D	0.0s to 600.0s	0.5S	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description : This parameter sets the delay time from automatic fault reset to automatic restart.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-30	Adopt flying start after automatic fault reset	0x831E	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable 1: Enable							
	Description : This parameter sets whether flying start is adopted after automatic fault reset.  Value description: 0: Disable Flying start is not adopted after automatic fault reset. 1: Enable Flying start is adopted after automatic fault reset.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-31	List that allows restart after automatic fault reset	0x831F	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Whitelist 1: Blacklist							
	Description : This parameter sets the fault group that automatic restart is allowed for after the faults are reset.  Value description: 0: Whitelist Automatic restart is allowed for the faults set by H3-34 to H3-39 after the faults are reset. 1: Blacklist Automatic restart is allowed for the faults set by parameters other than H3-34 to H3-39 after the faults are reset.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-34	Designated fault code 1	0x8322	0.0 to	0.0	Unsigned	Real time	Expansion	Nothing



			255.9		16 bit	changes		
	Description: This parameter sets the code of fault 1 for which restart is allowed after fault reset.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-35	Designated fault code 2	0x8323	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description: This parameter sets the code of fault 2 for which restart is allowed after fault reset.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-36	Designated fault code 3	0x8324	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description: This parameter sets the code of fault 3 for which restart is allowed after fault reset.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-37	Designated fault code 4	0x8325	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description: This parameter sets the code of fault 4 for which restart is allowed after fault reset.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-38	Designated fault code 5	0x8326	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description: This parameter sets the code of fault 5 for which restart is allowed after fault reset.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H3-39	Designated fault code 6	0x8327	0.0 to 255.9	0.0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Description: This parameter sets the code of fault 6 for which restart is allowed after fault reset.							

## H6: Historical Fault Record 1

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H6-00	Fault code 1 of the	0x8600	0.0 to	0.0	Unsigned	Cannot be	Standard	Nothing

	last time		6553.5		16 bit	changed		
	Description: This parameter records fault code 1 of the last time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H6-06	Fault code 2 of the last time	0x8606	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter records fault code 2 of the last time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H6-12	Fault code 3 of the last time	0x860C	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter records fault code 3 of the last time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H6-18	Fault code 4 of the last time	0x8612	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter records fault code 4 of the last time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H6-24	Fault code 5 of the last time	0x8618	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter records fault code 5 of the last time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H6-30	Fault code 6 of the last time	0x861E	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter records fault code 6 of the last time. For example, E015.1 is displayed as 15.1.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
H6-36	Frequency upon the latest fault	0x8624	0.00 Hz to 655.35 Hz	0.00Hz	Signed 16 bits	Cannot be changed	Standard	Nothing																		
	Description: This parameter records the operating frequency (U0-19) upon the latest fault.																									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
H6-37	Current upon the latest fault	0x8625	0.00 A to 655.35 A	0.00A	Signed 16 bits	Cannot be changed	Standard	Nothing																		
	Description: This parameter records the output current (U0-04) upon the latest fault.																									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
H6-38	Bus voltage upon the latest fault	0x8626	0.0 V to 6553.5 V	0.0V	Unsigned 16 bit	Cannot be changed	Standard	Nothing																		
	Description: This parameter records the bus voltage (U0-02) upon the latest fault.																									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
H6-39	Input terminal status upon the latest fault	0x8627	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing																		
	Value:																									
		<table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>DI1 status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 1</td> <td>DI2 status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 2</td> <td>DI3 status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 3</td> <td>DI4/HDI status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 4</td> <td>DI5 status (MD600A)</td> <td>0: Low level 1: High level</td> </tr> </tbody> </table>							Bit	Name	Value	Bit 0	DI1 status	0: Low level 1: High level	Bit 1	DI2 status	0: Low level 1: High level	Bit 2	DI3 status	0: Low level 1: High level	Bit 3	DI4/HDI status	0: Low level 1: High level	Bit 4	DI5 status (MD600A)	0: Low level 1: High level
Bit	Name	Value																								
Bit 0	DI1 status	0: Low level 1: High level																								
Bit 1	DI2 status	0: Low level 1: High level																								
Bit 2	DI3 status	0: Low level 1: High level																								
Bit 3	DI4/HDI status	0: Low level 1: High level																								
Bit 4	DI5 status (MD600A)	0: Low level 1: High level																								

Bit 5	Reserved	0: Low level 1: High level
Bit 6	Reserved	0: Low level 1: High level
Bit 7	Reserved	0: Low level 1: High level
Bit 8	Reserved	0: Low level 1: High level
Bit 9	Reserved	0: Low level 1: High level
Bit 10	VDI1 status	0: Low level 1: High level
Bit 11	VDI2 status	0: Low level 1: High level
Bit 12	VDI3 status	0: Low level 1: High level
Bit 13	VDI4 status	0: Low level 1: High level
Bit 14	VDI5 status	0: Low level 1: High level
Bit 15	VDI6 status	0: Low level 1: High level

**Description :**

This parameter records the input terminal status upon the latest fault.

**Value description:**

Bit 0: DI1 state

0: Low level

DI1 has no signal input.

1: High level

DI1 has signal input.

Bit 1: DI2 state

0: Low level

DI2 has no signal input.

1: High level

DI2 has signal input.

Bit 2: DI3 state

0: Low level

DI3 has no signal input.

1: High level

DI3 has signal input.

Bit 3: DI4/HDI status  
0: Low level  
DI4 has no signal input.  
1: High level  
DI4 has signal input.

Bit 10: VDI1 state  
0: Low level  
VDI1 has no signal input.  
1: High level  
VDI1 has signal input.

Bit 11: VDI2 state  
0: Low level  
VDI2 has no signal input.  
1: High level  
VDI2 has signal input.

Bit 12: VDI3 state  
0: Low level  
VDI3 has no signal input.  
1: High level  
VDI3 has signal input.

Bit 13: VDI4 status  
0: Low level  
VDI4 has no signal input.  
1: High level  
VDI4 has signal input.

Bit 14: VDI5 status  
0: Low level  
VDI5 has no signal input.  
1: High level  
VDI5 has signal input.

Bit 15: VDI6 state  
0: Low level  
VDI6 has no signal input.  
1: High level  
VDI6 has a signal input.

Additional information:  
The source of the DI status upon the latest fault is set by U0-07.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H6-40	Output terminal status upon the	0x8628	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing

latest fault							
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Value:

Bit	Name	Value
Bit 0	RO1 status	0: Low level 1: High level
Bit 1	Reserved	0: Low level 1: High level
Bit 2	Reserved	0: Low level 1: High level
Bit 3	Reserved	0: Low level 1: High level
Bit 4	DO1 status (MD600A)	0: Low level 1: High level
Bit 5	DO2 status (MD600A)	0: Low level 1: High level
Bit 6	Reserved	0: Low level 1: High level
Bit 7	Reserved	0: Low level 1: High level
Bit 8	Reserved	0: Low level 1: High level
Bit 9	Reserved	0: Low level 1: High level
Bit 10	VDO1 status	0: Low level 1: High level
Bit 11	VDO2 status	0: Low level 1: High level
Bit 12	VDO3 status	0: Low level 1: High level
Bit 13	VDO4 status	0: Low level 1: High level
Bit 14	VDO5 status	0: Low level 1: High level
Bit 15	VDO6 status	0: Low level 1: High level

Description:

This parameter records the output terminal state upon the latest fault.

Bit 0: RO1 status

0: Low level

The RO has no signal output.

1: High level

The RO has signal output.

Bit 4: DO1 status (MD600A)

0: Low level

The DO has no signal output.

1: High level

The DO has signal output.

Bit 5: DO2 status (MD600A)

0: Low level

The DO has no signal output.

1: High level

The DO has signal output.

Bit 10: VDO1 status

0: Low level

VDO1 has no signal output.

1: High level

VDO1 has signal output.

Bit 11: VDO2 state

0: Low level

VDO2 has no signal output.

1: High level

VDO2 has signal output.

Bit 12: VDO3 state

0: Low level

VDO3 has no signal output.

1: High level

VDO3 has signal output.

Bit 13: VDO4 status

0: Low level

VDO4 has no signal output.

1: High level

VDO4 has signal output.

Bit 14: VDO5 status

0: Low level

VDO5 has no signal output.

1: High level

VDO5 has signal output.

Bit 15: VDO6 state

0: Low level

VDO6 has no signal output.

1: High level

VDO6 has a signal output.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H6-41	Drive state upon the latest fault	0x8629	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Value:</p> <p>0: Initializing    3: Operation allowed    6: Stop  1: Switch-on inhibited    4: Start    7: Self-check  2: Switch-on allowed    5: Operating    8: Motor parameter auto-tuning</p>							
	<p>Description:</p> <p>This parameter records the drive state upon the latest fault.</p> <p>Value description:</p> <p>0: The AC drive is in the initialization state.  1: Switch-on is inhibited for the AC drive.  2: Switch-on is allowed for the AC drive.  3: Operation is allowed for the AC drive.  4: The AC drive is in the startup state.  5: The drive is in the running state.  6: The AC drive is in the stop state.  7: The AC drive is in the self-check state.  8: The AC drive is in the auto-tuning state.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H6-42	Power-on time upon the latest fault	0x862A	0 min to 65535 min	0min	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Description:</p> <p>This parameter records the power-on time upon the latest fault.</p> <p>Additional information:</p> <p>The power-on time upon the latest fault is the time set by U0-25 (Current power-on time).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H6-43	Running time upon the latest fault	0x862B	0.0 min to 6553.5 min	0.0min	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Description:</p> <p>This parameter records the running time upon the latest fault.</p>							



	Additional information: The running time upon the latest fault is the time set by U0-26 (Current running time).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H6-44	Status word 1 upon the latest fault	0x862C	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Value:							
		<b>Bit</b>	<b>Name</b>	<b>Value</b>				
		Bit 0	Ready to switch on	0: Inactive 1: Active				
		Bit 1	Ready to run	0: Inactive 1: Active				
		Bit 2	Running	0: Inactive 1: Active				
		Bit 3	Faulty	0: Inactive 1: Active				
		Bit 4	OFF2 (coast to stop)	0: Inactive 1: Active				
		Bit 5	OFF3 (quick stop)	0: Inactive 1: Active				
		Bit 6	Switch-on inhibited	0: Inactive 1: Active				
		Bit 7	Alarm or running with restriction	0: Inactive 1: Active				
		Bit 8	No speed deviation	0: Inactive 1: Active				
		Bit 9	Local or remote	0: Local 1: Remote				
		Bit 10	Target speed reached	0: Inactive 1: Active				
		Bit 11	Torque limiting	0: Inactive 1: Active				
	Bit 12	Forward speed	0: Inactive 1: Active					
	Bit 13	Reverse speed	0: Inactive 1: Active					
	Bit 14	Running (pulse output)	0: Inactive 1: Active					

Bit 15	User-defined state 0	0: Inactive 1: Active
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Description :

This parameter records the status word 1 upon the latest fault.

Value description:

Bit 0: Ready to switch on

0: Inactive

The AC drive is not in the power-on preparation state.

1: Active

The AC drive is in the power-on preparation state.

Bit 1: Ready to run

0: Inactive

The AC drive is not in the ready-to-run state.

1: Active

The AC drive is in the ready-to-run state.

Bit 2: Running

0: Inactive

The AC drive is not in the running state.

1: Active

The AC drive is in the running state.

Bit 3: Faulty

0: Inactive

The AC drive is in the normal state.

1: Active

The AC drive is in the faulty state.

Bit 4: OFF2 (coast to stop)

0: Inactive

OFF2 (coast to stop) stop mode is inactive.

1: Active

OFF2 (coast to stop) stop mode is active.

Bit 5: OFF3 (quick stop)

0: Inactive

OFF3 (quick stop) stop mode is inactive.

1: Active

OFF3 (quick stop) stop mode is active.

Bit 6: Switch-on inhibited

0: Inactive

Switch-on is not inhibited for the AC drive.

1: Active

Switch-on is inhibited for the AC drive.

Bit 7: Alarm or running with restriction

0: Inactive

The AC drive does not encounter an alarm or is not in the restricted running state.

1: Active

The AC drive encounters an alarm or is in the restricted running state.

Bit 8: No speed deviation

0: Inactive

The AC drive speed is not deviated.

1: Active

The AC drive speed is deviated.

Bit 9: Local or remote

0: Local

The AC drive is in the local control mode.

1: Remote

The AC drive is in the remote control mode.

Bit 10: Target speed reached

0: Inactive

The target speed is not reached.

1: Active

The target speed is reached.

Bit 11: Torque limiting

0: Inactive

The torque is unlimited.

1: Active

The torque is limited.

Bit 12: Forward speed

0: Inactive

The forward speed is not allowed.

1: Active

The forward speed is allowed.

Bit 13: Reverse speed

0: Inactive

The reverse speed is not allowed.

1: Active

The reverse speed is allowed.

Bit 14: Running (pulse output)

0: Inactive

The AC drive is not in the running (pulse output) state.

1: Active

The AC drive is in the running (pulse output) state.

Bit 15: User-defined state 0

0: Inactive

The user-defined state 0 is inactive.

1: Active

	The user-defined state 0 is active.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
H6-45	Status word 2 upon the latest fault	0x862D	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing	
	Value:								
		<b>Bit</b>	<b>Name</b>	<b>Value</b>					
		Bit 0	Self-check	0: Inactive 1: Active					
		Bit 1	Auto-tuning	0: Inactive 1: Active					
		Bit 2	Minor fault state	0: Inactive 1: Active					
		Bit 3	Alarm state	0: Inactive 1: Active					
		Bit 4	Speed mode	0: Inactive 1: Active					
		Bit 5	Torque mode	0: Inactive 1: Active					
		Bit 6	Reserved	0: Inactive 1: Active					
		Bit 7	RFG enable	0: Inactive 1: Active					
		Bit 8	RFG running	0: Inactive 1: Active					
		Bit 9	Stop upon fault	0: Inactive 1: Active					
		Bit 10	Non-jogging	0: Inactive 1: Active					
		Bit 11	Jogging	0: Inactive 1: Active					
		Bit 12	Decelerate to stop	0: Inactive 1: Active					
	Bit 13	Reserved							
	Bit 14	Terminal control	0: Inactive 1: Active						
	Bit 15	User-defined state 1	0: Inactive 1: Active						

Description :

This parameter records the status word 2 upon the latest fault.

Value description:

Bit 0: Self-check

0: Inactive

The AC drive is not in the self-check state.

1: Active

The AC drive is in the self-check state.

Bit 1: Auto-tuning

0: Inactive

The AC drive is not in the parameter auto-tuning state.

1: Active

The AC drive is in the parameter auto-tuning state.

Bit 2: Minor fault state

0: Inactive

The AC drive does not encounter minor faults.

1: Active

The AC drive encounters minor faults.

Bit 3: Alarm state

0: Inactive

The AC drive does not encounter alarms.

1: Active

The AC drive encounters alarms.

Bit 4: Speed mode

0: Inactive

The AC drive is not in the speed mode.

1: Active

The AC drive is in the speed mode.

Bit 5: Torque mode

0: Inactive

The AC drive is not in the torque mode.

1: Active

The AC drive is in the torque mode.

Bit 6: Reserved

0: Inactive

The AC drive is not in the position mode.

1: Active

The AC drive is in the position mode.

Bit 7: RFG enabled

0: Inactive

RFG is disabled.

1: Active

<p>RFG is enabled.</p> <p>Bit 8: RFG running</p> <p>0: Inactive</p> <p>RFG is in non-running state.</p> <p>1: Active</p> <p>RFG is in the running state.</p> <p>Bit 9: Stop upon fault</p> <p>0: Inactive</p> <p>The command for stopping upon a fault is inactive.</p> <p>1: Active</p> <p>The command for stopping upon a fault is valid.</p> <p>Bit 10: Non-jogging</p> <p>0: Inactive</p> <p>The AC drive is jogging.</p> <p>1: Active</p> <p>The AC drive is in non-jogging state.</p> <p>Bit 11: Jogging</p> <p>0: Inactive</p> <p>The AC drive is in non-jogging state.</p> <p>1: Active</p> <p>The AC drive is jogging.</p> <p>Bit 12: Decelerate to stop</p> <p>0: Inactive</p> <p>The AC drive does not in the deceleration to stop state.</p> <p>1: Active</p> <p>The AC drive is in the deceleration to stop state.</p> <p>Bit 13:: Reserved</p> <p>Bit 14: Terminal control</p> <p>0: Inactive</p> <p>Terminal control is disabled.</p> <p>1: Active</p> <p>Terminal control is enabled.</p> <p>Bit 15: User-defined state 1</p> <p>0: Inactive</p> <p>User-set state 1 is inactive.</p> <p>1: Active</p> <p>User-set state 1 is active.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H6-46	Command word upon the latest fault	0x862E	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing

Value:

Bit	Name	Value
Bit 0	ON_OFF1 (start/stop)	0: Stop 1: Run
Bit 1	OFF2 (coast to stop)	0: Activate 1: Normal
Bit 2	OFF3 (quick stop)	0: Activate 1: Normal
Bit 3	Running	0: Inhibit 1: Allow
Bit 4	RFG output forced to be 0	0: Normal 1: RFG output forced to be 0
Bit 5	RFG pause	0: Normal 1: RFG pause
Bit 6	RFG input forced to be 0	0: Normal 1: RFG input forced to be 0
Bit 7	Fault reset	0: Inactive 1: Active
Bit 8	JOG1	0: Inactive 1: Active
Bit 9	JOG2	0: Inactive 1: Active
Bit 10	Remote control (reserved)	0: Inactive 1: Active
Bit 11	Speed inversion	0: Do not invert the speed 1: Invert the speed
Bit 12	Start signal	0: Inactive 1: Active
Bit 13	Internal start command	0: Inactive 1: Active
Bit 14	Reserved	
Bit 15	Reserved	

Description:

This parameter records the command word upon the latest fault.

Value description:

Bit 0: ON\_OFF1 (start/stop)

0: Stop

1: Run

Bit 1: OFF2 (coast to stop)  
0: Activate  
OFF2 (coast to stop) stop command is activated.  
1: Normal  
OFF2 (coast to stop) stop command is normal.

Bit 2: OFF3 (quick stop)  
0: Activate  
OFF3 (quick stop) stop command is activated.  
1: Normal  
OFF3 (quick stop) stop command is normal.

Bit 3: Running  
0: Inhibit  
The AC drive is not allowed for running.  
1: Allow  
The AC drive is allowed for running.

Bit 4: RFG output forced to be 0  
0: Normal  
RFG output is not forced to be 0.  
1: RFG output forced to be 0  
RFG output is forced to be 0.

Bit 5: RFG pause  
0: Normal  
RFG is normal.  
1: RFG pause  
RFG pauses.

Bit 6: RFG input forced to be 0  
0: Normal  
RFG input is not forced to be 0.  
1: RFG input forced to be 0  
RFG input is forced to be 0.

Bit 7: Fault reset  
0: Inactive  
The fault cannot be reset.  
1: Active  
The fault can be reset.

Bit 8: JOG1  
0: Inactive  
JOG1 is inactive.  
1: Active  
JOG1 is active.

Bit 9: JOG2  
0: Inactive  
JOG2 is inactive.



1: Active  
 JOG2 is active.  
 Bit 10: Remote control (reserved)  
 0: Inactive  
 1: Active  
 Bit 11: Speed inversion  
 0: Do not invert the speed  
 The running speed is opposite to the set speed.  
 1: Invert the speed  
 The running speed is the same as the set speed.  
 Bit 12: Start signal  
 0: Inactive  
 The AC drive start signal is inactive.  
 1: Active  
 The AC drive start signal is active.  
 Bit 13: Internal start command  
 0: Inactive  
 The AC drive internal start signal is inactive.  
 1: Active  
 The AC drive internal start signal is active.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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H6-47	RFG status word upon the latest fault	0x862F	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
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Value:

Bit	Name	Value
Bit 0 to bit 1	Acceleration/Deceleration state	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
Bit 2 to bit 3	Acceleration/Deceleration arc state	0: Constant speed 1: Start segment 2: Constant acceleration 3: End segment
Bit 4	Reserved	
Bit 5	Reserved	
Bit 6	Reserved	
Bit 7	Reserved	

Bit 8 to bit 9	Acceleration/deceleration state of the previous cycle	0: Reserved 1: Constant speed 2: Acceleration 3: Decelerate
Bit 10 to bit 11	Arc state of the previous cycle	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
Bit 12	Reserved	
Bit 13	Reserved	
Bit 14	Reserved	
Bit 15	Reserved	
<p>Description :</p> <p>This parameter records the RFG status word upon the latest fault.</p> <p>Value description:</p> <p>Bit 0 to bit 1: Acceleration/Deceleration state</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p> <p>Bit 2 to bit 3: Acceleration/Deceleration arc state</p> <p>0: Constant speed 1: Start segment 2: Constant acceleration 3: End segment</p> <p>Bit 4 to bit 7: Reserved</p> <p>Bit 8 to bit 9: Acceleration or deceleration state of the previous cycle</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p> <p>Bit 10 and bit 11: Arc state of the previous cycle</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p>		

## H7: Historical Fault Record 2

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-00	Fault code 1 of the second latest time	0x8700	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter records the fault code 1 of the second latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-06	Fault code 2 of the second latest time	0x8706	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter records the fault code 2 of the second latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-12	Fault code 3 of the second latest time	0x870C	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter records the fault code 3 of the second latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-18	Fault code 4 of the second latest time	0x8712	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter records the fault code 4 of the second latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-24	Fault code 5 of the second latest time	0x8718	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter records the fault code 5 of the second latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-30	Fault code 6 of the	0x871E	0.0 to	0.0	Unsigned	Cannot be	Standard	Nothing

	second latest time		6553.5		16 bit	changed		
	Description: This parameter records the fault code 6 of the second latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-36	Frequency upon the second latest fault	0x8724	0.00 Hz to 655.35 Hz	0.00Hz	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description: This parameter records the operating frequency upon the second latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-37	Current upon the second latest fault	0x8725	0.00 A to 655.35 A	0.00A	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description: This parameter records the output current upon the second latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-38	Bus voltage upon the second latest fault	0x8726	0.0 V to 6553.5 V	0.0V	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter records the bus voltage upon the second latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-39	Input terminal status upon the second latest fault	0x8727	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter records the input terminal status upon the second latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-40	Output terminal status upon the second latest fault	0x8728	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing

	<p>Description :</p> <p>This parameter records the output terminal status upon the second latest fault.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Drive state upon the second latest fault	0x8729	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Value:</p> <p>0: Initializing    3: Operation allowed    6: Stop  1: Switch-on inhibited    4: Start    7: Self-check  2: Switch-on allowed    5: Operating    8: Motor parameter auto-tuning</p>							
H7-41	<p>Description :</p> <p>This parameter records the drive state upon the second latest fault.</p> <p>Value description:</p> <p>0: Initializing  The AC drive is in the initialization state.</p> <p>1: Switch-on inhibited  Switch-on is inhibited for the AC drive.</p> <p>2: Switch-on allowed  Switch-on is allowed for the AC drive.</p> <p>3: Operation allowed  Operation is allowed for the AC drive.</p> <p>4: Start  The AC drive is in the startup state.</p> <p>5: Operating  The drive is in the running state.</p> <p>6: Stop  The AC drive is in the stop state.</p> <p>7: Self-check  The AC drive is in the self-check state.</p> <p>8: Motor parameter auto-tuning  The AC drive is in the auto-tuning state.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Power-on time upon the second latest fault	0x872A	0 min to 65535 min	0min	Unsigned 16 bit	Cannot be changed	Standard	Nothing
H7-42	<p>Description :</p> <p>This parameter records the power-on time upon the second latest fault.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-43	Running time upon the second latest fault	0x872B	0.0 min to 6553.5 min	0.0min	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter records the running time upon the second latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-44	Status word 1 upon the second latest fault	0x872C	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Value:							
		Bit	Name	Value				
		Bit 0	Ready to switch on	0: Inactive 1: Active				
		Bit 1	Ready to run	0: Inactive 1: Active				
		Bit 2	Running	0: Inactive 1: Active				
		Bit 3	Faulty	0: Inactive 1: Active				
		Bit 4	OFF2 (coast to stop)	0: Inactive 1: Active				
		Bit 5	OFF3 (quick stop)	0: Inactive 1: Active				
		Bit 6	Switch-on inhibited	0: Inactive 1: Active				
		Bit 7	Alarm or running with restriction	0: Inactive 1: Active				
		Bit 8	No speed deviation	0: Inactive 1: Active				
		Bit 9	Local or remote	0: Local 1: Remote				
		Bit 10	Target speed reached	0: Inactive 1: Active				
	Bit 11	Torque limiting	0: Inactive 1: Active					
	Bit 12	Forward speed	0: Inactive 1: Active					

Bit 13	Reverse speed	0: Inactive 1: Active
Bit 14	Running (pulse output)	0: Inactive 1: Active
Bit 15	User-defined state 0	0: Inactive 1: Active

Description :

This parameter records the status word 1 upon the second latest fault.

Value description:

Bit 0: Ready to switch on

0: Inactive

The AC drive is not in the power-on preparation state.

1: Active

The AC drive is in the power-on preparation state.

Bit 1: Ready to run

0: Inactive

The AC drive is not in the ready-to-run state.

1: Active

The AC drive is in the ready-to-run state.

Bit 2: Running

0: Inactive

The AC drive is not in the running state.

1: Active

The AC drive is in the running state.

Bit 3: Faulty

0: Inactive

The AC drive is in the normal state.

1: Active

The AC drive is in the faulty state.

Bit 4: OFF2 (coast to stop)

0: Inactive

OFF2 (coast to stop) stop mode is inactive.

1: Active

OFF2 (coast to stop) stop mode is active.

Bit 5: OFF3 (quick stop)

0: Inactive

OFF3 (quick stop) stop mode is inactive.

1: Active

OFF3 (quick stop) stop mode is active.

Bit 6: Switch-on inhibited

0: Inactive

Switch-on is not inhibited for the AC drive.

1: Active

Switch-on is inhibited for the AC drive.

Bit 7: Alarm or running with restriction

0: Inactive

The AC drive does not encounter an alarm or is not in the restricted running state.

1: Active

The AC drive encounters an alarm or is in the restricted running state.

Bit 8: No speed deviation

0: Inactive

The AC drive speed is not deviated.

1: Active

The AC drive speed is deviated.

Bit 9: Local or remote

0: Local

The AC drive is in the local control mode.

1: Remote

The AC drive is in the remote control mode.

Bit 10: Target speed reached

0: Inactive

The target speed is not reached.

1: Active

The target speed is reached.

Bit 11: Torque limiting

0: Inactive

The torque is unlimited.

1: Active

The torque is limited.

Bit 12: Forward speed

0: Inactive

The forward speed is not allowed.

1: Active

The forward speed is allowed.

Bit 13: Reverse speed

0: Inactive

The reverse speed is not allowed.

1: Active

The reverse speed is allowed.

Bit 14: Running (pulse output)

0: Inactive

The AC drive is not in the running (pulse output) state.

1: Active

The AC drive is in the running (pulse output) state.



	Bit 15: User-defined state 0 0: Inactive The user-defined state 0 is inactive. 1: Active The user-defined state 0 is active.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-45	Status word 2 upon the second latest fault	0x872D	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Value:							
		Bit	Name	Value				
		Bit 0	Self-check	0: Inactive 1: Active				
		Bit 1	Auto-tuning	0: Inactive 1: Active				
		Bit 2	Active limit state	0: Inactive 1: Active				
		Bit 3	Alarm state	0: Inactive 1: Active				
		Bit 4	Speed mode	0: Inactive 1: Active				
		Bit 5	Torque mode	0: Inactive 1: Active				
		Bit 6	Reserved	0: Inactive 1: Active				
		Bit 7	RFG enable	0: Inactive 1: Active				
		Bit 8	RFG running	0: Inactive 1: Active				
		Bit 9	Fault reaction	0: Inactive 1: Active				
		Bit 10	Non-jogging	0: Inactive 1: Active				
	Bit 11	Jogging	0: Inactive 1: Active					
	Bit 12	Decelerate to stop	0: Inactive 1: Active					
	Bit 13	Reserved	0: Inactive 1: Active					

Bit 14	Terminal control	0: Inactive 1: Active
Bit 15	User-defined state 1	0: Inactive 1: Active

Description :

This parameter records the status word 2 upon the second latest fault.

Value description:

Bit 0: Self-check

0: Inactive

The AC drive is not in the self-check state.

1: Active

The AC drive is in the self-check state.

Bit 1: Auto-tuning

0: Inactive

The AC drive is not in the parameter auto-tuning state.

1: Active

The AC drive is in the parameter auto-tuning state.

Bit 2: Minor fault state

0: Inactive

The AC drive does not encounter minor faults.

1: Active

The AC drive encounters minor faults.

Bit 3: Alarm state

0: Inactive

The AC drive does not encounter alarms.

1: Active

The AC drive encounters alarms.

Bit 4: Speed mode

0: Inactive

The AC drive is not in the speed mode.

1: Active

The AC drive is in the speed mode.

Bit 5: Torque mode

0: Inactive

The AC drive is not in the torque mode.

1: Active

The AC drive is in the torque mode.

Bit 6: Reserved

0: Inactive

The AC drive is not in the position mode.

1: Active

<p>The AC drive is in the position mode.</p> <p>Bit 7: RFG enabled</p> <p>0: Inactive</p> <p>RFG is disabled.</p> <p>1: Active</p> <p>RFG is enabled.</p> <p>Bit 8: RFG running</p> <p>0: Inactive</p> <p>RFG is in non-running state.</p> <p>1: Active</p> <p>RFG is in the running state.</p> <p>Bit 9: Stop upon fault</p> <p>0: Inactive</p> <p>The command for stopping upon a fault is inactive.</p> <p>1: Active</p> <p>The command for stopping upon a fault is valid.</p> <p>Bit 10: Non-jogging</p> <p>0: Inactive</p> <p>The AC drive is jogging.</p> <p>1: Active</p> <p>The AC drive is in non-jogging state.</p> <p>Bit 11: Jogging</p> <p>0: Inactive</p> <p>The AC drive is in non-jogging state.</p> <p>1: Active</p> <p>The AC drive is jogging.</p> <p>Bit 12: Decelerate to stop</p> <p>0: Inactive</p> <p>The AC drive does not in the deceleration to stop state.</p> <p>1: Active</p> <p>The AC drive is in the deceleration to stop state.</p> <p>Bit 13:: Reserved</p> <p>Bit 14: Terminal control</p> <p>0: Inactive</p> <p>Terminal control is disabled.</p> <p>1: Active</p> <p>Terminal control is enabled.</p> <p>Bit 15: User-defined state 1</p> <p>0: Inactive</p> <p>User-set state 1 is inactive.</p> <p>1: Active</p> <p>User-set state 1 is active.</p>
--

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
H7-46	Command word upon the second latest fault	0x872E	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing	
	Value:								
		<b>Bit</b>	<b>Name</b>	<b>Value</b>					
		Bit 0	ON_OFF1 (start/stop)	0: Stop 1: Run					
		Bit 1	OFF2 (coast to stop)	0: Activate 1: Normal					
		Bit 2	OFF3 (quick stop)	0: Activate 1: Normal					
		Bit 3	Running	0: Inhibit 1: Allow					
		Bit 4	RFG output forced to be 0	0: Normal 1: RFG output forced to be 0					
		Bit 5	RFG pause	0: Normal 1: RFG pause					
		Bit 6	RFG input forced to be 0	0: Normal 1: RFG input forced to be 0					
		Bit 7	Fault reset	0: Inactive 1: Active					
		Bit 8	JOG1	0: Inactive 1: Active					
		Bit 9	JOG2	0: Inactive 1: Active					
		Bit 10	Remote control (reserved)	0: Inactive 1: Active					
		Bit 11	Speed inversion	0: Do not invert the speed 1: Invert the speed					
		Bit 12	Start signal	0: Inactive 1: Active					
	Bit 13	Internal start command	0: Inactive 1: Active						
	Bit 14	Reserved							
	Bit 15	Reserved							
Description:									
This parameter records the command word upon the second latest fault.									

Value description:

Bit 0: ON\_OFF1 (start/stop)

0: Stop

1: Run

Bit 1: OFF2 (coast to stop)

0: Activate

OFF2 (coast to stop) stop command is activated.

1: Normal

OFF2 (coast to stop) stop command is normal.

Bit 2: OFF3 (quick stop)

0: Activate

OFF3 (quick stop) stop command is activated.

1: Normal

OFF3 (quick stop) stop command is normal.

Bit 3: Running

0: Inhibit

The AC drive is not allowed for running.

1: Allow

The AC drive is allowed for running.

Bit 4: RFG output forced to be 0

0: Normal

RFG output is not forced to be 0.

1: RFG output forced to be 0

RFG output is forced to be 0.

Bit 5: RFG pause

0: Normal

RFG is normal.

1: RFG pause

RFG pauses.

Bit 6: RFG input forced to be 0

0: Normal

RFG input is not forced to be 0.

1: RFG input forced to be 0

RFG input is forced to be 0.

Bit 7: Fault reset

0: Inactive

The fault cannot be reset.

1: Active

The fault can be reset.

Bit 8: JOG1

0: Inactive

JOG1 is inactive.

<p>1: Active JOG1 is active. Bit 9: JOG2 0: Inactive JOG2 is inactive. 1: Active JOG2 is active. Bit 10: Remote control (reserved) 0: Inactive 1: Active Bit 11: Speed inversion 0: Do not invert the speed The running speed is opposite to the set speed. 1: Invert the speed The running speed is the same as the set speed. Bit 12: Start signal 0: Inactive The AC drive start signal is inactive. 1: Active The AC drive start signal is active. Bit 13: Internal start command 0: Inactive The AC drive internal start signal is inactive. 1: Active The AC drive internal start signal is active.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H7-47	RFG status word upon the second latest fault	0x872F	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Value:							
	Bit 0 to bit 1	Acceleration/Deceleration state			0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration			
	Bit 2 to bit 3	Acceleration/Deceleration arc state			0: Constant speed 1: Start segment 2: Constant acceleration 3: End segment			
Bit 4 to bit 7	Reserved							

Bit 8 to bit 9	Acceleration or deceleration state of the previous cycle	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
Bit 10 and bit 11	Arc state of the previous cycle	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
Bit 12 to bit 15	Reserved	
<p>Description :</p> <p>This parameter records the RFG status word upon the second latest fault.</p> <p>Value description:</p> <p>Bit 0 to bit 1: Acceleration/Deceleration state</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p> <p>Bit 2 to bit 3: Acceleration/Deceleration arc state</p> <p>0: Constant speed 1: Start segment 2: Constant acceleration 3: End segment</p> <p>Bit 8 to bit 9: Acceleration or deceleration state of the previous cycle</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p> <p>Bit 10 and bit 11: Arc state of the previous cycle</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p>		

### H8: Historical Fault Record 3

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H8-00	Fault code 1 of the	0x8800	0.0 to	0.0	Unsigned	Cannot be	Expansion	Nothing

	third latest time		6553.5		16 bit	changed		
	Description: This parameter records the fault code 1 of the third latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H8-06	Fault code 2 of the third latest time	0x8806	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 2 of the third latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H8-12	Fault code 3 of the third latest time	0x880C	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 3 of the third latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H8-18	Fault code 4 of the third latest time	0x8812	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 4 of the third latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H8-24	Fault code 5 of the third latest time	0x8818	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 5 of the third latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H8-30	Fault code 6 of the third latest time	0x881E	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 6 of the third latest time. For example, E015.1 is displayed as 15.1.							



Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H8-36	Frequency upon the third latest fault	0x8824	0.00 Hz to 655.35 Hz	0.00Hz	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter records the operating frequency upon the third latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H8-37	Current upon the third latest fault	0x8825	0.00 A to 655.35 A	0.00A	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter records the output current upon the third latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H8-38	Bus voltage upon the third latest fault	0x8826	0.0 V to 6553.5 V	0.0V	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the bus voltage upon the third latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H8-39	Input terminal status upon the third latest fault	0x8827	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the input terminal status upon the third latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H8-40	Output terminal status upon the third latest fault	0x8828	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the output terminal status upon the third latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

H8-41	Drive state upon the third latest fault	0x8829	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Initializing                         3: Operation allowed                         6: Stop 1: Switch-on inhibited                         4: Start                         7: Self-check 2: Switch-on allowed                         5: Operating                         8: Motor parameter auto-tuning							
	Description: This parameter records the drive state upon the third latest fault.  Value description: 0: Initializing The AC drive is in the initialization state. 1: Switch-on inhibited Switch-on is inhibited for the AC drive. 2: Switch-on allowed Switch-on is allowed for the AC drive. 3: Operation allowed Operation is allowed for the AC drive. 4: Start The AC drive is in the startup state. 5: Operating The drive is in the running state. 6: Stop The AC drive is in the stop state. 7: Self-check The AC drive is in the self-check state. 8: Motor parameter auto-tuning The AC drive is in the auto-tuning state.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H8-42	Power-on time upon the third latest fault	0x882A	0 min to 65535 min	0min	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the power-on time upon the third latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H8-43	Running time upon the third latest fault	0x882B	0.0 min to 6553.5 min	0.0min	Unsigned 16 bit	Cannot be changed	Expansion	Nothing

	Description : This parameter records the running time upon the third latest fault.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
H8-44	Status word 1 upon the third latest fault	0x882C	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing	
	Value:								
		<b>Bit</b>	<b>Name</b>	<b>Value</b>					
		Bit 0	Ready to switch on	0: Inactive 1: Active					
		Bit 1	Ready to run	0: Inactive 1: Active					
		Bit 2	Running	0: Inactive 1: Active					
		Bit 3	Faulty	0: Inactive 1: Active					
		Bit 4	OFF2 (coast to stop)	0: Inactive 1: Active					
		Bit 5	OFF3 (quick stop)	0: Inactive 1: Active					
		Bit 6	Switch-on inhibited	0: Inactive 1: Active					
		Bit 7	Alarm or running with restriction	0: Inactive 1: Active					
		Bit 8	No speed deviation	0: Inactive 1: Active					
		Bit 9	Local or remote	0: Local 1: Remote					
		Bit 10	Target speed reached	0: Inactive 1: Active					
		Bit 11	Torque limiting	0: Inactive 1: Active					
	Bit 12	Forward speed	0: Inactive 1: Active						
	Bit 13	Reverse speed	0: Inactive 1: Active						
	Bit 14	Running (pulse output)	0: Inactive 1: Active						

Bit 15	User-defined state 0	0: Inactive 1: Active
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Description :

This parameter records the status word 1 upon the third latest fault.

Value description:

Bit 0: Ready to switch on

0: Inactive

The AC drive is not in the power-on preparation state.

1: Active

The AC drive is in the power-on preparation state.

Bit 1: Ready to run

0: Inactive

The AC drive is not in the ready-to-run state.

1: Active

The AC drive is in the ready-to-run state.

Bit 2: Running

0: Inactive

The AC drive is not in the running state.

1: Active

The AC drive is in the running state.

Bit 3: Faulty

0: Inactive

The AC drive is in the normal state.

1: Active

The AC drive is in the faulty state.

Bit 4: OFF2 (coast to stop)

0: Inactive

OFF2 (coast to stop) stop mode is inactive.

1: Active

OFF2 (coast to stop) stop mode is active.

Bit 5: OFF3 (quick stop)

0: Inactive

OFF3 (quick stop) stop mode is inactive.

1: Active

OFF3 (quick stop) stop mode is active.

Bit 6: Switch-on inhibited

0: Inactive

Switch-on is not inhibited for the AC drive.

1: Active

Switch-on is inhibited for the AC drive.

Bit 7: Alarm or running with restriction

0: Inactive

The AC drive does not encounter an alarm or is not in the restricted running state.

1: Active

The AC drive encounters an alarm or is in the restricted running state.

Bit 8: No speed deviation

0: Inactive

The AC drive speed is not deviated.

1: Active

The AC drive speed is deviated.

Bit 9: Local or remote

0: Local

The AC drive is in the local control mode.

1: Remote

The AC drive is in the remote control mode.

Bit 10: Target speed reached

0: Inactive

The target speed is not reached.

1: Active

The target speed is reached.

Bit 11: Torque limiting

0: Inactive

The torque is unlimited.

1: Active

The torque is limited.

Bit 12: Forward speed

0: Inactive

The forward speed is not allowed.

1: Active

The forward speed is allowed.

Bit 13: Reverse speed

0: Inactive

The reverse speed is not allowed.

1: Active

The reverse speed is allowed.

Bit 14: Running (pulse output)

0: Inactive

The AC drive is not in the running (pulse output) state.

1: Active

The AC drive is in the running (pulse output) state.

Bit 15: User-defined state 0

0: Inactive

The user-defined state 0 is inactive.

1: Active

	The user-defined state 0 is active.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
H8-45	Status word 2 upon the third latest fault	0x882D	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing	
	Value:								
		<b>Bit</b>	<b>Name</b>	<b>Value</b>					
		Bit 0	Self-check	0: Inactive 1: Active					
		Bit 1	Auto-tuning	0: Inactive 1: Active					
		Bit 2	Active limit state	0: Inactive 1: Active					
		Bit 3	Alarm state	0: Inactive 1: Active					
		Bit 4	Speed mode	0: Inactive 1: Active					
		Bit 5	Torque mode	0: Inactive 1: Active					
		Bit 6	Reserved	0: Inactive 1: Active					
		Bit 7	RFG enable	0: Inactive 1: Active					
		Bit 8	RFG running	0: Inactive 1: Active					
		Bit 9	Fault reaction	0: Inactive 1: Active					
		Bit 10	Non-jogging	0: Inactive 1: Active					
		Bit 11	Jogging	0: Inactive 1: Active					
	Bit 12	Decelerate to stop	0: Inactive 1: Active						
	Bit 13	Reserved	0: Inactive 1: Active						
	Bit 14	Terminal control	0: Inactive 1: Active						

Bit 15	User-defined state 1	0: Inactive 1: Active
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Description :

This parameter records the status word 2 upon the third latest fault.

Value description:

Bit 0: Self-check

0: Inactive

The AC drive is not in the self-check state.

1: Active

The AC drive is in the self-check state.

Bit 1: Auto-tuning

0: Inactive

The AC drive is not in the parameter auto-tuning state.

1: Active

The AC drive is in the parameter auto-tuning state.

Bit 2: Minor fault state

0: Inactive

The AC drive does not encounter minor faults.

1: Active

The AC drive encounters minor faults.

Bit 3: Alarm state

0: Inactive

The AC drive does not encounter alarms.

1: Active

The AC drive encounters alarms.

Bit 4: Speed mode

0: Inactive

The AC drive is not in the speed mode.

1: Active

The AC drive is in the speed mode.

Bit 5: Torque mode

0: Inactive

The AC drive is not in the torque mode.

1: Active

The AC drive is in the torque mode.

Bit 6: Reserved

0: Inactive

The AC drive is not in the position mode.

1: Active

The AC drive is in the position mode.

Bit 7: RFG enabled

0: Inactive  
RFG is disabled.

1: Active  
RFG is enabled.

Bit 8: RFG running

0: Inactive  
RFG is in non-running state.

1: Active  
RFG is in the running state.

Bit 9: Stop upon fault

0: Inactive  
The command for stopping upon a fault is inactive.

1: Active  
The command for stopping upon a fault is valid.

Bit 10: Non-jogging

0: Inactive  
The AC drive is jogging.

1: Active  
The AC drive is in non-jogging state.

Bit 11: Jogging

0: Inactive  
The AC drive is in non-jogging state.

1: Active  
The AC drive is jogging.

Bit 12: Decelerate to stop

0: Inactive  
The AC drive does not in the deceleration to stop state.

1: Active  
The AC drive is in the deceleration to stop state.

Bit 13:: Reserved

Bit 14: Terminal control

0: Inactive  
Terminal control is disabled.

1: Active  
Terminal control is enabled.

Bit 15: User-defined state 1

0: Inactive  
User-set state 1 is inactive.

1: Active  
User-set state 1 is active.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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H8-46	Command word upon the third latest fault	0x882E	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing																																																		
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0: Stop  
1: Run  
Bit 1: OFF2 (coast to stop)  
0: Activate  
OFF2 (coast to stop) stop command is activated.  
1: Normal  
OFF2 (coast to stop) stop command is normal.  
Bit 2: OFF3 (quick stop)  
0: Activate  
OFF3 (quick stop) stop command is activated.  
1: Normal  
OFF3 (quick stop) stop command is normal.  
Bit 3: Running  
0: Inhibit  
The AC drive is not allowed for running.  
1: Allow  
The AC drive is allowed for running.  
Bit 4: RFG output forced to be 0  
0: Normal  
RFG output is not forced to be 0.  
1: RFG output forced to be 0  
RFG output is forced to be 0.  
Bit 5: RFG pause  
0: Normal  
RFG is normal.  
1: RFG pause  
RFG pauses.  
Bit 6: RFG input forced to be 0  
0: Normal  
RFG input is not forced to be 0.  
1: RFG input forced to be 0  
RFG input is forced to be 0.  
Bit 7: Fault reset  
0: Inactive  
The fault cannot be reset.  
1: Active  
The fault can be reset.  
Bit 8: JOG1  
0: Inactive  
JOG1 is inactive.  
1: Active  
JOG1 is active.  
Bit 9: JOG2

0: Inactive  
 JOG2 is inactive.  
 1: Active  
 JOG2 is active.  
 Bit 10: Remote control (reserved)  
 0: Inactive  
 1: Active  
 Bit 11: Speed inversion  
 0: Do not invert the speed  
 The running speed is opposite to the set speed.  
 1: Invert the speed  
 The running speed is the same as the set speed.  
 Bit 12: Start signal  
 0: Inactive  
 The AC drive start signal is inactive.  
 1: Active  
 The AC drive start signal is active.  
 Bit 13: Internal start command  
 0: Inactive  
 The AC drive internal start signal is inactive.  
 1: Active  
 The AC drive internal start signal is active.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	RFG status word upon the third latest fault	0x882F	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
H8-47	Value:							
	Bit	Name			Value			
	Bit 0 to bit 1	Acceleration/Deceleration state			0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration			
	Bit 2 to bit 3	Acceleration/Deceleration arc state			0: Constant speed 1: Start segment 2: Constant acceleration 3: End segment			
Bit 4 to bit 7	Reserved							

	Bit 8 to bit 9	Acceleration or deceleration state of the previous cycle	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
	Bit 10 and bit 11	Arc state of the previous cycle	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
	Bit 12 to bit 15	Reserved	
<p>Description :</p> <p>This parameter records the RFG status word upon the third latest fault.</p> <p>Value description:</p> <p>Bit 0 to bit 1: Acceleration/Deceleration state</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p> <p>Bit 2 to bit 3: Acceleration/Deceleration arc state</p> <p>0: Constant speed 1: Start segment 2: Constant acceleration 3: End segment</p> <p>Bit 4 to bit 7: Reserved</p> <p>Bit 8 to bit 9: Acceleration or deceleration state of the previous cycle</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p> <p>Bit 10 and bit 11: Arc state of the previous cycle</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p> <p>Bit 12 to bit 15: Reserved</p>			

## H9: Historical Fault Record 4

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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H9-00	Fault code 1 of the fourth latest time	0x8900	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 1 of the fourth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H9-06	Fault code 2 of the fourth latest time	0x8906	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 2 of the fourth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H9-12	Fault code 3 of the fourth latest time	0x890C	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 3 of the fourth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H9-18	Fault code 4 of the fourth latest time	0x8912	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 4 of the fourth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H9-24	Fault code 5 of the fourth latest time	0x8918	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 5 of the fourth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H9-30	Fault code 6 of the fourth latest time	0x891E	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description:							

	This parameter records the fault code 6 of the fourth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H9-36	Frequency upon the fourth latest fault	0x8924	0.00 Hz to 655.35 Hz	0.00Hz	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter records the operating frequency upon the fourth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H9-37	Current upon the fourth latest fault	0x8925	0.00 A to 655.35 A	0.00A	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter records the output current upon the fourth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H9-38	Bus voltage upon the fourth latest fault	0x8926	0.0 V to 6553.5 V	0.0V	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter records the bus voltage upon the fourth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H9-39	Input terminal status upon the fourth latest fault	0x8927	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter records the input terminal status upon the fourth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H9-40	Output terminal status upon the fourth latest fault	0x8928	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter records the output terminal status upon the fourth latest fault.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H9-41	Drive state upon the fourth latest fault	0x8929	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value:</p> <p>0: Initializing                                    3: Operation allowed                                    6: Stop  1: Switch-on inhibited                                    4: Start                                    7: Self-check  2: Switch-on allowed                                    5: Operating                                    8: Motor parameter auto-tuning</p>							
	<p>Description:</p> <p>This parameter records the drive state upon the fourth latest fault.</p> <p>Value description:</p> <p>0: Initializing The AC drive is in the initialization state.</p> <p>1: Switch-on inhibited Switch-on is inhibited for the AC drive.</p> <p>2: Switch-on allowed Switch-on is allowed for the AC drive.</p> <p>3: Operation allowed Operation is allowed for the AC drive.</p> <p>4: Start The AC drive is in the startup state.</p> <p>5: Operating The drive is in the running state.</p> <p>6: Stop The AC drive is in the stop state.</p> <p>7: Self-check The AC drive is in the self-check state.</p> <p>8: Motor parameter auto-tuning The AC drive is in the auto-tuning state.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H9-42	Power-on time upon the fourth latest fault	0x892A	0 min to 65535 min	0min	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Description:</p> <p>This parameter records the power-on time upon the fourth latest fault.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

H9-43	Running time upon the fourth latest fault	0x892B	0.0 min to 6553.5 min	0.0min	Unsigned 16 bit	Cannot be changed	Expansion	Nothing	
	Description : This parameter records the running time upon the fourth latest fault.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
H9-44	Status word 1 upon the fourth latest fault	0x892C	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing	
	Value:								
		Bit	Name	Value					
		Bit 0	Ready to switch on	0: Inactive 1: Active					
		Bit 1	Ready to run	0: Inactive 1: Active					
		Bit 2	Running	0: Inactive 1: Active					
		Bit 3	Faulty	0: Inactive 1: Active					
		Bit 4	OFF2 (coast to stop)	0: Inactive 1: Active					
		Bit 5	OFF3 (quick stop)	0: Inactive 1: Active					
		Bit 6	Switch-on inhibited	0: Inactive 1: Active					
		Bit 7	Alarm or running with restriction	0: Inactive 1: Active					
		Bit 8	No speed deviation	0: Inactive 1: Active					
		Bit 9	Local or remote	0: Local 1: Remote					
		Bit 10	Target speed reached	0: Inactive 1: Active					
		Bit 11	Torque limiting	0: Inactive 1: Active					
	Bit 12	Forward speed	0: Inactive 1: Active						
	Bit 13	Reverse speed	0: Inactive 1: Active						



Bit 14	Running (pulse output)	0: Inactive 1: Active
Bit 15	User-defined state 0	0: Inactive 1: Active

Description :

This parameter records the status word 1 upon the fourth latest fault.

Value description:

Bit 0: Ready to switch on

0: Inactive

The AC drive is not in the power-on preparation state.

1: Active

The AC drive is in the power-on preparation state.

Bit 1: Ready to run

0: Inactive

The AC drive is not in the ready-to-run state.

1: Active

The AC drive is in the ready-to-run state.

Bit 2: Running

0: Inactive

The AC drive is not in the running state.

1: Active

The AC drive is in the running state.

Bit 3: Faulty

0: Inactive

The AC drive is in the normal state.

1: Active

The AC drive is in the faulty state.

Bit 4: OFF2 (coast to stop)

0: Inactive

OFF2 (coast to stop) stop mode is inactive.

1: Active

OFF2 (coast to stop) stop mode is active.

Bit 5: OFF3 (quick stop)

0: Inactive

OFF3 (quick stop) stop mode is inactive.

1: Active

OFF3 (quick stop) stop mode is active.

Bit 6: Switch-on inhibited

0: Inactive

Switch-on is not inhibited for the AC drive.

1: Active

Switch-on is inhibited for the AC drive.

Bit 7: Alarm or running with restriction

0: Inactive  
The AC drive does not encounter an alarm or is not in the restricted running state.

1: Active  
The AC drive encounters an alarm or is in the restricted running state.

Bit 8: No speed deviation

0: Inactive  
The AC drive speed is not deviated.

1: Active  
The AC drive speed is deviated.

Bit 9: Local or remote

0: Local  
The AC drive is in the local control mode.

1: Remote  
The AC drive is in the remote control mode.

Bit 10: Target speed reached

0: Inactive  
The target speed is not reached.

1: Active  
The target speed is reached.

Bit 11: Torque limiting

0: Inactive  
The torque is unlimited.

1: Active  
The torque is limited.

Bit 12: Forward speed

0: Inactive  
The forward speed is not allowed.

1: Active  
The forward speed is allowed.

Bit 13: Reverse speed

0: Inactive  
The reverse speed is not allowed.

1: Active  
The reverse speed is allowed.

Bit 14: Running (pulse output)

0: Inactive  
The AC drive is not in the running (pulse output) state.

1: Active  
The AC drive is in the running (pulse output) state.

Bit 15: User-defined state 0

0: Inactive

	<p>The user-defined state 0 is inactive.  1: Active  The user-defined state 0 is active.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
H9-45	Status word 2 upon the fourth latest fault	0x892D	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value:							
		<b>Bit</b>	<b>Name</b>	<b>Value</b>				
		Bit 0	Self-check	0: Inactive 1: Active				
		Bit 1	Auto-tuning	0: Inactive 1: Active				
		Bit 2	Active limit state	0: Inactive 1: Active				
		Bit 3	Alarm state	0: Inactive 1: Active				
		Bit 4	Speed mode	0: Inactive 1: Active				
		Bit 5	Torque mode	0: Inactive 1: Active				
		Bit 6	Reserved	0: Inactive 1: Active				
		Bit 7	RFG enable	0: Inactive 1: Active				
		Bit 8	RFG running	0: Inactive 1: Active				
		Bit 9	Fault reaction	0: Inactive 1: Active				
		Bit 10	Non-jogging	0: Inactive 1: Active				
		Bit 11	Jogging	0: Inactive 1: Active				
	Bit 12	Decelerate to stop	0: Inactive 1: Active					
	Bit 13	Reserved	0: Inactive 1: Active					

Bit 14	Terminal control	0: Inactive 1: Active
Bit 15	User-defined state 1	0: Inactive 1: Active

Description :

This parameter records the status word 2 upon the fourth latest fault.

Value description:

Bit 0: Self-check

0: Inactive

The AC drive is not in the self-check state.

1: Active

The AC drive is in the self-check state.

Bit 1: Auto-tuning

0: Inactive

The AC drive is not in the parameter auto-tuning state.

1: Active

The AC drive is in the parameter auto-tuning state.

Bit 2: Minor fault state

0: Inactive

The AC drive does not encounter minor faults.

1: Active

The AC drive encounters minor faults.

Bit 3: Alarm state

0: Inactive

The AC drive does not encounter alarms.

1: Active

The AC drive encounters alarms.

Bit 4: Speed mode

0: Inactive

The AC drive is not in the speed mode.

1: Active

The AC drive is in the speed mode.

Bit 5: Torque mode

0: Inactive

The AC drive is not in the torque mode.

1: Active

The AC drive is in the torque mode.

Bit 6: Reserved

0: Inactive

The AC drive is not in the position mode.

1: Active

<p>The AC drive is in the position mode.</p> <p>Bit 7: RFG enabled</p> <p>0: Inactive</p> <p>RFG is disabled.</p> <p>1: Active</p> <p>RFG is enabled.</p> <p>Bit 8: RFG running</p> <p>0: Inactive</p> <p>RFG is in non-running state.</p> <p>1: Active</p> <p>RFG is in the running state.</p> <p>Bit 9: Stop upon fault</p> <p>0: Inactive</p> <p>The command for stopping upon a fault is inactive.</p> <p>1: Active</p> <p>The command for stopping upon a fault is valid.</p> <p>Bit 10: Non-jogging</p> <p>0: Inactive</p> <p>The AC drive is jogging.</p> <p>1: Active</p> <p>The AC drive is in non-jogging state.</p> <p>Bit 11: Jogging</p> <p>0: Inactive</p> <p>The AC drive is in non-jogging state.</p> <p>1: Active</p> <p>The AC drive is jogging.</p> <p>Bit 12: Decelerate to stop</p> <p>0: Inactive</p> <p>The AC drive does not in the deceleration to stop state.</p> <p>1: Active</p> <p>The AC drive is in the deceleration to stop state.</p> <p>Bit 13:: Reserved</p> <p>Bit 14: Terminal control</p> <p>0: Inactive</p> <p>Terminal control is disabled.</p> <p>1: Active</p> <p>Terminal control is enabled.</p> <p>Bit 15: User-defined state 1</p> <p>0: Inactive</p> <p>User-set state 1 is inactive.</p> <p>1: Active</p> <p>User-set state 1 is active.</p>
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Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
H9-46	Command word upon the fourth latest fault	0x892E	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing	
	Value:								
		<b>Bit</b>	<b>Name</b>	<b>Value</b>					
		Bit 0	ON_OFF1 (start/stop)	0: Stop 1: Run					
		Bit 1	OFF2 (coast to stop)	0: Activate 1: Normal					
		Bit 2	OFF3 (quick stop)	0: Activate 1: Normal					
		Bit 3	Running	0: Inhibit 1: Allow					
		Bit 4	RFG output forced to be 0	0: Normal 1: RFG output forced to be 0					
		Bit 5	RFG pause	0: Normal 1: RFG pause					
		Bit 6	RFG input forced to be 0	0: Normal 1: RFG input forced to be 0					
		Bit 7	Fault reset	0: Inactive 1: Active					
		Bit 8	JOG1	0: Inactive 1: Active					
		Bit 9	JOG2	0: Inactive 1: Active					
		Bit 10	Remote control (reserved)	0: Inactive 1: Active					
		Bit 11	Speed inversion	0: Do not invert the speed 1: Invert the speed					
		Bit 12	Start signal	0: Inactive 1: Active					
	Bit 13	Internal start command	0: Inactive 1: Active						
	Bit 14	Reserved							
	Bit 15	Reserved							
Description:									
This parameter records the command word upon the fourth latest fault.									

Value description:

Bit 0: ON\_OFF1 (start/stop)

0: Stop

1: Run

Bit 1: OFF2 (coast to stop)

0: Activate

OFF2 (coast to stop) stop command is activated.

1: Normal

OFF2 (coast to stop) stop command is normal.

Bit 2: OFF3 (quick stop)

0: Activate

OFF3 (quick stop) stop command is activated.

1: Normal

OFF3 (quick stop) stop command is normal.

Bit 3: Running

0: Inhibit

The AC drive is not allowed for running.

1: Allow

The AC drive is allowed for running.

Bit 4: RFG output forced to be 0

0: Normal

RFG output is not forced to be 0.

1: RFG output forced to be 0

RFG output is forced to be 0.

Bit 5: RFG pause

0: Normal

RFG is normal.

1: RFG pause

RFG pauses.

Bit 6: RFG input forced to be 0

0: Normal

RFG input is not forced to be 0.

1: RFG input forced to be 0

RFG input is forced to be 0.

Bit 7: Fault reset

0: Inactive

The fault cannot be reset.

1: Active

The fault can be reset.

Bit 8: JOG1

0: Inactive

JOG1 is inactive.

1: Active  
 JOG1 is active.  
 Bit 9: JOG2  
 0: Inactive  
 JOG2 is inactive.  
 1: Active  
 JOG2 is active.  
 Bit 10: Remote control (reserved)  
 0: Inactive  
 1: Active  
 Bit 11: Speed inversion  
 0: Do not invert the speed  
 The running speed is opposite to the set speed.  
 1: Invert the speed  
 The running speed is the same as the set speed.  
 Bit 12: Start signal  
 0: Inactive  
 The AC drive start signal is inactive.  
 1: Active  
 The AC drive start signal is active.  
 Bit 13: Internal start command  
 0: Inactive  
 The AC drive internal start signal is inactive.  
 1: Active  
 The AC drive internal start signal is active.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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H9-47	RFG status word upon the fourth latest fault	0x892F	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
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Value:

Bit	Name	Value
Bit 0 to bit 1	Acceleration/Deceleration state	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
Bit 2 to bit 3	Acceleration/Deceleration arc state	0: Constant speed 1: Start segment 2: Constant acceleration 3: End segment
Bit 4 to bit 7	Reserved	



Bit 8 to bit 9	Acceleration or deceleration state of the previous cycle	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
Bit 10 and bit 11	Arc state of the previous cycle	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
Bit 12 to bit 15	Reserved	
<p>Description :</p> <p>This parameter records the RFG status word upon the fourth latest fault.</p> <p>Value description:</p> <p>Bit 0 to bit 1: Acceleration/Deceleration state</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p> <p>Bit 2 to bit 3: Acceleration/Deceleration arc state</p> <p>0: Constant speed 1: Start segment 2: Constant acceleration 3: End segment</p> <p>Bit 8 to bit 9: Acceleration or deceleration state of the previous cycle</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p> <p>Bit 10 and bit 11: Arc state of the previous cycle</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p>		

## HA: Historical Fault Record 5

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
HA-00	Fault code 1 of the	0x8A00	0.0 to	0.0	Unsigned	Cannot be	Expansion	Nothing

	fifth latest time		6553.5		16 bit	changed		
	Description: This parameter records the fault code 1 of the fifth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
HA-06	Fault code 2 of the fifth latest time	0x8A06	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 2 of the fifth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
HA-12	Fault code 3 of the fifth latest time	0x8A0C	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 3 of the fifth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
HA-18	Fault code 4 of the fifth latest time	0x8A12	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 4 of the fifth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
HA-24	Fault code 5 of the fifth latest time	0x8A18	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 5 of the fifth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
HA-30	Fault code 6 of the fifth latest time	0x8A1E	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 6 of the fifth latest time. For example, E015.1 is displayed as 15.1.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
HA-36	Frequency upon the fifth latest fault	0x8A24	0.00 Hz to 655.35 Hz	0.00Hz	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter records the operating frequency upon the fifth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
HA-37	Current upon the fifth latest fault	0x8A25	0.00 A to 655.35 A	0.00A	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter records the output current upon the fifth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
HA-38	Bus voltage upon the fifth latest fault	0x8A26	0.0 V to 6553.5 V	0.0V	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the bus voltage upon the fifth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
HA-39	Input terminal status upon the fifth latest fault	0x8A27	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the input terminal status upon the fifth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
HA-40	Output terminal status upon the fifth latest fault	0x8A28	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the output terminal status upon the fifth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

HA-41	Drive state upon the fifth latest fault	0x8A29	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Initializing                                      3: Operation allowed                                      6: Stop 1: Switch-on inhibited                                      4: Start                                      7: Self-check 2: Switch-on allowed                                      5: Operating                                      8: Motor parameter auto-tuning							
	Description: This parameter records the drive state upon the fifth latest fault.  Value description: 0: Initializing The AC drive is in the initialization state. 1: Switch-on inhibited Switch-on is inhibited for the AC drive. 2: Switch-on allowed Switch-on is allowed for the AC drive. 3: Operation allowed Operation is allowed for the AC drive. 4: Start The AC drive is in the startup state. 5: Operating The drive is in the running state. 6: Stop The AC drive is in the stop state. 7: Self-check The AC drive is in the self-check state. 8: Motor parameter auto-tuning The AC drive is in the auto-tuning state.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
HA-42	Power-on time upon the fifth latest fault	0x8A2A	0 min to 65535 min	0min	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the power-on time upon the fifth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
HA-43	Running time upon the fifth latest fault	0x8A2B	0.0 min to 6553.5 min	0.0min	Unsigned 16 bit	Cannot be changed	Expansion	Nothing

	Description : This parameter records the running time upon the fifth latest fault.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
HA-44	Status word 1 upon the fifth latest fault	0x8A2C	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing	
	Value:								
		<b>Bit</b>	<b>Name</b>	<b>Value</b>					
		Bit 0	Ready to switch on	0: Inactive 1: Active					
		Bit 1	Ready to run	0: Inactive 1: Active					
		Bit 2	Running	0: Inactive 1: Active					
		Bit 3	Faulty	0: Inactive 1: Active					
		Bit 4	OFF2 (coast to stop)	0: Inactive 1: Active					
		Bit 5	OFF3 (quick stop)	0: Inactive 1: Active					
		Bit 6	Switch-on inhibited	0: Inactive 1: Active					
		Bit 7	Alarm or running with restriction	0: Inactive 1: Active					
		Bit 8	No speed deviation	0: Inactive 1: Active					
		Bit 9	Local or remote	0: Local 1: Remote					
		Bit 10	Target speed reached	0: Inactive 1: Active					
		Bit 11	Torque limiting	0: Inactive 1: Active					
	Bit 12	Forward speed	0: Inactive 1: Active						
	Bit 13	Reverse speed	0: Inactive 1: Active						
	Bit 14	Running (pulse output)	0: Inactive 1: Active						

Bit 15	User-defined state 0	0: Inactive 1: Active
--------	----------------------	--------------------------

Description :

This parameter records the status word 1 upon the fifth latest fault.

Value description:

Bit 0: Ready to switch on

0: Inactive

The AC drive is not in the power-on preparation state.

1: Active

The AC drive is in the power-on preparation state.

Bit 1: Ready to run

0: Inactive

The AC drive is not in the ready-to-run state.

1: Active

The AC drive is in the ready-to-run state.

Bit 2: Running

0: Inactive

The AC drive is not in the running state.

1: Active

The AC drive is in the running state.

Bit 3: Faulty

0: Inactive

The AC drive is in the normal state.

1: Active

The AC drive is in the faulty state.

Bit 4: OFF2 (coast to stop)

0: Inactive

OFF2 (coast to stop) stop mode is inactive.

1: Active

OFF2 (coast to stop) stop mode is active.

Bit 5: OFF3 (quick stop)

0: Inactive

OFF3 (quick stop) stop mode is inactive.

1: Active

OFF3 (quick stop) stop mode is active.

Bit 6: Switch-on inhibited

0: Inactive

Switch-on is not inhibited for the AC drive.

1: Active

Switch-on is inhibited for the AC drive.

Bit 7: Alarm or running with restriction

0: Inactive

The AC drive does not encounter an alarm or is not in the restricted running state.

1: Active

The AC drive encounters an alarm or is in the restricted running state.

Bit 8: No speed deviation

0: Inactive

The AC drive speed is not deviated.

1: Active

The AC drive speed is deviated.

Bit 9: Local or remote

0: Local

The AC drive is in the local control mode.

1: Remote

The AC drive is in the remote control mode.

Bit 10: Target speed reached

0: Inactive

The target speed is not reached.

1: Active

The target speed is reached.

Bit 11: Torque limiting

0: Inactive

The torque is unlimited.

1: Active

The torque is limited.

Bit 12: Forward speed

0: Inactive

The forward speed is not allowed.

1: Active

The forward speed is allowed.

Bit 13: Reverse speed

0: Inactive

The reverse speed is not allowed.

1: Active

The reverse speed is allowed.

Bit 14: Running (pulse output)

0: Inactive

The AC drive is not in the running (pulse output) state.

1: Active

The AC drive is in the running (pulse output) state.

Bit 15: User-defined state 0

0: Inactive

The user-defined state 0 is inactive.

1: Active

	The user-defined state 0 is active.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
HA-45	Status word 2 upon the fifth latest fault	0x8A2D	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing	
	Value:								
		<b>Bit</b>	<b>Name</b>	<b>Value</b>					
		Bit 0	Self-check	0: Inactive 1: Active					
		Bit 1	Auto-tuning	0: Inactive 1: Active					
		Bit 2	Active limit state	0: Inactive 1: Active					
		Bit 3	Alarm state	0: Inactive 1: Active					
		Bit 4	Speed mode	0: Inactive 1: Active					
		Bit 5	Torque mode	0: Inactive 1: Active					
		Bit 6	Reserved	0: Inactive 1: Active					
		Bit 7	RFG enable	0: Inactive 1: Active					
		Bit 8	RFG running	0: Inactive 1: Active					
		Bit 9	Fault reaction	0: Inactive 1: Active					
		Bit 10	Non-jogging	0: Inactive 1: Active					
		Bit 11	Jogging	0: Inactive 1: Active					
	Bit 12	Decelerate to stop	0: Inactive 1: Active						
	Bit 13	Reserved	0: Inactive 1: Active						
	Bit 14	Terminal control	0: Inactive 1: Active						



Bit 15	User-defined state 1	0: Inactive 1: Active
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Description :

This parameter records the status word 2 upon the fifth latest fault.

Value description:

Bit 0: Self-check

0: Inactive

The AC drive is not in the self-check state.

1: Active

The AC drive is in the self-check state.

Bit 1: Auto-tuning

0: Inactive

The AC drive is not in the parameter auto-tuning state.

1: Active

The AC drive is in the parameter auto-tuning state.

Bit 2: Minor fault state

0: Inactive

The AC drive does not encounter minor faults.

1: Active

The AC drive encounters minor faults.

Bit 3: Alarm state

0: Inactive

The AC drive does not encounter alarms.

1: Active

The AC drive encounters alarms.

Bit 4: Speed mode

0: Inactive

The AC drive is not in the speed mode.

1: Active

The AC drive is in the speed mode.

Bit 5: Torque mode

0: Inactive

The AC drive is not in the torque mode.

1: Active

The AC drive is in the torque mode.

Bit 6: Reserved

0: Inactive

The AC drive is not in the position mode.

1: Active

The AC drive is in the position mode.

Bit 7: RFG enabled

	<p>0: Inactive RFG is disabled.</p> <p>1: Active RFG is enabled.</p> <p>Bit 8: RFG running</p> <p>0: Inactive RFG is in non-running state.</p> <p>1: Active RFG is in the running state.</p> <p>Bit 9: Stop upon fault</p> <p>0: Inactive The command for stopping upon a fault is inactive.</p> <p>1: Active The command for stopping upon a fault is valid.</p> <p>Bit 10: Non-jogging</p> <p>0: Inactive The AC drive is jogging.</p> <p>1: Active The AC drive is in non-jogging state.</p> <p>Bit 11: Jogging</p> <p>0: Inactive The AC drive is in non-jogging state.</p> <p>1: Active The AC drive is jogging.</p> <p>Bit 12: Decelerate to stop</p> <p>0: Inactive The AC drive does not in the deceleration to stop state.</p> <p>1: Active The AC drive is in the deceleration to stop state.</p> <p>Bit 13:: Reserved</p> <p>Bit 14: Terminal control</p> <p>0: Inactive Terminal control is disabled.</p> <p>1: Active Terminal control is enabled.</p> <p>Bit 15: User-defined state 1</p> <p>0: Inactive User-set state 1 is inactive.</p> <p>1: Active User-set state 1 is active.</p>							
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Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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HA-46	Command word upon the fifth latest fault	0x8A2E	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing																																																		
	Value:																																																									
	<table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>ON_OFF1 (start/stop)</td> <td>0: Stop 1: Run</td> </tr> <tr> <td>Bit 1</td> <td>OFF2 (coast to stop)</td> <td>0: Activate 1: Normal</td> </tr> <tr> <td>Bit 2</td> <td>OFF3 (quick stop)</td> <td>0: Activate 1: Normal</td> </tr> <tr> <td>Bit 3</td> <td>Running</td> <td>0: Inhibit 1: Allow</td> </tr> <tr> <td>Bit 4</td> <td>RFG output forced to be 0</td> <td>0: Normal 1: RFG output forced to be 0</td> </tr> <tr> <td>Bit 5</td> <td>RFG pause</td> <td>0: Normal 1: RFG pause</td> </tr> <tr> <td>Bit 6</td> <td>RFG input forced to be 0</td> <td>0: Normal 1: RFG input forced to be 0</td> </tr> <tr> <td>Bit 7</td> <td>Fault reset</td> <td>0: Inactive 1: Active</td> </tr> <tr> <td>Bit 8</td> <td>JOG1</td> <td>0: Inactive 1: Active</td> </tr> <tr> <td>Bit 9</td> <td>JOG2</td> <td>0: Inactive 1: Active</td> </tr> <tr> <td>Bit 10</td> <td>Remote control (reserved)</td> <td>0: Inactive 1: Active</td> </tr> <tr> <td>Bit 11</td> <td>Speed inversion</td> <td>0: Do not invert the speed 1: Invert the speed</td> </tr> <tr> <td>Bit 12</td> <td>Start signal</td> <td>0: Inactive 1: Active</td> </tr> <tr> <td>Bit 13</td> <td>Internal start command</td> <td>0: Inactive 1: Active</td> </tr> <tr> <td>Bit 14</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Bit 15</td> <td>Reserved</td> <td></td> </tr> </tbody> </table>								Bit	Name	Value	Bit 0	ON_OFF1 (start/stop)	0: Stop 1: Run	Bit 1	OFF2 (coast to stop)	0: Activate 1: Normal	Bit 2	OFF3 (quick stop)	0: Activate 1: Normal	Bit 3	Running	0: Inhibit 1: Allow	Bit 4	RFG output forced to be 0	0: Normal 1: RFG output forced to be 0	Bit 5	RFG pause	0: Normal 1: RFG pause	Bit 6	RFG input forced to be 0	0: Normal 1: RFG input forced to be 0	Bit 7	Fault reset	0: Inactive 1: Active	Bit 8	JOG1	0: Inactive 1: Active	Bit 9	JOG2	0: Inactive 1: Active	Bit 10	Remote control (reserved)	0: Inactive 1: Active	Bit 11	Speed inversion	0: Do not invert the speed 1: Invert the speed	Bit 12	Start signal	0: Inactive 1: Active	Bit 13	Internal start command	0: Inactive 1: Active	Bit 14	Reserved		Bit 15	Reserved
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Description :																																																										
This parameter records the command word upon the fifth latest fault.																																																										
Value description:																																																										

Bit 0: ON\_OFF1 (start/stop)  
0: Stop  
1: Run

Bit 1: OFF2 (coast to stop)  
0: Activate  
OFF2 (coast to stop) stop command is activated.  
1: Normal  
OFF2 (coast to stop) stop command is normal.

Bit 2: OFF3 (quick stop)  
0: Activate  
OFF3 (quick stop) stop command is activated.  
1: Normal  
OFF3 (quick stop) stop command is normal.

Bit 3: Running  
0: Inhibit  
The AC drive is not allowed for running.  
1: Allow  
The AC drive is allowed for running.

Bit 4: RFG output forced to be 0  
0: Normal  
RFG output is not forced to be 0.  
1: RFG output forced to be 0  
RFG output is forced to be 0.

Bit 5: RFG pause  
0: Normal  
RFG is normal.  
1: RFG pause  
RFG pauses.

Bit 6: RFG input forced to be 0  
0: Normal  
RFG input is not forced to be 0.  
1: RFG input forced to be 0  
RFG input is forced to be 0.

Bit 7: Fault reset  
0: Inactive  
The fault cannot be reset.  
1: Active  
The fault can be reset.

Bit 8: JOG1  
0: Inactive  
JOG1 is inactive.  
1: Active  
JOG1 is active.

Bit 9: JOG2  
 0: Inactive  
 JOG2 is inactive.  
 1: Active  
 JOG2 is active.

Bit 10: Remote control (reserved)  
 0: Inactive  
 1: Active

Bit 11: Speed inversion  
 0: Do not invert the speed  
 The running speed is opposite to the set speed.  
 1: Invert the speed  
 The running speed is the same as the set speed.

Bit 12: Start signal  
 0: Inactive  
 The AC drive start signal is inactive.  
 1: Active  
 The AC drive start signal is active.

Bit 13: Internal start command  
 0: Inactive  
 The AC drive internal start signal is inactive.  
 1: Active  
 The AC drive internal start signal is active.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	RFG status word upon the fifth latest fault	0x8A2F	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
HA-47	Value:							
	bit0-bit1	Acceleration/Deceleration state				0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration		
	Bit 2 to bit 3	Acceleration/Deceleration arc state				0: Constant speed 1: Start segment 2: Constant acceleration 3: End segment		
	Bit 4 to bit 7	Reserved						

Bit 8 to bit 9	Acceleration or deceleration state of the previous cycle	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
Bit 10 and bit 11	Arc state of the previous cycle	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
Bit 12 to bit 15	Reserved	
<p>Description :</p> <p>This parameter records the RFG status word upon the second latest fault.</p> <p>Value description:</p> <p>Bit 0 to bit 1: Acceleration/Deceleration state</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p> <p>Bit 2 to bit 3: Acceleration/Deceleration arc state</p> <p>0: Constant speed 1: Start segment 2: Constant acceleration 3: End segment</p> <p>Bit 8 to bit 9: Acceleration or deceleration state of the previous cycle</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p> <p>Bit 10 and bit 11: Arc state of the previous cycle</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p>		

## Hb: Historical Fault Record 6

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Hb-00	Fault code 1 of the	0x8B00	0.0 to	0.0	Unsigned	Cannot be	Expansion	Nothing

	sixth latest time		6553.5		16 bit	changed		
	Description: This parameter records the fault code 1 of the sixth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Hb-06	Fault code 2 of the sixth latest time	0x8B06	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 2 of the sixth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Hb-12	Fault code 3 of the sixth latest time	0x8B0C	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 3 of the sixth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Hb-18	Fault code 4 of the sixth latest time	0x8B12	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 4 of the sixth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Hb-24	Fault code 5 of the sixth latest time	0x8B18	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 5 of the sixth latest time. For example, E015.1 is displayed as 15.1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Hb-30	Fault code 6 of the sixth latest time	0x8B1E	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the fault code 6 of the sixth latest time. For example, E015.1 is displayed as 15.1.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Hb-36	Frequency upon the sixth latest fault	0x8B24	0.00 Hz to 655.35 Hz	0.00Hz	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter records the operating frequency upon the sixth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Hb-37	Current upon the sixth latest fault	0x8B25	0.00 A to 655.35 A	0.00A	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter records the output current upon the sixth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Hb-38	Bus voltage upon the sixth latest fault	0x8B26	0.0 V to 6553.5 V	0.0V	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the bus voltage upon the sixth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Hb-39	Input terminal status upon the sixth latest fault	0x8B27	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the input terminal state at the time of the sixth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Hb-40	Output terminal status upon the sixth latest fault	0x8B28	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter records the output terminal status upon the sixth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode





	Description : This parameter records the running time upon the sixth latest fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Hb-44	Status word 1 upon the sixth latest fault	0x8B2C	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value:							
		Bit	Name	Value				
		Bit 0	Ready to switch on	0: Inactive 1: Active				
		Bit 1	Ready to run	0: Inactive 1: Active				
		Bit 2	Running	0: Inactive 1: Active				
		Bit 3	Faulty	0: Inactive 1: Active				
		Bit 4	OFF2 (coast to stop)	0: Inactive 1: Active				
		Bit 5	OFF3 (quick stop)	0: Inactive 1: Active				
		Bit 6	Switch-on inhibited	0: Inactive 1: Active				
		Bit 7	Alarm or running with restriction	0: Inactive 1: Active				
		Bit 8	No speed deviation	0: Inactive 1: Active				
		Bit 9	Local or remote	0: Local 1: Remote				
		Bit 10	Target speed reached	0: Inactive 1: Active				
		Bit 11	Torque limiting	0: Inactive 1: Active				
	Bit 12	Forward speed	0: Inactive 1: Active					
	Bit 13	Reverse speed	0: Inactive 1: Active					
	Bit 14	Running (pulse output)	0: Inactive 1: Active					

Bit 15	User-defined state 0	0: Inactive 1: Active
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Description :

This parameter records the status word 1 upon the sixth latest fault.

Value description:

Bit 0: Ready to switch on

0: Inactive

The AC drive is not in the power-on preparation state.

1: Active

The AC drive is in the power-on preparation state.

Bit 1: Ready to run

0: Inactive

The AC drive is not in the ready-to-run state.

1: Active

The AC drive is in the ready-to-run state.

Bit 2: Running

0: Inactive

The AC drive is not in the running state.

1: Active

The AC drive is in the running state.

Bit 3: Faulty

0: Inactive

The AC drive is in the normal state.

1: Active

The AC drive is in the faulty state.

Bit 4: OFF2 (coast to stop)

0: Inactive

OFF2 (coast to stop) stop mode is inactive.

1: Active

OFF2 (coast to stop) stop mode is active.

Bit 5: OFF3 (quick stop)

0: Inactive

OFF3 (quick stop) stop mode is inactive.

1: Active

OFF3 (quick stop) stop mode is active.

Bit 6: Switch-on inhibited

0: Inactive

Switch-on is not inhibited for the AC drive.

1: Active

Switch-on is inhibited for the AC drive.

Bit 7: Alarm or running with restriction

0: Inactive

The AC drive does not encounter an alarm or is not in the restricted running state.

1: Active

The AC drive encounters an alarm or is in the restricted running state.

Bit 8: No speed deviation

0: Inactive

The AC drive speed is not deviated.

1: Active

The AC drive speed is deviated.

Bit 9: Local or remote

0: Local

The AC drive is in the local control mode.

1: Remote

The AC drive is in the remote control mode.

Bit 10: Target speed reached

0: Inactive

The target speed is not reached.

1: Active

The target speed is reached.

Bit 11: Torque limiting

0: Inactive

The torque is unlimited.

1: Active

The torque is limited.

Bit 12: Forward speed

0: Inactive

The forward speed is not allowed.

1: Active

The forward speed is allowed.

Bit 13: Reverse speed

0: Inactive

The reverse speed is not allowed.

1: Active

The reverse speed is allowed.

Bit 14: Running (pulse output)

0: Inactive

The AC drive is not in the running (pulse output) state.

1: Active

The AC drive is in the running (pulse output) state.

Bit 15: User-defined state 0

0: Inactive

The user-defined state 0 is inactive.

1: Active

	The user-defined state 0 is active.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
Hb-45	Status word 2 upon the sixth latest fault	0x8B2D	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing	
	Value:								
		<b>Bit</b>	<b>Name</b>	<b>Value</b>					
		Bit 0	Self-check	0: Inactive 1: Active					
		Bit 1	Auto-tuning	0: Inactive 1: Active					
		Bit 2	Active limit state	0: Inactive 1: Active					
		Bit 3	Alarm state	0: Inactive 1: Active					
		Bit 4	Speed mode	0: Inactive 1: Active					
		Bit 5	Torque mode	0: Inactive 1: Active					
		Bit 6	Reserved	0: Inactive 1: Active					
		Bit 7	RFG enable	0: Inactive 1: Active					
		Bit 8	RFG running	0: Inactive 1: Active					
		Bit 9	Fault reaction	0: Inactive 1: Active					
		Bit 10	Non-jogging	0: Inactive 1: Active					
		Bit 11	Jogging	0: Inactive 1: Active					
	Bit 12	Decelerate to stop	0: Inactive 1: Active						
	Bit 13	Reserved	0: Inactive 1: Active						
	Bit 14	Terminal control	0: Inactive 1: Active						

Bit 15	User-defined state 1	0: Inactive 1: Active
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Description :

This parameter records the status word 2 upon the sixth latest fault.

Value description:

Bit 0: Self-check

0: Inactive

The AC drive is not in the self-check state.

1: Active

The AC drive is in the self-check state.

Bit 1: Auto-tuning

0: Inactive

The AC drive is not in the parameter auto-tuning state.

1: Active

The AC drive is in the parameter auto-tuning state.

Bit 2: Minor fault state

0: Inactive

The AC drive does not encounter minor faults.

1: Active

The AC drive encounters minor faults.

Bit 3: Alarm state

0: Inactive

The AC drive does not encounter alarms.

1: Active

The AC drive encounters alarms.

Bit 4: Speed mode

0: Inactive

The AC drive is not in the speed mode.

1: Active

The AC drive is in the speed mode.

Bit 5: Torque mode

0: Inactive

The AC drive is not in the torque mode.

1: Active

The AC drive is in the torque mode.

Bit 6: Reserved

0: Inactive

The AC drive is not in the position mode.

1: Active

The AC drive is in the position mode.

Bit 7: RFG enabled

0: Inactive  
RFG is disabled.

1: Active  
RFG is enabled.

Bit 8: RFG running

0: Inactive  
RFG is in non-running state.

1: Active  
RFG is in the running state.

Bit 9: Stop upon fault

0: Inactive  
The command for stopping upon a fault is inactive.

1: Active  
The command for stopping upon a fault is valid.

Bit 10: Non-jogging

0: Inactive  
The AC drive is jogging.

1: Active  
The AC drive is in non-jogging state.

Bit 11: Jogging

0: Inactive  
The AC drive is in non-jogging state.

1: Active  
The AC drive is jogging.

Bit 12: Decelerate to stop

0: Inactive  
The AC drive does not in the deceleration to stop state.

1: Active  
The AC drive is in the deceleration to stop state.

Bit 13:: Reserved

Bit 14: Terminal control

0: Inactive  
Terminal control is disabled.

1: Active  
Terminal control is enabled.

Bit 15: User-defined state 1

0: Inactive  
User-set state 1 is inactive.

1: Active  
User-set state 1 is active.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
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Hb-46	Command word upon the sixth latest fault	0x8B2E	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing																																																		
	Value:																																																									
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Bit</th> <th style="width: 40%;">Name</th> <th style="width: 50%;">Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>ON_OFF1 (start/stop)</td> <td>0: Stop 1: Run</td> </tr> <tr> <td>Bit 1</td> <td>OFF2 (coast to stop)</td> <td>0: Activate 1: Normal</td> </tr> <tr> <td>Bit 2</td> <td>OFF3 (quick stop)</td> <td>0: Activate 1: Normal</td> </tr> <tr> <td>Bit 3</td> <td>Running</td> <td>0: Inhibit 1: Allow</td> </tr> <tr> <td>Bit 4</td> <td>RFG output forced to be 0</td> <td>0: Normal 1: RFG output forced to be 0</td> </tr> <tr> <td>Bit 5</td> <td>RFG pause</td> <td>0: Normal 1: RFG pause</td> </tr> <tr> <td>Bit 6</td> <td>RFG input forced to be 0</td> <td>0: Normal 1: RFG input forced to be 0</td> </tr> <tr> <td>Bit 7</td> <td>Fault reset</td> <td>0: Inactive 1: Active</td> </tr> <tr> <td>Bit 8</td> <td>JOG1</td> <td>0: Inactive 1: Active</td> </tr> <tr> <td>Bit 9</td> <td>JOG2</td> <td>0: Inactive 1: Active</td> </tr> <tr> <td>Bit 10</td> <td>Remote control (reserved)</td> <td>0: Inactive 1: Active</td> </tr> <tr> <td>Bit 11</td> <td>Speed inversion</td> <td>0: Do not invert the speed 1: Invert the speed</td> </tr> <tr> <td>Bit 12</td> <td>Start signal</td> <td>0: Inactive 1: Active</td> </tr> <tr> <td>Bit 13</td> <td>Internal start command</td> <td>0: Inactive 1: Active</td> </tr> <tr> <td>Bit 14</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Bit 15</td> <td>Reserved</td> <td></td> </tr> </tbody> </table>								Bit	Name	Value	Bit 0	ON_OFF1 (start/stop)	0: Stop 1: Run	Bit 1	OFF2 (coast to stop)	0: Activate 1: Normal	Bit 2	OFF3 (quick stop)	0: Activate 1: Normal	Bit 3	Running	0: Inhibit 1: Allow	Bit 4	RFG output forced to be 0	0: Normal 1: RFG output forced to be 0	Bit 5	RFG pause	0: Normal 1: RFG pause	Bit 6	RFG input forced to be 0	0: Normal 1: RFG input forced to be 0	Bit 7	Fault reset	0: Inactive 1: Active	Bit 8	JOG1	0: Inactive 1: Active	Bit 9	JOG2	0: Inactive 1: Active	Bit 10	Remote control (reserved)	0: Inactive 1: Active	Bit 11	Speed inversion	0: Do not invert the speed 1: Invert the speed	Bit 12	Start signal	0: Inactive 1: Active	Bit 13	Internal start command	0: Inactive 1: Active	Bit 14	Reserved		Bit 15	Reserved
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This parameter records the command word upon the sixth latest fault.																																																										
Value description:																																																										



Bit 0: ON\_OFF1 (start/stop)  
0: Stop  
1: Run

Bit 1: OFF2 (coast to stop)  
0: Activate  
OFF2 (coast to stop) stop command is activated.  
1: Normal  
OFF2 (coast to stop) stop command is normal.

Bit 2: OFF3 (quick stop)  
0: Activate  
OFF3 (quick stop) stop command is activated.  
1: Normal  
OFF3 (quick stop) stop command is normal.

Bit 3: Running  
0: Inhibit  
The AC drive is not allowed for running.  
1: Allow  
The AC drive is allowed for running.

Bit 4: RFG output forced to be 0  
0: Normal  
RFG output is not forced to be 0.  
1: RFG output forced to be 0  
RFG output is forced to be 0.

Bit 5: RFG pause  
0: Normal  
RFG is normal.  
1: RFG pause  
RFG pauses.

Bit 6: RFG input forced to be 0  
0: Normal  
RFG input is not forced to be 0.  
1: RFG input forced to be 0  
RFG input is forced to be 0.

Bit 7: Fault reset  
0: Inactive  
The fault cannot be reset.  
1: Active  
The fault can be reset.

Bit 8: JOG1  
0: Inactive  
JOG1 is inactive.  
1: Active  
JOG1 is active.

Bit 9: JOG2  
 0: Inactive  
 JOG2 is inactive.  
 1: Active  
 JOG2 is active.

Bit 10: Remote control (reserved)  
 0: Inactive  
 1: Active

Bit 11: Speed inversion  
 0: Do not invert the speed  
 The running speed is opposite to the set speed.  
 1: Invert the speed  
 The running speed is the same as the set speed.

Bit 12: Start signal  
 0: Inactive  
 The AC drive start signal is inactive.  
 1: Active  
 The AC drive start signal is active.

Bit 13: Internal start command  
 0: Inactive  
 The AC drive internal start signal is inactive.  
 1: Active  
 The AC drive internal start signal is active.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	RFG status word upon the sixth latest fault	0x8B2F	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
Hb-47	Value:							
	Bit	Name			Value			
	Bit 0 to bit 1	Acceleration/Deceleration state			0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration			
	Bit 2 to bit 3	Acceleration/Deceleration arc state			0: Constant speed 1: Start segment 2: Constant acceleration 3: End segment			
Bit 4 to bit 7	Reserved							

Bit 8 to bit 9	Acceleration or deceleration state of the previous cycle	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
Bit 10 and bit 11	Arc state of the previous cycle	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
Bit 12 to bit 15	Reserved	
<p>Description :</p> <p>This parameter records the RFG status word upon the second latest fault.</p> <p>Value description:</p> <p>Bit 0 to bit 1: Acceleration/Deceleration state</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p> <p>Bit 2 to bit 3: Acceleration/Deceleration arc state</p> <p>0: Constant speed 1: Start segment 2: Constant acceleration 3: End segment</p> <p>Bit 8 to bit 9: Acceleration or deceleration state of the previous cycle</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p> <p>Bit 10 and bit 11: Arc state of the previous cycle</p> <p>0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration</p>		

## n0: Communication General Configuration

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n0-10	Communication software version	0x200A	0.00 to 655.35	0.00	Unsigned 16 bit	Cannot be changed	Expansion	Nothing

	<p>Description : This parameter displays the current communication software version.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n0-11	Communication status	0x200B	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value:</p> <p>0: Invalid 1: CAN open communication initializing 2: CAN open communication pre-operational 8: CAN open communication in progress 9: CAN open communication stopped 10: CAN link communication initializing 20: CAN link communication pre-operational 80: CAN link communication in progress</p>							
	<p>Description :</p> <p>This parameter displays the communication status of the drive using the selected communication protocol.</p> <p>Value description:</p> <p>0: Invalid 1: CAN open communication initialization The communication protocol is CAN open and the drive is in the initialization state. 2: CAN open pre-operational The communication protocol is CAN open and the drive is in the pre-operational state. 8: CAN open communication in progress The communication protocol is CAN open and the drive is communicating with other devices. 9: CAN open communication stopped The communication protocol is CAN open and the drive is in the stop state. 10: CAN link communication initializing The communication protocol is CAN link and the drive is in the initialization state. 20: CAN link pre-operational The communication protocol is CAN link and the drive is in the pre-operational state. 80: CAN link communication in progress The communication protocol is CAN link and the drive is communicating with other devices.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n0-12	Compatibility with legacy communication address	0x200C	Refer to "Value"	1	Unsigned 16 bit	Shutdown change	Expansion	Nothing
	<p>Value:</p> <p>0: Not compatible 1: Compatible</p>							
	<p>Description :</p> <p>This parameter specifies whether this product can communicate with communication addresses of legacy products.</p> <p>Value description:</p> <p>0: Not compatible</p>							

	1: Compatible  Additional information: Legacy addresses include 1000H to 1020H, 2000H to 2004H, 3000H, and 8000H to 8001H.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n0-13	Speed set by 1000H	0x200D	Refer to "Value"	2	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Percentage (corresponds to the rated frequency/one decimal place) 1: Percentage (corresponds to the rated frequency/two decimal places) 2: Percentage (corresponds to the maximum frequency/two decimal places)							
	Description: This parameter specifies the target speed written through the 1000H communication address.  Value description: 0: Percentage (corresponds to the rated frequency/one decimal place) When n0-13 is set to 0, the unit is percentage and the value is a signed 16-bit number that ranges from -30000 to +30000 and that contains one decimal place. For frequency dimension data, it is the percentage of the rated motor frequency. For example, when decimal 1000 is written and the rated frequency is 50.00 Hz, the frequency reference is 50.00 Hz. When decimal -5000 is written and the rated frequency is 50.00 Hz, the frequency reference is -250.00 Hz. 1: Percentage (corresponds to the rated frequency/two decimal places) When n0-13 is set to 1, the unit is percentage and the value is a signed 16-bit number that ranges from -30000 to +30000 and that contains two decimal places. For frequency dimension data, it is the percentage of the rated motor frequency. For example, when decimal 1000 is written and the rated frequency is 50.00 Hz, the frequency reference is 5.00 Hz. When decimal -10000 is written and the rated frequency is 50.00 Hz, the frequency reference is -50.00 Hz. 2: Percentage (corresponds to the maximum frequency/two decimal places) When n0-13 is set to 2, the unit is percentage and the value is a signed 16-bit number that ranges from -30000 to +30000 and that contains two decimal places. For frequency dimension data, it is the percentage of the maximum frequency. For example, when decimal 1000 is written and the maximum frequency is 100.00 Hz, the frequency reference is 10.00 Hz. When decimal -10000 is written and the maximum frequency is 100.00 Hz, the frequency reference is -100.00 Hz.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n0-14	Speed set by 7310H	0x200E	Refer to "Value"	1	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Frequency (unsigned 16-bit) 1: Frequency (signed 16-bit) 2: Speed (signed 16-bit) 3: Percentage (corresponds to the rated frequency/signed 16-bit/two decimal places) 4: Percentage (corresponds to the maximum frequency/signed 16-bit/two decimal places)							
	Description: This parameter specifies the target speed written through the 7310H communication address.							

Value description:

0: Frequency (unsigned 16-bit)

When n0-14 is set to 0, the unit is frequency and the value is an unsigned 16-bit number containing the same number of decimal places as that defined by A0-11. For example, when decimal 1000 is written and A0-11 is set to 2, the frequency reference is 10.00 Hz. When decimal 40000 is written and A0-11 is set to 1, the frequency reference is 4000.0 Hz.

1: Frequency (signed 16-bit)

When n0-14 is set to 1, the unit is frequency and the value is a signed 16-bit number containing the same number of decimal places as that defined by A0-11. For example, when decimal -1000 is written and A0-11 is set to 2, the frequency reference is -10.00 Hz. When decimal 20000 is written and A0-11 is set to 1, the frequency reference is 2000.0 Hz.

2: Speed (signed 16-bit)

When n0-14 is set to 2, the unit is speed and the value is a signed 16-bit number without decimal places. For example, when decimal 1500 is written and the number of pole pairs is 2, the frequency reference is 50.00 Hz. When decimal -3000 is written and the number of pole pairs is 2, the frequency reference is -100.00 Hz.

3: Percentage (corresponds to the rated frequency/signed 16-bit/two decimal places)

When n0-14 is set to 3, the unit is percentage and the value is a signed 16-bit number containing two decimal places. The written value is referenced against the rated frequency. For example, when decimal 1000 is written and the rated frequency is 50.00 Hz, the frequency reference is 5.00 Hz. When decimal -10000 is written and the rated frequency is 50.00 Hz, the frequency reference is -50.00 Hz.

4: Percentage (corresponds to the maximum frequency/signed 16-bit/two decimal places)

When n0-14 is set to 4, the unit is percentage and the value is a signed 16-bit number containing two decimal places. The written value is referenced against the maximum frequency. For example, when decimal 1000 is written and the rated frequency is 150.00 Hz, the frequency reference is 15.00 Hz. When decimal -10000 is written and the rated frequency is 150.00 Hz, the frequency reference is -150.00 Hz.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n0-15	Save parameters written through communication (group AE)	0x200F	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value:							
	0: Invalid 1: Valid  Description : This parameter sets whether to save the AE group mapping written through 0x2FXX to the EEPROM.  Value description: 0: Invalid The AE group mapping written through 0x2FXX is not saved to the EEPROM; therefore, the AE group mapping is not saved upon a power failure. 0: Valid The AE group mapping written through 0x2FXX is saved to the EEPROM; therefore, the AE group mapping is saved upon a power failure.							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
n0-16	Automatic communication fault reset	0x2010	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Invalid 1: Valid							
	Description: This parameter sets whether to enable automatic reset for communication faults.  Value description: 0: Invalid Automatic reset for communication faults is invalid. 0: Valid Automatic reset for communication faults is valid.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n0-18	Communication fault detection	0x2012	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Invalid 1: Valid Others: B connector							
	Description: This parameter sets whether to enable communication fault detection.  Value description: 0: Invalid Communication fault detection is disabled. In this case, the AC drive does not report a communication fault. 1: Valid Communication fault detection is enabled. Others: B connector Whether to enable communication fault detection depends on the value of B connector.							

## n1: Commissioning Communication

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n1-00	Commissioning baud rate	0x2100	Refer to "Value"	9	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Value:							

	9: 115200 bps							
	<p>Description :</p> <p>This parameter sets the baud rate of communication between the AC drive and the commissioning software or external keyboard.</p> <p>Value description:</p> <p>9: 115200 bps</p> <p>The commissioning modulation baud rate is fixed to 115200.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n1-02	Commissioning address	0x2102	1 to 127	1	Unsigned 16 bit	Shutdown change	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the address of communication between the AC drive and the commissioning software or external keyboard.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n1-03	Commissioning interface function selection	0x2103	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value :</p> <p>0: Commissioning</p> <p>1: Modbus RTU communication</p> <p>Description :</p> <p>This parameter sets the function for the commissioning interface (RJ45 interface).</p> <p>Value description:</p> <p>0: Commissioning</p> <p>1: Modbus RTU communication</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n1-04	Modbus RTU data format (RJ45 interface)	0x2104	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value :</p> <p>0: No check (8-N-2)</p> <p>1: Even parity check (8-E-1)</p> <p>2: Odd parity check (8-O-1)</p> <p>3: No check (8-N-1)</p> <p>Description :</p> <p>This parameter defines the format of Modbus data transmitted between the host controller and AC drive. Note that the data format set on the host controller must be the same as that set on the AC drive. Otherwise, communication will fail.</p> <p>Value description:</p>							



	0: No check (8-N-2) 1: Even parity check (8-E-1) 2: Odd parity check (8-O-1) 3: No check (8-N-1)							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n1-05	Modbus RTU response delay (RJ45 interface)	0x2105	0 ms to 20 ms	2ms	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter defines the interval from the end of data reception by the AC drive to the start of data transmission to the host controller.  Additional information: If the response delay is shorter than the system processing time, the system processing time prevails. This means that the system processes data and then sends the data to the host controller. If the response delay is longer than the system processing time, the system processes data and waits for the response delay time. After the time elapses, the system sends the data to the host controller.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n1-06	Modbus RTU communication timeout time (RJ45 interface)	0x2106	0.0s to 60.0s	0.0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the Modbus RTU communication timeout time.  Additional information: 1. When this parameter is set to 0.0s, the Modbus communication timeout time is invalid. Generally, set it to 0.0s. This parameter is used to monitor communication status in a system with continuous communication. 2. If this parameter is set to a valid value and the communication interval between the current communication and the next communication exceeds the value of n1-06, the system reports a communication fault.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n1-07	Modbus RTU communication baud rate (RJ45 interface)	0x2107	Refer to "Value"	5	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: 300 bps                          4: 4800 bps                          7: 38400 bps 1: 600 bps                              5: 9600 bps                              8: 57600 bps 2: 1200 bps                             6: 19200 bps                             9: 115200 bps 3: 2400 bps							
	Description: This parameter sets the Modbus RTU communication baud rate. A greater baud rate indicates faster communication.							

	Value description: 0: 300 bps 1: 600 bps 2: 1200 bps 3: 2400 bps 4: 4800 bps 5: 9600 bps 6: 19200 bps 7: 38400 bps 8: 57600 bps 9: 115200 bps							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n1-08	Modbus RTU communication address (RJ45 interface)	0x2108	1 to 247	1	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description : This parameter sets the address of the AC drive commissioning interface for Modbus RTU communication.							

## n2: Modbus Communication

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n2-00	Modbus communication baud rate	0x2200	Refer to "Value"	5	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: 300 bps    4: 4800 bps    7: 38400 bps 1: 600 bps    5: 9600 bps    8: 57600 bps 2: 1200 bps    6: 19200 bps    9: 115200 bps 3: 2400 bps							
	Description : This parameter defines the baud rate of data transmitted between the host controller and the AC drive.  Value description: 0: 300 bps 1: 600 bps 2: 1200 bps 3: 2400 bps 4: 4800 bps							

	<p>5: 9600 bps  6: 19200 bps  7: 38400 bps  8: 57600 bps  9: 115200 bps</p> <p>Additional information:  1. A greater baud rate indicates faster communication.  2. The baud rate of the host controller must be the same as that of the AC drive. Otherwise, communication will fail.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n2-01	Modbus data format	0x2201	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: No check (8-N-2) 1: Even parity (8-E-1) 2: Odd parity (8-O-1) 3: No check (8-N-1)							
	Description: This parameter defines the format of Modbus data transmitted between the host controller and AC drive.  Value description: 0: No check (8-N-2) 1: Even parity (8-E-1) 2: Odd parity (8-O-1) 3: No check (8-N-1)  Additional information: Note that the data format set on the host controller must be the same as that set on the AC drive. Otherwise, communication will fail.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n2-02	Modbus local address	0x2202	1 to 247	1	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description: This parameter sets the Modbus local address.  Additional information: The local address must be unique in the range of 1 to 247, which is the basis for point-to-point communication between the AC drive and host controller.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

n2-03	Modbus response delay	0x2203	0 ms to 20 ms	2ms	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter defines the interval from the end of data reception by the AC drive to the start of data transmission to the host controller.</p> <p>Additional information:</p> <p>If the response delay is shorter than the system processing time, the system processing time prevails. This means that the system processes data and then sends the data to the host controller. If the response delay is longer than the system processing time, the system processes data and waits for the response delay time. After the time elapses, the system sends the data to the host controller.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n2-04	Modbus communication timeout time	0x2204	0.0s to 60.0s	0.0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the Modbus communication timeout time.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. When this parameter is set to 0.0s, the Modbus communication timeout time is invalid. Generally, set it to 0.0s. This parameter is used to monitor communication status in a system with continuous communication.</li> <li>2. If this parameter is set to a valid value and the communication interval between the current communication and the next communication exceeds the value of n2-04, the system reports a communication fault.</li> </ol>							

### n3: CAN Communication

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode								
n3-00	CAN communication baud rate	0x2300	Refer to "Value"	5	Unsigned 16 bit	Shutdown change	Standard	Nothing								
	<p>Value:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">0: 20 kbps</td> <td style="width: 50%;">4: 250 kbps</td> </tr> <tr> <td>1: 50 kbps</td> <td>5: 500 kbps</td> </tr> <tr> <td>2: 100 kbps</td> <td>6: 1 Mbps</td> </tr> <tr> <td>3: 125 kbps</td> <td></td> </tr> </table>								0: 20 kbps	4: 250 kbps	1: 50 kbps	5: 500 kbps	2: 100 kbps	6: 1 Mbps	3: 125 kbps	
	0: 20 kbps	4: 250 kbps														
1: 50 kbps	5: 500 kbps															
2: 100 kbps	6: 1 Mbps															
3: 125 kbps																
<p>Description :</p> <p>This parameter defines the baud rate of data transmitted between the host controller and the AC drive.</p> <p>Value description:</p> <p>0: 20 kbps</p>																

	1: 50 kbps 2: 100 kbps 3: 125 kbps 4: 250 kbps 5: 500 kbps 6: 1 Mbps  Additional information: 1. A greater baud rate indicates faster communication. 2. The baud rate of the host controller must be the same as that of the AC drive. Otherwise, communication will fail.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n3-01	CAN communication enable	0x2301	Refer to "Value"	1	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Disable 1: Enable							
	Description: This parameter sets whether to enable CAN communication.  Value description: 0: Disable 1: Enable							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n3-02	CAN station number	0x2302	1 to 247	1	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description: This parameter sets the CAN communication station number.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n3-10	CAN communication protocol selection	0x230A	Refer to "Value"	2	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 1: CAN open 2: CAN link							
	Description: This parameter is used to select a CAN communication protocol.  Value description: 1: CAN open 2: CAN link							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n3-14	CAN open mode	0x230E	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Default mode 1: Expert mode							
	Description: This parameter sets the CAN open user control mode.  Value description: 0: Default mode 1: Expert mode							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n3-15	CAN open prohibition time	0x230F	0 to 65535	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description: This parameter sets the prohibition time in the unit of 100 $\mu$ s for the CAN open expert mode.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n3-16	CAN open event time	0x2310	0 to 65535	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description: This parameter sets the event time in the unit of ms for the CAN open expert mode.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
n3-26	CAN communication effectiveness	0x231A	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Value: 0: Not supported by the current device 1: Effective							
	Description: This parameter displays whether CAN communication is effective.							

## nE: Process Data Address Mapping

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-00	RPDO1-	0x2E00	0x0 to	0x0	Unsigned 16	Real time	Standard	Nothing

	SubIndex0-H		0xFFFF		bit	changes		
	<p>Description :</p> <p>This parameter indicates the high-order byte address of mapping channel 0 for process data RPDO1. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-01	RPDO1-SubIndex0-L	0x2E01	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the low-order byte address of mapping channel 0 for process data RPDO1. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-02	RPDO1-SubIndex1-H	0x2E02	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the high-order byte address of mapping channel 1 for process data RPDO1. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-03	RPDO1-SubIndex1-L	0x2E03	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the low-order byte address of mapping channel 1 for process data RPDO1. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-04	RPDO1-SubIndex2-H	0x2E04	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the high-order byte address of mapping channel 2 for process data RPDO1. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-05	RPDO1-SubIndex2-L	0x2E05	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the low-order byte address of mapping channel 2 for process data RPDO1. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

nE-06	RPDO1-SubIndex3-H	0x2E06	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 3 for process data RPDO1. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-07	RPDO1-SubIndex3-L	0x2E07	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 3 for process data RPDO1. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-08	RPDO2-SubIndex0-H	0x2E08	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 0 for process data RPDO2. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-09	RPDO2-SubIndex0-L	0x2E09	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 0 for process data RPDO2. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-10	RPDO2-SubIndex1-H	0x2E0A	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 1 for process data RPDO2. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-11	RPDO1-SubIndex1-L	0x2E0B	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 1 for process data RPDO2. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication	Range	Default	Data type	Change mode	User	Effective



		address					authority	mode
nE-12	RPDO2-SubIndex2-H	0x2E0C	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 2 for process data RPDO2. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-13	RPDO2-SubIndex2-L	0x2E0D	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 2 for process data RPDO2. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-14	RPDO2-SubIndex3-H	0x2E0E	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 3 for process data RPDO2. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-15	RPDO2-SubIndex3-L	0x2E0F	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 3 for process data RPDO2. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-16	RPDO3-SubIndex0-H	0x2E10	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 0 for process data RPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-17	RPDO3-SubIndex0-L	0x2E11	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 0 for process data RPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-18	RPDO3-SubIndex1-H	0x2E12	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 1 for process data RPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							
nE-19	RPDO1-SubIndex1-L	0x2E13	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 1 for process data RPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							
nE-20	RPDO3-SubIndex2-H	0x2E14	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 2 for process data RPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							
nE-21	RPDO3-SubIndex2-L	0x2E15	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 2 for process data RPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							
nE-22	RPDO3-SubIndex3-H	0x2E16	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 3 for process data RPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							
nE-23	RPDO3-SubIndex3-L	0x2E17	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 3 for process data RPDO3. The host controller							

	maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-24	RPDO4-SubIndex0-H	0x2E18	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 0 for process data RPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-25	RPDO4-SubIndex0-L	0x2E19	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 0 for process data RPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-26	RPDO4-SubIndex1-H	0x2E1A	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 1 for process data RPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-27	RPDO1-SubIndex1-L	0x2E1B	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 1 for process data RPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-28	RPDO4-SubIndex2-H	0x2E1C	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 2 for process data RPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-29	RPDO4-SubIndex2-L	0x2E1D	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description :							

	This parameter indicates the low-order byte address of mapping channel 2 for process data RPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-30	RPDO4-SubIndex3-H	0x2E1E	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter indicates the high-order byte address of mapping channel 3 for process data RPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-31	RPDO4-SubIndex3-L	0x2E1F	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter indicates the low-order byte address of mapping channel 3 for process data RPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-32	RPDO1-SubIndex0-H	0x2E20	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter indicates the high-order byte address of mapping channel 0 for process data TPDO1. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-33	TPDO1-SubIndex0-L	0x2E21	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter indicates the low-order byte address of mapping channel 0 for process data TPDO1. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-34	TPDO1-SubIndex1-H	0x2E22	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter indicates the high-order byte address of mapping channel 1 for process data TPDO1. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-35	TPDO1-SubIndex1-L	0x2E23	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing

	<p>Description :</p> <p>This parameter indicates the low-order byte address of mapping channel 1 for process data TPDO1. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-36	TPDO1-SubIndex2-H	0x2E24	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the high-order byte address of mapping channel 2 for process data TPDO1. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-37	RPDO1-SubIndex2-L	0x2E25	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the low-order byte address of mapping channel 2 for process data TPDO1. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-38	TPDO1-SubIndex3-H	0x2E26	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the high-order byte address of mapping channel 3 for process data TPDO1. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-39	RPDO1-SubIndex3-L	0x2E27	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the low-order byte address of mapping channel 3 for process data TPDO1. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-40	TPDO2-SubIndex0-H	0x2E28	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the high-order byte address of mapping channel 0 for process data TPDO2. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-41	RPDO1-	0x2E29	0x0 to	0x0	Unsigned 16	Real time	Standard	Nothing

	SubIndex0-L		0xFFFF		bit	changes		
	<p>Description :</p> <p>This parameter indicates the low-order byte address of mapping channel 0 for process data TPDO2. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-42	TPDO2-SubIndex1-H	0x2E2A	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the high-order byte address of mapping channel 1 for process data TPDO2. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-43	RPDO1-SubIndex1-L	0x2E2B	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the low-order byte address of mapping channel 1 for process data TPDO2. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-44	TPDO2-SubIndex2-H	0x2E2C	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the high-order byte address of mapping channel 2 for process data TPDO2. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-45	RPDO1-SubIndex2-L	0x2E2D	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the low-order byte address of mapping channel 2 for process data TPDO2. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-46	TPDO2-SubIndex3-H	0x2E2E	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the high-order byte address of mapping channel 3 for process data TPDO2. The host controller maps the address automatically and this parameter does not need manual editing.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

nE-47	RPDO1-SubIndex3-L	0x2E2F	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 3 for process data TPDO2. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-48	TPDO3-SubIndex0-H	0x2E30	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 0 for process data TPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-49	RPDO1-SubIndex0-L	0x2E31	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 0 for process data TPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-50	TPDO3-SubIndex1-H	0x2E32	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 1 for process data TPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-51	RPDO1-SubIndex1-L	0x2E33	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 1 for process data TPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-52	TPDO3-SubIndex2-H	0x2E34	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 2 for process data TPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication	Range	Default	Data type	Change mode	User	Effective

		address					authority	mode
nE-53	RPDO1-SubIndex2-L	0x2E35	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 2 for process data TPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-54	TPDO3-SubIndex3-H	0x2E36	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 3 for process data TPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-55	RPDO1-SubIndex3-L	0x2E37	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 3 for process data TPDO3. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-56	TPDO4-SubIndex0-H	0x2E38	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 0 for process data TPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-57	RPDO1-SubIndex0-L	0x2E39	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 0 for process data TPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-58	TPDO4-SubIndex1-H	0x2E3A	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 1 for process data TPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							



Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-59	RPDO1-SubIndex1-L	0x2E3B	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 1 for process data TPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
nE-60	TPDO4-SubIndex2-H	0x2E3C	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 2 for process data TPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
nE-61	RPDO1-SubIndex2-L	0x2E3D	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 2 for process data TPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
nE-62	TPDO4-SubIndex3-H	0x2E3E	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the high-order byte address of mapping channel 3 for process data TPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
nE-63	RPDO1-SubIndex3-L	0x2E3F	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter indicates the low-order byte address of mapping channel 3 for process data TPDO4. The host controller maps the address automatically and this parameter does not need manual editing.							
nE-66	Number of valid RPDOs	0x2E42	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter displays the number of valid R mapping channels.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
nE-67	Number of valid TPDOs	0x2E43	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter displays the number of valid T mapping channels.							

## o6: Logic Operation 1

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
o6-00	Logic AND/OR module A function selection	0x5600	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable 1: AND 2: OR							
	Description : 0: The module is disabled and the output is 0. 1: The module function is AND. The module performs the AND operation on inputs 1, 2, 3, and 4 and then outputs a result. 2: The module function is OR. The module performs the OR operation on inputs 1, 2, 3, and 4 and then outputs a result.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
o6-01	Logic AND/OR module A input 1	0x5601	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable 1: Logic 1 2: Logic 0 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description : 0: The input is 0. 1: The input is 1. 2: The input is 0. 3 to 7: The input is that of the corresponding DI. Others: The input is that of the connector.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
o6-02	Logic AND/OR	0x5602	Refer to	0	Unsigned	Real time	Expansion	Nothing

	module A input 2		"Value"		16 bit	changes		
Value:								
0: Disable			3: DI1			6: DI4		
1: Logic 1			4: DI2			7: DI5 (MD600A)		
2: Logic 0			5: DI3			Others: B connector		
Description:								
0: The input is 0.								
1: The input is 1.								
2: The input is 0.								
3 to 7: The input is that of the corresponding DI.								
Others: The input is that of the connector.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
o6-03	Logic AND/OR module A input 3	0x5603	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value:							
	0: Disable			3: DI1			6: DI4	
1: Logic 1			4: DI2			7: DI5 (MD600A)		
2: Logic 0			5: DI3			Others: B connector		
Description:								
0: The input is 0.								
1: The input is 1.								
2: The input is 0.								
3 to 7: The input is that of the corresponding DI.								
Others: The input is that of the connector.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
o6-04	Logic AND/OR module A input 4	0x5604	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value:							
	0: Disable			3: DI1			6: DI4	
1: Logic 1			4: DI2			7: DI5 (MD600A)		
2: Logic 0			5: DI3			Others: B connector		
Description:								
0: The input is 0.								
1: The input is 1.								
2: The input is 0.								
3 to 7: The input is that of the corresponding DI.								
Others: The input is that of the connector.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

o6-05	Logic AND/OR module B function selection	0x5605	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable 1: AND 2: OR							
	Description: Same as module A							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
o6-06	Logic AND/OR module B input 1	0x5606	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable                      3: DI1                                      6: DI4 1: Logic 1                      4: DI2                                      7: DI5 (MD600A) 2: Logic 0                      5: DI3                                      Others: B connector							
	Description: Same as module A							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
o6-07	Logic AND/OR module B input 2	0x5607	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable                      3: DI1                                      6: DI4 1: Logic 1                      4: DI2                                      7: DI5 (MD600A) 2: Logic 0                      5: DI3                                      Others: B connector							
	Description: Same as module A							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
o6-08	Logic AND/OR module B input 3	0x5608	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable                      3: DI1                                      6: DI4 1: Logic 1                      4: DI2                                      7: DI5 (MD600A) 2: Logic 0                      5: DI3                                      Others: B connector							
	Description: Same as module A							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

o6-09	Logic AND/OR module B input 4	0x5609	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing	
	Value:								
	0: Disable	3: DI1	6: DI4						
	1: Logic 1	4: DI2	7: DI5 (MD600A)						
	2: Logic 0	5: DI3	Others: B connector						
Description: Same as module A									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
o6-80	Input of logic NOT module A	0x5650	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing	
	Value:								
	0: Disable	3: DI1	6: DI4						
	1: Logic 1	4: DI2	7: DI5 (MD600A)						
	2: Logic 0	5: DI3	Others: B connector						
Description: The module performs the NOT operation on the input and then outputs a result. 0: The module is disabled and the output is 0. 1: The input is 1. 2: The input is 0. 3 to 7: The input is that of the corresponding DI. Others: The input is that of the connector.									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
o6-81	Input of logic NOT module B	0x5651	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing	
	Value:								
	0: Disable	3: DI1	6: DI4						
	1: Logic 1	4: DI2	7: DI5 (MD600A)						
	2: Logic 0	5: DI3	Others: B connector						
Description: Same as module A									

## o7: Logic Operation 2

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
o7-00	Logic XOR/XNOR module A function	0x5700	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing

	selection							
Value: 0: Disable 0: XOR 2: XNOR								
Description: 0: The module is disabled and the output is 0. 1: The module function is XOR. The module performs the XOR operation on inputs 1 and 2 and then outputs a result. 2: The module function is XNOR. The module performs the XNOR operation on inputs 1 and 2 and then outputs a result.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
o7-01	Logic XOR/XNOR module A input 1	0x5701	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable 1: Logic 1 2: Logic 0 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: 0: The input is 0. 1: The input is 1. 2: The input is 0. 3 to 7: The input is that of the corresponding DI. Others: The input is that of the connector.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
o7-02	Logic XOR/XNOR module A input 2	0x5702	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable 1: Logic 1 2: Logic 0 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: 0: The input is 0. 1: The input is 1. 2: The input is 0. 3 to 7: The input is that of the corresponding DI. Others: The input is that of the connector.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
o7-03	Logic XOR/XNOR module B function	0x5703	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing

	selection							
	Value: 0: Disable 0: XOR 2: XNOR							
	Description: Same as module A							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
o7-04	Logic XOR/XNOR module B input 1	0x5704	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable 1: Logic 1 2: Logic 0 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: Same as module A							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
o7-05	Logic XOR/XNOR module B input 2	0x5705	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	Value: 0: Disable 1: Logic 1 2: Logic 0 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: Same as module A							

## P0: Auxiliary Functions

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-05	Jump frequency during acceleration/deceleration	0x6005	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Disable 1: Enable							

	<p>Description :</p> <p>This parameter is used to enable or disable the jump frequency function during acceleration/deceleration.</p> <p>Value description:</p> <p>0: Disable</p> <p>The AC drive continues to run at the running frequency when the running frequency reaches the jump frequency during acceleration and deceleration.</p> <p>1: Enable</p> <p>The AC drive skips over the jump frequency when the running frequency reaches the jump frequency during acceleration and deceleration. The jump range is twice the value of P0-10 (Jump frequency amplitude).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Jump frequency 1	0x6006	0.0 Hz to 800.0 Hz	0.0Hz	Unsigned 16 bit	Real time changes	Standard	Nothing
P0-06	<p>Description :</p> <p>This parameter sets the first jump frequency, which is used together with P0-10 (Jump frequency amplitude).</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. When the frequency reference is within the jump frequency range, the actual running frequency will be maintained at the lower or upper limit of the jump frequency range. This allows the AC drive to avoid the mechanical resonance point of the load.</li> <li>2. When this parameter is set to 0, the first jump frequency function is disabled.</li> <li>3. During acceleration/deceleration, if the actual running frequency reaches the jump frequency threshold, the drive keeps the acceleration/deceleration status and the jump frequency function will not apply.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Jump frequency 2	0x6007	0.0 Hz to 800.0 Hz	0.0Hz	Unsigned 16 bit	Real time changes	Standard	Nothing
P0-07	<p>Description :</p> <p>This parameter sets the second jump frequency, which is used together with P0-10 (Jump frequency amplitude).</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. When the set frequency is within the jump frequency range, the actual running frequency will run at the edge of the jump frequency range (lower limit or upper limit of the range), allowing the AC drive to avoid the mechanical resonance point of the load.</li> <li>2. Set to 0, and the second jump frequency function is canceled.</li> <li>3. During acceleration/deceleration, the actual running frequency normally passes the jump frequency range, and no jump occurs.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode



	Jump frequency 3	0x6008	0.0 Hz to 800.0 Hz	0.0Hz	Unsigned 16 bit	Real time changes	Standard	Nothing
P0-08	<p>Description :</p> <p>This parameter sets the third jump frequency, which is used together with P0-10 (Jump frequency amplitude).</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. When the set frequency is within the jump frequency range, the actual running frequency will run at the edge of the jump frequency range (lower limit or upper limit of the range), allowing the AC drive to avoid the mechanical resonance point of the load.</li> <li>2. Set to 0, and the third jump frequency function is canceled.</li> <li>3. During acceleration/deceleration, the actual running frequency normally passes the jump frequency range, and no jump occurs.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Jump frequency 4	0x6009	0.0 Hz to 800.0 Hz	0.0Hz	Unsigned 16 bit	Real time changes	Standard	Nothing
P0-09	<p>Description :</p> <p>This parameter sets the fourth jump frequency, which is used together with P0-10 (Jump frequency amplitude).</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. When the set frequency is within the jump frequency range, the actual running frequency will run at the edge of the jump frequency range (lower limit or upper limit of the range), allowing the AC drive to avoid the mechanical resonance point of the load.</li> <li>2. Set to 0, and the fourth jump frequency function is canceled.</li> <li>3. During acceleration/deceleration, the actual running frequency normally passes the jump frequency range, and no jump occurs.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Jump frequency amplitude	0x600A	0.0 Hz to 5.0 Hz	0.0Hz	Unsigned 16 bit	Real time changes	Standard	Nothing
P0-10	<p>Description :</p> <p>This parameter sets the effective jump frequency range.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. If the running frequency exceeds the jump frequency and then the frequency is set to the jump frequency, the running frequency jumps the value of the jump frequency plus the jump frequency amplitude (upper limit of the range).</li> <li>2. If the running frequency does not exceed the jump frequency and then the frequency is set to the jump frequency, the running frequency jumps the value of the jump frequency minus the jump frequency amplitude (lower limit of the range).</li> </ol>							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
P0-11	Operation mode when the frequency reference is below the minimum motor frequency	0x600B	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Run at the minimum motor frequency 1: Stop 2: Run at zero speed 3: Coast to stop							
	Description: This parameter sets the operation mode when the frequency reference is below the minimum motor frequency  Value description: 0: Run at the minimum motor frequency If the frequency reference is below the minimum motor frequency, the AC drive runs at the minimum motor frequency. 1: Stop If the frequency reference is below the minimum motor frequency, the AC drive decelerates to stop. 2: Run at zero speed If the frequency reference is below the minimum motor frequency, the AC drive runs at zero speed. 3: Coast to stop If the frequency reference is below the minimum motor frequency, the AC drive coasts to stop.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-13	Timing function	0x600D	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Disable 1: Enable							
	Description: This parameter sets whether the timing function of the AC drive is enabled.  Description: 0: Disable 1: Enable The AC drive starts timing at startup. When the set timing duration is reached, the AC drive stops automatically. The multi-function DO can be configured to output ON signals.  Additional information: 1. The timing duration is set by P0-14 and P0-15 in the unit of minute. 2. The AC drive starts timing from 0 each time it starts up and the remaining timing duration can be viewed in U0-20.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

P0-14	Timing operation duration source	0x600E	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: P0-15 1: AI1 Others: F connector							
	Description: This parameter sets the timing operation duration source.  Value description: 0: P0-15 The timing operation duration is set by P0-15. 1: AI1 The timing operation duration is set by AI1 input voltage and P0-15. Others: F connector The timing operation duration is set by the F connector value and P0-15.  Additional information: When this parameter is set to 1, the timing operation duration equals the result of (AI voltage/10 V) x P0-15. 100% of the analog input range corresponds to P0-15.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-15	Digital setting of timing operation duration	0x600F	0.0 min to 6500.0 min	0.0min	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description: This parameter sets the timing operation duration.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-16	Power-on time threshold (hour)	0x6010	0h to 65535h	0h	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the power-on time threshold in hours.  Additional information: 1. The power-on time threshold is set by P0-16 and P0-18. When Ad-02 (Cumulative power-on time in hours) x 3600 + Ad-03 (Cumulative power-on time in seconds) exceeds P0-16 (Power-on time threshold in hours) x 3600 + P0-18 (Power-on time threshold in seconds), the multi-functional DO outputs an active signal after configuration. 2. Set P0-16 and P0-18 to 0 to disable the related function.							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
P0-17	Running time threshold (hour)	0x6011	0h to 65535h	0h	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the running time threshold in hours.  Additional information: 1. The running time threshold is set by P0-17 and P0-19. When Ad-00 (Cumulative running time in hours) x 3600 + Ad-01 (Cumulative running time in seconds) exceeds P0-17 (Running time threshold in hours) x 3600 + P0-19 (Running time threshold in seconds), the multi-functional DO outputs an active signal after configuration. 2. Set P0-17 and P0-19 to 0 to disable the related function.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-18	Power-on time threshold (second)	0x6012	0s to 3599s	0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the running time threshold in seconds.  Additional information: 1. The power-on time threshold is set by P0-16 and P0-18. When Ad-02 (Cumulative power-on time in hours) x 3600 + Ad-03 (Cumulative power-on time in seconds) exceeds P0-16 (Power-on time threshold in hours) x 3600 + P0-18 (Power-on time threshold in seconds), the multi-functional DO outputs an active signal after configuration. 2. Set P0-16 and P0-18 to 0 to disable the related function.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-19	Running time threshold (second)	0x6013	0s to 3599s	0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the running time threshold in seconds.  Additional information: 1. The running time threshold is set by P0-17 and P0-19. When Ad-00 (Cumulative running time in hours) x 3600 + Ad-01 (Cumulative running time in seconds) exceeds P0-17 (Running time threshold in hours) x 3600 + P0-19 (Running time threshold in seconds), the multi-functional DO outputs an active signal after configuration. 2. Set P0-17 and P0-19 to 0 to disable the related function.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-20	Current running time threshold	0x6014	0.0 min to 6500.0 min	0.0min	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Description :							

	<p>This parameter sets the current running time threshold of the AC drive.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. If the current running time reaches the value set by this parameter, the multi-functional DO outputs an active signal after configuration.</li> <li>2. This parameter is invalid if it is set to 0.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-21	Protection upon start	0x6015	Refer to "Value"	1	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Disable</p> <p>1: Enable</p>							
	<p>Description:</p> <p>This parameter sets whether to enable the protection function for the AC drive.</p> <p>Value description:</p> <p>0: Disable</p> <p>1: Enable</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. If this parameter is set to 1, the AC drive does not respond to the run command valid upon AC drive power-on (for example, an input terminal is ON before power-on). The AC drive responds only after the run command is canceled and becomes valid again.</li> <li>2. If this parameter is set to 1, the AC drive does not respond to the run command valid upon fault reset of the AC drive. The run protection can be disabled only after the run command has been canceled.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-22	Wakeup frequency	0x6016	P0-24 to A2-17	0.00Hz	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the wakeup frequency of the AC drive, which is used for exiting the hibernation state.</p> <p>Additional information:</p> <p>In the hibernation state, when the current running command is valid and the frequency reference is equal to or larger than P0-22 (Wakeup frequency) for the time longer than the value of P0-23 (Wakeup delay), the drive starts directly.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-23	Wakeup delay	0x6017	0.0s to 6500.0s	0.0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the wakeup delay time of the AC drive.</p>							

	<p>Additional information:</p> <p>In the hibernation state, when the current running command is valid and the frequency reference is equal to or larger than P0-22 (Wakeup frequency) for the time longer than the value of P0-23 (Wakeup delay), the drive starts directly.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-24	Hibernation frequency	0x6018	0.00 Hz to P0-22	0.00Hz	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the hibernation frequency of the AC drive. When the frequency reference set in the running state is lower than the hibernation frequency, the AC drive enters the hibernation state.</p> <p>Additional information:</p> <p>If the AC drive is running and the frequency reference is lower than or equal to the hibernation frequency (P0-24) for the time longer than the value set by P0-25 (Hibernation delay), the AC drive enters the hibernation state and decelerates to stop.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-25	Hibernation delay	0x6019	0.0s to 6500.0s	0.0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the hibernation delay time of the AC drive.</p> <p>Additional information:</p> <p>If the AC drive is running and the frequency reference is lower than or equal to the hibernation frequency (P0-24) for the time longer than the value set by P0-25 (Hibernation delay), the AC drive enters the hibernation state and decelerates to stop.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-26	Dead zone time of forward/reverse run switchover	0x601A	0.0s to 3000.0s	0.0s	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter defines the transition time at 0 Hz output during switchover between forward running and reverse running.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-33	Drive overtemperature threshold	0x6021	0°C to 100°C	75°C	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the overtemperature threshold of the inverter heatsink module.</p> <p>Additional information:</p>							

	When the inverter dissipation temperature (U0-82) reaches the value of P0-33 (Drive overtemperature threshold), the multi-function DO outputs an active signal after configuration.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-34	Frequency detection value (FDT1)	0x6022	0.00 Hz to A2-17	50.00Hz	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the running frequency detection value 1 of the AC drive.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. When the running frequency is higher than the frequency detection value (FDT1), the DO outputs an active signal.</li> <li>2. When the running frequency is lower than the result of frequency detection value minus frequency detection value multiplied by frequency detection hysteresis coefficient, the DO outputs an inactive signal.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-35	Frequency detection hysteresis coefficient (FDT1)	0x6023	0.0% to 100.0%	5.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the running frequency detection hysteresis coefficient of the AC drive. It is a percentage of the frequency detection value (FDT1).</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. When the running frequency is higher than the frequency detection value (FDT1), the DO outputs an active signal.</li> <li>2. When the running frequency is lower than the result of frequency detection value minus frequency detection value multiplied by frequency detection hysteresis coefficient, the DO outputs an inactive signal.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-36	Frequency detection value (FDT2)	0x6024	0.00 Hz to A2-17	50.00Hz	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the running frequency detection value 2 of the AC drive.</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. When the running frequency is higher than the frequency detection value (FDT2), the DO outputs an active signal.</li> <li>2. When the running frequency is lower than the result of frequency detection value minus frequency detection value multiplied by frequency detection hysteresis coefficient, the DO outputs an inactive signal.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-37	Frequency detection hysteresis coefficient (FDT2)	0x6025	0.0% to 100.0%	5.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the running frequency detection hysteresis coefficient of the AC drive. It is a percentage of the</p>							

	<p>frequency detection value (FDT2).</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. When the running frequency is higher than the frequency detection value (FDT2), the DO outputs an active signal.</li> <li>2. When the running frequency is lower than the result of frequency detection value minus frequency detection value multiplied by frequency detection hysteresis coefficient, the DO outputs an inactive signal.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-38	Detection frequency amplitude	0x6026	0.0% to 100.0%	0.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the detection frequency amplitude for the running frequency. It is a percentage of A2-04 (per-unit frequency base value).</p> <p>Additional information:</p> <p>When the running frequency of the AC drive is in the range of target frequency <math>\pm</math> per-unit frequency x P0-38, the DO outputs an active signal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-39	Detection frequency 1	0x6027	0.00 Hz to A2-17	50.00Hz	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the detection frequency 1 of the AC drive.</p> <p>Additional information:</p> <p>When the running frequency of the AC drive is in the range of detection frequency 1 <math>\pm</math> detection frequency amplitude 1, the DO terminal outputs an active signal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-40	Detection frequency amplitude 1	0x6028	0.1% to 100.0%	0.1%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the detection frequency amplitude 1, which is a percentage of P0-39.</p> <p>Additional information:</p> <p>When the running frequency of the AC drive is in the range of detection frequency 1 <math>\pm</math> detection frequency amplitude 1, the DO terminal outputs an active signal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-41	Detection frequency 2	0x6029	0.00 Hz to A2-17	50.00Hz	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the detection frequency 2 of the AC drive.</p>							



	<p>Additional information: When the running frequency of the AC drive is in the range of detection frequency 2 <math>\pm</math> detection frequency amplitude 2, the DO terminal outputs an active signal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-42	Detection frequency amplitude 2	0x602A	0.1% to 100.0%	0.1%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description: This parameter sets the detection frequency amplitude 2, which is a percentage of P0-41.</p> <p>Additional information: When the running frequency of the AC drive is in the range of detection frequency 2 <math>\pm</math> detection frequency amplitude 2, the DO terminal outputs an active signal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-43	Detection current 1	0x602B	0.0% to 300.0%	100.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description: This parameter sets the detection current 1, which is a percentage of the rated motor current.</p> <p>Additional information: When the output current of the AC drive is in the range of detection current 1 <math>\pm</math> detection current amplitude 1, the DO outputs an active signal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-44	Detection current amplitude 1	0x602C	0.0% to 300.0%	0.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description: This parameter sets the detection current amplitude 1, which is a percentage of the rated motor current.</p> <p>Additional information: When the output current of the AC drive is in the range of detection current 1 <math>\pm</math> detection current amplitude 1, the DO outputs an active signal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-45	Detection current 2	0x602D	0.0% to 300.0%	100.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description: This parameter sets the detection current 2, which is a percentage of the rated motor current.</p> <p>Additional information:</p>							

	When the output current of the AC drive is in the range of detection current 2 $\pm$ detection current amplitude 2, the DO outputs an active signal.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-46	Detection current amplitude 2	0x602E	0.0% to 300.0%	0.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the detection current amplitude 2, which is a percentage of the rated motor current.</p> <p>Additional information:</p> <p>When the output current of the AC drive is in the range of detection current 2 <math>\pm</math> detection current amplitude 2, the DO outputs an active signal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-47	Zero current detection level	0x602F	0.0% to 300.0%	5.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the zero current detection value of the output current, which is a percentage of the rated motor current.</p> <p>Additional information:</p> <p>When the output current of the AC drive is lower than or equal to the zero current detection level for a period longer than the value of P0-48 (Zero current detection delay), the DO outputs an active signal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-48	Zero current detection delay	0x6030	0.01s to 600.00s	0.10s	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the zero current detection delay time of the output current.</p> <p>Additional information:</p> <p>When the output current of the AC drive is lower than or equal to the zero current detection level for a period longer than the value of P0-48 (Zero current detection delay), the DO outputs an active signal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-49	Output current overlimit threshold	0x6031	0.0% to 300.0%	200.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the output current overlimit threshold of the AC drive, which is a percentage of the rated motor current.</p> <p>Additional information:</p>							

	When the output current of the AC drive is larger than the output current overlimit threshold for a period longer than the value of P0-50 (Output current overlimit detection delay), the DO outputs an active signal.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-50	Output current overlimit detection delay	0x6032	0.00s to 600.00s	0.00s	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the output current overlimit detection delay time.</p> <p>Additional information:</p> <p>When the output current of the AC drive is larger than the output current overlimit threshold for a period longer than the value of P0-50 (Output current overlimit detection delay), the DO outputs an active signal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-51	Target speed amplitude	0x6033	0.0% to 600.0%	3.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter Defines the detection width of the target speed (frequency) when the running frequency of the AC drive and the actual motor speed reach the target speed (frequency).</p> <p>Additional information:</p> <p>1. When both the running speed and the detected motor actual speed are in the range of target speed <math>\pm</math> target speed amplitude for the specified time, an active signal is output.</p> <p>2: If this parameter is set to 0, the target speed reach function is invalid.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-52	Target speed reach time	0x6034	0.00s to 100.00s	3.00s	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the time for the running frequency and the actual motor speed to reach the target speed (frequency).</p> <p>Additional information:</p> <p>1. When both the running speed and the detected motor actual speed are in the range of target speed <math>\pm</math> target speed amplitude for the specified time, an active signal is output.</p> <p>2: If this parameter is set to 0, the target speed reach function is invalid.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-53	Speed comparison reach threshold 1	0x6035	0.0% to 600.0%	100.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the speed comparison reach threshold 1 of the motor running speed (absolute value).</p>							

	<p>Additional information:</p> <ol style="list-style-type: none"> <li>1. During normal operation, when the motor running speed (absolute value) is higher than the value of P0-53 (Speed comparison reach threshold 1) for the time set by P0-55 (Speed comparison reach time 1), the multi-function DO outputs an active signal (speed comparison reach signal).</li> <li>2. When any of the following conditions is met, the multi-function DO outputs an inactive signal (speed comparison reach signal): <ol style="list-style-type: none"> <li>a. The value of P0-53 is set to 0.</li> <li>b. The motor running speed is 0.</li> <li>c. The operation direction is opposite to the previous direction.</li> <li>d. <math>P0-53 &gt; P0-54</math> and the absolute value of the motor running speed <math>&lt;  P0-53-P0-54 </math>.</li> </ol> </li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-54	Speed comparison reach hysteresis 1	0x6036	0.0% to 600.0%	3.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the speed comparison reach hysteresis 1 of the motor running speed (absolute value).</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. During normal operation, when the motor running speed (absolute value) is higher than the value of P0-53 (Speed comparison reach threshold 1) for the time set by P0-55 (Speed comparison reach time 1), the multi-function DO outputs an active signal (speed comparison reach signal).</li> <li>2. When any of the following conditions is met, the multi-function DO outputs an inactive signal (speed comparison reach signal): <ol style="list-style-type: none"> <li>a. The value of P0-53 is set to 0.</li> <li>b. The motor running speed is 0.</li> <li>c. The operation direction is opposite to the previous direction.</li> <li>d. <math>P0-53 &gt; P0-54</math> and the absolute value of the motor running speed <math>&lt;  P0-53-P0-54 </math>.</li> </ol> </li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-55	Speed comparison reach time 1	0x6037	0.00s to 100.00s	3.00s	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description:</p> <p>This parameter sets the speed comparison reach time of the motor running speed (absolute value).</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. During normal operation, when the motor running speed (absolute value) is higher than the value of P0-53 (Speed comparison reach threshold 1) for the time set by P0-55 (Speed comparison reach time 1), the multi-function DO outputs an active signal (speed comparison reach signal).</li> <li>2. When any of the following conditions is met, the multi-function DO outputs an inactive signal (speed comparison reach signal): <ol style="list-style-type: none"> <li>a. The value of P0-53 is set to 0.</li> <li>b. The motor running speed is 0.</li> <li>c. The operation direction is opposite to the previous direction.</li> </ol> </li> </ol>							

	d. P0-53 > P0-54 and the absolute value of the motor running speed <  P0-53-P0-54 .							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-56	Speed comparison reach threshold 2	0x6038	0.0% to 600.0%	100.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the speed comparison reach threshold 2 of the motor running speed (absolute value).</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. During normal operation, when the motor running speed (absolute value) is higher than the value (not 0) of P0-56 (Speed comparison reach threshold 2) for the time set by P0-58 (Speed comparison reach time 2), the multi-function DO outputs an active signal (speed comparison reach signal).</li> <li>2. When any of the following conditions is met, the multi-function DO outputs an inactive signal (speed comparison reach signal): <ol style="list-style-type: none"> <li>a. The value of P0-56 is set to 0.</li> <li>b. The motor running speed is 0.</li> <li>c. The operation direction is opposite to the previous direction.</li> <li>d. P0-56 &gt; P0-57 and the absolute value of the motor running speed &lt;  P0-56-P0-57 .</li> </ol> </li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-57	Speed comparison reach hysteresis 2	0x6039	0.0% to 600.0%	3.0%	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the speed comparison reach hysteresis 2 of the motor running speed (absolute value).</p> <p>Additional information:</p> <ol style="list-style-type: none"> <li>1. During normal operation, when the motor running speed (absolute value) is higher than the value (not 0) of P0-56 (Speed comparison reach threshold 2) for the time set by P0-58 (Speed comparison reach time 2), the multi-function DO outputs an active signal (speed comparison reach signal).</li> <li>2. When any of the following conditions is met, the multi-function DO outputs an inactive signal (speed comparison reach signal): <ol style="list-style-type: none"> <li>a. The value of P0-56 is set to 0.</li> <li>b. The motor running speed is 0.</li> <li>c. The operation direction is opposite to the previous direction.</li> <li>d. P0-56 &gt; P0-57 and the absolute value of the motor running speed &lt;  P0-56-P0-57 .</li> </ol> </li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-58	Speed comparison reach time 2	0x603A	0.00s to 100.00s	3.00s	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Description :</p> <p>This parameter sets the speed comparison reach time 2 of the motor running speed (absolute value).</p>							

<p>Additional information:</p> <ol style="list-style-type: none"> <li>1. During normal operation, when the motor running speed (absolute value) is higher than the value (not 0) of P0-56 (Speed comparison reach threshold 2) for the time set by P0-58 (Speed comparison reach time 2), the multi-function DO outputs an active signal (speed comparison reach signal).</li> <li>2. When any of the following conditions is met, the multi-function DO outputs an inactive signal (speed comparison reach signal): <ol style="list-style-type: none"> <li>a. The value of P0-56 is set to 0.</li> <li>b. The motor running speed is 0.</li> <li>c. The operation direction is opposite to the previous direction.</li> <li>d. <math>P0-56 &gt; P0-57</math> and the absolute value of the motor running speed <math>&lt;  P0-56 - P0-57 </math>.</li> </ol> </li> </ol>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-59	Bit 15 setting of system status word 1	0x603B	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value:</p> <p>0: Invalid</p> <p>1: Set to 1</p> <p>Others: B connector</p>							
	<p>Description:</p> <p>This parameter sets whether the user-defined state 0 set by bit 15 of system status word 1 is valid.</p> <p>Value description:</p> <p>0: Invalid</p> <p>The user-defined state 0 set by bit 15 of system status word 1 is set to 0.</p> <p>1: Set 1</p> <p>The user-defined state 0 set by bit 15 of system status word 1 is set to 1.</p> <p>Others: B connector</p> <p>The user-defined state 0 set by bit 15 of system status word 1 is determined by the selected connector.</p> <p>Additional information:</p> <p>System status word 1 is set by L5-00.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-60	Bit 15 setting of system status word 2	0x603C	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Expansion	Nothing
	<p>Value:</p> <p>0: Invalid</p> <p>1: Set to 1</p> <p>Others: B connector</p>							
	<p>Description:</p> <p>This parameter sets whether the user-defined state 1 set by bit 15 of system status word 2 is valid.</p>							



	<p>This parameter is used to select the monitoring signal, including output current, torque, or power signal, or is used to select the monitoring signal from the connector.</p> <p>Value description:  0: Disable monitoring  1: Monitor the output current  2: Monitor the output torque  3: Monitor the output power  Others: F connector</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Load monitoring signal status	0x6043	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
P0-67	<p>Description:  This parameter displays the monitoring signal state.</p> <p>Value description:  0: The monitoring signal is within the set normal area.  1: The monitoring signal is below the set normal area (load loss).  4: The monitoring signal is above the set normal area (overload).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Load monitoring overload action	0x6044	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
P0-68	<p>Value:  0: No alarm/fault  1: Alarm  2: Fault  3: Alarm/Fault</p> <p>Description:  This parameter sets the action of the drive when overload is monitored.</p> <p>Value description:  0: No alarm/fault  No alarm/fault is reported.  1: Alarm  Overload alarm E046.2 is reported when the monitoring signal is higher than the set overload curve for a period longer than the time set by P0-85 (Allowed overload time).  2: Fault  Overload fault E046.1 is reported when the monitoring signal is higher than the set overload curve for a period longer than the time set by P0-85 (Allowed overload time).  3: Alarm/Fault</p>							



	Overload alarm E046.2 is reported when the monitoring signal is higher than the set overload curve for a period longer than half of the time set by P0-85 (Allowed overload time). Overload fault E046.1 is reported when the monitoring signal is higher than or equal to the set overload curve for a period longer than the time set by P0-85 (Allowed overload time).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-69	Action for load loss in monitored state	0x6045	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: No alarm/fault 1: Alarm 2: Fault 3: Alarm/Fault							
	Description: This parameter sets the action of the drive when load loss is monitored.  Value description: 0: No alarm/fault No alarm/fault is reported. 1: Alarm Load loss alarm E046.4 is reported when the monitoring signal is lower than the set load loss curve for a period longer than the time set by P0-86 (Allowed load loss time). 2: Fault Load loss fault E046.3 is reported when the monitoring signal is lower than the set load loss curve for a period longer than the time set by P0-86 (Allowed load loss time). 3: Alarm/Fault Load loss alarm E046.4 is reported when the monitoring signal is lower than the set load loss curve for a period longer than half of the time set by P0-86 (Allowed load loss time). Overload fault E046.3 is reported when the monitoring signal is lower than or equal to the set load loss curve for a period longer than the time set by P0-86 (Allowed load loss time).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-70	X-coordinate point 1 in load monitoring state	0x6046	0.0% to 600.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the first speed point on the x-coordinate in load monitoring state. The speed point is valid symmetrically on the negative half of the x-coordinate.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-71	X-coordinate point 2 in load monitoring state	0x6047	0.0% to 600.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the second speed point on the x-coordinate in load monitoring state. The speed point is valid symmetrically on the negative half of the x-coordinate.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-72	X-coordinate point 3 in load monitoring state	0x6048	0.0% to 600.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the third speed point on the x-coordinate in load monitoring state. The speed point is valid symmetrically on the negative half of the x-coordinate.							
P0-73	X-coordinate point 4 in load monitoring state	0x6049	0.0% to 600.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the fourth speed point on the x-coordinate in load monitoring state. The speed point is valid symmetrically on the negative half of the x-coordinate.							
P0-74	X-coordinate point 5 in load monitoring state	0x604A	0.0% to 600.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the fifth speed point on the x-coordinate in load monitoring state. The speed point is valid symmetrically on the negative half of the x-coordinate.							
P0-75	Upper limit 1 on load monitoring curve	0x604B	0.0% to 400.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the first overload point on the load curve.							
P0-76	Upper limit 2 on load monitoring curve	0x604C	0.0% to 400.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the second overload point on the load curve.							
P0-77	Upper limit 3 on load monitoring curve	0x604D	0.0% to 400.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description : This parameter sets the third overload point on the load curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

P0-78	Upper limit 4 on load monitoring curve	0x604E	0.0% to 400.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the fourth overload point on the load curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-79	Upper limit 5 on load monitoring curve	0x604F	0.0% to 400.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the fifth overload point on the load curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-80	Lower limit 1 on load monitoring curve	0x6050	0.0% to 400.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the first load loss point on the load curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-81	Lower limit 2 on load monitoring curve	0x6051	0.0% to 400.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the second load loss point on the load curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-82	Lower limit 3 on load monitoring curve	0x6052	0.0% to 400.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the third load loss point on the load curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-83	Lower limit 4 on load monitoring curve	0x6053	0.0% to 400.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the fourth load loss point on the load curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-84	Lower limit 5 on load monitoring curve	0x6054	0.0% to 400.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the fifth load loss point on the load curve.							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
P0-85	Allowed overload time	0x6055	0.0s to 6553.5s	20.0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter specifies the delay for the response action set by P0-68 after the drive is monitored to be in the overload state.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-86	Allowed load lost time	0x6056	0.0s to 6553.5s	20.0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter specifies the delay for the response action set by P0-69 after the drive is monitored to be in the load loss state.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-87	Base frequency for target frequency adjustment by UP/DOWN key on operating panel or by terminal functioning as UP/DOWN key	0x6057	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Running frequency 1: Frequency reference							
	Description: This parameter sets the base frequency for target frequency adjustment by the UP/DOWN key on the operating panel or by the terminal functioning as the UP/DOWN key.  Value description: 0: Running frequency When adjusted by the UP/DOWN key on the operating panel or by the terminal functioning as the UP/DOWN key, the target frequency increases or decreases based on the running frequency. 1: Frequency reference When adjusted by the UP/DOWN key on the operating panel or by the terminal functioning as the UP/DOWN key, the target frequency increases or decreases based on the frequency reference.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-88	Retention of frequency adjusted by UP/DOWN key on operating panel or by terminal functioning as UP/DOWN key upon stop	0x6058	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value:							

	<p>0: Non-retentive 1: Retentive</p>							
	<p>Description : This parameter sets whether the frequency adjusted by UP/DOWN key on operating panel or by terminal functioning as UP/DOWN key is retained when the AC drive stops.</p> <p>Value description: 0: Non-retentive Parameters b5-01 and b6-01 are used to set the main frequency through the operating panel. Then the main frequency is keys on the operating panel or by the terminal functioning as the UP/DOWN key. If this parameter is set to 0, the adjusted frequency is not retained when the AC drive stops. 1: Retentive Parameters b5-01 and b6-01 are used to set the main frequency through the operating panel. Then the main frequency is keys on the operating panel or by the terminal functioning as the UP/DOWN key. If this parameter is set to 0, the adjusted frequency is retained when the AC drive stops.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P0-89	Retention of frequency adjusted by UP/DOWN key on operating panel or by terminal functioning as UP/DOWN key upon power failure	0x6059	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value: 0: Non-retentive 1: Retentive</p>							
	<p>Description : This parameter sets whether the frequency adjusted by UP/DOWN key on operating panel or by terminal functioning as UP/DOWN key is retained when the AC drive is powered off.</p> <p>Value description: 0: Non-retentive Parameters b5-01 and b6-01 are used to set the main frequency through the operating panel. Then the main frequency is keys on the operating panel or by the terminal functioning as the UP/DOWN key. If this parameter is set to 0, the adjusted frequency is not retained when the AC drive is powered off. 1: Retentive Parameters b5-01 and b6-01 are used to set the main frequency through the operating panel. Then the main frequency is keys on the operating panel or by the terminal functioning as the UP/DOWN key. If this parameter is set to 0, the adjusted frequency is retained when the AC drive is powered off.</p>							

## P1: Simple PLC

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-00	Simple PLC module	0x6100	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Disable 1: Enable							
	Description: This parameter is used to enable or disable the simple PLC module.  Value description: 0: Disable The simple PLC module is disabled. The current STEP, current STEP running time (hours and seconds), and STEP per-unit value of the simple PLC module are cleared. 1: Enable The simple PLC module is enabled, but whether the PLC module calculation and output are normal depends on P1-01.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-01	Simple PLC calculation source	0x6101	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing
	Value: 0: Invalid 1: Valid 3: DI1 4: DI2 5: DI3 6: DI4 7: DI5 (MD600A) Others: B connector							
	Description: This parameter sets the simple PLC calculation source.  Value description: 0: Invalid The simple PLC calculation function is invalid. 1: Valid The simple PLC calculation function is valid. 3: DI1 Whether the simple PLC calculate function is valid depends on the input state of DI1. 4: DI2 Whether the simple PLC calculate function is valid depends on the input state of DI2. 5: DI3							

<p>Whether the simple PLC calculate function is valid depends on the input state of DI3. 6: DI4 Whether the simple PLC calculate function is valid depends on the input state of DI4. 7: DI5 Whether the simple PLC calculate function is valid depends on the input state of DI5. Others: B connector Whether the simple PLC calculation function is valid depends on the state of the selected B connector.</p> <p>Additional information: 1. If the simple PLC calculation function is enabled, the simple PLC module runs according to the operation mode of the simple PLC. The simple PLC module also calculates the current STEP based on the running time and outputs the current STEP, current STEP running time (hours and seconds), and current STEP per-unit value. 2. If the simple PLC calculation function is disabled, the output of the current STEP, current STEP running time (hours and seconds) of the simple PLC is the value when the calculation is stopped. The output of the current STEP per-unit value is the value of stage i when the calculation is stopped.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Simple PLC running mode	0x6102	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
P1-02	<p>Value:</p> <p>0: Keep multi-reference value 0 after running for one cycle 1: Keep final values after running for one cycle 2: Repeat running 3: Output 0 after running for one cycle</p>							
	<p>Description:</p> <p>This parameter sets the simple PLC running mode.</p> <p>Value description: 0: Keep multi-reference value 0 after running for one cycle Multi-reference value 0 is output after the simple PLC module runs for one cycle. 1: Keep final values after running for one cycle The final value is output after the simple PLC module runs for one cycle. 2: Repeat running The simple PLC module starts running again from the first stage after completing a cycle. 3: Output 0 after running for one cycle The PLC STEP per unit value is output as 0 after the simple PLC module runs for one cycle.</p> <p>Additional information: 1. If this parameter is set to 0, 1, or 3, the flag is set to 1 after a single-running cycle is completed; a high-level signal of 10 ms is output after the simple PLC module stops; a high-level signal of 250 ms is output when the simple PLC module runs</p>							

	<p>for one cycle.</p> <p>2. If this parameter is set to 2, a high-level signal of 250 ms is output after the simple PLC module completes running for one cycle.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
P1-03	Simple PLC function selection	0x6103	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing	
	Value:								
		<b>Bit</b>	<b>Name</b>	<b>Value</b>					
		Ones	Retention upon power failure	0: Non-retentive 1: Retentive					
		Tens	Calculation configuration	0: Keep the current stage when calculation is invalid and perform recalculation when calculation is valid 1: Keep the current stage when calculation is invalid and continue to run when calculation is valid					
		Hundreds	Reserved						
		Thousands	Reserved						
	Ten thousands	Reserved							
Description:									
This parameter sets the simple PLC function.									
Value description:									
Ones: Retention upon power failure									
0: Non-retentive									
The current STEP and current STEP running time of the simple PLC is not retentive upon a power failure.									
1: Retentive									
The current STEP and current STEP running time of the simple PLC is retentive upon a power failure.									
Tens: Calculation configuration									
0: When calculation (P1-01) is disabled, the current STEP is kept. When calculation (P1-01) is enabled, the drive runs from STEP 0 and the running time is recalculated.									
1: When calculation (P1-01) is disabled, the current STEP is kept. When calculation (P1-01) is enabled, the drive runs from the current STEP and the current running time continues.									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
P1-04	Simple PLC state reset	0x6104	Refer to "Value"	0	Unsigned 16 bit	Shutdown change	Standard	Nothing	
	Value:								



<p>0: Invalid</p> <p>1: Valid</p> <p>3: DI1</p> <p>4: DI2</p> <p>5: DI3</p> <p>6: DI4</p> <p>7: DI5 (MD600A)</p> <p>Others: B connector</p>
<p>Description :</p> <p>This parameter sets the source for resetting the simple PLC state.</p> <p>Value description:</p> <p>0: Invalid</p> <p>When the simple PLC state reset is invalid, the simple PLC operates according to the setting.</p> <p>1: Valid</p> <p>The simple PLC module is restored to the initial state. The simple PLC running phase is 0, and the simple PLC output is the setpoint of the multi-reference 0 of P1-09.</p> <p>3: DI1</p> <p>Whether the simple PLC state reset function is valid depends on the input state of DI1.</p> <p>4: DI2</p> <p>Whether the simple PLC state reset function is valid depends on the input state of DI2.</p> <p>5: DI3</p> <p>Whether the simple PLC state reset function is valid depends on the input state of DI3.</p> <p>6: DI4</p> <p>Whether the simple PLC state reset function is valid depends on the input state of DI4.</p> <p>7: DI5</p> <p>Whether the simple PLC state reset function is valid depends on the input state of DI5.</p> <p>Others: B connector B</p> <p>Whether the simple PLC state reset function is valid depends on the state of the selected B connector.</p> <p>Additional information:</p> <p>After the DI terminal is assigned with function 23 (Simple PLC status reset), the value of P1-04 is automatically switched to the corresponding DI terminal connector parameter (the commissioning software displays L4-48 to L4-52 and the operating panel displays 1448 to 1452).</p>

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-05	Current STEP of simple PLC	0x6105	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Description :</p> <p>This parameter displays the current STEP of the simple PLC.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-06	Current STEP running time	0x6106	0 to	0	Unsigned	Cannot be	Standard	Nothing

	(hour) of simple PLC		65535		16 bit	changed		
	Description: This parameter displays the current STEP running time in hours of the simple PLC.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-07	Current STEP running time (seconds) of simple PLC	0x6107	0.0 to 3599.9	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter displays the current STEP running time in seconds of the simple PLC.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Time unit of simple PLC operation	0x6108	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: s (second) 1: h (hour)							
P1-08	Description: This parameter sets the time unit of the simple PLC operation.  Value description: 0: s (second) The unit of simple PLC running time is second (s). 1: h (hour) The unit of simple PLC running time is hour (h).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Running time of multi-reference 0 set by simple PLC	0x6109	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
P1-09	Description: This parameter sets the running time of multi-reference 0 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.  Additional information: It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the							

	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-10	Acceleration/Deceleration time of multi-reference 0 set by simple PLC	0x610A	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Ramp 1 acceleration/deceleration time (b7-04/b7-05) 1: Ramp 2 acceleration/deceleration time (b7-10/b7-11) 2: Ramp 3 acceleration/deceleration time (b7-16/b7-17) 3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)							
	Description: This parameter sets the acceleration/deceleration time of multi-reference 0 set by simple PLC.  Value description: 0: Ramp 1 acceleration/deceleration time (b7-04/b7-05) Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 0 set by simple PLC. 1: Ramp 2 acceleration/deceleration time (b7-10/b7-11) Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 0 set by simple PLC. 2: Ramp 3 acceleration/deceleration time (b7-16/b7-17) Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 0 set by simple PLC. 3: Ramp 4 acceleration/deceleration time (b7-22/b7-23) Select the acceleration/deceleration time of ramp 4 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 0 set by simple PLC.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-11	Running time of multi-reference 1 set by simple PLC	0x610B	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the running time of multi-reference 1 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.  Additional information: It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the							

	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-12	Acceleration/Deceleration time of multi-reference 1 set by simple PLC	0x610C	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)</p>							
	<p>Description:</p> <p>This parameter sets the acceleration/deceleration time of multi-reference 1 set by simple PLC.</p> <p>Value description:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 1 set by simple PLC.  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 1 set by simple PLC.  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 1 set by simple PLC.  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)  Select the acceleration/deceleration time of ramp 4 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 1 set by simple PLC.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-13	Running time of multi-reference 2 set by simple PLC	0x610D	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the running time of multi-reference 2 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.</p> <p>Additional information:</p> <p>It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the</p>							

	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-14	Acceleration/Deceleration time of multi-reference 2 set by simple PLC	0x610E	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)</p>							
	<p>Description:</p> <p>This parameter sets the acceleration/deceleration time of multi-reference 2 set by simple PLC.</p> <p>Value description:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 2 set by simple PLC.  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 2 set by simple PLC.  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 2 set by simple PLC.  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)  Select the acceleration/deceleration time of ramp 4 (b7-22/b7-23) as the acceleration/deceleration time of multi-reference 2 set by simple PLC.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-15	Running time of multi-reference 3 set by simple PLC	0x610F	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the running time of multi-reference 3 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.</p> <p>Additional information:</p> <p>It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the</p>							

	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-16	Acceleration/Deceleration time of multi-reference 3 set by simple PLC	0x6110	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Ramp 1 acceleration/deceleration time (b7-04/b7-05) 1: Ramp 2 acceleration/deceleration time (b7-10/b7-11) 2: Ramp 3 acceleration/deceleration time (b7-16/b7-17) 3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)							
	Description: This parameter sets the acceleration/deceleration time of multi-reference 3 set by simple PLC.  Value description: 0: Ramp 1 acceleration/deceleration time (b7-04/b7-05) Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 3 set by simple PLC. 1: Ramp 2 acceleration/deceleration time (b7-10/b7-11) Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 3 set by simple PLC. 2: Ramp 3 acceleration/deceleration time (b7-16/b7-17) Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 3 set by simple PLC. 3: Ramp 4 acceleration/deceleration time (b7-22/b7-23) Select the acceleration/deceleration time of ramp 4 (b7-22/b7-23) as the acceleration/deceleration time of multi-reference 3 set by simple PLC.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-17	Running time of multi-reference 4 set by simple PLC	0x6111	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the running time of multi-reference 4 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.  Additional information: It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the							

	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-18	Acceleration/Deceleration time of multi-reference 4 set by simple PLC	0x6112	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Ramp 1 acceleration/deceleration time (b7-04/b7-05) 1: Ramp 2 acceleration/deceleration time (b7-10/b7-11) 2: Ramp 3 acceleration/deceleration time (b7-16/b7-17) 3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)							
	Description: This parameter sets the acceleration/deceleration time of multi-reference 4 set by simple PLC.  Value description: 0: Ramp 1 acceleration/deceleration time (b7-04/b7-05) Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 4 set by simple PLC. 1: Ramp 2 acceleration/deceleration time (b7-10/b7-11) Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 4 set by simple PLC. 2: Ramp 3 acceleration/deceleration time (b7-16/b7-17) Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 4 set by simple PLC. 3: Ramp 4 acceleration/deceleration time (b7-22/b7-23) Select the acceleration/deceleration time of ramp 4 (b7-22/b7-23) as the acceleration/deceleration time of multi-reference 4 set by simple PLC.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-19	Running time of multi-reference 5 set by simple PLC	0x6113	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the running time of multi-reference 5 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.  Additional information: It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the							

	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-20	Acceleration/Deceleration time of multi-reference 5 set by simple PLC	0x6114	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)</p>							
	<p>Description:</p> <p>This parameter sets the acceleration/deceleration time of multi-reference 5 set by simple PLC.</p> <p>Value description:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 5 set by simple PLC.  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 5 set by simple PLC.  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 5 set by simple PLC.  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)  Select the acceleration/deceleration time of ramp 4 (b7-22/b7-23) as the acceleration/deceleration time of multi-reference 5 set by simple PLC.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-21	Running time of multi-reference 6 set by simple PLC	0x6115	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the running time of multi-reference 6 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.</p> <p>Additional information:</p> <p>It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the</p>							



	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-22	Acceleration/Deceleration time of multi-reference 6 set by simple PLC	0x6116	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)</p>							
	<p>Description:</p> <p>This parameter sets the acceleration/deceleration time of multi-reference 6 set by simple PLC.</p> <p>Value description:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 6 set by simple PLC.  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 6 set by simple PLC.  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 6 set by simple PLC.  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)  Select the acceleration/deceleration time of ramp 4 (b7-22/b7-23) as the acceleration/deceleration time of multi-reference 6 set by simple PLC.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-23	Running time of multi-reference 7 set by simple PLC	0x6117	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the running time of multi-reference 7 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.</p> <p>Additional information:</p> <p>It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the</p>							

	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-24	Acceleration/Deceleration time of multi-reference 7 set by simple PLC	0x6118	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)</p>							
	<p>Description:</p> <p>This parameter sets the acceleration/deceleration time of multi-reference 7 set by simple PLC.</p> <p>Value description:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 7 set by simple PLC.  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 7 set by simple PLC.  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 7 set by simple PLC.  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)  Select the acceleration/deceleration time of ramp 4 (b7-22/b7-23) as the acceleration/deceleration time of multi-reference 7 set by simple PLC.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-25	Running time of multi-reference 8 set by simple PLC	0x6119	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the running time of multi-reference 8 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.</p> <p>Additional information:</p> <p>It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the</p>							

	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-26	Acceleration/Deceleration time of multi-reference 8 set by simple PLC	0x611A	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Ramp 1 acceleration/deceleration time (b7-04/b7-05) 1: Ramp 2 acceleration/deceleration time (b7-10/b7-11) 2: Ramp 3 acceleration/deceleration time (b7-16/b7-17) 3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)							
	Description: This parameter sets the acceleration/deceleration time of multi-reference 8 set by simple PLC.  Value description: 0: Ramp 1 acceleration/deceleration time (b7-04/b7-05) Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 8 set by simple PLC. 1: Ramp 2 acceleration/deceleration time (b7-10/b7-11) Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 8 set by simple PLC. 2: Ramp 3 acceleration/deceleration time (b7-16/b7-17) Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 8 set by simple PLC. 3: Ramp 4 acceleration/deceleration time (b7-22/b7-23) Select the acceleration/deceleration time of ramp 4 (b7-22/b7-23) as the acceleration/deceleration time of multi-reference 8 set by simple PLC.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-27	Running time of multi-reference 9 set by simple PLC	0x611B	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the running time of multi-reference 9 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.  Additional information: It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the							

	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-28	Acceleration/Deceleration time of multi-reference 9 set by simple PLC	0x611C	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Ramp 1 acceleration/deceleration time (b7-04/b7-05) 1: Ramp 2 acceleration/deceleration time (b7-10/b7-11) 2: Ramp 3 acceleration/deceleration time (b7-16/b7-17) 3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)							
	Description: This parameter sets the acceleration/deceleration time of multi-reference 9 set by simple PLC.  Value description: 0: Ramp 1 acceleration/deceleration time (b7-04/b7-05) Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 9 set by simple PLC. 1: Ramp 2 acceleration/deceleration time (b7-10/b7-11) Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 9 set by simple PLC. 2: Ramp 3 acceleration/deceleration time (b7-16/b7-17) Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 9 set by simple PLC. 3: Ramp 4 acceleration/deceleration time (b7-22/b7-23) Select the acceleration/deceleration time of ramp 4 (b7-22/b7-23) as the acceleration/deceleration time of multi-reference 9 set by simple PLC.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-29	Running time of multi-reference 10 set by simple PLC	0x611D	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the running time of multi-reference 10 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.  Additional information: It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the							

	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-30	Acceleration/Deceleration time of multi-reference 10 set by simple PLC	0x611E	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)</p>							
	<p>Description:</p> <p>This parameter sets the acceleration/deceleration time of multi-reference 10 set by simple PLC.</p> <p>Value description:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 10 set by simple PLC.  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 10 set by simple PLC.  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 10 set by simple PLC.  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)  Select the acceleration/deceleration time of ramp 4 (b7-22/b7-23) as the acceleration/deceleration time of multi-reference 10 set by simple PLC.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-31	Running time of multi-reference 11 set by simple PLC	0x611F	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the running time of multi-reference 11 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.</p> <p>Additional information:</p> <p>It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the</p>							

	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-32	Acceleration/Deceleration time of multi-reference 11 set by simple PLC	0x6120	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)</p>							
	<p>Description:</p> <p>This parameter sets the acceleration/deceleration time of multi-reference 11 set by simple PLC.</p> <p>Value description:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 11 set by simple PLC.  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 11 set by simple PLC.  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 11 set by simple PLC.  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)  Select the acceleration/deceleration time of ramp 4 (b7-22/b7-23) as the acceleration/deceleration time of multi-reference 11 set by simple PLC.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-33	Running time of multi-reference 12 set by simple PLC	0x6121	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the running time of multi-reference 12 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.</p> <p>Additional information:</p> <p>It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the</p>							

	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-34	Acceleration/Deceleration time of multi-reference 12 set by simple PLC	0x6122	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)</p>							
	<p>Description:</p> <p>This parameter sets the acceleration/deceleration time of multi-reference 12 set by simple PLC.</p> <p>Value description:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 12 set by simple PLC.  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 12 set by simple PLC.  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 12 set by simple PLC.  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)  Select the acceleration/deceleration time of ramp 4 (b7-22/b7-23) as the acceleration/deceleration time of multi-reference 12 set by simple PLC.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-35	Running time of multi-reference 13 set by simple PLC	0x6123	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the running time of multi-reference 13 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.</p> <p>Additional information:</p> <p>It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the</p>							

	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-36	Acceleration/Deceleration time of multi-reference 13 set by simple PLC	0x6124	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)</p>							
	<p>Description:</p> <p>This parameter sets the acceleration/deceleration time of multi-reference 13 set by simple PLC.</p> <p>Value description:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 13 set by simple PLC.  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 13 set by simple PLC.  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 13 set by simple PLC.  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)  Select the acceleration/deceleration time of ramp 4 (b7-22/b7-23) as the acceleration/deceleration time of multi-reference 13 set by simple PLC.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-37	Running time of multi-reference 14 set by simple PLC	0x6125	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the running time of multi-reference 14 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.</p> <p>Additional information:</p> <p>It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the</p>							



	acceleration/deceleration time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-38	Acceleration/Deceleration time of multi-reference 14 set by simple PLC	0x6126	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)</p>							
	<p>Description:</p> <p>This parameter sets the acceleration/deceleration time of multi-reference 14 set by simple PLC.</p> <p>Value description:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)  Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 14 set by simple PLC.  1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)  Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 14 set by simple PLC.  2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)  Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 14 set by simple PLC.  3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)  Select the acceleration/deceleration time of ramp 4 (b7-22/b7-23) as the acceleration/deceleration time of multi-reference 14 set by simple PLC.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P1-39	Running time of multi-reference 15 set by simple PLC	0x6127	0.0s (h) to 6553.5s (h)	0.0s(h)	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description:</p> <p>This parameter sets the running time of multi-reference 15 set by simple PLC. The running time is the sum of acceleration/deceleration time and operating time at constant speed and target frequency.</p> <p>Additional information:</p> <p>It is recommended that the running time of multi-reference i set by simple PLC should be set higher than the</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	acceleration/deceleration time.							
P1-40	Acceleration/Deceleration time of multi-reference 15 set by simple PLC	0x6128	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
<p>Value:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)</p> <p>1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)</p> <p>2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)</p> <p>3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)</p>								
<p>Description:</p> <p>This parameter sets the acceleration/deceleration time of multi-reference 15 set by simple PLC.</p> <p>Value description:</p> <p>0: Ramp 1 acceleration/deceleration time (b7-04/b7-05)</p> <p>Select the acceleration/deceleration time of ramp 1 (b7-04/b7-05) as the acceleration/deceleration time of multi-reference 15 set by simple PLC.</p> <p>1: Ramp 2 acceleration/deceleration time (b7-10/b7-11)</p> <p>Select the acceleration/deceleration time of ramp 2 (b7-10/b7-11) as the acceleration/deceleration time of multi-reference 15 set by simple PLC.</p> <p>2: Ramp 3 acceleration/deceleration time (b7-16/b7-17)</p> <p>Select the acceleration/deceleration time of ramp 3 (b7-16/b7-17) as the acceleration/deceleration time of multi-reference 15 set by simple PLC.</p> <p>3: Ramp 4 acceleration/deceleration time (b7-22/b7-23)</p> <p>Select the acceleration/deceleration time of ramp 4 (b7-22/b7-23) as the acceleration/deceleration time of multi-reference 15 set by simple PLC.</p>								

## P2: Process PID Parameters

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-00	Process PID	0x6200	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
<p>Value:</p> <p>0: Disable</p> <p>1: Enable</p>								

	Others: B connector														
	<p>Description:</p> <p>This parameter sets whether to enable the process PID.</p> <p>0: Disable The process PID is not used for calculation and the output is cleared.</p> <p>1: Enable The process PID is used for calculation according to the set parameter.</p> <p>Others: B connector Whether the process PID is used for calculation is determined by a bit-connector parameter.</p>														
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode							
P2-01	PID action direction	0x6201	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing							
	<p>Value:</p> <p>0: Forward 1: Reverse Others: B connector</p>														
	<p>Description:</p> <p>This parameter sets the PID action direction.</p> <p>0: Forward When the feedback value is less than the PID reference, the output frequency of the AC drive increases.</p> <p>1: Reverse When the feedback value is less than the PID reference, the output frequency of the AC drive decreases.</p> <p>Others: B connector Select the parameter in the bit connector to control PID direction. (The value 0 represents forward action and 1 represents reverse action.)</p>														
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode							
P2-02	PID reference source	0x6202	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing							
	<p>Value:</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">0: PID digital reference</td> <td>5: Multi-reference</td> </tr> <tr> <td>1: AI1</td> <td>6: Simple PLC</td> </tr> <tr> <td>3: MD-BP-M potentiometer</td> <td>8: Communication</td> </tr> <tr> <td>4: HDI pulse reference</td> <td>Others: F connector</td> </tr> </table>								0: PID digital reference	5: Multi-reference	1: AI1	6: Simple PLC	3: MD-BP-M potentiometer	8: Communication	4: HDI pulse reference
0: PID digital reference	5: Multi-reference														
1: AI1	6: Simple PLC														
3: MD-BP-M potentiometer	8: Communication														
4: HDI pulse reference	Others: F connector														

**Description :**  
This parameter specifies the PID reference source.

**Value description:**  
0: PID digital reference  
The PID target reference is the value of P2-03 (PID digital reference).  
1: AI1  
The PID target reference is the AI curve per unit value corresponding to AI1 input voltage.  
3: MD-BP-M potentiometer  
The PID target reference is set by the MD-BP-M potentiometer.  
4: HDI pulse reference  
The PID target reference is the HDI curve per unit value corresponding to the DI4 pulse frequency input.  
5: Multi-reference  
The PID target reference is the per unit value after multi-reference calculation.  
6: Simple PLC  
The PID target reference is the per unit value after simple PLC calculation.  
8: Communication  
The PID target reference is set by remote communication (1000H).  
Others: F connector  
The PID target reference is set by the parameter of the float connector.

**Additional information:**  
When P2-02 is set to 5 (multi-reference), b8-08 (source of multi-reference 0) cannot be set to 5 (PID reference).

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-03	PID digital reference	0x6203	0.0% to 800.0%	50.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<b>Description :</b> When P2-02 (PID reference source) is set to 0, this parameter shall be set.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-04	PID feedback source	0x6204	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<b>Value:</b> 0: AI1 3: MD-BP-M potentiometer 4: HDI pulse reference 5: Multi-reference Others: F connector							
	<b>Description :</b> This parameter sets the PID feedback source.							

	<p>Value description:</p> <p>0: AI1 The PID feedback reference is the AI curve per unit value corresponding to the AI1 input voltage.</p> <p>3: MD-BP-M potentiometer The PID feedback reference is set by the MD-BP-M potentiometer.</p> <p>4: HDI pulse reference The PID feedback reference is the HDI curve per unit value corresponding to the pulse frequency input.</p> <p>5: Communication The PID feedback reference is set by remote communication (1000H).</p> <p>Others: F connector The PID feedback reference is set by the parameter of the float connector.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-05	PID reference and feedback range	0x6205	0 to 65535	1000	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the PID reference and feedback ranges.</p> <p>Additional information:</p> <p>This parameter is dimensionless and only used for display of the PID reference and feedback. For example, if the parameter is set to 1000, the PID reference (0% to 100%) and feedback (0% to 100%) correspond to 0 to 1000 of U0-15 and U0-16 linearly.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-06	PID reference change time	0x6206	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter defines the time required for the PID reference to change from 0.0% to 100.0%.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-07	PID feedback filter time	0x6207	0.00s to 60.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the PID feedback filter time.</p> <p>Additional information:</p> <p>The filter helps to reduce interference on the feedback but decreases the responsive speed of the process closed-loop</p>							

	system.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-08	PID output filter time	0x6208	0.00s to 60.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description: This parameter defines the filter time of PID output.</p> <p>Additional information: The filter enhances smooth output but decreases the responsive speed of the process closed-loop system.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-09	PID reverse cut-off frequency	0x6209	0.00 Hz to A2-17	2.00Hz	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description: This parameter sets the PID reverse cut-off frequency.</p> <p>Additional information: 1. When the frequency source is set by PID, the PID cut-off frequency in the reverse direction is the minimum PID output value. 2. When the frequency source is main frequency + PID, P2-09 is set by the main frequency and PID and set to the minimum frequency value after "main frequency + PID" operation. 3. This parameter is invalid when set to 0. 4. To use this function, the minimum PID output source must be set to Ld-98.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-11	PID parameter switchover condition	0x620B	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value: 0: No switchover and default to PID parameter 1 1: Switchover by DI 2: Automatic switchover based on deviation 3: Automatic switchover based on running frequency</p>							
	<p>Description: This parameter sets the switchover mode of the two groups of PID parameters.</p> <p>Value description:</p>							

<p>0: No switchover and default to PID parameter 1 No switchover is performed.</p> <p>1: Switchover by DI To enable switchover through the DI, assign the DI with function 43 (PID parameter switchover). If the DI is invalid, group 1 (P2-14 to P2-16) is selected. If the DI is valid, group 2 (P2-17 to P2-19) is selected.</p> <p>2: Automatic switchover based on deviation If the absolute value of the deviation between the setting and the feedback is less than P2-12 (PID parameter switchover deviation 1), parameter group 1 is selected. If the absolute value of the deviation between the setting and the feedback is greater than P2-13 (PID parameter switchover deviation 2), parameter group 2 is selected. If the absolute value of the deviation between the setting and feedback is between P2-12 (PID parameter switchover deviation 1) and P2-13 (PID parameter switchover deviation 2), the PID parameters are linear interpolation values of the two sets of PID parameters.</p> <p>3: Automatic switchover based on running frequency Linear interpolation between 0 Hz and the maximum motor frequency is performed based on the running frequency of the AC drive (0 Hz corresponds to the first group of PID parameters and the maximum frequency corresponds to the second group of PID parameters).</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-12	PID parameter switchover deviation 1	0x620C	0.0% to P2-13	20.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description: This parameter defines the minimum deviation when PID parameters are automatically switched based on the deviation.</p> <p>Additional information: This parameter is valid when P2-11 is set to 2.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-13	PID parameter switchover deviation 2	0x620D	P2-12 to 800.0%	80.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description: This parameter defines the maximum deviation when PID parameters are automatically switched based on the deviation.</p> <p>Additional information: They are valid when P2-11 is set to 2.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-14	PID parameter 1	0x620E	0.0 to	20.0	Unsigned	Real time	Standard	Nothing

	proportional gain Kp1		1000.0		16 bit	changes		
<p>Description:</p> <p>This parameter defines the proportional gain Kp of the first group of parameters in PID control.</p> <p>Additional information:</p> <p>The deviation reduction speed depends on the proportional coefficient Kp. A larger Kp value indicates faster deviation reduction but higher possibility of oscillation. A smaller Kp value indicates lower possibility of oscillation but slower deviation reduction.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	PID parameter 1 integral time Ti1	0x620F	0.01s to 10.00s	2.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
P2-15	<p>Description:</p> <p>This parameter defines the integral time Ti of the first group of parameters in PID control.</p> <p>Additional information:</p> <p>This parameter determines the integral adjustment intensity of the PID controller. Shorter integral time indicates greater adjustment intensity.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	PID parameter 1 differential time Td1	0x6210	0.000s to 10.000s	0.000s	Unsigned 16 bit	Real time changes	Standard	Nothing
P2-16	<p>Description:</p> <p>This parameter defines the differential time Td of the first group of parameters in PID control.</p> <p>Additional information:</p> <p>This parameter determines the differential adjustment intensity of the PID controller. Longer differential time indicates greater adjustment intensity.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	PID parameter 2 proportional gain Kp2	0x6211	0.0 to 1000.0	20.0	Unsigned 16 bit	Real time changes	Standard	Nothing
P2-17	<p>Description:</p> <p>This parameter defines the proportional gain Kp of the second group of parameters in PID control.</p> <p>Additional information:</p> <p>See P2-14.</p>							



Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-18	PID parameter 2 integral time Ti2	0x6212	0.01s to 10.00s	2.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter defines the integral time Ti of the second group of parameters in PID control.  Additional information: See P2-15.							
P2-19	PID parameter 2 derivative time Td2	0x6213	0.000s to 10.000s	0.000s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter defines the differential time Td of the second group of parameters in PID control.  Additional information: See P2-16.							
P2-20	PID initial value	0x6214	0.0% to 800.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter defines the initial output value when PID calculation starts.  Additional information: The PID starts the closed-loop regulation operation only after the PID has output the PID initial value for a period longer than the PID initial value holding time.							
P2-21	Active time of PID initial value	0x6215	0.00s to 650.00s	0.00s	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter sets the active time of the PID initial value.  Additional information:							

	See P2-20.																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
P2-22	PID deviation dead zone	0x6216	0.0% to 800.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Description : This parameter defines the minimum deviation of PID adjustment, that is, the deviation dead zone.</p> <p>Additional information: When the deviation is within the PID deviation limit, no adjustment is required. This parameter helps balance the accuracy and stability of the system output.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
P2-23	PID differential limit	0x6217	0.00% to 600.00%	0.10%	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Description : This parameter defines the maximum value of the PID differential output.</p> <p>Additional information: For the PID controller, the differential may easily cause system oscillation. Therefore, the PID differential is restricted to a small range.</p>																
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode									
P2-26	Maximum output source	0x621A	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing									
	<p>Value :</p> <table border="0"> <tr> <td>0: 100%</td> <td>6: Multi-reference</td> <td>9: Communication</td> </tr> <tr> <td>2: AI1</td> <td>7: Simple PLC</td> <td>10: MD-BP-M potentiometer</td> </tr> <tr> <td>5: HDI pulse</td> <td>8: PID</td> <td>Others: F connector</td> </tr> </table>								0: 100%	6: Multi-reference	9: Communication	2: AI1	7: Simple PLC	10: MD-BP-M potentiometer	5: HDI pulse	8: PID	Others: F connector
	0: 100%	6: Multi-reference	9: Communication														
2: AI1	7: Simple PLC	10: MD-BP-M potentiometer															
5: HDI pulse	8: PID	Others: F connector															
<p>Description : This parameter defines the maximum PID output value, which is the percentage per unit value.</p> <p>Value description: 0: 100% The maximum PID output value is 100%. 2: AI1 The maximum PID output value is the AI1 curve per unit value.</p>																	

<p>5: HDI pulse The maximum PID output value is the HDI curve per unit value.</p> <p>6: Multi-reference The maximum PID output value is the per unit value after multi-reference calculation.</p> <p>7: Simple PLC The maximum PID output value is the per unit value after simple PLC calculation.</p> <p>8: PID The maximum PID output value is the PID output per unit value.</p> <p>9: Communication The maximum PID output value is set by communication (1000H).</p> <p>10: MD-BP-M potentiometer The maximum PID output value is set by the MD-BP-M potentiometer.</p> <p>Others: F connector The maximum PID output value is the value of the selected float connector.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-27	Minimum output source	0x621B	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: -100%    6: Multi-reference    9: Communication</p> <p>2: AI1    7: Simple PLC    10: MD-BP-M potentiometer</p> <p>5: HDI pulse    8: PID    Others: F connector</p>							
	<p>Description:</p> <p>This parameter defines the minimum PID output value, which is the percentage per unit value.</p> <p>Value description:</p> <p>0: -100% The minimum PID output value is -100%.</p> <p>2: AI1 The minimum PID output value is the AI1 curve per unit value.</p> <p>5: HDI pulse The minimum PID output value is the HDI curve per unit value.</p> <p>6: Multi-reference The minimum PID output value is the per unit value after multi-reference calculation.</p> <p>7: Simple PLC The minimum PID output value is the per unit value after simple PLC calculation.</p> <p>8: PID The minimum PID output value is the PID output per unit value.</p> <p>9: Communication The minimum PID output value is set by communication (1000H).</p>							



P2-29	Forced output value assignment	0x621D	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	Value: 0: Invalid 1: Valid Others: B connector							
	Description: This parameter sets whether to the forced output value assignment function is valid.  Value description:  0: Invalid The forced output value assignment function is invalid. 1: Valid The forced output value assignment function is valid. Others: B connector Whether the forced output value assignment function is valid depends on the status of the selected connector B.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-30	Upper limit for PID feedback loss detection	0x621E	0.0% to 800.0%	100.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter defines the upper limit for PID feedback loss detection.  Additional information: 1. This parameter is used to determine whether the PID feedback is lost. 2. When the PID feedback has been greater than the value of P2-30 (Upper limit for PID feedback loss detection) for a period longer than the PID feedback loss detection time, the AC drive reports E031.1. 3. Setting P2-30 to 800.0% disables feedback loss detection.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-31	Lower limit for PID feedback loss detection	0x621F	0.0% to 800.0%	0.0%	Unsigned 16 bit	Real time changes	Standard	Nothing
	Description: This parameter defines the lower limit for PID feedback loss detection.							

	<p>Additional information:</p> <ol style="list-style-type: none"> <li>1. This parameter is used to determine whether the PID feedback is lost.</li> <li>2. When the PID feedback has been less than the value of P2-31 (Lower limit for PID feedback loss detection) for a period longer than the PID feedback loss detection time, the AC drive reports E031.1.</li> <li>3. Setting P2-31 to 0 disables feedback loss detection.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-32	PID feedback loss detection time	0x6220	0.0s to 20.0s	0.0s	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Description :</p> <p>This parameter sets the PID feedback loss detection time.</p> <p>Additional information:</p> <p>See P2-30 to P2-31.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-33	Selection of PID operation at stop	0x6221	Refer to "Value"	0	Unsigned 16 bit	Real time changes	Standard	Nothing
	<p>Value:</p> <p>0: No operation at stop</p> <p>1: Operation at stop</p> <p>Others: B connector</p>							
	<p>Description :</p> <p>This parameter defines whether the PID operation is performed at stop.</p> <p>Value description:</p> <p>0: No operation at stop</p> <p>When the motor is not running, PID operation is not performed and the output is cleared.</p> <p>1: Operation at stop</p> <p>When the motor is not running, PID operation is still performed and the output changes based on the feedback and reference.</p> <p>Others: B connector</p> <p>Whether the PID operation is performed when the motor is not running depends on the status of the selected connector B.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
P2-34	PID integral	0x6222	Refer to	10	Unsigned	Real time	Standard	Nothing

		"Value"		16 bit	changes		
Value:							
	Bit	Name	Value				
	Ones	Integral operation pause/separation	0: Invalid 1: Valid				
	Tens	Whether to stop integral operation when the output reaches a limit	0: Continue integral operation 1: Stop integral operation				
	Hundreds	Reserved					
	Thousands	Reserved					
	Ten thousands	Reserved					
Description:							
This parameter defines the properties of PID integral operation.							
Value description:							
Ones: Integral operation pause/separation							
0: Invalid							
When integral pause is inactive, it remains inactive no matter whether the multi-functional DI is active.							
1: Valid							
When the DI is assigned with the PID pause function (for example, function 22), PID integral operation stops. In this case, only PID proportional and differential operations are valid.							
Tens: Whether to stop integral operation when the output reaches a limit							
0: Continue integral operation							
1: Stop integral operation							
When the PID operation output reaches the maximum or minimum value, PID integral operation continues.							
1: Stop integral operation							
When the PID operation output reaches the maximum or minimum value, PID integral operation stops.							
Additional information:							
If the tens place of P2-34 is set to 1, PID integral operation stops, which may help reduce the PID overshoot.							

## L0: Bit Connector 1

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-32	DI1	0x9020	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
Description:								
This parameter displays the final output level state of DI1.								
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
L0-33	DI2	0x9021	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the final output level state of DI2.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-34	DI3	0x9022	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the final output level state of DI3.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-35	DI4	0x9023	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the final output level state of DI4.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-36	DI5(MD600A)	0x9024	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the final output level state of DI5 (MD600A).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-42	VDI1	0x902A	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the final output level state of VDI1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-43	VDI2	0x902B	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the final output level state of VDI2.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-44	VDI3	0x902C	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the final output level state of VDI3.							



Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-45	VDI4	0x902D	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the final output level state of VDI4.							
L0-46	VDI5	0x902E	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the final output level state of VDI5.							
L0-47	VDI6	0x902F	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the final output level state of VDI6.							
L0-48	DI1 reversal	0x9030	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the state after reversal of the final output of DI1.							
L0-49	DI2 reversal	0x9031	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the state after reversal of the final output of DI2.							
L0-50	DI3 reversal	0x9032	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the state after reversal of the final output of DI3.							
L0-51	DI4 reversal	0x9033	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description :							

	This parameter displays the state after reversal of the final output of DI4.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-52	DI5 reversal (MD600A)	0x9034	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the state after reversal of the final output of DI5 (MD600A).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-58	VDI1 reversal	0x903A	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the state after reversal of the final output of VDI1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-59	VDI2 reversal	0x903B	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the state after reversal of the final output of VDI2.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-60	VDI3 reversal	0x903C	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the state after reversal of the final output of VDI3.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-61	VDI4 reversal	0x903D	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the state after reversal of the final output of VDI4.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-62	VDI5 reversal	0x903E	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the state after reversal of the final output of VDI5.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-63	VDI6 reversal	0x903F	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing

	<p>Description :</p> <p>This parameter displays the state after reversal of the final output of VDI6.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-64	RO1 raw value	0x9040	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter displays the output state before relay RO1 filtering.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-68	DO1 raw value (MD600A)	0x9044	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter displays the final output state of DO1 (MD600A).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-69	DO2 raw value (MD600A)	0x9045	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter displays the final output state of DO2 (MD600A).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-80	RO1	0x9050	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter displays the final output state of relay RO1.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-84	DO1(MD600A)	0x9054	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter displays the final output state of DO1 (MD600A).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-85	DO2(MD600A)	0x9055	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter displays the final output state of DO2 (MD600A).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-90	VDO1	0x905A	0 to	0	Unsigned	Cannot be	Expansion	Nothing

			65535		16 bit	changed		
	Description: This parameter displays the final output state of VDO1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-91	VDO2	0x905B	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter displays the final output state of VDO2.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-92	VDO3	0x905C	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter displays the final output state of VDO3.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-93	VDO4	0x905D	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter displays the final output state of VDO4.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-94	VDO5	0x905E	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter displays the final output state of VDO5.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-95	VDO6	0x905F	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter displays the final output state of VDO6.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-96	AI1 input overlimit	0x9060	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter displays whether the AI1 input voltage exceeds the AI limit range.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

L0-98	Level status when AI1 is used as DI	0x9062	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the level status when AI1 is used as the DI.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L0-99	HDI input disconnection	0x9063	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates whether the HDI input is disconnected. Disconnection occurs when the HDI input pulse frequency is less than half of the HDI input lower limit or the input is disconnected.							

## L1: Bit Connector 2

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-11	AC drive overtemperature threshold (flag)	0x910B	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays whether the AC drive temperature reaches the threshold (P0-33).							
L1-12	Ready to switch on	0x910C	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Not ready to switch on 1: Ready to switch on							
	Description : This parameter displays whether the AC drive is ready to power on.  Value description: 0: Not ready to switch on 1: Ready to switch on  Additional information: When the state machine (L5-06) enters the "Switch-on allowed" state, the drive is ready to power on.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-13	Ready to run	0x910D	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing

	<p>Value:</p> <p>0: Not ready to run 1: Ready to run</p> <p>Description:</p> <p>This parameter displays whether the AC drive is ready to run.</p> <p>Value description:</p> <p>0: Not ready to run 1: Ready to run</p> <p>Additional information:</p> <p>When the state machine (L5-06) enters the "Switch-on allowed" state, the AC drive is ready to run.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Running	0x910E	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-14	<p>Value:</p> <p>0: Not in operation 1: In operation</p> <p>Description:</p> <p>This parameter displays whether the AC drive is running.</p> <p>Value description:</p> <p>0: Not in operation 1: In operation</p> <p>Additional information:</p> <p>When the state machine (L5-06) enters the "Operational" state, the drive is running.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Faulty state	0x910F	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-15	<p>Value:</p> <p>0: No fault 1: Faulty</p> <p>Description:</p> <p>This parameter displays whether the drive is faulty.</p> <p>Value description:</p> <p>0: No fault 1: Faulty</p>							

	Additional information: When a fault occurs, the drive displays the fault code Exxx.x.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-16	OFF2 (coast to stop)	0x9110	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Valid 1: Invalid							
	Description: This parameter displays the OFF2 (coast to stop) current state.  Value description: 0: Valid 1: Invalid  Additional information: OFF2 (coast to stop) is valid when L1-16 is set to 0 and invalid when L1-16 is set to 1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-17	OFF3 (quick stop)	0x9111	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Valid 1: Invalid							
	Description: This parameter displays the OFF3 (quick stop) current state.  Value description: 0: Valid 1: Invalid  Additional information: OFF3 (quick stop) is valid when L1-17 is set to 0 and invalid when L1-17 is set to 1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-18	Switch-on inhibition	0x9112	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Switch-on allowed 1: Switch-on inhibited							

	<p>Description :</p> <p>This parameter displays whether the AC drive is in the switch-on inhibition state.</p> <p>Value description:</p> <p>0: Switch-on allowed</p> <p>1: Switch-on inhibited</p> <p>Additional information:</p> <p>When the state machine enters the "Switch-on inhibited" state, the drive is inhibited from being switched on.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-19	Alarm/Minor fault	0x9113	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value:</p> <p>0: No alarm/minor fault</p> <p>1: Alarms/minor faults occur.</p>							
	<p>Description :</p> <p>This parameter displays whether the drive encounters an alarm or a minor fault.</p> <p>Value description:</p> <p>0: No alarm/minor fault</p> <p>1: Alarms/minor faults occur.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-20	Deviation between actual speed and speed reference	0x9114	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value:</p> <p>0: The deviation between the actual speed and speed reference is large.</p> <p>1: The deviation between the actual speed and speed reference is in the allowed range.</p>							
	<p>Description :</p> <p>This parameter indicates whether the deviation between the actual speed and speed reference is large.</p> <p>Value description:</p> <p>0: The deviation between the actual speed and speed reference is large.</p> <p>1: The deviation between the actual speed and speed reference is in the allowed range.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-21	Local or remote control	0x9115	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value:</p> <p>0: Local</p>							



	1: Remote							
	Description: This parameter is used to select the local or remote control mode.							
	Value description: 0: Local 1: Remote							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Target speed reach	0x9116	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-22	Value: 0: Target speed not reached 1: Target speed reached							
	Description: This parameter displays whether the target speed of the AC drive is reached. When both the running speed and the actual motor speed have been in the range of target speed $\pm$ P0-51 for a period longer than the time set by P0-52, the output becomes active.							
	Value description: 0: Target speed not reached 1: Target speed reached							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Torque limit	0x9117	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-23	Value: 0: Torque limit reached; 1: Torque/Current limit not reached							
	Description: Displays whether the torque reaches the set upper and lower limits. The data is valid when the torque is limited.							
	Value description: 0: Torque/Current limit reached; 1: Torque/Current limit not reached							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Forward speed	0x9118	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-24	Description: This parameter displays the direction of the running speed. This parameter is valid when the running direction is forward.							
	Value description: 0: Invalid							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	1: Valid							
	Reverse speed	0x9119	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-25	Description : This parameter displays the direction of the running speed. This parameter is valid when the running direction is reverse.  Value description: 0: Invalid 1: Valid							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Motor running flag	0x911A	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-26	Value: 0: Stopped 1: Running (pulse output)  Description : This parameter displays the status of the motor.  Value description: 0: Stopped 1: Running (pulse output)  Additional information: The value 0 indicates the stop state, and the value 1 indicates the running state. The running state includes the deceleration phase.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	User-defined status 0	0x911B	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-27	Description : This parameter displays whether the user-defined state 0 is active.  Additional information: When bit 15 of system status word 1 (L5-00) is set to be active, the user-defined state 0 is active.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Self-check	0x911C	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-28	Value:							

	0: Invalid 1: Self-check in progress  Description : This parameter displays whether the AC drive is in the self-check state.  Value description: 0: Invalid 1: Self-check in progress							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-29	Auto-tuning	0x911D	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value : 1: Invalid 1: Auto-tuning in progress							
	Description : This parameter displays whether the AC drive is in the auto-tuning state.  Value description: 0: Invalid 1: Auto-tuning in progress							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-30	Minor fault (running with restriction) activation	0x911E	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value : 0: Invalid 1: Minor fault							
	Description : This parameter displays whether the drive encounters a minor fault.  Value description: 0: Invalid 1: Minor fault  Additional information: When a minor fault occurs, the drive displays the minor fault code Lxxx.x.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-31	Alarm activation	0x911F	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing

	Value: 0: Invalid 1: Valid							
	Description: This parameter displays whether the drive encounters a fault, a minor fault, or an alarm.							
	Additional information: This flag bit is active when any fault, minor fault, or alarm is activated.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Speed mode	0x9120	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-32	Value: 0: Invalid 1: Valid							
	Description: This parameter displays whether the current running mode is speed control. The value 1 indicates the speed control mode.							
L1-32	Value description: 0: Invalid 1: Valid							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Torque mode	0x9121	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-33	Value: 0: Invalid 1: Valid							
	Description: This parameter displays whether the current running mode is torque control. The value 1 indicates the torque control mode.							
L1-33	Value description: 0: Invalid 1: Valid							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-35	RFG module enable	0x9123	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value:							

	0: Disable 1: Enable  Description : This parameter displays whether to enable the RFG module.  Value description: 0: Disable 1: Enable  Additional information: When the state machine enters the "Operational" state or "Decelerate to stop" state, the RFG module is enabled.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-36	RFG module operation	0x9124	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Stopped 1: Running							
	Description : This parameter displays whether the RFG module is in the running state.  Value description: 0: Stopped 1: Running  Additional information: When the state machine enters the "Operational" state, the RFG module is running.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-37	Stop at fault	0x9125	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Invalid 1: Valid							
	Description : This parameter displays whether the fault stop command is active.  0: Invalid 1: Valid							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-38	Normal operation	0x9126	Refer to	0	Unsigned	Cannot be	Expansion	Nothing

			"Value"		16 bit	changed		
	Value: 0: Invalid 1: Normal operation							
	Description: This parameter displays whether the AC drive is in the normal running state.  Value description: 0: Invalid 1: Normal operation							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-39	Jogging	0x9127	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Non-jogging 1: Jogging							
	Description: This parameter displays whether the AC drive is in the jogging state.  Value description: 0: Non-jogging 1: Jogging							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-40	Deceleration to stop	0x9128	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Inactive 1: Decelerate to stop							
	Description: This parameter displays whether the AC drive is in the deceleration-to-stop state.  0: Inactive 1: Decelerate to stop							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-42	Terminal control	0x912A	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Invalid							

	<p>1: Valid</p> <p>Description: This parameter displays whether the command source is terminal control. It is valid when the command source is terminal control.</p> <p>Value description: 0: Invalid 1: Valid</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-43	User-defined state 1	0x912B	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Description: This parameter displays whether the user-defined state 1 is active.</p> <p>Additional information: When bit 15 of system status word 2 (L5-01) is set to be active, the user-defined state 1 is active.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-44	Control channel selection	0x912C	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value: 0: Control channel 1 1: Control channel 2</p> <p>Description: This parameter displays the active control channel.</p> <p>Value description: 0: Control channel 1 1: Control channel 2</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-45	Reference channel	0x912D	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value: 0: Reference channel 1 1: Reference channel 2</p> <p>Description: This parameter displays the active reference channel.</p> <p>Value description: 0: Reference channel 1</p>							

1: Reference channel 2								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-48	Error output (fault or alarm, excluding undervoltage)	0x9130	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: No error is reported. 1: Errors are reported.							
	Description: This parameter sets whether the AC drive reports faults, minor faults, or alarms. Undervoltage is excluded.  Value description: 0: No error is reported. 1: Errors are reported.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-49	EEPROM idle state	0x9131	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates whether the EEPROM is in the idle state. If it is valid, the EEPROM is idle and no parameter needs to be saved.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-50	Communication control	0x9132	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Invalid 1: Valid							
	Description: This parameter indicates whether the command source is communication control. It is valid when the command source is communication control.  Value description: 0: Invalid 1: Valid							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-51	Fault output	0x9133	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value:							



	<p>0: A fault occurs and the relay is invalid during automatic reset.  1: A fault occurs and the relay is valid during automatic reset.</p> <p>Description:  This parameter indicates fault output and whether the relay is valid during automatic fault reset.</p> <p>Value description:  0: A fault occurs and the relay is invalid during automatic reset.  1: A fault occurs and the relay is valid during automatic reset.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-55	Bus voltage state	0x9137	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value:  0: Abnormal bus voltage  1: Normal bus voltage</p>							
	<p>Description:  This parameter indicates the bus voltage state and the "ready for power-on" state.</p> <p>Value description:  0: Abnormal bus voltage  The bus voltage is abnormal, and the drive is not ready for power-on.  1: Normal bus voltage is normal  The bus voltage is normal, and the drive is ready for power-on.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-60	Excessive speed deviation	0x913C	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value:  0: Invalid  1: Excessive motor speed deviation</p>							
	<p>Description:  This parameter indicates whether the motor speed deviation is excessive.</p> <p>Additional information:  When this parameter is set to 1, the drive reports E042.1 (Excessive speed deviation).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-61	Overspeed	0x913D	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value:  0: Invalid</p>							

	1: Motor overspeed							
	<p>Description:</p> <p>This parameter indicates whether the motor encounters overspeed.</p> <p>Additional information:</p> <p>When this parameter is set to 1, the drive reports E043.1 (Motor overspeed).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Target speed reach	0x913E	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-62	<p>Value:</p> <p>0: Not reached 1: Reached</p> <p>Description:</p> <p>This parameter indicates whether the target speed of the AC drive is reached.</p> <p>Value description:</p> <p>0: Not reached 1: Reached</p> <p>Additional information:</p> <p>When both the running speed and the actual motor speed have been in the range of target speed <math>\pm</math> P0-51 for a period longer than the time set by P0-52, the output becomes active.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Speed comparison reach 1	0x913F	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-63	<p>Value:</p> <p>0: Not reached 1: Reached</p> <p>Description:</p> <p>This parameter indicates whether the motor running speed reaches the speed comparison 1 range.</p> <p>Value description:</p> <p>0: Not reached 1: Reached</p> <p>Additional information:</p> <p>When the motor speed (absolute value) during normal operation exceeds the speed (not 0) set by P0-53 for a period longer than the time defined by P0-55, the connector output is valid.</p> <p>The connector output is invalid when any of the following condition is met:</p> <p>1. The speed comparison threshold set by P0-53 is 0.</p>							

	<p>2. The motor running speed is 0.</p> <p>3. The operation direction is opposite to the previous direction.</p> <p>4. <math>P0-53 &gt; P0-54</math> and absolute value of motor running speed <math>&lt;  P0-53-P0-54 </math>.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-64	Speed comparison reach 2	0x9140	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value:</p> <p>0: Not reached</p> <p>1: Reached</p>							
	<p>Description:</p> <p>This parameter indicates whether the motor running speed reaches the speed comparison 2 range.</p>							
	<p>Value description:</p> <p>0: Not reached</p> <p>1: Reached</p> <p>Additional information:</p> <p>When the motor speed (absolute value) during normal operation exceeds the speed (not 0) set by P0-56 for a period longer than the time defined by P0-58, the connector output is valid.</p> <p>The connector output is invalid when any of the following condition is met:</p> <ol style="list-style-type: none"> <li>1. The speed comparison threshold set by P0-56 is 0.</li> <li>2. The motor running speed is 0.</li> <li>3. The operation direction is opposite to the previous direction.</li> <li>4. <math>P0-56 &gt; P0-57</math> and absolute value of motor running speed <math>&lt;  P0-56-P0-57 </math>.</li> </ol>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-65	Forward motor speed	0x9141	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value:</p> <p>0: Reverse</p> <p>1: Forward</p>							
	<p>Description:</p> <p>This parameter indicates whether the motor running direction is forward.</p>							
	<p>Value description:</p> <p>0: Reverse</p> <p>1: Forward</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-66	Reverse motor speed	0x9142	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing

	Value: 0: Forward 1: Reverse							
	Description: This parameter indicates whether the motor running direction is reverse.  Value description: 0: Forward 1: Reverse							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Torque limit	0x9144	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-68	Value: 0: Unlimited 1: Limited							
	Description: In the speed control mode, the torque limit function is valid when the output torque reaches the torque limit.  Value description: 0: Unlimited 1: Limited  Additional information: Connector LC-82 is used to set the maximum torque in the forward direction and LC-83 is used to set the maximum torque in the reverse direction.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Frequency upper limit reach	0x9145	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L1-69	Value: 0: Not reached 1: Reached							
	Description: This parameter indicates whether the running frequency reaches the upper limit.  Additional information: The forward frequency upper limit is determined by C4-10 (Maximum motor frequency), d1-03 (Digital setting of forward frequency upper limit), and d1-05 (Forward frequency upper limit selection), whichever is the minimum. The reverse frequency upper limit is similar as the forward frequency upper limit.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

L1-70	Frequency lower limit reach (invalid at stop)	0x9146	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Not reached 1: Reached							
	Description: This parameter indicates whether the running frequency reaches the lower limit. When P0-11 (Running mode when frequency reference < frequency lower limit) is set to 1 (stop), the terminal outputs an inactive signal no matter whether the operating frequency reaches the lower limit. When P0-11 (running mode when frequency reference lower than lower limit) is set to 0 (run at frequency lower limit) or 2 (run at zero speed) and the operation frequency reaches the frequency lower limit, the terminal outputs an active signal. The frequency lower limit is determined by C4-11 (Minimum motor frequency) and d1-07 (Digital setting of forward frequency lower limit), whichever is larger. The reverse frequency lower limit is similar as the forward frequency lower limit.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-71	Reverse run	0x9147	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Invalid 1: Reverse run							
	Description: This parameter indicates whether the AC drive is running in the reverse direction.  Value description: 0: Invalid 1: Reverse run							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-72	Frequency lower limit reach (valid at stop)	0x9148	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Not reached 1: Reached							
	Description: This parameter indicates whether the running frequency reaches the lower limit. The connector output is valid when the running frequency reaches the lower limit. This function is active even in the stop state.  Value description: 0: Not reached 1: Reached							

	<p>Additional information: The frequency lower limit is determined by C4-11 (Minimum motor frequency) and d1-07 (Digital setting of forward frequency lower limit), whichever is larger. The reverse frequency lower limit is similar as the forward frequency lower limit.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-73	Operation frequency reach	0x9149	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value: 0: Not reached 1: Reached</p>							
	<p>Description: This parameter indicates whether the running frequency reaches the target frequency.</p> <p>Value description: 0: Not reached 1: Reached</p> <p>Additional information: When the operation frequency of the AC drive is in the range of target frequency <math>\pm</math> A2-04 (Per unit frequency) x P0-38 (Detection frequency amplitude), the terminal outputs an active signal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-74	Detection frequency 1 reach	0x914A	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value: 0: Not reached 1: Reached</p>							
	<p>Description: This parameter indicates whether the running frequency reaches detection frequency 1.</p> <p>Value description: 0: Not reached 1: Reached</p> <p>Additional information: When the running frequency of the AC drive is in the range of P0-39 <math>\pm</math> A2-04 x P0-40, the terminal outputs an active signal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L1-75	Detection frequency 2 reach	0x914B	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing

	<p>Value:</p> <p>0: Not reached</p> <p>1: Reached</p>
	<p>Description:</p> <p>This parameter indicates whether the running frequency reaches detection frequency 2.</p> <p>Value description:</p> <p>0: Not reached</p> <p>1: Reached</p> <p>Additional information:</p> <p>When the running frequency of the AC drive is in the range of <math>P0-41 \pm A2-04 \times P0-42</math>, the terminal outputs an active signal.</p>

### L3: Bit Connector 4

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L3-36	Logic AND/OR module A output	0x9324	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value:</p> <p>0: Invalid</p> <p>1: Valid</p>							
	<p>Description:</p> <p>This parameter indicates the output of logic AND/OR module A.</p> <p>Value description:</p> <p>0: Invalid</p> <p>1: Valid</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L3-37	Logic AND/OR module B output	0x9325	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value:</p> <p>0: Invalid</p> <p>1: Valid</p>							
	<p>Description:</p> <p>This parameter indicates the output of logic AND/OR module B.</p> <p>Value description:</p>							

	0: Invalid 1: Valid							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L3-52	Logic NOT module A output	0x9334	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Invalid 1: Valid							
	Description: This parameter indicates the output of logic NOT module A.  Value description: 0: Invalid 1: Valid							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L3-53	Logic NOT module B output	0x9335	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Invalid 1: Valid							
	Description: This parameter indicates the output of logic NOT module B.  Value description: 0: Invalid 1: Valid							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L3-68	Logic XOR/XNOR module A output	0x9344	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Invalid 1: Valid							
	Description: This parameter indicates the output of logic XOR/XNOR module A.  Value description: 0: Invalid 1: Valid							



Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L3-69	Logic XOR/XNOR module B output	0x9345	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Invalid 1: Valid							
	Description: This parameter indicates the output of logic XOR/XNOR module B.  Value description: 0: Invalid 1: Valid							

## L4: Bit Connector 5

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-71	Single stop command set by simple PLC	0x9447	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Inactive 1: Active							
	Description: This parameter indicates whether the single stop command set by simple PLC is valid.  Value description: 0: Inactive 1: Active							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-72	Power-on time reach	0x9448	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Not reached 1: Reached							
	Description: This parameter indicates whether the cumulative power-on time (Ad-02 and Ad-03) reaches the set power-on time (P0-16 and P0-18).							

	Value description: 0: Not reached 1: Reached							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-73	Running time reach	0x9449	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Not reached 1: Reached							
	Description: This parameter indicates whether the cumulative running time (Ad-00 and Ad-01) reaches the set running time (P0-17 and P0-19).  Value description: 0: Not reached 1: Reached							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-74	Timing duration reach	0x944A	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Not reached 1: Reached							
	Description: This parameter indicates whether the timing duration reaches the set time (P0-14 and P0-15).  Value description: 0: Not reached 1: Reached							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-75	Current running duration reach	0x944B	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Not reached 1: Reached							
	Description: This parameter indicates whether the current running time reaches the set time (P0-20).  Value description:							

	0: Not reached 1: Reached							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-77	Simple PLC module operation for one cycle	0x944D	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Not completed 1: Completed							
	Description: This parameter indicates whether the simple PLC module completes operation for one cycle.							
	Value description: 0: Not completed 1: Completed  Additional information: When the operation mode of the simple PLC module is set to "running for one cycle", this bit remains at high-level output after the simple PLC module has run for one cycle. When the simple PLC running mode is changed, the simple PLC is reset, or the simple PLC is disabled, this bit is reset to 0.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-80	Operation at zero speed (invalid at stop)	0x9450	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Invalid 1: Valid							
	Description: This parameter indicates whether the AC drive is operating at zero speed. It is invalid when the drive stops.							
	Value description: 0: Invalid 1: Valid							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-81	Operation at zero speed (valid at stop)	0x9451	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Invalid 1: Valid							
	Description:							

	<p>This parameter indicates whether the AC drive is operating at zero speed. It is valid when the drive stops.</p> <p>Value description: 0: Invalid 1: Valid</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-82	Frequency level detection 1	0x9452	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value: 0: Invalid 1: Valid</p>							
	<p>Description: This parameter indicates whether the running frequency reaches the frequency level detection 1 (FDT1) range.</p> <p>Value description: 0: Invalid 1: Valid</p> <p>Additional information: When the running frequency is higher than P0-34 (Frequency level detection 1 (FDT1)), the terminal outputs an active signal. When the running frequency is lower than the result of frequency level detection 1 (FDT1) minus frequency level detection 1 (FDT1) x P0-35 (hysteresis value), the terminal outputs an inactive signal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-83	Frequency level detection 2	0x9453	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value: 0: Invalid 1: Valid</p>							
	<p>Description: This parameter indicates whether the running frequency reaches the frequency level detection 2 (FDT2) range.</p> <p>Value description: 0: Invalid 1: Valid</p> <p>Additional information: When the running frequency is higher than P0-36 (Frequency level detection 2 (FDT2)), the terminal outputs an active signal. When the running frequency is lower than the result of frequency level detection 2 (FDT2) minus frequency level detection 2 (FDT2) x P0-37 (hysteresis value), the terminal outputs an inactive signal.</p>							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
L4-85	Cycle operation of simple PLC module	0x9455	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Not completed 1: Completed							
	Description: This parameter indicates whether the simple PLC module completes cycle operation.  Value description: 0: Not completed 1: Completed  Additional information: The connector outputs an effective level of 250 ms each time the simple PLC module completes cycle operation.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-86	Communication setting value	0x9456	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates whether the communication setting value is valid.  Value description: 0: Invalid 1: Valid							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-88	Current 1 reach	0x9458	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Not reached 1: Reached							
	Description: This parameter indicates whether the output current reaches the range set by current 1.  Value description: 0: Not reached 1: Reached  Additional information: When the output current of the AC drive is within the range of (P0-43 (Detection current 1) ± P0-44 (Detection current amplitude 1)) x rated motor current, the connector output is valid.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-89	Current 2 reach	0x9459	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Not reached 1: Reached							
	Description: This parameter indicates whether the output current reaches the range set by current 2.  Value description: 0: Not reached 1: Reached  Additional information: When the output current of the AC drive is within the range of (P0-45 (Detection current 2) ± P0-46 (Detection current amplitude 2)) x rated motor current, the connector output is valid.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-90	Zero current state	0x945A	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Invalid 1: Valid							
	Description: This parameter indicates whether the AC drive is in the zero current output state.  Value description: 0: Invalid 1: Valid  Additional information: When the output current of the AC drive remains at or below the zero current detection level (P0-47) for a period greater than the value of P0-48 (zero current detection delay time), the connector outputs an active signal.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-91	Output current overlimit	0x945B	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Invalid 1: Valid							
	Description:							

	<p>This parameter indicates whether the output current exceeds the limit.</p> <p>Value description: 0: Invalid 1: Valid</p> <p>Additional information: When the output current of the AC drive is higher than P0-49 (Output current threshold) for a period longer than P0-50 (Delay time for output current overlimit detection), the connector output is valid.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-92	Motor pre-overload	0x945C	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value: 0: Invalid 1: Motor pre-overload activated</p>							
	<p>Description: This parameter indicates whether the motor pre-overload fault is activated.</p> <p>Value description: 0: Invalid 1: Motor pre-overload activated</p> <p>Additional information: When this parameter is set to 1, the drive reports A111.1 (Motor pre-overload).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-93	Drive pre-overload	0x945D	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value: 0: Invalid 1: Drive pre-overload activated</p>							
	<p>Description: This parameter indicates whether the drive pre-overload fault is activated.</p> <p>Value description: 0: Invalid 1: Drive pre-overload activated</p> <p>Additional information: When this parameter is set to 1, the drive reports A110.1 (Drive pre-overload).</p>							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
L4-94	Bus undervoltage	0x945E	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Invalid 1: Bus undervoltage							
	Description: This parameter indicates whether the bus undervoltage fault is activated.  Value description: 0: Invalid 1: Bus undervoltage  Additional information: When this parameter is set to 1, the drive reports E009.1 (Bus undervoltage).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L4-95	Output three-phase loss	0x945F	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Invalid 1: Output three-phase loss activated							
	Description: This parameter indicates whether the output three-phase loss fault is activated.  Value description: 0: Invalid 1: Output three-phase loss activated  Additional information: When this parameter is set to 1, the drive reports E030.1 (Output three-phase loss).							

## L5: Word Connector 1

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-00	System status word 1	0x9500	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value:							



Bit	Name	Value
Bit 0	Ready to switch on	0: Inactive 1: Active
Bit 1	Ready to run	0: Inactive 1: Active
Bit 2	Running	0: Inactive 1: Active
Bit 3	Faulty	0: Inactive 1: Active
Bit 4	OFF2 (coast to stop)	0: Inactive 1: Active
Bit 5	OFF3 (quick stop)	0: Inactive 1: Active
Bit 6	Switch-on inhibited	0: Inactive 1: Active
Bit 7	Alarm or running with restriction	0: Inactive 1: Active
Bit 8	No speed deviation	0: Inactive 1: Active
Bit 9	Local or remote	0: Local 1: Remote
Bit 10	Target speed reached	0: Inactive 1: Active
Bit 11	Torque limiting	0: Inactive 1: Active
Bit 12	Forward speed	0: Inactive 1: Active
Bit 13	Reverse speed	0: Inactive 1: Active
Bit 14	Running (pulse output)	0: Inactive 1: Active
Bit 15	User-defined state 0	0: Inactive 1: Active

**Description :**

This parameter indicates the value of system status word 1. You can click the current value of the parameter to view the system status indicated by each bit. The value 0 indicate "Inactive" and 1 indicates "Active".

**Value description:**

Bit 0: Ready to switch on

The AC drive passes self-check upon power-on and no fault occurs.

Bit 1: Ready to run  
The AC drive can run normally.

Bit 2: Running  
The AC drive is running.

Bit 3: Faulty  
The AC drive stops due to a fault.

Bit 4: OFF2 (coast to stop)  
OFF2 (coast to stop) command is active, and the motor coasts to stop.

Bit 5: OFF3 (quick stop)  
OFF3 (quick stop) command is active, and the motor performs quick stop.

Bit 6: Switch-on inhibited  
The AC drive is in the switch-on inhibition state.

Bit 7: Alarm or running with restriction  
The AC drive reports Axxx.x (fault) or Lxxx.x (running with restriction).

Bit 8: No speed deviation  
The deviation between the running speed and target speed is within the allowable range.

Bit 9: Local or remote  
The AC drive is in the local or remote control mode.

Bit 10: Target speed reached  
It indicates whether the set target speed is reached.

Bit 11: Torque limiting  
It indicates whether the torque limit is triggered.

Bit 12: Forward speed  
The AC drive is running in the forward direction.

Bit 13: Reverse speed  
The AC drive is running in the reverse direction.

Bit 14: Running (pulse output)  
The AC drive is running and has output.

Bit 15: User-defined state 0  
The AC drive is in user-defined state 0.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-06	Current state machine	0x9506	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Initializing                                      3: Operation allowed                                      6: Stop 1: Switch-on inhibited                                      4: Start                                      7: Self-check 2: Switch-on allowed                                      5: Operating                                      8: Motor parameter auto-tuning							
	Description: This parameter indicates the current state of the system status machine.							

	<p>Value description:</p> <p>0: Initializing</p> <p>1: Switch-on inhibited</p> <p>2: Switch-on allowed</p> <p>3: Operation allowed</p> <p>4: Start</p> <p>5: Operating</p> <p>6: Stop</p> <p>7: Self-check</p> <p>8: Motor parameter auto-tuning</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	System state machine switchover command	0x9507	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L5-07	Value:							
		Bit	Name	Value				
		Bit 0	Startup command active	0: Inactive 1: Active				
		Bit 1	Stop command active	0: Inactive 1: Active				
		Bit 2	OFF2 (coast to stop) active	0: Inactive 1: Active				
		Bit 3	OFF3 (quick stop) active	0: Inactive 1: Active				
		Bit 4	Running permission (non-hibernation state)	0: Inactive 1: Active				
		Bit 5	Running inhibition	0: Inactive 1: Active				
		Bit 6	Stop due to fault	0: Inactive 1: Active				
		Bit 7	Reserved					
		Bit 8	Reserved					
		Bit 9	Reserved					
		Bit 10	Reserved					
		Bit 11	Reserved					
		Bit 12	Reserved					
	Bit 13	Reserved						

	Bit 14	Reserved						
	Bit 15	Reserved						
<p>Description :</p> <p>This parameter indicates the active system state machine switchover command. You can click the current value of the parameter to view the command and status indicated by each bit.</p> <p>Value description:</p> <p>Bit 0: Startup command active The startup command is active.</p> <p>Bit 1: Stop command active The stop command is active.</p> <p>Bit 2: OFF2 (coast to stop) active OFF2 (coast to stop) command valid, and the motor coasts to stop .</p> <p>Bit 3: OFF3 (quick stop) active OFF3 (quick stop) stop command is valid, and the motor performs quick stop.</p> <p>Bit 4: Running permission (non-hibernation state) The AC drive is allowed to run.</p> <p>Bit 5: Running inhibition The AC drive is prohibited from running.</p> <p>Bit 6: Stop due to fault The AC drive stops due to a fault.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Current stop mode	0x9509	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L5-09	<p>Value:</p> <p>0: Coast to stop 1: Stop at maximum capability 2: Quick stop 3: Decelerate to stop</p>							
	<p>Description :</p> <p>This parameter indicates the active stop mode.</p> <p>Value description:</p> <p>0: Coast to stop 1: Stop at max. capacity 2: Quick stop 3: Decelerate to stop</p>							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
L5-10	Decelerate to stop/DC braking	0x950A	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Decelerate to stop 1: Short circuit braking 2: DC braking 3: Idle							
	Description: This parameter indicates the deceleration to stop/DC braking state.  Value description: 0: Decelerate to stop 1: Short circuit braking 2: DC braking 3: Idle							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-15	Commissioning software/App control	0x950F	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Not controlled by commissioning software 1: Controlled by commissioning software							
	Description: This parameter indicates whether the commissioning software or the APP has obtained control permissions of the AC drive.  Value description: 0: Not controlled by commissioning software 1: Controlled by commissioning software							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-17	Bus voltage	0x9511	0.0 V to 6553.5 V	0.0V	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the bus voltage of the AC drive in the unit of V. The value has one decimal place.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
L5-18	AC drive version	0x9512	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing																		
	Value: 0: CAN version   2: Reserved 1: Reserved   3: Reserved 1: Reserved   4: Modbus version																									
	Description: This parameter indicates the AC drive version.  Value description: 0: CAN version 4: Modbus version																									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
L5-20	Module temperature	0x9514	0.0°C to 6553.5°C	0.0°C	Signed 16 bits	Cannot be changed	Expansion	Nothing																		
	Description: This parameter indicates the temperature of the AC drive heatsink module in the unit of °C.																									
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																		
L5-21	LED control word	0x9515	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing																		
	Value:																									
	<table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>Start</td> <td>0: Invalid 1: Active</td> </tr> <tr> <td>Bit 1</td> <td>Stop</td> <td>0: Invalid 1: Active</td> </tr> <tr> <td>Bit 2</td> <td>Jog 1</td> <td>0: Invalid 1: Active</td> </tr> <tr> <td>Bit 3</td> <td>Local control</td> <td>0: Invalid 1: Active</td> </tr> <tr> <td>Bit 4</td> <td>Reset</td> <td>0: Invalid 1: Active</td> </tr> </tbody> </table>								Bit	Name	Value	Bit 0	Start	0: Invalid 1: Active	Bit 1	Stop	0: Invalid 1: Active	Bit 2	Jog 1	0: Invalid 1: Active	Bit 3	Local control	0: Invalid 1: Active	Bit 4	Reset	0: Invalid 1: Active
	Bit	Name	Value																							
	Bit 0	Start	0: Invalid 1: Active																							
	Bit 1	Stop	0: Invalid 1: Active																							
	Bit 2	Jog 1	0: Invalid 1: Active																							
Bit 3	Local control	0: Invalid 1: Active																								
Bit 4	Reset	0: Invalid 1: Active																								

	Bit 5	Jog 2	0: Invalid 1: Active																	
	Bit 6	Direction switchover	0: Invalid 1: Active																	
	Bit 7	Reserved																		
	Bit 8	Reserved																		
	Bit 9	Reserved																		
	Bit 10	Reserved																		
	Bit 11	Reserved																		
	Bit 12	Reserved																		
	Bit 13	Reserved																		
	Bit 14	Reserved																		
	Bit 15	Reserved																		
<p>Description :</p> <p>This parameter displays the control command status on the LED operating panel. You can click the current value of the parameter to view the control word status indicated by each bit. The value 0 indicates "Invalid" and 1 indicates "Valid".</p> <p>Value description:</p> <p>Bit 0: Start          Bit 1: Stop          Bit 2: Jog 1          Bit 3: Local control          Bit 4: Reset          Bit 5: Jog 2          Bit 6: Direction switchover</p>																				
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode												
	IDS control word	0x9516	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing												
L5-22	<p>Value:</p> <table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>Start</td> <td>0: Invalid 1: Active</td> </tr> <tr> <td>Bit 1</td> <td>Stop</td> <td>0: Invalid 1: Active</td> </tr> <tr> <td>Bit 2</td> <td>Jog 1</td> <td>0: Invalid 1: Active</td> </tr> </tbody> </table>								Bit	Name	Value	Bit 0	Start	0: Invalid 1: Active	Bit 1	Stop	0: Invalid 1: Active	Bit 2	Jog 1	0: Invalid 1: Active
Bit	Name	Value																		
Bit 0	Start	0: Invalid 1: Active																		
Bit 1	Stop	0: Invalid 1: Active																		
Bit 2	Jog 1	0: Invalid 1: Active																		

Bit 3	Jog 2	0: Invalid 1: Active
Bit 4	Reset	0: Invalid 1: Active
Bit 5	Forward direction	0: Invalid 1: Active
Bit 6	Reverse direction	0: Invalid 1: Active
Bit 7	Auto-tuning	0: Invalid 1: Active
Bit 8	Self-check	0: Invalid 1: Active
Bit 9	Reserved	
Bit 10	Reserved	
Bit 11	Reserved	
Bit 12	Reserved	
Bit 13	Reserved	
Bit 14	Reserved	
Bit 15	Reserved	

Description :

This parameter indicates the control command status of the IDS commissioning software. You can click the current value of the parameter to view the control word status indicated by each bit. The value 0 indicates "Invalid" and 1 indicates "Valid".

Value description:

Bit 0: Start

Bit 1: Stop

Bit 2: Jog 1

Bit 3: Jog 2

Bit 4: Reset

Bit 5: Forward direction

Bit 6: Reverse direction

Bit 7: Auto-tuning

Bit 8: Self-check

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-23	SOP control word	0x9517	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing



Value:

Bit	Name	Value
Bit 0	Start	0: Invalid 1: Active
Bit 1	Stop	0: Invalid 1: Active
Bit 2	Jog 1	0: Invalid 1: Active
Bit 3	Jog 2	0: Invalid 1: Active
Bit 4	Reset	0: Invalid 1: Active
Bit 5	Forward direction	0: Invalid 1: Active
Bit 6	Reverse direction	0: Invalid 1: Active
Bit 7	Auto-tuning	0: Invalid 1: Active
Bit 8	Self-check	0: Invalid 1: Active
Bit 9	Reserved	
Bit 10	Reserved	
Bit 11	Reserved	
Bit 12	Reserved	
Bit 13	Reserved	
Bit 14	Reserved	
Bit 15	Reserved	

Description:

This parameter indicates the control command status of the SOP-20 operating panel. You can click the current value of the parameter to view the control word status indicated by each bit. The value 0 indicates "Invalid" and 1 indicates "Valid".

Value description:

Bit 0: Start

Bit 1: Stop

Bit 2: Jog 1

Bit 3: Jog 2

Bit 4: Reset

Bit 5: Forward direction

	Bit 6: Reverse direction Bit 7: Auto-tuning Bit 8: Self-check								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
L5-24	Command channel system command	0x9518	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing	
	Value:								
		<b>Bit</b>	<b>Name</b>	<b>Value</b>					
		Bit 0	ON_OFF1 (start/stop)	0: Stop 1: Run					
		Bit 1	OFF2 (coast to stop)	0: Activate 1: Normal					
		Bit 2	OFF3 (quick stop)	0: Activate 1: Normal					
		Bit 3	Running	0: Inhibit 1: Allow					
		Bit 4	RFG output forced to be 0	0: Normal 1: RFG output forced to be 0					
		Bit 5	RFG pause	0: Normal 1: RFG pause					
		Bit 6	RFG input forced to be 0	0: Normal 1: RFG input forced to be 0					
		Bit 7	Fault reset (reserved)	0: Disable 1: Enable					
		Bit 8	JOG1	0: Disable 1: Enable					
		Bit 9	JOG2	0: Disable 1: Enable					
		Bit 10	Remote control (reserved)	0: Disable 1: Enable					
		Bit 11	Speed inversion	0: Do not invert the speed 1: Invert the speed					
	Bit 12	Start signal	0: Disable 1: Enable						
	Bit 13	Internal start command	0: Disable 1: Enable						
	Bit 14	Reserved							

Bit 15	Reserved	
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Description :

This parameter indicates the command input status of the user-defined channel. You can click the current value of the parameter to view the control word status indicated by each bit.

Value description:

Bit 0: ON\_OFF1 (start/stop)

It displays the ON\_OFF1 (start/stop) command state.

0: Stop

1: Run

Bit 1: OFF2 (coast to stop)

It displays the OFF2 (coast to stop) command state.

0: Activate

1: Normal

Bit 2: OFF3 (quick stop)

It displays the OFF3 (quick stop) command state.

0: Activate

1: Normal

Bit 3: Running

It displays whether running is allowed.

0: Inhibit

1: Allow

Bit 4: RFG output forced to 0

It displays whether the RFG output is forced to 0.

0: Normal

1: RFG output forced to 0

Bit 5: RFG pause

It displays whether the RFG is paused.

0: Normal

1: RFG pause

Bit 6: RFG input forced to 0

It displays whether the RFG input is forced to 0.

0: Normal

1: RFG input forced to 0

Bit 8: JOG1

It displays the JOG1 command state.

0: Disable

1: Enable

Bit 9: JOG2

It displays the JOG2 command state.

0: Disable

1: Enable

<p>Bit 11: Speed inversion It displays whether the speed is reversed. 0: Do not invert the speed 1: Invert the speed</p> <p>Bit 12: Start signal It displays whether the start signal is active. 0: Disable 1: Enable</p> <p>Bit 13: Internal start command It displays the internal start command state. 0: Disable 1: Enable</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-25	LED command clear flag	0x9519	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value: 0: Invalid 1: Valid</p>							
	<p>Description: This parameter indicates whether the LED control command is cleared.</p> <p>Value description: 0: Invalid 1: Valid</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-26	SOP command clear flag	0x951A	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Value: 0: Invalid 1: Valid</p>							
	<p>Description: This parameter indicates whether the SOP control command is cleared.</p> <p>Value description: 0: Invalid 1: Valid</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																																	
L5-27	IDS command clear flag	0x951B	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing																																	
	Value: 0: Invalid 1: Valid																																								
	Description: This parameter indicates whether the control command of the IDS commissioning software is cleared.  Value description: 0: Invalid 1: Valid																																								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																																	
L5-28	Terminal module command	0x951C	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing																																	
	Value:																																								
	<table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>ON_OFF1 (start/stop)</td> <td>0: Stop 1: Run</td> </tr> <tr> <td>Bit 1</td> <td>OFF2 (coast to stop)</td> <td>0: Stop 1: Run</td> </tr> <tr> <td>Bit 2</td> <td>OFF3 (quick stop)</td> <td>0: Stop 1: Run</td> </tr> <tr> <td>Bit 3</td> <td>Running permission</td> <td>0: Disable 1: Enable</td> </tr> <tr> <td>Bit 4</td> <td>Reset command</td> <td>0: Do not reset 1: Reset</td> </tr> <tr> <td>Bit 5</td> <td>JOG1</td> <td>0: Disable 1: Enable</td> </tr> <tr> <td>Bit 6</td> <td>JOG2</td> <td>0: Disable 1: Enable</td> </tr> <tr> <td>Bit 7</td> <td>Speed inversion</td> <td>0: Do not invert the speed 1: Invert the speed</td> </tr> <tr> <td>Bit 8</td> <td>Reserved</td> <td></td> </tr> <tr> <td>Bit 9</td> <td>Reserved</td> <td></td> </tr> </tbody> </table>								Bit	Name	Value	Bit 0	ON_OFF1 (start/stop)	0: Stop 1: Run	Bit 1	OFF2 (coast to stop)	0: Stop 1: Run	Bit 2	OFF3 (quick stop)	0: Stop 1: Run	Bit 3	Running permission	0: Disable 1: Enable	Bit 4	Reset command	0: Do not reset 1: Reset	Bit 5	JOG1	0: Disable 1: Enable	Bit 6	JOG2	0: Disable 1: Enable	Bit 7	Speed inversion	0: Do not invert the speed 1: Invert the speed	Bit 8	Reserved		Bit 9	Reserved	
	Bit	Name	Value																																						
	Bit 0	ON_OFF1 (start/stop)	0: Stop 1: Run																																						
	Bit 1	OFF2 (coast to stop)	0: Stop 1: Run																																						
	Bit 2	OFF3 (quick stop)	0: Stop 1: Run																																						
	Bit 3	Running permission	0: Disable 1: Enable																																						
	Bit 4	Reset command	0: Do not reset 1: Reset																																						
	Bit 5	JOG1	0: Disable 1: Enable																																						
Bit 6	JOG2	0: Disable 1: Enable																																							
Bit 7	Speed inversion	0: Do not invert the speed 1: Invert the speed																																							
Bit 8	Reserved																																								
Bit 9	Reserved																																								

Bit 10	Reserved	
Bit 11	Reserved	
Bit 12	Reserved	
Bit 13	Reserved	
Bit 14	Reserved	
Bit 15	Reserved	

Description :

This parameter indicates the control command status in the terminal control mode. You can click the current value of the parameter to view the command status indicated by each bit.

Value description:

Bit 0: ON\_OFF1 (start/stop)

It displays the ON\_OFF1 (Start/Stop) stop command state.

0: Stop

1: Run

Bit 1: OFF2 (coast to stop)

It displays the OFF2 (coast to stop) command state.

0: Stop

1: Run

Bit 2: OFF3 (quick stop)

It displays the OFF3 (quick stop) command state.

0: Stop

1: Stop

Bit 3: Running permission

It displays whether running is allowed.

0: Disable

1: Enable

Bit 4: Reset command

It displays whether the reset command is valid.

0: Do not reset

1: Reset

Bit 5: JOG1

It displays the JOG1 command state.

0: Disable

1: Enable

Bit 6: JOG2

It displays the JOG2 command state.

0: Disable

1: Enable

Bit 7: Speed inversion

It displays whether the speed is reversed.

	0: Do not invert the speed 1: Invert the speed								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode	
L5-29	Input state of terminal module A	0x951D	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing	
	Value:								
		<b>Bit</b>	<b>Name</b>	<b>Value</b>					
		Bit 0	ON_OFF1 (start/stop)	0: Inactive 1: Active					
		Bit 1	Reverse running (Rev)	0: Inactive 1: Active					
		Bit 2	Running permission	0: Inactive 1: Active					
		Bit 3	Reset command	0: Inactive 1: Active					
		Bit 4	JOG1	0: Inactive 1: Active					
		Bit 5	JOG2	0: Inactive 1: Active					
		Bit 6	Reserved	0: Inactive 1: Active					
		Bit 7	Reserved	0: Inactive 1: Active					
		Bit 8	Terminal function input (IN1)	0: Inactive 1: Active					
		Bit 9	Terminal function input (IN2)	0: Inactive 1: Active					
		Bit 10	Terminal function input (IN3)	0: Inactive 1: Active					
		Bit 11	Reserved						
	Bit 12	Reserved							
	Bit 13	Reserved							
	Bit 14	Reserved							
	Bit 15	Reserved							
Description:									
This parameter indicates the control command input status of the terminal module A. You can click the current value of the parameter to view the command status indicated by each bit.									

	<p>Value description:</p> <p>Bit 0: ON_OFF1 (start/stop) It displays the ON_OFF1 (start/stop) command state. 0: Invalid 1: Active</p> <p>Bit 1: Reverse running (Rev) It displays the status of the reverse running command. 0: Invalid 1: Active</p> <p>Bit 2: Running permission It displays the status of the running permission command. 0: Invalid 1: Active</p> <p>Bit 3: Reset command It displays whether the reset command is active. 0: Invalid 1: Active</p> <p>Bit 4: JOG1 It displays the JOG1 command state. 0: Invalid 1: Active</p> <p>Bit 5: JOG2 It displays the JOG2 command state. 0: Invalid 1: Active</p> <p>Bit 8: Terminal function input (IN1) It displays whether the terminal control IN1 input is active. 0: Invalid 1: Active</p> <p>Bit 9: Terminal function input (IN2) It displays whether the terminal control IN2 input is active. 0: Invalid 1: Active</p> <p>Bit 10: Terminal function input IN3 It displays whether the terminal control IN3 input is active. 0: Inactive 1: Active</p>							
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Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-30	Input state of terminal module B	0x951E	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing



Value:

Bit	Name	Value
Bit 0	ON_OFF1 (start/stop)	0: Inactive 1: Active
Bit 1	Reverse running (Rev)	0: Inactive 1: Active
Bit 2	Running permission	0: Inactive 1: Active
Bit 3	Reset command	0: Inactive 1: Active
Bit 4	JOG1	0: Inactive 1: Active
Bit 5	JOG2	0: Inactive 1: Active
Bit 6	Reserved	0: Inactive 1: Active
Bit 7	Reserved	0: Inactive 1: Active
Bit 8	Terminal function input (IN1)	0: Inactive 1: Active
Bit 9	Terminal function input (IN2)	0: Inactive 1: Active
Bit 10	Terminal function input (IN3)	0: Inactive 1: Active
Bit 11	Reserved	
Bit 12	Reserved	
Bit 13	Reserved	
Bit 14	Reserved	
Bit 15	Reserved	

Description:

This parameter indicates the control command input status of the terminal module B. You can click the current value of the parameter to view the command status indicated by each bit.

Value description:

Bit 0: ON\_OFF1 (start/stop)

It displays the ON\_OFF1 (start/stop) command state.

0: Invalid

1: Active

Bit 1: Reverse running (Rev)

<p>It displays the status of the reverse running command.</p> <p>0: Invalid 1: Active</p> <p>Bit 2: Running permission</p> <p>It displays the status of the running permission command.</p> <p>0: Invalid 1: Active</p> <p>Bit 3: Reset command</p> <p>It displays whether the reset command is active.</p> <p>0: Invalid 1: Active</p> <p>Bit 4: JOG1</p> <p>It displays the JOG1 command state.</p> <p>0: Invalid 1: Active</p> <p>Bit 5: JOG2</p> <p>It displays the JOG2 command state.</p> <p>0: Invalid 1: Active</p> <p>Bit 8: Terminal function input (IN1)</p> <p>It displays whether the terminal control IN1 input is active.</p> <p>0: Invalid 1: Active</p> <p>Bit 9: Terminal function input (IN2)</p> <p>It displays whether the terminal control IN2 input is active.</p> <p>0: Invalid 1: Active</p> <p>Bit 10: Terminal function input IN3</p> <p>It displays whether the terminal control IN3 input is active.</p> <p>0: Inactive 1: Active</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-31	Running mode (normal operation/jogging)	0x951F	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Normal operation 1: Jogging							
	Description: This parameter indicates the running mode of the drive.							

	Value description: 0: Normal operation 1: Jogging							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Jogging command source 1/2	0x9520	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L5-32	Value: 0: Jogging command source 1 1: Jogging command source 2							
L5-32	Description: This parameter indicates the jogging command source.  Value description: 0: Jogging command source 1 1: Jogging command source 2							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Control target	0x9521	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L5-33	Value: 0: Speed control 1: Torque control 2: Reserved							
L5-33	Description: This parameter indicates the control target for motor output.  Value description: 0: Speed control 1: Torque control 2: Reserved							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-34	RFG status word	0x9522	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing

Value:

Bit	Name	Value
Bit 0 and bit 1	Acceleration or deceleration status	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
Bit 2 and bit 3	Acceleration or deceleration arc status	0: Constant speed 1: Start segment 2: Constant acceleration 3: End segment
Bit 4	Reserved	
Bit 5	Reserved	
Bit 6	Reserved	
Bit 7	Reserved	
Bit 8 to bit 9	Acceleration or deceleration status of the previous cycle	0: Reserved 1: Constant speed 2: Acceleration 3: Deceleration
Bit 10 and bit 11	Arc status of the previous cycle	0: Constant speed 1: Start segment 2: Constant acceleration 3: End segment
Bit 12	Reserved	
Bit 13	Reserved	
Bit 14	Reserved	
Bit 15	Reserved	

Description :

This parameter indicates the RFG module status. You can click the current value of the parameter to view the status indicated by each bit.

Value description:

Bit 0 to bit1: Acceleration/Deceleration status

It indicates the current acceleration/deceleration phase status.

0: Reserved

1: Constant speed

2: Acceleration

3: Deceleration

Bit 2 to bit 3: Acceleration or deceleration arc status

0: Constant speed

1: Start segment

	<p>2: Constant acceleration  3: End segment  Bit 8 to bit 9: Acceleration/deceleration status of the previous cycle  It indicates the acceleration/deceleration phase status of the previous cycle .  0: Reserved  1: Constant speed  2: Acceleration  3: Deceleration  Bit 10 and bit 11: Arc status of the previous cycle  0: Constant speed  1: Start segment  2: Constant acceleration  3: End segment</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	RFG command word	0x9523	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L5-35	Value:							
	Bit 0	Calculation		0: Disable 1: Enable				
	Bit 1	Forced output		0: Disable 1: Enable				
	Bit 2	Calculation pause		0: Disable 1: Enable				
	Bit 3	Bypass		0: Disable 1: Enable				
	Bit 4	Reserved						
	Bit 5	Arc type		0: Continuous arc 1: Non-continuous arc				
	Bit 6	Reserved						
	Bit 7	Reserved						
	Bit 8	Reserved						
	Bit 9	Reserved						
	Bit 10	Reserved						
	Bit 11	Reserved						
	Bit 12	Reserved						
Bit 13	Reserved							

	Bit 14	Reserved						
	Bit 15	Reserved						
<p>Description:</p> <p>This parameter indicates the active RFG command. You can click the current value of the parameter value to view the command status indicated by each bit.</p> <p>Value description:</p> <p>Bit 0: Calculation It indicates whether to enable the RFG calculation function. 0: Disable 1: Enable</p> <p>Bit 1: Forced output It indicates whether the RFG is forced to output. 0: Disable 1: Enable</p> <p>Bit 2: Calculation pause It indicates whether RFG calculation is paused. 0: Disable 1: Enable</p> <p>Bit 3: Bypass It indicates whether the bypass function is enabled. 0: Disable 1: Enable</p> <p>Bit 5: Arc type It indicates the RFG arc type. 0: Continuous arc 1: Non-continuous arc</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-38	V/f separation time set to 0	0x9526	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
<p>Description:</p> <p>This parameter indicates whether the command that the V/f separation time is set to 0 is valid.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-39	V/f separation	0x9527	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
<p>Value:</p>								

	0: Disable 1: Enable							
	Description: This parameter indicates whether to enable V/f separation.  Value description: 0: Disable 1: Enable							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-40	AI1 raw sampling value	0x9528	-32.767 V to 32.767 V	0.000V	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the AI1 input voltage raw value in the unit of V.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-43	AI1 sampling value after correction	0x952B	-327.67 V to 327.67 V	0.00V	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the AI1 input voltage after correction in the unit of V.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-46	AI1 curve input value	0x952E	-327.67 V to 327.67 V	0.00V	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the input value of the AI1 voltage and frequency curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-49	AO1 output before correction	0x9531	-327.67 V to 327.67 V	0.00V	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the AO1 output value before automatic correction.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

L5-51	AO1 output after correction	0x9533	-32.767 V to 32.767 V	0.000V	Signed 16 bits	Cannot be changed	Expansion	Nothing																																			
	Description : This parameter indicates the AO1 output value after automatic correction.																																										
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																																			
L5-53	HDI input frequency	0x9535	0.00 kHz to 655.35 kHz	0.00kHz	Unsigned 16 bit	Cannot be changed	Expansion	Nothing																																			
	Description : This parameter indicates the sampling frequency of the DI4 high-speed pulse input in the unit of kHz.																																										
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																																			
L5-56	This parameter indicates the communication reference command word.	0x9538	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing																																			
	Value: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Bit</th> <th style="width: 60%;">Name</th> <th style="width: 30%;">Value</th> </tr> </thead> <tbody> <tr> <td>bit0</td> <td>ON_OFF1 (start/stop)</td> <td>0: Invalid 1: Valid</td> </tr> <tr> <td>bit1</td> <td>OFF2 (coast to stop)</td> <td>0: Invalid 1: Valid</td> </tr> <tr> <td>bit2</td> <td>OFF3 (quick stop)</td> <td>0: Stop 1: Run</td> </tr> <tr> <td>bit3</td> <td>Running permission</td> <td>0: Activate 1: Normal</td> </tr> <tr> <td>bit4</td> <td>Reset</td> <td>0: Activate 1: Normal</td> </tr> <tr> <td>bit5</td> <td>JOG1</td> <td>0: Invalid 1: Valid</td> </tr> <tr> <td>bit6</td> <td>JOG2</td> <td>0: Invalid 1: Valid</td> </tr> <tr> <td>bit7</td> <td>Speed inversion</td> <td>0: Do not invert the speed 1: Invert the speed</td> </tr> <tr> <td>bit8</td> <td>Reserved</td> <td></td> </tr> <tr> <td>bit9</td> <td>Reserved</td> <td></td> </tr> <tr> <td>bit10</td> <td>Reserved</td> <td></td> </tr> </tbody> </table>								Bit	Name	Value	bit0	ON_OFF1 (start/stop)	0: Invalid 1: Valid	bit1	OFF2 (coast to stop)	0: Invalid 1: Valid	bit2	OFF3 (quick stop)	0: Stop 1: Run	bit3	Running permission	0: Activate 1: Normal	bit4	Reset	0: Activate 1: Normal	bit5	JOG1	0: Invalid 1: Valid	bit6	JOG2	0: Invalid 1: Valid	bit7	Speed inversion	0: Do not invert the speed 1: Invert the speed	bit8	Reserved		bit9	Reserved		bit10	Reserved
Bit	Name	Value																																									
bit0	ON_OFF1 (start/stop)	0: Invalid 1: Valid																																									
bit1	OFF2 (coast to stop)	0: Invalid 1: Valid																																									
bit2	OFF3 (quick stop)	0: Stop 1: Run																																									
bit3	Running permission	0: Activate 1: Normal																																									
bit4	Reset	0: Activate 1: Normal																																									
bit5	JOG1	0: Invalid 1: Valid																																									
bit6	JOG2	0: Invalid 1: Valid																																									
bit7	Speed inversion	0: Do not invert the speed 1: Invert the speed																																									
bit8	Reserved																																										
bit9	Reserved																																										
bit10	Reserved																																										



	bit11	Reserved						
	bit12	Reserved						
	bit13	Reserved						
	bit14	Reserved						
	bit15	Reserved						
<p>Description :</p> <p>This parameter indicates the input status of the communication control command. You can click the current value of the parameter to view the control word status indicated by each bit. The value 0 indicates "Invalid" and 1 indicates "Valid".</p> <p>Value description:</p> <p>Bit 0: ON_OFF1 (start/stop)</p> <p>Bit 1: OFF2 (coast to stop)</p> <p>Bit 2: OFF3 (quick stop)</p> <p>Bit 3: Running permission</p> <p>Bit 4: Reset</p> <p>Bit 5: JOG1</p> <p>Bit 6: JOG2</p> <p>Bit 7: Speed inversion</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-58	Clear communication command	0x953A	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
<p>Description :</p> <p>This parameter indicates whether the communication command is cleared.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-59	Enable RFG performance forcibly	0x953B	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
<p>Description :</p> <p>This parameter indicates whether the RFG performance is forcibly enabled.</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-61	Switch to deceleration time 4 forcibly	0x953D	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
<p>Description :</p> <p>This parameter indicates whether the deceleration time is forcibly switched to deceleration time 4.</p>								

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-62	Immediate DC braking command by DI	0x953E	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates whether the immediate DC braking command (function 32 assigned to DI) is active.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-63	Drive sampling DI status	0x953F	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value:							

	Bit 13	VDI4 status	0: Low level 1: High level					
	Bit 14	VDI5 status	0: Low level 1: High level					
	Bit 15	VDI6 status	0: Low level 1: High level					
<p>Description :</p> <p>This parameter indicates the drive sampling status of the DI. 0 indicates that the terminal is sampled at low level and 1 indicates that the terminal is sampled at high level.</p> <p>Value description:</p> <p>Bit 0: DI1 status          Bit 1: DI2 status          Bit 2: DI3 status          Bit 3: DI4/HDI status          Bit 4: DI5 status (MD600A)          Bit 10: VDI1 status          Bit 11: VDI2 status          Bit 12: VDI3 status          Bit 13: VDI4 status          Bit 14: VDI5 status          Bit 15: VDI6 status</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Drive output status of DI	0x9540	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L5-64	Value:							
	Bit	Name	Value					
	Bit 0	DI1 status	0: Low level 1: High level					
	Bit 1	DI2 status	0: Low level 1: High level					
	Bit 2	DI3 status	0: Low level 1: High level					
	Bit 3	DI4/HDI status	0: Low level 1: High level					
	Bit 4	DI5 status (MD600A)	0: Low level 1: High level					

	Bit 5	Reserved	0: Low level 1: High level					
	Bit 6	Reserved	0: Low level 1: High level					
	Bit 7	Reserved	0: Low level 1: High level					
	Bit 8	Reserved	0: Low level 1: High level					
	Bit 9	Reserved	0: Low level 1: High level					
	Bit 10	VDI1 status	0: Low level 1: High level					
	Bit 11	VDI2 status	0: Low level 1: High level					
	Bit 12	VDI3 status	0: Low level 1: High level					
	Bit 13	VDI4 status	0: Low level 1: High level					
	Bit 14	VDI5 status	0: Low level 1: High level					
	Bit 15	VDI6 status	0: Low level 1: High level					
<p>Description :</p> <p>This parameter indicates the drive output status of the DI. 0 indicates that the terminal outputs at low level and 1 indicates that the terminal outputs at high level.</p> <p>Value description:</p> <p>Bit 0: DI1 status  Bit 1: DI2 status  Bit 2: DI3 status  Bit 3: DI4/HDI status  Bit 4: DI5 status (MD600A)  Bit 10: VDI1 status  Bit 11: VDI2 status  Bit 12: VDI3 status  Bit 13: VDI4 status  Bit 14: VDI5 status  Bit 15: VDI6 status</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

L5-65	Final output status of DI	0x9541	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing																																																		
	Value:																																																									
	<table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>DI1 status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 1</td> <td>DI2 status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 2</td> <td>DI3 status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 3</td> <td>DI4/HDI status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 4</td> <td>DI5 status (MD600A)</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 5</td> <td>Reserved</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 6</td> <td>Reserved</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 7</td> <td>Reserved</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 8</td> <td>Reserved</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 9</td> <td>Reserved</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 10</td> <td>VDI1 status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 11</td> <td>VDI2 status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 12</td> <td>VDI3 status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 13</td> <td>VDI4 status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 14</td> <td>VDI5 status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 15</td> <td>VDI6 status</td> <td>0: Low level 1: High level</td> </tr> </tbody> </table>								Bit	Name	Value	Bit 0	DI1 status	0: Low level 1: High level	Bit 1	DI2 status	0: Low level 1: High level	Bit 2	DI3 status	0: Low level 1: High level	Bit 3	DI4/HDI status	0: Low level 1: High level	Bit 4	DI5 status (MD600A)	0: Low level 1: High level	Bit 5	Reserved	0: Low level 1: High level	Bit 6	Reserved	0: Low level 1: High level	Bit 7	Reserved	0: Low level 1: High level	Bit 8	Reserved	0: Low level 1: High level	Bit 9	Reserved	0: Low level 1: High level	Bit 10	VDI1 status	0: Low level 1: High level	Bit 11	VDI2 status	0: Low level 1: High level	Bit 12	VDI3 status	0: Low level 1: High level	Bit 13	VDI4 status	0: Low level 1: High level	Bit 14	VDI5 status	0: Low level 1: High level	Bit 15	VDI6 status
Bit	Name	Value																																																								
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Bit 1	DI2 status	0: Low level 1: High level																																																								
Bit 2	DI3 status	0: Low level 1: High level																																																								
Bit 3	DI4/HDI status	0: Low level 1: High level																																																								
Bit 4	DI5 status (MD600A)	0: Low level 1: High level																																																								
Bit 5	Reserved	0: Low level 1: High level																																																								
Bit 6	Reserved	0: Low level 1: High level																																																								
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Description:																																																										
This parameter indicates the final output status of the DI. 0 indicates that the terminal outputs at low level and 1 indicates that the terminal outputs at high level.																																																										

	Value description: Bit 0: DI1 status Bit 1: DI2 status Bit 2: DI3 status Bit 3: DI4/HDI status Bit 4: DI5 status (MD600A) Bit 10: VDI1 status Bit 11: VDI2 status Bit 12: VDI3 status Bit 13: VDI4 status Bit 14: VDI5 status Bit 15: VDI6 status							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Final output status of DO	0x9544	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L5-68	Value:							
	Bit	Name	Value					
	Bit 0	RO1 status	0: Low level 1: High level					
	Bit 1	Reserved	0: Low level 1: High level					
	Bit 2	Reserved	0: Low level 1: High level					
	Bit 3	Reserved	0: Low level 1: High level					
	Bit 4	DO1 status (MD600A)	0: Low level 1: High level					
	Bit 5	DO2 status (MD600A)	0: Low level 1: High level					
	Bit 6	Reserved	0: Low level 1: High level					
	Bit 7	Reserved	0: Low level 1: High level					
Bit 8	Reserved	0: Low level 1: High level						
Bit 9	Reserved	0: Low level 1: High level						

	Bit 10	VDO1 status	0: Low level 1: High level					
	Bit 11	VDO2 status	0: Low level 1: High level					
	Bit 12	VDO3 status	0: Low level 1: High level					
	Bit 13	VDO4 status	0: Low level 1: High level					
	Bit 14	VDO5 status	0: Low level 1: High level					
	Bit 15	VDO6 status	0: Low level 1: High level					
<p>Description :</p> <p>This parameter indicates the final output status of the DO. 0 indicates that the terminal outputs at low level and 1 indicates that the terminal outputs at high level.</p> <p>Value description:</p> <p>Bit 0: RO1 status</p> <p>Bit 4: DO1 status (MD600A)</p> <p>Bit 5: DO2 status (MD600A)</p> <p>Bit 10: VDO1 status</p> <p>Bit 11: VDO2 status</p> <p>Bit 12: VDO3 status</p> <p>Bit 13: VDO4 status</p> <p>Bit 14: VDO5 status</p> <p>Bit 15: VDO6 status</p>								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	I/O monitoring status	0x9545	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L5-69	Value:							
	Bit	Name	Value					
	Bit 0	AI1 disconnection limit exceeded	0: Not exceeded 1: Exceeded					
	Bit 1	Reserved	0: Low level 1: High level					
	Bit 2	AI-as-DI output status	0: Low level 1: High level					

Bit 3	HDI input disconnection status	0: Not disconnected 1: Disconnected
Bit 4	Reserved	
Bit 5	Reserved	
Bit 6	Reserved	
Bit 7	Reserved	
Bit 8	Reserved	
Bit 9	Reserved	
Bit 10	Reserved	
Bit 11	Reserved	
Bit 12	Reserved	
Bit 13	Reserved	
Bit 14	Reserved	
Bit15	Module temperature reached	0: Not reached 1: Reached

**Description :**

This parameter indicates the monitoring status of the I/O function.

**Value description:**

Bit 0: A11 disconnection limit exceeded

0: Not exceeded

1: Exceeded

Bit 2: AI-as-DI output status

0: Low level

1: High level

Bit 3: HDI input disconnection status

0: Not disconnected

1: Disconnected

Bit 15: Module temperature reached

0: Not reached

1: Reached

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-70	Main speed	0x9546	-327.68 Hz to 327.67 Hz	0.00Hz	Signed 16 bits	Cannot be changed	Expansion	Nothing
<p><b>Description :</b> This parameter indicates the main speed (frequency) in the unit of Hz.</p>								



Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-71	Auxiliary speed	0x9547	-327.68 Hz to 327.67 Hz	0.00Hz	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the auxiliary speed (frequency) in the unit of Hz.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-78	Flag for 32-bit written data	0x954E	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates whether the length of the data written through mapping is 32-bit.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-79	Low-order 16 bit of the externally written data 1	0x954F	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : When communication mapping is enabled, this parameter displays the low-order 16 bit of the externally written data 1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-80	Low-order 16 bit of the externally written data 2	0x9550	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : When communication mapping is enabled, this parameter displays the low-order 16 bit of the externally written data 2.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-81	Low-order 16 bit of the externally written data 3	0x9551	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : When communication mapping is enabled, this parameter displays the low-order 16 bit of the externally written data 3.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

L5-82	Low-order 16 bit of the externally written data 4	0x9552	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: When communication mapping is enabled, this parameter displays the low-order 16 bit of the externally written data 4.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-83	Low-order 16 bit of the externally written data 5	0x9553	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: When communication mapping is enabled, this parameter displays the low-order 16 bit of the externally written data 5.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-84	Low-order 16 bit of the externally written data 6	0x9554	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: When communication mapping is enabled, this parameter displays the low-order 16 bit of the externally written data 6.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-85	Low-order 16 bit of the externally written data 7	0x9555	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: When communication mapping is enabled, this parameter displays the low-order 16 bit of the externally written data 7.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-86	Low-order 16 bit of the externally written data 8	0x9556	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: When communication mapping is enabled, this parameter displays the low-order 16 bit of the externally written data 8.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-87	Low-order 16 bit of the externally written data 9	0x9557	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description:							

	When communication mapping is enabled, this parameter displays the low-order 16 bit of the externally written data 9.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-88	Low-order 16 bit of the externally written data 10	0x9558	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : When communication mapping is enabled, this parameter displays the low-order 16 bit of the externally written data 10.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-89	High-order 16 bit of the externally written data 1	0x9559	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : When communication mapping is enabled, this parameter displays the high-order 16 bit of the externally written data 1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-90	High-order 16 bit of the externally written data 2	0x955A	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : When communication mapping is enabled, this parameter displays the high-order 16 bit of the externally written data 2.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-91	High-order 16 bit of the externally written data 3	0x955B	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : When communication mapping is enabled, this parameter displays the high-order 16 bit of the externally written data 3.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-92	High-order 16 bit of the externally written data 4	0x955C	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : When communication mapping is enabled, this parameter displays the high-order 16 bit of the externally written data 4.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

L5-93	High-order 16 bit of the externally written data 5	0x955D	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: When communication mapping is enabled, this parameter displays the high-order 16 bit of the externally written data 5.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-94	High-order 16 bit of the externally written data 6	0x955E	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: When communication mapping is enabled, this parameter displays the high-order 16 bit of the externally written data 6.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-95	High-order 16 bit of the externally written data 7	0x955F	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: When communication mapping is enabled, this parameter displays the high-order 16 bit of the externally written data 7.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-96	High-order 16 bit of the externally written data 8	0x9560	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: When communication mapping is enabled, this parameter displays the high-order 16 bit of the externally written data 8.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-97	High-order 16 bit of the externally written data 9	0x9561	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: When communication mapping is enabled, this parameter displays the high-order 16 bit of the externally written data 9.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L5-98	High-order 16 bit of the externally written data 10	0x9562	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description:							

	When communication mapping is enabled, this parameter displays the high-order 16 bit of the externally written data 10.
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## L6: Word Connector 2

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L6-00	Rated motor speed	0x9600	0 rpm to 65535 rpm	0rpm	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter sets the rated motor speed in the unit of rpm.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L6-01	Rated motor frequency	0x9601	0.0 Hz to 6553.5 Hz	0.0Hz	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter sets the rated motor frequency in the unit of Hz.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L6-02	Rated voltage	0x9602	0.0 V to 6553.5 V	0.0V	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter sets the rated voltage in the unit of V.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L6-03	Rated current	0x9603	0.0 A to 6553.5 A	0.0A	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter sets the rated current in the unit of A.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

L6-04	Rated power	0x9604	0.00 kW to 655.35 kW	0.00kW	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
Description: This parameter sets the rated power in the unit of kW.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L6-08	Frequency offset mode in torque control	0x9608	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
Value: 0: Bidirectional offset 1: Unidirectional offset 2: Overspeed control								
Description: This parameter indicates the speed limit offset of the enabled reference channel in torque control mode.  Value description 0: Bidirectional offset Torque is limited in both directions. 1: Unidirectional offset Torque is limited in only one direction. 2: Overspeed control Torque is limited by PI adjustment upon overspeed.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L6-09	RFG acceleration/deceleration state	0x9609	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
Value: 0: Reserved 1: Constant-speed segment 2: Acceleration segment 3: Deceleration segment								
Description: This parameter displays the acceleration/deceleration phase information of the RFG.								

	Value description: 0: Reserved 1: Constant-speed segment 2: Acceleration segment 3: Deceleration segment							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L6-10	RFG arc state	0x960A	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Constant-speed segment 1: Start segment 2: Constant-acceleration segment 3: End segment							
	Description: This parameter indicates the RFG arc state.  Value description: 0: Constant-speed segment 1: Start segment 2: Constant-acceleration segment 3: End segment							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L6-27	Flag of change based on decimal places of power parameters	0x961B	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the flag of change based on decimal places of power parameters. This flag varies with the power class.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L6-33	Control mode	0x9621	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value:							

	0: Speed control 1: Torque control 2: Reserved							
	Description: This parameter indicates the active motor control mode.  Value description: 0: Speed control 1: Torque control 2: Reserved							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	System main status word 4	0x9623	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L6-35	Value:							
	Bit 0	Run at zero speed (inactive at stop)	0: Active 1: Inactive					
	Bit 1	Run at zero speed (valid at stop)	0: Active 1: Inactive					
	Bit 2	Frequency level detection 1	0: Active 1: Inactive					
	Bit 3	Frequency level detection 2	0: Active 1: Inactive					
	Bit 4	Reserved						
	Bit 5	Simple PLC cycle completed	0: Active 1: Inactive					
	Bit 6	Communication setting value	0: Active 1: Inactive					
	Bit 7	Reserved						
	Bit 8	Current 1 reached	0: Active 1: Inactive					
	Bit 9	Current 2 reached	0: Active 1: Inactive					
	Bit 10	Zero current state	0: Active 1: Inactive					



Bit 11	Output current limit exceeded	0: Active 1: Inactive
Bit 12	Motor overload alarm	0: Active 1: Inactive
Bit 13	AC drive overload alarm	0: Active 1: Inactive
Bit 14	Undervoltage	0: Active 1: Inactive
Bit 15	Three-phase loss	0: Active 1: Inactive

**Description :**

This parameter displays the value of system status word 4. You may click the current value of the parameter to view the system status indicated by each bit.

**Value description:**

Bit 0: Run at zero speed (inactive at stop)

The AC drive is in the zero-speed running state. This function is inactive at stop.

Bit 1: Run at zero speed (active at stop)

The AC drive is in the zero-speed running state. This function is active at stop.

Bit 2: Frequency level detection 1

The bit is valid when the running frequency is higher than the frequency detection value 1 (FDT1). The bit invalid when the running frequency is lower than the result of frequency detection value 1 minus frequency detection value 1 multiplied by frequency detection hysteresis coefficient 1. Set FTD1-related parameters through P0-34 to PO-35.

Bit 3: Frequency level detection 2

The bit is valid when the running frequency is higher than the frequency detection value 2 (FDT2). The bit is invalid when the running frequency is lower than the result of frequency detection value 2 minus frequency detection value 2 multiplied by frequency detection hysteresis coefficient 2. Set FTD2-related parameters through P0-36 to PO-37.

Bit 5: Simple PLC cycle completed

The bit is valid when the simple PLC module completes a cycle.

Bit 6: Communication setting value

The AC drive sets the parameter value through communication.

Bit 7: Reserved

Bit 8: Current 1 reached

When the output current of the AC drive is within the range of (detection current 1  $\pm$  detection current amplitude 1) x rated motor current, the bit is valid. Set related parameters through P0-43 to PO-44.

Bit 9: Current 2 reached

When the output current of the AC drive is within the range of (detection current 2  $\pm$  detection current amplitude 2) x rated motor current, the bit is valid. Set related parameters through P0-45 to PO-46.

Bit 10: Zero current state

When the output current of the AC drive has been less than or equal to the zero current detection level for a period longer than the zero current detection delay, the bit is valid. Set current-related parameters through P0-47 to PO-48.

Bit 11: Output current limit exceeded

	<p>When the output current of the AC drive is output current overlimit threshold for a period longer than the output current overlimit detection delay, the bit is valid. Parameters related to output current overlimit detection are set through P0-49 to P0-50.</p> <p>Bit 12: Motor overload alarm The AC drive reports A111.1 when the bit is active.</p> <p>Bit 13: AC drive overload alarm The AC drive reports A110.1 when the bit is active.</p> <p>Bit 14: Undervoltage The AC drive reports E009.1 when the bit is active.</p> <p>Bit 15: Three-phase loss The AC drive reports E030.1 when the bit is active.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Undervoltage fault flag	0x9624	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L6-36	<p>Description : This parameter indicates whether the bus undervoltage fault is activated.</p> <p>Remarks When this parameter is set to 1, the drive reports E009.1 (Bus undervoltage).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Fault restart clear command	0x9625	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
L6-37	<p>Value: 0: Do not restart upon fault 1: Restart upon fault</p> <p>Description : This parameter indicates whether the fault restart command is active.</p> <p>Value description: 0: Do not restart upon fault 1: Restart upon fault</p> <p>Additional information: Restart is triggered only when the fault restart command changes from inactive to active. If the current command is not cleared, the fault restart command cannot be triggered again.</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L6-40	External command source	0x9628	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Value: 0: Operating panel 1: Terminal 2: Communication 3: User-defined							
	Description: This parameter indicates the external command source.  Value description: 0: Operating panel 1: Terminal 2: Communication 3: User-defined							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L6-46	Carrier frequency	0x962E	0.000 kHz to 65.535 kHz	0.000kHz	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the active carrier frequency in the unit of kHz.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L6-47	HDI final input frequency	0x962F	0.00 kHz to 100.00 kHz	0.00kHz	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the final input frequency in the unit of kHz after HDI source selection.							

## L7: Word Connector 3

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
L7-61	User load curve setting error	0x973D	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates whether the user load curve is set incorrectly. It is valid when the user load curve is set incorrectly.							

## Lb: Float Connector 1

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-00	AI1 curve input per unit value	0x9B00	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the AI1 curve input per unit value. 100% corresponds to the upper limit of the AI curve input.							
Lb-01	MD-BP-M potentiometer per-unit value	0x9B01	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the external potentiometer input per unit value. 100% corresponds to the upper limit of the AI curve input.							
Lb-03	HDI curve input per unit value	0x9B03	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the HDI curve input per unit value. 100% corresponds to the upper limit of the HDI curve input.							
Lb-05	Per unit value of frequency set through communication	0x9B05	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description :							

	This parameter indicates the target frequency per unit value set through communication. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-07	Maximum forward frequency	0x9B07	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the maximum forward frequency. 100% corresponds to the rated motor frequency C4-06.</p> <p>Additional information:</p> <p>The "digital setting of forward frequency upper limit" is compared with the "forward frequency upper limit selection" and the smaller value is taken. If that value is in the range of the minimum motor frequency to the maximum motor frequency, that value is taken as the forward maximum frequency effective for the reference channel. Otherwise, the maximum motor frequency is taken.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-08	Minimum forward frequency	0x9B08	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the minimum forward frequency. 100% corresponds to the rated motor frequency C4-06.</p> <p>Additional information:</p> <p>The "minimum motor frequency" is compared with the "digital setting of forward frequency lower limit" and the smaller value is taken. If that value is in the range of the minimum motor frequency to the maximum forward frequency, that value is taken as the forward minimum frequency effective for the reference channel. Otherwise, the minimum motor frequency is taken.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-09	Maximum reverse frequency	0x9B09	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the maximum reverse frequency. 100% corresponds to the rated motor frequency C4-06.</p> <p>Additional information:</p> <p>The "digital setting of reverse frequency upper limit" is compared with the "reverse frequency upper limit selection" and the larger value is taken. If that value is in the range of the negated minimum motor frequency to the negated maximum motor frequency, that value is taken as the reverse maximum frequency effective for the reference channel. Otherwise, the negated maximum motor frequency is taken.</p>							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
Lb-10	Minimum reverse frequency	0x9B0A	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the minimum reverse frequency. 100% corresponds to the rated motor frequency C4-06.</p> <p>Additional information:</p> <p>The "negated minimum motor frequency" is compared with the "digital setting of reverse frequency lower limit" and the larger value is taken. If that value is in the range of the negated minimum motor frequency to the maximum reverse frequency, that value is taken as the reverse minimum frequency effective for the reference channel. Otherwise, the negated minimum motor frequency is taken.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-11	Forward frequency limit with the additional frequency applied	0x9B0B	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the forward limit after the main frequency plus the additional frequency. 100% corresponds to the rated motor frequency C4-06.</p> <p>Additional information:</p> <p>The value of this connector is the smaller of the "maximum motor frequency" and the "digital setting of forward frequency upper limit". It is used to limit the maximum forward frequency after the additional frequency is applied.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-12	Reverse frequency limit with the additional frequency applied	0x9B0C	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the reverse limit after the main frequency plus the additional frequency. 100% corresponds to the rated motor frequency C4-06.</p> <p>Additional information:</p> <p>The value of this connector is the larger of the "negated maximum motor frequency" and the "digital setting of reverse frequency upper limit". It is used to limit the maximum reverse frequency after the additional frequency is applied.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-13	Main frequency	0x9B0D	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p>							

	This parameter indicates the product of the main frequency multiplied by the main frequency gain coefficient for the active reference channel. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-14	Auxiliary frequency	0x9B0E	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the product of the auxiliary frequency multiplied by the auxiliary frequency gain coefficient for the active reference channel. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-15	Channel target frequency	0x9B0F	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the final target frequency of the active channel. 100% corresponds to the rated motor frequency C4-06.  Additional information: When jogging is enabled, the effective jog frequency is displayed in priority. When jogging is disabled, the target frequency after operations on main and auxiliary frequencies and after the frequency is limited by 800% in the positive and negative directions is displayed.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-16	Channel additional frequency	0x9B10	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the final additional frequency of the active channel. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-17	Additional frequency reference	0x9B11	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the additional frequency reference in torque mode and speed mode for the active channel. 100% corresponds to the rated motor frequency C4-06.  Additional information: In the torque control mode, if the speed limit source is "digital setting", the additional frequency reference is 0. If the							

	speed limit source is "speed channel", the additional frequency reference is the additional frequency of the current channel. In the speed control mode, the additional frequency of this connector is consistent with that of the channel.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-18	Raw frequency reference	0x9B12	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This connector indicates the raw frequency reference in torque control mode and speed control mode. 100% corresponds to the rated motor frequency C4-06.</p> <p>Additional information:</p> <p>In the torque control mode, if the "speed limit source" is digital setting, this connector displays the digital setting of the speed limit. If the "speed limit source" is the speed channel, this connector displays the target speed of the channel. In the speed control mode, this connector displays the target speed of the channel.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-19	Frequency reference after operation with restriction	0x9B13	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the frequency reference after operation with restriction. 100% corresponds to the rated motor frequency C4-06.</p> <p>Additional information:</p> <p>If operation is not restricted, this connector displays the raw frequency reference. If the drive operates with the restricted frequency, this connector displays the frequency reference that has been processed based on these running limits: speed restriction operation mode (H1-60), designated safe operation frequency (H1-61), maximum forward frequency limit (H1-62), and maximum reverse frequency limit (H1-63).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-20	Frequency reference after adjustment by UP/DOWN key	0x9B14	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the frequency reference after operation with the restricted speed and after the frequency is adjusted by the UP/DOWN key on the operating panel or by the terminal functioning as the UP/DOWN key. 100% corresponds to the rated motor frequency C4-06.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-21	Frequency reference after restriction in	0x9B15	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be	Expansion	Nothing



	forward/reverse direction					changed		
	<p>Description :</p> <p>This parameter indicates the frequency reference after it is adjusted by the UP/DOWN key on the operating panel or by the terminal functioning as the UP/DOWN key and after it is processed based on forward and reverse speed. 100% corresponds to the rated motor frequency C4-06.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-22	Frequency reference after restriction by forward/reverse maximum/minimum frequency	0x9B16	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the frequency reference that has been processed with direction limits and further processed based on these limits: maximum forward frequency, minimum forward frequency, maximum reverse frequency, and minimum reverse frequency.</p> <p>Additional information:</p> <p>The values of "Forward maximum frequency", "Forward minimum frequency", "Reverse maximum frequency", and "Reverse minimum frequency" can be viewed through connectors L3045 to L3048.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-23	Frequency reference after jump frequency	0x9B17	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the frequency reference that has been processed with frequency limits and further processed based on the jump frequency (P0-06 to P0-10). 100% corresponds to the rated motor frequency C4-06.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-24	Frequency reference after ramping	0x9B18	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the frequency reference that has been processed with the jump frequency and further processed based on ramping. 100% corresponds to the rated motor frequency C4-06.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-25	Jog 1 frequency	0x9B19	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p>							

	This parameter indicates jog 1 frequency for the active channel, which is obtained based on settings of the jog 1 frequency source and jog 1 frequency reference. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-26	Jog 2 frequency	0x9B1A	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates jog 2 frequency for the active channel, which is obtained based on settings of the jog 2 frequency source and jog 2 frequency reference. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-27	Offset of frequency adjusted by UP/DOWN key	0x9B1B	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the offset of the frequency adjusted by the UP/DOWN key on the operating panel or the terminal functioning as the UP/DOWN key. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-28	Upper limit of frequency adjusted by UP/DOWN key	0x9B1C	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the upper limit of the frequency adjusted by the UP/DOWN key on the operating panel or by the terminal functioning as the UP/DOWN key. 100% corresponds to the rated motor frequency C4-06.  Additional information: The upper/lower limit of frequency adjusted by UP/DOWN key is calculated based on the forward or reverse maximum and minimum frequencies and the frequency reference and direction that have been processed with running limits. For example, when the frequency reference is greater than 0, the upper/lower limit of frequency adjusted by UP/DOWN key can be calculated based on the maximum and minimum forward frequencies.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-29	Lower limit of frequency adjusted by UP/DOWN key	0x9B1D	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the lower limit of the frequency adjusted by the UP/DOWN key on the operating panel or by the terminal functioning as the UP/DOWN key. 100% corresponds to the rated motor frequency C4-06.  Additional information:							

	The upper/lower limit of frequency adjusted by UP/DOWN key is calculated based on the forward or reverse maximum and minimum frequencies and the frequency reference and direction that have been processed with running limits. For example, when the frequency reference is greater than 0, the upper/lower limit of frequency adjusted by UP/DOWN key can be calculated based on the maximum and minimum forward frequencies.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-30	Forward maximum torque	0x9B1E	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the per unit value of the forward maximum torque. Base value of per unit torque = (Rated motor power x 60)/(2PI x Rated motor speed)</p> <p>Additional information:</p> <p>In the non-torque restriction operation mode, the forward maximum torque is the smaller of the digital setting of forward torque limit (d1-10) and the forward torque limit selection (d1-09). In the torque restriction operation mode, the forward maximum torque is the smallest of the digital setting of forward torque limit (d1-10), the forward torque limit selection (d1-09), and the forward maximum torque limit (H1-66).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-31	Reverse maximum torque	0x9B1F	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the per unit value of the reverse maximum torque. Base value of per unit torque = (Rated motor power x 60)/(2PI x Rated motor speed)</p> <p>Additional information:</p> <p>In the non-torque restriction operation mode, the maximum reverse torque is the larger of the digital setting of reverse torque limit (d1-12) and the reverse torque limit selection (d1-11). In the torque restriction operation mode, the maximum reverse torque is the largest of the digital setting of reverse torque limit (d1-12), the reverse torque limit selection (d1-11), and the negated maximum reverse torque limit (H1-67).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-32	Torque reference	0x9B20	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the torque reference. Base value of per unit torque = (Rated motor power x 60)/(2PI x Rated motor speed)</p> <p>Additional information:</p>							

	The torque reference is obtained after the torque is multiplied by the torque gain coefficient and after the torque is further processed based on the maximum and minimum torque limits.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-33	Additional torque	0x9B21	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the additional torque. Base value of per unit torque = <math>(\text{Rated motor power} \times 60) / (2\text{PI} \times \text{Rated motor speed})</math></p> <p>Additional information:</p> <p>The additional torque is obtained after superposition of additional torque 1 and additional torque 2 and after the torque is processed based on the maximum and minimum torque limits.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-34	Torque reference after filtering	0x9B22	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the torque set by Lb-32 after filtering. Base value of per unit torque = <math>(\text{Rated motor power} \times 60) / (2\text{PI} \times \text{Rated motor speed})</math></p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-35	Target torque reference	0x9B23	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the target torque reference. Base value of per unit torque = <math>(\text{Rated motor power} \times 60) / (2\text{PI} \times \text{Rated motor speed})</math></p> <p>Additional information:</p> <p>In non-operating state, the target torque is 0. In operating state, the target torque is the real-time target torque that has been filtered and processed based on torque acceleration and deceleration.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-36	Speed limit in torque control mode	0x9B24	0.0% to 6553.5%	0.0%	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the speed limit in the torque control mode. The value 100% corresponds to the rated motor frequency C4-06.</p>							

	<p>Additional information:</p> <p>In the torque control mode, when the speed limit source for the active channel is set to "digital setting", the speed limit is the digital setting value. When the speed limit source is set to "speed channel", the speed limit is the channel target frequency.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-37	Frequency offset in torque control mode	0x9B25	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the frequency offset in the torque control mode. 100% corresponds to the rated motor frequency C4-06.</p> <p>Additional information:</p> <p>For the active channel, the speed limit offset in the torque control mode is obtained based on settings of the "speed limit offset source" and "digital setting of speed limit offset".</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-38	Target voltage upon V/f separation	0x9B26	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the target voltage upon V/f separation. 100% corresponds to the rated motor voltage C4-03.</p> <p>Additional information:</p> <p>In non-operating state or when V/f separation is disabled, the target voltage upon V/f separation is 0. In operating state and when V/f separation is enabled (the V/f curve type is set to "V/f separation"), the target voltage upon V/f separation is determined based on the V/f separation voltage source, voltage digital setting for V/f separation, and V/f voltage upper limit.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-39	Voltage output upon V/f separation	0x9B27	0.0% to 6553.5%	0.0%	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the voltage output upon V/f separation. 100% corresponds to the rated motor voltage C4-03.</p> <p>Value description:</p> <p>In non-operating state, the voltage output upon V/f separation is 0. In operating state, the voltage output upon V/f separation is the voltage that has been processed based on the voltage acceleration and deceleration for V/f separation.</p>							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
Lb-40	RFG reference input	0x9B28	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the raw RFG input value. The frequency after the ramp change is used as the RFG input. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-41	RFG calculation input	0x9B29	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the target input value that will be updated after RFG calculation starts. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-42	RFG actual target	0x9B2A	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the effective input value that is processed by internal logic after the RFG calculation input update. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-43	RFG calculation output	0x9B2B	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the real-time calculation output value after the RFG calculation input target is calculated based on the acceleration and deceleration time. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-45	RFG final output (rated per-unit value)	0x9B2D	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output value obtained by superimposing the additional frequency on the RFG calculation output value. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-46	RFG acceleration rate	0x9B2E	0.0% to	0.0%	Signed 16	Cannot	Expansion	Nothing

			6553.5%		bits	be changed		
	Description : This parameter indicates the RFG output frequency change rate, that is, the RFG acceleration rate.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-47	RFG forced value of startup frequency function	0x9B2F	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the RFG forced value when the startup frequency is active and the output remains. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-48	Operating frequency	0x9B30	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the real-time output frequency of the AC drive, that is, the motor target frequency. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-49	Frequency reference	0x9B31	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the target frequency obtained by superimposing the channel target frequency after being limited by the frequency range on the channel additional frequency. 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-50	AO1 input ratio	0x9B32	-3276.8% to +3276.7%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the AO1 input ratio. The AO1 output is obtained through curve conversion.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-52	Result of forward frequency upper limit selection	0x9B34	0.0% to 6553.5%	100.0%	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description :							

	This parameter indicates the upper limit set by d1-07, which limits the forward maximum operation frequency. It is a per-unit value based on the rated motor frequency, that is, 100% indicates the rated motor frequency.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-53	Result of reverse frequency upper limit selection	0x9B35	-3276.8% to +3276.7%	- 100.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the upper limit set by d1-08, which limits the reverse maximum operation frequency. It is a per-unit value based on the rated motor frequency, that is, 100% indicates the rated motor frequency.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-60	Running frequency (%)	0x9B3C	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the motor running frequency. 100% corresponds to the rated motor frequency C4-06.  Additional information: In the torque control or V/f control mode, use the feedback frequency. Otherwise, use the performance-enabled control target.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-62	Output current (percentage)	0x9B3E	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the output current. 100% corresponds to the rated motor current C4-04.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-63	Output voltage (percentage)	0x9B3F	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the output voltage. 100% corresponds to the rated motor voltage C4-03.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-64	Output power (percentage)	0x9B40	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the output power. 100% corresponds to the rated motor power C4-01.							



Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-65	Output torque (percentage)	0x9B41	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the output torque. 100% corresponds to $(\text{rated motor power} \times 60) / (2\text{PI} \times \text{rated motor speed})$ .							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Lb-66	Actual motor speed (percentage)	0x9B42	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the actual motor speed. 100% corresponds to $(60 \times \text{rated motor frequency C4-06}) / \text{number of pole pairs}$ .							

## LC: Float Connector 2

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-00	Final frequency reference	0x9C00	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the final output frequency, that is, obtained by drooping the RFG final output frequency (if the droop function is enabled) The value 100% corresponds to the rated motor frequency C4-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-06	Torque reference	0x9C06	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the motor torque reference in the vector mode.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-07	Final flux reference	0x9C07	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the motor flux reference in the vector mode.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-08	Excitation current	0x9C08	0.0% to	0.0%	Signed 16	Cannot be	Expansion	Nothing

	reference		6553.5%		bits	changed		
	Description : This parameter indicates the motor excitation current reference in the vector mode. 100% corresponds to the rated motor current C4-04.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-09	Torque current reference	0x9C09	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the torque current reference in the vector mode. 100% corresponds to the rated motor current C4-04.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-10	Rotor speed	0x9C0A	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the rotor speed. 100% corresponds to the rated motor frequency C4-06.							
	Additional information: The value of this parameter is the encoder speed in the FVC mode, motor observation speed in the SVC mode, and synchronous frequency before slip compensation in the V/f mode.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-12	Output torque	0x9C0C	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output torque per unit value. Base value of per-unit torque = (Rated motor power x 60)/(2PI x Rated motor speed)							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-13	Flux amplitude	0x9C0D	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the motor flux feedback value in the vector mode.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-14	Flux angle	0x9C0E	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the angle between the motor magnetic flux and the stationary coordinate system.							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
LC-18	Output voltage amplitude	0x9C12	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output voltage amplitude of the motor. 100% corresponds to the rated motor voltage C4-03.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-20	Actual excitation current of motor	0x9C14	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the actual excitation current of the motor in the vector mode. 100% corresponds to the rated motor current C4-04.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-21	Actual torque current of motor	0x9C15	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the actual torque current of the motor in the vector mode. 100% corresponds to the rated motor current C4-04.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-22	Output power	0x9C16	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output power per unit value of the motor, which uses the rated AC drive power as the base value.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-26	IU	0x9C1A	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the phase-U output current of the motor. 100% corresponds to the rated motor current C4-04.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-27	IV	0x9C1B	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the phase-V output current of the motor. 100% corresponds to the rated motor current C4-04.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-28	IW	0x9C1C	0.0% to	0.0%	Signed 16	Cannot be	Expansion	Nothing

			6553.5%		bits	changed		
	Description : This parameter indicates the phase-W output current of the motor. 100% corresponds to the rated motor current C4-04.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-29	Motor shutdown time	0x9C1D	0.0s to 6553.5s	0.0s	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the shutdown time of the motor.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-30	Motor running time	0x9C1E	0.0s to 6553.5s	0.0s	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicate the motor running time.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-31	Drive bus voltage	0x9C1F	0.0 V to 6553.5 V	0.0V	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the bus voltage of the AC drive.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-32	Drive overload coefficient	0x9C20	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the overload coefficient of the drive. When 100% is reached, the drive reports E010.1 (Drive overload fault).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-33	Motor overload coefficient	0x9C21	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the overload coefficient of the motor. When 100% is reached, the drive reports E011.1 (Motor overload fault).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-36	General PID output	0x9C24	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the total output of the general PID. Set PID-related parameters in group P2.							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-37	General PID error	0x9C25	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the error input of the general PID. Set PID-related parameters in group P2.							
LC-38	General PID reference	0x9C26	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the reference input of the general PID. Set PID-related parameters in group P2.							
LC-39	General PID feedback	0x9C27	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the general PID feedback. Set PID-related parameters in group P2.							
LC-40	General PID proportional output	0x9C28	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the proportional output of the general PID. Set PID-related parameters in group P2.							
LC-41	General PID integral output	0x9C29	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the integral output of the general PID. Set PID-related parameters in group P2.							
LC-42	General PID differential output	0x9C2A	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicate the differential output of the general PID. Set PID-related parameters in group P2.							
LC-47	Carrier frequency	0x9C2F	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description :							

	This parameter indicates the final effective carrier frequency.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-59	Monitoring variable 0	0x9C3B	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : Internal variable gShowData display							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-60	Monitoring variable 1	0x9C3C	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the value of the internal variable gShowData[1].							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-61	Monitoring variable 2	0x9C3D	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the value of the internal variable gShowData[2].							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-62	Monitoring variable 3	0x9C3E	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the value of the internal variable gShowData[3].							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-63	Monitoring variable 4	0x9C3F	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the value of the internal variable gShowData[4].							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-64	Monitoring variable 5	0x9C40	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the value of the internal variable gShowData[5].							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-65	Monitoring variable 6	0x9C41	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing

	Description : This parameter indicates the value of the internal variable gShowData[6].							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-66	Monitoring variable 7	0x9C42	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the value of the internal variable gShowData[7].							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-67	Monitoring variable 8	0x9C43	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the value of the internal variable gShowData[8].							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-68	Monitoring variable 9	0x9C44	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the value of the internal variable gShowData[9].							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-77	Speed loop active Kp	0x9C4D	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the proportional coefficient of the speed loop.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-78	Speed loop active Ti	0x9C4E	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the integral coefficient of the speed loop.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-79	Speed loop output	0x9C4F	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicate the speed loop output value.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-80	Speed loop Kp output	0x9C50	0.0% to	0.0%	Signed 16	Cannot be	Expansion	Nothing

			6553.5%		bits	changed		
	<p>Description :</p> <p>This parameter indicates the proportional coefficient output of the speed loop.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-81	Speed loop Ti output	0x9C51	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the integral coefficient output of the speed loop.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-82	Forward torque limit	0x9C52	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the per unit value of the forward maximum torque. Base value of per unit torque = (Rated motor power x 60)/(2PI x Rated motor speed)</p> <p>Additional information:</p> <p>In the non-torque restriction operation mode, the forward maximum torque is the smaller of the digital setting of forward torque limit (d1-10) and the forward torque limit selection (d1-09). In the torque restriction operation mode, the forward maximum torque is the smallest of the digital setting of forward torque limit (d1-10), the forward torque limit selection (d1-09), and the forward maximum torque limit (H1-66).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-83	Reverse torque limit value	0x9C53	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the per unit value of the reverse maximum torque. Base value of per unit torque = (Rated motor power x 60)/(2PI x Rated motor speed)</p> <p>Additional information:</p> <p>In the non-torque restriction operation mode, the maximum reverse torque is the larger of the digital setting of reverse torque limit (d1-12) and the reverse torque limit selection (d1-11). In the torque restriction operation mode, the maximum reverse torque is the largest of the digital setting of reverse torque limit (d1-12), the reverse torque limit selection (d1-11), and the negated maximum reverse torque limit (H1-67).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-84	Forward torque current limit	0x9C54	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description :</p> <p>This parameter indicates the active forward maximum torque current. The per unit value is the rated motor current C4-04.</p>							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective



		address				mode	authority	mode
LC-85	Reverse torque current limit	0x9C55	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the active reverse maximum torque current. The per unit value is the rated motor current C4-04.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-86	Unlimited speed loop output	0x9C56	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicate the unlimited speed loop output value.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-87	Torque feedforward output	0x9C57	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the torque feedforward output value. Base value of per-unit torque = (Rated motor power x 60)/(2PI x Rated motor speed)							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-88	Load observation torque	0x9C58	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the load observation torque. Base value of per-unit torque = (Rated motor power x 60)/(2PI x Rated motor speed)							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-89	Total additional torque	0x9C59	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the additional torque. Base value of per unit torque = (Rated motor power x 60)/(2PI x Rated motor speed)  Additional information: The additional torque is obtained after superposition of additional torque 1 and additional torque 2 and after the torque is processed based on the maximum and minimum torque limits.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-92	Output value 1 viewed through variable connector	0x9C5C	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description :							

	<p>This parameter indicates output value 1 viewed through the variable connector.</p> <p>Additional information: The internal parameter index of variable connector 1 is set by Ab-48. If the variable is a floating number, it is displayed in the connector.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-93	Output value 2 viewed through variable connector	0x9C5D	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description : This parameter indicates output value 2 viewed through the variable connector.</p> <p>Additional information: The internal parameter index of variable connector 2 is set by Ab-49. If the variable is a floating number, it is displayed in the connector.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-94	Output value 3 viewed through variable connector	0x9C5E	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description : This parameter indicates output value 3 viewed through the variable connector.</p> <p>Additional information: The internal parameter index of variable connector 3 is set by Ab-50. If the variable is a floating number, it is displayed in the connector.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-95	Output value 4 viewed through variable connector	0x9C5F	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	<p>Description : This parameter indicates output value 4 viewed through the variable connector.</p> <p>Additional information: The internal parameter index of variable connector 4 is set by Ab-51. If the variable is a floating number, it is displayed in the connector.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
LC-96	Output value 5 viewed through variable	0x9C60	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing

	connector							
	<p>Description :</p> <p>This parameter indicates output value 5 viewed through the variable connector.</p> <p>Additional information:</p> <p>The internal parameter index of variable connector 5 is set by Ab-52. If the variable is a floating number, it is displayed in the connector.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Output value 6 viewed through variable connector	0x9C61	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
LC-97	<p>Description :</p> <p>This parameter indicates output value 6 viewed through the variable connector.</p> <p>Additional information:</p> <p>The internal parameter index of variable connector 6 is set by Ab-53. If the variable is a floating number, it is displayed in the connector.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Output value 7 viewed through variable connector	0x9C62	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
LC-98	<p>Description :</p> <p>This parameter indicates output value 7 viewed through the variable connector.</p> <p>Additional information:</p> <p>The internal parameter index of variable connector 7 is set by Ab-54. If the variable is a floating number, it is displayed in the connector.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Output value 8 viewed through variable connector	0x9C63	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
LC-99	<p>Description :</p> <p>This parameter indicates output value 8 viewed through the variable connector.</p> <p>Additional information:</p> <p>The internal parameter index of variable connector 8 is set by Ab-55. If the variable is a floating number, it is displayed in the connector.</p>							

## Ld: Float Connector 3

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-48	Output corresponding to the selected multi-reference value	0x9D30	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to the selected multi-reference value.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-49	Output corresponding to multi-reference 0	0x9D31	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 0.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-50	Output corresponding to multi-reference 1	0x9D32	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 1.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-51	Output corresponding to multi-reference 2	0x9D33	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 2.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-52	Output corresponding to multi-reference 3	0x9D34	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 3.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-53	Output corresponding to multi-reference 4	0x9D35	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 4.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

Ld-54	Output corresponding to multi-reference 5	0x9D36	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 5.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-55	Output corresponding to multi-reference 6	0x9D37	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 6.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-56	Output corresponding to multi-reference 7	0x9D38	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 7.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-57	Output corresponding to multi-reference 8	0x9D39	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 8.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-58	Output corresponding to multi-reference 9	0x9D3A	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 9.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-59	Output corresponding to multi-reference 10	0x9D3B	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 10.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-60	Output corresponding to multi-reference 11	0x9D3C	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 11.							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
Ld-61	Output corresponding to multi-reference 12	0x9D3D	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 12.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-62	Output corresponding to multi-reference 13	0x9D3E	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 13.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-63	Output corresponding to multi-reference 14	0x9D3F	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 14.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-64	Output corresponding to multi-reference 15	0x9D40	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the output corresponding to multi-reference 15.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-89	Percentage of AO1 value written through communication	0x9D59	0.0% to 6553.5%	0.0%	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the per unit value of the AO curve input written by communication.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-92	Per-unit current based on the maximum 1000 A	0x9D5C	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the per-unit current based on the maximum 1000 A.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-93	Per-unit voltage based on the maximum 1000 V	0x9D5D	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description :							

	This parameter indicates the per-unit voltage based on the maximum 1000 V.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-94	Absolute value of torque output through AO	0x9D5E	0.0% to 6553.5%	0.0%	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the absolute value of the torque output through AO.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-95	AO output torque (-200.0% to +200.0%)	0x9D5F	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the range of the torque output through AO, which is -200.0% to +200.0%.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-96	PLC target velocity	0x9D60	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the per-unit frequency set by simple PLC. The base value of the per-unit frequency is the rated motor frequency (C4-06).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-98	PID reverse cut-off output	0x9D62	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the maximum output for PID reverse cut-off.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
Ld-99	Communication setting	0x9D63	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the data written to communication addresses 0x1000H and 7310H.  Additional information: The frequency source, torque upper limit source, V/f separation voltage source, PID reference source, PID feedback source can be set to communication. Communication addresses 0x1000H and 7310H are switched through n0-13 and n0-14.							

## U0: General Monitoring Parameter 0

Param.	Name	Communication	Range	Default	Data type	Change	User	Effective
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		address				mode	authority	mode
U0-00	Operating frequency	0x7000	0.00 Hz to 600.00 Hz	0.00Hz	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the absolute value of the AC drive operating frequency in the unit of Hz.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-01	Frequency reference	0x7001	0.00 Hz to 600.00 Hz	0.00Hz	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the absolute value of the AC drive frequency reference in the unit of Hz.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-02	Bus voltage	0x7002	0.0 V to 6553.5 V	0.0V	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the bus voltage of the AC drive in the unit of V.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-03	Output voltage	0x7003	0 V to 6553.5 V	0V	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the output voltage of the AC drive in the unit of V during operation.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-04	Output current	0x7004	0.00 A to 655.35 A	0.00A	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the output current of the AC drive in the unit of A during operation.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-05	Output power	0x7005	-3276.8 kW to +3276.7	0.0kW	Signed 16 bits	Cannot be changed	Standard	Nothing



			kW																																						
	Description: This parameter indicates the output power of the AC drive in the unit of kW during operation.																																								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																																	
U0-06	Output torque	0x7006	-3276.8% to +3276.7%	0.0%	Signed 16 bits	Cannot be changed	Standard	Nothing																																	
	Description: This parameter indicates the output torque of the AC drive in the unit of percentage during operation. The base value of the percentage is the rated motor torque.																																								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode																																	
U0-07	DI input state	0x7007	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing																																	
	Value: <table border="1" data-bbox="269 982 987 1913"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>DI1 status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 1</td> <td>DI2 status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 2</td> <td>DI3 status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 3</td> <td>DI4/HDI status</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 4</td> <td>DI5 status (MD600A)</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 5</td> <td>Reserved</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 6</td> <td>Reserved</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 7</td> <td>Reserved</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 8</td> <td>Reserved</td> <td>0: Low level 1: High level</td> </tr> <tr> <td>Bit 9</td> <td>Reserved</td> <td>0: Low level 1: High level</td> </tr> </tbody> </table>								Bit	Name	Value	Bit 0	DI1 status	0: Low level 1: High level	Bit 1	DI2 status	0: Low level 1: High level	Bit 2	DI3 status	0: Low level 1: High level	Bit 3	DI4/HDI status	0: Low level 1: High level	Bit 4	DI5 status (MD600A)	0: Low level 1: High level	Bit 5	Reserved	0: Low level 1: High level	Bit 6	Reserved	0: Low level 1: High level	Bit 7	Reserved	0: Low level 1: High level	Bit 8	Reserved	0: Low level 1: High level	Bit 9	Reserved	0: Low level 1: High level
Bit	Name	Value																																							
Bit 0	DI1 status	0: Low level 1: High level																																							
Bit 1	DI2 status	0: Low level 1: High level																																							
Bit 2	DI3 status	0: Low level 1: High level																																							
Bit 3	DI4/HDI status	0: Low level 1: High level																																							
Bit 4	DI5 status (MD600A)	0: Low level 1: High level																																							
Bit 5	Reserved	0: Low level 1: High level																																							
Bit 6	Reserved	0: Low level 1: High level																																							
Bit 7	Reserved	0: Low level 1: High level																																							
Bit 8	Reserved	0: Low level 1: High level																																							
Bit 9	Reserved	0: Low level 1: High level																																							

Bit 10	VDI1 status	0: Low level 1: High level
Bit 11	VDI2 status	0: Low level 1: High level
Bit 12	VDI3 status	0: Low level 1: High level
Bit 13	VDI4 status	0: Low level 1: High level
Bit 14	VDI5 status	0: Low level 1: High level
Bit 15	VDI6 status	0: Low level 1: High level

**Description :**

This parameter indicates the input status value of the DI. After the value is converted to binary data, each bit corresponds to one DI signal.

**Value description:**

Bit 0: DI1 status

0: Low level

Low-level signals are input.

1: High level

High-level signals are input.

Bit 1: DI2 status

0: Low level

Low-level signals are input.

1: High level

High-level signals are input.

Bit 2: DI3 status

0: Low level

Low-level signals are input.

1: High level

High-level signals are input.

Bit 3: DI4 status

0: Low level

Low-level signals are input.

1: High level

High-level signals are input.

Bit 4: DI5 status

0: Low level

Low-level signals are input.

1: High level  
 High-level signals are input.  
 Bit 10: VDI1 status  
 0: Low level  
 Low-level signals are input.  
 1: High level  
 High-level signals are input.  
 Bit 11: VDI2 status  
 0: Low level  
 Low-level signals are input.  
 1: High level  
 High-level signals are input.  
 Bit 12: VDI3 status  
 0: Low level  
 Low-level signals are input.  
 1: High level  
 High-level signals are input.  
 Bit 13: VDI4 status  
 0: Low level  
 Low-level signals are input.  
 1: High level  
 High-level signals are input.  
 Bit 14: VDI5 status  
 0: Low level  
 Low-level signals are input.  
 1: High level  
 High-level signals are input.  
 Bit 15: VDI6 status  
 0: Low level  
 Low-level signals are input.  
 1: High level  
 High-level signals are input.

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode							
U0-08	DO output status	0x7008	Refer to "Value"	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing							
	Value:														
		<table border="1"> <thead> <tr> <th>Bit</th> <th>Name</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Bit 0</td> <td>RO1 status</td> <td>0: Low level 1: High level</td> </tr> </tbody> </table>		Bit	Name	Value	Bit 0	RO1 status	0: Low level 1: High level						
Bit	Name	Value													
Bit 0	RO1 status	0: Low level 1: High level													

Bit 1	Reserved	0: Low level 1: High level
Bit 2	Reserved	0: Low level 1: High level
Bit 3	Reserved	0: Low level 1: High level
Bit 4	DO1 status (MD600A)	0: Low level 1: High level
Bit 5	DO2 status (MD600A)	0: Low level 1: High level
Bit 6	Reserved	0: Low level 1: High level
Bit 7	Reserved	0: Low level 1: High level
Bit 8	Reserved	0: Low level 1: High level
Bit 9	Reserved	0: Low level 1: High level
Bit 10	VDO1 status	0: Low level 1: High level
Bit 11	VDO2 status	0: Low level 1: High level
Bit 12	VDO3 status	0: Low level 1: High level
Bit 13	VDO4 status	0: Low level 1: High level
Bit 14	VDO5 status	0: Low level 1: High level
Bit 15	VDO6 status	0: Low level 1: High level

**Description:**

This parameter indicates the output status value of the DO. After the value is converted into binary data, every bit corresponds to one DO signal.

**Value description:**

Bit 0: RO1 status

0: Low level

Low-level signals are input.

1: High level

High-level signals are input.

	<p>Bit 4: DO1 status  0: Low level  Low-level signals are input.  1: High level  High-level signals are input.</p> <p>Bit 4: DO2 status  0: Low level  Low-level signals are input.  1: High level  High-level signals are input.</p> <p>Bit 10: VDO1 status  0: Low level  Low-level signals are input.  1: High level  High-level signals are input.</p> <p>Bit 11: VDO2 status  0: Low level  Low-level signals are input.  1: High level  High-level signals are input.</p> <p>Bit 12: VDO3 status  0: Low level  Low-level signals are input.  1: High level  High-level signals are input.</p> <p>Bit 13: VDO4 status  0: Low level  Low-level signals are input.  1: High level  High-level signals are input.</p> <p>Bit 14: VDO5 status  0: Low level  Low-level signals are input.  1: High level  High-level signals are input.</p> <p>Bit 15: VDO6 status  0: Low level  Low-level signals are input.  1: High level  High-level signals are input.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

U0-09	AI1 voltage	0x7009	-10.57 V to 10.57 V	0.00V	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the AI1 sampling data in the unit of V.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-14	Load speed	0x700E	0 rpm to 65535 rpm	0rpm	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the target load speed in the unit of rpm. The decimal place of the value is determined by A0-12 (Number of decimal places for load speed display).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-15	PID reference	0x700F	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the process PID reference (unit: 1). PID reference = P2-02 (PID reference percentage) x P2-05 (PID reference feedback range)							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-16	PID feedback	0x7010	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the process PID feedback value (unit: 1). PID feedback = P2-04 (PID feedback percentage) x P2-05 (PID reference feedback range)							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-17	PLC stage	0x7011	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the simple PLC operation stage, which includes 16 stages.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-18	HDI input pulse	0x7012	0.00 kHz to	0.00kHz	Unsigned	Cannot be	Standard	Nothing

	frequency		20.00 kHz		16 bit	changed		
	Description: This parameter indicates the high-speed pulse sampling frequency of DI4 in the unit of 0.01 kHz after the HDI function is enabled.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-19	Actual motor frequency	0x7013	-327.68 Hz to 327.67 Hz	0.00Hz	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the actual running frequency of the motor in the unit of Hz. The decimal place of the value is determined by A0-12 (Number of decimal places for load speed display).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-20	Remaining time for timing operation	0x7014	0.0 min to 6553.5 min	0.0min	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the remaining time for timing operation in the unit of minute.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-21	AI1 voltage before correction	0x7015	-10.570 V to 10.570 V	0.000V	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the AI1 input sampling voltage in the unit of V.  Additional information: The actually used voltage is obtained after linear correction to reduce the deviation between the sampled voltage and the actual input voltage. For actual used voltage, see U0-09.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-24	Actual motor speed	0x7018	0 rpm to 65535 rpm	0rpm	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the actual feedback speed in the unit of rpm. The decimal place of the value is determined by A0-12 (Number of decimal places for load speed display).							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-25	Current power-on time	0x7019	0 min to 65535 min	0min	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the current power-on time in the unit of minute.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-26	Current running time	0x701A	0.0 min to 6553.5 min	0.0min	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the current running time in the unit of minute. The maximum value is 6553.5 minutes. If the maximum value is reached, timing stops.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-27	HDI input pulse frequency	0x701B	0 Hz to 20000 Hz	0Hz	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the high-speed pulse sampling frequency of DI4 in the unit of Hz after the HDI function is enabled. It is the same as U0-18 except the unit.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-28	Communication setting value	0x701C	-327.68% to 327.67%	0.00%	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description: This parameter displays the data written through communication address 0x1000.  Additional information: The base of percentage is determined by the value set by address 0x1000. The unit of this value can be switched through n0-13.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-30	Digital setting of main frequency	0x701E	-327.68 Hz to 327.67 Hz	0.00Hz	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description:							



	This parameter indicates the main frequency in the unit of Hz.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-31	Digital setting of auxiliary frequency	0x701F	-327.68 Hz to 327.67 Hz	0.00Hz	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the auxiliary frequency in the unit of Hz.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-35	Target torque	0x7023	-200.0% to 200.0%	0.0%	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the torque in the torque mode in percentage. 100% corresponds to the per unit torque base value of A2-06.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-37	Power factor angle	0x7025	-3276.8° to +3276.7°	0.0°	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the current power factor angle.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-39	Target voltage upon V/f separation	0x7027	0 V to 65535 V	0V	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the target output voltage in the unit of V upon V/f separation.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-40	Output voltage upon V/f separation	0x7028	0 V to 65535 V	0V	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the actual output voltage in the unit of V upon V/f separation.							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
U0-45	Fault code	0x702D	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the current fault code.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-46	Minor fault code	0x702E	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the current minor fault code.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-47	Alarm code	0x702F	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the current alarm code.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-48	Prompt code	0x7030	0.0 to 6553.5	0.0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the current prompt code.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-49	Set fan speed	0x7031	0 rpm to 65535 rpm	0rpm	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the set speed of the fan in the unit of rpm during operation.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-50	Actual fan speed	0x7032	-32768 rpm to +32767	0rpm	Signed 16 bits	Cannot be changed	Expansion	Nothing

			rpm					
	Description: This parameter indicates the actual speed of the fan in the unit of rpm.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-51	Offset of frequency adjusted by UP/DOWN key	0x7033	-327.68 Hz to 327.67 Hz	0.00Hz	Signed 16 bits	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates the offset of the frequency adjusted by the UP/DOWN key on the operating panel or by terminal functioning as the UP/DOWN key. The unit is Hz.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-52	Fan initialization	0x7034	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description: This parameter indicates whether the fan is initialized upon power-on.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-56	Output per-unit value of MD-BP-M potentiometer	0x7038	0.00% to 655.35%	0.00%	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the output value of the MD-BP-M potentiometer voltage and frequency curve.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-57	Voltage of MD-BP-M potentiometer	0x7039	-10.57 V to 10.57 V	0.00V	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the voltage of the MD-BP-M potentiometer.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-59	Frequency reference (%)	0x703B	-3276.8% to +3276.7%	0.0%	Signed 16 bits	Cannot be changed	Standard	Nothing



	This parameter indicates the per-unit value of the torque upper limit.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	AC drive status 2	0x7044	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
U0-68	<p>Description :</p> <p>This parameter indicates the AC drive status 2.</p> <p>Value description:</p> <p>Bit 0: Operation</p> <p>0: Stopped The AC drive has stopped.</p> <p>1: Running The AC drive is running.</p> <p>Bit 1: Forward/Reverse rotation</p> <p>0: Forward running The AC drive is running in the forward direction.</p> <p>1: Reverse running The AC drive is running in the reverse direction.</p> <p>Bit 2: Faulty status</p> <p>0: No fault No fault occurs on the AC drive.</p> <p>1: Fault Faults occur on the AC drive.</p> <p>Bit 3: Frequency reach</p> <p>0: Not reached The AC drive does not reach the preset speed.</p> <p>1: Reached The AC drive reaches the preset speed.</p> <p>Bit 4 to bit 7: Reserved</p> <p>Bit 8 to bit 15: Fault master code For details, see specific fault descriptions.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Actual motor frequency (signed)	0x7045	-327.67 Hz to 327.67 Hz	0.00Hz	Signed 16 bits	Cannot be changed	Standard	Nothing
U0-69	<p>Description :</p> <p>This parameter indicates the actual running frequency of the drive. The value is signed data, and the decimal place of the value is determined by A0-12 (Number of decimal places for load speed display).</p>							

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-70	actual motor speed (signed)	0x7046	-32768 rpm to +32767 rpm	0rpm	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the actual running speed in the unit of rpm. The value is signed data, indicating the forward or reverse direction.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-71	Output current (one decimal place)	0x7047	0.0 A to 6553.5 A	0.0A	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the output current of the AC drive in the unit of A during operation. The number of decimal places for the value is fixed to one.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-75	Actual motor frequency (unsigned)	0x704B	0.00 Hz to 655.35 Hz	0.00Hz	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the actual running frequency of the drive. The value is signed data, and the decimal place of the value is determined by A0-11 (Number of decimal places for frequency).							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-76	Low-order bits of cumulative power consumption	0x704C	0.0 kWh to 6553.5 kWh	0.0kWh	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter displays the low-order bits of cumulative power consumption.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U0-77	High-order bits of cumulative power consumption	0x704D	0 kWh to 65535 kWh	0kWh	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description :							

	This parameter displays the high-order bits of cumulative power consumption.
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## U2: General Monitoring Parameter 2

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U2-01	Current control channel	0x7201	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Value: 0: Control channel 1 1: Control channel 2							
	Description: This parameter indicates the active target control channel.  Value description: 0: Control channel 1 1: Control channel 2							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U2-02	Current reference channel	0x7202	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Value: 0: Reference channel 1 1: Reference channel 2							
	Description: This parameter indicates the active reference channel.  Value description: 0: Reference channel 1 1: Reference channel 2							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U2-03	Active jump frequency	0x7203	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the active jump frequency.  Value description: 1: Jump frequency 1 is active.							

	<p>2: Jump frequency 2 is active.  4: Jump frequency 3 is active.  8: Jump frequency 4 is active</p> <p>Additional information:  This parameter is valid only when the jump frequency function is enabled. If the jump frequency function is disabled, this parameter is forcibly set to 0.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U2-04	Local or remote control mode	0x7204	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Value: 0: Remote 1: Local							
	Description: This parameter indicates the active control command status.  Value description: 0: Remote 1: Local							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U2-05	Active multi-reference	0x7205	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the active multi-reference.  Additional information: The AC drive provides four multi-reference terminals (b8-03 to b8-06), which provide 16 states, corresponding to 16 frequencies.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U2-06	Current multi-reference effective value	0x7206	-3276.7% to +3276.7%	0.0%	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the effective value of the active multi-reference.  Additional information: The value of this parameter is a percentage of the rated frequency. 100% corresponds to the rated motor frequency.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode



U2-08	Time required for power-off	0x7208	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
Description: This parameter indicates the time required for power-off.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U2-13	Protection action selection for fault	0x720D	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
Value: 0: Invalid 1: Coast to stop 2: Stop at maximum capacity 4: Quick stop 8: Decelerate to stop 512: Running with restriction 1024: Alarm 2048: Prompt								
Description: This parameter indicates the protection action selection when a fault occurs.								
Value description: 0: Invalid 1: Coast to stop 2: Stop at maximum capacity 4: Quick stop 8: Decelerate to stop 512: Running with restriction 1024: Alarm 2048: Prompt								
Additional information: For example, if U2-13 is set to 1024, "Alarm" is displayed on the operating panel when the selected fault occurs.								
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U2-14	Fault automatic reset and restart step	0x720E	Refer to "Value"	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
Value: 0: Automatic fault reset and initialization 1: Confirm whether automatic fault reset is enabled 2: Obtain the number of automatic fault reset times 3: Automatic fault reset interval 4: Counting of time interval for automatic fault reset 5: Return to fault 6: Fault waiting 7: Check fault 8: Wait for running 9: Restart 10: Wait for running after restart 11: Cancel fault 12: Automatic reset failed								

	<p>Description :</p> <p>This parameter indicates the automatic fault reset and restart steps.</p> <p>Value description:</p> <p>0: Automatic fault reset and initialization</p> <p>1: Confirm whether automatic fault reset is enabled</p> <p>2: Obtain the number of automatic fault reset times</p> <p>3: Automatic fault reset interval</p> <p>4: Counting of time interval for automatic fault reset</p> <p>5: Return to fault</p> <p>6: Fault waiting</p> <p>7: Check fault</p> <p>8: Wait for running</p> <p>9: Restart</p> <p>10: Wait for running after restart</p> <p>11: Cancel fault</p> <p>12: Automatic reset failed</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Prompt for parameter setting error	0x7217	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
U2-23	<p>Description :</p> <p>This parameter indicates the prompt for parameter setting errors.</p> <p>0: No exception</p> <p>1: Reserved</p> <p>2: Reserved</p> <p>3: Reserved</p> <p>4: Reserved</p> <p>5: Reserved</p> <p>6: Reserved</p> <p>7: Reserved</p> <p>8: Reserved</p> <p>9: Reserved</p> <p>10: The multi-point curve setting is abnormal.</p> <p>11: The user load curve setting is abnormal.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Macro parameter backup error	0x7218	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
U2-24	<p>Description :</p> <p>This flag bit is set and alarm A032.7 is reported when the number of backup parameters exceeds the upper limit.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode

U2-25	Remaining time for timing operation	0x7219	0.0 min to 6553.5 min	0.0min	Unsigned 16 bit	Cannot be changed	Expansion	Nothing
	Description : This parameter indicates the remaining time for timing operation.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U2-63	Communication alarm	0x723F	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates an alarm is reported for the current communication.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U2-68	Module temperature	0x7244	0.0°C to 6553.5°C	0.0°C	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the temperature of the AC drive heatsink module in the unit of °C.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U2-69	AI1 input setting proportion	0x7245	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the AI1 curve input per unit value. 100% corresponds to the upper limit of the AI curve input.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U2-72	HDI input setting proportion	0x7248	0.0% to 6553.5%	0.0%	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the HDI curve input per unit value. 100% corresponds to the upper limit of the HDI curve input.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U2-73	AO1 input proportion	0x7249	-3276.8% to +3276.7%	0.0%	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the AO1 input proportion. The AO1 output is obtained through curve conversion.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U2-75	AO1 output before correction	0x724B	-327.67 V to 327.67 V	0.00V	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the AO1 output value before automatic correction.							
Param.	Name	Communication	Range	Default	Data type	Change	User	Effective

		address				mode	authority	mode
U2-77	AO1 output after correction	0x724D	-32.767 V to 32.767 V	0.000V	Signed 16 bits	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the AO1 output value after automatic correction.							

### U3: General Monitoring Parameter 3

Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-00	LCD command word	0x7300	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the current LCD command word.  Value description: 1: Forward rotation 2: Reverse rotation 3: Jog 1 4: Jog 2 5: Fault reset 6: Stop command  Additional information:: If U3-00 always displays A5A5, it indicates invalid data and is used for invalid commands. The host controller data cannot be displayed.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-01	Remote call	0x7301	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the address of the Loc/Rem key on the SOP-20.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-02	IDS command word	0x7302	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description: This parameter indicates the IDS control command word.  Value description: 1: Start 2: Stop							

	3: Jog 1 4: Jog 2 5: Fault reset 6: Forward direction 7: Reverse direction 8: Auto-tuning 9: Self-check  Additional information: If U3-02 always displays A5A5, it indicates invalid data and is used for invalid commands. The host controller data cannot be displayed.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-03	Commissioning software control permission	0x7303	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates whether the commissioning software control permission is written successfully.							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-07	LED control word	0x7307	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the command control word on the LED operating panel.  Value description: 1: Running 2: Stop 3: Jog 1 4: Local 5: Fault reset 6: Jog 2 7: Direction change							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-08	Commissioning software control word	0x7308	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the command control word of the commissioning software.  Value description: 1: Forward rotation 2: Reverse rotation 3: Jog 1							

	<p>4: Jog 2 5: Fault reset 6: Stop command</p> <p>Additional information:: If U3-08 always displays A5A5, it indicates invalid data and is used for invalid commands. The host controller data cannot be displayed.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-09	SOP control word	0x7309	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Description : This parameter indicates the command control word of the SOP-20.</p> <p>Value description: 1: Start 2: Stop 3: Jog 1 4: Jog 2 5: Fault reset 6: Forward direction 7: Reverse direction 8: Auto-tuning 9: Self-check</p> <p>Additional information: If U3-09 always displays A5A5, it indicates invalid data and is used for invalid commands. The host controller data cannot be displayed.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-16	Speed 2 set through communication (0x7310)	0x7310	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Description : This parameter indicates the speed in the unit of Hz written by address 0x7310. The number of decimal places is determined by n0-14.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-17	Control word 2 set through communication (0x7311)	0x7311	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Description : This parameter indicates control word 2 set through communication.</p> <p>Value description: 0: Stop according to the stop mode</p>							

	<p>1: Forward running  2: Reverse running  3: Jog 1  4: Jog 2  5: Coast to stop  6: Stop according to the stop mode  7: Fault reset  8: Emergency stop</p> <p>Additional information: If U3-17 always displays A5A5, it indicates invalid data and is used for invalid commands. The host controller data cannot be displayed.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-18	DO status setting (DO function setting source: communication)	0x7312	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Description :  The value can be changed through communication to control the DO output.</p> <p>Additional information: Change the DO output level signal through communication. This parameter is similar to E1-02 (DO output function selection) with the value set to 20 (Communication setting).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-19	AO1 output (AO1 function setting source: communication)	0x7313	0% to 65535%	0%	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Description :  The value can be changed through communication to control the AO output.</p> <p>Additional information: Change the AO output level signal through communication. This parameter is similar to E3-00 (AO output function selection) with the value set to 12 (Communication setting).</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-23	Speed 1 set through communication (0x1000)	0x7317	-32768 to 32767	0	Signed 16 bits	Cannot be changed	Standard	Nothing
	<p>Description :  This parameter indicates the speed in the unit of Hz written through address 0x1000. The number of decimal places is determined by n0-13.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-28	Communication status word	0x731C	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing

	<p>Description :</p> <p>This parameter indicates the AC drive status word set through communication.</p> <p>Value description:</p> <p>1: Forward running</p> <p>2: Reverse running</p> <p>3: Stopped</p> <p>4: Auto-tuning</p> <p>5: Faulty</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
	Control word 1 set through communication (0x7321)	0x7321	0x0 to 0xFFFF	0x0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
U3-33	<p>Description :</p> <p>This parameter indicates control word 1 set through communication.</p> <p>Value description:</p> <p>Bit 0: ON_OFF1 (start/stop)</p> <p>0: Stop</p> <p>1: Run</p> <p>Bit 1: OFF2 (coast to stop)</p> <p>0: Stop</p> <p>Bit 2: OFF3 (quick stop)</p> <p>0: Stop</p> <p>Bit 3: Running permission</p> <p>1: Enable</p> <p>Bit 4: Reset command</p> <p>1: Reset</p> <p>Bit 5: JOG1</p> <p>1: Valid</p> <p>Bit 6: JOG2</p> <p>1: Valid</p> <p>Bit 7: Speed inversion</p> <p>1: Invert the speed</p> <p>Additional information: If U3-33 always displays A5A5, it indicates invalid data and is used for invalid commands. The host controller data cannot be displayed.</p>							
Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-50	Reading of fault main code	0x7332	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	<p>Description :</p> <p>This parameter indicates the main code of the minor fault.</p>							



Param.	Name	Communication address	Range	Default	Data type	Change mode	User authority	Effective mode
U3-51	Reading of fault sub-code	0x7333	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the sub-code of the minor fault.							
U3-52	Reading of minor fault main code	0x7334	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the main code of the minor fault.							
U3-53	Reading of minor fault sub-code	0x7335	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the sub-code of the minor fault.							
U3-54	Reading of alarm main code	0x7336	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the alarm main code.							
U3-55	Reading of alarm sub-code	0x7337	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the alarm sub-code.							
U3-56	Reading of prompt main code	0x7338	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description : This parameter indicates the prompt main code.							
U3-57	Reading of prompt sub-code	0x7339	0 to 65535	0	Unsigned 16 bit	Cannot be changed	Standard	Nothing
	Description :							

	This parameter indicates the prompt sub-code.
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## 2 Fault and Alarm List

Fault code	Fault name	Cause	Fault level	Default fault level	Reset
		The instantaneous output current exceeds 3.535 times the AC drive rated current (A3-03).	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
	Hardware overcurrent	Output grounding	<p>1. Measure the resistance of the output end to ground with a megger to check whether the resistance is in the unit of megohm.</p> <p>2. Enable manual self-check (C2-04 = 1) and enable the drive to run. If no fault is reported, the drive is normal. (The IT power grid cannot detect short circuit to ground. For details, see section "Self-check" in the function guide.)</p>	Replace the part that encounters short circuit to ground faults, such as the motor or cable.	

		<p>Output inter-phase short circuit</p>	<p>1. Measure the resistance between UV/VW/WU phases with a multimeter (in resistance mode) to check whether the resistance is symmetrical. 2. Enable manual self-check (C2-04 = 1) and enable the drive to run. If no fault is reported, the drive is normal.</p>	<p>Replace the part that encounters short circuit to ground faults</p>
		<p>High value of the speed loop gain (SVC)</p>	<p>Reduce the speed loop Kp (F2-02) to half the current value and set the speed loop Ti (F2-03) to 2s. Start running and observe whether the drive can run smoothly. If the fault persists, reduce the Kp to half the current value several times. If the fault still occurs, the fault is not caused by the cause.</p>	<p>Reduce the speed loop Kp (F2-02) to half the current value and set the speed loop Ti (F2-03) to 2s.</p>

		<p>Synchronous motor demagnetization (SVC)</p>	<p>Record the current back EMF (F1-12), disassemble the motor coupling, and perform dynamic auto-tuning for the synchronous motor (F1-69 = 12) again. Compare whether the new value of the back EMF is lower than the initial value. Note that when the motor temperature increases, the back EMF decreases by less than 10%. If the back EMF recovers after cooling, it is normal.</p>	<p>Analyze the specific demagnetization causes. Common causes include low carrier frequency, oscillation in speed control mode, and excessive motor back EMF and output current harmonic. If the motor is replaced directly, demagnetization may occur again.</p>
		<p>Synchronous/asynchronous motor parameters are not tuned in the vector control mode (SVC).</p>	<p>In the SVC control mode (F0-01 = 0), perform parameter auto-tuning. Compare the parameters in group F1 to the default values to check whether auto-tuning has been performed.</p>	<p>Perform accurate parameter auto-tuning or download all parameters that need auto-tuning. For details, see the Commissioning and Trial Run section in the function guide.</p>

		Low carrier frequency during high-speed operation	Check whether the carrier frequency set for the motor during high-speed operation is higher than the result of output frequency x 12. If no, control dissipation may result in overcurrent.	The carrier frequency of high-power machines is low by default. In this case, increase the carrier frequency during high-speed motor operation. Calculate derating according to the carrier frequency and select the model according to the derating coefficient.
		The motor is started during rotation (synchronous motor in SVC).	Before start, check whether the motor is rotating, especially check whether the load is heavy with large inertia. The time for the motor with such a load to coast to stop is long.	Set the startup mode to flying start (d0-02 = 1).
		Oscillation caused by overcurrent (asynchronous motors in V/f control mode)	Use the commissioning software continuous oscilloscope to check whether the actual excitation/torque current (LC-20/21) and rotor speed (LC-10) of the motor are oscillating. The fluctuation range of the actual excitation/torque current of the motor does not exceed 10% under normal conditions.	<ol style="list-style-type: none"> <li>1. Increase or decrease the V/f oscillation suppression gain (d2-23) properly and observe whether oscillation gets weaker.</li> <li>2. Change the motor control mode to SVC (F0-01 = 0). After parameter auto-tuning, use the SVC mode.</li> </ol>

		<p>Overvoltage suppression or undervoltage suppression parameters are improper (asynchronous motor in V/f control mode).</p>	<p>Check whether overvoltage suppression (d1-54) or undervoltage suppression (d1-63) is enabled and observe whether overcurrent occurs in the overvoltage or undervoltage stage.</p>	<p>Adjust the parameters according to V/f overvoltage suppression and V/f undervoltage suppression sections in the function guide. Adjust the undervoltage suppression Kp/Ki (d1-66/67) under undervoltage suppression conditions and the overvoltage suppression Kp/Ki (d1-57/58) under overvoltage suppression conditions. Decrease the value. If it is invalid, increase the value.</p>
		<p>The value of the torque boost parameter (asynchronous motor in V/f control mode) is too large.</p>	<p>1. Check whether the manual torque boost value (d2-14) is set too large. 2. When the torque boost mode is "automatic" or "manual + automatic", check whether the stator resistance (F1-20) is tuned.</p>	<p>1. Reduce the manual torque boost value and enable the drive to run again. 2. Perform static partial auto-tuning of the asynchronous motor (F1-69 = 1) and enable the drive to run again.</p>
		<p>V/f acceleration/deceleration time is too short (asynchronous motor in V/f control mode).</p>	<p>Increase the deceleration time and repeat the test. If the fault does not occur again, the fault is caused by short acceleration/deceleration time.</p>	<p>1. Determine whether the current acceleration/deceleration time is a value that must be set by the process. Otherwise, extend the acceleration/deceleration time properly 2. Enable the overcurrent suppression function (d2-26 = 1). If overcurrent persists, decrease the value first. If it is invalid, increase the value. 3. Increase the manual torque boost value (d2-14). 4. For working conditions with frequent start/stop, enable DC braking for stop to ensure that the DC braking time for stop (d0-29) will not expire until the next start. 5. When multiple motors are started simultaneously, apply the start DC braking with the same duration (d0-25) to all motors to significantly reduce startup current shock.</p>

		Model-related parameters are set incorrectly.	Check the nameplate of the drive to ensure the rated power/current/voltage of the drive (A3-02/03/04) are consistent with those on the nameplate.	Set model-related parameters correctly.
		Motor parameters are set incorrectly.	Check the nameplate of the motor to ensure the basic parameters of the motor (F1-00 to F1-11) are consistent with those on the nameplate.	Set the motor nameplate parameters according to section "Setting Motor Parameters" in the function guide.



		<p>The V/f curve voltage is too large (asynchronous motor V/f).</p>	<p>1. When the V/f curve is multi-point curve (d2-00 = 1), decrease the voltage at the point where the voltage/frequency is too large on the multi-point curve (d2-02 to d2-10) and observe whether the fault is cleared.</p> <p>2. When the V/f curve is V/f separation (d2-00 = 10), set the frequency, and then slowly increase the voltage. If the output voltage reaches the voltage set when the output current is lower than the voltage set at the time of the fault, the voltage for V/f separation is inappropriate.</p>	<p>1. Reduce the voltage/frequency ratio on the multi-point V/f curve to prevent it from being larger than the ratio on the linear V/f, resulting in the motor overexcitation.</p> <p>2. For V/f separation, set the voltage acceleration/deceleration time (d2-50/51) that matches the frequency to avoid excessive voltage acceleration time or output voltage.</p>
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		<p>Braking resistor overcurrent</p>	<p>Braking resistor overcurrent occurs when the bus voltage increases to the actual operating voltage of the braking unit (A4-01) due to motor deceleration or speed fluctuation. Remove the braking resistor and enable the drive to run again. Check whether overcurrent occurs again after the bus voltage increases. If not, check the following:</p> <ol style="list-style-type: none"> <li>1. Whether the braking output is short-circuited.</li> <li>2. Whether the braking resistor is wired correctly.</li> <li>3. Whether the resistance of the braking resistor is too low.</li> </ol>	<ol style="list-style-type: none"> <li>1. Re-connect the braking resistor.</li> <li>2. Select a braking resistor with large resistance.</li> </ol>
		<p>Operation at 0 Hz running divergence (synchronous motor in SVC mode)</p>	<p>When the synchronous motor is in the SVC mode and the set speed (U0-01) is near 0, the feedback speed fluctuates greatly and abnormal noise, motor stall, or slightly continuous reverse rotation occurs.</p>	<ol style="list-style-type: none"> <li>1. Avoid long-term operation at zero speed in the SVC mode.</li> <li>2. Perform parameter auto-tuning again (F1-69 = 12).</li> <li>3. Enable IF control. Set the ten place of the d0-85 (Low-speed processing mode) to 1. For details, see the section "Vector Control" in the function guide,</li> </ol>

		Hardware exception	Contact Invoence for technical support.	Contact Invoence for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Software overcurrent	The output instantaneous current exceeds the self-defined software overcurrent threshold (A3-54).	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		Output grounding	1. Measure the resistance of the output end to ground with a megger to check whether the resistance is in the unit of megohm. 2. Enable manual self-check (C2-04 = 1) and enable the drive to run. If no fault is reported, the drive is normal. (The IT power grid cannot detect short circuit to ground. For details, see section "Self-check" in the function guide.)	Replace the part that encounters short circuit to ground faults, such as the motor or cable.	

		<p>Output inter-phase short circuit</p>	<p>1. Measure the resistance between UV/VW/WU phases with a multimeter (in resistance mode) to check whether the resistance is symmetrical.</p> <p>2. Enable manual self-check (C2-04 = 1) and enable the drive to run. If no fault is reported, the drive is normal.</p>	<p>Replace the part that encounters short circuit to ground faults</p>
		<p>High value of the speed loop gain (SVC)</p>	<p>Reduce the speed loop Kp (F2-02) to half the current value and set the speed loop Ti (F2-03) to 2s. Start running and observe whether the drive can run smoothly. If the fault persists, reduce the Kp to half the current value several times. If the fault still occurs, the fault is not caused by the cause.</p>	<p>Reduce the speed loop Kp (F2-02) to half the current value and set the speed loop Ti (F2-03) to 2s.</p>

		<p>Synchronous motor demagnetization (SVC)</p>	<p>Record the current back EMF (F1-12), disassemble the motor coupling, and perform dynamic auto-tuning for the synchronous motor (F1-69 = 12) again. Compare whether the new value of the back EMF is lower than the initial value. Note that when the motor temperature increases, the back EMF decreases by less than 10%. If the back EMF recovers after cooling, it is normal.</p>	<p>Analyze the specific demagnetization causes. Common causes include low carrier frequency, oscillation in speed control mode, and excessive motor back EMF and output current harmonic. If the motor is replaced directly, demagnetization may occur again.</p>
		<p>Synchronous/asynchronous motor parameters are not tuned in the vector control mode (SVC).</p>	<p>In the SVC control mode (F0-01 = 0), perform parameter auto-tuning. Compare the parameters in group F1 to the default values to check whether auto-tuning has been performed.</p>	<p>Perform accurate parameter auto-tuning or download all parameters that need auto-tuning. For details, see the Commissioning and Trial Run section in the function guide.</p>

		Low carrier frequency during high-speed operation	Check whether the carrier frequency set for the motor during high-speed operation is higher than the result of output frequency x 12. If no, control dissipation may result in overcurrent.	The carrier frequency of high-power machines is low by default. In this case, increase the carrier frequency during high-speed motor operation. Calculate derating according to the carrier frequency and select the model according to the derating coefficient.
		The motor is started during rotation (synchronous motor in SVC).	Before start, check whether the motor is rotating, especially check whether the load is heavy with large inertia. The time for the motor with such a load to coast to stop is long.	Set the startup mode to flying start (d0-02 = 1).
		Oscillation caused by overcurrent (asynchronous motors in V/f control mode)	Use the commissioning software continuous oscilloscope to check whether the actual excitation/torque current (LC-20/21) and rotor speed (LC-10) of the motor are oscillating. The fluctuation range of the actual excitation/torque current of the motor does not exceed 10% under normal conditions.	<ol style="list-style-type: none"> <li>1. Increase or decrease the V/f oscillation suppression gain (d2-23) properly and observe whether oscillation gets weaker.</li> <li>2. Change the motor control mode to SVC (F0-01 = 0). After parameter auto-tuning, use the SVC mode.</li> </ol>

		<p>Overcurrent suppression parameters are improper (asynchronous motor in V/f control mode).</p>	<p>Ensure that overcurrent suppression is enabled (d2-26 = 1). Check whether the overcurrent suppression point (d2-27) and overcurrent suppression Kp/Ki (d2-28/d2-29) are too large or small.</p>	<p>Adjust the parameters according to section V/f overcurrent suppression in the function guide. Reduce the overcurrent suppression Kp/Ki first. If it is inactive, increase the Kp/Ki again. (For high-power motors, reduce the overcurrent suppression Kp/Ki appropriately.)</p>
		<p>Overvoltage suppression or undervoltage suppression parameters are improper (asynchronous motor in V/f control mode).</p>	<p>Check whether overvoltage suppression (d1-54) or undervoltage suppression (d1-63) is enabled and observe whether overcurrent occurs in the overvoltage or undervoltage stage.</p>	<p>Adjust the parameters according to V/f overvoltage suppression and V/f undervoltage suppression sections in the function guide. Adjust the undervoltage suppression Kp/Ki (d1-66/67) under undervoltage suppression conditions and the overvoltage suppression Kp/Ki (d1-57/58) under overvoltage suppression conditions. Decrease the value. If it is invalid, increase the value.</p>
		<p>The value of the torque boost parameter (asynchronous motor in V/f control mode) is too large.</p>	<p>1. Check whether the manual torque boost value (d2-14) is set too large. 2. When the torque boost mode is "automatic" or "manual + automatic", check whether the stator resistance (F1-20) is tuned.</p>	<p>1. Reduce the manual torque boost value and enable the drive to run again. 2. Perform static partial auto-tuning of the asynchronous motor (F1-69 = 1) and enable the drive to run again.</p>

		<p>V/f acceleration/deceleration time is too short (asynchronous motor in V/f control mode).</p>	<p>Increase the deceleration time and repeat the test. If the fault does not occur again, the fault is caused by short acceleration/deceleration time.</p>	<ol style="list-style-type: none"> <li>1. Determine whether the current acceleration/deceleration time is a value that must be set by the process. Otherwise, extend the acceleration/deceleration time properly</li> <li>2. Enable the overcurrent suppression function (d2-26 = 1). If overcurrent persists, decrease the value first. If it is invalid, increase the value.</li> <li>3. Increase the manual torque boost value (d2-14).</li> <li>4. For working conditions with frequent start/stop, enable DC braking for stop to ensure that the DC braking time for stop (d0-29) will not expire until the next start.</li> <li>5. When multiple motors are started simultaneously, apply the start DC braking with the same duration (d0-25) to all motors to significantly reduce startup current shock.</li> </ol>
		<p>Model-related parameters are set incorrectly.</p>	<p>Check the nameplate of the drive to ensure the rated power/current/voltage of the drive (A3-02/03/04) are consistent with those on the nameplate.</p>	<p>Set model-related parameters correctly.</p>
		<p>Motor parameters are set incorrectly.</p>	<p>Check the nameplate of the motor to ensure the basic parameters of the motor (F1-00 to F1-11) are consistent with those on the nameplate.</p>	<p>Set the motor nameplate parameters according to section "Setting Motor Parameters" in the function guide.</p>



		<p>The V/f curve voltage is too large (asynchronous motor V/f).</p>	<p>1. When the V/f curve is multi-point V/f (d2-00 = 1), decrease the voltage at the point where the voltage/frequency is too large in the multi-point curve (d2-02 to d2-10) and observe whether the fault disappears</p> <p>2. When the V/f curve is V/f separation (d2-00 = 10), set the frequency first, and then slowly try to increase the voltage. If the output voltage when the output current reaches the rated value is lower than the voltage set at the time of the fault, the V/f separation setting voltage is inappropriate</p>	<p>1. Reduce the voltage/frequency ratio on the multi-point V/f curve to prevent it from being larger than the ratio on the linear V/f, resulting in the motor overexcitation.</p> <p>2. For V/f separation, set the voltage acceleration/deceleration time (d2-50/51) that matches the frequency to avoid excessive voltage acceleration time or output voltage.</p>
		<p>The synchronous motor (SVC) runs in the vicinity of 0 Hz</p>	<p>When the synchronous motor is in the SVC mode and the set speed (U0-01) is near 0, the feedback speed fluctuates greatly and abnormal noise, motor stall, or slightly continuous reverse rotation occurs.</p>	<p>1. Avoid long-term operation at zero speed in the SVC mode.</p> <p>2. Perform parameter auto-tuning again (F1-69 = 12).</p> <p>3. Enable IF control. Set the ten place of the d0-85 (Low-speed processing mode) to 1. For details, see the section "Vector Control" in the function guide,</p>

		The self-defined software overcurrent threshold (A3-54) is small.	Check whether the self-defined software overcurrent threshold is too small.	Increase the self-defined software overcurrent threshold.	
		Hardware exception	Contact Inovance for technical support.	Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Bus overvoltage	The bus voltage exceeds the effective overvoltage threshold (A3-58).	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		Output grounding	1. Measure the resistance of the output end to ground with a megger to check whether the resistance is in the unit of megohm. 2. Enable manual self-check (C2-04 = 1) and enable the drive to run. If no fault is reported, the drive is normal. (The IT power grid cannot detect short circuit to ground. For details, see section "Self-check" in the function guide.)	Replace the part that encounters short circuit to ground faults, such as the motor or cable.	

		<p>In the power generation state, the braking recovery power is insufficient (synchronous motor/asynchronous motor in SVC mode).</p>	<ol style="list-style-type: none"> <li>1. Check whether the motor is in the power generation state (power generation during deceleration, or load with power generation, etc.).</li> <li>2. Check the hardware guide and use a multimeter to check whether the braking resistor model is proper and whether the braking resistor power is sufficient.</li> <li>3. Check whether the braking resistor encounters phase loss and is connected securely.</li> </ol>	<ol style="list-style-type: none"> <li>1. Increase the deceleration time and reduce the generating power.</li> <li>2. Increase the braking resistor power.</li> <li>3. Reconnect the braking resistor.</li> <li>4. Enable overvoltage suppression (d1-54 = 0) if overvoltage suppression is allowed for the load. For active loads such as lifting, do not enable overvoltage suppression.</li> </ol>
		<p>Sudden removal of the load causes speed overshoot and generation (synchronous motor/asynchronous motor in SVC mode).</p>	<p>Observe whether the overvoltage occurs after the load is suddenly removed and whether the actual motor speed rises significantly when the fault occurs.</p>	<p>Increase the speed loop Kp (F2-02) and increase the speed loop Ti (F2-03) to 2s.</p>

		<p>The value of the speed loop gain is too low, resulting in feedback power generation after feedback speed overshoot when the speed reference reaches the target value (synchronous motor/asynchronous motor in SVC mode).</p>	<p>Observe whether overvoltage occurs after the speed reaches the target value during acceleration.</p>	<ol style="list-style-type: none"> <li>1. Increase the speed loop Kp (F2-02) and increase the speed loop Ti (F2-03) to 2s.</li> <li>2. Enable S-curve (b7-00 = 1) to set the ramp acceleration end arc (F0-51).</li> </ol>
		<p>High value of the speed loop gain (SVC)</p>	<p>Reduce the speed loop Kp (F2-02) to half the current value and set the speed loop Ti (F2-03) to 2s. Start running and observe whether the drive can run smoothly. If the fault persists, reduce the Kp to half the current value several times. If the fault still occurs, the fault is not caused by the cause.</p>	<p>Reduce the speed loop Kp (F2-02) to half the current value and set the speed loop Ti (F2-03) to 2s.</p>
		<p>The motor is started during rotation (synchronous/asynchronous motor in SVC).</p>	<p>Before start, check whether the motor is rotating, especially check whether the load is heavy with large inertia. The time for the motor with such a load to coast to stop is long.</p>	<p>Set the startup mode to flying start (d0-02 = 1).</p>

		<p>Oscillation caused by overvoltage (asynchronous motors in V/f control mode)</p>	<p>Use the commissioning software continuous oscilloscope to check whether the actual excitation/torque current (LC-20/21) and rotor speed (LC-10) of the motor are oscillating. The fluctuation range of the actual excitation/torque current of the motor does not exceed 10% under normal conditions.</p>	<ol style="list-style-type: none"> <li>1. Increase or decrease the V/f oscillation suppression gain (d2-23) properly and observe whether oscillation gets weaker.</li> <li>2. Change the motor control mode to SVC (F0-01 = 0). After parameter auto-tuning, use the SVC mode.</li> </ol>
		<p>The deceleration time is too short.</p>	<p>Increase the deceleration time and repeat the test. If the fault does not occur, the deceleration time is too short.</p>	<ol style="list-style-type: none"> <li>1. Determine whether the current acceleration/deceleration time is a value that must be set by the process. Otherwise, extend the acceleration/deceleration time properly.</li> <li>2. Enable overvoltage suppression (F2-39 = 1) for working conditions where requirements on speed following are low. For working conditions where requirements on speed following are high, install a braking resistor.</li> <li>3. For applications where a braking resistor cannot be installed, increase the excitation current (d0-40 for SVC d0-41 for V/f). In the SVC mode, enable vector overexcitation (d0-39 = 1).</li> </ol>

		Model-related parameters are set incorrectly.	Check the nameplate of the drive to ensure the rated power/current/voltage of the drive (A3-02/03/04) are consistent with those on the nameplate.	Set model-related parameters correctly.
		The starting voltage of the braking unit is too high.	Check whether the effective action voltage of the braking unit (A4-01) approaches the overvoltage threshold (A3-57).	The effective action voltage of the braking unit varies with the voltage level of the machine. Manual modification is not required under normal conditions. In extreme cases, reduce the action voltage of the braking unit (A4-00).
		The input voltage is too high.	Check whether the input voltage meets the design requirements (380 V to 480 V for 380 V models and 220 V to 240 V for 220 V models).	<ol style="list-style-type: none"> <li>1. Reduce the input voltage to the normal range.</li> <li>2. Increase the overvoltage suppression action voltage (F2-40) and the action voltage of the braking unit (A4-00).</li> </ol>
		The overvoltage suppression parameters are set improperly.	Check whether overvoltage suppression (d1-54 = 1) is enabled and whether the overvoltage suppression Kp/Ki (d1-57/58) are too large or too small.	Adjust the overvoltage suppression Kp/Ki (d1-57/58) according to "V/f overvoltage suppression" and "V/f undervoltage suppression" sections in the function guide. Decrease the overvoltage suppression Kp/Ki first. If it is inactive, increase the overvoltage suppression Kp/Ki again. Decrease the overvoltage suppression Kp/Ki for machines with large inertia.

		<p>The synchronous motor reports a fault after overspeed or the synchronous motor coasts to stop after manual settings.</p>	<p>When the synchronous motor overspeed occurs, the result of back EMF (F1-12) x actual motor speed (LC-10) x 1.414 is much higher than the bus voltage. After the motor is interrupted, the weak magnetic current disappears and the U/V/W phase voltage increases dramatically in a short time. This causes the output diode to energize in the reverse direction and back EMF short circuit. A fault is reported.</p> <p>If the result of back EMF (F1-12) x actual motor speed (LC-10) x 1.414 is higher than the overvoltage threshold, operation interruption may cause overvoltage of the AC drive and may damage the drive.</p>	<p>Set the forward frequency upper limit (d1-03) to the result of overvoltage threshold (A3-58)/(1.414 x back EMF of synchronous motor). Keep the maximum running speed below this limit.</p> <p>Select the motor type properly. A motor with high back EMF can effectively reduce the output current. However, running at a speed above the limit may result in overvoltage or damage.</p>		
Fault code	Fault name	Cause	Fault level	Default fault level	Reset	

	Frequent contactor action	Soft start is applied to the relay repeatedly within a short period of time when the drive is not powered off.	0: Coast to stop	0: Coast to stop	Yes	
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>		
		The inlet contactor on the grid side operates improperly.	Contact the agent or Inovance for technical support.	Contact the agent or Inovance for technical support.		
		Fast power-off/on is performed frequently.	Measure whether the input voltage is within 380 V to 480 V.	Wait for the input voltage to stabilize before starting the drive. If power-on fails for a long time, check if the main contactor and grid are normal.		
		The pre-charge contactor is abnormal.	Contact Inovance for technical support.	Contact Inovance for technical support.		
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>	
	Undervoltage	The bus voltage is lower than the undervoltage threshold (A3-56).	0: Coast to stop	0: Coast to stop	Yes	
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>		
		Input phase loss exists.	Use a multimeter to check whether the line voltage among RS, ST, and ST are symmetric.	Check whether the input switch, contactor, and wiring terminals are proper.		
		Voltage dip occurs.	Undervoltage is generally caused by voltage dip.	For loads such as wind turbine pump, air compressor, and electric drums, enable undervoltage suppression (d1-63 = 1). During undervoltage suppression, transient speed drop may occur and the motoring energy will be converted to electric energy, keeping the bus voltage stable to prevent undervoltage.		



		<p>The incoming voltage is too low.</p>	<p>1. Check whether the input voltage meets the design requirements (380 V to 480 V for 380 V models and 220 V to 240 V for 220 V models) 2. Check whether the upstream circuit breaker or contactor trips or cannot be closed.</p>	<p>1. Increase the input voltage to the normal range. 2. Ensure that the incoming switch is normal.</p>
		<p>The undervoltage suppression parameter is set improperly.</p>	<p>1. Check whether undervoltage suppression (d1-63 = 1) is enabled and whether the undervoltage suppression Kp/Ki (d1-66/67) is set to an excessively high or low value. 2. During undervoltage suppression, when the actual speed is lower than the minimum operating frequency (d1-72) of undervoltage suppression, and the undervoltage fault will be triggered and the drive stops.</p>	<p>1. See sections "Undervoltage suppression" and "V/f undervoltage suppression" in the function guide for overvoltage/undervoltage suppression Kp/Ki ((d1-66/67). Decrease the setpoint first, and then increase the setpoint if it is invalid. 2. To run at a lower speed, modify the minimum running frequency (d1-72) of undervoltage suppression.</p>

		Oscillation and undervoltage occurs during motor operation.	Check whether the output torque (LC-12) and bus voltage (LC-31) are associated with large oscillation (above 10%) and the frequency is the same as that of bus fluctuation.	Rectify the oscillation fault during operation.	
		The buffer contactor is abnormal and the buffer resistor cannot be exited properly.	Undervoltage occurs after power-on, and the bus is restored after stop.	Contact Inovance for technical support.	
		Hardware exception occurs.	Contact Inovance for technical support.	Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Pre-drive timeout	The bus voltage falls below the undervoltage threshold (A3-56) within the specified time after the start command is triggered.	0: Coast to stop	0: Coast to stop	Yes
Cause		Check method	Solution		
		The input cable is not connected properly.	Check whether the input cable of the drive is connected properly.	Reconnect the AC drive output input circuit according to the wiring diagram in the user guide.	
		The input voltage is too low.	Check whether the input voltage meets the design requirements (380 V to 480 V for 380 V models and 220 V to 240 V for 220 V models).	Adjust the input voltage to a value within the normal range.	

		Hardware exception occurs.	If the fault is not caused by improper input voltage, the hardware may be damaged.	Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Drive overload	The accumulative overload coefficient (LC-32) of the drive reaches 100%.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	

		<p>The load is too heavy or the motor is stalled.</p>	<p>1. When the asynchronous motor is overloaded, switch to V/f control (F0-01 = 2) and observe whether the output current is too high. If motor parameters are set correctly, but overload occurs upon with-load start at slow acceleration in V/f mode, it indicates the load is too heavy.</p> <p>2. During high-speed operation in vector control, if the result of output torque percentage (LC-12) x output speed percentage (LC-10) is close to the output power, and the output torque is high, it indicates the load is too heavy.</p> <p>3. Check whether the brake is released normally.</p>	<p>1. When overload occurs during low-speed operation of the asynchronous motor, increase the no-load current (F1-30) properly and reduce the mutual inductance (F1-28) at the same time to ensure the multiplication result does not change.</p> <p>2. When overload occurs during low-speed operation of the synchronous motor, if a salient pole motor is used, increase the MTPA adjustment coefficient of the synchronous motor (d5-29). Observe whether the overall output current can be reduced.</p> <p>3. When overload occurs upon excessively heavy load in the high-speed field weakening zone, increase the modulation coefficient (A5-06). It is recommended to set A5-06 to a value lower than 108%.</p> <p>4. If the fault cannot be rectified through the preceding means, increase the power rating of the drive.</p>
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		<p>Divergence can occur near 0 Hz on the synchronous motor (SVC).</p>	<p>When the synchronous motor is in the SVC mode and the set speed (U0-01) is near 0, the feedback speed fluctuates greatly and unusual noise, motor stall, or slightly continuous reverse rotation occurs.</p>	<ol style="list-style-type: none"> <li>1. Avoid the long-term operation of the SVC at speeds close to zero.</li> <li>2. Enable IF control. Set the tens of the low-speed processing mode (d0-85) to 1. For details, see section "Vector control" in the function guide.</li> </ol>
		<p>The synchronous frequency of the asynchronous motor SVC operates near 0 Hz (asynchronous motor SVC).</p>	<p>The synchronous frequency (LC-15) is close to 0 (<math>\pm 0.5\%</math>) and runs for more than 10s.</p>	<p>Avoid the long-term operation at speeds close to zero.</p>
		<p>Synchronous motor demagnetization (SVC)</p>	<p>Record the current back EMF (F1-12), disassemble the motor coupling, and perform dynamic auto-tuning for the synchronous motor (F1-69 = 12) again. Compare whether the new value of the back EMF is lower than the initial value. Note that when the motor temperature increases, the back EMF decreases by less than 10%. If the back EMF recovers after cooling, it is normal.</p>	<p>Analyze the specific demagnetization causes. Common causes include low carrier frequency, oscillation in speed control mode, and excessive motor back EMF and output current harmonic. If the motor is replaced directly, demagnetization may occur again.</p>

		<p>Synchronous/asynchronous motor parameters are not tuned in the vector control mode (SVC).</p>	<p>In the SVC control mode (F0-01 = 0), perform parameter auto-tuning. Compare the parameters in group F1 to the default values to check whether auto-tuning has been performed.</p>	<p>Perform accurate parameter auto-tuning or download all parameters that need auto-tuning. For details, see the Commissioning and Trial Run section in the function guide.</p>
		<p>V/f acceleration/deceleration time is too short (asynchronous motor in V/f control mode).</p>	<p>Increase the deceleration time and repeat the test. If the fault does not occur again, the fault is caused by short acceleration/deceleration time.</p>	<ol style="list-style-type: none"> <li>1. Determine whether current acceleration/deceleration time is a value that must be set by the process. Otherwise, extend the acceleration/deceleration time properly</li> <li>2. Enable the overcurrent suppression function (d2-26 = 1). If overcurrent persists, decrease the value first. If it is invalid, increase the value.</li> <li>3. Increase the manual torque boost value (d2-14).</li> <li>4. For working conditions with frequent start/stop, enable DC braking for stop to ensure that the DC braking time for stop (d0-29) will not expire until the next start.</li> <li>5. When multiple motors are started simultaneously, apply the DC braking for start with the same duration (d0-25) to significantly reduce startup current shock.</li> </ol>

		<p>The reference voltage of the V/f curve is too large (asynchronous motor V/f).</p>	<p>1. When the V/f curve is multi-point V/f (d2-00 = 1), decrease the voltage of the point (d2-02 to d2-10) with excessive high voltage/frequency and check whether the fault is cleared.  2. When the V/f curve is separated V/f (d2-00 = 10), set the frequency first, and then increase the voltage gradually. If the output voltage when the output current reaches the rated value is lower than the set voltage when the fault occurs, the voltage set for separated V/f is improper.</p>	<p>1. Reduce the voltage/frequency ratio in the multi-point V/f curve to prevent it from being larger than the ratio in the linear V/f, resulting in the motor overexcitation.  2. For separated V/f, set the voltage acceleration/deceleration time (d2-50/51) that matches the frequency to avoid excessive voltage acceleration time or output voltage.</p>
		<p>The value of the torque boost parameter (asynchronous motor in V/f control mode) is excessively high.</p>	<p>1. Check whether the manual torque boost value (d2-14) is set an excessively low.  2. When the torque boost mode is "automatic" or "manual + automatic", check whether the stator resistance (F1-20) has been auto-tuned.</p>	<p>1. Reduce the manual torque boost value and enable the drive to run again.  2. Perform static partial auto-tuning of the asynchronous motor (F1-69 = 1) and enable the drive to run again.</p>

		<p>The motor is started during rotation (synchronous/asynchronous motor in SVC).</p>	<p>Before start, check whether the motor is rotating.</p>	<p>Set the start mode to flying start (d0-02 = 1).</p>
		<p>Oscillation and overload in V/f mode (asynchronous motor V/f)</p>	<p>Use the continuous oscilloscope in the commissioning software to check whether the actual excitation/torque current (LC-20/21) and rotor speed (LC-10) of the motor are oscillating. The fluctuation range of the actual excitation/torque current of the motor does not exceed 10% under normal conditions.</p>	<ol style="list-style-type: none"> <li>1. Increase or decrease the V/f oscillation suppression gain (d2-23) properly and observe whether oscillation is alleviated.</li> <li>2. Change the motor control mode to SVC (F0-01 = 0). After parameter auto-tuning, use the SVC mode.</li> </ol>



		<p>Synchronous motor magnetic pole angle auto-tuning error (synchronous motor SVC)</p>	<p>1. When the motor can rotate freely, select pre-positioning start (d0-71 = 3) to check whether the motor can start normally.  2. If the motor Lq/Ld (F1-34/F1-32) is lower than 1.5 when the motor cannot rotate freely, start with voltage pulse mode (d0-71 = 0) and increase the initial position detection current of the synchronous motor (d0-75). Otherwise, start with high frequency injection (d0-71 = 1) and set the initial position compensation angle (d0-76) to 180.</p>	<p>1. The motor rotates slightly during pre-positioning start. If this does not affect the process, it is recommended to use this method to start the motor.  2. If the motor Lq/Ld (F1-34/F1-32) is less than 1.5, start with voltage pulse mode (d0-71 = 0) and increase the initial position detection current of the synchronous motor (d0-75). Otherwise, start with high frequency injection (d0-71 = 1) and set the initial position compensation angle (d0-76) to 180 and run the motor several times.  3. The magnetic pole position of the synchronous motor with squirrel-cage bar is inaccurate, which may easily lead to reverse rotation. It is recommended to set to asynchronous motor V/f operation mode.</p>
		<p>Motor parameters are set incorrectly.</p>	<p>Check the nameplate of the motor to ensure the basic parameters of the motor (F1-00 to F1-11) are consistent with those on the nameplate.</p>	<p>Set the motor nameplate parameters according to section "Setting Motor Parameters" in the function guide.</p>

		The power rating of the drive is too low.	Check whether low overload mode is selected for high overload applications, or a low-power drive is used to drive a high-power motor.	Replace with a drive with higher power rating.
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		<p>The synchronous motor reports a fault after overspeed or the synchronous motor coasts to stop as set manually.</p>	<p>When the synchronous motor overspeed occurs, the result of back EMF (F1-12) x actual motor speed (LC-10) x 1.414 is much higher than the bus voltage. After the motor operation is interrupted, the weak magnetic current disappears and the U/V/W phase voltage increases dramatically in a short time, causing the output diode to be switched on in the reverse direction and leading to back EMF short circuit. In this case, a fault can be reported. If the result of back EMF x actual motor speed (LC-10) x 1.414 is higher than the overvoltage threshold, operation interruption may cause overvoltage of the AC drive and may damage the drive.</p>	<p>Set the forward frequency upper limit (d1-03) to the result of overvoltage threshold (A3-58)/(1.414 x back EMF of synchronous motor). Keep the maximum running speed below this limit. Select a proper motor type. A motor with a high back EMF can effectively reduce the output current. However, running at a speed above the limit may result in overvoltage explosion.</p>
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		Long-term operation at low frequencies can lead to derating.	The direction change of the operating current and the IGBT shift of upper/lower bridge is slow during operation at low frequencies, which may result in violent IGBT junction temperature fluctuation and thermal stress, leading to IGBT damage. The derating ratio changes from 0% to 20% when the frequency changes from 5 Hz to 0 Hz.	Replace with a drive with higher power rating.	
		Model-related parameters are set incorrectly.	Check the nameplate of the drive to ensure the rated power/current/voltage of the drive (A3-02/03/04) are consistent with those on the nameplate.	Set model-related parameters correctly.	
		Derating occurs due to excessive high carrier frequency.	Setting the carrier frequency (A5-01) to a value higher than the default can result in derating of the output with load.	Set the carrier frequency properly. It is recommended to replace with a drive of high power rating at high carrier frequency output and insufficient output.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

		The accumulative overload coefficient (LC-33) of the motor reaches 100%.	0: Coast to stop	0: Coast to stop	Yes
			<b>Cause</b>	<b>Check method</b>	<b>Solution</b>
	Motor overload	The load is too heavy.	<p>1. When the asynchronous motor is overloaded, switch to V/f control (F0-01 = 2) and observe whether the output current is too high. If motor parameters are set correctly, but overload occurs upon with-load start at slow acceleration in V/f mode, it indicates the load is too heavy.</p> <p>2. During high-speed operation in vector control, if the result of output torque percentage (LC-12) x output speed percentage (LC-10) is close to the output power, and the output torque is high, it indicates the load is too heavy.</p> <p>3. Check whether the brake is released normally.</p>	<p>1. When overload occurs during low-speed operation of the asynchronous motor, increase the no-load current (F1-30) properly and reduce the mutual inductance (F1-28) at the same time to ensure the multiplication result does not change.</p> <p>2. When overload occurs during low-speed operation of the synchronous motor, if a salient pole motor is used, increase the MTPA adjustment coefficient of the synchronous motor (d5-29). Observe whether the overall output current can be reduced.</p> <p>3. When overload occurs upon excessively heavy load in the high-speed field weakening zone, increase the modulation coefficient (A5-06). It is recommended to set A5-06 to a value lower than 108%.</p> <p>4. If the fault cannot be rectified through the preceding means, increase the power rating of the drive.</p>	

		<p>Synchronous motor demagnetization (SVC)</p>	<p>Record the current back EMF (F1-12), disassemble the motor coupling, and perform dynamic auto-tuning for the synchronous motor (F1-69 = 12) again. Compare whether the new value of the back EMF is lower than the initial value. Note that when the motor temperature increases, the back EMF decreases by less than 10%. If the back EMF recovers after cooling, it is normal.</p>	<p>Analyze the specific demagnetization causes. Common causes include low carrier frequency, oscillation in speed control mode, and excessive motor back EMF and output current harmonic. If the motor is replaced directly, demagnetization may occur again.</p>
		<p>Motor parameters are set incorrectly.</p>	<p>Check the nameplate of the motor to ensure the basic parameters of the motor (F1-00 to F1-11) are consistent with those on the nameplate.</p>	<p>Set the motor nameplate parameters according to section "Setting Motor Parameters" in the function guide.</p>

		The incoming voltage is too low.	<p>1. Check whether the input voltage meets the design requirements (380 V to 480 V for 380 V models and 220 V to 240 V for 220 V models)</p> <p>2. Check whether the upstream circuit breaker or contactor trips or cannot be closed.</p>	<p>1. Increase the input voltage to the normal range.</p> <p>2. Ensure that the incoming switch is normal.</p>	
		d1-46 (Motor overload protection coefficient) is set improperly.	<p>The default motor overload data in the drive does not match the actual motor. The actual motor temperature rise is not high.</p> <p>Set the motor overload protection coefficient (d1-46) to extend the time for the motor to report an overload fault. If a fault occurs during long-term operation, turn off motor overload protection directly.</p>	<p>Increase the set motor overload protection coefficient (d1-46) to extend the time for the motor to report an overload. If the fault still persists during long-term operation, turn off the motor overload protection directly.</p>	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

		Input phase loss is detected in the hardware circuit.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes
	Input phase loss exists.		Cause	Check method	Solution
		The input cables of the drive are connected improperly.	Check whether the input cables of the drive are connected properly.	Reconnect the drive input circuit according to the wiring diagram in the user guide.	
		The incoming voltage is too low.	1. Check whether the input voltage meets the design requirements (380 V to 480 V for 380 V models and 220 V to 240 V for 220 V models) 2. Check whether the upstream circuit breaker or contactor trips or cannot be closed.	1. Increase the input voltage to a value within the normal range. 2. Ensure that the incoming switch is normal.	
		The AC drive diode is damaged.	Contact Inovance for technical support.	Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset



		The phase U current in the running state is much smaller than the other two phases.	0: Coast to stop	0: Coast to stop	Yes
	Phase loss occurs on phase U.	<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		Check whether the output cables of the drive are connected improperly.	Check whether the output cables of the drive are connected properly.	Reconnect the AC drive output circuit according to the wiring diagram in the product guide.	
		The output contactor is faulty or trips.	Check whether the output contactor is open and whether the power switch has tripped.	Close the output contactor or switch.	
		The motor is faulty.	1. Check the motor circuit to determine whether there is an open circuit. 2. Enable self-check manually (C2-04 = 1) and run the drive. If no fault is reported, the drive is normal.	Replace the short-circuited part, such as the motor or cable.	
		The motor winding is unbalanced.	Measure the phase-to-phase resistance among UV, UW, and VW phases of the motor using a multimeter to check whether they are equal.	Repair or replace the motor three-phase winding.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>
	V phase loss	The phase V current in the running state is much lower than the other two phases.	0: Coast to stop	0: Coast to stop	Yes

		Cause	Check method	Solution	
		The output cables of the drive are connected improperly.	Check whether the output cables of the drive are connected properly.	Reconnect the AC drive output circuit according to the wiring diagram in the user guide.	
		The output contactor is faulty or trips.	Check whether the output contactor is open and whether the circuit trips.	Close the output contactor or switch.	
		The motor is faulty.	1. Check the motor circuit to determine whether there is an open circuit. 2. Enable self-check manually (C2-04 = 1) and run the drive. If no fault is reported, the drive is normal.	Replace the short-circuited part, such as the motor or cable.	
		The motor winding is unbalanced.	Measure the phase-to-phase resistance among UV, UW, and VW phases of the motor using a multimeter to check whether they are equal.	Repair or replace parts of the motor three-phase winding.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Phase loss occurs on phase W.	The W phase current in the running state is much smaller than the other two phases.	0: Coast to stop	0: Coast to stop	Yes
		The output cables of the drive are connected improperly.	Check whether the output cables of the drive are connected properly.	Reconnect the AC drive output circuit according to the wiring diagram in the product guide.	

		The output contactor is faulty or trips.	Check whether the output contactor is open and whether the circuit trips.	Close the output contactor or switch.	
		The motor is faulty.	1. Check the motor circuit to determine whether there is an open circuit. 2. Enable self-check manually (C2-04 = 1) and run the drive. If no fault is reported, the drive is normal.	Replace the short-circuited part, such as the motor or cable.	
		The motor winding is unbalanced.	Measure the phase-to-phase resistance among UV, UW, and VW phases of the motor using a multimeter to check whether they are equal.	Repair or replace parts of the motor three-phase winding.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Drive overtemperature	The power module temperature exceeds the over-temperature threshold (A3-51).	0: Coast to stop	0: Coast to stop	Yes
Cause		Check method	Solution		
The ambient temperature is too high.		Measure the ambient temperature to check if it is higher than 50°C.	Lower down the ambient temperature.		
		The ventilation duct is blocked.	Check whether the air filter of the fan is blocked.	Clean the air duct.	
		The fan is damaged.	Start the AC drive after reducing the temperature and observe if the fan rotates.	If it does not rotate, replace the fan.	

		Hardware exception occurs.	Contact Inovance for technical support.	Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	External fault 1	The signal state corresponding to external fault 1 (H2-00) is high level.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes
		Cause	Check method	Solution	
		The input signal is activated.	Check whether the input signal corresponding to external fault (H2-00) is high level.	Restore the external fault 1 (H2-00) input signal state to low level.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes
	External fault 2	The signal state corresponding to external fault 2 (H2-01) is low level.			
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		The input signal is activated.	Check whether the state of the input signal corresponding to external fault 2 (H2-01) is low level.	Restore the state of the external fault 2 (H2-01) input signal to high level.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>
	Current detection circuit fault	The current zero drift detected in the stop state is excessively high.	0: Coast to stop	0: Coast to stop	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		Hardware exception occurs.	Contact Inovance for technical support.	Contact Inovance for technical support.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>
	Motor parameter auto-tuning times out.	调谐长时间未结束	0: Coast to stop	0: Coast to stop	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		The motor parameters and drive model are set incorrectly.	Check whether motor nameplate parameters (F1-00 to F1-07) are set correctly.	Accurately set the parameters according to the motor nameplate and then perform auto-tuning again.	

Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Motor parameter auto-tuning is interrupted.	The auto-tuning process is interrupted.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		The drive stops during parameter auto-tuning.	Check whether the drive stops during parameter auto-tuning.	Perform auto-tuning again.	
		Voltage dip occurs during parameter auto-tuning.	Check whether transient power off occurs due to input voltage fluctuation.	Wait for the input voltage to stabilize before starting the drive. If power-on fails for a long time, check if the main contactor and grid are normal.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Overcurrent during auto-tuning	The instantaneous output current exceeds the overcurrent threshold during motor auto-tuning.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		The instantaneous output current exceeds the overcurrent threshold during motor auto-tuning.	Check whether motor nameplate parameters (F1-00 to F1-07) are set correctly.	Accurately set the parameters according to the motor nameplate and then perform auto-tuning again.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	An exception occurs during back EMF auto-tuning.	The back EMF value is not within the allowable range.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	

		The load is too heavy or the motor is stalled.	<p>1. When the asynchronous motor is overloaded, switch to V/f control (F0-01 = 2) and observe whether the output current is too high. If motor parameters are set correctly, but overload occurs upon with-load start at slow acceleration in V/f mode, it indicates the load is too heavy.</p> <p>2. During high-speed operation in vector control, if the result of output torque percentage (LC-12) x output speed percentage (LC-10) is close to the output power, and the output torque is high, it indicates the load is too heavy.</p> <p>3. Check whether the brake is released normally.</p>	<p>1. When overload occurs during low-speed operation of the asynchronous motor, increase the no-load current (F1-30) properly and reduce the mutual inductance (F1-28) at the same time to ensure the multiplication result does not change.</p> <p>2. When overload occurs during low-speed operation of the synchronous motor, if a salient pole motor is used, increase the MTPA adjustment coefficient of the synchronous motor (d5-29). Observe whether the overall output current can be reduced.</p> <p>3. When overload occurs upon excessively heavy load in the high-speed field weakening zone, increase the modulation coefficient (A5-06). It is recommended to set A5-06 to a value lower than 108%.</p> <p>4. If the fault cannot be rectified through the preceding means, increase the power rating of the drive.</p>	
		The motor does not rotate.	Check whether the motor rotates normally.	Remove the brake or device that prevents the motor from rotating.	
		Overcurrent occurs during auto-tuning of the magnetic pole position.	Check whether motor nameplate parameters (F1-00 to F1-07) are set correctly.	Accurately set the parameters according to the motor nameplate and then perform auto-tuning again.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

	The motor type is incorrect.	The motor auto-tuning mode (F1-69) does not match the motor type (F1-00).	0: Coast to stop	0: Coast to stop	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		The motor auto-tuning mode does not match the motor type.	Check whether the motor auto-tuning mode (F1-69) and motor type (F1-00) are set correctly.	Accurately set the parameters according to the motor nameplate and then perform auto-tuning again.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>
	The auto-tuned gain deviation between current sampling phases is abnormal.	This fault is reported when the current sampling gain deviation between UV/VW phases is higher than that set by the software.	0: Coast to stop	0: Coast to stop	Supported
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		The auto-tuned inter-phase gain deviation is abnormal.	Check whether motor nameplate parameters (F1-00 to F1-07) are set correctly.	Accurately set the parameters according to the motor nameplate and then perform auto-tuning again.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>
	The auto-tuned no-load current exceeds the limit.	This fault is triggered when the no-load current is not within the allowable range specified by the software.	0: Coast to stop	0: Coast to stop	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		The auto-tuned no-load current is abnormal.	Check whether motor nameplate parameters (F1-00 to F1-07) are set correctly.	Accurately set the parameters according to the motor nameplate and then perform auto-tuning again.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>



		The time for reading/writing EEPROM continuously is excessively long.	0: Coast to stop 2: Quick stop 3: Decelerate to stop	0: Coast to stop	Supported
	The uninterrupted operation of EEPROM times out.				
		Cause	Check method	Solution	
		An EEPROM read-write fault occurs.	1. Check whether a certain parameter is modified frequently by the host controller. 2. Check whether the RAM address for parameter writing is correct and whether the RAM address mapping for each group of parameters is correct. 3. If the fault persists after the preceding two causes are ruled out, the EEPROM chip may be damaged.	1. Reduce the modifications made through the host controller. 2. If parameter writing through communication is incorrect, set a correct RAM address. 3. Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	EEPROM read error	The duration of continuous EEPROM read operation is excessively long.	0: Coast to stop 2: Quick stop 3: Decelerate to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	

		An EEPROM read-write fault occurs.	<ol style="list-style-type: none"> <li>1. Check whether a certain parameter is modified frequently by the host controller.</li> <li>2. Check whether the RAM address mapping for each group of parameters is correct.</li> <li>3. If the fault persists after the preceding two causes are ruled out, the EEPROM chip may be damaged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce the modifications made through the host controller.</li> <li>2. If parameter writing through communication is incorrect, set a correct RAM address.</li> <li>3. Contact Inovance for technical support.</li> </ol>	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	EEPROM write fault	The duration of continuous EEPROM write operation is excessively long.	<ol style="list-style-type: none"> <li>0: Coast to stop</li> <li>2: Quick stop</li> <li>3: Decelerate to stop</li> </ol>	0: Coast to stop	Yes
		Cause	Check method	Solution	
		An EEPROM read-write fault occurs.	<ol style="list-style-type: none"> <li>1. Check whether a certain parameter is modified frequently by the host controller.</li> <li>2. Check whether the RAM address mapping for each group of parameters is correct.</li> <li>3. If the fault persists after the preceding two causes are ruled out, the EEPROM chip may be damaged.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce the modifications made through the host controller.</li> <li>2. If parameter writing through communication is incorrect, set a correct RAM address.</li> <li>3. Contact Inovance for technical support.</li> </ol>	

Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	The number of read-write operations on the EEPROM within 1s exceeds the setpoint.	The number of write-read operations on the EEPROM within 1s exceeds the value of P0-62.	0: Coast to stop 2: Quick stop 3: Decelerate to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		An EEPROM read-write fault occurs.	Check whether the user's memory operation within 1s is frequent.	Reduce the write operations within 1s.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	EEPROM cache exceeds the limit.	The internal cache of the EEPROM is excessively high.	0: Coast to stop 2: Quick stop 3: Decelerate to stop	0: Coast to stop	Supported
		Cause	Check method	Solution	
		EEPROM internal cache exceeds the limit.	In the case of parameter writing through communication, check whether the write operation is frequent.	Reduce write operations within 1s.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	The AC drive output is short-circuited to ground.	Check the current between the output phase and ground exists.	0: Coast to stop	0: Coast to stop	Supported
		Cause	Check method	Solution	

		The output is grounded.	<p>1. Measure the resistance of the output end to ground with a megger to check whether the resistance is in the unit of megohm.</p> <p>2. Enable manual self-check (C2-04 = 1) and enable the drive to run. If no fault is reported, the drive is normal. (The IT power grid cannot detect short circuit to ground. For details, see section "Self-check" in the function guide.)</p>	Replace the short-circuited part, such as the motor or cable.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Operating time reached	The accumulative operating time (Ad-00, Ad-01) reaches the set value (P0-17, P0-19).	<p>0: Coast to stop</p> <p>1: Stop at maximum capacity</p> <p>2: Quick stop</p> <p>3: Decelerate to stop</p> <p>4 to 8: Reserved</p> <p>9: Run with speed limited</p> <p>10: Run with power limited</p> <p>11: Run with current limited</p> <p>12: Run with torque limited</p> <p>13: Display alarm</p> <p>14: Prompt</p> <p>15: Ignore</p>	0: Coast to stop	Yes
		Cause	Check method	Solution	

		The cumulative operating time reaches the set value.	Check that the accumulative operating time (Ad-00, Ad-01) reaches the set value (P0-17, P0-19)	Set parameter initialization (A0-00) to 2 to clear the accumulative running time.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	User-defined fault 1	Source of user-defined fault 1 (H2-02)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes
		Cause	Check method	Solution	
		1. The user-defined fault signal is input through the multi-function DI terminal. 2. The user-defined fault signal is input through the virtual I/O function. 3. The user-defined fault signal is input through the connector function.	Check the source of user-defined fault 1 (H2-02) and check whether the source is active (indicated by 1).	Set the fault input signal to 0 according to the user-defined fault source (H2-02) to reset the operation.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined fault 2	Source of user-defined fault 2 (H2-03)		0: Coast to stop	Supported
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined fault signal is input through the multi-function DI terminal. 2. The user-defined fault signal is input through the virtual I/O function. 3. The user-defined fault signal is input through the connector function.	Check the source of user-defined fault 2 (H2-03) and check whether the fault source is active (indicated by 1).	Set the fault input signal to 0 according to the user-defined fault source (H2-03) to reset the operation.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined fault 3	Source of user-defined fault 3 (H2-04)		0: Coast to stop	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined fault signal is input through the multi-function DI terminal. 2. The user-defined fault signal is input through the virtual I/O function. 3. The user-defined fault signal is input through the connector function.	Identify the source of user-defined fault 3 (H2-04) and check if the source is active (indicated by 1).	Set the fault input signal to 0 according to the user-defined fault source (H2-04) to reset the operation.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined fault 4	Source of user-defined fault 4 (H2-05)		0: Coast to stop	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined fault signal is input through the multi-function DI terminal. 2. The user-defined fault signal is input through the virtual I/O function. 3. The user-defined fault signal is input through the connector function.	Identify the source of user-defined fault 4 (H2-05) and check if the source is active (indicated by 1).	Set the fault input signal to 0 according to the user-defined fault source (H2-05) to reset the operation.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>



			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined fault 5	Source of user-defined fault 5 (H2-06)		0: Coast to stop	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined fault signal is input through the multi-function DI terminal. 2. The user-defined fault signal is input through the virtual I/O function. 3. The user-defined fault signal is input through the connector function.	Identify the source of user-defined fault 5 (H2-06) and check if the source is active (indicated by 1).	Set the fault input signal to 0 according to the user-defined fault source (H2-06) to reset the operation.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined fault 6	Source of user-defined fault 6 (H2-07)		0: Coast to stop	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined fault signal is input through the multi-function DI terminal. 2. The user-defined fault signal is input through the virtual I/O function. 3. The user-defined fault signal is input through the connector function.	Identify the source of user-defined fault 6 (H2-07) and check if the source is active (indicated by 1).	Set the fault input signal to 0 according to the user-defined fault source (H2-07) to reset the operation.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined fault 7	Source of user-defined fault 7 (H2-08)		0: Coast to stop	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined fault signal is input through the multi-function DI terminal. 2. The user-defined fault signal is input through the virtual I/O function. 3. The user-defined fault signal is input through the connector function.	Identify the source of user-defined fault 7 (H2-08) and check if the source is active (indicated by 1).	Set the fault input signal to 0 according to the user-defined fault source (H2-08) to reset the operation.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined fault 8	Source of user-defined fault 8 (H2-09)		0: Coast to stop	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined fault signal is input through the multi-function DI terminal. 2. The user-defined fault signal is input through the virtual I/O function. 3. The user-defined fault signal is input through the connector function.	Identify the source of user-defined fault 8 (H2-09) and check if the source is active (indicated by 1).	Set the fault input signal to 0 according to the user-defined fault source (H2-09) to reset the operation.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined alarm 1	The source of user-defined alarm 1 (H2-10) is high level.		13: Display alarm	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined alarm signal is input through the multi-function DI terminal. 2. The user-defined alarm signal is input through the virtual I/O function. 3. The user-defined alarm signal is input through the connector function.	Identify the source of user-defined alarm 1 (H2-10) and check whether the alarm source is active (indicated by 1).	Set the alarm input signal to 0 according to the user-defined alarm source (H2-10) to reset the operation	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined alarm 2	The source of user-defined alarm 2 (H2-11) is high level.		13: Display alarm	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined alarm signal is input through the multi-function DI terminal. 2. The user-defined alarm signal is input through the virtual I/O function. 3. The user-defined alarm signal is input through the connector function.	Identify the source of user-defined alarm 2 (H2-11) and check if the alarm source is active (indicated by 1).	Set the alarm input signal to 0 according to the user-defined alarm source (H2-11) to reset the operation	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined alarm 3	The source of user-defined alarm 3 (H2-12) is high level.		13: Display alarm	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined alarm signal is input through the multi-function DI terminal. 2. The user-defined alarm signal is input through the virtual I/O function. 3. The user-defined alarm signal is input through the connector function.	Identify the source of user-defined alarm 3 (H2-12) and check whether the source is active (indicated by 1).	Set the alarm input signal to 0 according to the user-defined alarm source (H2-12) to reset the operation.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined alarm 4	The source of user-defined alarm 4 (H2-13) is high level.		13: Display alarm	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined alarm signal is input through the multi-function DI terminal. 2. The user-defined alarm signal is input through the virtual I/O function. 3. The user-defined alarm signal is input through the connector function.	Check the source of user-defined alarm 4 (H2-13) and check whether the source is active (indicated by 1).	Set the alarm input signal to 0 according to the user-defined alarm source (H2-13) to reset the operation.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>



			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined alarm 5	The source of user-defined alarm 5 (H2-14) is high level.		13: Display alarm	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined alarm signal is input through the multi-function DI terminal. 2. The user-defined alarm signal is input through the virtual I/O function. 3. The user-defined alarm signal is input through the connector function.	Check the source of user-defined alarm 5 (H2-14) and check whether the source is active (indicated by 1).	Set the alarm input signal to 0 according to the user-defined alarm source (H2-14) to reset the operation.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined alarm 6	The source of user-defined alarm 6 (H2-15) is high level.		13: Display alarm	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined alarm signal is input through the multi-function DI terminal. 2. The user-defined alarm signal is input through the virtual I/O function. 3. The user-defined alarm signal is input through the connector function.	Check the source of user-defined alarm 6 (H2-15) and check whether the source is active (indicated by 1).	Set the alarm input signal to 0 according to the user-defined alarm source (H2-15) to reset the operation.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined alarm 7	The source of user-defined alarm 7 (H2-16) is high level.		13: Display alarm	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined alarm signal is input through the multi-function DI terminal. 2. The user-defined alarm signal is input through the virtual I/O function. 3. The user-defined alarm signal is input through the connector function.	Check the source of user-defined alarm 7 (H2-16) and check whether the source is active (indicated by 1).	Set the alarm input signal to 0 according to the user-defined alarm source (H2-16) to reset the operation.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	User-defined alarm 8	The source of user-defined alarm 8 (H2-17) is high level.		13: Display alarm	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. The user-defined alarm signal is input through the multi-function DI terminal. 2. The user-defined alarm signal is input through the virtual I/O function. 3. The user-defined alarm signal is input through the connector function.	Check the source of user-defined alarm 8 (H2-17) and check whether the source is active (indicated by 1).	Set the alarm input signal to 0 according to the user-defined alarm source (H2-17) to reset the operation.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	Cumulative power-on time reached	Check whether the accumulative power-on time (Ad-02 and Ad-03) has reached the set power-on threshold (P0-16 and P0-18).		13: Display alarm	Yes
			Cause	Check method	Solution
		The cumulative power-on time reaches the set value.	Check if the accumulative power-on time (Ad-02 and Ad-03) has reached the set power-on threshold (P0-16 and P0-18).	Set parameter initialization (A0-00) to 2 (clear records) to clear the accumulative power-on time.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

	Output three-phase loss	When the three-phase phase loss protection is enabled, the three-phase output current is smaller than the three-phase output phase loss detection threshold (d1-84) and the three-phase output phase loss detection time (d1-83) lasts	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes
		Cause	Check method	Solution	
		The AC drive is running without being connected to the motor.	Check whether the output cables of the drive are connected properly.	Reconnect the AC drive output circuit according to the wiring diagram in the product guide.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	PID feedback is lost during operation.	The PID feedback value is not within the PID feedback loss detection range (upper limit P2-30/lower limit P2-31), and such status keeps after the time defined by P2-32 elapses.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Supported

		Cause	Check method	Solution	
		PID feedback is not in the loss detection range.	Check the PID feedback source input value corresponding to the PID feedback source (P2-04) (for example, when the PID feedback source is set to 0 (AI1), the PID feedback source input value is the AI1 input value (E2-01)) to determine if the PID feedback value is greater than the PID detection upper limit (P2-30) or less than the PID detection lower limit (P2-31).	Adjust the PID feedback source input value or adjust the PID detection upper or lower limit (P2-30 or P2-31) so that the input value is in the detection range. Increase the PID detection upper limit (P2-30) by 10% or decrease the PID detection lower limit (P2-31) by 10% and test the result, and repeat this step as necessary.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Parameter reset exception	Power-off occurs during parameter initialization (A0-00).	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	13: Display alarm	Yes
		Cause	Check method	Solution	

		Parameter reset exception	Parameter reset by setting the parameter initialization (A0-00) parameter fails.	Perform parameter initialization again.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Parameter backup exception	Power off during parameter backup (A0-39).	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	13: Display alarm	Yes
		Cause	Check method	Solution	
		Parameter backup exception	Parameter backup by setting the user backup (A0-39) parameter fails.	Perform parameter backup again.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset



			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	Parameter exception upon power off	The attempt to save parameters upon power-off fails.		13: Display alarm	Yes
		Cause	Check method	Solution	
		Parameter exception upon power off	Parameter storage at power failure fails and the parameter is not retained after the power is restored.	Seek technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

	Parameter setting error	This fault is triggered when user load curves in group P0 are set improperly.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	13: Display alarm	Yes
		Cause	Check method	Solution	
		Parameter setting exception	The U2-23 is a non-zero value, the parameter is set improperly.	Check whether user load curves in group P0 are set properly.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Parameter check exception upon power-on	This fault is reported when the parameter value saved by EEPROM is not within the corresponding parameter range.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	13: Display alarm	Yes
		Cause	Check method	Solution	

		Parameter check exception upon power-on	When the parameter check at power-on is abnormal and the 16-bit parameter error type (U2-10) is not 0, it indicates a parameter check exception occurs.	Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Parameter backup invalid	The number of backup parameters exceeds the upper limit set by the software.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	13: Display alarm	Yes
		Cause	Check method	Solution	
		The number of backup parameters exceeds the upper limit.	When the value of U2-24 is 1, it indicates that the number of backup parameters exceeds the upper limit.	After clearing the parameter backup record, perform the parameter backup again.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

	Parameter initialization exception at power-on	This fault is triggered when initialization of the parameter is not done upon power-on.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	No
		Cause	Check method	Solution	
		Parameter initialization exception at power-on	When the value of the power-on initialization completion flag (U2-65) is 0, it indicates that parameter initialization fails.	Power off and on again.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Pulse-by-pulse current limit fault	This fault is reported when the output current exceeds the pulse-by-pulse limit and the duration of the pulse-by-pulse limit reaches the threshold in the V/f control mode of asynchronous motor.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	

		<p>The load is too heavy or the motor is stalled.</p>	<p>1. When the asynchronous motor is overloaded, switch to V/f control (F0-01 = 2) and observe whether the output current is too high. If motor parameters are set correctly, but overload occurs upon with-load start at slow acceleration in V/f mode, it indicates the load is too heavy.</p> <p>2. During high-speed operation in vector control, if the result of output torque percentage (LC-12) x output speed percentage (LC-10) is close to the output power, and the output torque is high, it indicates the load is too heavy.</p> <p>3. Check whether the brake is released normally.</p>	<p>1. When overload occurs during low-speed operation of the asynchronous motor, increase the no-load current (F1-30) properly and reduce the mutual inductance (F1-28) at the same time to ensure the multiplication result does not change.</p> <p>2. When overload occurs during low-speed operation of the synchronous motor, if a salient pole motor is used, increase the MTPA adjustment coefficient of the synchronous motor (d5-29). Observe whether the overall output current can be reduced.</p> <p>3. When overload occurs upon excessively heavy load in the high-speed field weakening zone, increase the modulation coefficient (A5-06). It is recommended to set A5-06 to a value lower than 108%.</p> <p>4. If the fault cannot be rectified through the preceding means, increase the power rating of the drive.</p>
		<p>The power rating of the drive is too low.</p>	<p>The rated current of motor (F1-04) is higher than that of the drive (A3-03).</p>	<p>Reduce the load or replace with a drive of higher power rating.</p>

		<p>V/f acceleration/deceleration time is too short (asynchronous motor in V/f control mode).</p>	<p>Increase the deceleration time and repeat the test. If the fault does not occur again, the fault is caused by short acceleration/deceleration time.</p>	<ol style="list-style-type: none"> <li>1. Determine whether current acceleration/deceleration time is a value that must be set by the process. Otherwise, extend the acceleration/deceleration time properly</li> <li>2. Enable the overcurrent suppression function (d2-26 = 1). If overcurrent persists, decrease the value first. If it is invalid, increase the value.</li> <li>3. Increase the manual torque boost value (d2-14).</li> <li>4. For working conditions with frequent start/stop, enable DC braking for stop to ensure that the DC braking time for stop (d0-29) will not expire until the next start.</li> <li>5. When multiple motors are started simultaneously, apply the DC braking for start with the same duration (d0-25) to significantly reduce startup current shock.</li> </ol>
		<p>The output is grounded.</p>	<ol style="list-style-type: none"> <li>1. Measure the resistance of the output end to ground with a megger to check whether the resistance is in the unit of megohm.</li> <li>2. Enable manual self-check (C2-04 = 1) and enable the drive to run. If no fault is reported, the drive is normal. (The IT power grid cannot detect short circuit to ground. For details, see section "Self-check" in the function guide.)</li> </ol>	<p>Replace the short-circuited part, such as the motor or cable.</p>

		Motor parameters are set incorrectly.	Check the nameplate of the motor to ensure the basic parameters of the motor (F1-00 to F1-11) are consistent with those on the nameplate.	Set the motor nameplate parameters according to section "Setting Motor Parameters" in the function guide.
		Output inter-phase is short-circuited.	<ol style="list-style-type: none"> <li>1. Measure the resistance between UV/VW/WU phases with a multimeter (in resistance mode) to check whether the resistance is symmetrical.</li> <li>2. Enable manual self-check (C2-04 = 1) and enable the drive to run. If no fault is reported, the drive is normal.</li> </ol>	Replace the part that encounters short circuit to ground faults
		The motor is started during rotation (synchronous motor in SVC).	Before start, check whether the motor is rotating.	Set the start mode to flying start (d0-02 = 1).

		<p>V/f oscillation (asynchronous motor V/f)</p>	<p>Use the continuous oscilloscope in the commissioning software to check whether the actual excitation/torque current (LC-20/21) and rotor speed (LC-10) of the motor are oscillating. The fluctuation range of the actual excitation/torque current of the motor does not exceed 10% under normal conditions.</p>	<p>1. Increase or decrease the V/f oscillation suppression gain (d2-23) properly and observe whether oscillation is alleviated. 2. Change the motor control mode to SVC (F0-01 = 0). After parameter auto-tuning, use the SVC mode.</p>
		<p>Output phase loss occurs.</p>	<p>1. Use a multimeter to measure the resistance between UV, VW, and WU. Normally, the resistance does not exceed 100 Ω. If output phase loss occurs, the resistance is infinite. 2. Enable manual self-check (C2-04 = 1) and run. If no fault is reported, the drive is normal.</p>	<p>Replace the phase loss part.</p>



		<p>The reference voltage of the V/f curve is too large (asynchronous motor V/f).</p>	<p>1. When the V/f curve is multi-point V/f (d2-00 = 1), decrease the voltage of the point (d2-02 to d2-10) with excessive high voltage/frequency and check whether the fault is cleared.  2. When the V/f curve is separated V/f (d2-00 = 10), set the frequency first, and then increase the voltage gradually. If the output voltage when the output current reaches the rated value is lower than the set voltage when the fault occurs, the voltage set for separated V/f is improper.</p>	<p>1. Reduce the voltage/frequency ratio in the multi-point V/f curve to prevent it from being larger than the ratio in the linear V/f, resulting in the motor overexcitation.  2. For separated V/f, set the voltage acceleration/deceleration time (d2-50/51) that matches the frequency to avoid excessive voltage acceleration time or output voltage.</p>
		<p>The value of the torque boost parameter (asynchronous motor in V/f control mode) is too large.</p>	<p>1. Check whether the manual torque boost value (d2-14) is set an excessively low.  2. When the torque boost mode is "automatic" or "manual + automatic", check whether the stator resistance (F1-20) has been auto-tuned.</p>	<p>1. Reduce the manual torque boost value and enable the drive to run again.  2. Perform static partial auto-tuning of the asynchronous motor (F1-69 = 1) and enable the drive to run again.</p>

		Model-related parameters are set incorrectly.	Check the nameplate of the drive to ensure the rated power/current/voltage of the drive (A3-02/03/04) are consistent with those on the nameplate.	Set model-related parameters correctly.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Excessive speed deviation	The deviation between the actual motor speed and the set speed is higher than the threshold (d1-40), and such status keeps after the time defined by d1-39 elapses.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	13: Display alarm	Yes
		Cause	Check method	Solution	

		<p>The load is too heavy or the motor is stalled.</p>	<p>1. When the asynchronous motor is overloaded, switch to V/f control (F0-01 = 2) and observe whether the output current is too high. If motor parameters are set correctly, but overload occurs upon with-load start at slow acceleration in V/f mode, it indicates the load is too heavy.</p> <p>2. During high-speed operation in vector control, if the result of output torque percentage (LC-12) x output speed percentage (LC-10) is close to the output power, and the output torque is high, it indicates the load is too heavy.</p> <p>3. Check whether the brake is released normally.</p>	<p>1. When overload occurs during low-speed operation of the asynchronous motor, increase the no-load current (F1-30) properly and reduce the mutual inductance (F1-28) at the same time to ensure the multiplication result does not change.</p> <p>2. When overload occurs during low-speed operation of the synchronous motor, if a salient pole motor is used, increase the MTPA adjustment coefficient of the synchronous motor (d5-29). Observe whether the overall output current can be reduced.</p> <p>3. When overload occurs upon excessively heavy load in the high-speed field weakening zone, increase the modulation coefficient (A5-06). It is recommended to set A5-06 to a value lower than 108%.</p> <p>4. If the fault cannot be rectified through the preceding means, increase the power rating of the drive.</p>
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		<p>Divergence can occur near 0 Hz on the synchronous motor (SVC).</p>	<p>When the synchronous motor is in the SVC mode and the set speed (U0-01) is near 0, the feedback speed fluctuates greatly and unusual noise, motor stall, or slightly continuous reverse rotation occurs.</p>	<ol style="list-style-type: none"> <li>1. Avoid the long-term operation of the SVC at speeds close to zero.</li> <li>2. Perform parameter auto-tuning again (F1-69 = 12).</li> <li>3. Enable IF control. Set the tens of the low-speed processing mode (d0-85) to 1.</li> </ol> <p>For details, see the section "Vector control" in the function guide.</p>
		<p>The synchronous frequency of the asynchronous motor SVC operates near 0 Hz (asynchronous motor SVC).</p>	<p>The synchronous frequency (LC-15) is close to 0 (<math>\pm 0.5\%</math>) and runs for more than 10s.</p>	<p>Avoid the long-term operation at speeds close to zero.</p>
		<p>Synchronous motor demagnetization (SVC)</p>	<p>Record the current back EMF (F1-12), disassemble the motor coupling, and perform dynamic auto-tuning for the synchronous motor (F1-69 = 12) again. Compare whether the new value of the back EMF is lower than the initial value. Note that when the motor temperature increases, the back EMF decreases by less than 10%. If the back EMF recovers after cooling, it is normal.</p>	<p>Analyze the specific demagnetization causes. Common causes include low carrier frequency, oscillation in speed control mode, and excessive motor back EMF and output current harmonic. If the motor is replaced directly, demagnetization may occur again.</p>

		<p>Synchronous/asynchronous motor parameters are not tuned in the vector control mode (SVC).</p>	<p>In the SVC control mode (F0-01 = 2), perform parameter auto-tuning. Compare the parameters in group F1 to the default values to check whether auto-tuning has been performed.</p>	<p>Perform accurate parameter auto-tuning or download all parameters that need auto-tuning. For details, see the Commissioning and Trial Run section in the function guide.</p>
		<p>The motor is started during rotation (synchronous motor in SVC).</p>	<p>Before start, check whether the motor is rotating.</p>	<p>Set the start mode to flying start (d0-02 = 1).</p>
		<p>Synchronous motor magnetic pole angle auto-tuning error (synchronous motor SVC)</p>	<p>1. When the motor can rotate freely, select pre-positioning start (d0-71 = 3) to check whether the motor can start normally. 2. If the motor Lq/Ld (F1-34/F1-32) is lower than 1.5 when the motor cannot rotate freely, start with voltage pulse mode (d0-71 = 0) and increase the initial position detection current of the synchronous motor (d0-75). Otherwise, start with high frequency injection (d0-71 = 1) and set the initial position compensation angle (d0-76) to 180.</p>	<p>1. The motor rotates slightly during pre-positioning start. If this does not affect the process, it is recommended to use this method to start the motor. 2. If the motor Lq/Ld (F1-34/F1-32) is less than 1.5, start with voltage pulse mode (d0-71 = 0) and increase the initial position detection current of the synchronous motor (d0-75). Otherwise, start with high frequency injection (d0-71 = 1) and set the initial position compensation angle (d0-76) to 180 and run the motor several times. 3. The magnetic pole position of the synchronous motor with squirrel-cage bar is inaccurate, which may easily lead to reverse rotation. It is recommended to set to asynchronous motor V/f operation mode.</p>

		Motor parameters are set incorrectly.	Check the nameplate of the motor to ensure the basic parameters of the motor (F1-00 to F1-11) are consistent with those on the nameplate.	Set the motor nameplate parameters according to section "Setting Motor Parameters" in the function guide.
		Model-related parameters are set incorrectly.	Check the nameplate of the drive to ensure the rated power/current/voltage of the drive (A3-02/03/04) are consistent with those on the nameplate.	Set model-related parameters correctly.
		The current limit is set to an excessively low value.	Check whether the maximum motor current (F1-13), the rated AC drive current (A3-05), and the output current limit (LC-19) are within the limit. For details, see section "Current limit" in the function guide.	Increase the current limit properly (F1-13).
		The torque limit is set to an excessively low value.	Check whether the output torque (LC-12) reaches the limit (Lb-30/31). For details, see section Torque Limit in the Function guide.	Increase the torque limit (d1-09/10) properly.

		The power limit is set to an excessively low value.	Check whether the output power (LC-22) reaches generating/motoring power limit (d1-13 to 17). For details, see section "Power limit" in the function guide.	Increase the power limit (d1-13/14) properly.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	The actual speed is opposite to the set speed.	The actual speed is in opposite direction to the set speed.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	13: Display alarm	Yes
		Divergence can occur near 0 Hz on the synchronous motor (SVC).	When the synchronous motor is in the SVC mode and the set speed (U0-01) is near 0, the feedback speed fluctuates greatly and unusual noise, motor stall, or slightly continuous reverse rotation occurs.	1. Avoid long-term operation at zero speed in the SVC mode. 2. Perform parameter auto-tuning again (F1-69 = 12). 3. Enable IF control. Set the ten place of the d0-85 (Low-speed processing mode) to 1. For details, see the section "Vector Control" in the function guide,	

		<p>The synchronous frequency of the asynchronous motor SVC operates near 0 Hz (asynchronous motor SVC).</p>	<p>The synchronous frequency (LC-15) is close to 0 (<math>\pm 0.5\%</math>) and runs for more than 10s.</p>	<p>Avoid the long-term operation at speeds close to zero.</p>
		<p>Synchronous motor demagnetization (SVC)</p>	<p>Record the current back EMF (F1-12), disassemble the motor coupling, and perform dynamic auto-tuning for the synchronous motor (F1-69 = 12) again. Compare whether the new value of the back EMF is lower than the initial value. Note that when the motor temperature increases, the back EMF decreases by less than 10%. If the back EMF recovers after cooling, it is normal.</p>	<p>Analyze the specific demagnetization causes. Common causes include low carrier frequency, oscillation in speed control mode, and excessive motor back EMF and output current harmonic. If the motor is replaced directly, demagnetization may occur again.</p>
		<p>Synchronous/asynchronous motor parameters are not tuned in the vector control mode (SVC).</p>	<p>In the SVC control mode (F0-01 = 0), perform parameter auto-tuning. Compare the parameters in group F1 to the default values to check whether auto-tuning has been performed.</p>	<p>Perform accurate parameter auto-tuning or download all parameters that need auto-tuning. For details, see the Commissioning and Trial Run section in the function guide.</p>



		<p>The motor is started during rotation (synchronous motor in SVC).</p>	<p>Before start, check whether the motor is rotating.</p>	<p>Set the start mode to flying start (d0-02 = 1).</p>
		<p>Synchronous motor magnetic pole angle auto-tuning error (synchronous motor SVC)</p>	<p>1. When the motor can rotate freely, select pre-positioning start (d0-71 = 3) to check whether the motor can start normally.  2. If the motor Lq/Ld (F1-34/F1-32) is lower than 1.5 when the motor cannot rotate freely, start with voltage pulse mode (d0-71 = 0) and increase the initial position detection current of the synchronous motor (d0-75). Otherwise, start with high frequency injection (d0-71 = 1) and set the initial position compensation angle (d0-76) to 180.</p>	<p>1. The motor rotates slightly during pre-positioning start. If this does not affect the process, it is recommended to use this method to start the motor.  2. If the motor Lq/Ld (F1-34/F1-32) is less than 1.5, start with voltage pulse mode (d0-71 = 0) and increase the initial position detection current of the synchronous motor (d0-75). Otherwise, start with high frequency injection (d0-71 = 1) and set the initial position compensation angle (d0-76) to 180 and run the motor several times.  3. The magnetic pole position of the synchronous motor with squirrel-cage bar is inaccurate, which may easily lead to reverse rotation. It is recommended to set to asynchronous motor V/f operation mode.</p>
		<p>Motor parameters are set incorrectly.</p>	<p>Check the nameplate of the motor to ensure the basic parameters of the motor (F1-00 to F1-11) are consistent with those on the nameplate.</p>	<p>Set the motor nameplate parameters according to section "Setting Motor Parameters" in the function guide.</p>

		Model-related parameters are set incorrectly.	Check the nameplate of the drive to ensure the rated power/current/voltage of the drive (A3-02/03/04) are consistent with those on the nameplate.	Set model-related parameters correctly.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Motor overspeed	This fault is reported when the actual motor speed exceeds the overspeed protection threshold (d1-37) and such status lasts after the time defined by d1-36 elapses.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes
		Cause	Check method	Solution	

		<p>The load is too heavy or the motor is stalled.</p>	<p>1. When the asynchronous motor is overloaded, switch to V/f control (F0-01 = 2) and observe whether the output current is too high. If motor parameters are set correctly, but overload occurs upon with-load start at slow acceleration in V/f mode, it indicates the load is too heavy.</p> <p>2. During high-speed operation in vector control, if the result of output torque percentage (LC-12) x output speed percentage (LC-10) is close to the output power, and the output torque is high, it indicates the load is too heavy.</p> <p>3. Check whether the brake is released normally.</p>	<p>1. When overload occurs during low-speed operation of the asynchronous motor, increase the no-load current (F1-30) properly and reduce the mutual inductance (F1-28) at the same time to ensure the multiplication result does not change.</p> <p>2. When overload occurs during low-speed operation of the synchronous motor, if a salient pole motor is used, increase the MTPA adjustment coefficient of the synchronous motor (d5-29). Observe whether the overall output current can be reduced.</p> <p>3. When overload occurs upon excessively heavy load in the high-speed field weakening zone, increase the modulation coefficient (A5-06). It is recommended to set A5-06 to a value lower than 108%.</p> <p>4. If the fault cannot be rectified through the preceding means, increase the power rating of the drive.</p>
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		<p>Synchronous motor demagnetization (SVC)</p>	<p>Record the current back EMF (F1-12), disassemble the motor coupling, and perform dynamic auto-tuning for the synchronous motor (F1-69 = 12) again. Compare whether the new value of the back EMF is lower than the initial value. Note that when the motor temperature increases, the back EMF decreases by less than 10%. If the back EMF recovers after cooling, it is normal.</p>	<p>Analyze the specific demagnetization causes. Common causes include low carrier frequency, oscillation in speed control mode, and excessive motor back EMF and output current harmonic. If the motor is replaced directly, demagnetization may occur again.</p>
		<p>Synchronous/asynchronous motor parameters are not tuned in the vector control mode (SVC).</p>	<p>In the SVC control mode (F0-01 = 0), perform parameter auto-tuning. Compare the parameters in group F1 to the default values to check whether auto-tuning has been performed.</p>	<p>Perform accurate parameter auto-tuning or download all parameters that need auto-tuning. For details, see the Commissioning and Trial Run section in the function guide.</p>

		<p>Synchronous motor magnetic pole angle auto-tuning error (synchronous motor SVC)</p>	<p>1. When the motor can rotate freely, select pre-positioning start (d0-71 = 3) to check whether the motor can start normally.  2. If the motor Lq/Ld (F1-34/F1-32) is lower than 1.5 when the motor cannot rotate freely, start with voltage pulse mode (d0-71 = 0) and increase the initial position detection current of the synchronous motor (d0-75). Otherwise, start with high frequency injection (d0-71 = 1) and set the initial position compensation angle (d0-76) to 180.</p>	<p>1. The motor rotates slightly during pre-positioning start. If this does not affect the process, it is recommended to use this method to start the motor.  2. If the motor Lq/Ld (F1-34/F1-32) is less than 1.5, start with voltage pulse mode (d0-71 = 0) and increase the initial position detection current of the synchronous motor (d0-75). Otherwise, start with high frequency injection (d0-71 = 1) and set the initial position compensation angle (d0-76) to 180 and run the motor several times.  3. The magnetic pole position of the synchronous motor with squirrel-cage bar is inaccurate, which may easily lead to reverse rotation. It is recommended to set to asynchronous motor V/f operation mode.</p>
		<p>Motor parameters are set incorrectly.</p>	<p>Check the nameplate of the motor to ensure the basic parameters of the motor (F1-00 to F1-11) are consistent with those on the nameplate.</p>	<p>Set the motor nameplate parameters according to section "Setting Motor Parameters" in the function guide.</p>

		The power rating of the drive is too low.	Check whether low overload mode is selected for high overload applications, or a low-power drive is used to drive a high-power motor.	Replace with a drive with higher power rating.
		Model-related parameters are set incorrectly.	Check the nameplate of the drive to ensure the rated power/current/voltage of the drive (A3-02/03/04) are consistent with those on the nameplate.	Set model-related parameters correctly.
		The motor overspeed detection parameters are set improperly.	Check whether the motor overspeed detection parameters (d1-36/37) meet the current operating conditions.	Set the detection parameters (d1-36 and d1-37) properly as needed so that the motor overspeed detection parameters can cover the actual speed change range of the motor.
		The current limit is set to an excessively low value.	Check whether the maximum motor current (F1-13), the rated AC drive current (A3-05), and the output current limit (LC-19) are within the limit. For details, see section "Current limit" in the function guide.	Increase the current limit properly (F1-13).
		The torque limit is set to an excessively low value.	Check whether the output torque (LC-12) reaches the limit (Lb-30/31). For details, see section Torque Limit in the Function guide.	Increase the torque limit (d1-09/10) properly.

		The power limit is set to an excessively low value.	Check whether the output power (LC-22) reaches generating/motorin g power limit (d1-13 to 17). For details, see section "Power limit" in the function guide.	Increase the power limit (d1-13/14) properly.	
		The startup torque is too large during torque control.	Check whether the motor control mode is torque control (F0-02 = 1) and whether a large torque reference is set.	Do not start in the torque control mode with a large torque reference at no load.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Asynchronous motor (SVC) stall	This fault is triggered when the actual motor speed exceeds the asynchronous motor SVC runaway protection threshold (d1-92) and lasts for the time defined by d1-91.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes
Cause			Check method	Solution	
		The synchronous frequency of the asynchronous motor SVC operates near 0 Hz (asynchronous motor SVC).	The synchronous frequency (LC-15) is close to 0 ( $\pm 0.5\%$ ) and runs for more than 10s.	Avoid the long-term operation at speeds close to zero.	

		Synchronous/asynchronous motor parameters are not tuned in the vector control mode (SVC).	In the SVC control mode (F0-01 = 0), perform parameter auto-tuning. Compare the parameters in group F1 to the default values to check whether auto-tuning has been performed.	Perform accurate parameter auto-tuning or download all parameters that need auto-tuning. For details, see the Commissioning and Trial Run section in the function guide.	
		Motor parameters are set incorrectly.	Check the nameplate of the motor to ensure the basic parameters of the motor (F1-00 to F1-11) are consistent with those on the nameplate.	Set the motor nameplate parameters according to section "Setting Motor Parameters" in the function guide.	
		Model-related parameters are set incorrectly.	Check the nameplate of the drive to ensure the rated power/current/voltage of the drive (A3-02/03/04) are consistent with those on the nameplate.	Set model-related parameters correctly.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset



		<p>The load monitoring overload action (P0-68) is set to “Fault” . The load observation value exceeds the upper limit of the load monitoring curve (P0-70 to P0-84) and the duration reaches the overload allowable time (P0-85).</p>	<p>0: Coast to stop  1: Stop at maximum capacity  2: Quick stop  3: Decelerate to stop  4 to 8: Reserved  9: Run with speed limited  10: Run with power limited  11: Run with current limited  12: Run with torque limited  13: Display alarm  14: Prompt  15: Ignore</p>	0: Coast to stop	Yes
	Load monitoring overload fault				
		Cause	Check method	Solution	
		<p>The load monitoring parameter is set improperly.</p>	<p>1. Ensure that the action for overload in load monitoring (P0-68) is enabled.  2. Check the load monitoring curve parameters (P0-70 to P0-84) and overload allowance time (P0-85).</p>	<p>Set the detection parameters (P0-68 to P0-86) properly based on actual conditions.</p>	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

		<p>The load monitoring overload action (P0-68) is set to "Alarm" . The load observation value exceeds the upper limit of the load monitoring curve (P0-70 to P0-84) and the duration reaches the overload allowable time (P0-85).</p>	<p>0: Coast to stop  1: Stop at maximum capacity  2: Quick stop  3: Decelerate to stop  4 to 8: Reserved  9: Run with speed limited  10: Run with power limited  11: Run with current limited  12: Run with torque limited  13: Display alarm  14: Prompt  15: Ignore</p>	13: Display alarm	Yes
	Load monitoring overload alarm				
		Cause	Check method	Solution	
		<p>The load monitoring parameter is set improperly.</p>	<p>1. Ensure that the action for overload in load monitoring (P0-68) is enabled.  2. Check the load monitoring curve parameters (P0-70 to P0-84) and overload allowance time (P0-85).</p>	<p>Set the detection parameters (P0-68 to P0-86) properly based on actual conditions.</p>	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

		<p>The load monitoring load loss action (P0-69) is set to "Fault" .</p> <p>The load observation value is below the lower limit of the load monitoring curve (P0-70 to P0-84), and such status keeps after the time defined by P0-86 is reached.</p>	<p>0: Coast to stop</p> <p>1: Stop at maximum capacity</p> <p>2: Quick stop</p> <p>3: Decelerate to stop</p> <p>4 to 8: Reserved</p> <p>9: Run with speed limited</p> <p>10: Run with power limited</p> <p>11: Run with current limited</p> <p>12: Run with torque limited</p> <p>13: Display alarm</p> <p>14: Prompt</p> <p>15: Ignore</p>	0: Coast to stop	Yes
	Load monitoring load loss fault				
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		<p>The load monitoring parameter is set improperly.</p>	<p>1. Ensure that the action for load lost in load monitoring (P0-69) is enabled.</p> <p>2. Check the load monitoring curve parameters (P0-70 to P0-84) and load lost allowance time (P0-86).</p>	<p>Set the detection parameters (P0-68 to P0-86) properly based on actual conditions.</p>	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

	Load monitoring load loss alarm	The load monitoring load loss action (P0-69) is set to "Alarm" . The load observation value is lower than the lower limit of the load monitoring curve (P0-70 to P0-84) and such status keeps after the time defined by P0-86 elapses.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	13: Display alarm	Yes
		Cause	Check method	Solution	
		The load monitoring parameter is set improperly.	1. Ensure that the action for load lost in load monitoring (P0-69) is enabled. 2. Check the load monitoring curve parameters (P0-70 to P0-84) and load lost allowance time (P0-86).	Set the detection parameters (P0-68 to P0-86) properly based on actual conditions.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>
	Magnetic pole position auto-tuning error	The magnetic pole position auto-tuning is interrupted due to an exception.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		Magnetic pole position auto-tuning error	Enable manual self-check (C2-04 = 1) and start the AC drive to check whether the output phase is lost.	Reconnect the AC drive output circuit according to the wiring diagram in the product guide.	

		The motor type is set to synchronous motor (F1-00 = 2) and runs when the motor is not connected.	Check whether the output cables of the drive are connected properly.	Reconnect the AC drive output circuit according to the wiring diagram in the product guide.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Self-check process interrupted	A stop command is sent during system self-check, leading to unusual interruption.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		The self-check process is interrupted.	Ensure that the start/stop control word is normal during self-check.	Perform self-check again when the start/stop control word is normal.	
		An error occurred during self-check.	Check whether any other fault is reported.	Rectify the fault reported.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Phase V upper bridge IGBT short-circuited during self-check	The VCE signal is detected to be abnormal.	0: Coast to stop	0: Coast to stop	Supported
		Cause	Check method	Solution	
		VCE signal exception of phase V upper bridge IGBT	Contact Inovance for technical support.	Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Phase V lower bridge IGBT short-circuited during self-check	The VCE signal is detected to be abnormal.	0: Coast to stop	0: Coast to stop	Supported
		Cause	Check method	Solution	
		VCE signal exception of phase V lower bridge IGBT	Contact Inovance for technical support.	Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Phase U upper bridge IGBT short-circuited during self-check	The VCE signal is detected to be abnormal.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	

		The VCE signal of phase U upper bridge IGBT is detected to be abnormal.	Contact Inovance for technical support.	Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Phase U lower bridge IGBT short-circuited during self-check	The VCE signal is detected to be abnormal.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		The VCE signal of phase U lower bridge IGBT is abnormal.	Contact Inovance for technical support.	Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Output phase loss during self-check	Phase loss occurs on the cable connecting the drive and motor.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		Output phase loss is detected during self-check of the drive.	Perform phase loss self-check (C2-04 = 1) and start the drive to check whether output phase loss exists.	Re-connect the output circuit of the drive.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Phase U upper bridge or phase V lower bridge IGBT cannot be switched on during self-check.	U+V-IGBT open circuit is detected.	0: Coast to stop	0: Coast to stop	Supported
		Cause	Check method	Solution	
		The phase U upper bridge or phase V lower bridge IGBT is faulty.	Contact Inovance for technical support.	Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Phase U lower bridge or phase V upper bridge IGBT cannot be switched on during self-check.	U+V-IGBT open circuit is detected.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		The phase U lower bridge or phase V upper bridge IGBT is faulty.	Contact Inovance for technical support.	Contact Inovance for technical support.	

Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Phase V upper bridge or phase W lower bridge IGBT cannot be switched on during self-check.	V+W-IGBT open circuit is detected.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		The phase V upper bridge or phase W lower bridge IGBT is faulty.	Contact Inovance for technical support.	Contact Inovance for technical support.	
	The phase V lower bridge or phase W upper bridge IGBT cannot be switched on during self-check.	V+W-IGBT open circuit is detected.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		The phase V lower bridge or phase W upper bridge IGBT is faulty.	Contact Inovance for technical support.	Contact Inovance for technical support.	
	The phase W upper bridge or phase U lower bridge cannot be switched on during self-check.	W+U-IGBT open circuit is detected.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		The phase W upper bridge or phase U lower bridge IGBT is faulty.	Contact Inovance for technical support.	Contact Inovance for technical support.	
	The phase W lower bridge or phase U upper bridge IGBT cannot be switched on during self-check.	W+U-IGBT open circuit is detected.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		The phase W lower bridge or phase U upper bridge IGBT is faulty.	Contact Inovance for technical support.	Contact Inovance for technical support.	
	Phase UV output short circuit is detected during self-check.	Output phase-to-phase output short circuit occurs on U/V end.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		Output inter-phase short circuit occurs in phase UV.	Check with a tramegger whether short circuit exists.	Re-connect the output circuit of the drive.	

		The phase UV output is short-circuited to ground.	Check with a tramegger whether short circuit exists.	Re-wire the AC drive output circuit.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Phase VW output short circuit is detected during self-check.	Inter-phase output short circuit is detected on the VW end.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		Output inter-phase short circuit occurs in phase VW.	Check with a tramegger whether short circuit exists.	Re-wire the AC drive output circuit.	
		The phase VW output is short-circuited to ground.	Check with a tramegger whether short circuit exists.	Re-wire the AC drive output circuit.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Phase WU output short circuit is detected during self-check.	Inter-phase output short circuit is detected on the WU end.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		Output inter-phase short circuit occurs in phase WU.	Check with a tramegger whether short circuit exists.	Re-wire the AC drive output circuit.	
		The phase WU output is short-circuited to ground.	Check with a tramegger whether short circuit exists.	Re-wire the AC drive output circuit.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	The phase U current sensor is detected to be installed in the reverse direction during self-check.	The phase U current direction is detected to be reversed.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	
		The phase U sensor is installed reversely.	Contact Inovance for technical support.	Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	The phase V current sensor is detected to be installed in the reverse direction during	The phase V current direction is detected to be reversed.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	



	self-check.	The phase V sensor is installed reversely.	Contact Invoance for technical support.	Contact Invoance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	The phase W current sensor is detected to be installed in the reverse direction during self-check.	The phase W current direction is detected to be reversed.	0: Coast to stop	0: Coast to stop	Yes
Cause		Check method	Solution		
		The phase W sensor is installed reversely.	Contact Invoance for technical support.	Contact Invoance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	The phase U and phase V current sensors are detected to be misplaced during self-check.	The UV phase current sampling is detected to be abnormal.	0: Coast to stop	0: Coast to stop	Supported
Cause		Check method	Solution		
		The phase U and phase V current sensors are misplaced.	Contact Invoance for technical support.	Contact Invoance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	The phase V and phase W current sensors are detected to be misplaced during self-check.	The phase VW current sampling is detected to be abnormal.	0: Coast to stop	0: Coast to stop	Yes
Cause		Check method	Solution		
		The phase V and phase W current sensors are misplaced.	Contact Invoance for technical support.	Contact Invoance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	The phase W and phase U current sensors are detected to be misplaced during self-check.	The phase WU current sampling is detected to be abnormal.	0: Coast to stop	0: Coast to stop	Yes
Cause		Check method	Solution		
		The phase W and phase U current sensors are misplaced.	Contact Invoance for technical support.	Contact Invoance for technical support.	



	Phases U and W are detected to be imbalanced during self-check.	The phase UW output is unbalanced with the other phase.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes	
		Cause	Check method	Solution		
		The load at the output end is unbalanced.	Check whether the UW phase current on the load side is balanced.	Adjust the output current balance on the load end.		
		The current sensors are inconsistent.	Contact Inovance for technical support.	Contact Inovance for technical support.		
Fault code	Fault name	Cause	Fault level	Default fault level	Reset	

	Phases U and W are detected to be imbalanced during self-check.	The phase UW output is unbalanced with the other phase.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes	
		Cause	Check method	Solution		
		The load at the output end is unbalanced.	Check whether the UV current on the load side is balanced.	Adjust the output current balance on the load end.		
		The current sensors are inconsistent.	Contact Inovance for technical support.	Contact Inovance for technical support.		
Fault code	Fault name	Cause	Fault level	Default fault level	Reset	

	The fan is faulty.	The fan operates improperly.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	15: Ignore fault	Yes
		Cause	Check method	Solution	
		The fan is blocked or disconnected.	Check if the fan is blocked or the fan connection is loose.	Clean the fan, replace fan parts, or reconnect the fan.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Internal fault	An exception occurs when calling the internal sequence of the software.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	15: Ignore	Yes
		Cause	Check method	Solution	

		An exception occurs when calling the sequence of the software.	Re-power on the drive to check if it works normally. If the fault is still reported, an exception occurs during calling the sequence of the software.	Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Motor stall fault	When the motor reaches the torque limit and the motor operating frequency keeps lower than the stall fault detection frequency (d1-81) within the time defined by d1-80, a motor stall fault can be reported.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes
		Cause	Check method	Solution	
		A motor stall fault is reported when the torque is limited in the speed control mode.	Check whether the torque is limited in the speed control mode.	Disable motor stall detection (d1-79 = 0).	

		<p>The load is too heavy or the motor is stalled.</p>	<p>1. When the asynchronous motor is overloaded, switch to V/f control (F0-01 = 2) and observe whether the output current is too high. If motor parameters are set correctly, but overload occurs upon with-load start at slow acceleration in V/f mode, it indicates the load is too heavy.</p> <p>2. During high-speed operation in vector control, if the result of output torque percentage (LC-12) x output speed percentage (LC-10) is close to the output power, and the output torque is high, it indicates the load is too heavy.</p> <p>3. Check whether the brake is released normally.</p>	<p>1. When overload occurs during low-speed operation of the asynchronous motor, increase the no-load current (F1-30) properly and reduce the mutual inductance (F1-28) at the same time to ensure the multiplication result does not change.</p> <p>2. When overload occurs during low-speed operation of the synchronous motor, if a salient pole motor is used, increase the MTPA adjustment coefficient of the synchronous motor (d5-29). Observe whether the overall output current can be reduced.</p> <p>3. When overload occurs upon excessively heavy load in the high-speed field weakening zone, increase the modulation coefficient (A5-06). It is recommended to set A5-06 to a value lower than 108%.</p> <p>4. If the fault cannot be rectified through the preceding means, increase the power rating of the drive.</p>
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		<p>Divergence can occur near 0 Hz on the synchronous motor (SVC).</p>	<p>When the synchronous motor is in the SVC mode and the set speed (U0-01) is near 0, the feedback speed fluctuates greatly and unusual noise, motor stall, or slightly continuous reverse rotation occurs.</p>	<ol style="list-style-type: none"> <li>1. Avoid the long-term operation of the SVC at speeds close to zero.</li> <li>2. Perform parameter auto-tuning again (F1-69 = 12).</li> <li>3. Enable IF control. Set the tens of the low-speed processing mode (d0-85) to 1.</li> </ol> <p>For details, see the section "Vector control" in the function guide.</p>
		<p>Synchronous motor demagnetization (SVC)</p>	<p>Record the current back EMF (F1-12), disassemble the motor coupling, and perform dynamic auto-tuning for the synchronous motor (F1-69 = 12) again. Compare whether the new value of the back EMF is lower than the initial value. Note that when the motor temperature increases, the back EMF decreases by less than 10%. If the back EMF recovers after cooling, it is normal.</p>	<p>Analyze the specific demagnetization causes. Common causes include low carrier frequency, oscillation in speed control mode, and excessive motor back EMF and output current harmonic. If the motor is replaced directly, demagnetization may occur again.</p>



		<p>Synchronous/asynchronous motor parameters are not tuned in the vector control mode (SVC).</p>	<p>In the SVC control mode (F0-01 = 0), perform parameter auto-tuning. Compare the parameters in group F1 to the default values to check whether auto-tuning has been performed.</p>	<p>Perform accurate parameter auto-tuning or download all parameters that need auto-tuning. For details, see the Commissioning and Trial Run section in the function guide.</p>
		<p>The motor is started during rotation (synchronous motor in SVC).</p>	<p>Before start, check whether the motor is rotating.</p>	<p>Set the start mode to flying start (d0-02 = 1).</p>
		<p>Synchronous motor magnetic pole angle auto-tuning error (synchronous motor SVC)</p>	<p>1. When the motor can rotate freely, select pre-positioning start (d0-71 = 3) to check whether the motor can start normally. 2. If the motor Lq/Ld (F1-34/F1-32) is lower than 1.5 when the motor cannot rotate freely, start with voltage pulse mode (d0-71 = 0) and increase the initial position detection current of the synchronous motor (d0-75). Otherwise, start with high frequency injection (d0-71 = 1) and set the initial position compensation angle (d0-76) to 180.</p>	<p>1. The motor rotates slightly during pre-positioning start. If this does not affect the process, it is recommended to use this method to start the motor. 2. If the motor Lq/Ld (F1-34/F1-32) is less than 1.5, start with voltage pulse mode (d0-71 = 0) and increase the initial position detection current of the synchronous motor (d0-75). Otherwise, start with high frequency injection (d0-71 = 1) and set the initial position compensation angle (d0-76) to 180 and run the motor several times. 3. The magnetic pole position of the synchronous motor with squirrel-cage bar is inaccurate, which may easily lead to reverse rotation. It is recommended to set to asynchronous motor V/f operation mode.</p>

		Motor parameters are set incorrectly.	Check the nameplate of the motor to ensure the basic parameters of the motor (F1-00 to F1-11) are consistent with those on the nameplate.	Set the motor nameplate parameters according to section "Setting Motor Parameters" in the function guide.
		Model-related parameters are set incorrectly.	Check the nameplate of the drive to ensure the rated power/current/voltage of the drive (A3-02/03/04) are consistent with those on the nameplate.	Set model-related parameters correctly.
		The current limit is set to an excessively low value.	Check whether the maximum motor current (F1-13), the rated AC drive current (A3-05), and the output current limit (LC-19) are within the limit. For details, see section "Current limit" in the function guide.	Increase the current limit properly (F1-13).
		The torque limit is set to an excessively low value.	Check whether the output torque (LC-12) reaches the limit (Lb-30/31). For details, see section Torque Limit in the Function guide.	Increase the torque limit (d1-09/10) properly.

		The power limit is set to an excessively low value.	Check whether the output power (LC-22) reaches generating/motoring power limit (d1-13 to 17). For details, see section "Power limit" in the function guide.	Increase the power limit (d1-13/14) properly.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Motor step loss	After motor step loss detection is enabled, when the deviation between the magnetic flux setpoint and the feedback value keeps exceeding the step loss fault detection threshold (d1-86) within the time defined by d1-85, this fault can be reported. It is active only for asynchronous motors.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes
		Cause	Check method	Solution	
		The synchronous frequency of the asynchronous motor SVC operates near 0 Hz (asynchronous motor SVC).	The synchronous frequency (LC-15) is close to 0 ( $\pm 0.5\%$ ) and runs for more than 10s.	Avoid the long-term operation at speeds close to zero.	

		Synchronous/asynchronous motor parameters are not tuned in the vector control mode (SVC).	In the SVC control mode (F0-01 = 0), perform parameter auto-tuning. Compare the parameters in group F1 to the default values to check whether auto-tuning has been performed.	Perform accurate parameter auto-tuning or download all parameters that need auto-tuning. For details, see the Commissioning and Trial Run section in the function guide.
		The motor is started during rotation (synchronous motor in SVC).	Before start, check whether the motor is rotating.	Set the start mode to flying start (d0-02 = 1).
		Motor parameters are set incorrectly.	Check the nameplate of the motor to ensure the basic parameters of the motor (F1-00 to F1-11) are consistent with those on the nameplate.	Set the motor nameplate parameters according to section "Setting Motor Parameters" in the function guide.
		Model-related parameters are set incorrectly.	Check the nameplate of the drive to ensure the rated power/current/voltage of the drive (A3-02/03/04) are consistent with those on the nameplate.	Set model-related parameters correctly.

		Output phase loss occurs.	<p>1. Use a multimeter to measure the resistance between UV, VW, and WU. Normally, the resistance does not exceed 100 Ω. If output phase loss occurs, the resistance is infinite.</p> <p>2. Enable manual self-check (C2-04 = 1) and run. If no fault is reported, the drive is normal.</p>	Replace the phase loss part.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Current control abnormal	After current control error detection is enabled, when the deviation between the set current and feedback current keeps exceeding the current control error detection threshold (d1-88) within the time defined by (d1-87), this fault can be reported.	<p>0: Coast to stop</p> <p>1: Stop at maximum capacity</p> <p>2: Quick stop</p> <p>3: Decelerate to stop</p> <p>4 to 8: Reserved</p> <p>9: Run with speed limited</p> <p>10: Run with power limited</p> <p>11: Run with current limited</p> <p>12: Run with torque limited</p> <p>13: Display alarm</p> <p>14: Prompt</p> <p>15: Ignore</p>	0: Coast to stop	Yes
		Cause	Check method	Solution	

		Synchronous/asynchronous motor parameters are not tuned in the vector control mode (SVC).	In the SVC control mode (F0-01 = 0), perform parameter auto-tuning. Compare the parameters in group F1 to the default values to check whether auto-tuning has been performed.	Perform accurate parameter auto-tuning or download all parameters that need auto-tuning. For details, see the Commissioning and Trial Run section in the function guide.	
		Output phase loss occurs.	1. Use a multimeter to measure the resistance among UV, VW, and WU. Normally, the resistance does not exceed 100 Ω. If the output phase loss occurs, the resistance is infinite. 2. Enable manual self-check (C2-04 = 1) and run. If no fault is reported, it is normal.	Replace the phase loss part.	
		The droop coefficient is set to an excessively high value (synchronous motor/asynchronous motor SVC).	Check whether the droop function (d3-27 = 1) is enabled, and observe through the continuous oscilloscope whether the final set speed (LC-00) is subject to obvious oscillation at every cycle.	The droop coefficient (d3-39) cannot exceed the rated slip of the motor.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	Inconsistency between calculated and set number of pole pairs	The set number of motor pole pairs (F1-14) is different from the auto-tuned number of motor pole pairs.		13: Display alarm	Yes
		Cause	Check method	Solution	
		The set number of motor pole pairs is inconsistent with the actual number.	Check whether the number of active pole pairs (F1-15) of the motor is consistent with the parameters provided by the motor manufacturer.	Set the number of motor pole pairs correctly (F1-14).	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	Mismatch among the rated power, voltage, and current of the motor	The set motor power factor is not within the allowable range.		13: Display alarm	Yes
			<b>Cause</b>	<b>Check method</b>	<b>Solution</b>
		The set rated power, voltage, and current of the motor do not match each other.	Check whether the rated motor power P (F1-01), rated voltage U (F1-03), rated current I (F1-04), and power factor are set outside the normal range.		Set motor parameters correctly.
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>



			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	No-load current error	The auto-tuned no-load current value is outside the allowable range.		13: Display alarm	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		The rated motor parameters are set incorrectly. Therefore, the auto-tuned no-load current is outside the allowable range.	Check whether rated motor parameters (F1-00 to F1-07) are consistent with those indicated on the motor nameplate.	Accurately set the parameters according to the motor nameplate and then perform auto-tuning.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

	Mutual inductance and no-load current inconsistent with the rated voltage	The deviation between the rated flux and the flux calculated based on the rated voltage and frequency exceeds the allowable range.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	13: Display alarm	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		The auto-tuned mutual inductance and no-load current are inconsistent with the rated voltage and rated frequency.	Check whether rated motor parameters (F1-00 to F1-07) are consistent with those indicated on the motor nameplate.	Accurately set the parameters according to the motor nameplate and then perform auto-tuning.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	Rotor resistance error	The auto-tuned rotor resistance is not within the allowable range.		13: Display alarm	Yes
			<b>Cause</b>	<b>Check method</b>	<b>Solution</b>
		The auto-tuned rotor resistance is not within the allowable range.	Check whether rated motor parameters (F1-00 to F1-07) are consistent with those indicated on the motor nameplate.	Accurately set the parameters according to the motor nameplate and then perform auto-tuning.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

	AC drive pre-overload	The accumulative value of drive overload is reached (100% - AC drive pre-overload threshold (A3-53)).	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	13: Display alarm	Yes
		Cause	Check method	Solution	

		<p>The load is too heavy the motor is stalled.</p>	<p>1. When the asynchronous motor is overloaded, switch to V/f control (F0-01 = 2) and observe whether the output current is too high. If motor parameters are set correctly, but overload occurs upon with-load start at slow acceleration in V/f mode, it indicates the load is too heavy.</p> <p>2. During high-speed operation in vector control, if the result of output torque percentage (LC-12) x output speed percentage (LC-10) is close to the output power, and the output torque is high, it indicates the load is too heavy.</p> <p>3. Check whether the brake is released normally.</p>	<p>1. When overload occurs during low-speed operation of the asynchronous motor, increase the no-load current (F1-30) properly and reduce the mutual inductance (F1-28) at the same time to ensure the multiplication result does not change.</p> <p>2. When overload occurs during low-speed operation of the synchronous motor, if a salient pole motor is used, increase the MTPA adjustment coefficient of the synchronous motor (d5-29). Observe whether the overall output current can be reduced.</p> <p>3. When overload occurs upon excessively heavy load in the high-speed field weakening zone, increase the modulation coefficient (A5-06). It is recommended to set A5-06 to a value lower than 108%.</p> <p>4. If the fault cannot be rectified through the preceding means, increase the power rating of the drive.</p>
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		<p>Divergence can occur near 0 Hz on the synchronous motor (SVC).</p>	<p>When the synchronous motor is in the SVC mode and the set speed (U0-01) is near 0, the feedback speed fluctuates greatly and unusual noise, motor stall, or slightly continuous reverse rotation occurs.</p>	<ol style="list-style-type: none"> <li>1. Avoid the long-term operation of the SVC at speeds close to zero.</li> <li>2. Enable IF control. Set the tens of the low-speed processing mode (d0-85) to 1. For details, see section "Vector control" in the function guide.</li> </ol>
		<p>The synchronous frequency of the asynchronous motor SVC operates near 0 Hz (asynchronous motor SVC).</p>	<p>The synchronous frequency (LC-15) is close to 0 (<math>\pm 0.5\%</math>) and runs for more than 10s.</p>	<p>Avoid the long-term operation at speeds close to zero.</p>
		<p>Synchronous motor demagnetization (SVC)</p>	<p>Record the current back EMF (F1-12), disassemble the motor coupling, and perform dynamic auto-tuning for the synchronous motor (F1-69 = 12) again. Compare whether the new value of the back EMF is lower than the initial value. Note that when the motor temperature increases, the back EMF decreases by less than 10%. If the back EMF recovers after cooling, it is normal.</p>	<p>Analyze the specific demagnetization causes. Common causes include low carrier frequency, oscillation in speed control mode, and excessive motor back EMF and output current harmonic. If the motor is replaced directly, demagnetization may occur again.</p>

		<p>Synchronous/asynchronous motor parameters are not tuned in the vector control mode (SVC).</p>	<p>In the SVC control mode (F0-01 = 0), perform parameter auto-tuning. Compare the parameters in group F1 to the default values to check whether auto-tuning has been performed.</p>	<p>Perform accurate parameter auto-tuning or download all parameters that need auto-tuning. For details, see the Commissioning and Trial Run section in the function guide.</p>
		<p>V/f acceleration/deceleration time is too short (asynchronous motor in V/f control mode).</p>	<p>Increase the deceleration time and repeat the test. If the fault does not occur again, the fault is caused by short acceleration/deceleration time.</p>	<ol style="list-style-type: none"> <li>1. Determine whether current acceleration/deceleration time is a value that must be set by the process. Otherwise, extend the acceleration/deceleration time properly</li> <li>2. Enable the overcurrent suppression function (d2-26 = 1). If overcurrent persists, decrease the value first. If it is invalid, increase the value.</li> <li>3. Increase the manual torque boost value (d2-14).</li> <li>4. For working conditions with frequent start/stop, enable DC braking for stop to ensure that the DC braking time for stop (d0-29) will not expire until the next start.</li> <li>5. When multiple motors are started simultaneously, apply the DC braking for start with the same duration (d0-25) to significantly reduce startup current shock.</li> </ol>

		<p>The reference voltage of the V/f curve is too large (asynchronous motor V/f).</p>	<p>1. When the V/f curve is multi-point V/f (d2-00 = 1), decrease the voltage of the point (d2-02 to d2-10) with excessive high voltage/frequency and check whether the fault is cleared.  2. When the V/f curve is separated V/f (d2-00 = 10), set the frequency first, and then increase the voltage gradually. If the output voltage when the output current reaches the rated value is lower than the set voltage when the fault occurs, the voltage set for separated V/f is improper.</p>	<p>1. Reduce the voltage/frequency ratio in the multi-point V/f curve to prevent it from being larger than the ratio in the linear V/f, resulting in the motor overexcitation.  2. For separated V/f, set the voltage acceleration/deceleration time (d2-50/51) that matches the frequency to avoid excessive voltage acceleration time or output voltage.</p>
		<p>The value of the torque boost parameter (asynchronous motor in V/f control mode) is excessively high.</p>	<p>1. Check whether the manual torque boost value (d2-14) is set an excessively low.  2. When the torque boost mode is "automatic" or "manual + automatic", check whether the stator resistance (F1-20) has been auto-tuned.</p>	<p>1. Reduce the manual torque boost value and enable the drive to run again.  2. Perform static partial auto-tuning of the asynchronous motor (F1-69 = 1) and enable the drive to run again.</p>



		<p>The motor is started during rotation (synchronous/asynchronous motor in SVC).</p>	<p>Before start, check whether the motor is rotating.</p>	<p>Set the start mode to flying start (d0-02 = 1).</p>
		<p>Oscillation and overload in V/f mode (asynchronous motor V/f)</p>	<p>Use the continuous oscilloscope in the commissioning software to check whether the actual excitation/torque current (LC-20/21) and rotor speed (LC-10) of the motor are oscillating. The fluctuation range of the actual excitation/torque current of the motor does not exceed 10% under normal conditions.</p>	<ol style="list-style-type: none"> <li>1. Increase or decrease the V/f oscillation suppression gain (d2-23) properly and observe whether oscillation is alleviated.</li> <li>2. Change the motor control mode to SVC (F0-01 = 0). After parameter auto-tuning, use the SVC mode.</li> </ol>

		<p>Synchronous motor magnetic pole angle auto-tuning error (synchronous motor SVC)</p>	<p>1. When the motor can rotate freely, select pre-positioning start (d0-71 = 3) to check whether the motor can start normally.  2. If the motor Lq/Ld (F1-34/F1-32) is lower than 1.5 when the motor cannot rotate freely, start with voltage pulse mode (d0-71 = 0) and increase the initial position detection current of the synchronous motor (d0-75). Otherwise, start with high frequency injection (d0-71 = 1) and set the initial position compensation angle (d0-76) to 180.</p>	<p>1. The motor rotates slightly during pre-positioning start. If this does not affect the process, it is recommended to use this method to start the motor.  2. If the motor Lq/Ld (F1-34/F1-32) is less than 1.5, start with voltage pulse mode (d0-71 = 0) and increase the initial position detection current of the synchronous motor (d0-75). Otherwise, start with high frequency injection (d0-71 = 1) and set the initial position compensation angle (d0-76) to 180 and run the motor several times.  3. The magnetic pole position of the synchronous motor with squirrel-cage bar is inaccurate, which may easily lead to reverse rotation. It is recommended to set to asynchronous motor V/f operation mode.</p>
		<p>Motor parameters are set incorrectly.</p>	<p>Check the nameplate of the motor to ensure the basic parameters of the motor (F1-00 to F1-11) are consistent with those on the nameplate.</p>	<p>Set the motor nameplate parameters according to section "Setting Motor Parameters" in the function guide.</p>

		The power rating of the drive is too low.	Check whether low overload mode is selected for high overload applications, or a low-power drive is used to drive a high-power motor.	Replace with a drive with higher power rating.
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		<p>The synchronous motor reports a fault after overspeed or the synchronous motor coasts to stop as set manually.</p>	<p>When the synchronous motor overspeed occurs, the result of back EMF (F1-12) x actual motor speed (LC-10) x 1.414 is much higher than the bus voltage. After the motor operation is interrupted, the weak magnetic current disappears and the U/V/W phase voltage increases dramatically in a short time, causing the output diode to be switched on in the reverse direction and leading to back EMF short circuit. In this case, a fault can be reported. If the result of back EMF x actual motor speed (LC-10) x 1.414 is higher than the overvoltage threshold, operation interruption may cause overvoltage of the AC drive and may damage the drive.</p>	<p>Set the forward frequency upper limit (d1-03) to the result of overvoltage threshold (A3-58)/(1.414 x back EMF of synchronous motor). Keep the maximum running speed below this limit. Select a proper motor type. A motor with a high back EMF can effectively reduce the output current. However, running at a speed above the limit may result in overvoltage explosion.</p>
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		Long-term operation at low frequencies can lead to derating.	The direction change of the operating current and the IGBT shift of upper/lower bridge is slow during operation at low frequencies, which may result in violent IGBT junction temperature fluctuation and thermal stress, leading to IGBT damage. The derating ratio changes from 0% to 20% when the frequency changes from 5 Hz to 0 Hz.	Replace with a drive with higher power rating.	
		Model-related parameters are set incorrectly.	Check the nameplate of the drive to ensure the rated power/current/voltage of the drive (A3-02/03/04) are consistent with those on the nameplate.	Set model-related parameters correctly.	
		Derating occurs due to excessive carrier frequency.	Setting the carrier frequency (A5-01) to a value higher than the default can result in derating of the output with load.	Set the carrier frequency properly. It is recommended to replace with a drive of high power rating at high carrier frequency output and insufficient output.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

	Motor pre-overload	When pre-overload protection is enabled, the accumulative overload of the motor exceeds the motor overload alarm coefficient (d1-47)	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	13: Display alarm	Yes
		Cause	Check method	Solution	

		<p>The load is too heavy.</p>	<p>1. When the asynchronous motor is overloaded, switch to V/f control (F0-01 = 2) and observe whether the output current is too high. If motor parameters are set correctly, but overload occurs upon with-load start at slow acceleration in V/f mode, it indicates the load is too heavy.</p> <p>2. During high-speed operation in vector control, if the result of output torque percentage (LC-12) x output speed percentage (LC-10) is close to the output power, and the output torque is high, it indicates the load is too heavy.</p> <p>3. Check whether the brake is released normally.</p>	<p>1. When overload occurs during low-speed operation of the asynchronous motor, increase the no-load current (F1-30) properly and reduce the mutual inductance (F1-28) at the same time to ensure the multiplication result does not change.</p> <p>2. When overload occurs during low-speed operation of the synchronous motor, if a salient pole motor is used, increase the MTPA adjustment coefficient of the synchronous motor (d5-29). Observe whether the overall output current can be reduced.</p> <p>3. When overload occurs upon excessively heavy load in the high-speed field weakening zone, increase the modulation coefficient (A5-06). It is recommended to set A5-06 to a value lower than 108%.</p> <p>4. If the fault cannot be rectified through the preceding means, increase the power rating of the drive.</p>
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		<p>Synchronous motor demagnetization (SVC)</p>	<p>Record the current back EMF (F1-12), disassemble the motor coupling, and perform dynamic auto-tuning for the synchronous motor (F1-69 = 12) again. Compare whether the new value of the back EMF is lower than the initial value. Note that when the motor temperature increases, the back EMF decreases by less than 10%. If the back EMF recovers after cooling, it is normal.</p>	<p>Analyze the specific demagnetization causes. Common causes include low carrier frequency, oscillation in speed control mode, and excessive motor back EMF and output current harmonic. If the motor is replaced directly, demagnetization may occur again.</p>
		<p>Motor parameters are set incorrectly.</p>	<p>Check the nameplate of the motor to ensure the basic parameters of the motor (F1-00 to F1-11) are consistent with those on the nameplate.</p>	<p>Set the motor nameplate parameters according to section "Setting Motor Parameters" in the function guide.</p>



		The incoming voltage is too low.	<p>1. Check whether the input voltage meets the design requirements (380 V to 480 V for 380 V models and 220 V to 240 V for 220 V models)</p> <p>2. Check whether the upstream circuit breaker or contactor trips or cannot be closed.</p>	<p>1. Increase the input voltage to a value within the normal range.</p> <p>2. Ensure that the incoming switch is normal.</p>	
		d1-46 (Motor overload protection coefficient) is set improperly.	<p>The default motor overload data in the drive does not match the actual motor. The actual motor temperature rise is not high.</p> <p>Set the motor overload protection coefficient (d1-46) to extend the time for the motor to report an overload fault. If a fault occurs during long-term operation, turn off motor overload protection directly.</p>	<p>Increase the set motor overload protection coefficient (d1-46) to extend the time for the motor to report an overload. If the fault still persists during long-term operation, turn off the motor overload protection directly.</p>	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

		The module pre- overtemperature threshold is the result of the module overtemperature threshold (A3-51) minus the module overtemperature margin (A3-52). When the detected module temperature exceeds this threshold, the drive pre- overtemperature fault is reported.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	13: Display alarm	Yes
	Module pre- overtemperature				
		Cause	Check method	Solution	
		The ambient temperature is too high.	Measure the ambient temperature to check whether it is higher than 50°C.	Lower down the ambient temperature.	
		The air duct is blocked.	Check whether the air filter of the fan is blocked.	Clean the air duct.	
		The fan is damaged.	Start the AC drive after reducing the temperature and observe if the fan rotates.	If it does not rotate, replace the fan.	
		Hardware exception occurs.	Contact Inovance for technical support.	Contact Inovance for technical support.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	HDI disconnected	The HDI input value is lower than 50% of the minimum HDI input value.		15: Ignore fault	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		1. HDI input is disconnected. 2. HDI input signal frequency is abnormal.	1. Check if the HDI input cable is intact. 2. Check the HDI input signal frequency change to determine if there is abnormal interruption.	1. Reconnect the HDI input cable. 2. Ensure that the minimum input frequency of the HDI curve (E4-08/E4-12) is the frequency lower limit of the HDI signal. 3. Modify fault protection action selection 12 (H1-12) to select an appropriate fault response level or hide this fault.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	AI1 input error	The AI1 input exceeds the AI input protection range (E2-14 to E2-15).		15: Ignore	Yes
			<b>Cause</b>	<b>Check method</b>	<b>Solution</b>
		1. The AI is disconnected. 2. The AI input signal voltage or current is abnormal.	1. Check whether the AI input cable is intact. 2. Check the AI input voltage or current change. The input can be determined as abnormal if the change exceeds the upper or lower limit of AI input protection (E2-14 or E2-15).		1. Reconnect the cable. 2. Ensure that the input voltage (current) does not exceed the upper or lower limit of AI input protection (E2-14 or E2-15). 3. Modify fault protection action selection 12 (H1-12) to select an appropriate fault response level or hide this fault. 4. Modify the setting of AI input protection parameters (E2-14, E2-15, and E2-36) to avoid false alarms caused by signal interference.
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

	Modbus communication times out.	No data is received within the time defined by n2-04 after communication is established.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes
		Cause	Check method	Solution	

		Modbus communication times out.	<ol style="list-style-type: none"> <li>1. Check whether the RS485 communication cable is connected correctly.</li> <li>2. Check whether the Modbus communication timeout time (n2-04) and the PLC communication cycle are set properly.</li> <li>3. Check whether communication parameters such as the station number (n2-02), communication baud rate (n2-00), and data format (n2-01) are set correctly.</li> <li>4. Check whether the Modbus command is set correctly according to the data frame format specified in the function guide.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reconnect RS485 communication cables.</li> <li>2. Modify the Modbus communication timeout time (n2-04) and PLC communication cycle.</li> <li>3. Modify the duplicate station number (n2-02). Set the baud rate (n2-00) and data format (n2-01) to values consistent with the host controller.</li> <li>4. Write communication commands according to section Communication in the function guide.</li> </ol>	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	CANopen heartbeat timeout	No data is received within the detection time after CANopen heartbeat is configured.		0: Coast to stop	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		CANopen communication timeout	Check if the CAN communication cable is connected correctly. Check parameters n3-04 to n3-07 to determine the interference situation.	Remove external interference and correct the connection of the CAN communication cable.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

	CANopen PDO mapping	The PDO configuration information does not match the setting of the AC drive parameters.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes
		Cause	Check method	Solution	
		The PDO mapping configured for CANopen is inconsistent with the PDO mapped in actual communication.	Check the PDO mapping of the process data address mapping (parameters in group nE) based on the communication scheme.	Modify the PDO mapping configuration of the host controller.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset



			0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore		
	CANlink heartbeat timeout	No data is received within the detection time after CANlink heartbeat is configured.		0: Coast to stop	Yes
		Cause	Check method	Solution	
		CANlink heartbeat timeout	Compare the heartbeat time set by the host controller with the heartbeat consumption time.	Decrease the heartbeat time set by the host controller so that it is less than the heartbeat consumption time.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

	CANlink station number conflict	The same CANlink station number is set for different devices.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes
		Cause	Check method	Solution	
		CANlink station number conflict	Check if any station numbers of master and slave are duplicated.	Modify the duplicate station number.	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset
	Modbus-RTU communication timeout (RJ45)	No data is received within the time defined by n1-06 after Modbus-RTU communication is established.	0: Coast to stop	0: Coast to stop	Yes
		Cause	Check method	Solution	

		Modbus-RTU communication timeout	<ol style="list-style-type: none"> <li>1. Check whether the RS485 communication cable is connected correctly.</li> <li>2. Check whether the Modbus communication timeout time (n1-06) and the PLC communication cycle are set properly.</li> <li>3. Check whether communication parameters such as the station number (n1-08), communication baud rate (n1-07), and data format (n1-04) are set correctly.</li> <li>4. Check whether the data frame is set correctly according to section Communication in the function guide.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reconnect the RS485 communication cables.</li> <li>2. Modify the Modbus communication timeout time (n1-06) and PLC communication cycle.</li> <li>3. Modify the duplicate station number (n1-08). Set the baud rate (n1-07) and data format (n1-04) to the same value.</li> <li>4. Write communication commands according to section Communication in the function guide.</li> </ol>	
Fault code	Fault name	Cause	Fault level	Default fault level	Reset

		After the commissioning software obtains the control permission and controls the motor operation, the commissioning software is disconnected from the drive.	0: Coast to stop 1: Stop at maximum capacity 2: Quick stop 3: Decelerate to stop 4 to 8: Reserved 9: Run with speed limited 10: Run with power limited 11: Run with current limited 12: Run with torque limited 13: Display alarm 14: Prompt 15: Ignore	0: Coast to stop	Yes
	Commissioning software communication fault				
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		After the commissioning software obtains the control permission and controls the motor operation, the commissioning software is disconnected from the drive.	1. Check whether SOP-20 is connected to the PC properly. 2. Check whether SOP-20 is connected to the AC drive properly. 3. Check whether cables are routed properly. Install a magnetic ring to suppress interference if needed.	Re-connect SOP-20 to the PC and SOP-20 to the drive. Install a magnetic ring to suppress interference if needed.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>

	Undervoltage due to voltage dip	Undervoltage suppression is enabled when undervoltage occurs. During decelerate-to-stop (d1-63 = 1) when the voltage is recovered, forced stop applies when the bus voltage is lower than the voltage threshold of undervoltage suppression (d1-65).	0: Coast to stop	0: Coast to stop	Yes
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		The power grid voltage fluctuates, triggering the decelerate-to-stop upon undervoltage suppression.	Check whether response to undervoltage is set to “Decelerate to stop” . Check whether the grid voltage fluctuates and the fluctuation range reaches the voltage threshold for undervoltage suppression (d1-65).	Wait for the bus voltage to stabilize before starting the drive. If the voltage cannot be stabilized for a long time, check whether the main contactor and grid are normal.	
<b>Fault code</b>	<b>Fault name</b>	<b>Cause</b>	<b>Fault level</b>	<b>Default fault level</b>	<b>Reset</b>
	Parameter downloading interrupted	The drive powers off during parameter downloading.	0: Coast to stop	0: Coast to stop	Supported
		<b>Cause</b>	<b>Check method</b>	<b>Solution</b>	
		The drive powers off during parameter downloading.	N/A	Perform any of the following steps to restore the parameters, and then reset the fault. 1. Initialize parameters. 2. Download parameters.	



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