Special system component

M8000~M8255£¬D8000~D8255 are defined as special components of which functions are described as following:

M component	M component description	D component	D component description
	System operation status		
M8000	ON when user program is running	D8000	Monitor timer of user program operation
M8001	M8000 status is inverted	D8001	Single board program version, for example 24100 H2U = 24, 100 version V1.00
M8002	ON during first period of user program	D8002	Program capacity, 4K, 8K and 16K etc.
M8003	M8002 status is inverted	D8003	Fixed value 0X10, internal memory of PLC
M8004	If any of M8060~M8067 [except for M8062] is ON then M8004 is effective	D8004	Wrong BCD value of M8060~M8067, normally 0
M8005	Actuated when battery voltage is too low	D8005	BCD current value of battery voltage
M8006	Actuated when battery is too low [latch]	D8006	Threshold value of low battery voltage detection, initial value is 2.6V
M8007	AC power lost for 5ms then M8007&M8008 will be actuated, but the program continue running within D8008	D8007	Time of saving M8007 actions, reset to 0 when power is lost
M8008	If the power is lost within D8008, then the user program will stop running when M8008 changes from ON¡úOFF. M8000 is OFF	D8008	AC power lost detection time, default 10ms
M8009	Actuated when the extension unit loses 24V power	D8009	Module number of extension unit which loses 24V power
	System clock		
M8010	reserved	D8010	Current scan time, from step 0 of user program (0.1 ms)
M8011	Clock oscillator of which period is 10ms	D8011	Minimum scan time (0.1 ms)
M8012	Clock oscillator of which period is 100ms	D8012	Maximum scan time (0.1ms)
M8013	Clock oscillator of which period is 1s	D8013	Clock second (0~59)
M8014	Clock oscillator of which period is 1 minute	D8014	Minute of Real-time clock (0~59)
M8015	Clock stop and preset	D8015	Hour of Real-time clock (0~23)
M8016	Stop clock read and display	D8016	Day of Real-time clock (1~31)
M8017	¡À30 seconds correction	D8017	Month of Real-time clock(1~12)
M8018	Installation detection	D8018	Year of Real-time clock(2000~2099)
M8019	Real-time clock (RTC) error	D8019	Week of real-time clock
	Instruction flags		
M8020	Operation Zero flag	D8020	Input filter constant 0~60 of X000~X007 [default 10ms]
M8021	Operation Borrow flag	D8021	Reserved
M8022	Operation Carry flag	D8022	Reserved
M8023	Reserved	D8023	Reserved
M8024	BMOV instruction direction	D8024	Reserved
M8025	HSC instruction mode	D8025	Reserved
M8026	RAMP instruction mode	D8026	Reserved
M8027	PR mode	D8027	Reserved
M8028	Reserved	D8028	The same address with Z0
M8029	Instruction (PLSR and so on) execution complete	D8029	The same address with V0
	PLC operation mode		
M8030	If it¡¯s ON then even battery voltage is low the alarm BATT.V LED not lit	D8030	Reserved
M8031	Non-latch memory all clear when it's ON	D8031	Reserved
M8032	Latch memory all clear when it's ON	D8032	Reserved

M8033	When ON memory hold in "stop" mode			D8033	Reserved
M8034	When ON all PLC output is OFF state			D8034	Reserved
M8035	Forced operation command 1			D8035	Reserved
M8036	Force operation command 2			D8036	Reserved
M8037	Force stop command			D8037	Reserved
M8038	Communication setup flags			D8038	Reserved
M8039	Constant scan mode			D8039	Constant scan time,default 0, the unit is ms
Step ladder flag					
M8040	STL transfer disable			D8040	
M8041	Transfer start			D8041	
M8042	A pulse output is given in response to a start input			D8042	
M8043	ON during the last state of ZERO RETURN mode			D8043	Up to 8 active STL states, from the range S0 to S899, are stored in D8040 to D8047 in ascending numerical order.
M8044	ON when the machine zero is detected			D8044	
M8045	Disables the "all output reset" function when the operation mode is changed			D8045	
M8046	ON when STL monitoring has been enabled (M8047) and there is an active STL state			D8046	
M8047	When ON D8040 to D8047 are enabled for active STL step monitoring			D8047	
M8048	When M8049 is ON, anyone from S900~S999 is enabled.			D8048	Reserved
M8049	When ON D8049 is enabled for active annunciator state monitoring			D8049	save S900~S999's alarm min. address No.
Interrupt control flags					
M8050	Drive I00¡õ interrupt disabled			D8050	Reserved
M8051	Drive I10¡õ interrupt disabled			D8051	Reserved
M8052	Drive I20¡õ interrupt disabled			D8052	Reserved
M8053	Drive I30¡õ interrupt disabled			D8053	Reserved
M8054	Drive I40¡õ interrupt disabled			D8054	Reserved
M8055	Drive I50¡õ interrupt disabled			D8055	Reserved
M8056	Drive I6¡õ¡õ interrupt disabled			D8056	Reserved
M8057	Drive I7¡õ¡õ interrupt disabled			D8057	Reserved
M8058	Drive I8¡õ¡õ interrupt disabled			D8058	Reserved
M8059	Drive counter interrupt disabled			D8059	Reserved
Error detection devices					
components	name	Program error LED	PLC status		
M8060	I/O configuration error []	OFF	RUN	D8060	The first I/O number of the unit or block causing the error
M8061	PLC hardware error	Flash	STOP	D8061	Error code for hardware error
M8062	PLC communication error	OFF	RUN	D8062	Error code for Communications error
M8063	Parallel link/ general communication error	OFF	RUN	D8063	Error code for parallel link error
M8064	Parameter error	Flash	STOP	D8064	Error code identifying parameter error
M8065	Syntax error	Flash	STOP	D8065	Error code identifying syntax error
M8066	Program error	Flash	STOP	D8066	Error code identifying program construction error
M8067	Operation error	OFF	RUN	D8067	Error code identifying operation error
M8068	Operation error latch	OFF	RUN	D8068	Operation error step number latched
M8069	Reserved			D8069	Step numbers for found errors corresponding to flags M8065 to M8067
Link function					
M8070	Driven when the PLC is a master station in a parallel link application			D8070	Parallel link watchdog time - 500 ms
	Driven when the PLC is a slave station				

M8071	in a parallel link application	D8071	Reserved
M8072	ON while the PLC is operating in a parallel link	D8072	Reserved
M8073	ON when M8070/ M8071 are incorrectly set during parallel link operations	D8073	Reserved
Tracking sampling			
M8074	Reserved	D8074	Remain number of tracking sampling
M8075	Tracking Sampling get ready to begin instruction	D8075	Tracking sampling No. setup(1~512)
M8076	Tracking sampling complete,then instruction execution start	D8076	Tracking sampling cycle
M8077	Tracking sampling while execution monitoring	D8077	Trigger Designation
M8078	Tracking sampling when execution complete monitoring	D8078	Components address number setup of trigger condition
M8079	Sampling data tracking more than D8075	D8079	Tracking sampling data pointer
M8080	Reserved	D8080	Bit component address number No.0
M8081	Reserved	D8081	Bit component address number No.1
M8082	Reserved	D8082	Reserved
M8083	Reserved	D8083	Reserved
M8084	High speed counter multiple interrupt enabled (default OFF)	D8084	Counter sequence number of high speed counter multiple interrupts
M8085	Output initialization flag of Y0 port	D8085	Default data of multiple interrupts are 0
M8086	Output initialization flag of Y1 port	D8086	Corresponding D component sequence number
M8087	Output initialization flag of Y2 port	D8087	Reserved
M8088	Output initialization flag of Y3 port	D8088	Reserved
M8089	Output initialization flag of Y4 port	D8089	Reserved
M8090	Y0 Output complete interrupt enabled	D8090	Reserved
M8091	Y1 Output complete interrupt enabled	D8091	Reserved
M8092	Y2 Output complete interrupt enabled	D8092	Reserved
M8093	Y3 Output complete interrupt enabled	D8093	Reserved
M8094	Y4 Output complete interrupt enabled	D8094	Reserved
M8095	Reserved	D8095	Reserved
M8096	Reserved	D8096	Word component address number No.0
M8097	Reserved	D8097	Word component address number No.1
M8098	Reserved	D8098	Word component address number No.2
High speed ring counter			
M8099	High speed ring counter operation	D8099	[0 to 32767] increased action ring-counter (0.1 ms)
Miscellaneous Devices			
M8100	SPD(X000)- pulse numbers/minute	D8100	Reserved
M8101	SPD(X001)- pulse numbers/minute	D8101	Single board program version, for example 24100 H2U = 24, 100 version V1.00
M8102	SPD(X002)- pulse numbers/minute	D8102	Program capacity provided by system to user program
M8103	SPD(X003)- pulse numbers/minute	D8103	Reserved
M8104	SPD(X004)- pulse numbers/minute	D8104	Acceleration time when executing DRVI and DRVA [default 100], M8135 determines that it¡¯s whether effective or not [Y0]
M8105	SPD(X005)- pulse numbers/minute	D8105	Acceleration time when executing DRVI and DRVA [default 100], M8135 determines that it¡¯s whether effective or not [Y1]
M8106	Reserved	D8106	Acceleration time when executing DRVI and DRVA [default 100], M8135 determines that it¡¯s whether effective or not [Y2]

M8107	Reserved	D8107	Acceleration time when executing DRVI and DRVA [default_100], M8135 determines that it¡¯s whether effective or not [Y3]
M8108	Reserved	D8108	Acceleration time when executing DRVI and DRVA [default_100], M8135 determines that it¡¯s whether effective or not [Y4]
M8109	Output refresh error	D8109	Output refresh error address number
COM0 communication and link			
M8110	Reserved	D8110	Communication format, the interface configuration with a default of 0
M8111	Sending and waiting (RS instruction)	D8111	Station number settings, the interface configuration settings with a default of 1
M8112	Sending flag (RS instruction) Instruction execution status (MODBUS)	D8112	Amount of remaining data to be transmitted (Only to RS instruction)
M8113	Receiving complete flag (RS) Communication error flag (MODBUS)	D8113	Amount of data already received (Only to RS instruction)
M8114	Receiving (only to RS instruction)	D8114	Start character STX (Only to RS instruction)
M8115	Reserved	D8115	Termination character ETX (Only to RS instruction)
M8116	Reserved	D8116	Communication protocol, the interface configuration with a default of 0
M8117	Reserved	D8117	Computer link protocol of data starting address
M8118	Reserved	D8118	Computer link protocol sending data amount
M8119	timeout judgement	D8119	Communication overtime judgement,? the interface configuration settings with a default of 10£¨100ms£©
COM1 communication link			
M8120	Reserved	D8120	Communication format, the interface configuration with a default of 0
M8121	Sending and waiting (RS instruction)	D8121	Station number settings, the interface configuration settings with a default of 1
M8122	Sending flag (RS instruction) Instruction execution status(MODBUS)	D8122	Amount of remaining data to be transmitted (Only to RS instruction)
M8123	Receiving complete flag (RS) Communication error flag (MODBUS)	D8123	Amount of data already received (Only to RS instruction)
M8124	Receiving (only to RS instruction)	D8124	Start character STX (Only to RS instruction)
M8125	Reserved	D8125	Termination character ETX (Only to RS instruction)
M8126	Reserved	D8126	Communication protocol, the interface configuration with a default of 0
M8127	Reserved	D8127	Computer link protocol of data starting address
M8128	Reserved	D8128	Computer link protocol sending data amount
M8129	timeout judgement	D8129	Communication overtime judgement,? the interface configuration settings with a default of 10£¨100ms£©
High speed & positioning			
M8130	Control mode of HSZ instruction platform	D8130	Special bit for high-speed model (record number)
M8131	Paralleled with M8130	D8131	HSZ & PLSY completion mark of comparison mode (record number)

M8132	HSZ&PLSY speed mode	D8132	
M8133	Paralleled with M8132	D8133	HSZ & PLSY frequency control mode
M8134	Reserved	D8134	
M8135	Y0 speed-down time and pulse output can be change to be enabled [ON-PLSR,DRVI,DRVA]	D8135	Completion mark for HSZ & PLSY frequency control mod
M8136	Y1 speed-down time and pulse output can be change to be enabled[ON-PLSR,DRVI,DRVA]	D8136	The total number of Y000&Y001 output pulses
M8137	Y2 speed-down time and pulse output can be change to be enabled[ON-PLSR,DRVI,DRVA]	D8137	
M8138	Y3 speed-down time and pulse output can be change to be enabled[ON-PLSR,DRVI,DRVA]	D8138	Reserved
M8139	Y4 speed-down time and pulse output can be change to be enabled[ON-PLSR,DRVI,DRVA]	D8139	Reserved
M8140	CLR signal output function of ZRN is enabled.	D8140	PLSY&PLSR output Y000 corresponding cumulative value for the pulse number
M8141	Reserved	D8141	
M8142	Reserved	D8142	PLSY&PLSR output Y001 corresponding cumulative value for the pulse number
M8143	Reserved	D8143	
M8144	Reserved	D8144	
M8145	Y000 pulse output stop	D8145	The offset speed when DRVI,DRVA execution
M8146	Y001 pulse output stop	D8146	Maximum speed of DRVI,DRVA execution[Default 100,000]
M8147	Y000 pulse output monitor	D8147	
M8148	Y001 pulse output monitor	D8148	acceleration and deceleration time when DRVI,DRVA execution[Default 100]
M8149	Y002 pulse output monitor	D8149	Reserved
M8150	Y003 pulse output monitor	D8150	PLSY&PLSR output Y002 corresponding cumulative value for the pulse number
M8151	Y004 pulse output monitor	D8151	
M8152	Y002 pulse output monitor	D8152	PLSY&PLSR output Y003 corresponding cumulative value for the pulse number
M8153	Y003 pulse output stop	D8153	
M8154	Y004 pulse output stop	D8154	PLSY&PLSR output Y004 corresponding cumulative value for the pulse number
M8155	Reserved	D8155	
M8156	Reserved	D8156	Clear definition of Y0 port signal (ZRN) [Default 5=Y005]
M8157	Reserved	D8157	Clear definition of Y1 port signal (ZRN) [Default 6=Y006]
Extension function			
M8158	Reserved	D8158	Clear definition of Y2 port signal (ZRN) [Default 7=Y007]
M8159	Reserved	D8159	Clear definition of Y3 port signal (ZRN) [Default 8=Y010]
M8160	Selection of XCH operation to swap bytes in a single data word	D8160	Clear definition of Y4 port signal (ZRN) [Default 9=Y011]
M8161	Selection of 8 bit operations for applied instructions ASC, RS, ASCI, HEX, CCD	D8161	Reserved
M8162	High speed mode for parallel connection	D8162	Reserved
M8163	Reserved	D8163	Reserved
M8164	(FROM/TO) Move points variable mode	D8164	(FROM/TO) Move points fixed mode
M8165	Reserved	D8165	When the PLSR, DRVI, DR VA are in execution, the deceleration time [default 100] is determined by M8135 whether it is enabled. [Y0]
			When the PLSR, DRVI, DR VA are in execution, the deceleration time [default

M8166	Reserved	D8166	100] is determined by M8136 whether it is enabled. [Y1]
M8167	(HEY)HEX data processing function	D8167	When the PLSR, DRVI, DR VA are in execution, the deceleration time [default 100] is determined by M8137 whether it is enabled. [Y2]
M8168	(SMOV)HEX data processing function	D8168	When the PLSR, DRVI, DR VA are in execution, the deceleration time [default 100] is determined by M8138 whether it is enabled. [Y3]
M8169	Reserved	D8169	When the PLSR, DRVI, DR VA are in execution, the deceleration time [default 100] is determined by M8139 whether it is enabled. [Y4]
Pulse capture		Communication link	
M8170	X000 pulse capture	D8170	Reserved
M8171	X001 pulse capture	D8171	Reserved
M8172	X002 pulse capture	D8172	Reserved
M8173	X003 pulse capture	D8173	Station No. set?status
M8174	X004 pulse capture	D8174	Communication sub-station set status
M8175	X005 pulse capture	D8175	Refresh range set status
M8176	Reserved	D8176	Station No. setting
M8177	Reserved	D8177	Communication sub-station number setting
M8178	Reserved	D8178	Refresh range setting
M8179	Reserved	D8179	Retry count setting
M8180	Reserved	D8180	Communication overtime setup
Communication link		Index addressing	
M8181	Reserved	D8181	Reserved
M8182	Reserved	D8182	Bit component address number No.2/Z1 register contents
M8183	Data transfer master station error	D8183	Bit component address number No.3/V1 register contents
M8184	Data transfer slave station 1 error	D8184	Bit component address number No.4/Z2 register contents
M8185	Data transfer slave station 2 error	D8185	Bit component address number No.5/V2 register contents
M8186	Data transfer slave station 3 error	D8186	Bit component address number No.6/Z3 register contents
M8187	Data transfer slave station 4 error	D8187	Bit component address number No.7/V3 register contents
M8188	Data transfer slave station 5 error	D8188	Bit component address number No.8/Z4 register contents
M8189	Data transfer slave station 6 error	D8189	Bit component address number No.9/V4 register contents
M8190	Data transfer slave station 7 error	D8190	Bit component address number No.10/Z5 register contents
M8191	Data transferring	D8191	Bit component address number No.11/V5 register contents
M8192	Reserved	D8192	Bit component address number No.12/Z6 register contents
M8193	Reserved	D8193	Bit component address number No.13/V6 register contents
M8194	Reserved	D8194	Bit component address number No.14/Z7 register content
M8195	C251 Double-frequency	D8195	Bit component address number No.15/V7 register content
M8196	C252 Double-frequency	D8196	Reserved
M8197	C253 Double-frequency	D8197	Reserved
M8198	C254 Double-frequency	D8198	Reserved
M8199	C255 Double-frequency	D8199	Reserved
Up/down counter control and status		Communication link	

M8200	C200 control	D8200	Reserved
M8201	C201 control	D8201	Currently connection scan time
M8202	C202 control	D8202	Maximum connection scan time
M8203	C203 control	D8203	Master station communication error number
M8204	C204 control	D8204	Slave station 1 communication error number
M8205	C205 control	D8205	Slave station 2 communication error number
M8206	C206 control	D8206	Slave station 3 communication error number
M8207	C207 control	D8207	Slave station 4 communication error number
M8208	C208 control	D8208	Slave station 5 communication error number
M8209	C209 control	D8209	Slave station 6 communication error number
M8210	C210 control	D8210	Slave station 7 communication error number
M8211	C211 control	D8211	Master station communication error code
M8212	C212 control	D8212	Slave station 1 communication error code
M8213	C213 control	D8213	Slave station 2 communication error code
M8214	C214 control	D8214	Slave station 3 communication error code
M8215	C215 control	D8215	Slave station 4 communication error code
M8216	C216 control	D8216	Slave station 5 communication error code
M8217	C217 control	D8217	Slave station 6 communication error code
M8218	C218 control	D8218	Slave station 7 communication error code
M8219	C219 control	D8219	Reserved
M8220	C220 control	D8220	Reserved
M8221	C221 control	D8221	Reserved
M8222	C222 control	D8222	Reserved
M8223	C223 control	D8223	Reserved
M8224	C224 control	D8224	Reserved
M8225	C225 control	D8225	Reserved
M8226	C226 control	D8226	Reserved
M8227	C227 control	D8227	Reserved
M8228	C228 control	D8228	Reserved
M8229	C229 control	D8229	Reserved
M8230	C230 control	D8230	Reserved
M8231	C231 control	D8231	Reserved
M8232	C232 control	D8232	Reserved
M8233	C233 control	D8233	Reserved
M8234	C234 control	D8234	Reserved
M8235	C235 control	D8235	Reserved
M8236	C236 control	D8236	Reserved
M8237	C237 control	D8237	Reserved
M8238	C238 control	D8238	Reserved
M8239	C239 control	D8239	Reserved
M8240	C240 control	D8240	Reserved
M8241	C241 control	D8241	Reserved
M8242	C242 control	D8242	Reserved
M8243	C243 control	D8243	Reserved
M8244	C244 control	D8244	Reserved
M8245	C245 control	D8245	Reserved

M8246	C246 control	D8246	Reserved
M8247	C247 control	D8247	Reserved
M8248	C248 control	D8248	Reserved
M8249	C249 control	D8249	Reserved
M8250	C250 control	D8250	Reserved
M8251	C251 control	D8251	Reserved
M8252	C252 control	D8252	Reserved
M8253	C253 control	D8253	Reserved
M8254	C254 control	D8254	Reserved
M8255	C255 control	D8255	Reserved