



> Electrical specifications

Items	Technical specifications			
Dielectric withstand voltage	AC1000V for 1 min, between power terminal and I/O terminal, between external terminal and shell			
Noise resistance	1500Vp-p or more, Noise width 1μs, 50ns (based on noise simulator), comply with (IEC61000-4-2/3/4/6)			
Vibration resistance	Installation	Frequency (Hz)	Acceleration (m/s²)	Single amplitude (mm)
	DIN rail mounting	10-57 57-150	- 4.9	0.035 -
	10 times of testing in each direction (X-, Y-, and Z-axis directions) (Total: 80 min, each)			
Insulation resistance	50 MΩ or more using 500 V DC insulation resistance meter (Between all terminals and ground terminal)			
IP protection level	IP20			
Working atmosphere	Max. 50°C, free from excessive dust and corrosive gas			
Working altitude	2000m (80kPa)			
Degree of pollution	2, Normally there is only non-conductive pollution, but temporary conductivity caused by condensation should also be expected			

> Environment specifications

Classifications	Items	Working environment	Transport environment	Storage environment
Environment parameter (IEC60721-3)	Temperature	0~50°C (No freezing)	-40~75°C	-25~75°C
	Humidity	5-95%RH (No condensation)		
	Impact (collision)	Acceleration 150m2, action time 11ms, twice in each direction (X-, Y-, and Z-axis directions)		
	Altitude/Atmosphere	Max.2000m	Max.3000m (>70kPa)	

> Input specifications*

Items	Specifications
Signal name	Transistor input (I0-I2)
Rated input voltage	DC 24V (+20%~-15%, pulse ripple within 10%)
Input type	NPN
Rated input current	3.65mA
ON current	>4.14mA
OFF current	<3.88mA
Input impedance	1.5KΩ
Max. input frequency	1kHz
Common method	Shared with power supply 0V, short-circuited internally

> Output specifications*

Items	Specifications
Signal name	Transistor output (Q0-Q1)
Output polarity	NPN
Control circuit voltage	DC 5~24V
Rated load current	50mA
Max. voltage drop at power-ON	0.05V
Leakage current at power-OFF	<0.1mA
Output frequency	Max. 1kHz
Common method	Shared with power supply 0V, short-circuited internally

*Will be supported.

> Power specifications

Items	Power voltage	Voltage fluctuation range	Input power	Undervoltage level	Output voltage	Voltage fluctuation	Output power
Specifications	DC 24V	-15%~20%	36W	19V	12V	±5%	16W

> Performance specifications

Items	Specifications			
Programming	Program capacity	16MBytes		
	I-area (%I)	128KBytes		
	Q-area (%Q)	128KBytes		
	M-area (%M)	512KBytes		
	Power-failure retention area	800KBytes		
	Other variables	Not defined		
Configuration	Number of extension modules	Digital module	Calculated based on current consumption	
		Analog module		
		External power supply		12V/16W
EtherCAT	Communication standard	IEC 61158 Type12		
	Physical layer	100BASE-TX		
	Transmission speed	100Mbps (100Base-TX)		
	Duplex mode	Full duplex		
	Topology	Linear, bus and star-type		
	Transmission medium	Cat.5E twisted pair cables		
	Maximum transmission distance between nodes	100m		
	Max. process data	Input: 5,736 bytes Output: 5,736 bytes (but the max. number of frames of process data is 4)		
	Communication cycle	Mini.1ms		
	CANOpen master	Link layer	CAN2.0A	
Terminal resistor		Built-in 120Ω. Do not support disconnection		
Support baud rate bps		20K,50K,100K,125K,250K,500K,800K和1M		
Transmission medium		Cat.5E twisted pair cables		
Max. communication distance		2500 m (20Kbit/s)		
Maximum number of the slaves		32		
Communication cycle		Mini.1ms		
Serial ports	Physical layer	COM1	RS485	
		COM2	RS485 only support master station	
		COM3	RS232	
	Terminal resistor	COM1	Built-in 120Ω, support DIP switch	
		COM2	Built-in 120Ω. Do not support disconnection	
	Baud rate bps	4800~115200		
	Max. communication distance	COM1, COM2	500m	
		COM3	15m	
Maximum number of the slaves	COM1, COM2	32		
	COM3	1		
Transmission medium	Cat.5E twisted pair cables			