PLC

R-series PLC

HCR8A

＞ Main units

Models	Description
HCR8A-32MT/R-A	16 input points，16 output points，transistor/relay output
HCR8A-48MT/R-A	24 input points，24 output points，transistor/relay output
HCR8A-64MT/R-A	32 input points，32 output points，transistor/relay output
HCR8A-80MT/R-A	40 input points，40 output points，transistor/relay output
HCR8A-128MT/R-A	64 input points，64 output points，transistor/relay output

＞ Environment specifications

Items	Specifications
Working temperature	0~55℃
Storage temperature	-25~70℃ (No condensation)
Relative humidity	10%~95% (No condensation)
Working altitude	2000m Max.
Electromagnetic interference	EFT 2KV (No condensation)
Vibration	5～8.4Hz， amplitude 3.5mm, 8.4～150Hz, Acceleration 9.8m/s², scan at a rate of one multiplication frequency per minute, ten times in each direction (X-, Y-, and Z-axis directions)
Impact (collision)	147m/s², three times in each direction (X-, Y-, and Z-axis directions)
Pollution level	Pollution degree 2
Protection level	IP20
Cooling method	Natural air cooling
Installation method	DIN rail mounting 35mm

＞ Power specifications

Items		AC power specifications
Power voltage		AC 100~240V
Freeze frequency		50/60Hz
Instantaneous power-failure range		The operation of the main units will not be affected When the instantaneous power failure occurs within 10ms.
Power fuse		250V 3.15A
Inrush current	Main units	Max.30A 5ms or less/AC 100V Max.65A 5ms or less/AC 200V

Power	HCR8A-32M□-A	60W
	HCR8A-48M□-A	60W
	HCR8A-64M□-A	60W
	HCR8A-80M□-A	60W
	HCR8A-128M□-A	60W
24VDC power supply	HCR8A-48MT~80MT	600mA or less

＞ Performance specifications

Items		Specifications
Control points		256 points in total
Operation speed		LD:20ns
Program capacity		64k steps
Number of subprogram (tasks)		Unlimited
Programming port (HCP Woks2)	Ethernet	Suported
	USB(Mini-B)	Suported
	RS485	-
	RS232	Suported
Positioning (Transistor output)		200kpps×4 axes
High-speed counter (1-phase 1-input)		200kHz×3 ch 10kHz×1 ch
SD memory card slot		Suported
Network (Ethernet)	Simple communication	Will be supported
	Modbus/TCP master	Will be supported
	Modbus/TCP slave	Suported
	Socket communication	Will be supported
	FTP server function	Will be supported
Hold during power-failure	Data size	64KB
Extension	Board extension	Suported
	Left extension modules	Will be supported
	Right extension modules	Suported
Serial communication (protocol or instruction)	Modbus RTU	32 slave stations supported
	Modbus RTU slave	Suported
	Free communication protocol	Suported

> Input specifications

Items			Specifications
Input points			16/24/32/40/64 points
Input resistance	Main units	X000～X005	3.9kΩ
		X006,X007	3.3kΩ
		X010 or more	4.3kΩ
	I/O extension units/modules		4.3kΩ
Input current	Main units	X000～X005	6mA/DC 24V
		X006,X007	7mA/DC 24V
		X010 or more	5mA/DC 24V
	I/O extension units/modules		5mA/DC 24V
Input sensitivity ON-current	Main units	X000～X005	3.5mA or more
		X006,X007	4.5mA or more
		X010 or more	3.5mA or more
	I/O extension units/modules		3.5mA or more/DC 24V
Input sensitivity OFF-current			1.5mA or less
Input response frequency	X000～X005		200kHz
	X005 or more		10kHz
Input signal form			No-voltage contact input
			Sink NPN open-collector transistor
			Source PNP open-collector transistor
Input circuit isolation			Optocoupler isolation
Operation display			LCD dot matrix lit when input is ON

> Output specifications

Items			Transistor output specifications
Output points			16/24/32/40/64 points
Output type			NPN by default(PNP needs to be customized)
External voltage			DC 5～30V
Max. load			1 output point: 0.5A
			4 output points: 0.8A
			8 output points: 1.6A
Open-circuit leakage current			0.1mA or less/DC 30V
ON-voltage drop		Y0～Y3	1.0V or less
		Y3 or more	1.5V or less
Response time	Main units	Y0～Y3	5μor less/10mA or more(DC 5～24V)
		Y3 or more	0.2ms or less/200mA or more(DC 24V)
	I/O extension units/modules		0.2ms or less/200mA or more(DC 24V)
Input circuit isolation			Optocoupler isolation
Input operation display			LCD dot matrix lit when output is ON

Items		Relay output sepcifications
Output points		16/24/32/40/64 points
Output type		Relay
External voltage		DC 30V or less　240VAC or less(250VAC or less when not compatible with CE, UL, CUL standards)
Max. load	Resistive load	1 output point : 2A 4 output points: 8A 8 output points: 8A
	Inductive load	80VA
Mini. load		DC 5V　2mA(Reference)
Open-circuit leakage current		-
Response time	OFF→ON	About10ms
	ON→OFF	About10ms
Circuit isolation		Mechanical isolation
Operation display		LCD dot matrix lit when output is ON

> Ethernet specifications

Items	Specifications
Interface type	RJ45 connector
Data transmission speed	100Mbps
Communication mode	Full/half-duplex
Max. transmission distance	100m
Supported protocol	HCP Works 2 connection, Socket communication, simple communication, FTP server
Transmission medium	Cat.5E twisted pair cables

> RS485 specifications

Items	Specifications
Interface type	RS485
Data transmission speed	Max.115200bps
Communication mode	Half-duplex
Max. transmission distance	100m (At a specific baud rate)
Supported protocol	Modbus RTU master/slave Download monitoring protocol Free communication protocol
Isolation status	Digital isolation
Terminating resistor	Not built-in

> RS232 specifications

Items	Specifications
Interface type	RS232
Data transmission speed	Max.115200bps
Communication mode	Full-duplex
Max. transmission distance	5m
Supported protocol	Download monitoring protocol Free communication protocol
Isolation status	Non-isolated