PLC

R-series PLC

HCR8P

> Main units

Models	Description
HCR8P-32MT/R-A	16 input points, 16 output points, transistor/relay output
HCR8P-48MT/R-A	24 input points, 24 output points, transistor/relay output
HCR8P-64MT/R-A	32 input points, 32 output points, transistor/relay output
HCR8P-80MT/R-A	40 input points, 40 output points, transistor/relay output
HCR8P-128MT/R-A	60 input points, 60 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 (Power cable, signal cable)
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	Specifications
Input voltage	AC 100~240V 50/60Hz
Power fuse	250V 3.15A time-delay fuse
Power efficiency	80%
Allowable instantaneous power-failure time	The operation of the main units will continue when the instantaneous power failure occurs within 10ms. When the voltage is 200VAC, it can be changed to 10-100ms by user program
Output voltage	External 24VDC power：24V/0.8A
Output power for right extension moduels	5V/2A 24V/0.8A
Number of right extension modules	Up to 8 (Extension power supply not connected)

> Performance specifications

Items			Specifications
Number of control axes			8 axes
Pulse output form			Transistor
Max. frequency			Pulse 200kHz
Positioning	Pulse output mode		PULSE/SIGN mode
	Positioning range	Control unit	Motor unit system
		Positioning range	-2147483648～+2147483647
	Speed instruction	Speed instruction unit	pps
		Base speed	0～200Kpps
		Max. speed	1pps～200Kpps
		Homing return speed	1pps～200Kpps
		Creeping speed	1pps～200Kpps
		Acceleration time	0～32767ms
		Deceleration time	0～32767ms
	Acceleration/ deceleration processing		Trapezoidal acceleration /deceleration
	Interpolation function		N/A

> Input specifications

High-speed input			Specifications
Input points			16 points (X000~X017)
Input form			NPN/PNP
Input voltage		All inputs	DC 24V±10%
Input resistance		All inputs	2.7kΩ
Input current		All inputs	8.5mA/DC 24V
Input sensitivity current	ON-current	All inputs	4.03mA or more
	OFF-current	All inputs	3.06mA or less
Input response frequency		All inputs	200kHz
Input signal form		All inputs	NPN/PNP Open collector transistor
Circuit isolation		All inputs	Optocoupler isolation
Input operation display		-	LEDlit when input is ON

Low-speed input			Specifications
Input points			X020 or more
Input form			NPN/PNP
Input voltage		All inputs	DC 24V±10%
Input resistance		All inputs	4.3kΩ
Input current		All inputs	5.3mA/DC 24V
Input sensitivity current	ON-current	All inputs	2.13mA or more
	OFF-current	All inputs	1.8mA or less
Input response frequency		All inputs	5kHz
Input signal form		All inputs	NPN/PNP Open collector transistor
Circuit isolation		All inputs	Optocoupler isolation
Input operation display		-	LEDlit when input is ON

> Output specifications

Items			Transistor output specifications
Output points			16/24/32/40/64 points
Output form			Transistor/NPN (PNP type needs to be customized)
External voltage		All outputs	DC 5～30V
Max. load	Resistive load	All outputs	0.5A/1 point The total load current of resistance load per common terminal should be the following: - 1 output point:0.5A - 4 output points:0.8A - 8 output points:1.6A
	Inductive load	All outputs	12W/DC 24V
Open-circuit leakage current		All outputs	0.1mA or less/DC 30V
ON-voltage drop		All outputs	1.5V or less
Response time	OFF→ON	Y000～Y007	2.5μs or less/10mA or more(DC 5～24V)
		Y0010 or more	0.2ms or less/200mA or more(at 24VDC)
	ON→OFF	Y000～Y007	2.5μs or less/10mA or more(DC 5～24V)
		Y010 or more	0.2ms or less/200mA or more(at 24VDC)
Circuit isolation		All outputs	Optocoupler isolation
Output operation display		-	LED lit whdn optocoupler is driven

Items		Relay output specifications
Output points		16/24/32/40/64 points
Output type		Relay
External voltage		DC 30V or less AC 240V or less
Max. load		2A/1 point The total load current of resistance load per common terminal should be the following: ·4 output points/common terminal：8A or less ·8 output points/common terminal：8A or less
Open-circuit leakage current		-
Response time	OFF→ON	About 10ms
	ON→OFF	About 10ms
Circuit isolation	All outputs	Mechanical isolation
Output operation display		The corresponding LED dots are on when the output is ON

> Ethernet specifications

Items	Specifications
Interface type	RJ45 connector
Data transmission speed	100/10Mbps
Communication mode	Full/Half-duplex
Max. transmission distance	100m
Supported protocol	Download monitoring protocol Modbus TCP/IP slave
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	Digital isolation

> CAN Specifications

Items	Specifications
Data transmission speed	Max.1Mbps
Communication mode	Half-duplex
Max. transmission distance	2.5km (The actual transmission distance is related to the baud rate)
Supported protocol	CANOpen
Isolation status	Digital isolation