

HCNXE-SERIES UNIT LINEUP

Naming rule for HCNXE-series extension modules

HC

Product name

HC: HCFA controller

NXE

Distributed modules

NXE: EtherCAT module

NXP: ProfiNet module

NXM: Modbus TCP module

NXC: CANOpen module

ID

Function modules

ID: Digital input

OD: Digital output

MD: Digital I/O

32

Number of channels

32: Number of channels

Note: For digital I/O, represented by 4-digit, for example: 2408, indicating 24 input points and 8 output points

D

Power type

D: DC power

A: AC power

Distributed digital input modules

Models		Number of channel	Input/output type				External dimension WxDxH(mm)
			Input		Output		
	HCNXE-ID32-D	32	32	DC 24V (NPN/PNP)	-	-	160x28x50

Distributed digital output modules

Models		Number of channel	Input/output type				External dimension WxDxH(mm)
			Input		Output		
	HCNXE-OD32-D	32	-	-	32	NPN	160x28x50

Distributed digital I/O modules

Models		Number of channel	Input/output type				External dimension WxDxH(mm)
			Input		Output		
	HCNXE-MD1616-D	32	16	DC 24V (NPN/PNP)	16	NPN	160x28x50
	HCNXE-MD2408-D	32	24	DC 24V (NPN/PNP)	8	NPN	160x28x50

Environment specifaions

Items	Specifications				
Ambient temperature	For operation:0~55°C (32~131°F) For storage:-25~75°C (-13~167°F)				
Relative humidity	For operation:5~95%RH (No condensation)				
Vibration resistance	Installation	Frequency (Hz)	Frequency (m/s²)	Half amplitude (mm)	10 times of testing in each direction (X-, Y-, and Z-axis directions) (Total: 80 min, each)
	When installed on DIN rail	10-57	-	0.035	
		57-150	4.9	-	
	When installed directly	10-57	-	0.075	
		57-150	9.8	-	
Shock resistance	147m/s ² , Action time: 11ms, 3 times by half-sine pulse in each direction X, Y, and Z				
Noise resistance	By noise simulator at noise voltage of 10,000Vp-p, noise width of 1μs, rise time of 1ns and period of 30 to 100Hz				
Dielectric withstand voltage	AC 500V one minute		Between all the terminals and grounding terminals		
Insulation resistance	5MΩor more by 500V DC megger				
Grounding	Class D grounding (grounding resistance: 100Ωor less) <Common grounding with a heavy electrical system is not allowed.				
Working atmosphere	Free from corrosive or flammable gas and excessive conductive dusts				
Working altitude	2000m or less				

Power specifications

Items	Rated power of control side	Input voltage range of control side	Max.currentconsumption of control side	Rated power of IO side	Input voltage range of IO side	Max. current of IO side
Specifications	DC 24V	DC 20.4~28.8V	50mA/24V	DC 24V	DC 20.4~28.8V	5A

REMOTE DIGITAL INPUT



HCNxE-ID32-D

32-point digital input

Support NPN/PNP input

REMOTE DIGITAL OUTPUT



HCNxE-OD32-D

32-point digital output

Support NPN output

REMOTE DIGITAL IN/OUT



HCNxE-MD1616-D

32-point digital I/O

Support NPN/PNP input

Support NPN output



HCNxE-MD2408-D

32-point digital I/O

Support NPN/PNP input

Support NPN output

Digital input module

Items	Specifications
Models	HCNxE-ID32-D
Input points	32
Rated input voltage	DC 24V (DC 20.4~28.8V)
Rated input current	8.4mA/24V
ON-voltage/ON-current	DC 15V or more/5mA or more
ON/OFF response time	125μs or more
Input resistance	3kΩ
Input type	Compatible with NPN and PNP (switched by the Switch)
Wiring method	2-wire sensor, 3-wire sensor

Digital output module

Items	Specifications
Models	HCNxE-OD32-D
Output points	32
Rated load voltage	DC 24V (DC 20.4~28.8V)
Rated load current	0.5A/ch, 2A/8ch
Leakage current at power-OFF	0.1mA or less
Residual voltage at power-ON	0.3V or less
ON/OFF response time	125μs or more
Output tyle	NPN, built-in common terminal
Wiring method	2-wire
Protection functions	Overcurrent protection, overvoltage protection, over-temperature protection

Digital I/O module

Items	Specifications	
Models	HCNxE-MD1616-D	HCNxE-MD2408-D
Input points	16	24
Output points	16	8
Rated input voltage	DC 24V (DC 20.4~28.8V)	DC 24V (DC 20.4~28.8V)
Rated input current	8.4mA/24V	8.4mA/24V
ON-voltage/ON-current	DC 15V or more/5mA or more	DC 15V or more/5mA or more
ON/OFF response time	125μs or more	125μs or more
Input resistance	3kΩ	3kΩ
Input type	Compatible with NPN and PNP(switched by the Switch)	Compatible with NPN and PNP(switched by the Switch)
Wiring method	2-wire sensor, 3-wire sensor	2-wire sensor, 3-wire sensor
Rated load voltage	DC 24V (DC 20.4~28.8V)	DC 24V (DC 20.4~28.8V)
Rated load current	0.5A/ch, 2A/8ch	0.5A/ch, 2A/8ch
Leakage current at power-OFF	0.1mA or less	0.1mA or less
Residual voltage at power-ON	0.3V or less	0.3V or less
Output type	NPN, built-in common terminal	NPN, built-in common terminal
Wiring method	2-wire	2-wire
Protection functions	Overcurrent protection, overvoltage protection, over-temperature protection	Overcurrent protection, overvoltage protection, over-temperature protection