

Digital input module CPX-AP-I-16NDI-M8-3P

Part number: 8179440

FESTO



Data sheet

Feature	Value
Dimensions (W x L x H)	60 mm x 170 mm x 35 mm
Type of mounting	On H-rail via accessories With through-hole
Product weight	216 g
Ambient temperature	-20 °C...60 °C
Storage temperature	-40 °C...70 °C
Relative air humidity	5 - 95% Non-condensing
Degree of protection	IP65 IP67
Note on degree of protection	Unused connections sealed
Corrosion resistance class CRC	1 - Low corrosion stress
Max. cable length	30 m inputs 50 m system communication
Note on max. cable length	Power supply according to nominal voltage
LABS (PWIS) conformity	VDMA24364-B2-L
Cleanroom suitability, measured according to ISO 14644-14	Element installed statically, no meaningful evaluation possible according to ISO 14644-1
CE mark (see declaration of conformity)	To EU EMC Directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC
KC mark	KC-EMV
Approval	RCM trademark c UL us listed (OL)
Certificate issuing authority	UL E239998
Note on materials	RoHS-compliant
Material housing	PA PC Die-cast zinc, nickel-plated
Material o-ring	FPM
Diagnostics via LED	Diagnostics per module Status per channel
Diagnostics per internal communication	Short circuit/overload in sensor supply Electronics/sensors overvoltage Electronics/sensors undervoltage

Feature	Value
Communication interface, function	System communication XF10 IN / XF20 OUT
Communication interface, connection type	2x socket
Communication interface, connection technology	M8x1, D-coded according to EN 61076-2-114
Communication interface, number of pins/cores	4
Communication interface, protocol	AP
Communication interface, screened	yes
Power supply, function	Incoming electronics/sensors and load
Power supply, connection type	Plugs
power supply, connection system	M8x1, A-coded to EN 61076-2-104
Power supply, number of pins/wires	4
Power transmission, function	Outgoing electronics/sensors and load
Power transmission, connection type	Socket
Power transmission, connection technology	M8x1, A-coded to EN 61076-2-104
Power transmission, number of pins/wires	4
Note regarding operating voltage	SELV/PELV fixed power supplies required Note voltage drop
Nominal DC operating voltage, electronics/sensors	24 V
Permissible voltage fluctuations for electronics/sensors	± 25%
Max. power supply	2 x 4 A (external fuse required)
Intrinsic current consumption at nominal operating voltage for electronics/sensors	Typically 40 mA
Power failure bridging	10 ms
Reverse polarity protection	yes
Electrical connection input, function	Digital input
Electrical connection input, connection type	16 x socket
Electrical connection input, connector system	M8x1, A-coded to EN 61076-2-104
Electrical connection input, number of connections/cores	3
Number of inputs	16
Characteristic for inputs	To IEC 61131-2, type 3
Switching level	Signal 0: ≤ 5 V Signal 1: ≥ 11 V
Switching logic for inputs	NPN (negative switching) 2-wire sensors to IEC 61131-2 3-wire sensors to IEC 61131-2
Input debounce time	0.1 ms 3 ms 10 ms 20 ms
Fuse protection of inputs (short circuit)	Internal electronic fuse per module
Max. residual current of inputs per module	1.8 A
Electrical isolation of inputs between channels	no
Electrical isolation of inputs between channel – internal communication	yes