Digital input/output module CPX-AP-I-4DI4DO-M12-5P

Part number: 8086603

General operating condition

Data sheet

Feature	Value
Dimensions W x L x H	30 mm x 170 mm x 35 mm
Type of mounting	On H-rail with accessories With through-hole
Product weight	129 g
Ambient temperature	-20 °C ... 60 °C
Storage temperature	-40 °C ... 70 °C
Relative air humidity	5 - 95% Non-condensating
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 outputs 30 m inputs 50 m system communication
Information on max. cable length	Power supply according to nominal voltage
LABS (PWIS) conformity	VDMA24364-B2-L
Cleanroom suitability, measured according to ISO 14644-14	Statically installed element, no meaningful evaluation possible according to ISO 14644-1
CE marking (see declaration of conformity)	As per EU EMC directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC
KC characters	KC-EMV
Certification	RCM compliance mark c UL us - Listed (OL)
Certificate issuing authority	UL E239998
Note on materials	RoHS compliant
Housing material	PC Die-cast zinc, nickel-plated
O-ring material	FPM
Diagnostics via LED	Diagnostics per module Load power supply Status per channel
Diagnose per internal communication	Short-circuit/overload in output signal Short circuit/overload in sensor supply Electronics/sensors overvoltage Overvoltage load Electronics/sensors undervoltage Undervoltage load
No. of outputs	4
Communication interface, function	System communication XF10 IN / XF20 OUT

Feature	Value
Communication interface, connection type	2x port
Communication interface, connection technology	M8x1, D-coded as per EN 61076-2-114
Communication interface, number of pins/wires	4
Communication interface, protocol	AP
Communication interface, shielding	Yes
Power supply, function	Incoming electronics/sensors and load
Power supply, type of connection	Plug
Power supply, connection technology	M8x1, A-coded as per EN 61076-2-104
Power supply, number of pins/wires	4
Voltage forwarding, function	Outgoing electronics/sensors and load
Voltage forwarding, connection type	Socket
Voltage forwarding, connection technology	M8x1, A-coded as per EN 61076-2-104
Voltage forwarding, number of pins/wires	4
Note regarding operating voltage	SELV/PELV fixed power supplies required Note voltage drop
Nominal operating voltage DC load	24 V
Permissible voltage fluctuations load	±25%
Nominal operating voltage DC for 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 35 mA
Intrinsic current consumption at nominal operating voltage load	Typically 10 mA
Power failure buffering	10 ms
Reverse polarity protection	Yes
Electrical connection input, function	Digital input
Electrical connection input, connection type	2x port
Electrical input connection, connection technology	M12x1 A-coded as per EN 61076-2-101
Electrical connection, input, number of pins/wires	5
No. of inputs	4
Input characteristics	As per IEC 61131-2, Type 3
Switching level	Signal 0: <= 5 V Signal 1: >= 11 V
Input switching logic	PNP (positive switching) 2-wire sensors as per IEC 61131-2 3-wire sensors as per IEC 61131-2
Input debounce time	0.1 ms 3 ms 10 ms 20 ms
Fuse protection 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
Digital inputs, electrical isolation of input - internal communication	Yes
Electrical connection output, function	Digital output
Electrical connection output, connection type	2x port
Electrical connection output, connection technology	M12x1 A-coded as per EN 61076-2-101
Electrical output connection, number of pins/wires	5
Characteristic curve outputs	As per IEC 61131-2, type 0.5
Switching logic at outputs	PNP (positive switching)
Fuse protection outputs (short circuit)	Internal electronic fuse per channel
Output delay with resistive load	Signal change 0->1: < 200 µs Signal change 1->0: < 200 µs
Max. residual current of outputs per module	2 A
Electrical isolation of outputs between channels	No

Feature	Value
Electrical isolation of outputs between channel - internal communication	Yes
Max. power supply per channel	0.5 A