


# Digital input/output module CPX-AP-I-4DI4DO-M8-3P

Part number: 8086601

**FESTO**



 [General operating condition](#)

## Data sheet

Feature	Value
Dimensions (W x L x H)	30 x 170 x 35 mm
Type of mounting	On H-rail via accessories With through-hole
Product weight	129 g
Ambient temperature	-20 °C ... 50 °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 outputs 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 class	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	PC Die-cast zinc, nickel-plated
Material o-ring	FPM
Diagnostics via LED	Diagnostics per module Load power supply Status per channel
Diagnostics per internal communication	Load switch-off Short-circuit/overload in output signal Short circuit/overload in sensor supply Electronics/sensors overvoltage Load overvoltage Electronics/sensors undervoltage Load undervoltage
Number of outputs	4

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/wires	4
Communication interface, protocol	AP
Communication interface, shielding	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 operating voltage DC of load	24 V
Permissible voltage fluctuation of load	± 25 %
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 35 mA
Intrinsic current consumption at nominal operating voltage load	Typically 10 mA
Power failure bridging	10 ms
Reverse polarity protection	yes
Electrical connection input, function	Digital input
Electrical connection input, connection type	4x 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	4
Characteristic for inputs	To IEC 61131-2, type 3
Switching level	Signal 0: ≤ 5 V Signal 1: ≥ 11 V
Switching logic for inputs	PNP (positive 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
Electrical connection output, function	Digital output
Electrical connection output, connection type	4x socket
Electrical connection output, connector system	M8x1, A-coded to EN 61076-2-104
Electrical connection output, number of connections/cores	3
Characteristic for outputs	According to IEC 61131-2, type 0.5
Switching logic for outputs	PNP (positive switching)
Fuse protection of outputs (short circuit)	Internal electronic fuse per channel
Output delay with ohmic load	Signal change 0→1: < 200 µs Signal change 1→0: < 200 µs
Max. residual current outputs per module	2 A

Feature	Value
Electrical isolation of outputs between channels	no
Electrical isolation of outputs between channel - internal communication	yes
Max. power supply per channel	0.5 A