

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

Part number: 8086603

**FESTO**



## Data sheet

Feature	Value
Dimensions W x L x H	30 mm x 170 mm x 35 mm
KC characters	KC EMC
Diagnose 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
Max. power supply	2 x 4 A (external fuse required)
Electrical connection output, connection type	2x socket
Fuse protection outputs (short circuit)	Internal electronic fuse per channel
Note on degree of protection	Unused connections sealed
Fuse protection inputs (short circuit)	Internal electronic fuse per module
Communication interface, connection technology	M8x1, D-coded as per EN 61076-2-114
Permissible voltage fluctuations for electronics/sensors	± 25 %
Electrical connection output, connection technology	M12x1 A-coded as per EN 61076-2-101
Power supply, connection technology	M8x1, A-coded as per EN 61076-2-104
Power supply, function	Incoming electronics/sensors and load
Electrical isolation of outputs between channels	no
Voltage forwarding, connection technology	M8x1, A-coded as per EN 61076-2-104
Intrinsic current consumption at nominal operating voltage load	Typically 10 mA
Information on max. cable length	Power supply according to nominal voltage
Relative air humidity	5 - 95 % Non-condensing
Output delay with resistive load	Signal change 0->1: < 200 µs Signal change 1->0: < 200 µs
Max. power supply per channel	0.5 A
Communication interface, connection type	2x socket
Intrinsic current consumption at nominal operating voltage for electronics/sensors	Typically 35 mA
Power supply, type of connection	Plug
Voltage forwarding, connection type	Socket
Communication interface, function	System communication XF10 IN / XF20 OUT
Max. cable length	30 m outputs 30 m inputs 50 m system communication
Electrical connection input, function	Digital input
Communication interface, protocol	AP-COM

Feature	Value
Digital inputs, electrical isolation of input - internal communication	yes
Diagnostics via LED	Diagnostics per module Load power supply Status per channel
Electrical isolation of inputs between channels	no
Permissible voltage fluctuations load	± 25 %
Electrical connection output, function	Digital output
Electrical connection input, connection type	2x socket
Electrical isolation of outputs between channel - internal communication	yes
Communication interface, shielding	yes
Voltage forwarding, function	Outgoing electronics/sensors and load
Electrical input connection, connection technology	M12x1 A-coded as per EN 61076-2-101
Electrical connection, input, number of pins/wires	5
Voltage forwarding, number of pins/wires	4
Nominal operating voltage DC for electronics/sensors	24 V
No. of outputs	4
Power supply, number of pins/wires	4
Electrical output connection, number of pins/wires	5
No. of inputs	4
Communication interface, number of pins/wires	4
Nominal operating voltage DC load	24 V
Max. residual current of inputs per module	1.8 A
Max. residual current of outputs per module	2 A
Power failure buffering	10 ms
Note regarding operating voltage	SELV/PELV fixed power supplies required Note voltage drop
Type code	CPX-AP-I
Reverse polarity protection	yes
Input debounce time	0.1 ms 3 ms 10 ms 20 ms
Switching level	Signal 0: ≤ 5 V Signal 1: ≥ 11 V
CE marking (see declaration of conformity)	As per EU EMC directive
Corrosion resistance class (CRC)	1 - Low corrosion stress
Storage temperature	-40 °C ... 70 °C
Degree of protection	IP65 IP67
Ambient temperature	-20 °C ... 50 °C
Certification	RCM compliance mark
Product weight	129 g
Characteristic curve outputs	As per IEC 61131-2, type 0.5
Input characteristics	As per IEC 61131-2, type 3
Input switching logic	PNP (positive switching) 2-wire sensors as per IEC 61131-2 3-wire sensors as per IEC 61131-2
Switching logic at outputs	PNP (positive switching)
Type of mounting	With through-hole
Note on materials	RoHS-compliant
Housing material	PA PC Die-cast zinc, nickel-plated