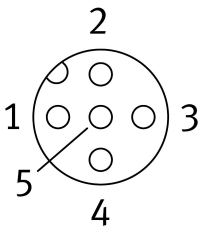
Digital input/output module
CPX-AP-A-6FDI3FDO-PS-M12-5P

Part number: 8129117





Data sheet

Feature	Value
Dimensions (W x L x H)	(including interlinking block) 50.1 mm x 107.3 mm x 57.5 mm
Grid dimension	50.1 mm
Type of mounting	Screw-clamped
Product weight	145 g
Mounting position	Any
Ambient temperature	-20 °C...50 °C
Note on ambient temperature	Observe derating according to user documentation Observe ambient temperature derating according to IEC 61131-2:2017
Storage temperature	-20 °C...70 °C
Relative air humidity	5 - 95% Non-condensing
Nominal altitude of use	<= 2000 m ASL (> 79.5 kPa)
Max. installation height	3500 m
Note on max. installation height	> 2000 m ASL (< 79.5 kPa) Observe derating according to user documentation Observe ambient temperature derating according to IEC 61131-2:2017
Corrosion resistance class CRC	1 - Low corrosion stress
Vibration resistance	Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6
Note on vibration resistance	SG1 on DIN rail SG2 on direct mounting Transport application test with severity class 1 to FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27
Note on shock resistance	30 g/11 ms to EN 60068-2-27 SG1 on DIN rail SG2 on direct mounting Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27
Protection class	III
Pollution degree	2
Overvoltage category	II
Max. cable length	200 m outputs

Feature	Value
	200 m inputs
LABS (PWIS) conformity	VDMA24364-B2-L
Fire test material	UL94 V-0 (housing)
Note on materials	RoHS compliant Free of halogen Free of phosphoric acid ester
Material cover	Reinforced PBT
Material screws	Nickel-plated steel
Material threaded sleeve	High-alloy stainless steel
Material o-ring	Fluoro rubber
Diagnostics via LED	(Outputs) Diagnostics per channel Power supply load (outputs) (Inputs-Outputs) Diagnostics per module (Inputs-Outputs) Status per channel
Max. address volume, inputs	5 Byte
Max. address volume, outputs	6 Byte
Number of outputs	3
Module parameters	FDevice destination address FDevice source address Configuration of voltage monitoring load supply PL
Communication interface, protocol	AP
Note regarding operating voltage	SELV/PELV fixed power supplies required Note the voltage drop
Note on nominal operating voltage DC	Protected Extra-Low-Voltage to IEC 60204-1
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%
Intrinsic current consumption at nominal operating voltage for electronics/sensors	Typically 60 mA
Intrinsic current consumption at nominal operating voltage load	Typically 15 mA
Power failure bridging	10 ms
Potential separation between the supply voltages electronics/sensor technology and load/valves	Yes
Reverse polarity protection	Yes
Electrical connection input, function	Digital input
Electrical connection input, connection type	3x socket
Electrical connection input, connector system	M12x1, A-coded to EN 61076-2-101
Electrical connection input, number of connections/cores	5
Number of inputs	6
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	2.5 ms
Electrical isolation of inputs between channel – internal communication	No
Behaviour after end of overload of the sensor supply	Automatic return
Fuse protection of inputs (short circuit)	Internal electronic fuse per channel
Max. residual current of inputs per module	1.44 A
Electrical isolation of inputs between channels	No
Electrical connection output, function	Digital output
Electrical connection output, connection type	3x socket
Electrical connection output, connector system	M12x1, A-coded to EN 61076-2-101
Electrical connection output, number of connections/cores	5
Characteristic for outputs	Based on IEC1131-T2

Feature	Value
	To IEC 61131-2, type 2
Switching logic for outputs	PNP (positive switching)
Fuse protection of outputs (short circuit)	Internal electronic fuse per channel
Behaviour after end of overload of the outputs	No automatic return
Output delay with ohmic load	Signal change 0->1: < 100 µs Signal change 1->0: < 100 µs
Max. residual current outputs per module	4.5 A
Electrical isolation of outputs between channels	No
Electrical isolation of outputs between channel - internal communication	Yes
Max. power supply per channel	1.5 A