PROFINET Interface
CPX-AP-A-PN-M12

Part number: 8129241

General operating condition

Data sheet

Feature	Value
Dimensions W x L x H	(incl. interlinking block) 50.1 mm x 107.3 mm x 57.5 mm
Width dimension	50.1 mm
Type of mounting	Screwed tightly
Max. number of modules	80
Product weight	108 g
Mounting position	Any
Ambient temperature	-20 °C ... 50 °C
Note on ambient temperature	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 above sea level	<= 2000 m ASL (> 79.5 kPa)
Max. installation height	3500 m
Information on max. installation height	> 2000 m ASL (< 79.5 kPa) 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 as per FN 942017-4 and EN 60068-2-6
Note on vibration resistance	SG1 on H-rail SG2 on direct mounting Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27
Note on shock resistance	30 g/11 ms as per EN 60068-2-27 SG1 on H-rail SG2 on direct mounting Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27
Protection class	III
Contamination level	2
Overvoltage category	II
Max. cable length	100 m PROFINET
LABS (PWIS) conformity	VDMA24364-B2-L
Material fire test	UL94 V-0 (housing)
Note on materials	RoHS-compliant Halogen-free Free of phosphoric acid ester
Housing material	PC
Cover material	PBT-reinforced

Feature	Value
Material of screws	Steel, nickel-plated
Threaded sleeve material	High-alloy stainless steel
O-ring material	FPM
Diagnostics via LED	Diagnostics per module PROFINET communication Power supply for electronics/sensors Load power supply System diagnostics Maintenance required
Diagnostics via bus	APDD invalid Load switch-off Communication error Electronics/sensors overvoltage Load overvoltage Electronics/sensors undervoltage Load undervoltage
Fieldbus interface, type	Ethernet
Fieldbus interface, protocol	LLDP MRP, MRPD (ring redundancy) PROFINET FSU PROFINET I&M0 .. 3 PROFINET IRT PROFINET RT PROFINET Shared device S2 system redundancy SNMP
Fieldbus interface, function	Bus connection, incoming/forwarding
Fieldbus interface, connection type	2x socket
Fieldbus interface, connection technology	M12x1, D-coded as per EN 61076-2-101
Fieldbus interface, connection pattern	00995716
Fieldbus interface, number of poles/wires	4
Fieldbus interface, galvanic isolation	yes
Fieldbus interface, transmission rate	100 Mbit/s
Fieldbus interface, note on transmission rate	100 Mbit, switched fast Ethernet
Max. address capacity inputs	1024 byte
Max. address capacity outputs	1024 byte
Module parameters	Configuration of voltage monitoring, load supply PL
Internal cycle time	‹ 1 ms
Configuration support	GSDML file
Communication interface, function	System communication XF20 OUT
Communication interface, connection type	Socket
Communication interface, connection technology	M8x1, D-coded as per EN 61076-2-114
Communication interface, number of pins/wires	4
Communication interface, connection pattern	00995937
Communication interface, protocol	AP
Communication interface, shielding	yes
Note regarding operating voltage	SELV/PELV fixed power supplies required Note voltage drop
Note on nominal operating voltage DC	Protected Extra-Low-Voltage as per IEC 60204-1
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 %
Intrinsic current consumption at nominal operating voltage for electronics/sensors	Typically 80 mA
Intrinsic current consumption at nominal operating voltage load	Typically 4 mA
Power failure buffering	10 ms
Potential separation between the supply voltages electronics/sensor technology and load/valves	yes

Feature	Value
Reverse polarity protection	yes