

EtherCAT interface CPX-AP-A-EC-M12

Part number: 8129243

FESTO



 [General operating condition](#)

Data sheet

Feature	Value
Dimensions (W x L x H)	50.1 mm x 107.3 mm x 57.5 mm
Grid dimension	50.1 mm
Type of mounting	Screw-clamped
Max. number of modules	80
Product weight	113 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	≤ 2000 m ASL (≥ 79.5 kPa)
Max. installation height	3500 m
Note on max. installation height	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	100 m EtherCAT®
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 screen	Makrolon®
Material screws	Nickel-plated steel

Feature	Value
Material threaded sleeve	High-alloy stainless steel
Material o-ring	Fluoro rubber
Diagnostics via LED	Diagnostics per module EtherCAT® RUN Power supply, electronics/sensors Load power supply System diagnostics Maintenance required
Diagnostics via bus	APDD invalid Switch-off load supply Communication error Electronics/sensors overvoltage Load overvoltage Electronics/sensors undervoltage Load undervoltage
Fieldbus interface	Ethernet
Field bus, protocol	EtherCAT® EtherCAT CoE EtherCAT Distributed Clocks (DC) EtherCAT EoE EtherCAT FoE EtherCAT Modular Device Profile (MDP)
Fieldbus interface, function	Bus connection incoming/outgoing
Field bus, connection type	2x socket
Field bus, connection system	M12x1, D-coded to EN 61076-2-101
Fieldbus interface, connection pattern	00995716
Field bus, connection pattern	4
Field bus interface, electrical isolation	Yes
Field bus interface, transmission rate	100 Mbit/s
Fieldbus interface, note on transmission rate	100 Mbit, fast switching Ethernet
Max. address volume, inputs	1024 Byte
Max. address volume, outputs	1024 Byte
Module parameters	Configuration of voltage monitoring load supply PL
Internal cycle time	< 1 ms
Configuration support	ESI file
Communication interface, function	System communication XF20 OUT
Communication interface, connection type	Socket
Communication interface, connection technology	M8x1, D-coded according to EN 61076-2-114
Communication interface, number of pins/cores	4
Communication interface, plug pattern	00995937
Communication interface, protocol	AP
Communication interface, screened	Yes
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 95 mA
Intrinsic current consumption at nominal operating voltage load	Typically 3 mA
Power failure bridging	10 ms
Potential separation between the supply voltages electronics/sensor technology and load/valves	Yes
Reverse polarity protection	Yes