

Automation system CPX-AP-A

Part number: 8079933

FESTO



 General operating condition

Data sheet

Overall data sheet – Individual values depend upon your configuration.

Feature	Value
Electrical control	AP interface Ethernet
Protocol	AP
Dimensions (W x L x H)	Depending on configuration
Grid dimension	50.1 mm
Type of mounting	Direct mounting via through-hole On H-rail via accessories On mounting frame Screw-clamped With through-hole for M5 screw with accessories With through-hole for M6 screw with accessories Via through-hole for M5 screw Via through-hole for M6 screw
Max. number of modules	15
Product weight	450 g ... 5200 g
Mounting position	Any, on H-rail: horizontal
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	> 2000 m ASL (< 79.5 kPa) Observe ambient temperature derating according to IEC 61131-2:2017
Degree of protection	IP65 IP67
Note on degree of protection	Unused connections sealed
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 H-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 H-rail SG2 on direct mounting Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27

Feature	Value
Protection class	III
Protection against direct and indirect contact	SELV/PELV power supply units required
Pollution degree	2
Overvoltage category	II
LABS (PWIS) conformity	VDMA24364-B2-L
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with EU RoHS Directive
CE marking (see declaration of conformity)	To UK instructions for EMC To UK RoHS instructions
KC mark	KC-EMV
Approval	RCM trademark c UL us listed (OL)
Certificate issuing authority	UL E239998
Note on materials	RoHS-compliant Free of halogen Free of phosphoric acid ester
Diagnostics via LED	(Outputs) Diagnostics per channel Power supply load (outputs) (Inputs-Outputs) Diagnostics per module (Inputs-Outputs) Status per channel Diagnostics per channel Diagnostics per module EtherCAT® RUN Ethernet/IP communication PROFINET communication Power supply, electronics/sensors Load power supply Status per channel Status per module System diagnostics Service required
Diagnostics via bus	APDD invalid Load switch-off Communication fault Electronics/sensors overvoltage Load overvoltage Electronics/sensors undervoltage Load undervoltage
Diagnostics per internal communication	Load switch-off IO-Link® event Communication fault Short-circuit/overload in output signal Short circuit/overload in sensor supply Electronics/sensors overvoltage Load overvoltage Electronics/sensors undervoltage Load undervoltage
Note on fieldbus interface	All information that is relevant to CPX-AP can be read out via the Ethernet interfaces/fieldbus connections and changed depending on the function. Auto MDI, the bus module performs a crossover check Firmware update via Ethernet interface/fieldbus interface I&M function according to PNO is supported. Based on the Ethernet protocol IEEE 802.3
Fieldbus interface	Ethernet

Feature	Value
Field bus, protocol	ACD (Address Conflict Detection) DLR (Device Level Ring) EtherCAT@ EtherCAT CoE EtherCAT Distributed Clocks (DC) EtherCAT EoE EtherCAT FoE EtherCAT Modular Device Profile (MDP) EtherNet/IP EtherNet/IP QoS EtherNet/IP Quickconnect LLDP MRP, MRPD (ring redundancy) Modbus/TCP (Modbus/UDP) PROFINET FSU PROFINET I&MO .. 3 PROFINET IRT PROFINET RT PROFINET shared device S2 system redundancy SNMP
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 RJ45 to IEC 61076-3-117 (V14) SCRJ to IEC 61754-24-21
Field bus, connection pattern	2 ... 8
Field bus interface, electrical isolation	yes
Field bus interface, transmission rate	100 Mbit/s
Max. address volume, inputs	1024 Byte
Note on inputs	EP: 488 bytes Modbus: 4096 bytes
Max. address volume, outputs	1024 Byte
Note on outputs	EP: 496 bytes Modbus: 4096 bytes
Module parameters	Configuration of voltage monitoring load supply PL Behaviour after short circuit/overload at the output
Channel parameters	Activation diagnostics for IO-Link® device lost Input debounce time Port mode Target deviceID Target vendorID Target cycle time
Internal cycle time	< 1 ms
Configuration support	EDS file ESI file GSDML file IODD file
Power supply, function	Incoming electronics/sensors and load and functional earth
Power supply, connection type	Plugs
power supply, connection system	7/8" to NFPA/T3.5.29 M12x1, L-coded to EN 61076-2-111 M18x1 Push-pull to IEC 61076-3-126
Power supply, number of pins/wires	4 ... 5
Note regarding operating voltage	SELV/PELV fixed power supplies required Note 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%
Max. power supply	8 A ... 16 A

Feature	Value
Typ. intrinsic current consumption at nominal operating voltage for electronic system/sensors	40 mA ... 10000 mA
Typ. intrinsic current consumption at nominal operating voltage, load	3 mA ... 10000 mA
Power failure bridging	10 ms
Potential separation between the supply voltages electronics/sensor technology and load/valves	Yes
Reverse polarity protection	yes