

# Controller CPX-E-CEC-C1-PN

Part number: 4252741

FESTO



## Data sheet

 [General operating condition](#)

Feature	Value
Dimensions (W x L x H)	75.9 mm x 82.5 mm x 124.3 mm
Grid dimension	18.9 mm
Type of mounting	With H-rail
Max. number of modules	10
Product weight	288 g
Mounting position	Vertical Horizontal
Ambient temperature	-5 °C ... 50 °C
Note on ambient temperature	-5 - 60°C for vertical installation
Storage temperature	-20 °C ... 70 °C
Relative air humidity	95 % Non-condensing
Degree of protection	IP20
Corrosion resistance class CRC	0 - No corrosion stress
Vibration resistance	Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27
Protection against direct and indirect contact	PELV
LABS (PWIS) conformity	VDMA24364 zone III
CE mark (see declaration of conformity)	To EU EMC Directive In accordance with EU RoHS Directive
UKCA 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
Material housing	PA

Feature	Value
Diagnostics via LED	Force mode Module status Network fault Network status, engineering port 1 Network status, engineering port 2 EtherCAT® network status Network status, port 1 Network status, port 2 Run Power supply, electronics/sensors Load power supply System fault Service required
Operator controls	DIL switch for RUN/STOP Optional: CDSB operator unit
IP address setting	DHCP Via CODESYS Optional: via operator unit CDSB
Fieldbus interface	Ethernet
Field bus, protocol	LLDP MRP, MRPD (ring redundancy) PROFINET I&MO .. 3 PROFINET IO PROFINET RT PROFINET shared device SNMP
Fieldbus interface, function	Bus connection incoming/outgoing
Field bus, connection type	2x socket
Field bus, connection system	RJ45
Fieldbus interface, connection pattern	00995789
Field bus, connection pattern	8
Field bus interface, electrical isolation	yes
Field bus interface, transmission rate	100 Mbit/s
Fieldbus interface 2, type	Ethernet
Fieldbus interface 2, protocol	CoE EoE EtherCAT® EtherCAT master FoE
Fieldbus interface 2, function	Outgoing bus connection
Fieldbus interface 2, connection type	Socket
Fieldbus interface 2, connection technology	RJ45
Fieldbus interface 2, connection pattern	00995789
Fieldbus interface 2, number of pins/wires	8
Fieldbus interface 2, galvanic isolation	yes
Fieldbus interface 2, transmission rate	100 Mbit/s
Ethernet interface, connection type	2x socket
Ethernet interface, protocol	EasyIP Modbus® TCP OPC UA TCP/IP
Ethernet interface, function	Diagnostics Switch
Ethernet interface, connection system	RJ45
Ethernet interface, connection pattern	00995789
Ethernet interface, number of pins/wires	8
Ethernet interface, transmission rate	10 Mbit/s 100 Mbit/s
Max. address volume, inputs	64 Byte
Fieldbus interface, max. address volume for inputs	512 Byte
Max. address volume, outputs	64 Byte

Feature	Value
Fieldbus interface, max. address volume for outputs	512 Byte
System parameters	Diagnostic memory Fail-safe response System start
Module parameters	Channel alarms bundling Undervoltage diagnostics Channel alarms for undervoltage Process value representation of analogue modules
Configuration support	Control unit CDSB CODESYS V3 GSDML file
Additional functions	CODESYS V3
CPU data	Dual Core 766 MHz
storage medium	Micro SD <= 32 GB USB memory stick <= 32 GB
Power supply, function	Electronics and sensors
Power supply, connection type	Terminal strip
Power supply, note on connection type	> 4 A and UL 2x terminal strip for power supply
power supply, connection system	Spring-loaded terminal
Power supply, connection pattern	00995847
Power supply, number of pins/wires	4
Nominal DC operating voltage, electronics/sensors	24 V
Permissible voltage fluctuations for electronics/sensors	± 25%
Power supply, conductor diameter	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Power supply, note on conductor diameter	0.2 - 2.5 mm <sup>2</sup> for flexible conductors without wire ferrule
Max. power supply	8 A
Intrinsic current consumption at nominal operating voltage for electronics/sensors	Typically 150 mA
Power failure bridging	20 ms
Reverse polarity protection	24 V sensor supply against 0 V sensor supply
USB-interface	USB 2.0
Programming software	CODESYS provided by Festo
Program memory	100 MB user program
Processing time	Approx. 200 µs/1 k instruction
Function modules	And others Read CPX-E module diagnostics CPX-E diagnostic status Copy CPX-E diagnostic trace
Buffering time real-time clock	3 Weeks
Flag	CODESYS variable concept