

# Bus module CPX-E-EC

Part number: 4080498

**FESTO**



|    |   |   |    |
|----|---|---|----|
| RD | 0 | 1 | RD |
| BU | 2 | 3 | BU |

## Data sheet

| Feature                                        | Value                                                                                                           |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Dimensions W x L x H                           | 42.2 mm x 76.5 mm x 125.8 mm                                                                                    |
| Width dimension                                | 18.9 mm                                                                                                         |
| Type of mounting                               | With DIN rail                                                                                                   |
| Max. number of modules                         | 10                                                                                                              |
| Product weight                                 | 145 g                                                                                                           |
| Mounting position                              | Vertical<br>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%<br>Non-condensating                                                                                         |
| Degree of protection                           | IP20                                                                                                            |
| Corrosion resistance class (CRC)               | 0 - No corrosion stress                                                                                         |
| Vibration resistance                           | Transport application test with severity level 1 as per FN 942017-4 and EN 60068-2-6                            |
| Shock resistance                               | Shock test with severity level 1 as per FN 942017-5 and EN 60068-2-27                                           |
| Protection against direct and indirect contact | PELV                                                                                                            |
| LABS (PWIS) conformity                         | VDMA24364 Zone III                                                                                              |
| CE marking (see declaration of conformity)     | As per EU EMC directive<br>As per EU RoHS directive                                                             |
| UKCA marking (see declaration of conformity)   | To UK instructions for EMC<br>To UK RoHS instructions                                                           |
| KC characters                                  | KC-EMV                                                                                                          |
| Certification                                  | RCM compliance mark<br>c UL us - Listed (OL)                                                                    |
| Certificate issuing authority                  | UL E239998                                                                                                      |
| Note on materials                              | RoHS compliant                                                                                                  |
| Housing material                               | PA                                                                                                              |
| Diagnostics via LED                            | EtherCAT Error<br>EtherCAT RUN<br>Force mode<br>Modify<br>Module status<br>Power supply for electronics/sensors |

| Feature                                                                            | Value                                                                                                                                                          |
|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                    | Load power supply<br>System fault<br>Connection Status                                                                                                         |
| Diagnostics via bus                                                                | Wire break<br>short-circuit<br>Parameterization error<br>Upper limit value violated<br>Over temperature<br>Lower limit value not complied with<br>Undervoltage |
| Fieldbus interface, type                                                           | EtherCAT                                                                                                                                                       |
| Fieldbus interface, protocol                                                       | EtherCAT                                                                                                                                                       |
| Fieldbus interface, connection type                                                | 2x port                                                                                                                                                        |
| Fieldbus interface, connection technology                                          | RJ45                                                                                                                                                           |
| Fieldbus interface, number of poles/wires                                          | 8                                                                                                                                                              |
| 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                                                       | 64 byte                                                                                                                                                        |
| Fieldbus interface, max. address volume for inputs                                 | 64 byte                                                                                                                                                        |
| Information on inputs                                                              | 62 bytes with I/O diagnostic interface<br>63 bytes with status bits<br>64 bytes without diagnostics                                                            |
| Max. address capacity outputs                                                      | 64 byte                                                                                                                                                        |
| Fieldbus interface, max. address volume for outputs                                | 64 byte                                                                                                                                                        |
| Note on outputs                                                                    | 62 bytes with I/O diagnostic interface<br>64 bytes with status bits<br>64 bytes without diagnostics                                                            |
| System parameter                                                                   | Diagnostic memory<br>Fail-safe response<br>Force mode<br>System startup                                                                                        |
| Module parameters                                                                  | Channel alarm bundling<br>Undervoltage diagnostics<br>Channel alarms for undervoltage                                                                          |
| Configuration support                                                              | ESI file                                                                                                                                                       |
| Power supply, function                                                             | Electronics and sensors                                                                                                                                        |
| Power supply, type of connection                                                   | Terminal strip                                                                                                                                                 |
| Power supply, note on connection type                                              | > 4 A and UL 2x terminal strip for power supply                                                                                                                |
| Power supply, connection technology                                                | Spring-loaded terminal                                                                                                                                         |
| Power supply, number of pins/wires                                                 | 4                                                                                                                                                              |
| Nominal operating voltage DC for electronics/sensors                               | 24 V                                                                                                                                                           |
| Permissible voltage fluctuations for electronics/sensors                           | ±25%                                                                                                                                                           |
| Power supply, conductor diameter                                                   | 0.2 mm²...1.5 mm²                                                                                                                                              |
| Power supply, information on conductor diameter                                    | 0.2 - 2.5 mm² for flexible conductors without cable end sleeves                                                                                                |
| Max. power supply                                                                  | 8 A                                                                                                                                                            |
| Intrinsic current consumption at nominal operating voltage for electronics/sensors | Typically 64 mA                                                                                                                                                |
| Power failure buffering                                                            | 20 ms                                                                                                                                                          |
| Reverse polarity protection                                                        | 24 V sensor supply against 0 V sensor supply                                                                                                                   |