# Counter module
# CPX-E-1CI

Part number: 4827505

General operating condition

## Data sheet

| Feature | Value |
|---|---|
| Dimensions (W x L x H) | 18.9 x 76.6 x 124.3 mm |
| Grid dimension | 18.9 mm |
| Type of mounting | With H-rail |
| Product weight | 88 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-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 |
| LABS (PWIS) conformity | VDMA24364 zone III |
| CE mark (see declaration of conformity) | To EU EMC Directive<br>In accordance with EU RoHS Directive |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK RoHS instructions |
| KC mark | KC-EMV |
| Approval | RCM trademark<br>c UL us listed (OL) |
| Certificate issuing authority | UL E239998 |
| Note on materials | RoHS-compliant |
| Material housing | PA |
| Material screws | Galvanised steel |
| Diagnostics via LED | Encoder supply error<br>Errors per module<br>Encoder error<br>Encoder normal operation<br>Encoder supply normal operation<br>Status per channel |
| Diagnostics via bus | Measuring system error<br>Short circuit/overload in sensor supply<br>Parameter errors<br>Monitoring of wire break<br>Monitoring of zero pulse<br>Tracking error monitoring |

| Feature | Value |
|---|---|
| Max. address volume, inputs | 12 Byte |
| Max. address volume, outputs | 2 Byte |
| Module parameters | Debounce time for digital inputs<br>Pulse/zero pulse<br>Integration time for speed measurement<br>Internal revision ID<br>Load value<br>Latching event<br>Latching signal<br>Latching response<br>Upper count limit<br>Signal type/encoder type<br>Signal evaluation<br>Monitoring of cable break<br>Monitoring of zero pulse<br>Tracking error monitoring<br>Lower count limit |
| Channel parameters | Signal extension |
| Power supply, function | Encoder supply |
| Power supply, connection type | Terminal strip |
| power supply, connection system | Spring-loaded terminal |
| Power supply, connection pattern | 00995844 |
| Power supply, number of pins/wires | 6 |
| Nominal DC operating voltage, electronics/sensors | 24 V |
| Permissible voltage fluctuations for electronics/sensors | ± 25% |
| Power supply, conductor diameter | 0.2 mm² ... 1.5 mm² |
| Power supply, note on conductor diameter | 0.2 - 2.5 mm² for flexible conductors without wire ferrule |
| Intrinsic current consumption at nominal operating voltage for electronics/sensors | Typically 15 mA |
| Power failure bridging | 10 ms |
| Reverse polarity protection | 24 V sensor supply against 0 V sensor supply |
| Electrical connection input, function | Digital input |
| Electrical connection input, connection type | 2x terminal strip |
| Electrical connection input, connector system | Spring-loaded terminal |
| Electrical connection input, number of connections/cores | 6 |
| Electrical connection input, connection pattern | 00995843 |
| Electrical connection for input, conductor cross section | 0.2 mm² ... 1.5 mm² |
| Electrical connection for input, note on conductor cross section | 0.2 - 2.5 mm² for flexible conductors without wire ferrule |
| Electrical connection for input 2, function | Counting input |
| Electrical connection for input 2, connection type | Terminal strip |
| Electrical connection for input 2, connection technology | Spring-loaded terminal |
| Electrical connection for input 2, number of pins/wires | 6 |
| Electrical connection for input 2, connection pattern | 00995848 |
| Electrical connection for input 2, conductor cross section | 0.2 mm² ... 1.5 mm² |
| Electrical connection for input 2, note on conductor cross section | 0.2 - 2.5 mm² for flexible conductors without wire ferrule |
| Number of inputs | 4 |
| Characteristic for inputs | To IEC 61131-2, type 3 |
| Switching level | Signal 0: <= 5 V<br>Signal 1: >= 11 V |
| Switching logic for inputs | PNP (positive switching)<br>2-wire sensors to IEC 61131-2<br>3-wire sensors to IEC 61131-2 |
| Input debounce time | 0.02 ms<br>0.1 ms<br>3 ms |
| Behaviour after end of overload of the sensor supply | Automatic return |
| Max. residual current of inputs per module | 1.8 A |
| Isolation channel - channel | no |

| Feature | Value |
|---|---|
| Isolation channel - internal bus | no |
| Fuse protection (short circuit) | Internal electronic fuse per module |