

# Digital input module CPX-AP-I-8DI-M8-3P

Part number: 8086600

**FESTO**



## Data sheet

| Feature                                      | Value  |
|--|--|
| Dimensions (W x L x H)                       | 30 x 170 x 35 mm   |
| Type of mounting                             | On H-rail via accessories<br>With through-hole   |
| Product weight                               | 126 g  |
| Ambient temperature                          | -20 °C...50 °C   |
| Storage temperature                          | -40 °C...70 °C   |
| Relative air humidity                        | 5 - 95%<br>Non-condensing  |
| Degree of protection                         | IP65<br>IP67   |
| Note on degree of protection                 | Unused connections sealed  |
| Corrosion resistance class CRC               | 1 - Low corrosion stress   |
| Max. cable length                            | 30 m inputs<br>50 m system communication   |
| Note on max. cable length                    | Power supply according to nominal voltage  |
| LABS (PWIS) conformity                       | VDMA24364-B2-L   |
| Cleanroom class                              | Element installed statically, no meaningful evaluation possible according to ISO 14644-1                       |
| CE mark (see declaration of conformity)      | To EU EMC Directive  |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC   |
| 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<br>PC<br>Die-cast zinc, nickel-plated   |
| Material o-ring                              | FPM  |
| Diagnostics via LED                          | Diagnostics per module<br>Status per channel   |
| Diagnostics per internal communication       | Short circuit/overload in sensor supply<br>Electronics/sensors overvoltage<br>Electronics/sensors undervoltage |

| Feature  | Value  |
|--|--|
| Communication interface, function  | System communication XF10 IN / XF20 OUT  |
| Communication interface, connection type   | 2x socket  |
| Communication interface, connection technology                                     | M8x1, D-coded according to EN 61076-2-114  |
| Communication interface, number of pins/wires                                      | 4  |
| Communication interface, protocol  | AP   |
| Communication interface, shielding   | yes  |
| Power supply, function   | Incoming electronics/sensors and load  |
| Power supply, connection type  | Plugs  |
| power supply, connection system  | M8x1, A-coded to EN 61076-2-104  |
| Power supply, number of pins/wires   | 4  |
| Power transmission, function   | Outgoing electronics/sensors and load  |
| Power transmission, connection type  | Socket   |
| Power transmission, connection technology  | M8x1, A-coded to EN 61076-2-104  |
| Power transmission, number of pins/wires   | 4  |
| Note regarding operating voltage   | SELV/PELV fixed power supplies required<br>Note voltage drop                               |
| Nominal DC operating voltage, electronics/sensors                                  | 24 V   |
| Permissible voltage fluctuations for electronics/sensors                           | ± 25%  |
| Max. power supply  | 2 x 4 A (external fuse required)   |
| Intrinsic current consumption at nominal operating voltage for electronics/sensors | Typically 32 mA  |
| Power failure bridging   | 10 ms  |
| Reverse polarity protection  | yes  |
| Electrical connection input, function  | Digital input  |
| Electrical connection input, connection type                                       | 8x socket  |
| Electrical connection input, connector system                                      | M8x1, A-coded to EN 61076-2-104  |
| Electrical connection input, number of connections/cores                           | 3  |
| Number of inputs   | 8  |
| 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  | 0.1 ms<br>3 ms<br>10 ms<br>20 ms   |
| Fuse protection of inputs (short circuit)  | Internal electronic fuse per module  |
| Max. residual current of inputs per module   | 1.8 A  |
| Electrical isolation of inputs between channels                                    | no   |
| Electrical isolation of inputs between channel - internal communication            | yes  |