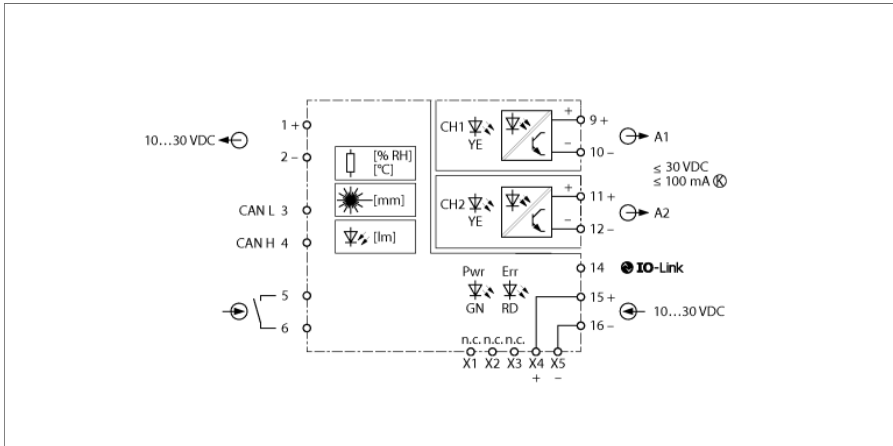


Cabinet Guard

Internal and External Sensors

IM12-CCM03-MTIS-3T-IOLC-PR/24V



The cabinet guard IM12-CCM03-MTIS-3T-IOLC-PR/24V monitors preset environmental limits inside the control cabinet. The environmental conditions are detected by a humidity or temperature sensor, a brightness sensor and a triangulation sensor that detects an incorrectly closed cabinet door. When exceeding or falling below the set limits an error message appears on the LED display or is reported via the switching outputs and the IO-Link interface to the host control system. The device can be fed via a power bridge.

The device is supplied with 24 VDC

The teaching is done manually on the device; extended parameterization is carried out via the HART interface.

The device is equipped with 8 screw terminals for connecting the power supply and switching outputs and can be mounted on a DIN rail acc. to EN 60715.

Furthermore, the device has 4 front-mounted LEDs to display the operating status (green), the error message (red) and the states of the switching outputs (2 × yellow).

- Two potential-free contacts
- Temperature detection
- Moisture detection
- Detection of distance to cabinet door
- IO-Link parameterizable
- Connection of two devices via CAN bus
- Power bridge
- Galvanic isolation of outputs (A1/A2)
- Removable screw terminals

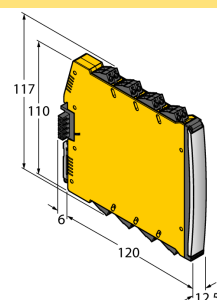
Cabinet Guard

Internal and External Sensors

IM12-CCM03-MTIS-3T-IOLC-PR/24V

Type designation	IM12-CCM03-MTIS-3T-IOLC-PR/24V
Ident-No.	7570102
Nominal voltage	24 VDC
Operating voltage range	10...30 VDC
Power consumption	≤ 0.5 W
Installed sensors CCM	Triangulation sensor 40...500 mm, Humidity sensor 10...90% rel. hum., Brightness sensor Temperature sensor -25 °C...+70 °C
Reference temperature	23 °C
Semiconductor output circuit(s)	
Output circuits (digital)	2 x transistor (potential-free) NO/NC
Switching voltage	≤ 30 VDC
Switching current per output	≤ 0.1 A
Voltage drop	≤ 1 V
Moisture Sensor	
Accuracy max.	+/- 4.5 % RF in the range 10...90%
Repeat accuracy	0.2 % RF
Temperature Sensor	
Max. accuracy	+/- 2 °C
Repeat accuracy	0.16 °C
Distance Sensor	
Beam angle	6 °
Measuring range	40...500 mm
Accuracy	+/-50 mm In the range of ≤ 500 mm
Temperature coefficient	+/- 30 mm in the range of ≤ 500 mm at -25°C ≤ T ≤ 70°C +/- 15 mm in the range of ≤ 500 mm at 0 °C ≤ T ≤ 50 °C
Max. linearity error	≤ 2 % of full scale
Indication	
Operational readiness	green
Switching state	Yellow
Error indication	red

Dimensions



Cabinet Guard

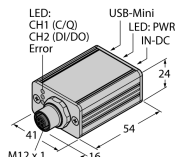
Internal and External Sensors

IM12-CCM03-MTIS-3T-IOLC-PR/24V

Protection class	IP20																																																
Flammability class acc. to UL 94	V-0																																																
Ambient temperature	-25...+70 °C																																																
Storage temperature	-25...+80 °C																																																
Relative humidity	≤ 95 %																																																
Dimensions	120 x 12.5 x 117 mm																																																
Weight	168 g																																																
Mounting instructions	DIN rail (NS35)																																																
Housing material	Polycarbonate/ABS																																																
Electrical connection	Removable screw clamp terminals, 2-pin																																																
Terminal cross-section	0.2...2.5 mm ² (24 ... 13 AWG)																																																
Tightening torque	0.5 Nm																																																
Tightening torque	4.43 LBS-Inch																																																
Environmental conditions	<table> <tr> <td>Operating altitude</td><td>Up to 2000 m above sea level</td></tr> <tr> <td>Pollution degree</td><td>II</td></tr> <tr> <td>Standards used</td><td></td></tr> <tr> <td>Voltage resistance and insulation</td><td></td></tr> <tr> <td></td><td>EN 50178</td></tr> <tr> <td></td><td>EN 61010-1</td></tr> <tr> <td>Shock</td><td></td></tr> <tr> <td></td><td>EN 60068-2-6</td></tr> <tr> <td></td><td>EN 60068-2-27</td></tr> <tr> <td>Temperature</td><td></td></tr> <tr> <td></td><td>EN 60068-2-1 Ad</td></tr> <tr> <td></td><td>EN 60068-2-2 Bd</td></tr> <tr> <td></td><td>EN 60068-2-1</td></tr> <tr> <td>Humidity</td><td></td></tr> <tr> <td></td><td>EN 60068-2-38</td></tr> <tr> <td>EMC</td><td></td></tr> <tr> <td></td><td>EN 61000-4-2</td></tr> <tr> <td></td><td>EN 61000-4-3</td></tr> <tr> <td></td><td>EN 61000-4-4</td></tr> <tr> <td></td><td>EN 61000-4-5</td></tr> <tr> <td></td><td>EN 61000-4-6</td></tr> <tr> <td></td><td>EN 61000-4-8</td></tr> <tr> <td>Emission</td><td></td></tr> <tr> <td></td><td>CISPR16</td></tr> </table>	Operating altitude	Up to 2000 m above sea level	Pollution degree	II	Standards used		Voltage resistance and insulation			EN 50178		EN 61010-1	Shock			EN 60068-2-6		EN 60068-2-27	Temperature			EN 60068-2-1 Ad		EN 60068-2-2 Bd		EN 60068-2-1	Humidity			EN 60068-2-38	EMC			EN 61000-4-2		EN 61000-4-3		EN 61000-4-4		EN 61000-4-5		EN 61000-4-6		EN 61000-4-8	Emission			CISPR16
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Accessories

Type code	Ident-No.	Description	Dimension drawing
USB-2-IOL-0002	6825482	IO-Link Master with integrated USB port	
IMX12-PS02-UI-UIR-PR /24VDC	7580610	Power supply module power bridge; Collective fault signal via relay; Single and redundant power supply via terminals; Removable screw terminals	