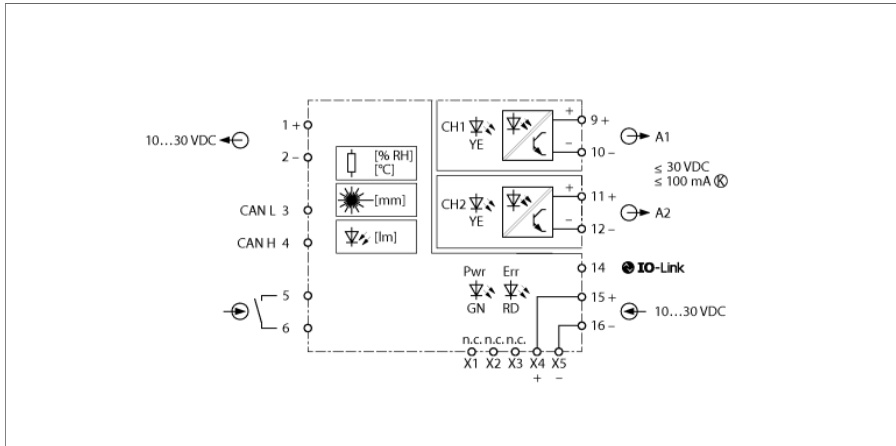


# Cabinet Guard

## Internal and External Sensors

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



The cabinet guard IM12-CCM03-MTIS-3T-IOLC-PR/24V/CC monitors preset environmental limits inside the control cabinet. The environmental conditions are detected by an integrated 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 limit values, 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 supplied via a power rail.

The device is supplied with 24 VDC

Teach-in can be performed manually on the device; extended parameterization is possible via the IO-Link interface.

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

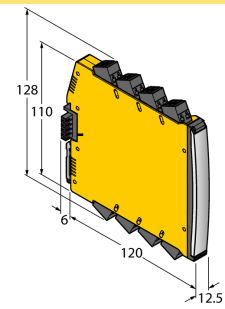
Furthermore, the device has 4 front-mounted LEDs to display the operating status (green), the error message (red) and the states of the switching outputs (2 × yellow).

The device is equipped with removable spring-type terminals.

- 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 cage clamp terminals

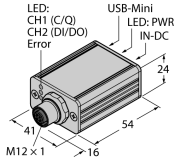
## Dimensions

Type	IM12-CCM03-MTIS-3T-IOLC-PR/24V/CC
ID	7570103
Nominal voltage	24 VDC
Operating voltage	10...30 VDC
Power consumption	≤ 0.5 W
Installed sensors CCM	Triangulation sensor 40...500 mm Humidity sensor 10...90 % rel. hum. Temperature sensor -25...+70 °C Dry contact
Reference temperature	23 °C
<b>Output circuits</b>	
<b>Semiconductor output circuits</b>	
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
<b>Moisture Sensor</b>	
Accuracy max.	± 4.5 % relative humidity in the range 10...90 %
Repeat accuracy	0.2 % RF
<b>Temperature Sensor</b>	
Max. accuracy	±2 °C
Repeat accuracy	0.16 °C
<b>Distance Sensor</b>	
Beam angle	6 °
Measuring range	40...500 mm
Relative 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
<b>Displays/Operating elements</b>	
Operational readiness	Green
Switching state	Yellow
Error indication	red



Mechanical data			
Protection class	IP20		
Flammability class acc. to UL 94	V-0		
Ambient temperature	-25...+60 °C		
Storage temperature	-25...+80 °C		
Dimensions	120 x 12.5 x 128 mm		
Weight	170 g		
Mounting instructions	DIN rail (NS35)		
Housing material	Polycarbonate/ABS		
Electrical connection	Removable spring-type terminals, 2-pin		
Terminal cross-section	0.2...2.5 mm <sup>2</sup> (AWG: 24...14)		
Environmental conditions	Operating height	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
	Air 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	

## Accessories

Type code	Ident no.		Dimension drawing
USB-2-IOL-0002	6825482	IO-Link Master with integrated USB port	 <p>LED-CH1 (C/O) LED-CH2 (DI/DO) Error USB-Mini LED-PWR IN-DC</p> <p>41 16 54 24 M12 x 1</p>