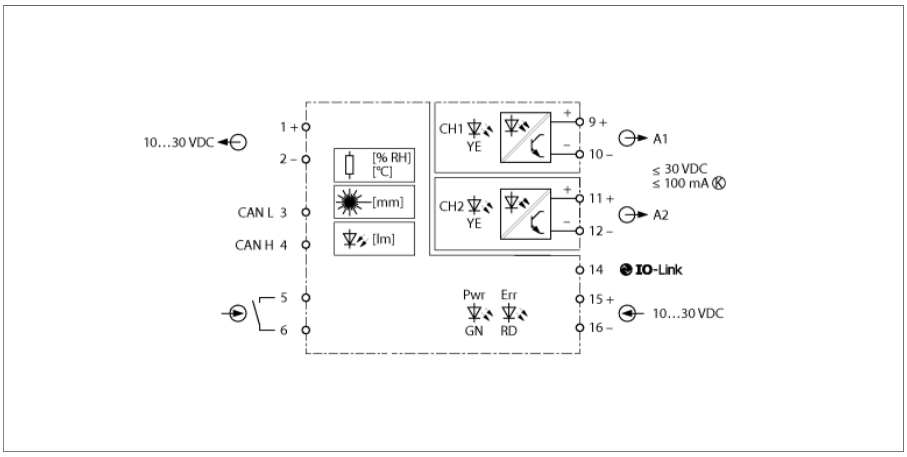
Cabinet Guard
Internal and External Sensors
IM12-CCM03-MTIS-3T-IOLC/24V/CC



The cabinet guard IM12-CCM03-MTIS-3T-IOLC/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 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
- Galvanic isolation of outputs (A1/A2)
- Removable cage clamp terminals

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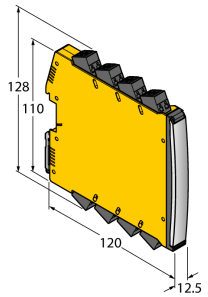
Type	IM12-CCM03-MTIS-3T-IOLC/24V/CC
ID	7570101
Nominal voltage	24 VDC
Operating voltage U_B	10…30 VDC
Power consumption	≤ 0.5 W
Installed sensors CCM	Triangulation sensor 40…500 mm Humidity sensor 10…90 % rel. hum. Temperature sensor -25…+70 °C Dry contact
Reference temperature	23 °C
Output circuits	
Semiconductor output circuits	
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 % relative humidity 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
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
Displays/Operating elements	
Operational readiness	Green
Switching state	Yellow
Error indication	red

Dimensions



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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	164 g	
Mounting instructions	DIN rail (NS35)	
Housing material	Plastic, Polycarbonate/ABS	
Electrical connection	Removable spring-type terminals, 2-pin	
Terminal cross-section	0.2…2.5 mm² (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

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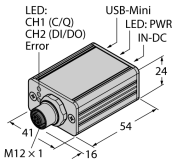
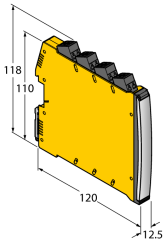
Accessories

Type code	Ident no.		Dimension drawing
USB-2-IOL-0002	6825482	IO-Link Master with integrated USB port	
IMX12-PS02-UI-UIR-PR/24VDC/CC	7580611	Power supply module power bridge; Collective fault signal via relay; Single and redundant power supply via terminals; Removable screw terminals	

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