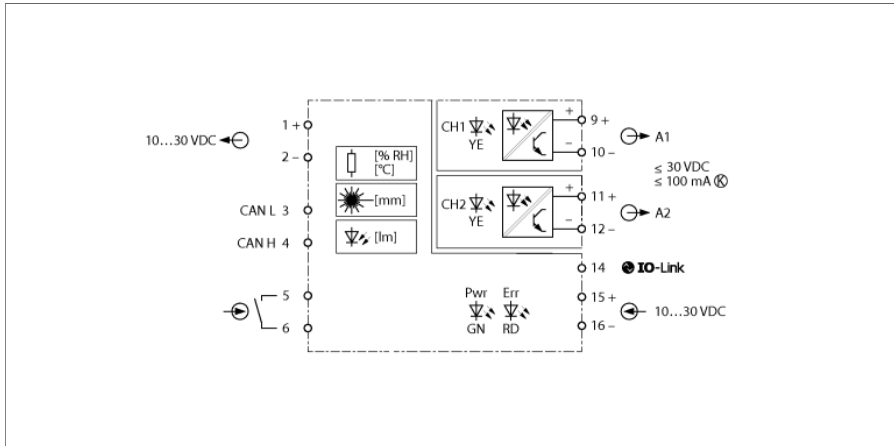


Cabinet Guard

Internal and External Sensors

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



The cabinet guard IM12-CCM03-MTIS-3T-IOLC/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 is supplied with 24 VDC

The teaching is done manually on the device; extended parameterization is carried out via the IO-Link 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.

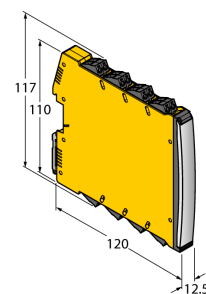
Furthermore, the device has 4 front-mounted LEDs to display the operating status (green), the error message (red) and the states of the switching outputs (2 × yellow).

The device is equipped with removable screw 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 screw terminals

Dimensions

Type	IM12-CCM03-MTIS-3T-IOLC/24V
ID	7570100
Nominal voltage	24 VDC
Operating voltage U_s	10...30 VDC
Power consumption	$\leq 0.5 \text{ W}$
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	$\leq 30 \text{ VDC}$
Switching current per output	$\leq 0.1 \text{ A}$
Voltage drop	$\leq 1 \text{ V}$
Moisture Sensor	
Accuracy max.	$\pm 4.5 \%$ relative humidity in the range 10...90 %
Repeat accuracy	0.2 % RF
Temperature Sensor	
Max. accuracy	$\pm 2 \text{ °C}$
Repeat accuracy	0.16 °C
Distance Sensor	
Beam angle	6 °
Measuring range	40...500 mm
Relative accuracy	$\pm 50 \text{ mm}$ in the range of $\leq 500 \text{ mm}$
Temperature coefficient	+/- 30 mm in the range of $\leq 500 \text{ mm}$ at $-25^\circ\text{C} \leq T \leq 70^\circ\text{C}$ +/- 15 mm in the range of $\leq 500 \text{ mm}$ at $0^\circ\text{C} \leq T \leq 50^\circ\text{C}$
Max. linearity error	$\leq 2 \%$ of full scale
Displays/Operating elements	
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 117 mm	
Weight	165 g	
Mounting instructions	DIN rail (NS35)	
Housing material	Plastic, Polycarbonate/ABS	
Electrical connection	Removable screw terminals, 2-pin	
Terminal cross-section	0.2...2.5 mm² (AWG: 24...14)	
Tightening torque	0.5 Nm	
Tightening torque	4.43 LBS-Inch	
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	