

IMX12-CCM – Types and Features

ID number	Type code	Description
7570092	IMX12-CCM02-MTI-11-2T-HC/L	with screw terminals
7570093	IMX12-CCM02-MTI-11-2T-HC/L/CC	with cage clamp terminals

Technical Data	
Nominal voltage	24 VDC loop-powered
Operating voltage	10...28 VDC
Power consumption	≤ 0.32 W
Installed sensors CCM	Triangulation sensor 4...20 cm Humidity sensor 0...80 % rel. hum. Brightness sensor Temperature sensor -25...+60 °C
Output current	20 mA firmly set
Semiconductor output circuit(s)	2 x transistor (potential-free) NO/NC
Output circuits (digital)	≤ 30 VDC
Switching voltage	≤ 100 mA T4 < 45 °C, otherwise 85 mA
Switching current per output	≤ 3.5 V
Voltage drop	
Moisture sensor	
Max. accuracy	± 3 % RF in the range 10...90 %
Repeat accuracy	0.2 % RF
Temperature sensor	
Accuracy max.	± 1.5 °C in the range -25...+60 °C
Repeat accuracy	0.16 °C
Distance Sensor	Information has been empirically determined, target white with matte finish
Beam angle	6°
Measuring range	40...200 mm
Accuracy	± 3 mm
Temperature coefficient max.	± 6 mm in the range ≤ 200 mm -25...+60 °C
Linearity error max.	± 8 mm in the range of 200 mm at 23 °C
Important note	For Ex-applications the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.
Application area	II 2G
Ignition protection category	II 2G Ex ib op is IIC T4 Gb
Output circuit	
Internal resistance R_i	35 Ω
Max. input voltage U_i	≤ 30 V
Max. input current I_i	≤ 85 mA
Max. input power P_i	≤ 253 mW
Supply circuit	
Internal inductance/capacitance L_i/C_i	L_i = negligibly small, C_i = negligibly small
Max. input voltage U_i	≤ 28 V
Max. input current I_i	≤ 93 mA
Max. input power P_i	≤ 700 mW
Internal inductance/capacitance L_i/C_i	L_i = negligibly small, C_i = 28.2 nF
Indication	
Operational readiness	green
Switching state	yellow
Error message	red

Your Global Automation Partner

IMX12-CCM Cabinet Guard



28 subsidiaries and over
60 representations worldwide!



IMX12-CCM

Efficient Cabinet Monitoring in the Ex area

The IMX12-CCM (Cabinet Condition Monitoring) can be installed in virtually any cabinet or any protective enclosure to continuously check the current protection degree there - even retrospectively. The DIN rail device notifies with a switching signal improperly closed doors, as well as exceedances of temperature and interior humidity, to the control system.

The 12.5 mm wide IMX12 CCM has an intrinsically safe 2-wire transducer interface and can be used in hazardous areas. The simple teaching process is done directly on the device without additional aids. For more diagnostic possibilities, such as reading out absolute values, the standardized HART interface is available.

In addition to the interface technology, the Turck cabinet guard also comprises several sensors, which detect the current state of the environment: A sensor for temperature, absolute humidity and triangulation. The latter detects the distance to the lid or the door and thus controls the proper closure. To detect moisture problems, the IMX12 CCM records these long-term trends and compares them with the learned good condition. Once defined limits are exceeded, a signal is provided via a potential-free contact to the control level.



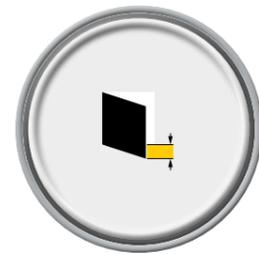
Voltage supply, 2-wire, 4...20 mA



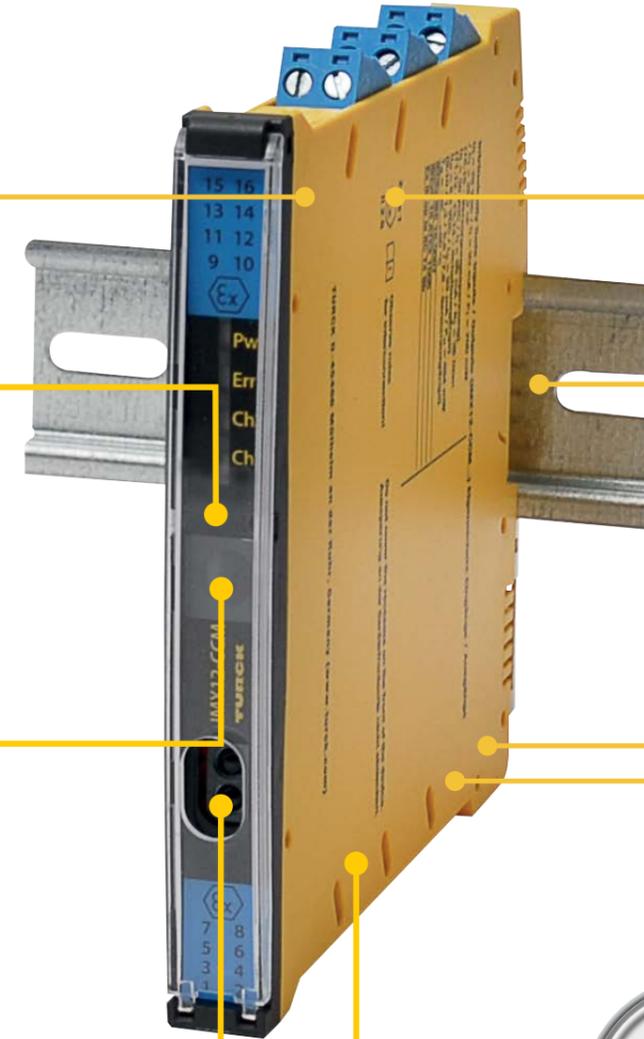
Easy commissioning without tools



Temperature and humidity



Distance measurement door open/close



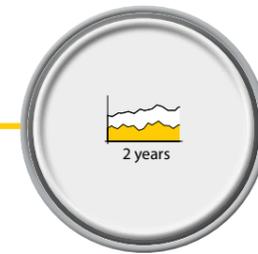
Installation in zone 1



Easily mounted on DIN rail



Hart® parameterizable



Integrated data logger, storage capacity max. two years



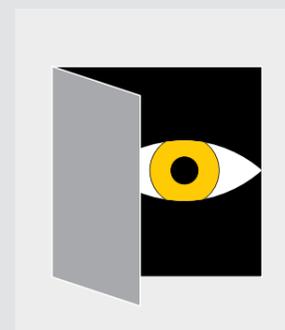
Alarm message via potential-free contacts



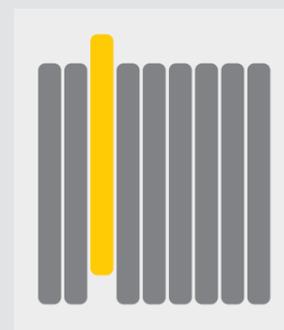
Reliable
Turck builds on many years of experience in the field of interface technology. The new device series combines this experience with state-of-the-art technology. With this, we offer you an excellent basis for securing your investments, also in the long term and under changed market conditions.



Compact
The cabinet guard IMX12 CCM requires very little space. With a width of just 12.5 mm, the IMX-CCM is an optimal solution even for small cabinets. The three built-in sensors provide excellent monitoring qualities.



Alert
In addition to monitoring the IP protection degree, the cabinet guard also warns against unwanted manipulations or unauthorised opening in the Ex area for example. Such operations are also traceable in hindsight via the built-in data blogger.



Retrofittable
The cabinet guard IMX12 CCM can be easily retrofitted in existing installations. All it needs is a little space on a DIN rail and a maximum of 6 wires to take advantage of the full range of functions. In-situ commissioning, without computers and other tools, is possible at any time.