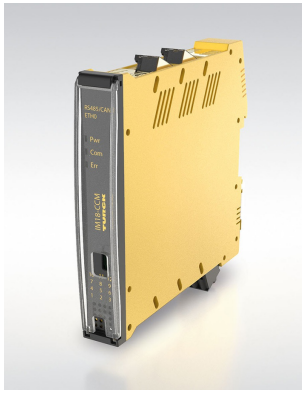
CAN Newsletter Online

CABINET GUARD

Condition monitoring for OEM control cabinets

The IM18-CCM from Turck brings the environment variables to higher-level systems for central condition monitoring in the Industrial Internet of Things. External devices such as vibration sensors for monitoring states can be integrated via CAN.



The IM18-CCM monitors control cabinets and sends data to IT systems (Source: Turck)

The integrated sensors of the narrow 18-mm device monitor temperature, air humidity, and door distance, in order to send this information via Ethernet to higher-level IT systems. External sensors used for condition monitoring, such as vibration sensors or additional temperature sensors, can be connected via CAN. The cabinet guard is enclosed in a plastic housing with protection to IP20 and is provided with three multicolor status LEDs. The Ethernet interface and the CAN interface are implemented as RJ45 sockets. The maximum cable length is 30 m. The used CAN interface provides a maximal transmission rate of 1 Mbit/s.

The product is particularly suitable for OEMs (original equipment manufacturers) wishing to provide basic condition monitoring values in their IT system. It detects critical states of the control cabinet directly in the field. Creeping changes or systemic problems can also be detected through long-term evaluations. The device thus bridges the gap between the OT and IT world and enables users to analyze the data material from the factory level directly from their office desk. The Linux platform also allows installation of customized condition monitoring software. In this way, measured values can be pre-processed and prepared on the device for the specific requirements of the application.

Application areas of the product are process industry, food and beverage, oil and gas, energy and water supply, as well as automotive. The hardware of the cabinet guard can also be scaled to facilitate certain condition monitoring tasks.

The IM18-CCM is the third model in the company's cabinet guard series. The two 12-mm devices IM12-CCM and IMX12-CCM come with an onboard condition monitoring software for monitoring limit states and long-term data series.

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