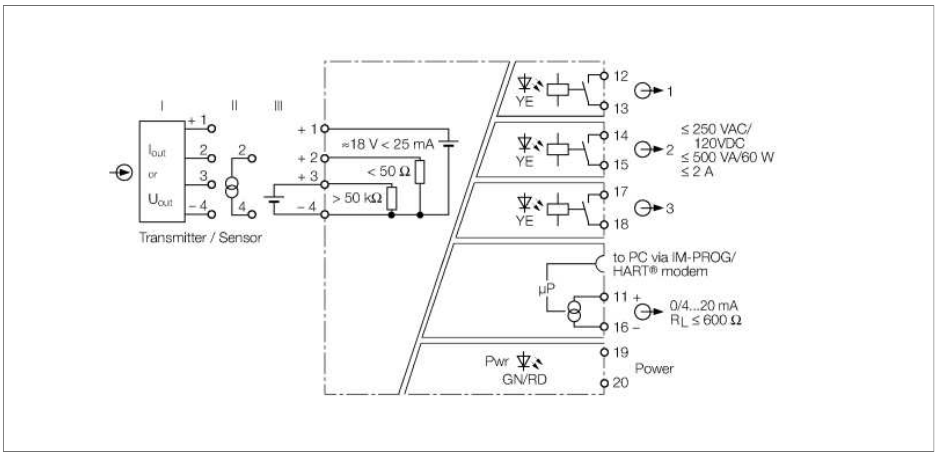
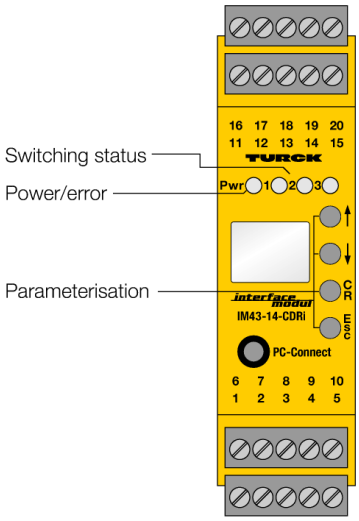
interface modul

Isolating transducer
1-channel
IM43-14-CDRI

TURCK
Industrial Automation





The 1-channel isolating transducer IM43-14-CDRI is designed to operate 2-wire transducers (III) and to galvanically separate and transfer the measured signals. Alternatively, active 2-wire transmitters (II) and passive 3-wire transmitters (I) can also be operated.

The three limit values are set via teach buttons at the front.

The device features one output for analog signals 0/4…20 mA and three outputs for limit value relays. The unit of the measured value is freely selectable and indicated on a 2-line display. A green LED indicates operational readiness, three yellow LEDs, one for each output, indicate the switching status.

At each of the three outputs a predefined set-point value can be monitored according to overshoot/undershoot. The switching hysteresis is defined by programming the switch-on and switch-off point. Furthermore, a switch-off delay can be set individually for each output.

The measured value is permanently written to a ring memory with space for 8000 values. The writing process is stopped with a predefined trigger event, like for example "excess of limit value". After that, the stored signal sequence can be read out.

The device can be parametrized and configured via PC (FDT/DTM). For this, connect the device to the PC via the 3.5 mm jack plug at the front (the matching transmission cable IM-PROG III can be ordered separately from TURCK). A basic scope of parameters can be set via buttons and display at the front or remotely via the current interface and HART®.

- **Input circuit: 0/4…20 mA; 0/2…10 V**
- **Output circuit: 0/4…20 mA, three independent limit value relays**
- **Universal operating voltage**
- **Monitors over and underrange of analog values and window limits**
- **Connection of passive 2-wire and active 3-wire transmitters**
- **Parametrized via PC (FDT/DTM), front panel switch and HART®**
- **Many diagnostic functions**
- **Ring memory for up to 8000 measured values**
- **Display**
- **Complete galvanic separation**

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interface modul

Isolating transducer
1-channel
IM43-14-CDRI

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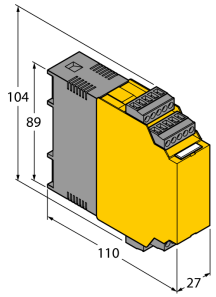
Type code	IM43-14-CDRI
Ident no.	7540045
Nominal voltage	Universal voltage supply unit
Operating voltage	20…250 VAC
Frequency	40…70 Hz
Operating voltage range	20…250 VDC
Power consumption	≤ 3 W
Residual ripple	≤ 10 mV_{ss}
Transmitter connection	
Supply voltage	≥ 17 V
Current	25 mA
Voltage input	0/2…10 VDC
Current input	0/4...20 mA
Output circuits	
Output current	0/4...20 mA
Fault current	0 / 22 mA adjustable
Output circuits (digital)	3 x relays (NO)
Relay switching voltage	≤ 250 VAC/120 VDC
Switching current per output	≤ 2 A
Switching capacity per output	≤ 500 VA/60 W
Switching frequency	≤ 10 Hz
Contact quality	AgNi, 3µ Au
Limit frequency	≤ 30 Hz
Measuring accuracy	≤ 0.05 % of full scale
Reference temperature	23 °C
Temperature drift analogue output	0.0025 %/K
Galvanic separation	
Test voltage	2.5 kV
Rated voltage	250 V
MTTF	100 years acc. to SN 29500 (Ed. 99) 40 °C
Indication	
Operational readiness	green
Switching state	yellow
Error indication	red
Protection class	IP20
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80°C
Dimensions	104x 27x 110 mm
Weight	245 g
Mounting instruction	For mounting on DIN rail or mounting panel
Housing material	Polycarbonate/ABS
Electrical connection	4 x 5-pole removable terminal blocks, reverse polarity protected, screw connection
Terminal cross-section	1 x 2.5 mm^2 / 2 x 1.5 mm^2
Tightening torque	0.5 Nm

Dimensions



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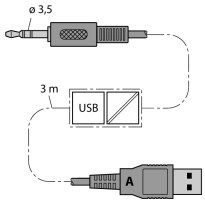
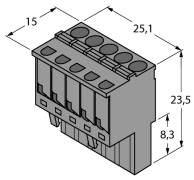
Accessories

Type code	Ident no.	Description	Dimension drawing
IM-PROG III	7525111	The programming adapter IM-PROG III is used for parametrization of TURCK IM and IMB devices via FDT/DTM and for galvanic separation.	
IM-CC-5X2BK/2BK	7541219	Cage clamps for IM modules (non-Ex devices, width 27 mm): 4 black, 5-pin, included in delivery	

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