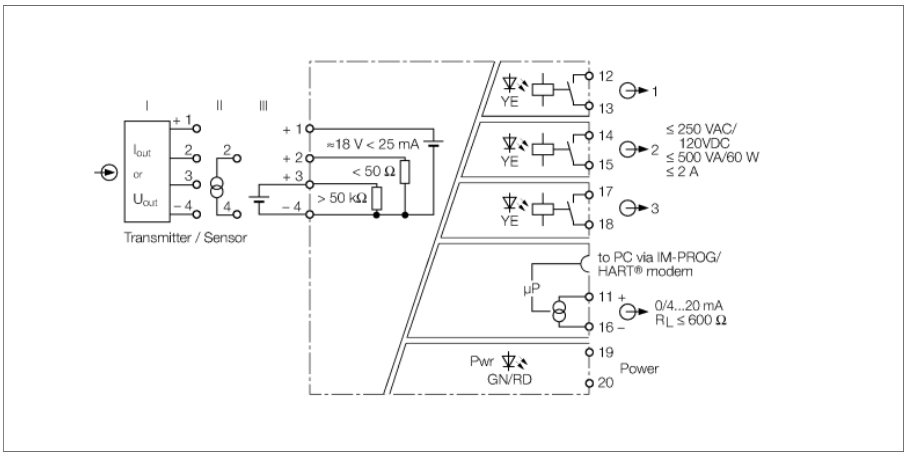
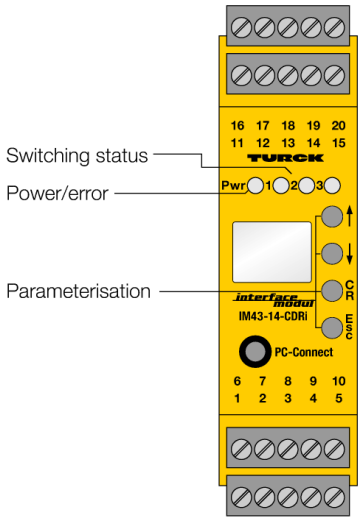
Isolating transducer
1-channel
IM43-14-CDRI





The 1-channel isolating transducer IM43-14-CDRI is used to operate 2-wire transducers (III), to galvanically separate and transfer the meausred signals.

Alternatively, active 2-wire transmitters (II) and passive 3-wire transmitters (I) can be operated.

The device features an analog output for 0/4…20 mA and also three limit value relay outputs. The measured value is shown on a 2-line display and the unit is freely paremetrizable. 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 setpoint value can be monitored according to overshoot/undershoot. In addition, the two relays monitor overshoot/undershoot of window limits which are defined as a tolerance around the setpoint value. The switching hysteresis is defined by programming the switch-on and switch-off point. Furthermore, switch-off can be set individually for each output. A locking function prevents the output relay from being switched on again. The outputs are operated in NO mode; in "good-condition" the corresponding output is in switched state.

The device offers a broad range of diagnostic functions. 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 configured and parametrized via PC with the software tool Device Type Manager (DTM). For this, the device is connected 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). In addition, a basic scope of parameters can be set via buttons and display at the front as well as via the HART®capable power interface

- **Isolating transducer**
- **Input circuit: 0/4…20 mA, 0/2…10 V**
- **Output circuit: 0/4…20 mA, three independent limit value relays**
- **Universal operating voltage**
- **Monitoring of analog values according to over and underrange of window limits**
- **Connection of passive 2-wire and active 3-wire transmitters**
- **Analog output adjustable in the event of input circuit errors**
- **Parametrized via PC (FDT/DTM); with diagnostic messaging function**
- **Ring memory for up to 8000 measured values**
- **Display of measured values and parameters**
- **Removable terminal blocks**
- **Galvanic separation of input circuits, output circuits and power supply**

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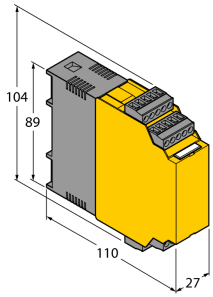
Isolating transducer
1-channel
IM43-14-CDRI

Type	IM43-14-CDRI
Ident-No.	7540045
Ident-No (TUSA)	M7540045
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	18 VDC
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	≤ 6 A
Switching capacity per output	≤ 1500 VA
Switching frequency	≤ 10 Hz
Contact quality	AgNi, 3µ Au
Limit frequency	≤ 30 Hz
Measuring accuracy	≤ 0.1 % of full scale
Reference temperature	23 °C
Galvanic separation	
Test voltage	2.5 kV
Rated voltage	250 V
Indication	
Operational readiness	green
Switching state	yellow
Error indication	red
Protection class	IP20
Ambient temperature	-25…+70 °C
Storage temperature	-40…80°C
Dimensions	104 x 27 x 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

Dimensions



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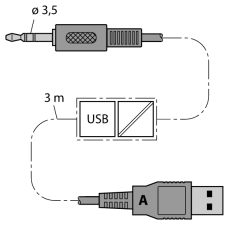
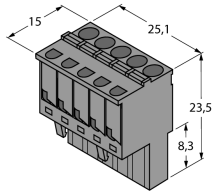
Accessories

Type code	Ident-No.	Short text	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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