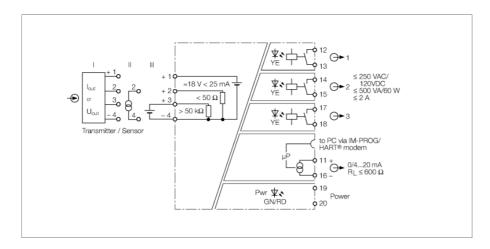
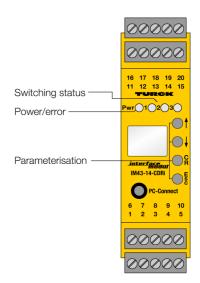


Isolating transducer 1-channel IM43-14-CDRI







The 1-channel IM43-14-CDRI isolating transducer is designed to operate 2-wire transducers (III) and to galvanically isolate and transmit 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 is equipped with an analog output of 0/4...20 mA; In addition, three relay outputs for limit values are available. The unit of the measured value is freely selectable and indicated on a 2-line display. A green LED indicates operational readiness, 3 yellow LEDs indicate the switching status of the individual channels.

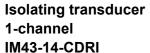
At each of the three outputs a predefined setpoint value can be monitored according to overshoot/undershoot. The switching hysteresis is defined by programming the switch-on and switch-off point. Furthermore, a switch-off delay can be set individually for each output.

The measured value is permanently written to a ring buffer 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 on 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 on the front as well as via the HART*capable power interface

- Input circuit: 0/4...20 mA; 0/2...10 V
- Output circuit: 0/4...20 mA, 3 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
- Parameterized via PC (FDT / DTM), front-panel switch and HART®
- Many diagnostic functions
- Ring buffer for up to 8000 measured values
- Display
- Complete galvanic isolation
- Input reverse-polarity protected







Type designation	IM43-14-CDRI
Ident no.	7540045

Nominal voltageUniversal voltage supply unitOperating voltage20...250 VACFrequency40...70 Hz

Operating voltage range 20...250 VDCPower consumption $\leq 3 \text{ W}$ Residual ripple $\leq 10 \text{ mV}_{ss}$

Transmitter connection

 $\begin{array}{lll} \mbox{Supply voltage} & \geq 17 \mbox{ V/ 20 mA} \\ \mbox{Current} & 25 \mbox{ mA} \\ \mbox{Voltage input} & 0/2...10 \mbox{ VDC} \\ \mbox{Input current} & 0/4...20 \mbox{ mA} \\ \end{array}$

Output circuits

Switching capacity per output $\leq 500 \text{ VA/60 W}$ Switching frequency $\leq 10 \text{ Hz}$ Contact quality AgNi, 3μ Au

Measuring accuracy (including linearity, hysteresis

and repeatability)

Reference temperature 23 $^{\circ}$ C Temperature drift analog output 0.0025 $^{\circ}$ K/K

Galvanic isolation

Test voltage 2.5 kV

Indication

Operational readiness green
Switching state Yellow
Error indication red

 Protection class
 IP20

 Flammability class acc. to UL 94
 V-0

 Ambient temperature (min.)
 -25 °C

 Ambient temperature (max.)
 70 °C

 Storage temperature
 -40...+80 °C

 Dimensions
 104 x 27 x 110 mm

Weight 245 g

Mounting instructions DIN rail (NS35) or panel Housing material Polycarbonate/ABS

Electrical connection 4 × 5-pin removable terminal blocks, reverse polarity

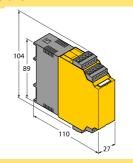
protected, screw terminal

≤ 0.05 % of full scale

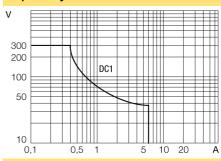
Terminal cross-section $1 \times 2.5 \text{ mm}^2 / 2 \times 1.5 \text{ mm}^2$

Tightening torque 0.5 Nm

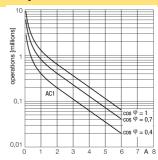
Dimensions



Output relay - Load curve



Output relay - Electrical lifetime







Isolating transducer 1-channel IM43-14-CDRI

Accessories

Type code	Ident no.	Description	Dimension drawing
IM-PROG III	7525111	USB-compatible programming adapter for the FDT/DTM-based parametrization of HART-capable Turck devices; galvanic separation between the device to be parametrized and the PC	0 3,5 3 m USB
IM-CC-5X2BK/2BK	7541219	Cage clamp terminals for IM modules (Ex-devices with 27 mm overall width); includes: 4 pcs. of 5-pin black terminals	25,1