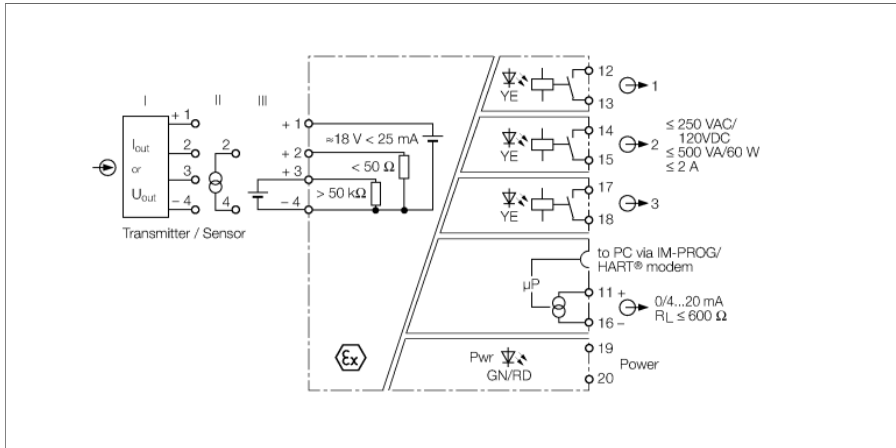


Isolating transducer 1-channel IM33-14EX-CDRI

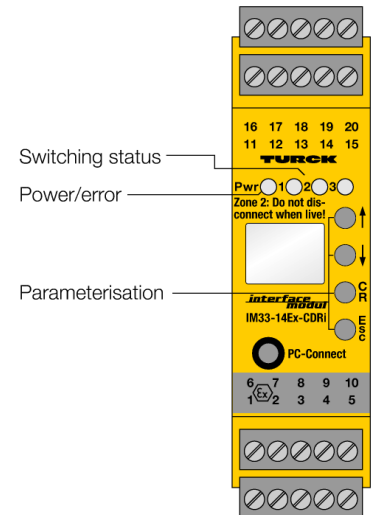


The 1-channel isolating transducer IM33-14EX-CDRI is designed to operate intrinsically safe transmitters in the Ex area and to transmit the measured signals to the non-Ex area.

The device is equipped with an analog output of 0/4...20 mA; In addition, three relay outputs for limit values are available. The measured value can be viewed on a 2-line display. A green LED indicates operational readiness, 3 yellow LEDs indicate the switching status of the individual channels.

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



- Monitoring of analog values and ranges according to over and underrange
- Line monitoring
- Parameterized via PC (FDT/DTM), front-panel switch or HART
- Ring buffer for up to 8000 measured values
- Display
- Power supply of 2 and 3-wire measuring transducers
- Suited for active and passive signals
- Output circuit: 0/4...20 mA, reversible
- 3 relay outputs
- Universal operating voltage
- Complete galvanic isolation
- Input reverse-polarity protected
- ATEX, IECEx, TR CU, KOSHA
- Installation in zone 2

Type	IM33-14EX-CDRI
ID	7560015
Nominal voltage	Universal voltage supply unit
Operating voltage	20...250 VAC
Frequency	40...70 Hz
Operating voltage U_s	20...125 VDC
Power consumption	≤ 3 W
Power dissipation, typical	≤ 1.7 W
Residual ripple	≤ 10 mV _{ss}

Transmitter connection	
Supply voltage	17 V/20 mA typ.
Current	25 mA
Voltage input	0/2...10 VDC
Input current	0/4...20 mA

Output circuits	
Output current	0/4...20 mA
Load resistance current output	≤ 0.6 k Ω
Fault current	0 / 22 mA adjustable
Output circuits (digital)	3 x relays (NO)
Output switching voltage relay	≤ 30 VDC / ≤ 250 VAC
Switching current per output	≤ 2 A
Switching capacity per output	≤ 500 VA/60 W
Switching frequency	≤ 10 Hz

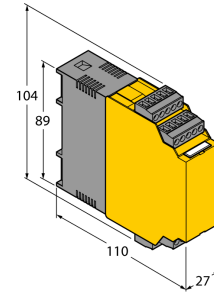
Response characteristic	
Measuring accuracy (including linearity, hysteresis and repeatability)	≤ 0.05 % of full scale
Reference temperature	23 °C
Temperature drift analog output	0.0025 %/K

Galvanic isolation	
Test voltage	2.5 kV RMS

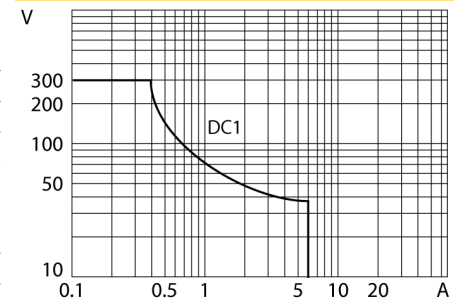
Important note	For Ex-applications the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.
Ex approval acc. to conformity certificate	IBExU 07 ATEX 1156
Application area	II (1) G, II (1) D
Ignition protection category	[Ex ia Ga] IIC; [Ex ia Da] IIIC
Ex approval acc. to conformity certificate	IBExU 07 ATEX B015 X
Application area	II 3 G
Ignition protection type	Ex nA nC [ic Gc] IIC T4 Gc
Characteristic	trapezoidal

Displays/Operating elements	
Operational readiness	Green
Switching state	Yellow
Error indication	red

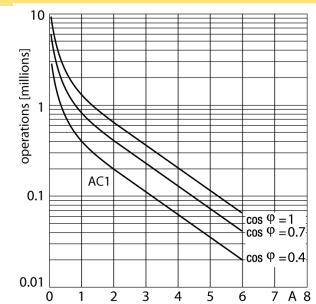
Dimensions



Output relay – Load curve



Output relay – Electrical lifetime



Mechanical data	
Protection class	IP20
Flammability class acc. to UL 94	V-0
Ambient temperature	-25...+70 °C
Storage temperature	-40...+80 °C
Dimensions	104 x 27 x 110 mm
Weight	253 g
Mounting instructions	DIN rail (NS35) or panel
Housing material	Plastic, Polycarbonate/ABS
Electrical connection	4 × 5-pin removable terminal blocks, reverse polarity protected, screw terminal
Terminal cross-section	1 × 2.5 mm ² /2 × 1.5 mm ²
Tightening torque	0.5 Nm

Accessories

Type code	Ident-No.		Dimension drawing
IM-CC-5X2BU/2BK	7504031	Cage clamp terminals for IM modules (Ex-devices with 27 mm overall width); includes: 2 pcs. 5-pin blue terminals and 2 pcs. 5-pin black terminals.	
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	