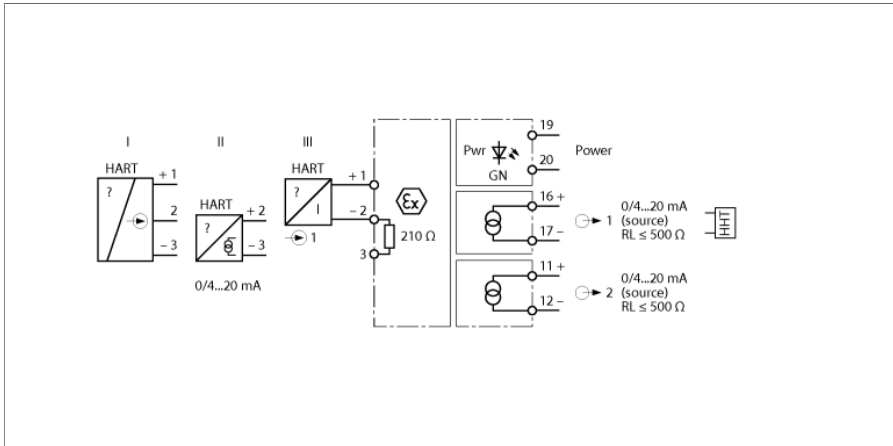


Isolating transducer 1-channel IM33-12EX-HI



The 1-channel HART®isolating transducer IM33-12EX-HI is designed to operate intrinsically safe HART®2-wire transducers (III) in the Ex area and to transmit the measured signal to the non-Ex area. In addition to the analog signals, also the digital HART®communication signals can be transmitted bidirectionally.

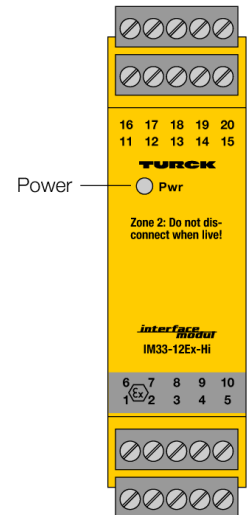
Alternatively, active 2-wire HART®transmitters (II) and passive 3-wire HART®transmitters (I) can be operated.

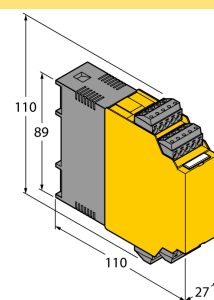
The device features 1 input and 2 output circuits laid out for 0/4...20 mA. A green LED indicates operational readiness.

The input signal is transmitted 1:1 without interference and made available at the output in the non-Ex area. The HART®signal is transmitted to output 1.

The removable terminal blocks feature test sockets (Ø 2 mm) for connection of a HART® handheld.

- Power supply of 2-wire measuring transducers with HART communication as well as connection to active 2-wire and passive 3-wire transmitters
- Input circuit: 0/4...20 mA
- Output circuit: 0/4...20 mA
- Removable terminal blocks, screwable, with 2 mm test socket
- Complete galvanic isolation
- Input reverse-polarity protected
- ATEX, IECEx, cFM_{us}, TR CU, INMETRO, NEPSI
- Installation in zone 2



Dimensions


Type	IM33-12EX-HI
ID	7506444
Nominal voltage	Universal voltage supply unit
Operating voltage	20...250 VAC
Frequency	40...70 Hz
Operating voltage U_s	20...125 VDC
Power consumption	$\leq 3 \text{ W}$
Residual ripple	$\leq 10 \text{ mV}_{\text{eff}}$
Transmitter connection	
Supply voltage	17 V/20 mA typ.
Current	25 mA
Input current	0/4...20 mA
Input resistance (current)	$\leq 250 \Omega$
Output circuits	
Output current	0/4...20 mA
Load resistance current output	$\leq 0.5 \text{ k}\Omega$
Response characteristic	
Rise time (10...90 %)	$\leq 50 \text{ ms}$
Fall time (90...10 %)	$\leq 50 \text{ ms}$
Measuring accuracy (including linearity, hysteresis and repeatability)	$\leq 0.1 \text{ % of full scale}$
Reference temperature	23 °C
Temperature drift	$\leq 0.005 \text{ % of full scale/K}$
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	TÜV 05 ATEX 2910
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	TÜV 06 ATEX 2967 X
Application area	II 3 G
Ignition protection type	Ex nA [ic Gc] IIC T4 Gc
Characteristic	trapezoidal
Displays/Operating elements	
Operational readiness	Green
Mechanical data	
Protection class	IP20
Flammability class acc. to UL 94	V-0
Ambient temperature	-25...+70 °C
	-25 ... +60 °C für FM
Storage temperature	-40...+80 °C
Dimensions	110 x 27 x 110 mm
Weight	210 g
Mounting instructions	DIN rail (NS35) or panel
Housing material	Plastic, Polycarbonate/ABS
Electrical connection	4 × 5-pin removable terminal blocks with test socket, 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.	