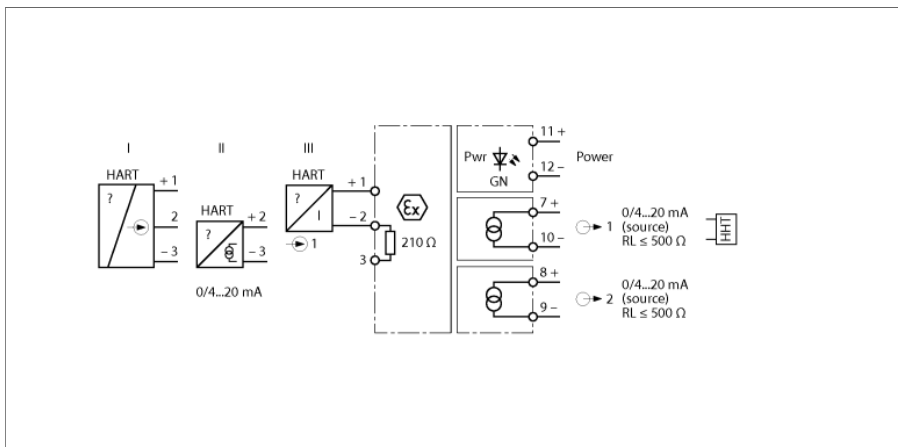


Isolating transducer 1-channel IM33-12EX-HI/24VDC



The 1-channel HART® isolating transducer IM33-12Ex-HI/24VDC 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.

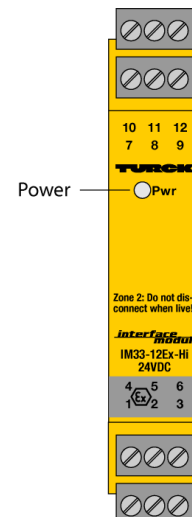
Alternatively, active 2-wire HART® transmitters (II) and passive 3-wire HART® transmitters (I) can be operated.

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 circuits: 0/4...20 mA
- SIL2
- Removable terminal blocks, screwable, with 2 mm test box
- Complete galvanic isolation
- Input reverse-polarity protected
- ATEX, IECEx, UL, cFM_{US}, TR CU, CCEO, Kosha
- Installation in zone 2



Dimensions

Type	IM33-12EX-HI/24VDC
ID	7506446
Nominal voltage	24 VDC
Operating voltage U_s	19...29 VDC
Power consumption	$\leq 3.2 \text{ W}$
Transmitter connection	
Supply voltage	17 V/20 mA typ.
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 18 ATEX 230812 X
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 552977 X
Application area	II 3 G
Ignition protection type	Ex nA [ic Gc] IIC T4 Gc
Characteristic	trapezoidal
Important note	If the device is used in applications to achieve functional safety according to IEC 61508, the safety manual must be used. Information in the data sheet are not valid for functional safety.
Approval	SIL 2 acc. to EXIDA FMEDA
Use in SIL safety circuits	SIL 2 acc. to IEC 61508
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 UL, FM, TIIS
Storage temperature	-40...+80 °C
Dimensions	110 x 18 x 110 mm
Weight	191 g
Mounting instructions	DIN rail (NS35) or panel
Housing material	Plastic, Polycarbonate/ABS
Electrical connection	4 × 3-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-3X2BU/2BK	6900475	Cage clamp terminals for IM modules (Ex-devices with 18 mm overall width); includes: 2 pcs. 3-pin blue terminals and 2 pcs. 3-pin black terminals.	