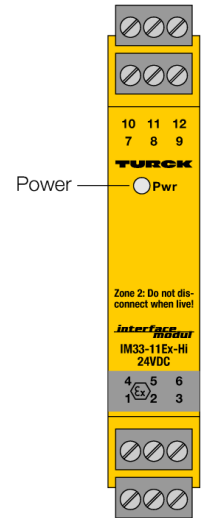
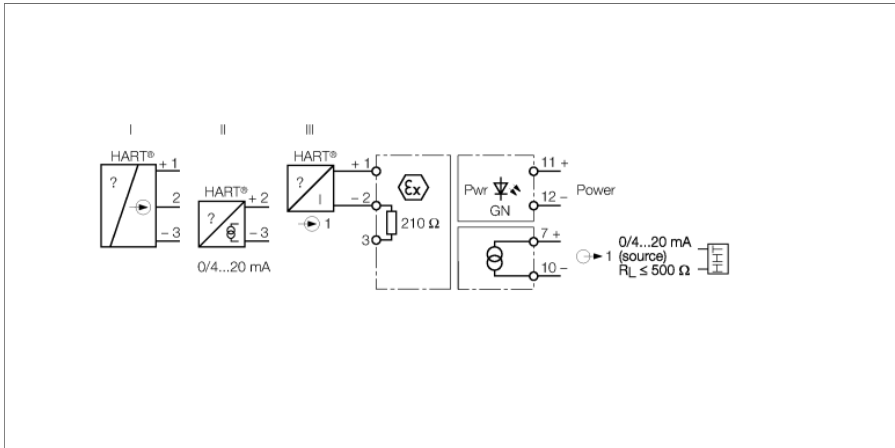


**Ex-HART® Isolating transducer
1-channel
IM33-11EX-HI/24VDC**



The 1-channel HART® isolating transducer IM33-11EX-HI/24VDC is designed to operate intrinsically safe HART® 2-wire transducers (III) in the Ex area and to transfer the measured signal to the non-Ex area. In addition to analog signals, the isolating transducer also transfers digital HART® communication signals bidirectionally.

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

The device features one input and one output circuit, for 0/4...20 mA. The green LED indicates operational readiness.

The input signal is transferred 1:1 without attenuation to the output in the non-Ex area.

Due to the 1:1 transmission characteristic, wire-break or short-circuit of the measuring transducer circuit are indicated as currents of 0 mA resp. > 22.5 mA.

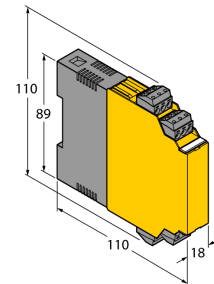
The removable terminal blocks feature test sockets (Ø 2 mm) for connection of a HART® handheld. Further devices with different Ex-criteria are available on request.

- Intrinsically safe input circuit EEx ia
- Application area acc. to ATEX: II (1) GD; II 3 G
- Installation in zone 2
- Power supply of 2-wire measuring transducers via 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
- SIL2
- Removable terminal blocks, screwable, 2 mm test socket
- Galvanic separation of input circuits, output circuits and power supply

Ex-HART® Isolating transducer
1-channel
IM33-11EX-HI/24VDC

Type	IM33-11EX-HI/24VDC									
Ident-No.	7506440									
Ident-No (TUSA)	M7506440									
Nominal voltage	24 VDC									
Operating voltage range	19...29 VDC									
Power consumption	≤ 2.2 W									
Transmitter connection										
Supply voltage	≤ 17 V									
Current input	0/4...20 mA									
Input resistance (current)	250 Ω									
Output circuits										
Output current	0/4...20 mA									
Load resistance current output	≤ 0.5 kΩ									
Limit frequency	≤ 30 Hz									
Rise time (10-90%)	≤ 50 ms									
Dropout time (90...10%)	≤ 50 ms									
Measuring accuracy	≤ 0.1 % of full scale									
Reference temperature	23 °C									
Temperature drift	≤ 0.01 % / K									
Galvanic separation										
Test voltage	2.5 kV									
Ex approval acc. to conformity certificate	TÜV 00 ATEX 1595									
Application area	II (1) GD									
Protection type	[EEx ia] IIC									
Max. output voltage U _o	≤ 21.9 V									
Max. output current I _o	≤ 95 mA									
Max. output power P _o	≤ 747 mW									
Rated voltage	250 V									
Characteristic	Trapezoidal									
Max. input voltage U _i	≤ 40 V									
Max. input power P _i	≤ 650 mW									
External inductance/capacitance L _i /C _i										
	<table border="1"> <thead> <tr> <th></th> <th>EEx ia IIC</th> <th>EEx ia IIB</th> </tr> </thead> <tbody> <tr> <td>Lo [mH]</td> <td>2.8</td> <td>14</td> </tr> <tr> <td>Co [µF]</td> <td>0,057</td> <td>0.295</td> </tr> </tbody> </table>		EEx ia IIC	EEx ia IIB	Lo [mH]	2.8	14	Co [µF]	0,057	0.295
	EEx ia IIC	EEx ia IIB								
Lo [mH]	2.8	14								
Co [µF]	0,057	0.295								
Ex approval acc. to conformity certificate	TÜV 06 ATEX 552977 X									
Application area	II 3 G									
Protection class for belonging equipment	EEx nA nC [nL] IIC/IIB T4									
Max. output voltage U _o	≤ 21.9 V									
Max. output current I _o	≤ 95 mA									
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Ex nL	IIC	IIB								
Lo [mH]	3	10,0								
Co [µF]	0.12	0.81								
Ex approval acc. to conformity certificate	IS-1.102									
Approval	SIL 2									
Indication										
Operational readiness	green									

Dimensions



Ex-HART® Isolating transducer
1-channel
IM33-11EX-HI/24VDC

Protection class	IP20
Ambient temperature	-25...+70 °C
Storage temperature	-40...80°C
Dimensions	110 x 18 x 110 mm
Weight	139 g
Mounting instruction	For mounting on DIN rail or mounting panel
Housing material	Polycarbonate/ABS
Electrical connection	4 x 3-pole removable terminal blocks with test socket, reverse polarity protected, screw connection
Terminal cross-section	1 x 2.5 mm ² / 2 x 1.5 mm ²

**Ex-HART® Isolating transducer
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Accessories

Type code	Ident-No.	Short text	Dimension drawing
IM-CC-3X2BU/2BK	6900475	Cage clamp terminals for IM modules (Ex devices; width 18 mm); 2 blue/2 black, 3-pin, included in delivery.	