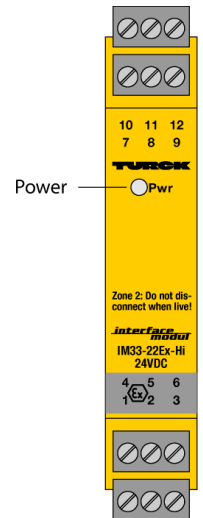
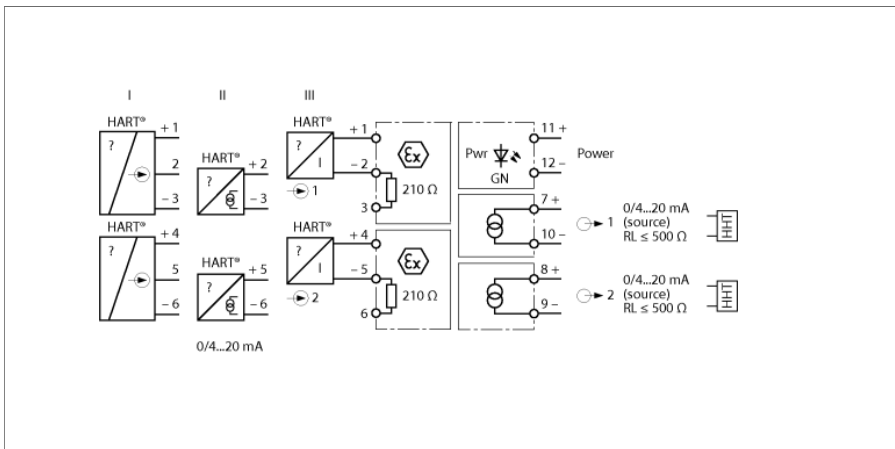


**Isolating transducer
2-channel
IM33-22EX-HI/24VDC**



The 2-channel HART® isolating transducer IM33-22EX-HI/24VDC is designed to operate intrinsically safe HART® 2-wire transducers (III) in the Ex area and to transmit the measured signals to the non-Ex area. Besides the analog signals, digital HART® communication signals can also be transmitted bidirectionally.

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

The device features 0/4...20 mA input and output circuits. A green LED indicates operational readiness.

The input signals are transmitted 1:1 and are presented to the relevant outputs in the non-Ex area.

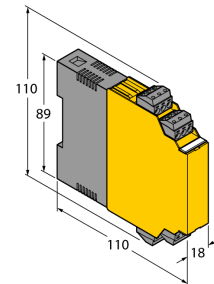
The removable terminal blocks feature test sockets (Ø 2 mm) for connection of a HART® handheld.

- ATEX, IECEx, UL, cFM_{us}, TR CU, TIIS, CCEO
- Installation in zone 2
- Supply of 2-wire measuring transducers with HART® communication as well as connection to active 2-wire and passive 3-wire transmitters
- Input circuits: 0/4...20 mA
- Output circuits: 0/4...20 mA
- SIL2
- Removable terminal blocks, screwable, with 2 mm test socket
- Complete galvanic isolation

**Isolating transducer
2-channel
IM33-22EX-HI/24VDC**

Type code	IM33-22EX-HI/24VDC									
Ident no.	7506441									
Nominal voltage	24 VDC									
Operating voltage range	19...29 VDC									
Power consumption	≤ 3.2 W									
Transmitter connection										
Supply voltage	≥ 17 V / 20 mA									
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									
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	≤ 0.005 % / K									
Galvanic isolation										
Test voltage	2.5 kV									
Important note	For safety applications the values specified in the safety manual or the relevant Ex certificates (ATEX, IECEx, UL, etc.) apply.									
Ex approval acc. to conformity certificate	TÜV 00 ATEX 1595									
Application area	II (1) G, II (1) D									
ignition protection category	[Ex ia Ga] IIC; [Ex ia Da] IIIC									
Max. values:	Terminal connection: 1...3 / 4...6									
Max. output voltage U_o	≤ 21.9 V									
Max. output current I_o	≤ 95 mA									
Max. output power P_o	≤ 747 mW									
Characteristic	Trapezoidal									
Max. input voltage U_i	≤ 30 V									
Max. input power P_i	≤ 650 mW									
External inductance/capacitance L_i/C_o	<table border="1"> <thead> <tr> <th>Ex ia</th> <th>IIC</th> <th>IIB</th> </tr> </thead> <tbody> <tr> <td>Lo [mH]</td> <td>2.8</td> <td>11</td> </tr> <tr> <td>Co [μF]</td> <td>0.057</td> <td>0,370</td> </tr> </tbody> </table>	Ex ia	IIC	IIB	Lo [mH]	2.8	11	Co [μF]	0.057	0,370
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Lo [mH]	2.8	11								
Co [μF]	0.057	0,370								
Ex approval acc. to conformity certificate	TÜV 06 ATEX 552977 X									
Application area	II 3 G									
Protection type	Ex nA [ic Gc] IIC T4 Gc									
Max. values:	Terminal connection: 1...3 / 4...6									
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Ex ic	IIC	IIB								
Lo [mH]	3	10.0								
Co [μF]	0.12	0.81								
Internal resistance R_i	331 Ω									
Approval	SIL 2 acc. to EXIDA FMEDA									
MTTF	159 years acc. to SN 29500 (Ed. 99) 40 °C									
Indication										
Operational readiness	green									

Dimensions



**Isolating transducer
2-channel
IM33-22EX-HI/24VDC**

IP Rating	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
Relative humidity	≤ 95 %
Dimensions	110 x 18 x 110 mm
Weight	183 g
Mounting instruction	for DIN rail / panel
Housing material	polycarbonate/ABS
Electrical connection	4 x 3-pin 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
Tightening torque	0.5 Nm

Accessories

Type code	Ident no.	Description	Design
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.	