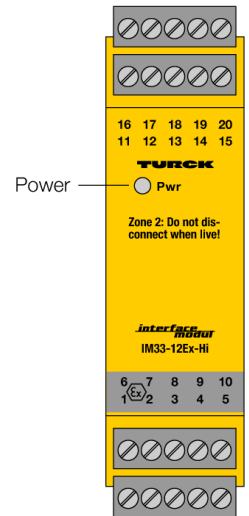
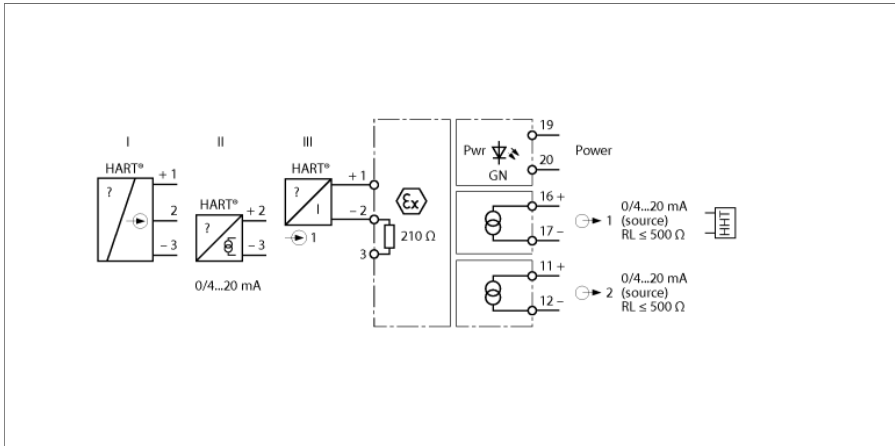


**Isolating transducer
1-channel
IM33-12EX-HI**



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.

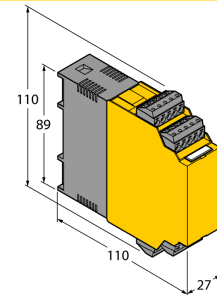
The removable terminal blocks feature test sockets (Ø 2 mm) for connection of a HART® handheld.

- ATEX, IECEx, cFM_{us}, TR CU, INMETRO, NEPSI
- 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 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

Isolating transducer
1-channel
IM33-12EX-HI

| | |
|--|--|
| Type designation | IM33-12EX-HI |
| Ident-No. | 7506444 |
| Nominal voltage | Universal voltage supply unit |
| Operating voltage | 20...250 VAC |
| Frequency | 40...70 Hz |
| Operating voltage range | 20...125 VDC |
| Power consumption | ≤ 3 W |
| Residual ripple | ≤ 10 mV _{eff} |
| Transmitter connection | |
| Supply voltage | ≥ 17 V / 20 mA |
| Current | 25 mA |
| Input current | 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 |
| Fall time (90...10 %) | ≤ 50 ms |
| Measuring accuracy (including linearity, hysteresis and repeatability) | ≤ 0.1 % of full scale |
| Reference temperature | 23 °C |
| Temperature drift | ≤ 0.005 % of full scale/K |
| Galvanic isolation | |
| Test voltage | 2.5 kV |
| 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 |
| Indication | |
| Operational readiness | green |
| 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 | Polycarbonate/ABS |
| Electrical connection | 4 × 5-pin removable terminal blocks with test socket, reverse polarity protected, screw terminal |
| Terminal cross-section | 1 x 2.5 mm ² / 2 x 1.5 mm ² |
| Tightening torque | 0.5 Nm |

Dimensions



**Isolating transducer
1-channel
IM33-12EX-HI**

Accessories

| Type code | Ident-No. | Description | 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. | |