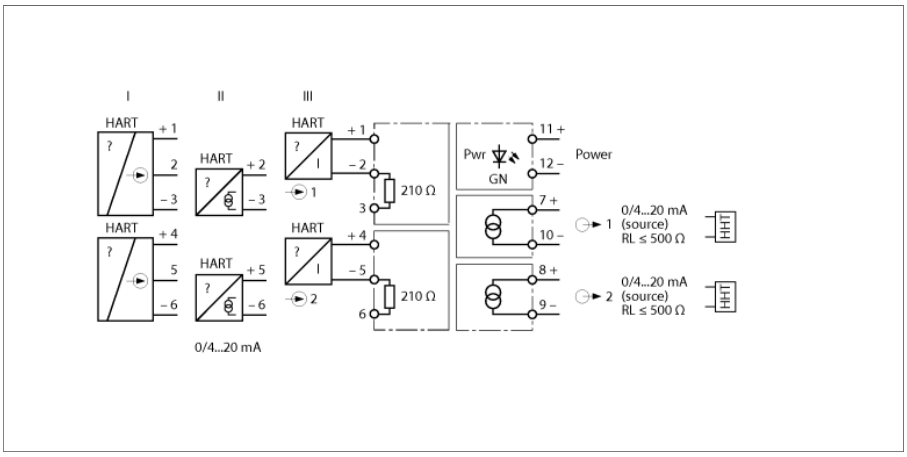
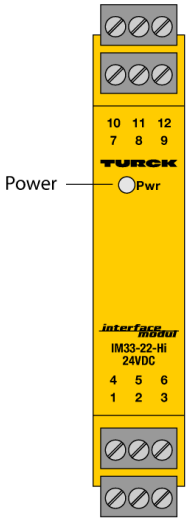
Isolating transducer
2-channel
IM33-22-HI/24VDC





The 2-channel HART® isolating transducer IM33-22-HI/24VDC is designed to operate HART® transducers 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 0/4…20 mA input and output circuits. A green LED indicates operational readiness.

The input signals are transmitted 1:1 without interference and made available at the outputs in the non-Ex area.

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
- SIL 2
- Removable terminal blocks, screwable, with 2 mm test box
- Complete galvanic isolation
- Input reverse-polarity protected
- TR CU

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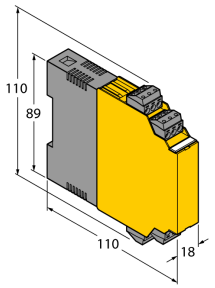
Type	IM33-22-HI/24VDC
ID	7506564
Nominal voltage	24 VDC
Operating voltage U_B	19…29 VDC
Power consumption	≤ 3.2 W
Transmitter connection	
Supply voltage	17 V/20 mA typ.
Input current	0/4…20 mA
Input resistance (current)	≤ 250 Ω
Output circuits	
Output current	0/4…20 mA
Load resistance current output	≤ 0.5 kΩ
Response characteristic	
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 RMS
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
Storage temperature	-40…+80 °C
Dimensions	110 x 18 x 110 mm
Weight	182 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 mm²/2 × 1.5 mm²
Tightening torque	0.5 Nm

Dimensions



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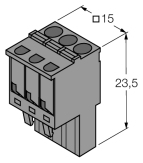
Accessories

Type code	Ident no.		Dimension drawing
IM-CC-3X2BK/2BK	7541218	Cage clamp terminals for IM modules (Ex-devices with 18 mm overall width); includes: 4 pcs. of 3-pin black terminals	

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