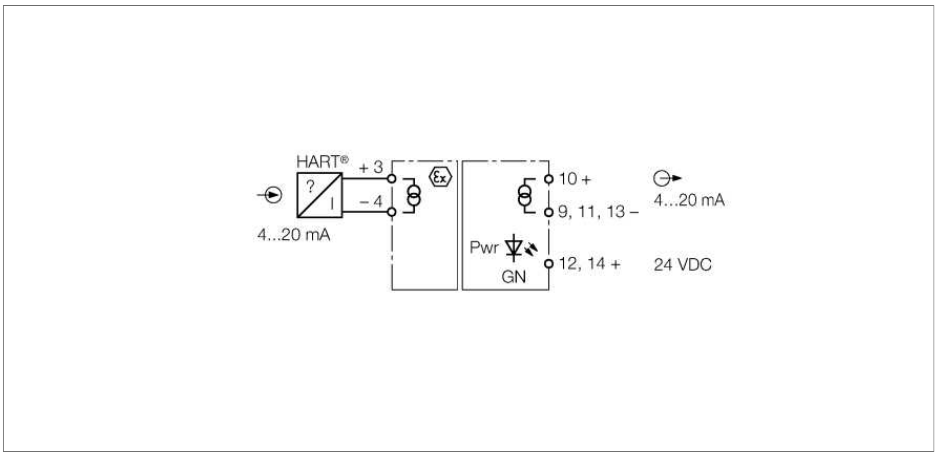
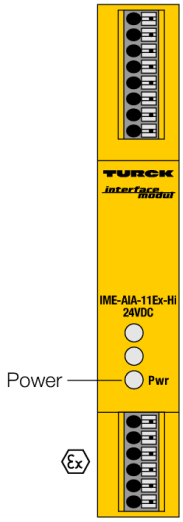
Isolating transducer
1-channel
IME-AiA-11Ex-Hi/24VDC





The single-channel HART® isolating transducer IME-AIA-11EX-Hi/24VDC is used to energize intrinsically safe 2-wire HART® transducers (III) in the Ex area and to transmit the measuring signal to the safe area.

In addition to the analog signals, digital HART® communication signals can be transferred bidirectionally.

The device features one input and one output circuit, with 0/4…20 mA each.

The green LED indicates operational readiness.

Safe galvanic isolation of input and output circuit. The input signal is transmitted 1:1 without attenuation to the output in the safe 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 or > 22.5 mA.

- **Intrinsically safe input circuit Ex ia**
- **Application area acc. to ATEX: II (1) G, II (1) D, II 3G**
- **SIL 2**
- **Isolating transducer, 1-channel**
- **Power supply of transmitters in the Ex area**
- **HART® transmissible**
- **Galvanic separation of input circuits, output circuits and power supply**

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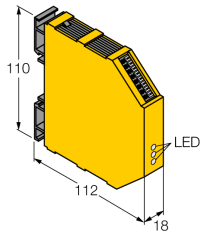
Hans Turck GmbH & Co.KG ● D-45472 Mülheim an der Ruhr ● Witzlebenstraße 7 ● Tel. 0208 4952-0 ● Fax 0208 4952-264 ● more@turck.com ● www.turck.com

Isolating transducer
1-channel
IME-AiA-11Ex-Hi/24VDC

Dimensions



Type code	IME-AiA-11Ex-Hi/24VDC
Ident no.	7541193
Nominal voltage	24 VDC
Operating voltage range	20…30 VDC
Power consumption	≤ 1 W
Power loss, typical	≤ 0.54 W
Input circuits	isolating transducer
Transmitter connection	
Supply voltage	≥13 V
Current	35 mA
Current input	4…20 mA
Output circuits	
Output current	4...20 mA
Load resistance current output	≤ 0.5 kΩ
Limit frequency	≤ 30 Hz
Rise time (10-90%)	≤ 10 ms
Dropout time (90…10%)	≤ 10 ms
Linearity deviation	≤ 0.1 % of full scale
Reference temperature	23 °C
Galvanic separation	
Test voltage	2.5 kV
Ex approval acc. to conformity certificate	TÜV 08 ATEX 554801
Application area	II (1) G, II (1) D
Protection type	[Ex ia] IIB ; [Ex iaD]
Max.output voltage U_o	≤ 23 V
Max. output current I_o	≤ 64.5 mA
Max. output power P_o	≤ 799 mW
Rated voltage	250 V
Characteristic	Trapezoidal
Internal inductance/capacitance L_i/C_i	Li = 76.5 µH, Ci = 22 nF
External inductance/capacitance L_o/C_o	

Ex ia	IIB		
Lo[mH]	4.8	0.9	0.12
Co[nF]	358	418	718

Ex approval acc. to conformity certificate	TÜV 08 ATEX 554909 X
Application area	II 3 G
Protection class for belonging equipment	Ex nA [nL] IIB/IIC T4
Max.output voltage U_o	≤ 23 V
Max. output current I_o	≤ 64.5 mA
Max. output power P_o	≤ 799 mW
Rated voltage	250 V
Characteristic	Trapezoidal
Internal inductance/capacitance L_i/C_i	Ci= 22 nF, Li= 76.5 µH
External inductance/capacitance L_o/C_o	

Ex nL	IIC	IIB	
Lo [mH]	0.12	19.9	9.9
Co [nF]	188	786	958

Approval	SIL 2
MTTF	250 years acc. to SN 29500 (Ed. 99) 40 °C
Indication	
Operational readiness	green

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Isolating transducer
1-channel
IME-AiA-11Ex-Hi/24VDC

Protection class	IP20
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80°C
Dimensions	112x 18x 110 mm
Weight	123 g
Mounting instruction	For mounting on DIN rail
Housing material	Polycarbonate/ABS
Electrical connection	cage clamp terminals made of Beryllium-Bronze
Terminal cross-section	1.5 mm^2

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