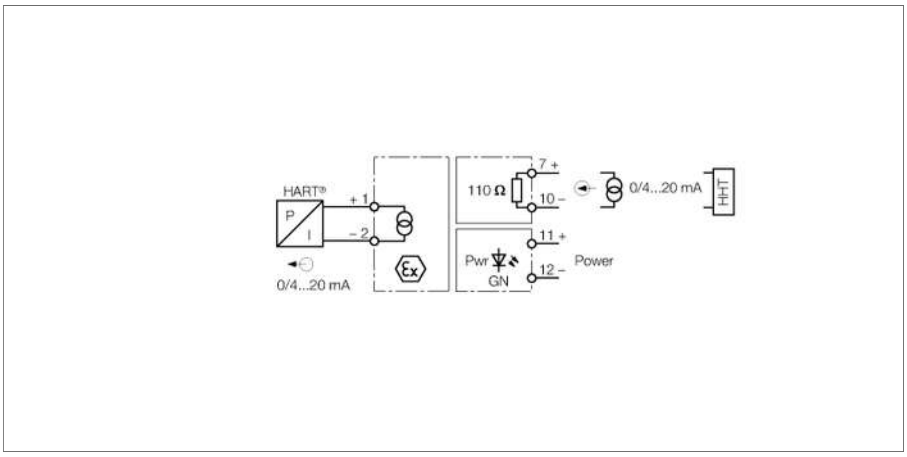
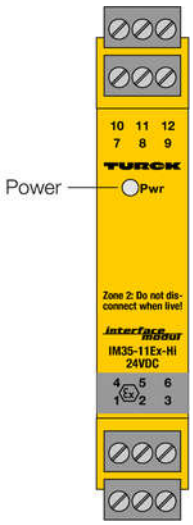
Analog signal isolator
1-channel
IM35-11EX-HI/24VDC





The standard current signal is galvanically isolated and transferred unattenuated 1:1 via the 1-channel signal isolator IM35-11EX-HI/24VDC from the non-Ex area to the Ex-area. In addition to the analog signals, also digital HART®communication signals bidirectionally.

Typical applications are for example, the control of I/P converters (at control valves for example) or indicators in the Ex-area.

The actuators are connected to the output terminals 1/2. Handheld terminals [HHT] can be connected to the output and input terminals 7/10.

In addition, the removable terminal blocks are equipped with 2 mm test sockets for signal control.

- **ATEX, IECEx, FM, UL, GOST**
- **Installation in zone 2**
- **Power supply of intelligent actuators via HART®communication**
- **Input circuit: 0/4…20 mA**
- **Output circuit: 0/4…20 mA, intrinsically-safe**
- **SIL2**
- **Removable terminal blocks, screwable, with 2 mm test box**
- **Galvanic isolation of input circuits, output circuits and power supply**

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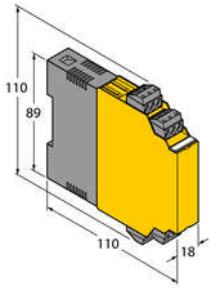
Analog signal isolator
1-channel
IM35-11EX-HI/24VDC

Dimensions



Type code	IM35-11EX-HI/24VDC
Ident no.	7506516
Flammability class acc. to UL 94	V-0
Nominal voltage	24 VDC
Operating voltage range	19…29 VDC
Power consumption	≤ 2.2 W
Current input	0/4...20 mA
Input resistance (current)	≤ 110 Ω
Output circuits	
Output current	0/4...20 mA
Load resistance current output	≤ 0.6 kΩ
Rise time (10-90%)	≤ 90 ms
Dropout time (90…10%)	≤ 90 ms
Measuring accuracy	≤ 0.1 % of full scale
Reference temperature	23 °C
Temperature drift	≤ 0.005 % / K
Galvanic isolation	
Test voltage	4.0 kV
Ex approval acc. to conformity certificate	TÜV 03 ATEX 2311
Application area	II (1) G, II (1) D
Protection type	[Ex ia Ga] IIC; [Ex ia Da] IIIC
Max. values:	terminal connection: 1+2
Max.output voltage U_o	≤ 15.9 V
Max. output current I_o	≤ 60 mA
Max. output power P_o	≤ 470 mW
Internal resistance R_i	528 Ω
Characteristic	Trapezoidal
Rated voltage	250 V
Internal inductance/capacitance L_i/C_i	Li=negligibly small; Ci=5nF

External inductance/capacitance L_o/C_o

Ex ic	IIC		IIB	
Lo [mH]	5	0,5	10	0,5
Co [nF]	135	330	860	2200

Ex approval acc. to conformity certificate	TÜV 06 ATEX 553057 X
Application area	II 3 G
Protection type	Ex nA [ic Gc] IIC T4 Gc
Max. values:	terminal connection: 1+2
Max.output voltage U_o	≤ 15.9 V
Max. output current I_o	≤ 60 mA
Max. output power P_o	≤ 470 mW
Internal resistance R_i	528 Ω
Characteristic	trapezoidal
Internal inductance/capacitance L_i/C_i	Li=negligibly small; Ci=5nF

External inductance/capacitance L_o/C_o

Ex ic	IIC		IIB	
Lo [mH]	5	0.5	10	0.5
Co [nF]	290	640	1700	3900

Approval	SIL 2 acc. to EXIDA FMEDA
MTTF	150 years acc. to SN 29500 (Ed. 99) 40 °C
Indication	
Operational readiness	green

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Analog signal isolator
1-channel
IM35-11EX-HI/24VDC

Protection class	IP20
Ambient temperature	-25…+70 °C
Storage temperature	-40…+80°C
Dimensions	110 x 18 x 110 mm
Weight	140 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
Tightening torque	0.5 Nm

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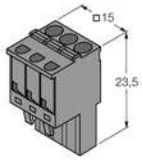
Accessories

Type code	Ident no.	Description	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.	

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