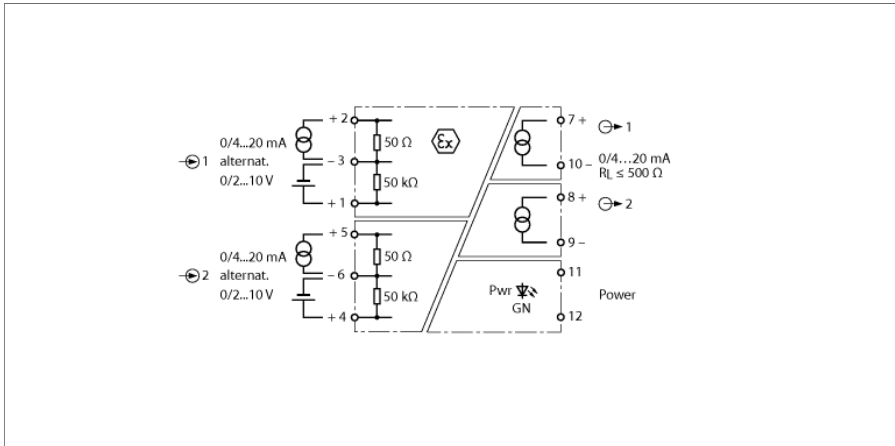


**Analog signal isolator  
2-channel  
IM31-22EX-I**



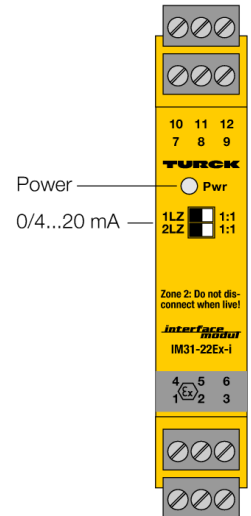
Normalized active voltage or current signals are transmitted galvanically isolated from the Ex area to the non-Ex area via the 2-channel analog signal isolator IM31-22EX-I.

The device features two input circuits of 0/2...10 V or 0/4...20 mA as well as two short-circuit proof output circuits of 0/4...20 mA.

The transmission characteristic is adjusted via a DIP switch on the front. In switch position 1:1 the input signals are transmitted without interference and made available at the outputs in the non-Ex area. In "LZ" switch position, a dead-zero signal at the input (0...10 V or 0...20 mA) is converted and provided as a live-zero signal at the output (4...20 mA).

A green LED indicates operational readiness.

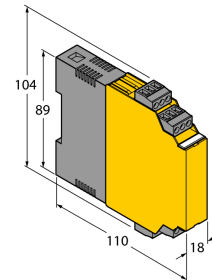
- ATEX, IECEx, UL,  $\text{FM}_{us}$ , TR CU, NEPSI, KOSHA
- Installation in zone 2
- Transmission of normalized analog signals from the Ex area to the non-Ex area
- Input circuits: 0/2...10 V or 0/4...20 mA
- Output circuits: 0/4...20 mA
- Complete galvanic isolation
- Input reverse-polarity protected



**Analog signal isolator**  
**2-channel**  
**IM31-22EX-I**

<b>Type designation</b>	IM31-22EX-I
Ident-No.	7506322
<b>Nominal voltage</b>	Universal voltage supply unit
Operating voltage	20...250 VAC
Frequency	40...70 Hz
Operating voltage range	20...125 VDC
Power consumption	≤ 2.2 W
<b>Voltage input</b>	0/2...10 VDC
Input resistance (voltage)	≥ 50 kΩ
Input current	0/4...20 mA
Input resistance (current)	≤ 50 Ω
<b>Output circuits</b>	
Output current	0/4...20 mA
Load resistance, current output	≤ 0.5 kΩ
<b>Rise time (10...90 %)</b>	≤ 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
<b>Galvanic isolation</b>	
Test voltage	2.5 kV
<b>Important note</b>	For Ex-applications the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.
Ex approval acc. to conformity certificate	TÜV 04 ATEX 2679
Application area	II (1) G; II (1) D
Ignition protection category	[Ex ia Ga] IIC/IIB; [Ex ia Da] IIIC
Ex approval acc. to conformity certificate	TÜV 06 ATEX 553387 X
Application area	II 3 G
Ignition protection type	Ex nA [ic Gc] IIC/IIB T4 Gc
Characteristic	linear
<b>Indication</b>	
Operational readiness	green
<b>Protection class</b>	IP20
Flammability class acc. to UL 94	V-0
Ambient temperature	-25...+70 °C
	-25 ... +60 °C für UL, FM
Storage temperature	-40...+80 °C
Relative humidity	≤ 95 %
Dimensions	104 x 18 x 110 mm
Weight	145 g
Mounting instructions	DIN rail (NS35) or panel
Housing material	Polycarbonate/ABS
Electrical connection	4 × 3-pin removable terminal blocks, reverse polarity protected, screw terminal
Terminal cross-section	1 x 2.5 mm <sup>2</sup> / 2 x 1.5 mm <sup>2</sup>
Tightening torque	0.5 Nm

**Dimensions**



**Analog signal isolator  
2-channel  
IM31-22EX-I**

**Accessories**

Type code	Ident-No.	Description	Dimension drawing
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.	