



## Isolating Transducer for Fire and Smoke Detectors IM33-FSD-Ex/L 2-channel



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- **2-channel isolating transducer with removable terminal blocks**
- **Intrinsically safe input circuits EEx ia**
- **Area of application according to ATEX: II (1) GD**
- **Isolating transducer without auxiliary power**
- **For supply of fire and smoke alarm detectors**
- **Complete galvanic isolation**
- **Signal transfer 0...40 mA**

The 2-channel isolating transducer IM33-FSD-Ex/L is designed for connection of conventional fire and smoke alarm detectors.

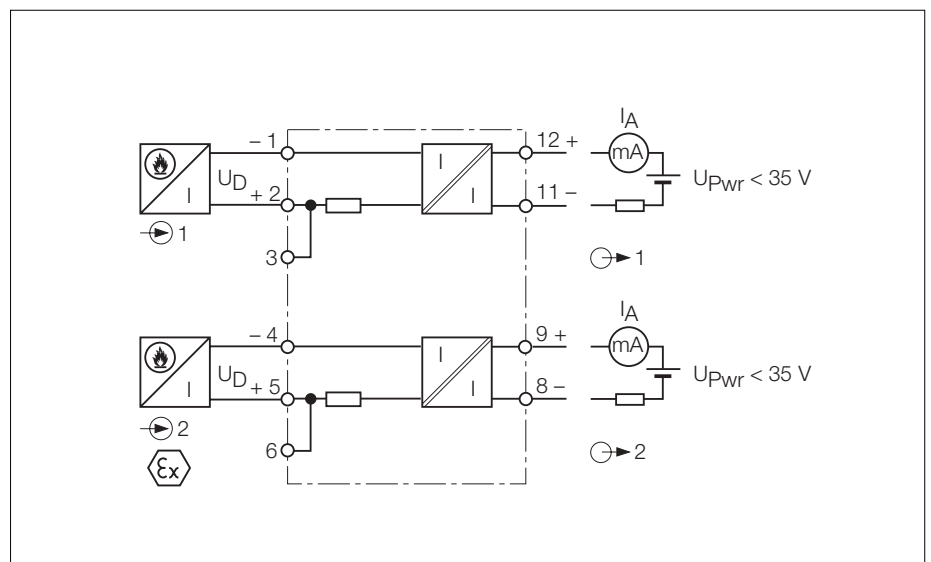
The detectors are supplied with energy; actuation of the detector results in an according current signal which is transferred to the safe area. It is possible to connect several detectors to each circuit.

The isolating transducer operates without auxiliary power (loop-powered) and must

be connected directly to the power-feeding inputs of processor devices. Unconditioned standard current signals of 0...40 mA are transferred. Please observe the voltage drop of the device.

The device features galvanic isolation between the input and output circuits. The inputs of the isolating transducer are reverse polarity protected.

An external earth-fault indicator can be used to indicate an earthing error securely.



## Isolating Transducer IM33-FSD-Ex/L

<b>Type</b>	IM33-FSD-Ex/L
Ident-no.	7506433
<b>Galvanic isolation</b>	between input circuit, output circuit and supply voltage for 250 V <sub>rms</sub> , test voltage 2,5 kV <sub>rms</sub>
<b>Transducer circuit</b>	
- Supply voltage	U <sub>B</sub> – 1 V – 300 Ω * I <sub>A</sub>
- Current	0...40 mA
- Short-circuit current	100 mA
- Input resistance	300 Ω
<b>Output circuit</b>	
- Voltage U <sub>B</sub>	6...35 VDC
- Current I <sub>A</sub>	0...40 mA
- Short-circuit current	100 mA
<b>Ex-approvals acc. to certificate of conformity</b>	TÜV 02 ATEX 1862
Maximum values	
- No load voltage U <sub>0</sub>	27,3 V
- Short-circuit current I <sub>0</sub>	90 mA
- Power P <sub>0</sub>	615 mW
Max. external inductances/capacitances L <sub>0</sub> /C <sub>0</sub>	
- [EEx ia] IIB	5 mH/300 nF
- [EEx ia] IIC	1 mH/70 nF
Marking of devices	II (1) GD [EEx ia] IIC
<b>Transfer characteristics</b>	
Linearity tolerance (o. f. v. = of final value)	≤ 1 % o. f. v.
Measuring tolerance	≤ 2 %
Long term error	≤ 0,5 %/year
Temperature effect	≤ 0,1 %/K o. f. v.
Pulse rise time (10 %...90 %)	≤ 10 ms
Release time (90 %...10 %)	≤ 10 ms
<b>Housing</b>	12-pole, 18 mm wide, Polycarbonate/ABS flammability class V-0 per UL 94
Mounting	snap-on clamps for top-hat rail (DIN 50022) or screw terminals for panel mounting
Connection	removable terminal blocks, reverse-polarity protected, screw connection
Connection profile	≤ 1 x 2,5 mm <sup>2</sup> or 2 x 1,5 mm <sup>2</sup> or 2 x 1,0 mm <sup>2</sup> with wire sleeves
Degree of protection (IEC 60529/EN 60529)	IP20
Operating temperature	-25...+60 °C

