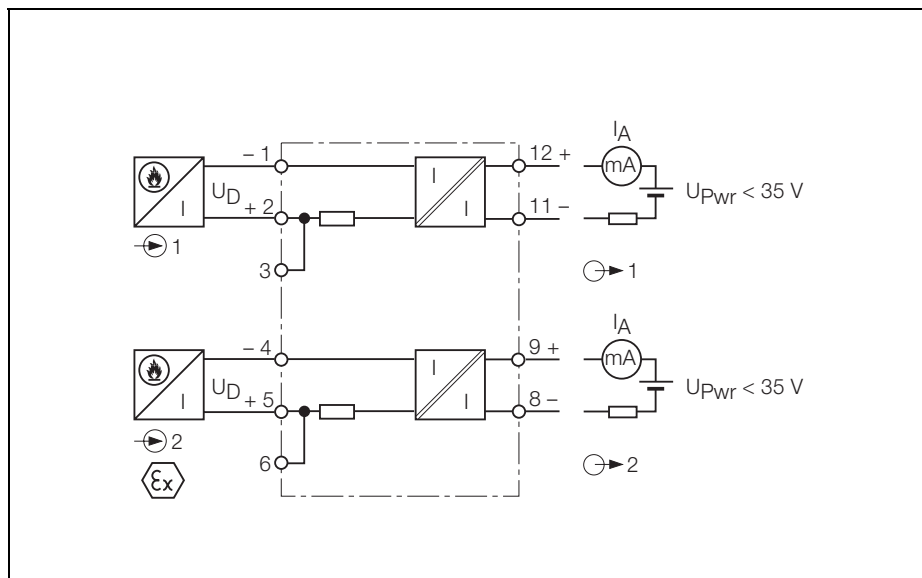


**isolating measuring transducer for fire and smoke detectors**

**1-channel**

**IM33-FSD-EX/L**



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

The indicators are supplied with energy and actuation of the indicator results in an according current signal which is transferred to the safe area. Several indicators can be connected to each circuit.

The isolating transducer is loop-powered and has to be connected directly to power-supplying input circuits of processor units.

Thereby unconditioned standard current signals of 0/4...20 mA are transferred. Please observe the voltage drop over the device.

Each input and output circuit is galvanically isolated. The inputs of the isolating transducer are reverse polarity protected.

A current-to-ground error can be detected safely via an external current-to-ground detector.

- **Intrinsically safe input circuits EEx ia**
- **Application area according to ATEX : II (1) GD**
- **isolating transducers without auxiliary power**
- **power supply for fire and smoke detectors**
- **signal transmission: 0...40 mA**
- **galvanic isolation between input circuits and output circuits**
- **removable terminal blocks, with screwable 2mm test socket**
- **Galvanic isolation of input circuits, output circuits and supply voltage**

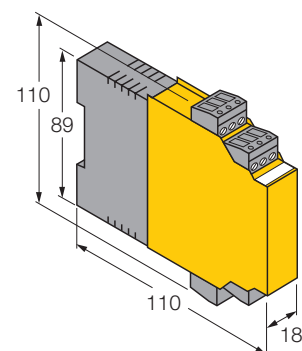


# isolating measuring transducer for fire and smoke detectors

## 1-channel

### IM33-FSD-EX/L

#### Dimensions



<b>Type</b>	IM33-FSD-EX/L	
Ident-No.	7506433	
<b>Nominal voltage</b>	24 VDC	
<b>Transmitter connection</b>		
Supply voltage	17 VDC	
Current	0...22 mA	
Input resistance	300 $\Omega$	
Current input		
Current input	0/4...20 mA	
<b>Output circuits</b>	0...40 mA	
Output current	2* 0/4...20 mA	
Load	$\leq 500 \Omega$	
<b>Rise time (10-90%)</b>	10 ms	
Dropout time (90...10%)	10 ms	
Linearity deviation	$\leq 0.1 \%$ of full scale	
Drift	$< 0.1 \%$ /annually	
Effect of supply voltage	$< 0.5 \%$ of full scale	
Temperature drift	$\leq 0.01 \%$ / K	
<b>Test voltage</b>	2.5 kV	
Constant voltage supply	250 V	
<b>Ex approval acc. to conformity certificate</b>		
Ex approval acc. to conformity certificate	TÜV 02 ATEX 1862	
Application area	II (1) GD	
Protection type	[EEx ia] IIC	
Max. output voltage $U_o$	$\leq 27.3$ V	
Max. output current $I_o$	$\leq 90$ mA	
Max. output power $P_o$	$\leq 615$ mW	
Characteristic	Linear	
External inductance/capacitance $L_o/C_o$		
	EEx ia IIC	EEx ia IIB
$L_o$ [mH]	1	5
$C_o$ [nF]	70	300
<b>Degree of protection</b>	IP20	
Ambient temperature	-25 ...+ 60 °C	
Housing length	110 mm	
Housing width	18 mm	
Housing height	110 mm	
Weight	134 g	
Mounting instruction	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 <sup>2</sup> / 2 x 1.5 mm <sup>2</sup>	