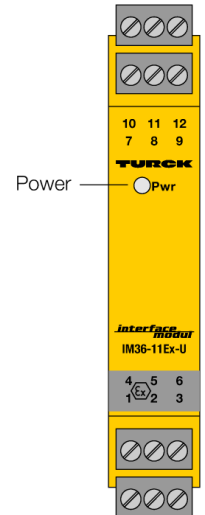
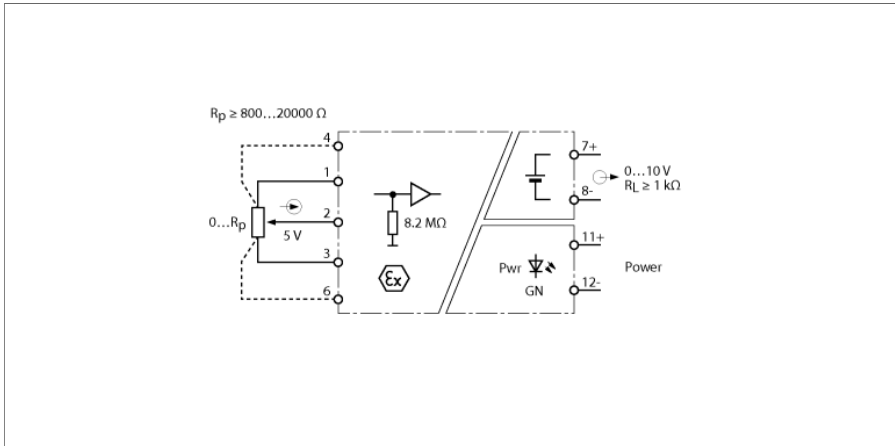


# Potentiometer Amplifier

## 1-channel

### IM36-11EX-U/24VDC



The 1-channel potentiometer amplifier IM36-11EX-U/24VDC is designed to transmit signals from 3 or 5-wire potentiometers galvanically isolated from the Ex area to the non-Ex area and to convert them into normalized 0...10 V analog signals. The resistance value of the wiper contact, ranging from 0 Ω to the nominal resistance value (final value) of the potentiometer, is detected and linearly processed.

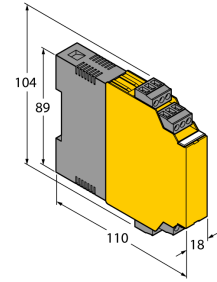
A potentiometer is defined by its nominal resistance value. Any potentiometer can be connected, provided the nominal resistance is 800 ... 20000 Ω. Common potentiometers featuring a nominal resistance of 1 kΩ or 10 kΩ can thus be used. The admissible line resistance is maximally 50 Ω with a potentiometer resistance of 800 Ω.

Galvanic isolation between input circuit, output circuit and power supply.

- Transmission of potentiometer signals from the Ex area
- Potentiometer, nominal resistance: 0.8...20 kΩ
- Output circuit: 0...10 V
- Complete galvanic isolation
- Input reverse-polarity protected
- ATEX, TR CU

## Dimensions

Type	IM36-11EX-U/24VDC
ID	7509526
Nominal voltage	24 VDC
Operating voltage	19...29 VDC
Power consumption	≤ 2 W
Input circuits	Potentiometer
Potentiometer input	
Potentiometer	
Cable resistance	≤ 50 Ω
Voltage on resistor	5 VDC
Nominal resistance	0.8...20 kΩ
Output circuits	
Output voltage	0...10 V
Response characteristic	
Measuring accuracy (including linearity, hysteresis and repeatability)	≤ 0.3 % of full scale
Galvanic isolation	
Test voltage	2.5 kV RMS
Important note	For Ex-applications the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.
Ex approval acc. to conformity certificate	TÜV 99 ATEX 1405
Application area	II (1) G
Ignition protection category	[EEx ia] IIC
Displays/Operating elements	
Operational readiness	Green
Mechanical data	
Protection class	IP20
Flammability class acc. to UL 94	V-0
Ambient temperature	-25...+60 °C
Storage temperature	-40...+80 °C
Dimensions	104 x 18 x 110 mm
Weight	137 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 × 2.5 mm <sup>2</sup> /2 × 1.5 mm <sup>2</sup>
Tightening torque	0.5 Nm



**Accessories**

Type code	Ident-No.		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.	