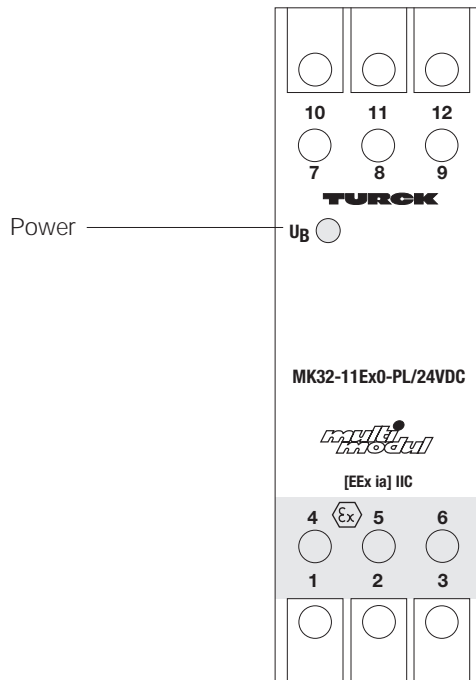


## PT100 Measuring Amplifier MK32-11Ex0-PL/24VDC



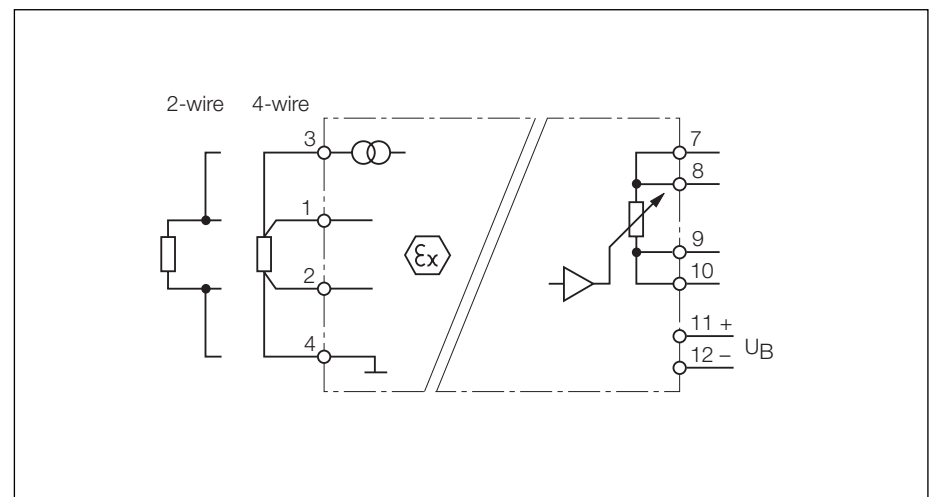
- **Intrinsically safe input circuits [EEx ia] IIC with static wire-break and short-circuit monitoring**
- **Input for 2-wire or 4-wire PT100 RTDs (resistance temperature detectors)**
- **2-wire or 4-wire outputs**
- **Operating range -200...+800 °C**
- **Output: resistance simulation**
- **Galvanic isolation between input circuit, output circuit and supply voltage**

The PT100 isolating transducer, type MK32-11Ex0-PL/24VDC, detects temperature dependent changes of PT100 RTDs. These signals are isolated and then reproduced as electric resistance values.

The input of the measuring amplifier is suited for connection of 2-wire or 4-wire PT100 RTDs.

Standard 2-wire or 4-wire processors may be connected to the output of the device.

A green LED indicates that power is supplied to the device.



# Analogue Data Transmitters



<b>Type</b>	MK32-11Ex0-PL/24VDC
Ident-No.	75 090 20
<b>Supply Voltage</b> $U_B$	10...30 VDC
Ripple $W_{PP}$	$\leq 10 \%$
Current consumption	$< 1.8 \text{ W}$ at $I_a = 20 \text{ mA}$
Galvanic isolation	between input circuit, output circuit and supply voltage for $250 \text{ V}_{rms}$ , test voltage $2.5 \text{ kV}_{rms}$
<b>Input Circuits</b>	intrinsically safe according to EN 50020
Version	PT100 RTD (IEC 751), 2- and 4-wire versions
Input line resistance	$< 200 \Omega/\text{cable}$
Sensor current	approx. $250 \mu\text{A}$
<b>Output Circuits</b>	
Reproduction of resistance value	max. $5 \text{ V}/4 \text{ mA}$
<b>Ex-Approvals acc. to Certificate of Conformity</b>	pending
Input circuit	
- Maximum values	
No-load current $I_0$	-
Short-circuit current $I_0$	-
- Max. external inductances/capacitances [EEx ia] IIC	-
<b>Transfer Characteristics</b>	
Operating range	$-200...+800 \text{ }^\circ\text{C}$
Compensation error	$\leq 0.1 \%$ of measuring scale (ref. to $-50...600 \text{ }^\circ\text{C}$ )
Load impedance	$\leq 0.005 \%$ of final value
Effect of load impedance	$\leq 0.005 \%$ of final value
Ambient temperature sensitivity	$\leq 0.005 \%$ /K of final value
Pulse rise time (10 %...90 %)	$< 1 \text{ s}$
Release time (90 %...10 %)	$< 1 \text{ s}$
<b>LED Indication</b>	
- Power "ON"	green
<b>Housing</b>	12-pole, 27 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	via flat terminals with self-lifting pressure plates
Connection profile	$\leq 2 \times 2.5 \text{ mm}^2$ or $2 \times 1.5 \text{ mm}^2$ with wire sleeves
Degree of protection (IEC 60529/EN 60529)	IP20
Operating temperature	$-25...+60 \text{ }^\circ\text{C}$

