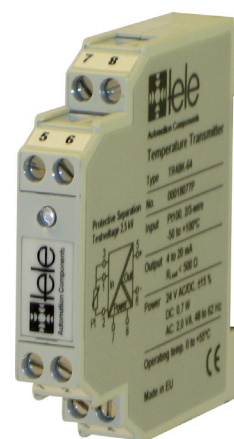


- ▶ Temperature Measuring with Pt100 -Sensors
- ▶ for Pt 100 with 2-wire or 3-wire connection, 4...20mA
- ▶ True 3-port separation
- ▶ Protective Separation acc. to EN 61140
- ▶ Only 60 mm installation depth, 11.2 mm wide
- ▶ industrial design



## Technical Data

### 1. Functions

TR48K-64 converts the PT100 signal on input to temperature linear standard signal 4 ... 20 mA

### 2. Mechanical Design

Self-extinguishing plastic housing, IP rating IP40  
 Mounted on DIN-Rail TS 35 according to EN 60715  
 Mounting position: any  
 Shockproof terminal connection according to VBG 4 (PZ1 required), IP rating IP20  
 Tightening torque: max. 1Nm  
 Terminal capacity:  
 1 x 0.5 to 2.5mm<sup>2</sup> with/without multicore cable end  
 1 x 4mm<sup>2</sup> without multicore cable end  
 2 x 0.5 to 1.5mm<sup>2</sup> with/without multicore cable end  
 2 x 2.5mm<sup>2</sup> flexible without multicore cable end

### 3. Input circuit:

Input signal: terminals: 1,2, Pt Sensor,3: Sense  
 Temperature sensor: Pt 100  
 Sensor connection: 2-wire or 3-wire connection  
 Measuring range 1): -50... +100 °C  
 Sensor wire resistance < 10 Ohm / wire  
 Sensor current: 1 mA / 0,1 mA

### 4. Output circuit:

Output signal: terminals: 5,6: 4...20 mA  
 Load: Current output: < 500 Ohm  
 Ripple: < 10 mVeff  
 Offset: < 20 µA

### 5. Accuracy

Linearity: < 0.2 % of input span  
 Temperature coefficient 2): < 0,025 %/K  
 Calibration: ±0,2 °C  
 Response time: < 100 ms

### 6. Ambient temperature

Operation temperature: 0°C bis +55°C (32 bis 131°F)  
 Storage temperature: -25°C bis +80°C (-13 bis 176°F)  
 Transport temperature: -25°C bis +80°C  
 Relative Humidity: 15% bis 85%  
 Pollution degree: 2

### 7. General Data

Test voltage: 2,5 kV, 50 Hz, 1 min,  
 Input against Output  
 against power supply

Working voltage 3),  
 (Basic Insulation) Up to 600 V AC/DC for  
 overvoltage category II  
 and pollution degree 2 acc.  
 to EN 61010-1 between all circuits.

Protection against  
 electrical shock 3)): Protective separation according  
 to EN 61140 by reinforced insulation in  
 accordance with EN61010-1  
 up to 300 V AC/DC  
 for overvoltage category II  
 and pollution degree 2  
 between all circuits.

Power supply: terminals:7,8: 24 V AC/DC, ± 15 %, AC: 48...62 Hz, ca. 2 VA, DC: approx. 0.7 W

EMV 4): EN 61326 –1

Wire cross-section: max. 2,5 mm<sup>2</sup>  
 Construction: 11.2 mm housing,  
 protection class: IP 20  
 Weight: Approx. 50 g

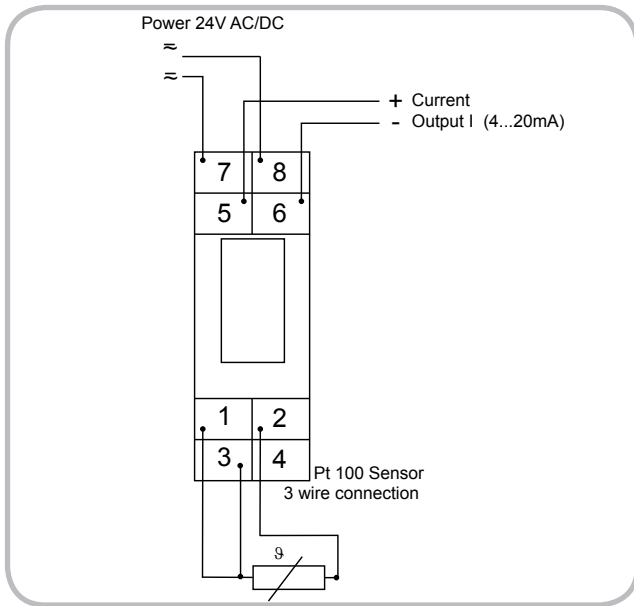
1) Other input ranges on request!  
 2) Average TC in specified operating temperature range.  
 3) As far as relevant the standards and rules mentioned above are considered by development and production of our devices. In addition relevant assembly rules are to be considered by installation of our devices in other equipments. For applications with high working voltages, take measures to prevent accidental contact and make sure that there is sufficient distance or insulation between adjacent situated devices.  
 4) Minor deviations possible during interference.

# TR48K-64

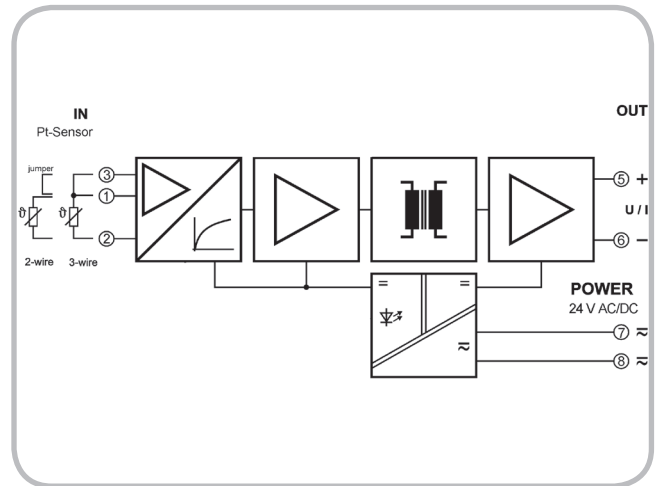
## Functions

The Temperature Transmitter TR48K-64 converts the sensor signal on input to temperature linear standard signal 4...20 mA and makes this signal galvanic isolated available at the transmitter output.

## Connections



## Block diagramm



## Dimensions

