



The temperature transducers series TMI and TMU are designed to temperature measuring in interior application in control and regulation systems for standardised signals 4 to 20 mA or 0 to 10 V processing. Temperature sensor is built in front panel of installation box type TANGO. The sensing element of the transducer is connected to wires, the other ends of which are connected to the converter temperature – current (or temperature – voltage), which is positioned on the board in the box. The converter is not provided with a galvanic separation. The signal thereof has a linear dependence on temperature. The operation conditions are met by conventional, chemically non/aggressive environment, in which neither attendance nor maintenance is required by the transducers

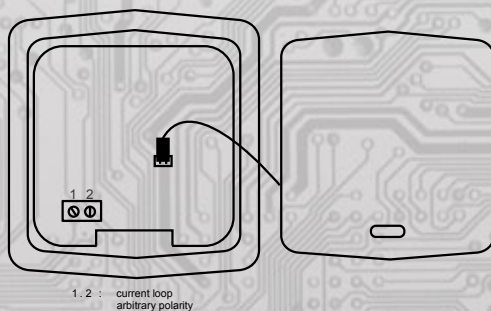
### Transducers type and temperature range

Transducers type	TMI	TMU
Output	4 to 20 mA	0 to 10 V
Temperature Ranges	-30 to 60 °C	-30 to 60 °C
	0 to 35 °C	0 to 35 °C
	0 to 50 °C	0 to 50 °C

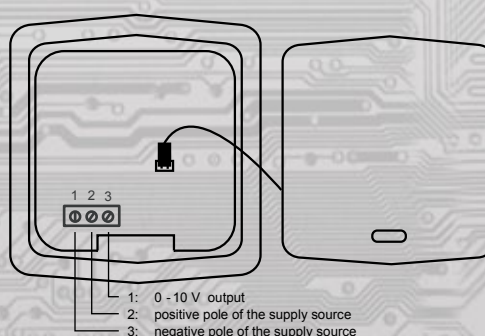
### Basic technical parameters

Transducers type	Output 4 to 20 mA	Output 0 to 10 V
Power supply U <sub>cc</sub>	11 to 35 VDC	18 to 30 VDC
Output signal	4 to 20 mA	0 to 10 V
Measurement error	< 0,6 %	< 0,6 %
Load resistance	$R_z = (U_{cc} - 11) \times 50 \text{ [}\Omega\text{]}$	$R_z > 50 \text{ k}\Omega$
Sensing element break	$I_z > 24 \text{ mA}$	$U_z > 12 \text{ V}$
Sensing element short	$I_z < 3 \text{ mA}$	$U_z > 0 \sim \text{V}$
Ambient temperature	-30 to 60 °C	-30 to 60 °C
Relative humidity	< 80 %	< 80 %
Degree of protection	IP40	IP40

#### Wiring diagram for TMI



#### Wiring diagram for TMU



#### Mounting the transducers

Transducers are determined for the installation into installation boxes type Tango. The printed circuit board has to be located into the frame via connectors outwards and has to be screwed up with self-drilling screws  $\varnothing 2,9 \text{ mm}$  into the installation box. When the terminal board is connected, connector of sensor has to be pushed into the socket. The cover with the sensor have to be pushed into the frame. When uninstalling, the cover has to be gently loosened by wresting with a flat bladed screwdrivers.

#### Method of ordering

State the quantity of pieces and the transducer type in the order.  
An example of an order: 5 pieces transducer **TMI 0/35**