Interior temperature sensors - output 4 ÷ 20 mA or 0 ÷ 10V

RK-x

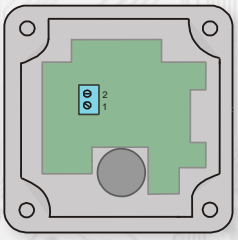
P10x

Description:
The resistance temperature transducers series P10x and RK-x are designed for temperature measuring in the interior applications. Transducers are provided with degree of protection IP30. The series RK-x are suitable for application with higher demands on the aesthetic design. Both versions are intended for the direct mounting on the wall. As the temperature sensor is used Pt1000 resistance element, which is placed in a metal enclosure at the sensors P10I and RK-I. The converter temperature - current or temperature - voltage is not provided with a galvanic separation.

Basic technical parameters

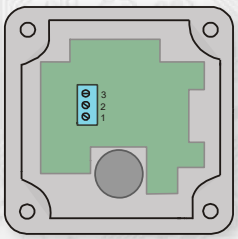
Sensor	Pt1000	
Measurement error	< 0,6 %	
	(P10I - RK-I)	(P10U - RK-U)
Output signal	4 ÷ 20 mA	0 ÷ 10 V
Power supply Ucc	11 ÷ 35 VDC	18 ÷ 30 VDC
Load resistance	Rz < (Ucc-11) x 50 [Ω]	Rz > 50 kΩ
Sensing element break	Iz > 24 mA	Uv > 12 V
Sensing element short	Iz < 3 mA	Uv ~ 0 V
Ambient temperature	-30 ÷ 80 °C	
Relative humidity	< 80%	
Material	**P10x**–ABS,grey colour (on reques white)	
	RK-x–ABS,white colour	
Protection type	IP 30	
Terminal board	**P10x**–COB5/2,diameter0,35 ÷ 2,5 mm²	
	RK-x–CPP,max. diameter 1 mm²	

Wiring diagram - P10I



1,2: current loop arbitrary polarity

Wiring diagram - P10U

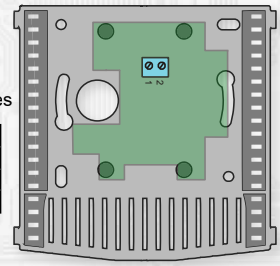


1: positive pole of the supply source
2: negative pole of the supply source
3: 0 to 10 V output

Temperature ranges

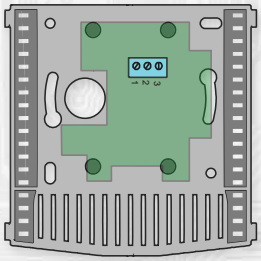
-30 ÷ 60°C
0 ÷ 35°C
0 ÷ 50°C
0 ÷ 100°C

Wiring diagram - RK-I



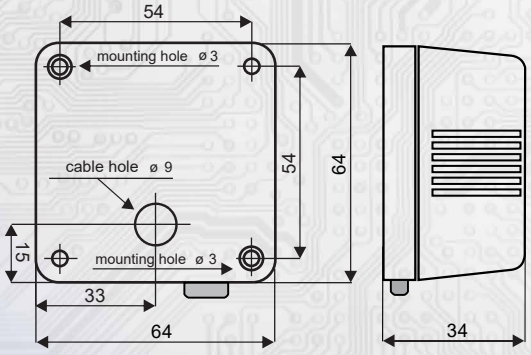
1,2: current loop arbitrary polarity

Wiring diagram - RK-U

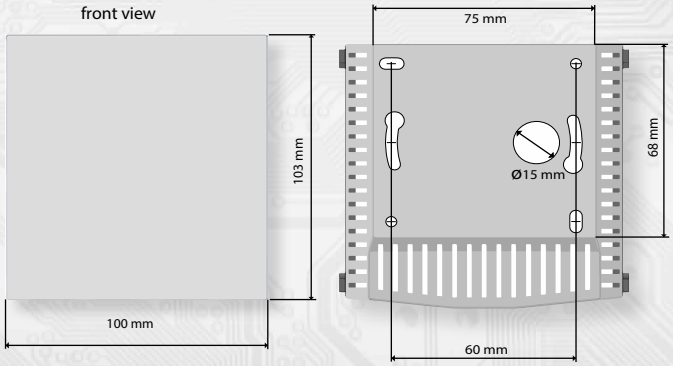


1: positive pole of the supply source
2: negative pole of the supply source
3: 0 to 10 V output

Dimension P10x



Dimension RK-Q



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