KIMO INSTRUMENTS

Technical Data Sheet

Presure • Temperature • Humidity • Air Velocity • Air Flow

New

CE

TM 50
ambient
IP 30

TM 50
air tight
IP 65

TM 50
Pt100 or Pt1000 on terminal block (probe in option)
IP65

TM 50
Duct mount
IP65

Temperature transmitter

TM 50

- *Temperature transmitter type TM 50/51*
- *Pt100 3 wires output or Pt1000 2 wires (according to the model)*
- *ABS IP65 and IP 30 housing, without display*
- *Quick and easy mounting "1/4 turn" system with wall-mount plate*

Part number

To order, just add the code to complete the part number

	Probe		Housing	
Pt 100	50	A	Ambient	
Pt 1000	51	B	on terminal block (Pt100 or Pt 1000)	
		E	Air tight	
		G	Duct mount	

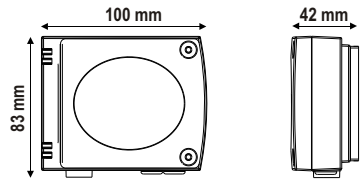
TM - [ ] - [ ]

Example : TM 50-A
Model : temperature transmitter TM 50, ambient housing IP 30.

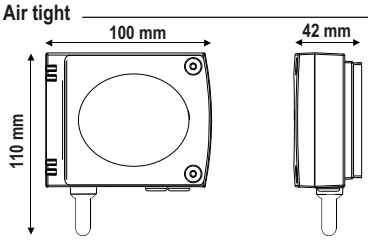
Dimensions

(with wall-mount plate)

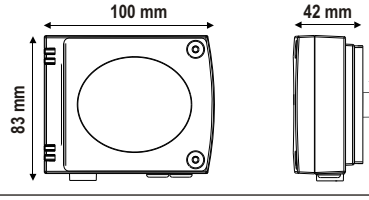
Ambient or Pt 100 on terminal block



Air tight



Duct mount



Features of the transmitter

Temperature

Working principle : a platinum resistance (Pt 100 or Pt1000) is a resistance with a positive temperature coefficient which varies according to the temperature. The higher the temperature is, the more the value of the resistance increases.
Example : for 0°C ≃ 100 Ω - for 100°C ≃ 138,5 Ω (Pt100)
for 0°C ≃ 1000 Ω - for 100°C ≃ 1385 Ω (Pt1000)

Measuring range.....-20 to +80°C (air tight and duct mount model)
+10 à +40°C (ambient model)
Accuracy*.....Pt100 class A as per DIN IEC751
Pt1000 class A as per DIN IEC751
Response time.....1/e (63%) 5 sec. (ambient model)
1/e (63%) 20 sec. (air tigth model)
depending on the probe (Pt100 on terminal block)
Type of fluid.....air and neutral gases

Features of the housing

Housing.....ABS
Fire-proof classification.....HB as per UL94
Dimensions.....see drawing beside
Protection.....IP 65 (air tight, duct mount and Pt100 on terminal block models)
IP 30 (ambient model)
Cable grip.....for cables Ø 7 mm max.
Weight.....110 g

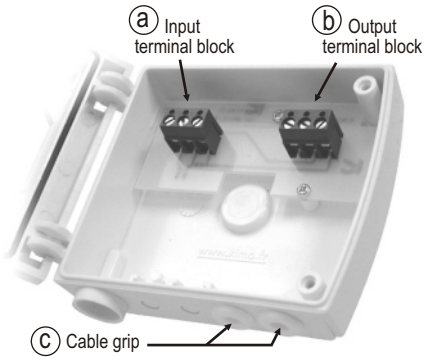
Technical specifications

Output.....Pt100 (3 wires) or Pt1000 (2 wires)
Electrical connection.....screw terminal block for cables Ø 1.5 mm² max.
Working temperature.....-20 to +80°C (air tight model)
+10 to +40°C (ambient model)
depending on the probe (Pt100 on terminal block)
Storage temperature.....-10 to +70°C
Environment.....air and neutral gases

*All the accuracies indicated in this technical datasheet were stated in laboratory conditions, and can be guaranteed for measurements carried out in the same conditions, or carried out with calibration compensation.

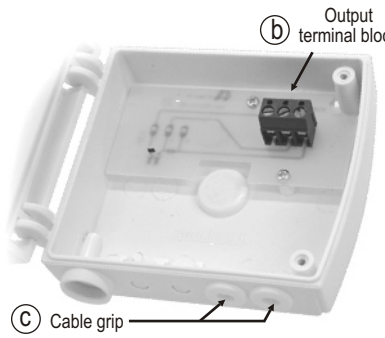
Connection

For the model
TM 50-B • **Pt100 or Pt1000 input and output on terminal block**



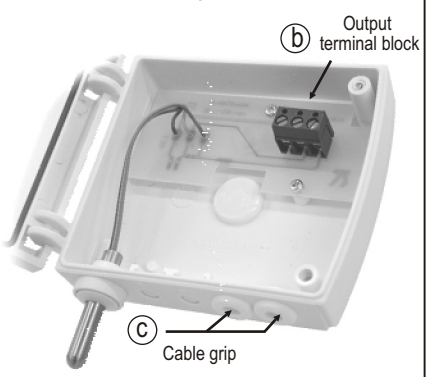
a 1 2 2' b 1 2 2'

For the model
TM 50-A and TM 51-G • **Pt100 output on terminal block**
TM 51-A and TM51-G • **Pt1000 output on terminal block**



b 1 2 2'

For the model
TM 50-E • **Pt100 output on terminal block**
TM 51-E • **Pt1000 output on terminal block**



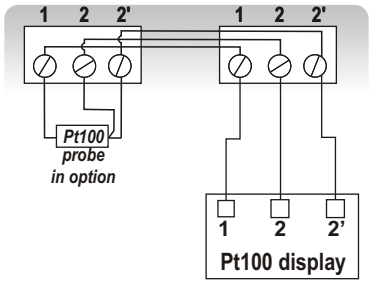
b 1 2 2'

c Cable grip : to insert the cable, it is required to slightly cut the rubber.

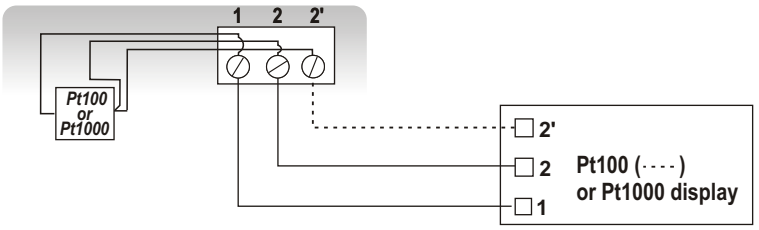
Pt 100 connections

⚠ This connection must be made by a qualified technician.

For the model
TM 50-B • **Input and output Pt100 on terminal block**



For the model
TM 50-A and **TM 50-E** • **output Pt100* on terminal block**
TM 51-A, TM 51-G and **TM 51-E** • **output Pt1000* on terminal block**

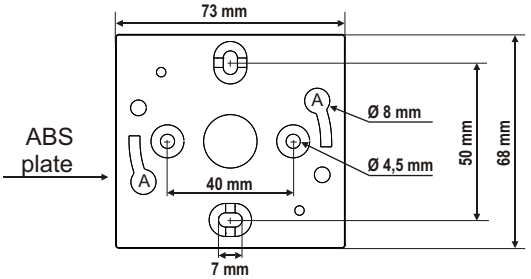


* Pt100 connection is usually made in 3 wires; the third wire is dedicated to resistance compensation of the connection cables.

* With Pt1000, the resistance of connection cables has less influence on the measurement than with Pt100. Therefore, Pt1000 cabling is generally made with only 2 wires.

Mounting

Installation : mount the ABS plate on the wall (this plate is supplied with the transmitter).
Drilling : Ø 6 mm with the screws and pins supplied with the transmitter.
Insert the transmitter into the plate (see points A of the drawing shown beside), by tilting it at 30°. Rotate the housing in clockwise direction until you hear a "click" which confirms that the transmitter is correctly installed.



Maintenance

Please avoid any aggressive solvent.
Please protect the transmitter and its probes from any cleaning product containing formol, that may be used for cleaning rooms or ducts.

Options

- Pt 100 or Pt1000 temperature probes

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