

**Temperature measurement module from
Pt100 sensors, for F4N400****Cat. N°:**
F4N106

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Temperature measurement module from Pt100 sensors, for F4N400

Cat. N°:
F4N106

1. DESCRIPTION - USE

Temperature measurement module.
Allows temperature measurement by external Pt100 sensors.
The module is equipped with 2 independent measurement channels.

2. RANGE

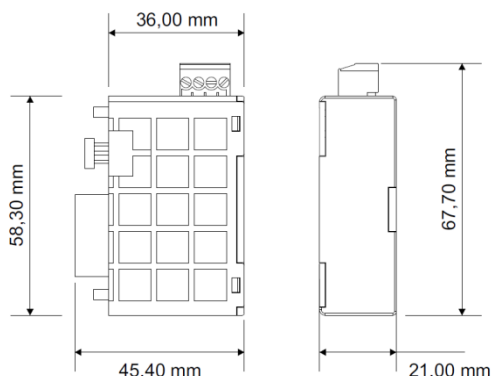
. Cat. N° F4N106: Temperature measurement module from external Pt100 sensors; associable only to multifunction measuring device F4N400.

. It is possible to connect only one module F4N107.

Auxiliary supply:

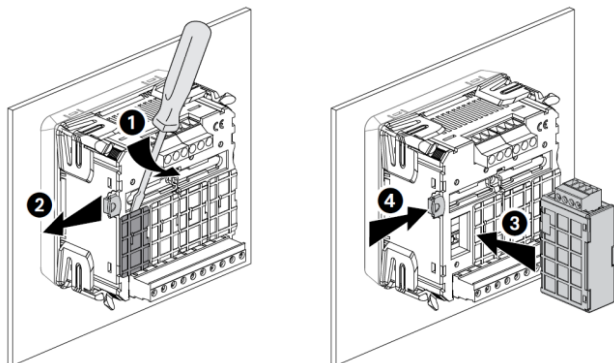
. Supplied by the multifunction measuring device F4N400

3. OVERALL DIMENSIONS



4. FIXING - CONNECTION

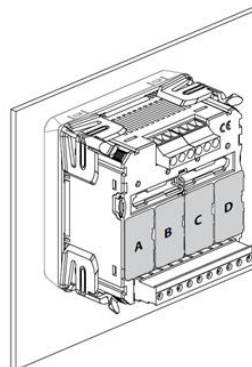
Fixing:



Note: modules must be connected with the device F4N400 not supplied.

4. FIXING - CONNECTION (continued)

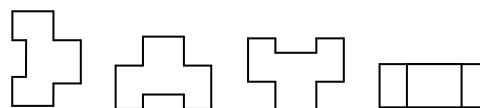
Associability table:



	A	B	C	D	
F4N101	×	×	✓	✓	max. 2
F4N102	×	×	✓	✓	max. 2
F4N103	✓	✓	✓	✓	max. 2
F4N104	✓	×	×	×	max. 1
F4N105	✓	×	×	×	max. 1
F4N106	×	×	×	✓	max. 1
F4N107	×	✓	×	×	max. 1

Operating position:

. Vertical Horizontal Upside down On the side



Screw terminals:

. Terminal depth: 8 mm.
. Stripping length: 8 mm

Screw head:

. Screw slotted.

Recommended tightening torque:

. 0,6 Nm.

Tools required:

. For terminals: flat screwdriver 2,5 mm
. For fixing the modules to the measuring device: flat screwdriver max. 5 mm.

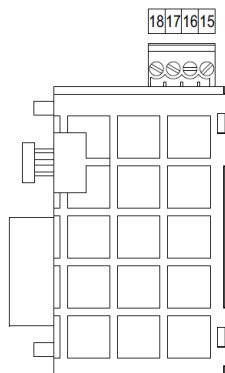
Connectable section:

. Copper cables.

	Without ferrule	With ferrule
Rigid cable	0,05 to 2,5 mm ²	-
Flexible cable	0,05 to 1,5 mm ²	0,05 to 1,5 mm ²

Wiring diagrams:

. Terminals identifications



Temperature measurement module from Pt100 sensors, for F4N400

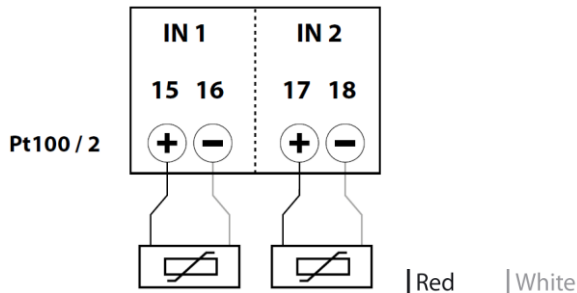
Cat. N°:

F4N106

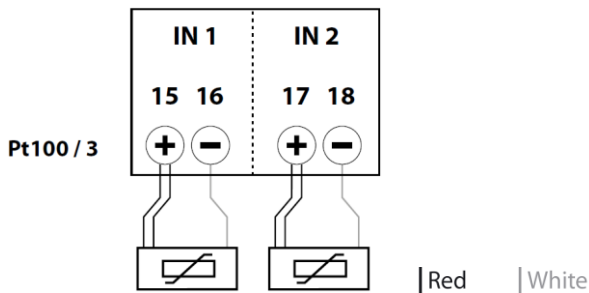
4. FIXING - CONNECTION *(continued)*

Wiring diagram Pt100 temperature sensors

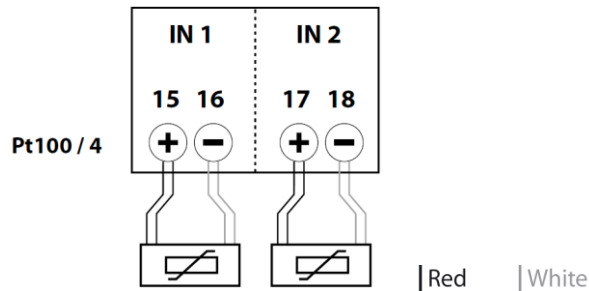
. Sensor 2-wires



. Sensor 3-wires



. Sensor 4-wires



Note: metallic part of the sensor must be earthed.

5. GENERAL CHARACTERISTICS

Terminals marking:

. By permanent ink pad printing.



Characteristics of the measuring inputs:

- . 2 inputs (not isolated from each other)
- . Sensor type: Pt100 resistor probe of platinum
- . Measuring range: (- 50 °C) ÷ (+ 350 °C)
- . Sensors cable max. length: 3 m
- . Line resistance: $\leq 1\text{ }^{\circ}\text{C}$ (with 1,5mm² cable and length 10m)
- . Measuring current (applied to Pt100): $\leq 500\mu\text{A}$
- . Linearization Pt100: according to IEC/EN 60751
- . Precision: cl. 0,5
- . Readings update:
 - 1 s, for variations $\geq 10\text{ }^{\circ}\text{C}$
 - 10 s, for variations $< 10\text{ }^{\circ}\text{C}$

5. GENERAL CHARACTERISTICS *(continued)*

Measurement display:

- . Resolution: 1 °C
- . Out of scale indication:
 - "high": $T > (+ 350\text{ }^{\circ}\text{C})$
 - "low": $T < (- 50\text{ }^{\circ}\text{C})$
- . Display of measuring circuit interruption: the display shows the text "high".

Plastic material:

- . Self-extinguishing polycarbonate.

Ambient operating temperature:

- . Min. = - 5 °C Max. = + 55 °C.

Ambient storage temperature:

- . Min. = - 25 °C Max. = + 70 °C.

Impulse withstand voltage:

- . Measuring inputs / All circuits
alternate current 50 Hz / 1 min.: 2 kV

Note: values referred to combination measuring device + add-on module.

Average weight per device:

- . 0,040 kg.

Volume when packed:

- . 0,30 dm³.

Consumption:

- . Module F4N106: $\leq 1\text{ VA}$
- . Measuring device F4N400 + 1 Module F4N106: $\leq 5\text{ VA}$

6. COMPLIANCE AND APPROVALS

Compliance to standards:

- . Compliance with Directive on electromagnetic compatibility (EMC) n° 2004/108/EC
- . Compliance with low voltage directive no. 73/23/CEE dated 19 February 1973, modified by directive no. 93/68/CEE dated 22 July 1993, modified by directive n° 2006/95/CE.
- . IEC/EN 60751