

Temperature Sensor Pt100 with Measurement Terminal 100922

Instruction sheet

04/12 SD



- 1 Measurement Terminal
- 2 Temperature sensor
- 3 Sensor box
- 4 Connecting cable

1. Safety instructions

The equipment conforms to safety regulations for electrical measuring instruments and control and laboratory equipment as per DIN EN 61010, part 1.

- In order to avoid permanent damage to the built-in Pt100 sensor, never exceed the maximum temperature of 150°C.
- Never expose the PVC grip or the connecting cable to temperatures above 80°C.

2. Description

The temperature sensor Pt100 with measurement terminal is used for measuring temperatures ranging from -50°C to +150°C. It is used in conjunction with the 3B Net/log™ (230 V, 50/60 Hz) (1000540) resp. 3B NET/log™ (115 V, 50/60 Hz) interface. Once connected, the sensor is automatically detected by the interface.

The temperature sensor is designed for measuring temperature in the copper piping of heat pumps (1000820 or 1000819). The tip of the thermocouple has a suitably shaped copper clamp for pipes with a diameter of 6 mm.

3. Contents

- 1 Sensor box
- 1 Pt100 sensor with measurement terminal
- 1 8-pin mini DIN connecting cable, 60 cm

4. Technical data

Measuring range:	-50°C to +150°C
Sensor type:	Pt100 sensing resistor
Accuracy:	0.1% of the measured value +0.25°C
Resolution:	0.1°C
Delay:	60 s approx. if temperature changes from 0°C to 100°C
Sensor cable:	PVC-insulated, 1 m

5. Operation

- Connect the thermocouple to the sensor box and attach it to the point where the measurement is to be made.
- Wait for the temperature to even out before taking readings.

6. Applications

Temperature measurements at the open ends of heat pump (1000820 or 1000819). See Fig. 1 and Fig. 2.

Determination of the temperature of metal tubes in thermal expansion apparatus (1000830)

Observation of freezing and boiling points as well as heat of reaction

Required apparatus:

1 3B NET/og™ (115 V, 50/60 Hz)	1000539
or	
1 3B NET/og™ (230 V, 50/60 Hz)	1000540
1 Temperature sensor Pt100 with measurement terminal	1009922

7. Care and maintenance

- Before cleaning the equipment, disconnect it from the 3B NET/og™ interface.
- Use a soft, damp cloth to clean it.

8. Disposal

- The packaging should be disposed of at local recycling points.
- Should you need to dispose of the equipment itself, never throw it away in normal domestic waste. Local regulations for the disposal of electrical equipment will apply.

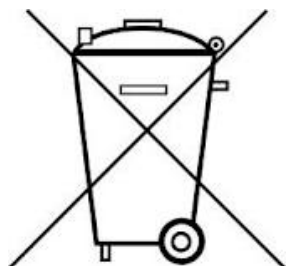


Fig. 1: Temperature measurement in front of heat pump expansion valve

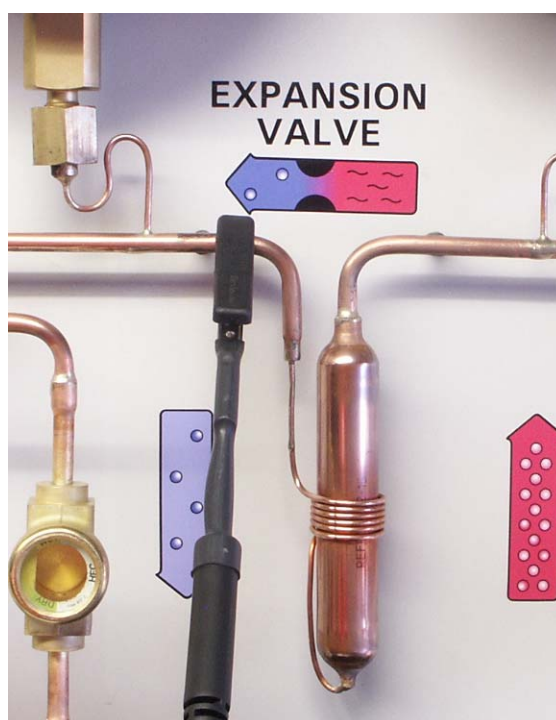


Fig. 2: Temperature measurement behind heat pump expansion valve