

# TEMPERATURE SENSOR WITH SETPOINT CORRECTION SAU 1000 – USER MANUAL

## Warning:

This sensor may be installed only by a qualified person who is familiar with § 5 of Regulation No. 50/1978 Coll. and with the “User Manual”.

## Installing the Sensor:

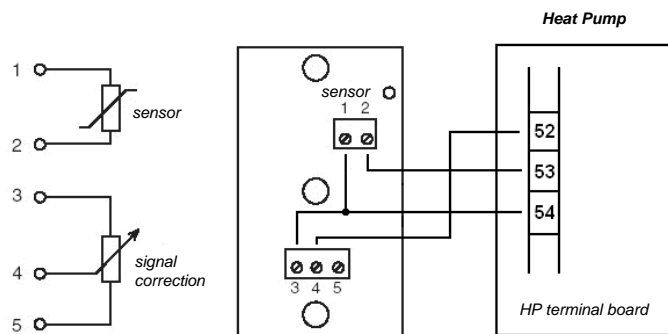
Before connecting the power connecting cable it is necessary to separate the control wheel with an arrow and the case lid with a marked scale. **This operation must be done with caution to prevent mechanical damage to the sensor.** The control module is mounted on the wall using two screws that are inserted into two openings in the base of the case. The case design allows to use cordless screwdriver without removing the peripheral frame with ventilation holes.

The other two holes in the case base are intended for the connection cable. The recommended wire cross section is 0.35 mm<sup>2</sup> to 1.5 mm<sup>2</sup>. If the connection cable is laid in the vicinity of high voltage conductors or conductors that supply an equipment generating an interfering electromagnetic field (eg. inductive load equipment), a shielded cable must be used.

After installing and connecting to the corresponding electrical measuring equipment, the sensor is ready for operation.

The sensor does not require any special servicing or maintenance.

## Wiring Diagram:



## Using the Sensor:

The SAU 1000 control modules are intended to measure air temperature in areas protected against water. Standard operating temperature range is -30 °C to 80 °C. In addition to measuring the temperature, these modules allow to correct the setpoint. Based on the information about the measured temperature it is possible to use a potentiometer to make a correction in the control system, such as increasing or decreasing temperature, etc. Applied TANGO case made by ABB Elektro ensures that these sensors are a suitable complement to wall switches, sockets, sensors and further elements of these series. These sensors are designed for use in a chemically non-aggressive environment.

## Disposal:

The product complies with the Act No. 185/2001 Coll. as amended, and the implementing Regulation No. 352/2005 Coll., in which are implemented Directives 2002/95/EC and 2002/96/EC of the European Parliament and of the Council. It is necessary to follow these directives when disposing the sensor.

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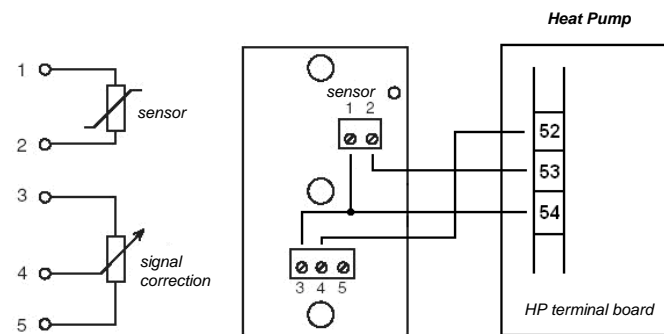
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**Warning:**

The temperature sensors must not be used to:

- Temperature measurement in places where the sensor could be exposed to vibrations or mechanical forces
- Temperature measurement in places where an explosion hazard may occur
- Temperature measurement in chemically aggressive environments
- Temperature measurement in places with a strong electrical interference
- Temperature measurement in places where the sensor could be exposed to direct heat radiation (lights, heaters, etc.) or sunshine.

**Technical parameters:**

Sensor type	NTC 10 kΩ / 3460 K
Accuracy	± 1 °C
Correction range	0 to 25 kΩ
Measuring range	-30 °C to 80 °C
Box dimensions	81 x 81 x 28 mm
Head material	ABS
Head temperature resistance	-30 °C to 80 °C
Terminal board	MEB 02001, ARK 500/3 – wire cross section 0.35 to 1.5 mm <sup>2</sup>
Terminal board protection	IP 30 according to EN 60 529

**Calibration:**

SINCLAIR company performs an initial calibration of measuring instruments during its manufacturing processes in accordance with § 10 of Act 505/1990. Metrological traceability of the measuring instruments is provided in accordance with § 9, paragraph 4 of this Act.

**WARRANTY CARD**

**The product is warranted for 24 months from the date of purchase.**

In this period SINCLAIR will remove for free all defects of the product due to manufacturing defects. When making a complaint, a completely and legibly filled warranty card must be submitted together with the product. The warranty does not cover the product damaged during transport, storage and improper handling; using the product for any purpose other than specified; failure to comply with the instructions for use; the product affected by an unauthorized modification; and the product without the warranty card or label.

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