

Datasheet

Subject to technical alteration
Issue date: 14.08.2020 • A110

**» APPLICATION**

The flat room thermostat is designed for heating or cooling via 2-pipe system in commercial, industrial and residential buildings useable with underfloor heating applications or for overheat protection.

» SECURITY ADVICE – CAUTION

The installation and assembly of electrical equipment should only be performed by authorized personnel.

The product should only be used for the intended application. Unauthorised modifications are prohibited! The product must not be used in relation with any equipment that in case of a failure may threaten, directly or indirectly, human health or life or result in danger to human beings, animals or assets. Ensure all power is disconnected before installing. Do not connect to live/operating equipment.



CAUTION! Risk of electric shock due to live components within the enclosure, especially devices with mains voltage supply (usually between 90..265 V).

Please comply with

- Local laws, health & safety regulations, technical standards and regulations
- Condition of the device at the time of installation, to ensure safe installation
- This data sheet and installation manual

» NOTES ON DISPOSAL

As a component of a large-scale fixed installation, Thermokon products are intended to be used permanently as part of a building or a structure at a pre-defined and dedicated location, hence the Waste Electrical and Electronic Act (WEEE) is not applicable. However, most of the products may contain valuable materials that should be recycled and not disposed of as domestic waste. Please note the relevant regulations for local disposal.

» REMARKS TO ROOM SENSORS

Location and Accuracy of Room Sensors

The room sensor should be mounted in a suitable location for measuring accurate room temperature. The accuracy of the temperature measurement also depends directly on the temperature dynamics of the wall. It is important, that the back plate is completely flush to the wall so that the circulation of air occurs through the vents in the cover. Otherwise, deviations in temperature measurement will occur due to uncontrolled air circulation. Also the temperature sensor should not be covered by furniture or similar devices. Mounting next to doors (due to draught) or windows (due to colder outside wall) should be avoided.

The temperature dynamics of the wall will influence the temperature measurement. Various wall types (brick, concrete, dividing and hollow brickwork) all have different behaviours with regards to thermal variations.

Surface and Flush Mounting

The temperature dynamics of the wall influence the measurement result of the sensor. Various wall types (brick, concrete, dividing and hollow brickwork) have different behaviours with regard to thermal variations. A solid concrete wall responds to thermal fluctuations within a room in a much slower way than a light-weight structure wall. Room temperature sensors installed in flush boxes have a longer response time to thermal variations. In extreme cases they detect the radiant heat of the wall even if the air temperature in the room is lower for example. The quicker the dynamics of the wall (temperature acceptance of the wall) or the longer the selected inquiry interval of the temperature sensor is the smaller the deviations limited in time are.

» TECHNICAL DATA

Measuring values	temperature
Output switching contact	changeover contact, heating or cooling max. 230 V ~ / 2 A (resistive, non-floating)
Power supply	230 V ~
Operating temperature range	max. permissible operating temperature 0..+50 °C
Sensor	bimetal
Inputs	floating input for ECO mode -3 K, 230 V ~
Control function	heating or cooling ON/OFF, ECO mode
Functions	setpoint
Set point range	+5..+30 °C
Switching values	output switching contact max. 460 W, switching hysteresis 0,5 K max. permissible temperature change rate 4 K/h
Enclosure	ABS, pure white brilliant
Protection	IP30 according to EN 60529
Cable entry	rear entry
Connection electrical	terminal block, max. 1,5 mm ²
Ambient condition	max. 85% rH non-condensing
Weight	ca. 60 g
Mounting	surface mounted on flush-mounting box (Ø=60 mm)

» PRODUCT TESTING AND CERTIFICATION



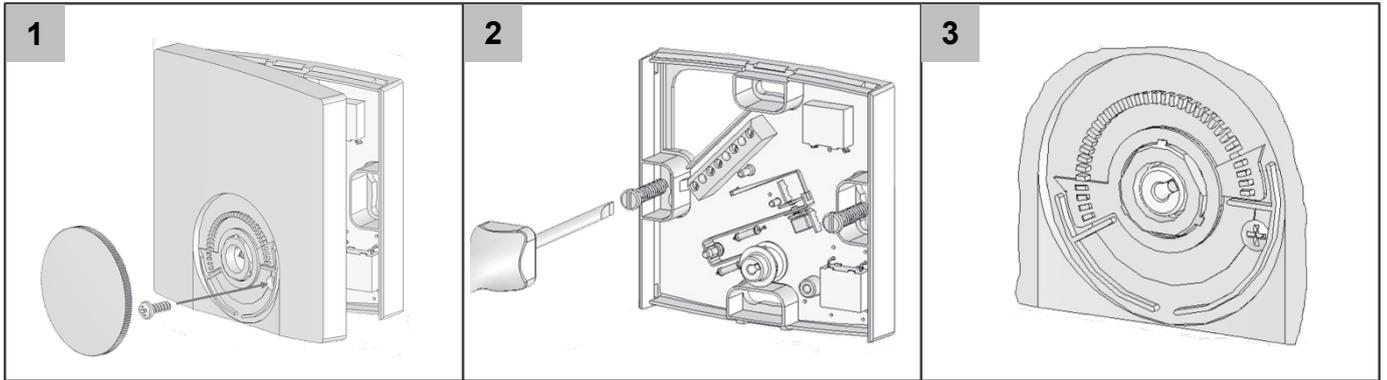
Declaration of conformity

The declaration of conformity of the products can be found on our website <https://www.thermokon.de/>.

» MOUNTING ADVICES

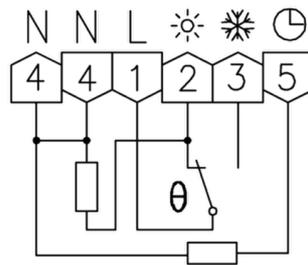


The device is able to resist to the types of dirt or dust that normally occur in offices and living spaces. Excessive volumes of dust and dirt produced during installation or during renovation works may soil the contacts and can lead to a breakdown of the device.



1. Always make sure to pull off the knob only prior to removing the housing cover. The adjusting knob must neither be put on, nor be pulled off without having put on the housing cover beforehand.
2. As there is only little space available for its wiring, it is recommended to install the device on an UP box. The venting slots that point to the wall must not be covered. If otherwise, there is danger that the control operations performed by the device become incorrect.
3. Below the rotary knob, the setting flag for the minimum temperature value (left, blue) and for the maximum temperature value (right, red) are located.

» CONNECTION PLAN



ECO mode:

The room temperature is decreased by approx. 3K when connecting the 230 V ~ power supply. The ECO mode is only possible when using the heating output (heating operation).

Output heating:

For currentless closed valve actuator.

Output cooling:

If currentless opened heating valves are used, they must be connect to the cooling output of the change-over contact.

» DIMENSIONS (MM)

