



1 Product documentation



The product is documented by different sets of instructions:

- Installation instructions
- Operating instructions (for download only)

Use the link www.conrad.com/downloads (alternatively scan the QR code) to download the instructions (or new/current versions if available). Follow the instructions on the web page.

2 Intended use

The product is a Wi-Fi thermostat for fixed indoor installation. The product is intended to control a mains operated load via temperature control.

The product can be controlled via touch display and the Tuya mobile app Smart Life/Smart Living.

The product is equipped with an internal and external sensor (probe). The external sensor can be used to measure the temperature in a different location to the thermostat, such as on the floor with an electric floor heating system.

The product is equipped with a backup battery to temporarily maintain the settings during power outages.

This device has an IP20 ingress protection rating and is suitable for dry rooms and indoor use. Contact with moisture, e.g. in bathrooms, must be avoided under all circumstances. The operating conditions shown in the "Technical data" must be strictly followed.

The product is intended for indoor use only. Do not use it outdoors.

Contact with moisture must be avoided under all circumstances.

If you use the product for purposes other than those described, the product may be damaged.

Improper use can result in short circuits, fires, electric shocks or other hazards.

The product complies with the statutory national and European requirements.

For safety and approval purposes, you must not rebuild and/or modify the product.

Read the installation instructions carefully and store them in a safe place. Make this product available to third parties only together with the installation instructions.

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3 Delivery contents

- Thermostat
- External sensor
- 2x Mounting screws
- Installation instructions

4 Description of symbols

The following symbols are on the product/appliance or are used in the text:



Read the operating instructions carefully.



The symbol warns of hazards that can lead to personal injury.



The symbol warns of dangerous voltage that can lead to personal injury by electric shock.



Protection class 2 (double or reinforced insulation, protective insulation).



This product must only be used in dry, enclosed indoor areas. It must not become damp or wet.

5 Safety instructions



Read the installation instructions carefully and especially observe the safety information. If you do not follow the safety instructions and information on proper handling, we assume no liability for any resulting personal injury or damage to property. Such cases will invalidate the warranty/guarantee.

5.1 General

- The product is not a toy. Keep it out of the reach of children and pets.
- Do not leave packaging material lying around carelessly. This may become dangerous playing material for children.
- If you have questions which remain unanswered by this information product, contact our technical support service or other technical personnel.
- Maintenance, modifications and repairs must only be completed by a technician or an authorised repair centre.

5.2 Electrical installation

WARNING! Safety hazard!

The product should only be installed by people with relevant electrical knowledge and experience! *)

If it is not installed properly, you risk:

- your own life
- the life of user of the electrical device
- severe damage to property, e.g., by fire
- personal liability for personal injury and material damage

Always consult an electrician!

*) Technical knowledge required to perform the installation:

For the installation, the following specialist knowledge is required in particular:

- The "Five safety rules": Disconnect from the mains; protect against accidental switch-on; ensure there is no voltage; earth and short-circuit; cover or protect adjacent live parts
- Use of suitable tools, measuring devices and personal protective equipment, where necessary
- Analysis of measurement results
- Use of electrical installation materials to meet the requirements for disconnection
- IP protection ratings
- Installation of electrical installation materials
- Type of power supply (TN system, IT system, TT system) and the corresponding connection criteria (classic earthing, protective earthing, necessary additional measures etc.)

If you are not a professional, do not do it yourself, have it performed by a specialist.

5.3 Handling

- Handle the product carefully. Jolts, impacts or a fall even from a low height can damage the product.

5.4 Operating environment

- Do not place the product under any mechanical stress.
- Protect the appliance from extreme temperatures, strong jolts, flammable gases, steam and solvents.
- Protect the product from high humidity and moisture.
- Protect the product from direct sunlight.

5.5 Operation

- Consult an expert when in doubt about the operation, safety or connection of the product.
- If it is no longer possible to operate the product safely, take it out of operation and protect it from any accidental use. DO NOT attempt to repair the product yourself. Safe operation can no longer be guaranteed if the product:
 - is visibly damaged,
 - is no longer working properly,
 - has been stored for extended periods in poor ambient conditions or
 - has been subjected to any serious transport-related stresses.

5.6 Battery

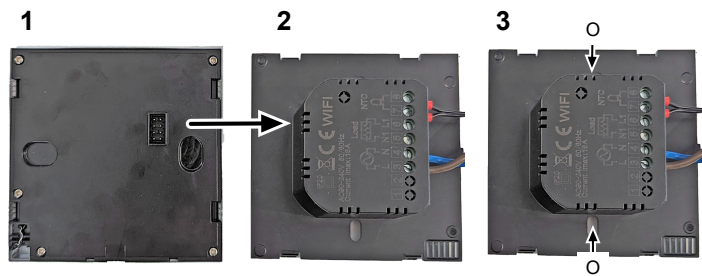
- Correct polarity must be observed while inserting the battery.
- The battery should be removed from the device if it is not used for a long period of time to avoid damage through leaking. Leaking or damaged batteries might cause acid burns when in contact with skin, therefore use suitable protective gloves to handle corrupted batteries.
- Batteries must be kept out of reach of children. Do not leave batteries lying around, as there is risk, that children or pets swallow them.
- Batteries must not be dismantled, short-circuited or thrown into fire. Never recharge non-rechargeable batteries. There is a risk of explosion!

5.7 Drilling



When penetrating the surface (example: drilling or inserting fasteners), make sure no cables or pipes are damaged. Inadvertently penetrating electric cables causes the life-threatening danger of an electric shock! Check for concealed wires and pipes before drilling or inserting fasteners.

6 Installation



Terminal assignment

Terminal	Connect terminal to
1	--
2	--
3 L	Mains supply "L"
4 N	Mains supply "N"
5 N1	Load "N"
6 L1	Load "L"
7	External temperature sensor (No polarity requirement)
8	External temperature sensor (No polarity requirement)

Important:

If the load requires a protective earth connection it must be connected separately.

Procedure

- Switch off/disconnect the power supply to which you will wire the product.
- Unclick and remove the display unit from the thermostat unit. See [1].
- Study the wiring diagram on the back of the thermostat unit. See [2].
- Wire the thermostat unit to the mains supply. Observe the limitations stated in the "Technical data".
- (If required) Wire the supplied external sensor to the thermostat unit.
- Wire the load to the thermostat unit. Observe the limitations stated in the "Technical data".
- Insert the thermostat unit into the flush-mounted/surface-mounted box at the installation location.
- Secure the thermostat unit through the mounting holes (O) with the included mounting screws. See [3].
- Attach the display unit to the thermostat unit. Make sure thermostat unit locks in place.
- Switch on/reconnect the power supply to which you have wired the product.
→ The product starts up and the main display shows.
- Select the sensor type to ensure correct functioning. See [Selecting the sensor type](#) [2].
→ The product is ready for use.

7 Selecting the sensor type

After installing the product, set the required sensor type to ensure correct functioning.

Sensor settings

Menu entry	Purpose	Settings
Sensor type	Select the sensor to be used for temperature measurements.	- Built-in: Internal sensor controls the temperature. - External: External sensor controls the temperature. - Internal and external sensor: Internal sensor controls the temperature and the external sensor is used as the limiting sensor. - Default: Built-in

Procedure

- Tap the button

- Go to Advanced.
- Scroll to Sensor type and select the required sensor type.

8 Declaration of Conformity (DOC)

Conrad Electronic SE, Klaus-Conrad-Straße 1, D-92240 Hirschau hereby declares that this product conforms to the 2014/53/EU directive.

- Click on the following link to read the full text of the EU declaration of conformity: www.conrad.com/downloads

Enter the product item number in the search box. You can then download the EU declaration of conformity in the available languages.

9 Disposal

9.1 Product



This symbol must appear on any electrical and electronic equipment placed on the EU market. This symbol indicates that this device should not be disposed of as unsorted municipal waste at the end of its service life.

Owners of WEEE (Waste from Electrical and Electronic Equipment) shall dispose of it separately from unsorted municipal waste. Spent batteries and accumulators, which are not enclosed by the WEEE, as well as lamps that can be removed from the WEEE in a non-destructive manner, must be removed by end users from the WEEE in a non-destructive manner before it is handed over to a collection point.

Distributors of electrical and electronic equipment are legally obliged to provide free take-back of waste. Conrad provides the following return options **free of charge** (more details on our website):

- in our Conrad offices
- at the Conrad collection points
- at the collection points of public waste management authorities or the collection points set up by manufacturers or distributors within the meaning of the ElektroG

End users are responsible for deleting personal data from the WEEE to be disposed of.

It should be noted that different obligations about the return or recycling of WEEE may apply in countries outside of Germany.

9.2 (Rechargeable) batteries

Remove batteries/rechargeable batteries, if any, and dispose of them separately from the product. According to the Battery Directive, end users are legally obliged to return all spent batteries/rechargeable batteries; they must not be disposed of in the normal household waste.



Batteries/rechargeable batteries containing hazardous substances are labelled with this symbol to indicate that disposal in household waste is forbidden. The abbreviations for heavy metals in batteries are: Cd = Cadmium, Hg = Mercury, Pb = Lead (name on (rechargeable) batteries, e.g. below the trash icon on the left).

Used (rechargeable) batteries can be returned to collection points in your municipality, our stores or wherever (rechargeable) batteries are sold. You thus fulfil your statutory obligations and contribute to environmental protection.

Batteries/rechargeable batteries that are disposed of should be protected against short circuit and their exposed terminals should be covered completely with insulating tape before disposal. Even empty batteries/rechargeable batteries can contain residual energy that may cause them to swell, burst, catch fire or explode in the event of a short circuit.

10 Technical data

10.1 Integrations

Mobile app control	Smart Life/Smart Living
Google Home support	Yes
Amazon Alexa support	Yes

10.2 Power supply

Protection class	Class II
Required wire cross-sectional area	2.5 mm ²
Input voltage	90 – 240 V/AC
Input AC frequency	50/60 Hz
Output voltage	90 – 240 V/AC
Output frequency	50/60 Hz
Relay type.....	Switch relay (1x pole)
Contact capacity.....	max. 16 A
Max. switching capacity.....	3600 W (resistive load) 660 W (inductive load)
Backup battery.....	1x CR1220 battery

10.3 Thermostat

Temperature setting range	+1 to +70 °C
Temperature display range.....	+1 to +70 °C

Display accuracy ±0.5 °C

10.4 External sensor

Sensor type NTC (10k) 1%

Sensor wire length..... 2.5 m

10.5 Display

Touch display Yes

Display type..... LCD (IPS)

Display resolution 480 x 480 pixels

Display dimensions..... 71 x 61 mm

10.6 Security

Display lock function..... Yes

Password protection Yes

Master password 361000

10.7 Wi-Fi module

Wi-Fi standard IEEE 802.11b/g/n, 2.4 GHz

Wireless frequency band 2.400 – 2.484 GHz

Wi-Fi range max. 100 m (in open area)

Wi-Fi transmission power ≤20 dBm

10.8 Others

Ingress protection IP20

Operating temperature 0 to +50 °C

Operating humidity 20 – 80 % RH (non-condensing)

Storage temperature -10 to +60 °C

Storage humidity 20 – 80 % RH (non-condensing)

Dimensions (W x H x D) (approx.) . 86 x 86 x 15 mm

Weight (approx.) 250 g

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