Installation and operating instructions

Airobot underfloor heating thermostat 230V

Important information

Warning! Risk of electric shock. 230 V electrical work must be performed by qualified personnel only.

The Airobot underfloor heating thermostat works only with water (hydronic) underfloor heating actuators. It is not suitable for electric floor heating; for electric floors use the external relay A-HC-R23016 (ask your dealer).

In a room, the thermostat opens/closes the actuator on the floor manifold to regulate hot-water flow under the floor. It does not control the heater, so the maximum room temperature depends on the heater's setpoint—e.g., setting 25 °C on the thermostat won't be reached if the heater is set lower.

Installation conditions

The room sensor measures air temperature to control room heating. For accurate readings:

- Do not place near heat sources (radiator, TV, router).
- Keep out of direct sunlight:
    - Sunlight heats the thermostat, causing incorrect readings.
    - Prolonged exposure may damage the display.

Installation

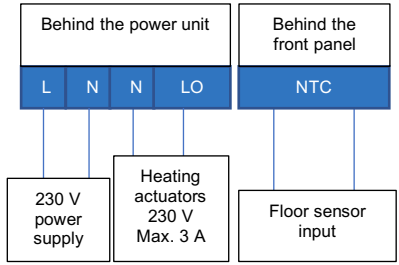
Step 1 Turn off the relevant circuit breaker(s). Verify no voltage with proper test tools. 230 V work must be done by qualified personnel.

Step 2 If replacing an old thermostat

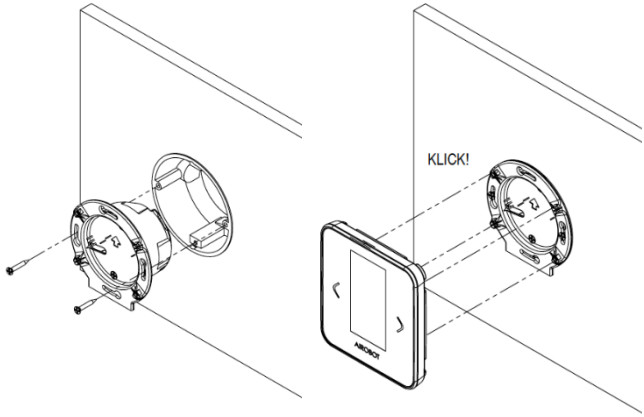
- Label all wires.
- Photograph or note the old connections.
- Remove the old thermostat.

Step 3

- Connect wires exactly as in the wiring diagram.
- If the actuator has no “N” wire, leave the N terminal unconnected.
- One thermostat can switch up to 5 actuators; max total load 1 A.



Step 4 Route floor sensor (optional)
Feed the sensor cable through the power unit’s side opening to the mounting plate.



Step 5 Screw the power unit to the wall box.

Step 5 (Optional) Plug the sensor leads into the NTC terminals behind the front panel

Step 6 Snap the front panel onto the power unit. Ensure no cables are pinched.

Step 7 Restore power. If the AIROBOT logo appears, press OK to begin setup.

Step 8 Follow the on-screen instructions to complete configuration

	Description
Choose a language	**Estonian** or **English**
Select the mode of operation	**Air - controls by room air temperature.** **Floor / Floor**: controls by floor temperature (requires sensor). You can change this later.
Screen	**Normal** (light**)** **Black** (dark/inverted)

You can change the settings later by going to Menu - Settings.

Step 9 Test the actuator

- Raise the setpoint above the room temperature to switch ON.
- Confirm the actuator opens (allow up to 10 min).
- Lower the setpoint and confirm it closes.

Step 10 (Optional) Connect to Wi-Fi

- Press MENU - WiFi or MENU - Settings - Connectivity - WiFi
- On your phone/computer, join Airobot-Thermostat-XXXXXX.

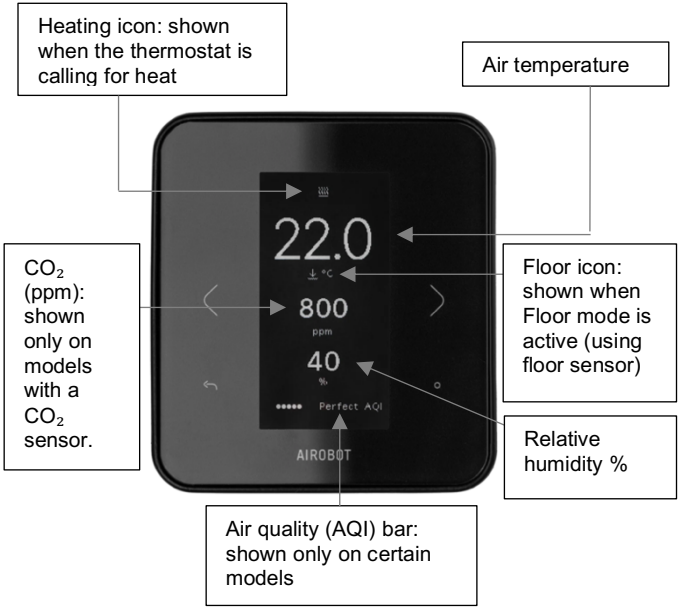
- In a browser, open *airobot-thermostat.local* (or the IP shown) or scan the shown QR code
- In a browser, tap SCAN/SEARCH WIFI, choose your home network, enter the password, and Create Connection.
- On success, “Pending..” changes to “Connection established”. Registration runs automatically (may take a few minutes) and the thermostat may update its software.
- If it fails, go to MENU → WiFi and choose reset network settings (“Do you want network settings to zero? — Yes”), then retry.

Step 11 (Optional) Add to the mobile app

- On the thermostat: MENU - Mobile application to show a QR code.
- In the app: Settings - Homegroup - Add a new device.
- Scan the QR code or enter the ID and password manually.

Use

Main view



Select a setpoint

- If the room temperature drops below the setpoint, the thermostat calls for heat.
- **Range:** +5…+35 °C.
- **Default:** 22 °C (good balance of comfort and efficiency).
- **Presets:** Home and Away. When Away is active, a holiday icon appears.

Features

Air quality & CO_2 (models with -AQ) - The thermostat shows an AQ score from 1 to 5 (5 = very good, 1 = unhealthy) based on CO_2 and humidity. CO_2 is shown in ppm; outdoor air is ~400 ppm. Guidance: 400-800 good, 1000–1600 high, over 1600 poor and ventilation should be improved. Readings are most accurate in rooms with active ventilation.

Boost (mobile application) - Forces heating on for 60 minutes, then returns to the previous mode (Auto or Away).

Valve exercise - To prevent sticking, the actuator is switched off for 8 minutes at least every 96 hours.

CO_2 to Airobot ventilation -

- Works with ventilation units produced from 07/2021 (ID/SN V02..) and thermostats with a CO_2 sensor (-AQ).
- Internet connection is required; the function operates via the Airobot cloud.
- In the app, add the thermostat and ventilation unit to the same Homegroup. In the ventilation settings, enable "Transmit CO_2 from room sensors/thermostats for air-quality control." Activation can take up to 10 minutes; CO_2 readings per room will then appear and you can set an upper CO_2 limit that increases the fan speed.

Local API - Allows local integration with common home-automation systems. See the Airobot Support site for documentation.

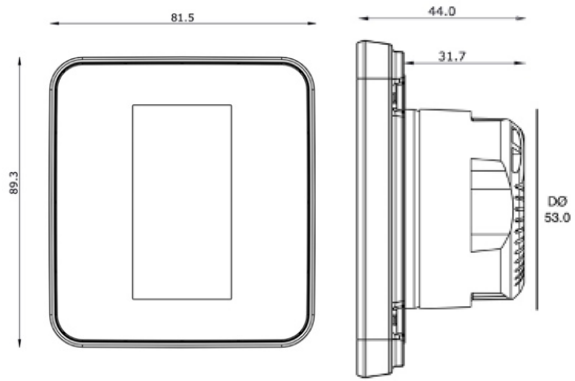
Factory reset - Open Settings - Expert. Hold OK for 5 seconds to open Expert, then choose Reset factory settings.

Expert settings - Hold OK for 5 seconds on Expert to reveal all options. Some are hidden by default.

- **Temp calibration:** Adjust the displayed temperature by ± value. Use when the thermostat is in a location that misreads room temperature.Recommended to use if the thermostat is located in an unsuitable location for measuring temperature
- **Control mode**
    - **Air temp -** controls by room air temperature.
    - **Floor temp**: controls by floor temperature (requires sensor). You can change this later.
- **Floor protection temperature:** Sets the maximum permitted floor temperature to protect floor finishes and safety. Floor sensor is required.
- **Air maximum temperature:** Sets the highest allowed setpoint.

- **Air minimum temperature:** Sets the lowest allowed setpoint.
- **Set PIN lock:** Locks the thermostat with a PIN so settings or setpoint cannot be changed
- **Setpoint allowed:** Chooses whether the setpoint can still be changed while the PIN lock is active.
- **Factory reset:** Restores factory settings.

Model	Air quality measurement with CO_2 sensor	Color
TE1-W	Not	White
TE1-W-AQ	Yes	White
TE1-B	Not	Black
TE1-B-AQ	Yes	Black



Accessories	Model
Actuator 230 V NC	A-HC-A230
Floor sensor 3 meters	A-HC-SFL10K
External relay for controlling electric floor heating	A-HC-R23016

Specifications

Maximum current	Up to 3 A
Actuators	230 V, NC normally closed
Power supply	230 VAC 50 Hz
Power cable	Maximum 2 × 1.5 mm^2
Power	0.3 W thermostat only
Network connection	Wi-Fi 2.4 GHz
IP class	IP20
Floor sensor	10 kΩ NTC (default), maximum 0.75 mm^2, expert setup additional options 6.8, 12, 15, 22, 33, 47 kΩ
Installation	EU wall box D68 mm, min depth 35 mm. Spacing between the fixing screws 60 mm.
Operating temperature and humidity of the installation	0 °C to 45 °C, max. 80% (non-condensing)
Temperature sensor	Digital, accuracy ±0.2 °C

Air humidity sensor	Digital, accuracy ±2%
Carbon dioxide (CO_2) sensor, *only on a model marked -AQ*	Photoacoustic, accuracy ±50 ppm + 5% reading
Compatibility	iOS/Android mobile app, Local API
Compliance with standards	EN 60730-1, EN 60730-2-9, EN 61000-6-2, EN 61000-6-4
E-paper screen	To save energy, the reading is updated on the screen every 5 minutes. The screen occasionally turns all black when it switches
Connection to the server	The thermostat sends readings securely and encrypted to the Airobot server every 3 minutes, with the same interval the data is updated in the mobile application.
Weight	113 g
Dimensions	82 x 89 x 44 mm
Package weight	168 g
Package dimensions	14 x 12.5 x 5 cm

Warranty terms

Duration: 2 years from the purchase date. Proof of purchase is required; if unavailable, the production date applies.

Coverage: Defects in materials or workmanship under normal use. Airobot or an authorized service partner will repair or replace the product at their discretion.

Not covered.

- Misuse, negligence, accidents, or improper handling
- Any unauthorized modification
- Normal wear (scratches, dents, cosmetic damage)
- Consumables (e.g., batteries) unless stated otherwise
- Damage from liquids, temperature extremes, or abnormal environments
- Software-related issues (including data loss or corruption)
- Third-party accessories or components not supplied with the product

How to claim: Contact your dealer or Airobot Customer Support via the website. Provide proof of purchase, a problem description, and other relevant details (e.g., photos, serial number).

Remedy: If the defect is confirmed, the unit will be repaired or replaced with a similar model. The repaired/replaced product is covered for the remainder of the original warranty or 6 months, whichever is longer.

Legal: This warranty is in addition to rights provided by applicable laws and regulations.

Manual updates: If your thermostat is connected to the internet, software updates may change functions or screens. Always check the latest version of the guide on the Airobot website.

Manufacturer details
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Customer support and guides

Version 08.2025