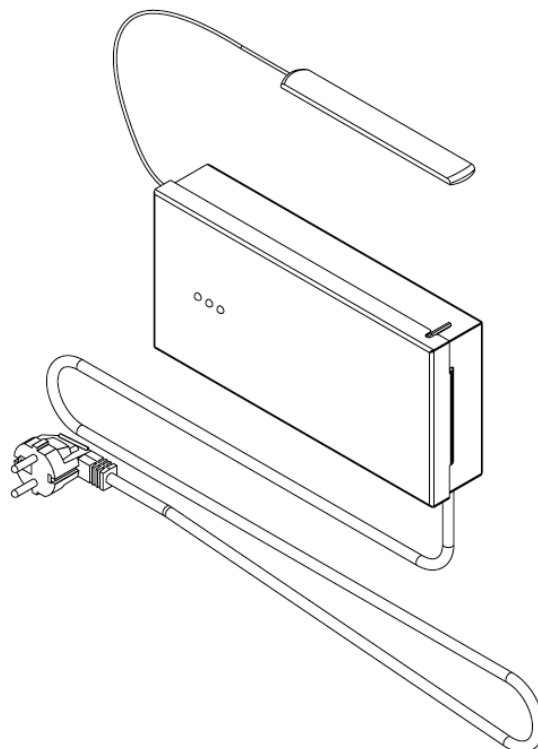# Installation and operating instructions

Airobot underfloor heating control automation 24 V system

Room controller A-HC-RC1

Room sensors SE1

# Contents

Installation

Room controller

In general, the room controller is installed in the collector cabinet. The room controller is attached to the wall with a DIN slat. When installing, make sure that the room controller does not come into contact with liquids, high humidity or hot sources. Installation is allowed both vertically and horizontally. DIN slats wall mounting tools choose according to the type of wall, they are not included.

Step 1: attach the DIN clamp included in the package to the room controller with 2 screws
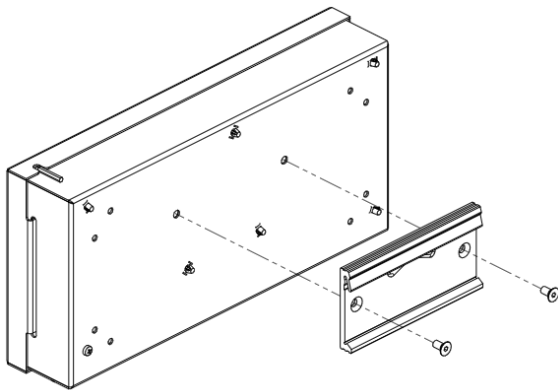
Step 2: attach the DIN slat to the wall with a suitable fastener (not included)
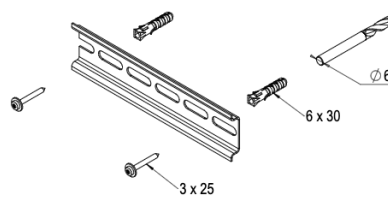
Step 3: Place the room controller DIN on the slat and, when pressed down with little force, it locks into it.
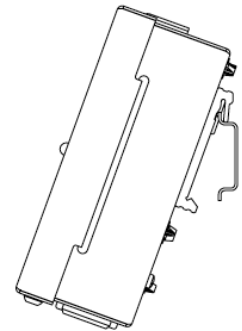
Room sensors

When choosing the location of the room sensor, it should be borne in mind that the purpose of the room sensor is to measure the air temperature in the room and, based on this, to regulate the heating of the room. To obtain the most accurate reading possible, when choosing the location of the room sensor, it is necessary to observe:

- Must not be near the radiator (for example, TV, router)
- Not allowed to be exposed to the direct rays of the sun

Installation:

- Attach the wall adapter to the device or wall with 2 screws
- Connect the wires according to the scheme in the section "Connecting room sensors"
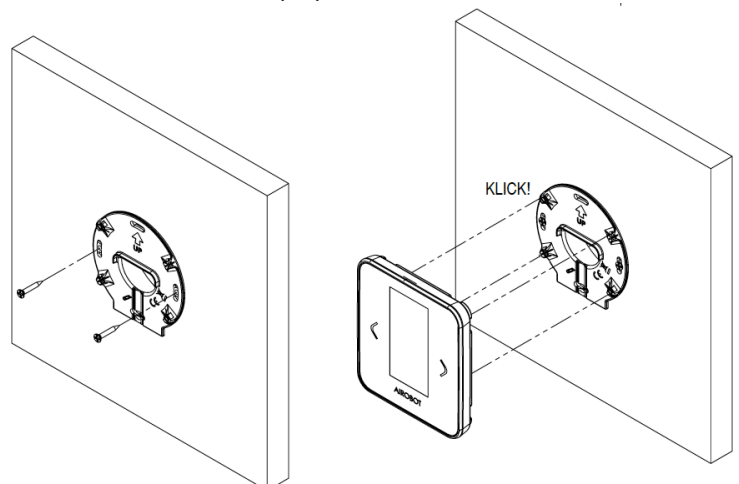
- If there is also a floor sensor, connect it to the connector marked NTC
- Attach the room sensor to the wall adapter

Remove:

If the need arises to remove the panel, then insert the end of the thin screwdriver between the wall adapter and the front panel (the hole is located in the bottom center) to a depth of about 2-3 cm and, gently bending, contribute to the removal.

Connect

Connecting room sensors

Connection of room sensors: Connect the wires according to the marking behind the room sensor +Ve, B, A, -Ve. It is allowed to combine different connection variants (see example connection variants A and B). Each room sensor has a unique address ID, so they are detectable by the system even if several room sensors connect to the room controller with a single cable . The total length of one circuit should not exceed 100 meters.

Connecting a floor sensor

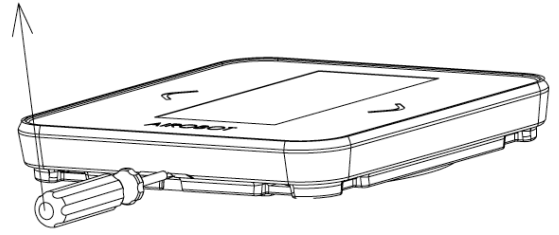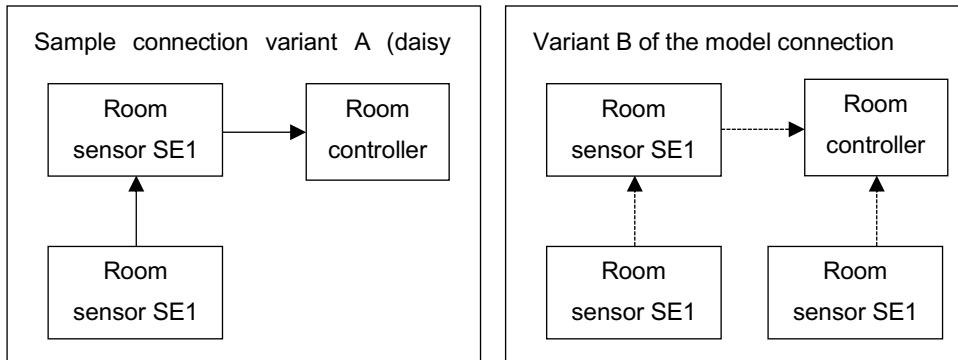Room sensors also allow you to control heating through the temperature of the floor. Behind the room sensor, there is an NTC temperature sensor input – connect the NTC 10kΩ sensor to the marked connector. In the case of connecting the floor sensor, when the room sensor is initially set up, it must be selected that the control is carried out through the floor sensor, since by default the air temperature is controlled from the sensor.

Connecting room sensors to the room controller

Room sensors must be connected to the connectors of the room controller T1, T2, T3 and T4 according to the designation: +Ve, B, A, -Ve. Make sure that the corresponding markings match with both the room controller and the room sensor connection. On the room controller, 4 connectors (from T1 to T4) are provided for this. It is also allowed to connect several room sensors to one connector, therefore, in the absence of room, it is allowed to make a connection externally in a separate electrical supply from the room controller. The order of the connection does not matter, because the room sensors can later be detected by the system by assigning a unique ID number to each room sensor.
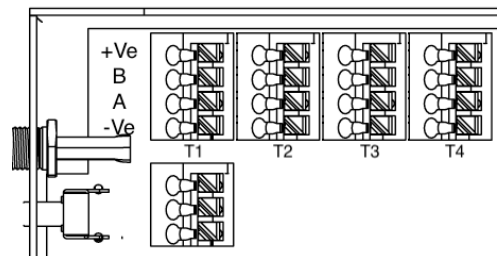
Connecting actuators

24 V NC (normally closed) type actuators shall be used. Connect the actuators according to the electrical circuit, where the **BROWN wire of the drive is connected to the "+" connector of the room**

controller and the **BLUE wire to the "–" connector of the room controller**. It is allowed to connect 1 drive under one connector.
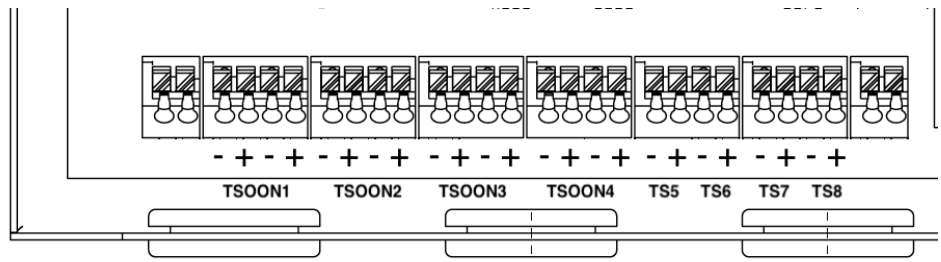
It is important to put the actuators in place according to the zones that are planned to be created. The designation of the zones is marked on top of the room controller. Zones 1 to 4 can be connected to each of the 2 actuators, zones 5 to 8 can be connected to each 1 drive. Later in the setup, it is possible to put, for example, several zones to control according to one room room sensor.

Circulation pump control

Ask for more from the dealer, software support coming soon with an over-the-air update. With a room controller, it is possible to control the operation of the circulation pump, if desired. The circulation pump is switched on when at least 1 of the room sensors requires heating or cooling. The pump is started by a delay of 3 minutes. To connect the pump, connect the "L" phase wire of the pump supply through the RELAY designation on the room controller to the contacts (potential-free relay) – by connecting the cables "NO" and "COM" to the contacts.
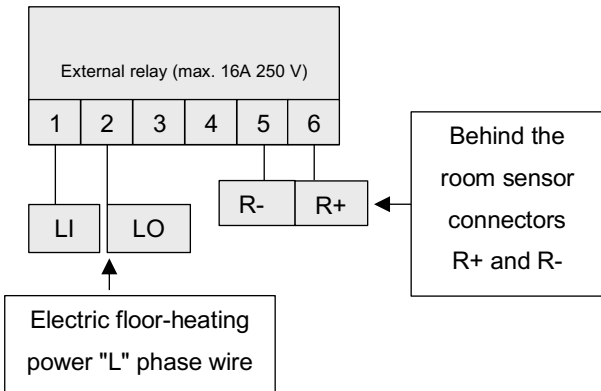
Control of electric floor heating with an external relay

Ask for more from the reseller, software support is coming with an over-the-air update. Hardware support is available and connections can be established now.

With a room controller, it is possible to control electric floor heating using an external relay. The optional external relay (A-HC-R2416) is installed behind the room sensor in the EU unit. The room that you want to heat with electric floor heating must be equipped with a floor temperature sensor. The phase cord of electric floor heating "L" must be transported through the relay (switching *on the principle of normally open*). There are 2 ways to control electric floor heating:

- **Solution 1: The room (zone) has only electric underfloor heating**: For electric floor heating, place the external relay behind the room sensor in the device and connect the relay to the R+ and R- marked sockets of the corresponding room sensor. The room sensor must still be assigned to a specific zone when setting up, but the drive will not be connected to that zone.
- **Solution 2: Electric underfloor heating and water underfloor heating in the room (zone):** If the floor cooling mode is activated in the room controller, then in the case of such a zone the drive is closed and the external relay for heating with electric floor heating is activated (if set). This allows you to make cooling in the floor while keeping the floor of the room with electric underfloor heating warm.
  - Water underfloor heating drive connect as usual to the corresponding zone
  - For electric floor heating, place the external relay behind the room sensor in the device compartment and connect the relay to the R+ and R- marked sockets of the corresponding room sensor.

Figure for connecting the relay:

External relay (max. 16A 250 V)

| 1 | 2 | 3 | 4 | 5 | 6 |

R- R+

LI LO

Behind the room sensor connectors R+ and R-

Electric floor-heating power "L" phase wire

General GPI input

Function 1: Activating floor cooling

It is possible to switch the room controller to the floor cooling mode automatically by sending a potential-free signal from the heater with a 2-groove low-current cable. The cable must be transported from the heater to the room controller and connected to the GPI input in the room controller. As for the output of the heater, connect in accordance with the instructions of the manufacturer of the heater. When making a connection, check the operation – the GPI LED light must be on when you receive the signal (after 30 seconds). *Ask the dealer for more information.*

GPI
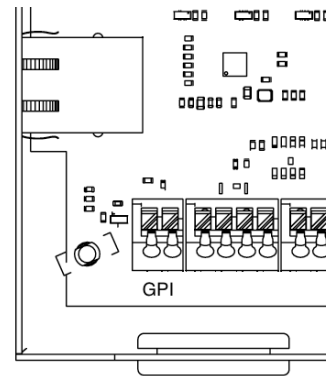
Connecting pipe temperature sensors

It is possible to connect up to 2pcs of a 10kΩ NTC type temperature sensor (product code A-HC-SPT10K) to the room controller. Sensors are not included and can be ordered separately. The pipe temperature sensor allows you to measure the temperature of the water flowing in the pipes from the surface of the pipe. The sensor is installed on the surface of the pipe with a special clamp mount. For example, the temperature of the water arriving and leaving the underfloor heating manifold can be measured, but the final choice of which pipe surfaces you want to measure is up to the end user. Connect the wires to the connector marked "NTC1" or "NTC2" on the room controller according to the electrical circuit.

NTC2 NTC1
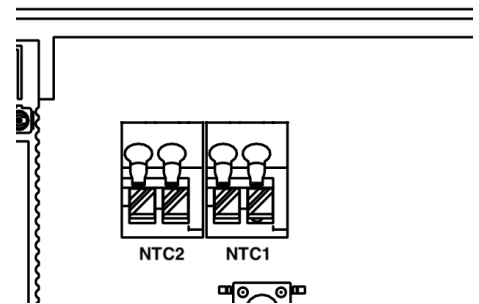
Connection to the power supply

The connection of the room controller to the electrical network is allowed only if the room controller and accessories connected to it, such as room sensors and actuators, are properly installed and the electrical connections are made correctly:

- Check whether all electrical connections are made correctly, incorrect connection between room controllers and room sensors can damage the equipment
- To connect to the electrical network, put the power cord of the room controller in the connector.

Initial setup

Pairing room sensors

If room sensors and the connection of the wires of the room controllers are established, then the next step is to determine and create zones that each room sensor will control. For setup, it is recommended to fill in the "Setup table" in advance, which can be found at the end of the instruction manual.

Step 1 – activate the pairing mode

- Connect the room controller to the mains.
- **Activate the pairing mode**. In the room controller, hold down the FUNCTION button for 3 seconds – the pairing mode will be activated - ⚡ the LED light will start flashing red-green. In the setting mode, the room controller begins to actively search for room sensors connected to it.

Next, you need to set up each connected room sensor separately.

Step 2 – Repeat for each room sensor

1. Select language: English or Estonian
2. Select the screen screen: plain or black
3. Choose a control method: air temperature or floor temperature
    a. Air temperature: control is carried out by air temperature
    b. Floor temperature: control is carried out according to a separate external floor sensor. To do this, it is necessary to connect an external sensor according to the room sensor.
4. Select the room sensor ID: This must be **a unique number for each room sensor** that is connected according to this specific room control. Press the left or right button to select the ID. To confirm, hold the OK button for 3 seconds.
5. Select the zones that a particular room sensor will control. There may be several of them.
    a. To dial the zone number on the screen, press the left or right button.
    b. To select a zone, press the OK button.
    c. When the zone(s) are selected, hold the OK button for less than 3 seconds to finally confirm the selection.
6. The room sensor setup is successfully completed when a message is displayed.

Step 3 – complete the pairing mode – when all room sensors are set up and paired

When all room sensors are set up, press the FUNCTION button 1 time in the room controller to end the room controller's pairing mode. - ⚡ The LED will remain permanently on green. In the event that the pairing mode is not terminated manually, its termination will occur automatically after 2 hours from the moment of activation.

Example 1: a bedroom, 2 heating circuits run under the floor, so 2 actuators are required for control. 2 actuators for zone 1 are connected to the room controller. When setting up a room sensor, choose in the selection of zones: 1.

Example 2: the living room and kitchen are driven jointly by one room sensor, 5 contours run under the floor, so 5 actuators are required for control. 5 actuators for zones 1 (2 actuators), 2 (2 actuators) and 5 (1 drive) are connected to the room controller. When setting up a room sensor, choose in the selection of zones: 1, 2, 5.

If there are problems with connecting, read the chapter "Error messages and emergency situations".

Testing zones and actuators

When all zones are created and set up, it is necessary to check whether each room sensor opens the actuators assigned to it. To do this, put the temperature setting point on the room sensor higher than the room temperature to create a demand for heating. Visually check whether the actuators have opened (opening takes 10 minutes). If the demand for heating is generated in several room sensors at once, then the system may create a queue when the actuators open, and the opening period may be somewhat longer. The figure describes the open position of the actuators offered by Airobot, in the case of using a drive from another manufacturer, familiarize yourself with the instructions for the drive to understand whether the drive is open or not. If the drive does not open, read more in the chapter "Error messages and emergency situations".

The drive is in the	The drive is in the
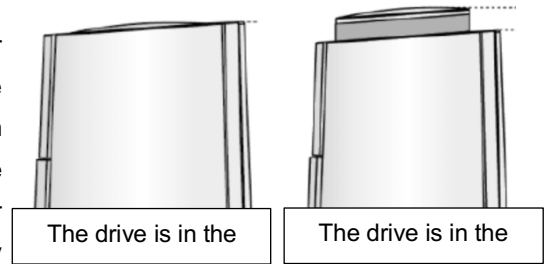
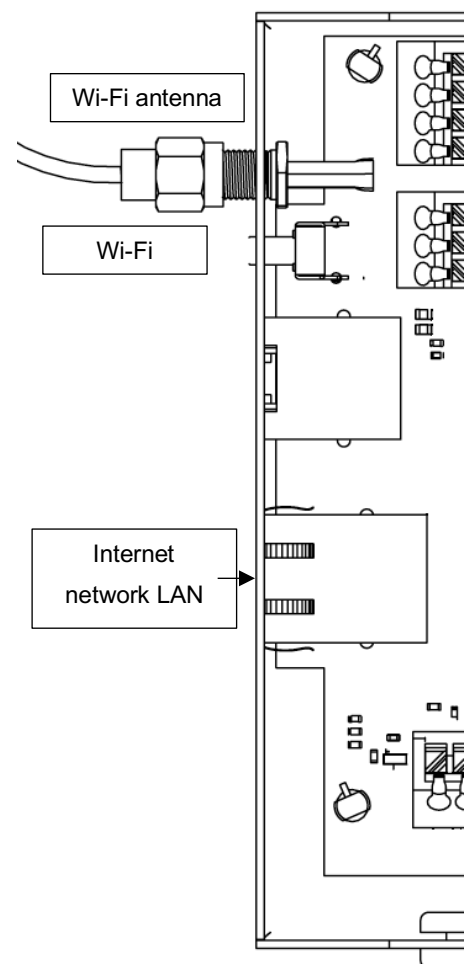# Connecting the room controller to the Internet network

Attention! Upon initial connection to the network, the room controller and room sensors may automatically start making a software update. Depending on the version, the room controller software update may take a few minutes. A software update for room sensors can take up to 10 minutes per room sensor – a corresponding message will be displayed on the screen when the update occurs. During the update, the power supply must not be removed until the update is complete.

Wi-Fi antenna

Wi-Fi

Internet network LAN

Connecting to the Internet network is indicative, it allows:

- Control the room controller and room sensors via mobile app
- Receive regular software updates

There are 2 ways to connect to the network:

- **Wired connection (LAN)** – Recommended connection method: Plug the Internet plug into the network socket on the left. In case of a successful connection, the orange light on the network socket of the room controller should start flashing. If the light is not blinking, check if the network cable is connected to your router and the Internet connection is available. In case of a successful connection, ⊕ the LED green light will remain permanently on

- **Wireless connection (Wi-Fi)** - a computer or smartphone is required to connect to a wireless Internet network:
  1. Connect the Wi-Fi antenna to the room controller.
  2. Place the Wi-Fi antenna in a location where Wi-Fi coverage is stronger – often collector cabinets are metal and coverage may be limited. If there are problems with the connection, then bring the antenna outside the collector cabinet.
  3. Press the Wi-Fi button on the room controller 1 time to activate the local area network. ⊕ The LED red light will start flashing.

4. Open the WI-FI (wireless Internet connection) settings on your phone or computer and look for a WI-FI connection called "Airobot-Room-Controller-XXXXX" and connect your smart device to this network.

5. Once connected, open the web browser app on your smart device and type in the address bar
   http:// *airobot-room-controller.local or http://192.168.4.1 or scan QR code:*

6. Now the room controller setup page should open for you:
   - Press "Search Wi-Fi network"
   - Click on "Choose a suitable Wi-Fi network from the list" and select your home wireless Internet network
   - Enter the password for the home wireless Internet network in the "Password" box.
   - Press connect.

In case of a successful connection, ⊕ the LED green light will remain permanently on

Doesn't the Wi-Fi setup page on the room controller open?

Often the problem can occur with smartphones, where the phone does not want to stay connected to the Wi-Fi network of the room controller.

- Turn off mobile Internet
- Check how many times if the phone still stays inside the network created by the room controller
- Try setting up with a laptop or a smartphone from another manufacturer

If Airobot-Heating-.." is not displayed in the list of network names, then the reason may be:

a. The device's Wi-Fi network cannot be found with the smart device – press the Wi-Fi button to make the network visible.

b. You already have a room controller connected to the Internet using the LAN Internet cord, in which case you will not be able to connect the room controller to Wi-Fi.

c. You have already done the Wi-Fi setting beforehand, but something may have gone wrong, and the mobile application still claims that there is no Internet connection with the control module – to do this, try to make the setup again and restore the network connection settings – to recover, hold down the Wi-Fi button on the room controller for 5 seconds.

Your home wireless Internet network will not be displayed in the list:

Fireplace cabinets are often located in a cabinet with a metal case, which can significantly reduce the Wi-Fi coverage area – try to find a better location for the Wi-Fi antenna and do a new search.

Add a room controller to the mobile app

The room controller must be pre-connected to the Internet network, otherwise it cannot be added to the mobile application. To add a room controller to the mobile application:

- In the room sensor, open Menu – Mobile app (QR code will be displayed)
- In the mobile app, open the homegroup settings and add a new device
- In the mobile application, add a name to the room controller (for example, "1st floor")
- Using your phone's camera, scan the QR code displayed on the room sensor – if scanning fails, the codes can also be entered manually

When you add a room controller to the app, you will instantly see the data of all the room sensors (zones) connected to it. If you have multiple room controllers, add it to the same homegroup in the mobile app as well.

Add a name to zones in the mobile app

In the mobile application, it is possible to assign a unique name to each zone (for example, living room, bedroom, etc.). To do this, open the Settings page in the mobile app – select the corresponding room controller from the list. Now the created zones and room sensors will be displayed in the list, where it will be possible to specify a name. To identify a room sensor, it's best to look at the sensor ID displayed in the mobile app and check the About room sensor menu to see if they overlap.

Use

Main view:

Heating: if the icon is displayed then the room sensor currently requires heating

Carbon dioxide CO2
Only on certain *models*

Air temperature °C

Floor icon: displayed when measuring through a floor sensor

Relative humidity %

Air quality assessment

Select a setting point

If the actual air temperature drops below the setting point, then the thermostat requires heating. It is possible to choose between +5 °C and +35 °C. The default setting point is 22 °C, which is also the recommended limit between energy efficiency and cognitive comfort. It is possible to set up two different setting points: at home and away. In the active state of remote mode, the holiday icon will be displayed on the screen.

- Reducing the desired temperature
- Top menu

- Backwards

- Increasing the desired temperature
- Download in menu

- Menu
- OK verification

Modes of operation

Home

The control works normally: if the actual temperature drops below the user's setting point (automatic mode setting point), then the heating in the corresponding zone is switched on. The default setting point is 22 °C, which is also the recommended limit between energy efficiency and cognitive comfort.

Away

For the difference between the mode of operation at home and away, the user has the opportunity to set a different setting point of the desired temperature: the setting point of the away mode. Activating the away mode allows you to switch all the room sensors connected to the room controller to the "Away" temperature setting point at once. The default setting point is 18 °C. This feature is only available through the mobile app.

Boost (boost)

The temporary mode of operation "gain" allows you to turn on the heating of all zones for one hour at a time, regardless of the setting point of the temperature desired by the user at the moment. When the time comes to an end, the previous operating mode is switched back (automatic or away). This feature is only available through the mobile app.

Features

Connection to the ventilation unit (for air quality control)

Functionality is available on ventilation devices starting from software version 531. Connection is only possible with Airobot devices produced from 07.2021 (ID/SN number starting with V02..) By connecting the room controller Airobot to the ventilation unit, it is possible to transmit the CO 2 reading of the room sensors to the ventilation unit. The ventilation unit monitors the CO 2 readings of the received room sensors, and if somewhere in the room the reading rises above the set limit, then the ventilation unit increases the ventilation rate in order to bring the CO2 level down. Room sensors must be equipped with a CO_2 sensor (in the model designation *-AQ)*. The functionality works through the Airobot server, which makes it necessary to connect the ventilation unit and the room controller to the Internet network. To activate the function:

- The software version of the ventilation unit must be at least 531
- In the mobile application, add a room controller and a ventilation unit to the same homegroup
- In the mobile application, open the settings of the ventilation unit - "Transmit the CO 2 readings of room sensors or thermostats to the ventilation unit for control by air quality". Activation can take up to 10 minutes, after which CO 2 readings from each room will appear in the mobile application to the ventilation unit. It is possible to set one upper limit for CO2, above which the ventilation rate will be increased.

Compatibility: Local API

The functionality is still under development and will be added over the air during the software update. The Airobot room controller can be controlled with the most common house automation systems via a local API. To control, it is necessary

to connect the room controller to the local Internet network and activate the corresponding functionality from the room sensor settings menu. API documentation can be found on the Airobot web helpdesk page.

Network settings reset

When restoring the network setting, the current wireless Internet network (Wi-Fi) setting is deleted from the room controller's memory: this allows the room controller to be connected to a new network. To recover, hold the Wi-Fi button for less than 5 seconds. In case of successful recovery, ⊕ the LED red light will be on for 15 seconds.

Factory reset

> **Warning!** Restoration of the factory setting should be carried out only by specialists with the appropriate qualifications. Upon recovery, all previous settings, including already created zones, will be deleted, and the entire setup process will have to be redone. When restoring, all pre-set and room sensors associated with the room controller should be connected to the room controller since the room controller also performs a factory reset on them. If the room sensor was not connected to the room controller, then a separate factory restoration of the room sensor should be performed. **If a restoration is done, you should always restore the room controller and all room sensors and start the setup from scratch.**

Restoring the factory settings of the room controller:
To restore, hold down the FUNCTION button on the room controller for 15 seconds. Upon successful restoration, all LED lights will be lit red for a while, and the language selection or Airobot logo must reappear on the screen of the room sensors connected to the room controller – now the setting must be done again according to the instructions. If the language selection or Airobot logo does not appear on the screen of some room sensors and the temperature-humidity view is still displayed, then these room sensors must be restored to separate factory settings.

Restoring the factory settings of the room sensor:
Open the room sensor menu and navigate to (but not open) the "Settings" menu. Hold the OK button from the "Settings" menu option (5 seconds) until the settings view opens with an additional option – select the restore factory settings option.

Replacing the room sensor

In case of failure of the existing room sensor, it must be replaced with a new one. When switching, it is necessary to determine what the room sensor with the ID number was there before, the same ID number must be assigned to the new room sensor. The room sensor ID is visible from the About view of the room sensor. If the room sensor is faulty and the numbers cannot be viewed from the ID, then:

- If connected to the Internet – open the room controller information view in the mobile app and see what the Sensor ID is (for example, the zone "Living room, sensor ID 1")
- Marking sticker "ID-X" behind the room sensor (there is not always a sticker)

Once the room sensor ID has been established:

- Connect a new room sensor and plug in a room controller
- Activate the pairing mode on the room controller by holding down the FUNCTION button for 3 seconds
- On the room sensor, make the setup again and select the room sensor ID – for example, if the faulty room sensor ID was 1, then enter the number 1 on the new room sensor.
- Stop pairing mode by pressing the FUNCTION button once.

Error messages and emergency situations

Initial setup: The room sensor cannot connect to the room controller at the first pairing
Possible causes:

- Check if the room controller is in pairing mode. ⚡ - The LED light must flash red-green.
- Cabling error - check the connection of the A and B wires between both the room sensor and the room controller.
- Setup error - make sure that the specified room sensor ID was unique. Each room sensor connected to the room controller must have a unique ID number.

Error message: The room sensor is not connected to the room controller

Possible causes:

- Cabling error – check the connection of the A and B wires between both the room sensor and the room controller.
- The room controller was subjected to factory reset – in rare cases, it is possible that the factory settings of the room sensor were still retained when restoring the factory settings. In this case, make a separate restoration of the factory settings for the room sensor: to do this, open the room sensor menu and navigate to (but not open) in the "Settings" menu. Hold down the OK button (5 seconds) until the settings view opens with an additional option – select the restore to factory settings option.

The room sensor does not have an image in front or the image is in front and does not update or respond to touches

Possible causes:

- Cabling error – check the connection of the wires between both the room sensor and the room controller (+Ve and -Ve connectors). If possible, measure with a multimeter whether the power supply reaches the room sensor
- Reboot the room controller by unplugging – generally the easiest way to pull out the corresponding automatic fuse from the switchboard for 30 seconds.
- Room sensor failure – if the supply current definitely reaches the room sensor, then the room sensor may be malfunctioning. Contact your dealer.

The connection between the room controller and the room sensor is lost

If in one of the set zones the connection to the room sensor is lost, then this zone goes into emergency mode as long as the connection is restored: the pattern repeats for 16 minutes heated, 6 minutes is not heated.

The drive does not open

- Check if the room sensor has created a demand for it to open – to do this, the setting point must be higher than the actual temperature displayed and the display must display the heating icon.
- Visually check the connection of the room controller actuators to see if the LED light with the appropriate marking is on (Z1 to Z8 LED, where, for example, Z1 stands for zone 1) – if the LED light is not on, then the room sensor has not created a demand for heating: check the setting. When activating several zones at once, a queue may occur on the switches, each subsequent zone is switched on after 2 minutes.
- If the LED light at the marking of the corresponding zone is on, but the drive still does not open, then most likely it is a faulty drive. Try temporarily using the same connector for other known working drive or measuring with a multimeter whether a 24V DC power supply is available.

The room controller's network connection (from the app) disappears from time to time

For a wireless network connection: the specifics of the building and the locations of the installation of the room controller can have a significant impact on the Wi-Fi coverage area. The included Wi-Fi antenna is on top of a 3-meter cable – try to place it in another location and check if the coverage is better. Often, collector cabinets are made of metal, which significantly impede the range of coverage. The antenna should be placed outside the cabinet.

Specifications, dimensions and annexes

Room controller

Dimensions (mm)
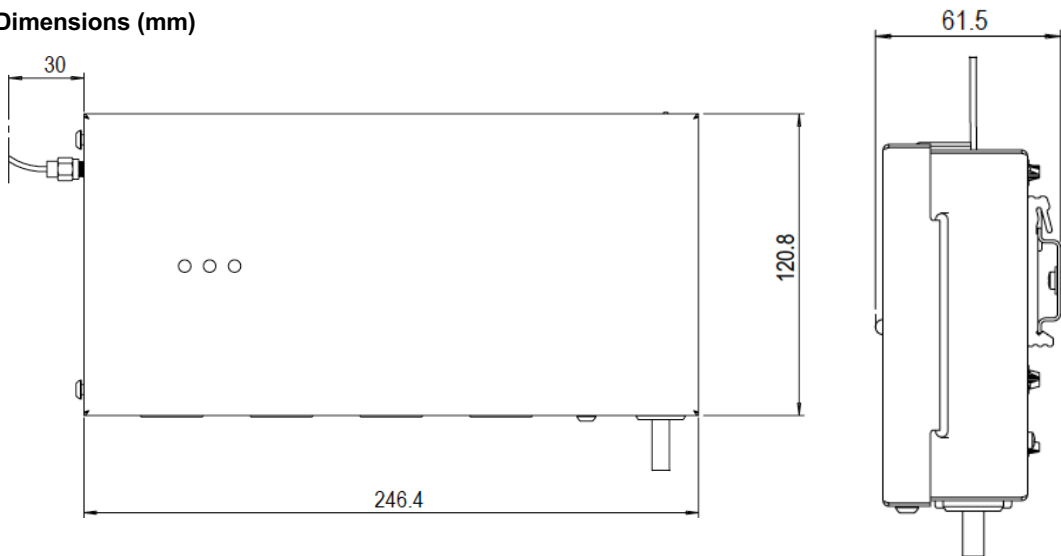
Annexes:

Product	Description
A-HC-SPT10K	Pipe temperature sensor for room controller, length 1 meter, NTC 10 kΩ
A-HC-A24	Drive for underfloor heating room controller with 24 V, M30 x 1.5 adapter

Specifications:

Model	A-HC-RC1
Maximum number of room sensors	8
Tax on heating zones. number	8
Connectivity to room sensors	4-soOnline low-current fiber cable, from 0.22 mm2 to 0.75 mm2, max. length 100 m. It is recommended to use a data cable.
Maximum number of actuators	12
Drive output	24 V DC, de-energized in the closed position (normally closed), liver. switching voltage 0,2 A
Power supply	230 VAC 50 Hz
Power	Liver. 45 W
Power connection	1 meter cord with EU connector
Ambient temperature and humidity when working	0 °C to 50 °C, max. 80% relative humidity (non-condensing)
Output relay 2, boiler (RELAY)	Potential-free NC/NO, tax. 3 A resistive or 1 A inductive
Network connection	Wi-Fi 2.4 GHz or LAN with internet wire
Compatibility	iOS and Android mobile app

|		
Compliance with standards	EN 60730-1, EN 60730-2-9, EN 61000-6-2, EN 61000-6-4	
Dimensions	244 x 55 x 120 mm	
Weight	1.25 kg	
Package dimensions	30 x 30 x 5.5 cm	
Package weight	1.6 kg	

Electrical diagram of the room controller

On the room controller, the exact markings are indicated, in which locations exactly each plug is located.

Connecting terminals	Designation	Explanation
+Ve (24 V) **B** **A** **-Ve**	T1, T2, T3, T4	AIROBOT room sensors A-SE1-*
+ **-**	ZONE1, ZONE2, ZONE3, ZONE4, ZN5, ZN6, ZN7, ZN8	Actuators 24 V DC NC, connect according to the zones to be created
NTC1	NTC1	10kΩ NTC pipe temperature sensor
NTC2	NTC2	10kΩ NTC pipe temperature sensor
GPI	GPI	Potential-free input contact NO (normally open), when activated, the desired function can be triggered, for example, cooling
LAN	LAN	Network cable input
COM **NO**	RELAY	Potential-free relay, tax. 3 A resistive or 1 A inductive
L N PE	POWER 230V	Room controller power supply 230 V tax. 3 A. The room controller is equipped with a plug-type power cord in the standard, can be removed.

Room sensors

Dimensions (mm):
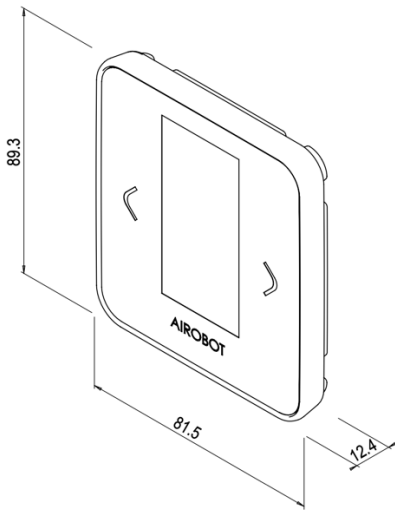
Models:

Model	Interconnection	Air quality measurement with a CO2 sensor	Colour
SE1-W	Wired	Not	White
SE1-W-AQ	Wired	Yes	White
SE1-B	Wired	Not	Black
SE1-B-AQ	Wired	Yes	Black

Extras to the room sensor

Product	Description
A-HC-SFL10K	Floor sensor for room sensor or thermostat, length 3 meters, NTC 10 kΩ
A-HC-R2416	External relay (24V) for controlling electric floor heating. Liver. 16A 250V, dimensions 48 x 48 mm, height 25mm.

Specifications

Supply voltage	From the room controller 24 V
Connectivity between the room sensor and the room controller	4-groove low-current fiber cable 0.22 mm2 – 0.75 mm2, max. length 100 m. It is recommended to use a data cable.
IP protection class	IP20
Ambient temperature and humidity when working	+5 $^\circ$C to 45 $^\circ$C, max. 80% relative humidity (non-condensing)
Floor sensor	10 kΩ NTC, max 0.75 mm^2
Installation	Wall adapter included, EU wall case D68 mm or smooth wall, 60 mm gap between mounting screws
Temperature sensor	Digital, accuracy ±0.2 $^\circ$C
Air humidity sensor	Digital, accuracy ±2%
Carbon dioxide (CO2) sensor, *only on a model marked -AQ*	Photoacoustic, accuracy ±50 ppm + 5% reading

E-paper screen	To save energy, the reading is updated on the screen every 5 minutes. The screen occasionally turns all black when you switch to cleaning from time to time
Compliance with standards	EN 60730-1, EN 60730-2-9, EN 61000-6-2, EN 61000-6-4
Product dimensions	82 x 89 x 11 mm
Product weight	60 g
Package dimensions	14 x 12.5 x 5 cm
Package weight	125 g

Setup table

We recommend filling in the table below at the moment of connecting the actuators and room sensors. The product packaging comes with stickers with the appropriate marking. The table will allow you to more easily perform the initial setup later.

Write the name of the zone here, for example, kitchen	Set sensor ID (unique for each zone)		Mark which zones and actuators are connected in a room controller, for example, A1 = Drive 1	
	ID1	ID5	ZONE1 – A1 A2	ZONE5 – A9
	ID2	ID6	ZONE2 – A3 A4	ZONE6 – A10
	ID3	ID7	ZONE3 - A5 A6	ZONE7 – A11
	ID4	ID8	ZONE4 - A7 A8	ZONE8 – A12
	ID1	ID5	ZONE1 – A1 A2	ZONE5 – A9
	ID2	ID6	ZONE2 – A3 A4	ZONE6 – A10
	ID3	ID7	ZONE3 - A5 A6	ZONE7 – A11
	ID4	ID8	ZONE4 - A7 A8	ZONE8 – A12
	ID1	ID5	ZONE1 – A1 A2	ZONE5 – A9
	ID2	ID6	ZONE2 – A3 A4	ZONE6 – A10
	ID3	ID7	ZONE3 - A5 A6	ZONE7 – A11
	ID4	ID8	ZONE4 - A7 A8	ZONE8 – A12
	ID1	ID5	ZONE1 – A1 A2	ZONE5 – A9
	ID2	ID6	ZONE2 – A3 A4	ZONE6 – A10
	ID3	ID7	ZONE3 - A5 A6	ZONE7 – A11
	ID4	ID8	ZONE4 - A7 A8	ZONE8 – A12
	ID1	ID5	ZONE1 – A1 A2	ZONE5 – A9
	ID2	ID6	ZONE2 – A3 A4	ZONE6 – A10
	ID3	ID7	ZONE3 - A5 A6	ZONE7 – A11
	ID4	ID8	ZONE4 - A7 A8	ZONE8 – A12
	ID1	ID5	ZONE1 – A1 A2	ZONE5 – A9
	ID2	ID6	ZONE2 – A3 A4	ZONE6 – A10
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	ID1	ID5	ZONE1 – A1 A2	ZONE5 – A9
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	ID3	ID7	ZONE3 - A5 A6	ZONE7 – A11
	ID4	ID8	ZONE4 - A7 A8	ZONE8 – A12
	ID1	ID5	ZONE1 – A1 A2	ZONE5 – A9
	ID2	ID6	ZONE2 – A3 A4	ZONE6 – A10
	ID3	ID7	ZONE3 - A5 A6	ZONE7 – A11
	ID4	ID8	ZONE4 - A7 A8	ZONE8 – A12

Warranty terms

Warranty duration: Airobot room controller, sensors and accessories are covered by the manufacturer's warranty for 2 years from the date of purchase. The warranty period is designed to cover any defects in materials or workmanship that may occur during normal use. To ensure the validity of the warranty, a proof of purchase is required, in its absence, the date of production of the product.

Coverage: During the warranty period, the manufacturer or an authorized service partner, at its sole discretion, will repair or replace any component or part of the product that has been identified as a result of defective materials or other malfunction. The manufacturer's warranty does not cover the following:

- Damage caused by misuse, negligence, accident or improper handling.
- Any changes that are made to the product without the permission of the manufacturer.
- Normal wear and tear, including scratches, dents and cosmetic damage.
- Consumable parts, such as batteries, unless otherwise noted.
- Damage caused by liquids, temperature extremes or environmental factors outside normal operating conditions.
- Software-related issues, including but not limited to data loss or corruption.
- Accessories or components not included with the original product.

Occurrence of defects: In the event of a warranty claim, the owner must contact the dealer or the manufacturer's customer support via the dedicated channels provided on the manufacturer's website. The holder may be required to provide a preliminary proof of purchase, a description of the problem and other relevant information.

Repair or replacement: If the mentioned defect is confirmed by the manufacturer, the product will either be repaired or replaced with a similar model at the discretion of the manufacturer. Repaired or replaced products are subject to the remaining duration of the original warranty period or 6 months, whichever is longer.

Additional information: For more information or questions about this warranty, please visit the manufacturer's website or contact the manufacturer. Keep a copy of this warranty for your documents along with proof of purchase, as it is required for all warranty claims. This warranty is in addition to the rights provided by applicable laws and regulations.

Support and contact

Connect your device to the Internet network to receive software updates.

Due to software updates, changes may occur to the guide, the updated version can always be found on the www.airobothome.com/abi helpdesk page.

We are grateful for any feedback on the use, characteristics, etc. of the device info@airobothome.com.

Manufacturer details

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Customer support and guides

www.airobothome.com/abi

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