



ENYX

HEAT CONTROL S1 WIFI

Wi-Fi Controller for Electric and Hydronic Underfloor Heating

USER & INSTALLATION MANUAL



Before installation and use, carefully read the entire manual

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Safety instructions

Installation must be performed by a qualified professional

Installation, electrical connection and operational testing may only be performed by a qualified professional, in accordance with the wiring diagram, the technical specifications of the device and the applicable regulations for electrical installations.

Disconnect the power supply before work

Before removing the front panel, connecting wires, installing the sensor or performing any work on the device, the power supply must be disconnected. **Do not work on the device while it is energized!**

Observe the permitted load

Before connection, check the supply voltage and the maximum permitted load of the device.

- For electric underfloor heating, the maximum load is **16 A**.
- For hydronic underfloor heating / thermal actuator, the maximum load is **3 A**.

The external floor sensor is mandatory for electric underfloor heating

For electric underfloor heating, the external NTC floor sensor must be installed and properly activated in the controller settings. The floor sensor is used to limit the floor temperature and protect the floor covering from excessive temperature.

Do not exceed floor temperature limits

The maximum floor temperature must be set according to the type of floor covering, the floor covering manufacturer's recommendations and the installation conditions. Incorrect settings may cause damage to the floor, parquet flooring, laminate, vinyl or other finished floor coverings.

Do not use a damaged device

Do not use the controller if the housing, display, terminals, wires or sensor are damaged. In the event of a sensor error, irregular operation or an error indication on the display, the device should be switched off and inspected by a qualified professional.

Flush-mounted wall installation

The controller is intended for flush-mounted wall installation in a suitable wall box. The device should be used under normal indoor operating conditions, without exposure to water, condensation, direct heat sources or mechanical damage.

Wi-Fi setup after proper installation

Wi-Fi connection and control via the app should be performed only after the device has been properly installed, connected and tested. Remote control does not replace proper installation, sensor configuration and heating system protection.

Important note for electric underfloor heating

For electric underfloor heating, the controller must be configured so that the external floor sensor protects the floor from excessive temperature. Do not operate the system using only the built-in room sensor.

Technical specifications

ENYX HEAT CONTROL S1 WIFI is an advanced touchscreen Wi-Fi controller for electric and hydronic underfloor heating, designed for precise, simple and comfortable room temperature control.

With its elegant glass panel, intuitive controls and control via a mobile app, the user can easily adjust the temperature, create weekly operating schedules and adapt heating to their daily routine.

The controller supports operation with a **built-in room sensor** and an **external NTC floor sensor**. This enables precise room temperature control, with additional protection of the floor and floor covering from excessive temperature.

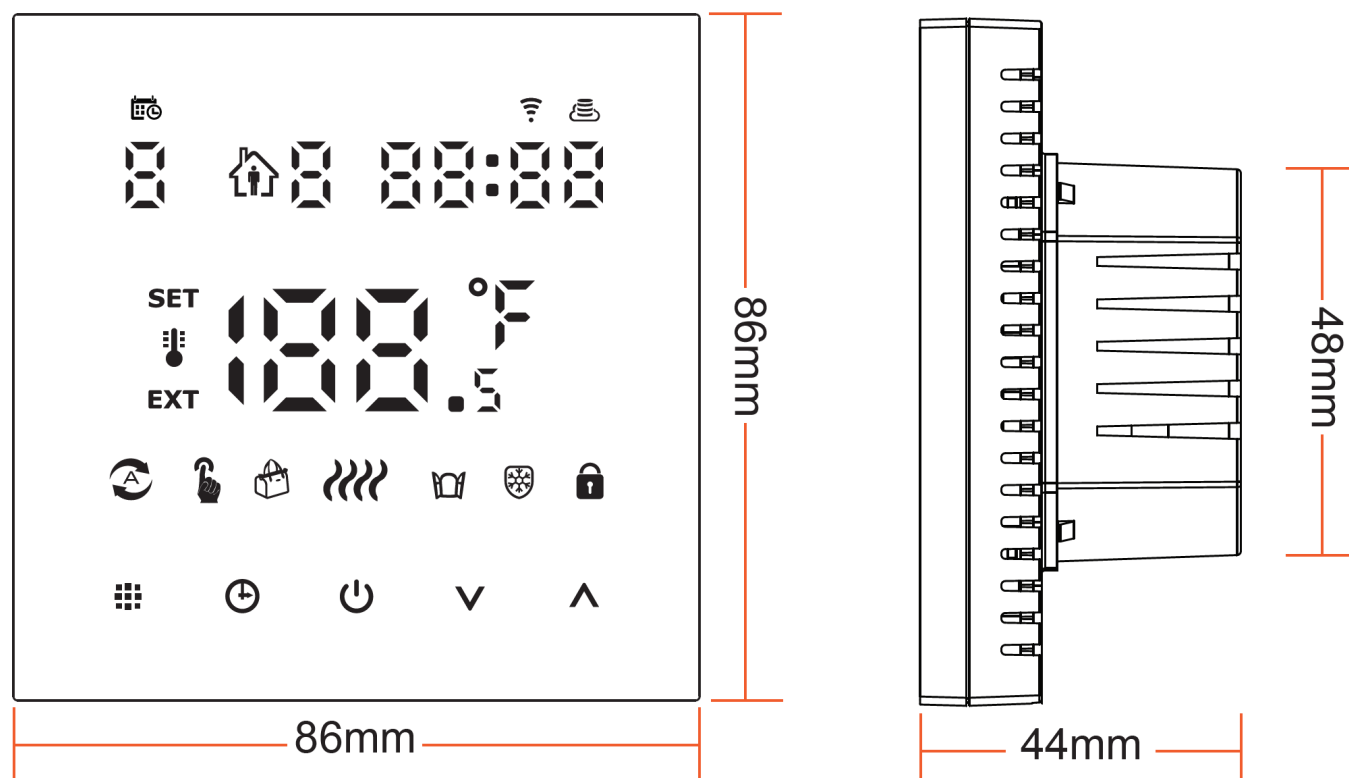
A display accuracy of **0.5°C**, child lock function, holiday mode and memory of settings after power failure make it a reliable solution for modern underfloor heating systems.

Available in **black and white versions**, ENYX HEAT CONTROL S1 WIFI discreetly fits into a wide range of interiors, providing clean design, practical use and long-term comfort.

Parameter	Value
Application:	Electric and hydronic underfloor heating
Power supply:	90–240 V AC, 50/60 Hz
Temperature display range:	1–70°C
Display accuracy:	0.5°C
Operating environment:	Normal indoor operating conditions
Temperature sensor:	NTC 10 kΩ, ±1%
Weekly schedule:	1-week programmable cycle
Contact rating:	3 A for hydronic heating / 16 A for electric heating
Output:	Relay switch
Limit temperature range:	1–70°C
Installation method:	Flush-mounted wall installation
Temperature setting range:	5–35°C
Dimensions:	86 × 86 × 27 mm

Note: For electric underfloor heating, the external NTC floor sensor must be installed and properly configured, as it is used to limit the floor temperature and protect the floor covering.

Display and icon description



- | | |
|---|---|
|  <p>Automatic mode — operation according to a preset program</p> |  <p>Wi-Fi connection — icon indicates Wi-Fi status; flashing indicates EZ connection mode.</p> |
|  <p>Manual mode — temperature is adjusted manually, without a programmed schedule.</p> |  <p>Child lock — button lock is activated to prevent unwanted setting changes.</p> |
|  <p>Clock — time display / time setting.</p> |  <p>Wi-Fi status: disconnected — controller is not connected to the Wi-Fi network.</p> |
|  <p>Programmable mode — operation according to the set weekly program.</p> |  <p>Cloud icon — flashing indicates AP network connection mode.</p> |
|  <p>Temporary manual mode — temporary manual temperature adjustment during programmed operation.</p> |  <p>Open window function — activates protection when a sudden temperature drop is detected.</p> |
|  <p>Holiday mode — sets the holiday duration and the temperature to be maintained.</p> |  <p>Room temperature — displays the currently measured room temperature.</p> |
|  <p>Heating — indicates active heating; if not displayed, heating is off.</p> |  <p>Set temperature — displays the target temperature set by the user.</p> |
|  <p>External NTC sensor — indicates that the external floor sensor is being used or its temperature is being displayed.</p> |  <p>Cooling mode — flashing icon indicates active cooling output.</p> |

Button functions



Power ON / OFF

A short press turns the controller on or off.



Mode / Program

1. A short press switches the operating mode between automatic and manual mode.
2. When the controller is on, press and hold the button for **3–5 seconds** to enter programmable mode settings.
3. When the controller is off, press and hold the button for **3–5 seconds** to enter advanced settings — **Option A**.



Clock / Confirmation

1. Confirms settings; used together with the mode/program button.
2. A short press is used to set the time.
3. When the controller is on, press and hold the button for **3–5 seconds** to set holiday mode. When **OFF** is displayed, press **▲** or **▼** to change it to **ON**, then press the clock button to confirm activation of holiday mode.
4. When the controller is off, press and hold the button for **3–5 seconds** to enter advanced settings — **Option B**.



Decrease value

1. Decreases the set value.
2. A long press locks or unlocks the buttons.



Increase value

1. Increases the set value.
2. A long press displays the external sensor temperature. This function is available only when **Option BN** in advanced settings is set to **N3**.
3. In programmable mode, pressing **▲** or **▼** enters temporary manual mode.

Programmable mode

The controller supports weekly scheduling, with the option to set multiple time periods during the day. This allows heating to be adjusted to the user's daily routine, providing greater comfort and more efficient energy use.

Three weekly programming models are available:

Model	Description
5+2	Separate program for weekdays and the weekend. Factory default mode.
6+1	Separate program for six days and one selected day.
7	Same programming principle for all seven days of the week.

Up to **6 time periods** can be set for each day.

Program setup

In advanced settings, first select the desired weekly programming model.

When the controller is on, press and hold the **program button** for **3–5 seconds** to enter programmable mode settings.

Short presses are used to select:

- hour,
- minute,
- time period.

Values are adjusted using the ▲ and ▼ buttons.

After setup is completed, the controller automatically saves the changes and exits the menu after approximately **10 seconds** of inactivity.

Factory default daily program

					
Wake-up	Leave home	Return home	Leave home	Evening return	Sleep
06:00 20°C	08:00 15°C	11:30 15°C	13:30 15°C	17:00 15°C	22:00 15°C

Recommended comfort temperature: 18–22°C.

Advanced settings

Option A

When the controller is off, press and hold the **program button** for **3–5 seconds** to enter advanced settings — **Option A**. Options are selected by briefly pressing the **program button**. Values are adjusted using the ▲ and ▼ buttons. A short press of the **power on/off** button switches to the next option. After setup is completed, the controller automatically saves the changes and exits the menu after approximately **5 seconds** of inactivity.

Code	Setting option	Function	Factory default
A1	Measured temperature calibration	Correction of the displayed room temperature within the range of –9 to +9°C . The value is displayed as a correction of the measured temperature.	–1°C
A2	Temperature difference setting for switching on/off	Sets the operating temperature difference, or hysteresis, within the range of 0.5 to 2.5°C .	1°C
A3	Child lock setting	0 : partial lock 1 : full lock	0
A4	Power on/off memory after power failure	0 : controller remembers the previous on/off status after power is restored 1 : controller remains off after power is restored 2 : controller turns on after power is restored	0
A5	Standby brightness	0 : off 1 : low brightness 2 : higher brightness	2
A6	Weekly programming selection	0 : 5+2 1 : 6+1 2 : 7 days	0
A7	Minimum set temperature limit	Sets the lower temperature limit within the range of 1–10°C .	5°C
A8	Maximum set temperature limit	Sets the upper temperature limit within the range of 20–70°C .	35°C
A9	Low temperature protection	Sets low temperature protection within the range of 1–10°C . When the set temperature is 10°C, pressing ▼ displays [–], disabling low temperature protection.	5°C

Code	Setting option	Function	Factory default
AA	High temperature protection for external sensor	Sets high temperature protection for the external sensor within the range of 20–70°C . When the set temperature is 20°C , pressing ▼ displays [--], disabling high temperature protection.	45°C
AB	Temperature difference setting for high temperature protection	Sets the temperature difference within the range of 1–9°C .	2°C
AC	Open window function activation temperature	Sets the activation temperature within the range of 5–25°C . When the set value is 5°C , pressing ▼ displays [--], disabling this function.	—
AD	Open window function operating time	Sets the function duration within the range of 10–20 minutes .	10 min
AE	Factory reset	When Ao is displayed, press and hold the confirmation / clock button until the full screen display appears. This starts the factory reset process.	—
AF	Heating / cooling mode	0 : heating 1 : cooling	0

Advanced settings

Option B

When the controller is off, press and hold the **clock / confirmation button** for **3–5 seconds** to enter advanced settings — **Option B**. Options are selected by briefly pressing the **program button**. Values are adjusted using the **▲** and **▼** buttons. A short press of the **power on/off button** switches to the next option. After setup is completed, the controller automatically saves the changes and exits the menu after approximately **5 seconds** of inactivity.

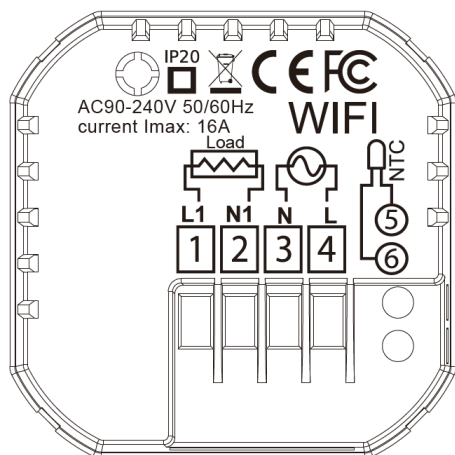
Code	Setting option	Function	Factory default
BN	Sensor operating mode selection	N1: the built-in sensor is used; floor high-temperature protection is disabled. N2: the external sensor is used; floor high-temperature protection is disabled. N3: built-in sensor controls room temperature, while the external sensor limits floor temperature. If the external sensor detects a temperature above the set maximum value, the relay switches off and heating stops.	N1
BC	Descaling function	0: descaling function off 1: descaling function on	0
Bo	Product information	This option cannot be changed.	—

Note: For electric underfloor heating, the recommended configuration is **N3**, as the external floor sensor protects the floor and floor covering from excessive temperatures.

Wiring diagrams

Electrical connection of the controller must be performed by a qualified professional, in accordance with the wiring diagram, the technical specifications of the device and the applicable regulations for electrical installations. Before connection, always disconnect the power supply.

Electric underfloor heating

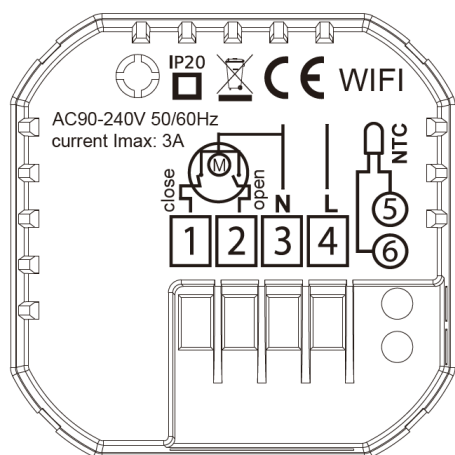


This diagram is used to connect the controller to an electric underfloor heating system.

Maximum permitted load: 16 A
Power supply: 90–240 V AC, 50/60 Hz
Sensor: External NTC floor sensor

For electric underfloor heating, the external floor sensor must be installed and active, as it limits the floor temperature and protects the floor covering.

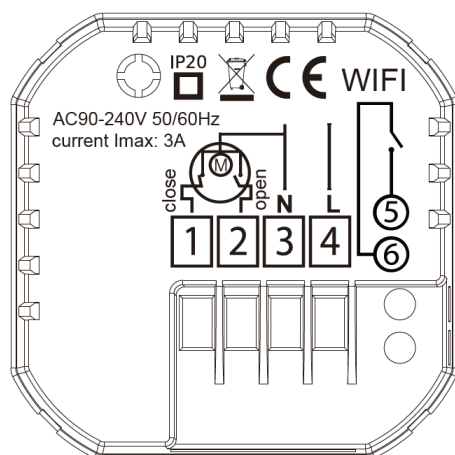
Hydronic underfloor heating



This diagram is used to connect the controller to a thermal actuator, valve actuator or other suitable component for controlling hydronic underfloor heating.

Maximum permitted load: 3 A
Power supply: 90–240 V AC, 50/60 Hz

Hydronic heating and wall-mounted gas boiler



This diagram is used when the controller is connected to a hydronic heating system and a wall-mounted gas boiler via a volt-free contact.

Note:
 Terminals **5 and 6** are connected to the gas boiler.
 Terminals **3 and 4** are connected to the **N** and **L** power supply.
 If a normally closed thermal actuator is used, connect it to terminals **2 and 3**.
 If a normally open thermal actuator is used, connect it to terminals **1 and 3**.

Protection via external sensor

The factory-set limit value for the external sensor is **45°C**. The reset differential for external sensor control is set to **2°C**.

When the temperature measured by the external sensor reaches **45°C**, the relay switches off and the controller displays a floor overheating warning. When the external sensor temperature drops to **43°C**, the relay resumes operation and the warning is removed.

This function can be activated only when the room temperature is lower than the set temperature, meaning there is a heating demand.

Sensor error display

The operating mode of the built-in and external sensors must be selected correctly.

If an incorrect sensor mode is selected, or if a sensor fault occurs, the display will show error **E1** or **E2**. In this case, the controller stops heating until the error is resolved.

If error **E1** or **E2** is displayed, do not operate the controller until the sensor, sensor operating mode and electrical connection have been checked. The inspection should be performed by a qualified professional or authorized service provider.

Warranty

ENYX HEAT CONTROL S1 WiFi comes with a warranty in accordance with the applicable ENYX warranty terms.

The warranty covers defects in materials and workmanship that occur during normal use, provided that the controller has been properly installed, connected and used in accordance with this manual.

To make a warranty claim, keep the proof of purchase and contact the seller, an authorized ENYX partner or ENYX service support.

The warranty does not cover damage caused by improper installation, incorrect electrical connection, exceeding the permitted load, mechanical damage, moisture ingress, unauthorized interventions or use of the device outside its intended purpose.

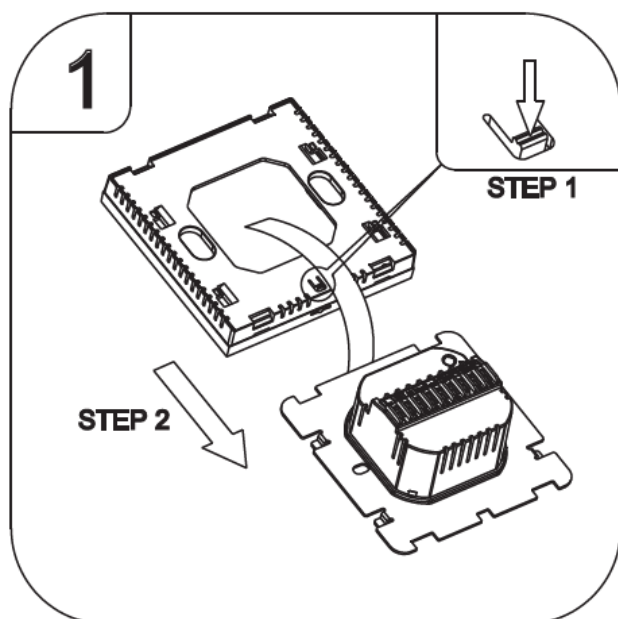
After the warranty period expires, service interventions and after-sales support may be charged in accordance with the applicable service terms.

Device installation

Important: Before connection, always disconnect the power supply. Do not work on the device while it is energized.

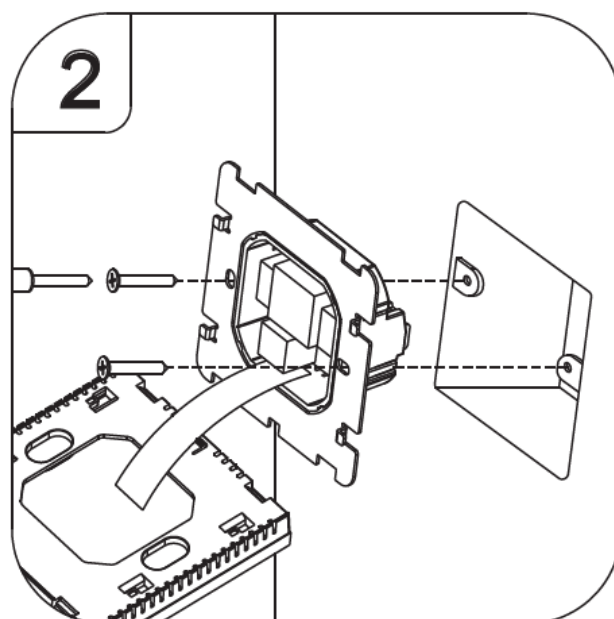
1. Opening the housing

Carefully separate the front panel of the controller from the rear mounting base, as shown in the image.



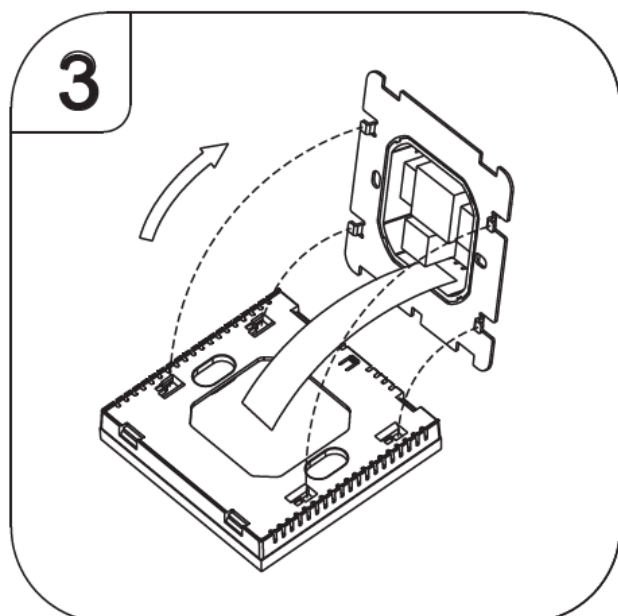
2. Fixing the mounting bracket

Place the rear mounting base into the wall box and secure it with suitable screws.



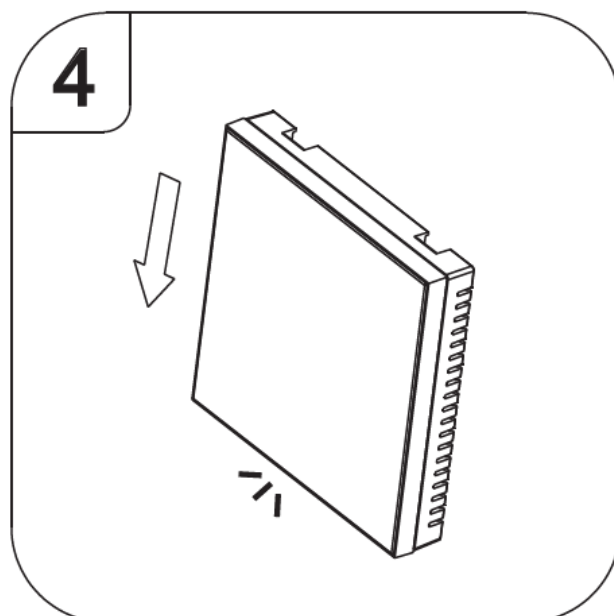
3. Connection and assembly

After completing the electrical connection according to the wiring diagram, place the front panel onto the rear mounting base.



4. Final positioning

Press the front panel until it fits properly onto the mounting bracket and check that the device is securely installed.



Wi-Fi Connection via mobile app

The controller can be connected to a mobile app, allowing remote temperature adjustment, operating mode selection and control of available functions.

For connection, you need:

- smartphone with internet access,
- wireless router,
- active Wi-Fi network,
- Wi-Fi network password.

Important: The controller connects via a **2.4 GHz Wi-Fi network**. If the router has separate 2.4 GHz and 5 GHz networks, select the 2.4 GHz network for connecting the controller.

Step 1 — Downloading the app

Download the **Smart Life** or **Smart RM** app from Google Play or the App Store.

Step 2 — Activating Wi-Fi connection mode

Turn on the controller. Press and hold the program and **clock / confirmation** buttons at the same time to activate Wi-Fi connection mode. When connection mode is active, the Wi-Fi and **cloud / network connection** icons flash simultaneously.

Step 3 — Registering or signing in to the app

Open the app and register a user account if you do not already have one. After registration, sign in to the app.

Step 4 — Adding the device

In the app, select **Add Device** or press the “+” icon to add a new device. Then select the category: **Small Home Appliances → Thermostat (Wi-Fi)**. Option names in the app may vary depending on the app version, phone language and software updates.

Step 5 — Selecting the Wi-Fi network

Select the **2.4 GHz Wi-Fi network** to which you want to connect the controller and enter the password. Make sure the password is entered correctly, including uppercase and lowercase letters, numbers and special characters.

Step 6 — Confirming the Wi-Fi indicator

In the app, confirm that the Wi-Fi indicator on the controller is flashing. If the app offers a choice of indicator flashing mode, select the option that matches the display on the controller:

App option	Meaning
Blink Quickly	Fast flashing
Blink Slowly	Slow flashing

Step 7 — Connecting the device

The app starts connecting the controller to the Wi-Fi network. During connection:

- do not turn off the controller,
- do not close the app,
- do not interrupt the Wi-Fi connection,
- keep the phone close to the router and controller.

Wait until the connection process is completed.

Step 8 — Device connected

When the connection is successfully completed, the controller will appear in the app. After that, you can use the app to adjust the temperature, select the operating mode and manage the available controller functions.

If the connection is not successful

If the controller cannot be connected to the app, check the following:

- the phone is connected to a 2.4 GHz Wi-Fi network,
- the Wi-Fi password has been entered correctly,
- the Wi-Fi signal at the controller installation location is strong enough,
- the controller is in active connection mode,
- the app has permission to access location services and the local network, if requested by the phone.

If the connection is still not successful, repeat the Wi-Fi connection mode activation procedure and try again.

Additional functions

Holiday mode

In the app, you can set the controller to maintain a selected temperature during periods of absence, providing background heating while you are away from home. This function is set in the mode marked with the hand icon. The holiday mode duration can be set from 1 to 30 days, with a maintained temperature of up to 27°C.

Controller lock

The lock function allows the controller to be locked remotely via the app, preventing unwanted changes to the device settings. The lock is activated by selecting the lock icon in the app. To unlock the controller, select the same icon again.

Device grouping

The app allows multiple controllers to be connected into one group and controlled at the same time. Grouping is done by selecting the edit option in the upper right corner of the app, then selecting Create Group. If multiple controllers are connected to the app, you can select which devices to include in the group. After confirming the selection, the group can be named for easier management.

Sensor type and temperature limit

In the app, select Sensor type and enter the password. The factory password is 123456. After that, three sensor operating modes are available:

1. Built-in sensor only

The controller uses only the internal air temperature sensor. Do not use this setting for electric underfloor heating, as it does not provide floor protection via the floor sensor.

2. External sensor only

The controller uses only the external floor sensor. This setting is suitable for rooms such as bathrooms, when the controller is installed outside the heated room.

3. Built-in and external sensor

The controller uses both sensors. The internal sensor measures room temperature, while the external floor sensor controls and limits the floor temperature. This is the recommended setting for most electric underfloor heating installations.

Floor temperature limit

After selecting the sensor type, check that the Set temp. max option is set to the appropriate maximum temperature for the specific floor covering. The usual floor temperature limit is 45°C, but it can be adjusted according to the floor type, the floor covering manufacturer's recommendation and the installation conditions. For electric underfloor heating, the external floor sensor must always be installed and active, as it protects the floor and floor covering from excessive temperatures.