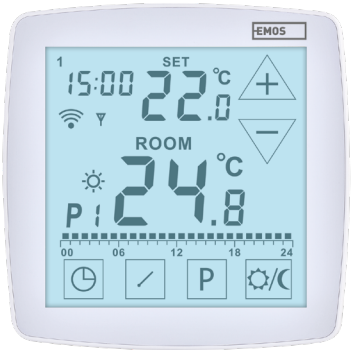
P56S11

GB | Wireless Thermostat



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Safety Instructions and Warnings

Read the user manual before using the device.

Follow the safety instructions provided in the manual.

- Read the manual carefully before using the product.
- Do not expose the product to direct sunlight, extreme cold and humidity and sudden changes in temperature. These could reduce detection accuracy.
- Do not place the product in locations prone to vibration and shocks – may cause damage.
- Do not expose the product to excessive force, impacts, dust, high temperatures, rain or humidity - these may cause malfunction, shorten energy life and deform plastic parts.
- Do not expose the product to rain or high humidity, or dropping or splashing water.
- Do not place any open flame sources on the product, e.g. a lit candle, etc.
- Do not put the product in places with inadequate air flow.
- Do not insert any objects into the product's vents.
- Do not tamper with the internal electrical circuits of the product – doing so may damage the product and will automatically void the warranty.
- The product should only be repaired by a qualified professional.
- Clean the product using a soft, slightly damp cloth. Do not use solvents or cleaning agents – they could scratch the plastic parts and cause corrosion of the electric circuits.
- Do not immerse the product in water or other liquids.
- In the event of damage or a defect on the product, do not perform any repairs by yourself. Bring it for repair to the shop where you bought it.
- This appliance is not intended for use by persons (including children) whose physical, sensory or mental disability or lack of experience and expertise prevents safe use, unless they are supervised or instructed in the use of the appliance by a person responsible for their safety. Children must always be supervised to ensure they do not play with the appliance.

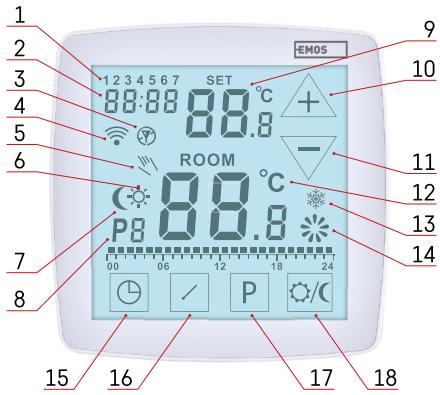
Package Contents

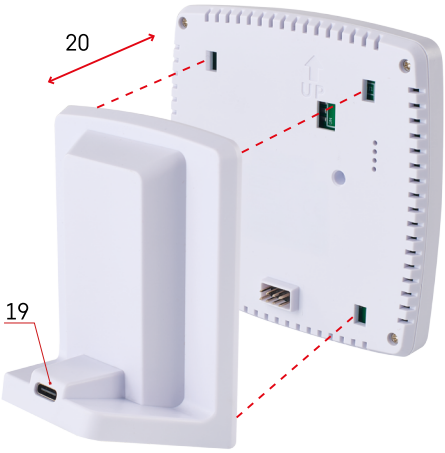
thermostat
receiver
USB adapter
USB-C cable
2 screws
2 wall plugs

Technical Specifications

Switched load: max. 230 V AC; 16 A for resistive loads; 5 A for inductive loads
Temperature measurement: 0 °C to 40 °C with 0.1 °C resolution; ±1 °C accuracy at 20 °C
Temperature setting: 7 °C to 30 °C in 0.2 °C increments
Temperature differential setting: 0.1 °C to 1.0 °C in 0.1 °C increments
Unit interconnection: via 868 MHz radio signal, max. 25 mW e.r.p..
WiFi frequency: 2.4 GHz, max. 25 mW e.i.r.p.
Pairing capacity: max. 6 receivers
Transmitter unit range: up to 100 m in an open space
Power supply:
- Control unit (transmitter) 5 V/1.5 A
- Includes: USB adapter 5 V/1.5 A, micro USB cable 1.5 m
- Switching unit (receiver) 230 V AC/50 Hz

Dimensions:
- Receiver: 115 × 37 × 91 mm
- Transmitter: 98 × 55 × 98 mm

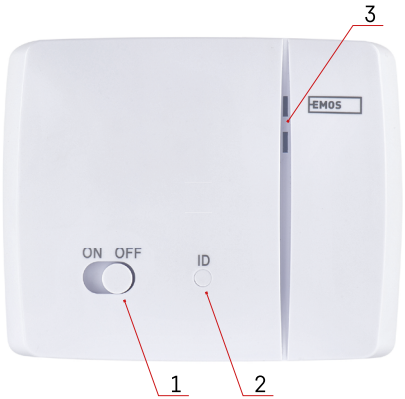




Device Description

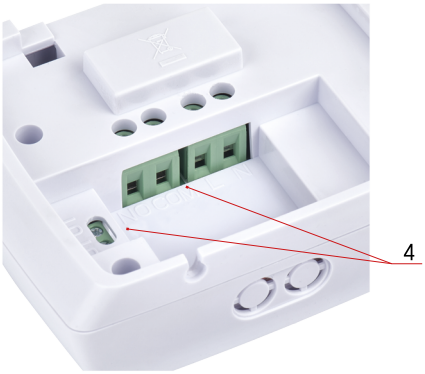
Control (Portable) Unit

1 – day of the week
2 – clock
3 – wireless communication with receiver
4 – Wi-Fi signal reception
5 – manual control
6 – comfort mode (comfort temperature)
7 – economy mode (economy temperature)
8 – programme presets and temperature chart for the day
9 – set temperature
10 – UP button
11 – DOWN button
12 – current room temperature
13 – low temperature protection mode
14 – operation icon (activation)
15 – time setting button
16 – comfort and economy temperature setting button
17 – programme setting button
18 – button for switching between comfort/economy mode
19 – USB-C socket for connecting the power cable
20 – removing the stand from the front of the thermostat



Switching Unit (Receiver)

1 – main ON/OFF switch
2 – pairing button ID
3 – LED indicators
4 – contacts for connection



LED Indicators (Diodes)

- the bottom blue LED indicates the switching unit is powered by 230 V AC mains. If the unit is not connected to power or if the main switch is in the OFF position, the blue LED is not lit.
- the top red LED is lit while the heating/air-conditioning system is active.

Main Switch

If the heating/air-conditioning system is not used for an extended period of time, it is recommended to turn the switching unit off (move the main switch to the OFF position).

Installation and Assembly

Attention

Before the first use, make sure to carefully read the instruction manual for the thermostat, as well as the manual for the boiler or air-conditioning equipment. Installation may only be carried out by a qualified professional! Follow applicable standards during installation. Before changing the thermostat, disconnect the heating system from the mains power in your home. This will prevent potential injury by electric current.

Pairing the Control Unit with the Switching Unit

Pairing enables transmission of information between the control unit and the switching unit. The units pair automatically (self-learning) after pressing the ID button.
Warning: When pairing two or more receivers, it is necessary to have pairing mode activated on all receivers simultaneously!
Plug the USB adapter with the attached USB-C cable into 230 V mains. Plug the USB-C cable into the bottom of the stand.
Connect the switching unit correctly to the power source, and press and hold the ID button; the top red LED starts flashing.
Within 10 seconds, long press the button on the control unit. Both units will automatically pair and the icon will be displayed. The red LED on the switching unit will stop flashing and goes out. If the pairing of the units fails, the icon will be displayed instead.

Testing Wireless Communication between the Units

1. Use the + button to select a temperature a few degrees higher than the current room temperature.
2. Wait for approximately 10 seconds or confirm by pressing the button.
3. The red LED on the switching unit will light up.
4. If the LED does not light up, move the control unit closer to the switching unit. Press the – button to set a value which is lower than the room temperature – the receiver must switch off.
5. Repeat steps 1 to 4.
6. After testing, reset the thermostat.

Note: The range between the control and switching unit is max. 100 m in an open space. The range may decrease indoors as the signal has to pass through walls and other obstacles.

Deleting the Memory (Code) of Paired Units

If you need to delete the pairing code used between the control and switching unit, follow the instructions below. Press and hold the ID button on the switching unit; the red LED will start flashing. Short press the ID button again within 10 seconds. The red LED will stop flashing and goes out. The pairing code is deleted.

Mounting the Switching Unit onto a Wall

1. Remove the rear cover of the switching unit.
2. Mark the spots for holes.
3. Drill two holes, carefully insert the plastic wall plugs into them and use two screws to mount the rear cover of the switching unit.
4. Connect the wires to the labelled terminals according to the wiring diagram.
5. Complete the installation by fitting the switching unit onto the mounted rear cover.

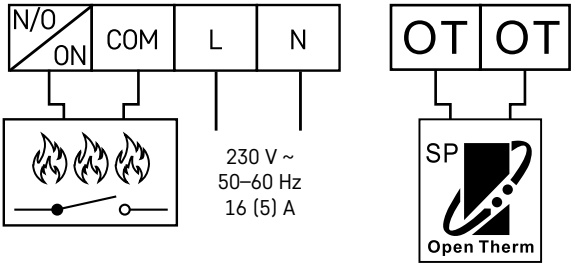
Thermostat (Control Unit) Placement

The placement of the thermostat significantly affects its functioning. Choose a location where members of the family spend most of their time, preferably near an inside wall where air circulates freely, with no direct sunlight. Do not place the thermostat in the vicinity of heat sources (such as TV sets, radiators, fridges), or close to a door. Failure to comply with these recommendations will prevent proper control over room temperature.

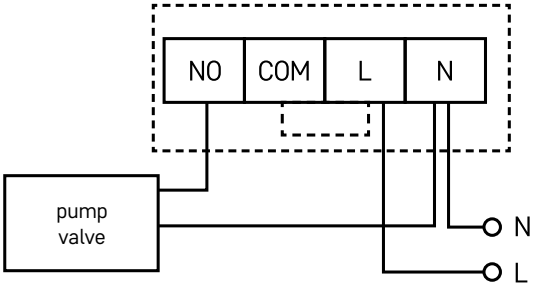
Wiring Diagram

The P56S11 thermostat can be used with any single-stage heating or air-conditioning system.
NO – switched contact
COM – contact for the switch
L – 230 V AC power connection
N – neutral conductor

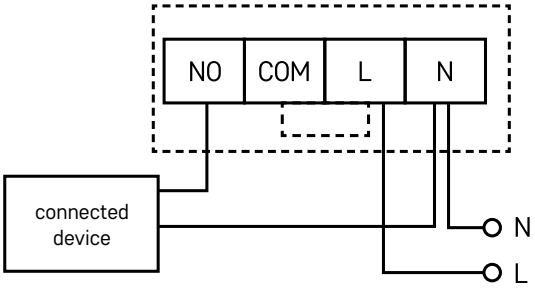
OT – OpenTherm connection



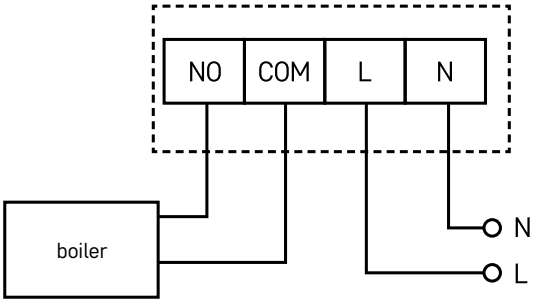
Pump/Motorised Valve Wiring Diagram



Floor Heating Wiring Diagram

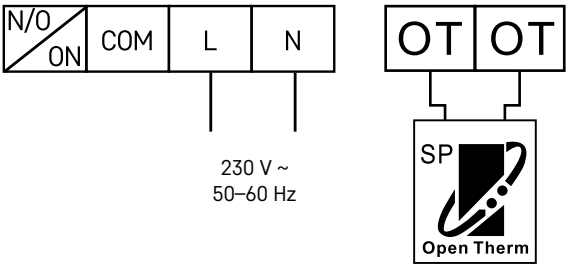


Boiler Wiring Diagram (Zero Voltage Switching)



• pre-installed wire coupler between COM and L will not be connected.

OpenTherm Wiring Diagram



Basic Setup

Warning: Remember that the first pressing of a button activates screen illumination, the next pressing sets values/functions.

Selecting Heating/Cooling System

1. Long-press the "P" button, then short-press the "P" button again; the screen will show settings.
2. Use the + and – buttons to set the heating mode (HEAT) or cooling mode (COOL).
3. Wait 1 minute to automatically return to the main menu or press the "P" button to move to the settings of the next function.

Selecting Temperature Differential

1. Long-press the "P" button, then short-press the "P" button 2×; the screen will display "DIFF".
2. Use the + and – buttons to set the differential value (0.1 °C to 1.0 °C, in 0.1 °C increments).
3. Wait 1 minute to automatically return to the main menu or press the "P" button to move to the settings of the next function.

The temperature differential (hysteresis) is the difference in temperature required for the system to switch on and off. If, for example, you set the temperature in the heating system to 20 °C and differential to 0.2 °C, the thermostat activates heating as soon as room temperature drops to 19.8 °C and switches heating off when temperature reaches 20.2 °C.

Room Temperature Calibration

1. Long-press the "P" button, then short-press the "P" button 3×; the screen will display "CAL" and the set value will be flashing.
2. Use the + and – buttons to set the desired value (-3.0 °C to 3.0 °C, in 0.5 °C increments).
3. Wait 1 minute to automatically return to the main menu or press the "P" button to move to the settings of the next function.

Room temperature calibration is used, for example, if the thermostat displays 21 °C but you want it to display 20 °C. In that case, the calibration value should be set to -1 °C.

Setting Button Sound

1. Long-press the "P" button, then short-press the "P" button 4×; the screen will display "bEEP".
2. Use the + and – buttons to set: Button beeping active – ON, Button beeping inactive – OFF.
3. Wait 1 minute to automatically return to the main menu or press the "P" button to move to the settings of the next function.

Resetting the Thermostat

1. Long-press the "P" button, then short-press the "P" button 5×; the display will show "rESE".
2. Press the ◷ button 2×; the thermostat will reset to factory settings.
3. Wait 1 minute to automatically return to the main menu or press the "P" button to move to the settings of the next function.

Setting the Day/Time

Press the ◷ button. The day number will start flashing (1 – Monday to 7 – Sunday). Use the + and – buttons (holding the button speeds up setting) to set the current day and press ◷. Set the hour, then press ◷ again and set the minutes. Confirm by pressing ◷ or wait 15 seconds for the setting to save automatically.

Screen Illumination

Pressing any button will illuminate the screen for 10 seconds.

Setting Target Temperature

1. Press the ⁄ button to switch to temperature setting mode. The temperature value will start flashing.
2. Repeatedly press the ☼/☾ button to switch between setting economy temperature (☾ icon) and comfort temperature (☼ icon).
3. Use the + or – button to set both temperatures in 0.2 °C increments.
4. Use the ⁄ button to save the setting.

If no button is pressed for 10 seconds, settings mode ends automatically. The default comfort temperature is 21 °C for the heating system and 23 °C for cooling; the default economy temperature is 18 °C for the heating system and 26 °C for cooling. Values can be changed as needed.

Setting a Programme

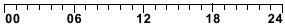
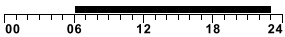
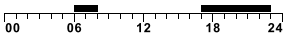
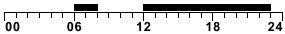
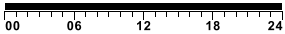
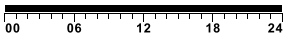
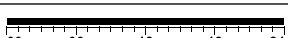
Selecting Week/Day

1. Press the "P" button; the day indicator will start flashing.
2. Repeatedly press the + or – button to select the day you wish to programme.

You can choose to programme: days individually / workdays (1, 2, 3, 4, 5) / weekend (6, 7) / whole week (1, 2, 3, 4, 5, 6, 7). Once you have chosen the days, continue by selecting a preset programme.

Selecting a Pre-Set Programme

1. Press the "P" button again to select a preset programme.
2. Use the + or – button to select one of the programmes: P1–P6. These programmes are factory presets (cannot be modified) and their profiles are shown in the figure.
3. Press the "P" button again to confirm the selected programme for the given day/week and exit the setting mode.

Programme Number	**Programme profile of the day: 24 h; resolution: 1 hour**
Programme 1: Comfort temperature all day	
Programme 2: Economy temperature all day	
Programme 3: Combination of comfort and economy temperature	
Programme 4: Combination of comfort and economy temperature	
Programme 5: Combination of comfort and economy temperature	
Programme 6: Combination of comfort and economy temperature	
Programme 7: Custom	
Programme 8: Custom	
Programme 9: Custom	

Dark fields indicate that comfort mode is set, otherwise the economy mode is set.

Setting a Custom Programme

1. If you select a custom programme (P7, P8, P9) during programme selection, you can press the "P" button to adjust the programme's temperature settings.
2. Press the + or – button repeatedly to choose the hour, which is indicated by the flashing of the ■ icon.
3. Press ☼/☾ to choose whether you want the system to be set to comfort or economy mode at that time.
4. After you have set the profile for the entire day, press the "P" button to confirm the selected programme and exit the setting mode.

Temporary Change of a Set Programme

In standard mode, where temperature is controlled by a selected programme, pressing the ☼/☾ button switches from the currently set programme to comfort or economy mode. When the selected programme is switched over in this way, the ✋ icon is displayed together with the selected control mode icon. This setting will cancel automatically upon the next temperature change in the programme.

Temporary Change of Temperature Setting

In standard mode, where temperature is controlled by a selected programme, you can press the + or – button to override the current temperature setting. The newly set temperature will be displayed along with the ✋ icon, the ☾ and ☼ icons will not be displayed. Pressing any button (except + or –) exits the temperature setting mode. If no button is pressed for 10 seconds, setting mode ends automatically. This setting will cancel automatically upon the next temperature change in the programme.
Note: If you wish to use the manually changed temperature for an extended period of time, we recommend doing so in programme no. 1 or 2.

Antifreeze Mode

Antifreeze mode is activated by pressing and holding the + and – buttons simultaneously for approx. 5 seconds (applies to heating mode only). ✋ and ❄ will appear on the screen and ☾ and ☼ will not be displayed. The preset temperature for this mode is 7 °C. Pressing any button cancels antifreeze mode.

Button Lock

Simultaneously hold the ◷ and + buttons for approx. 5 seconds. All buttons will be locked and the thermostat screen will flash LOC on the top left. To unlock, press the ◷ and + buttons simultaneously again for approx. 5 seconds; UNLO will flash on the screen.

Setting OpenTherm Parameters

Applies only to heating mode.

1. Long-press the button to access OpenTherm settings. "01" will appear in the left corner and water temperature in the OpenTherm boiler will appear in the centre (if the thermostat is not receiving a temperature reading, "--" will be displayed instead).
2. Press the button. "02" will appear in the left corner and temperature of the water returning back to the boiler will appear in the centre (if the thermostat is not receiving a temperature reading, "--" will be displayed instead).
3. Press the button. "03" will appear in the left corner and the temperature of hot water will appear in the centre (if the thermostat is not receiving a temperature reading, "--" will be displayed instead).
4. Pressing the button opens settings for temperature limit switching values. "04" will appear in the left corner and OFF will start flashing in the centre of the screen. Use + or – to select ON/OFF.
5. If you selected ON in the previous step, pressing opens settings for the maximum temperature limit switching value. "05" will appear in the left corner and temperature will appear in the centre. You can adjust the temperature using the + and – buttons (30 to 80 °C in 1 °C increments).
6. Pressing opens settings for hot water switching. "06" will appear in the left corner and OFF will start flashing in the centre of the screen. Use + or – to select ON/OFF.
7. If you selected ON in the previous step, pressing opens settings for hot water temperature. "07" will appear in the left corner and temperature will appear in the centre. You can adjust the temperature using the + and – buttons (25 to 65 °C in 1 °C increments).
8. Pressing opens the control switching settings. "08" will appear in the left corner and ON will start flashing in the centre of the screen. Use + or – to select ON/OFF.
9. Press the "P" button to confirm the setting.

OpenTherm Error Indication

If an error occurs in the OpenTherm boiler , an "Exxx" error code will appear on the screen, where "xxx" is between 0 and 255.

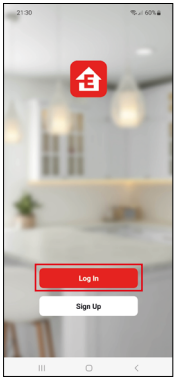
Mobile Application

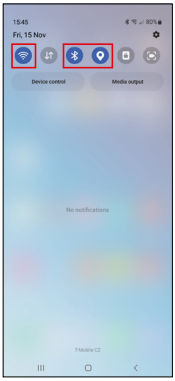
The thermostat can be controlled using a mobile app for iOS or Android.
Download the EMOS GoSmart app for your device.
Tap the Log In button if you've used the app before.
Otherwise, tap the Sign Up button and register.

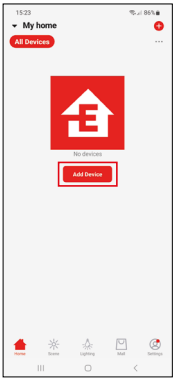
Pairing with the App

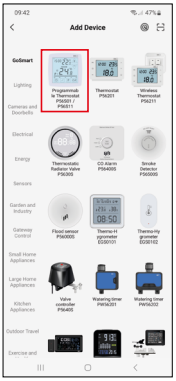
Long-press the "P" button, the screen will display CONF. Then long-press ◷, the screen will display E2 and the WiFi icon will be flashing. Tap Add Device in the app. Tap the GoSmart list on the left and tap the Programmable Thermostat P56S01/P56S11 icon. Follow the instructions in the app and enter the name and password for your 2.4 GHz Wi-Fi network. The gateway will pair with the app within 2 minutes.

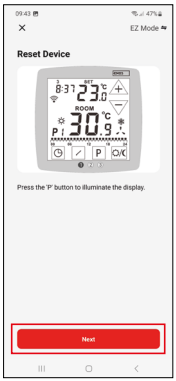
Note: If the device fails to pair, repeat the process. 5 GHz Wi-Fi networks are not supported.

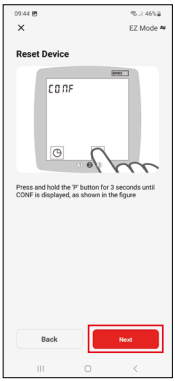


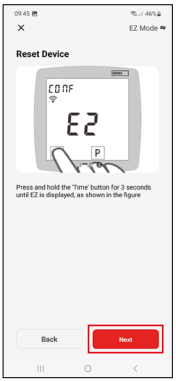


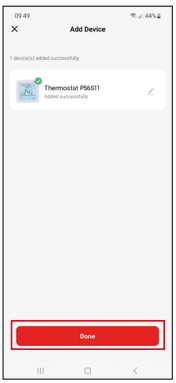


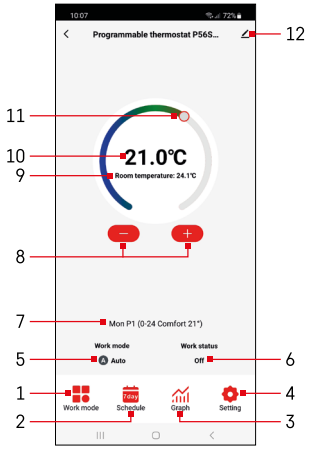










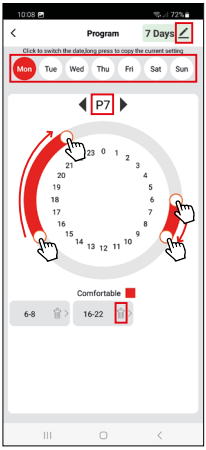


Controls and Functions

1 – temperature mode settings
2 – temperature programme settings
3 – graph
4 – settings
5 – set temperature mode
6 – relay status
7 – set programme
8 – temperature setting
9 – room temperature
10 – set temperature
11 – change temperature
12 – advanced settings

Temperature Mode Settings

Auto – automatic temperature control according to the programme
Manual – manual temperature control
Temporary – temporary manual temperature change valid until the next scheduled temperature change
Boost – temporary manual change in temperature for 1 to 9 hours, set in 1 hour increments
Holidays – long-term manual temperature change for 1 to 99 days, set in 1 day increments
OFF – anti-freeze mode, temperature fixed to 7 °C



Setting a Temperature Programme

Tap the pencil icon in the top right and choose the days setting:

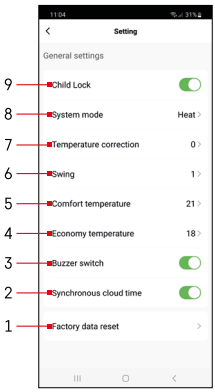
- 7 – calendar week
- 5+2 – workdays + weekend
- 24h – individual day

Tap to mark the programmed day, then long tap to copy the programmed schedule to other days.
Use the left/right arrow to select one of the P1–P9 programmes.
P1–P6 are factory preset programmes and cannot be modified.
P7–P9 are programmes that can be modified.

The circle represents a day divided into 24 hours, with 1 hour resolution.
Tap into the circle and drag your finger to mark the desired time range for setting the comfort temperature – red.
The time you do not mark is automatically set as economy temperature – grey.
To change the time range, either tap and drag your finger around the circle again or tap the grey time setting box at the bottom.
Tapping the trash bin icon deletes the setting.

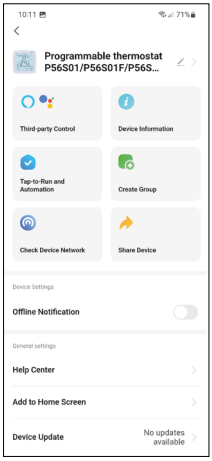
Graph

Displays a chart of set and measured temperature within the last max. 7 days.



Settings

1 – restore to factory settings (reset)
2 – time synchronization with the cloud
3 – button sound settings
4 – economy temperature setting
5 – comfort temperature setting
6 – temperature differential setting
7 – room temperature calibration setting
8 – heating/cooling system settings
9 – button lock



Advanced Settings

- Third-Party Control - connection to voice assistant
- Device Information – basic information about the device
- Tap-To-Run and Automation – scenes and automations assigned to the device
- Create Group – creates a group of similar devices
- Check Device Network – Wi-Fi network test
- Share Device – shares control of the device with another person
- Offline Notification – notifies when the device is offline for over 8 hours (e.g. power outage)
- Help Center – displays frequently asked questions and their solutions and provides the option to send us a question/suggestion/feedback directly
- Add to Home Screen – adds an icon for the device on the phone's home screen
- Device Update – updates the device

Troubleshooting FAQ

The thermostat is not working

- check the power cable and the USB adapter
- check that all cables are intact and correctly connected
- test wireless communication between the units
- test the functioning of the WiFi connection
- check that the OpenTherm setting is configured correctly on both devices
- check that the target temperature on the thermostat is set correctly; if the temperature set on the thermostat is lower than current temperature in the room, the boiler or heating will not activate
- check that the Heating/Cooling mode is set correctly
- restart the thermostat