



AURATON Auriga

User manual ver. 20200920

The document contains information on the safety, installation and use of the AURATON Auriga device.

A daily, wired temperature controller

AURATON Auriga is a daily, wired temperature controller designed to work with a gas or electric heating device.



FrostGuard function to
protect the room against freezing.



Possibility to temporarily lower the programmed temperature
For a period of 6 hours, every day, at the same time.

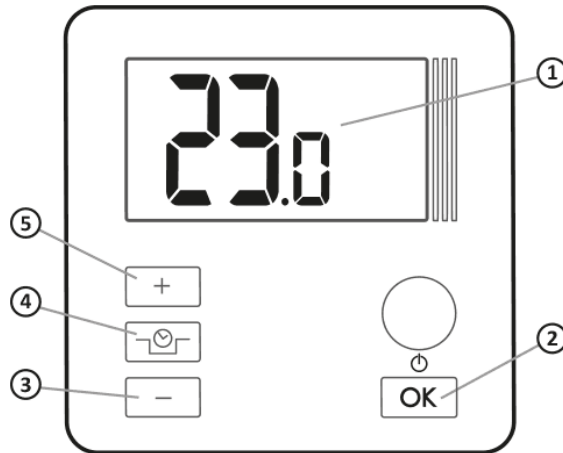
LCD

Backlit LCD display The
backlit display enables the device operation supervision even in
poorly lit rooms.


Description of AURATON Auriga

daily, wired temperature controller

On the front part of the housing there are a backlit LCD display and four function buttons.



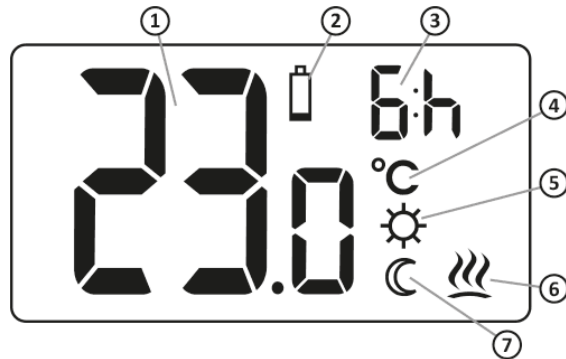
1. LCD display
2. confirm button or on / off button regulator
3. temperature decrease button
4. button for the temporary temperature reduction mode
5. temperature increase button

- **hold** - on / off regulator ()
- **short press** - confirms the temperature setting (**OK**)

Display

1. Temperature

In normal operation mode, the AURATON Auriga displays the temperature of the room in which it is currently installed.



2. Battery exhausted (🔋)

The indicator is visible when the minimum permissible battery voltage is exceeded. Replace the batteries as soon as possible.

NOTE: To maintain AURATON Auriga settings, battery replacement should take less than 30 seconds.

3. Temporary temperature reduction duration indicator

Shows how long the temporary temperature reduction mode will remain active.

4. Temperature unit (°C)


Indicates that the temperature is displayed in degrees Celsius.

5. Temporary temperature decrease program mode indicator (⚙)

Indicates the user scheduled "temporary temperature decrease" mode. It appears when the mode is not currently implemented, but the "temporary temperature reduction" function is active (*more information in the "Temporary temperature reduction mode setting" chapter*)

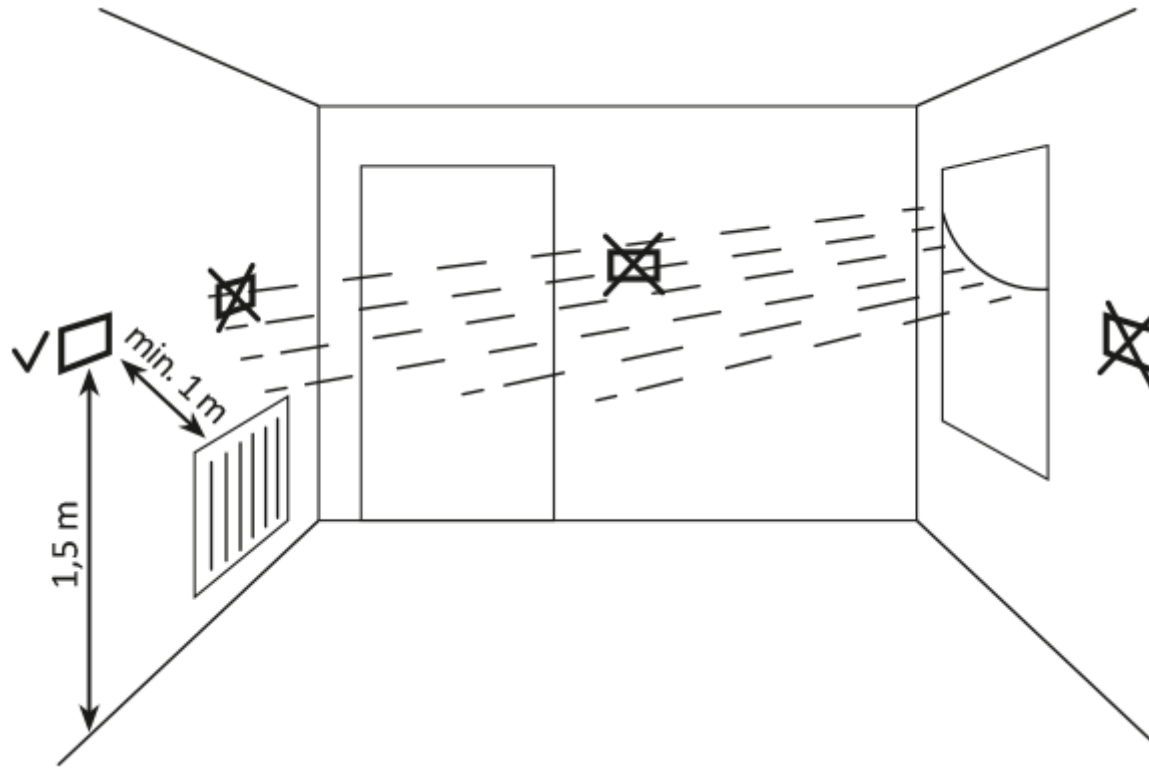
6. AURATON Auriga activation indicator ()

Pictogram informing about the device's operating status. Visible when the controlled device is turned on.

7. Temporary temperature decrease mode indicator ()

Appears while the temporary temperature decrease program is running.

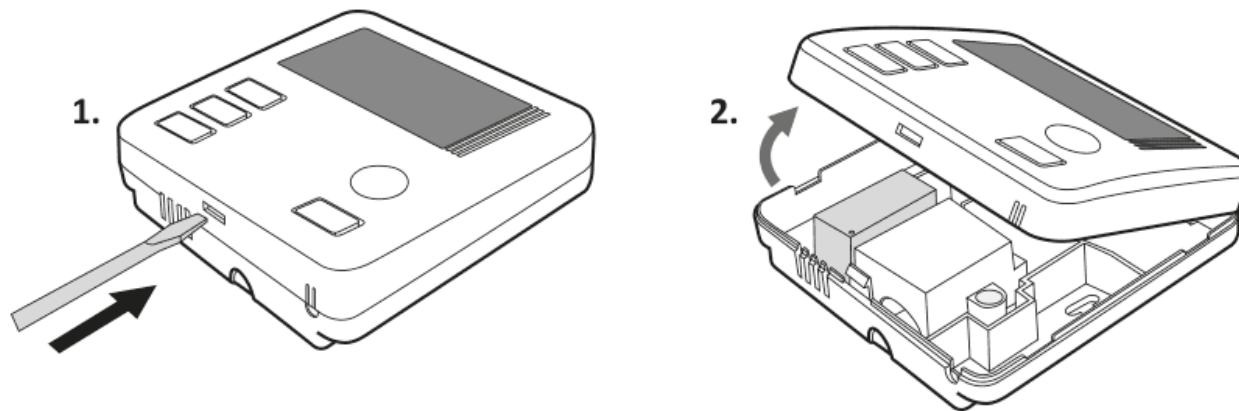
Choosing the right location for AURATON Auriga



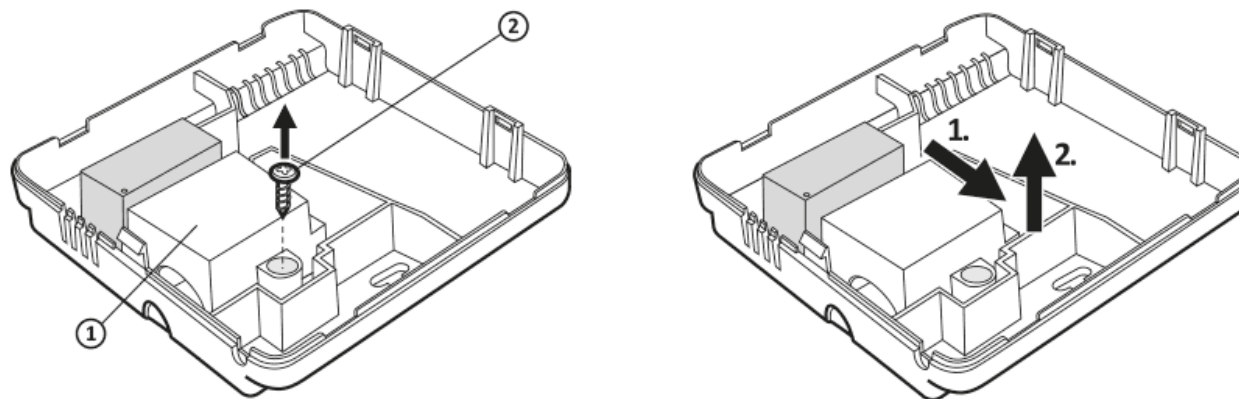
The correct operation of AURATON Auriga is largely influenced by its location. Location in a place with no air circulation or direct sunlight may result in incorrect temperature control. AURATON Auriga should be installed on the internal wall of the building (partition wall), in an environment with free air circulation. Avoid the proximity of heat emitting devices (TV, heater, refrigerator) or locations exposed to direct sunlight. Problems in proper operation may be caused by the vicinity of the door, exposing AURATON Auriga to possible vibrations.

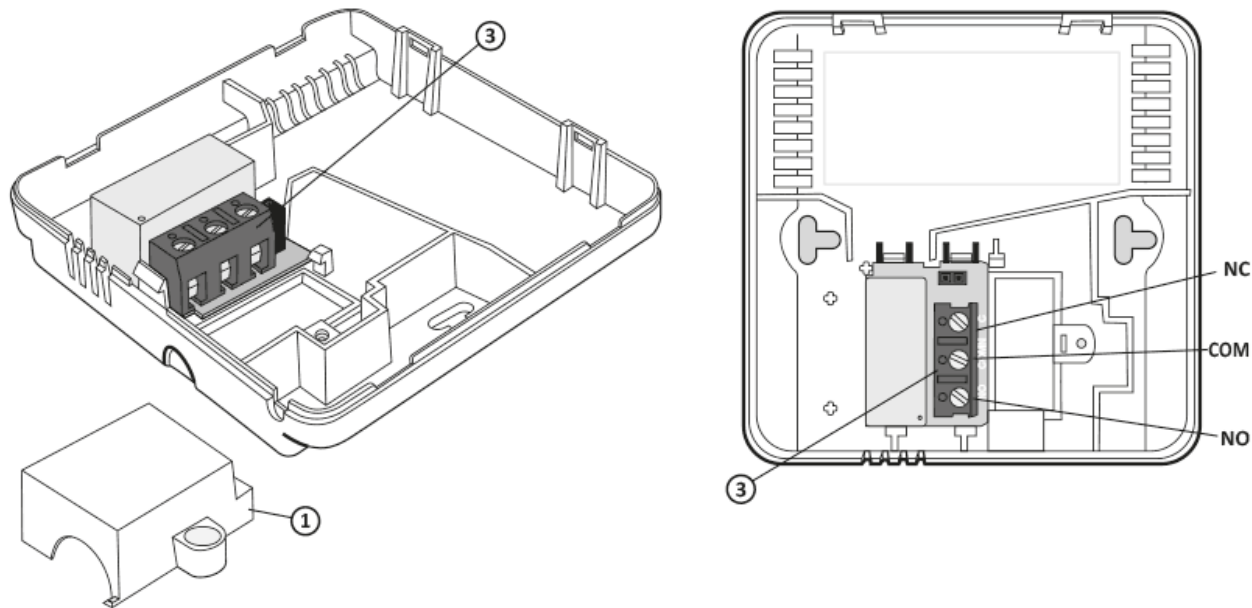
Connecting the cables to the AURATON Auriga

To connect the wires, remove the cover as shown below:



The cable clamps are located on the back of the AURATON Auriga, under the plastic cover.





1. cover
2. screw
3. wire clamps

It is a typical single-pole two-state relay. In most cases, the NC terminal is not used.

NOTE:

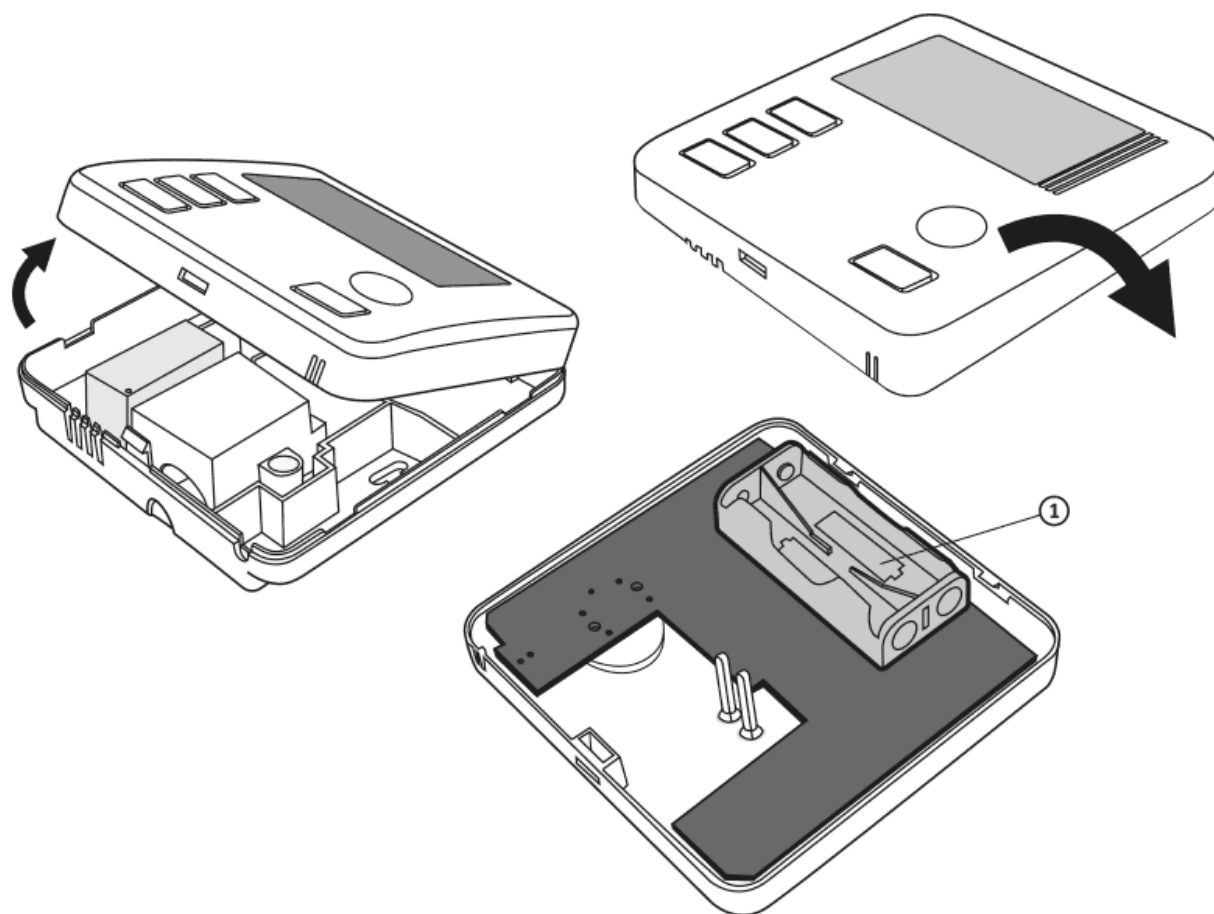
After connecting the wires, put the plastic cover back on.

Installing / replacing the battery

The battery socket is located inside the regulator on the front of the housing. To install the batteries, remove the controller housing as shown in the chapter "Connecting the cables to the AURATON Auriga".

NOTE:

We recommend alkaline batteries to power AURATON controllers. Do not use rechargeable batteries because the rated voltage is too low.



1 - battery socket 2 x AAA 1.5V

Insert two AAA 1.5V batteries into the battery socket, paying attention to the correct polarity of the batteries.

NOTE:

After replacing the battery and assembling the housing, we recommend pressing the button twice in order to stabilize the relay operation.

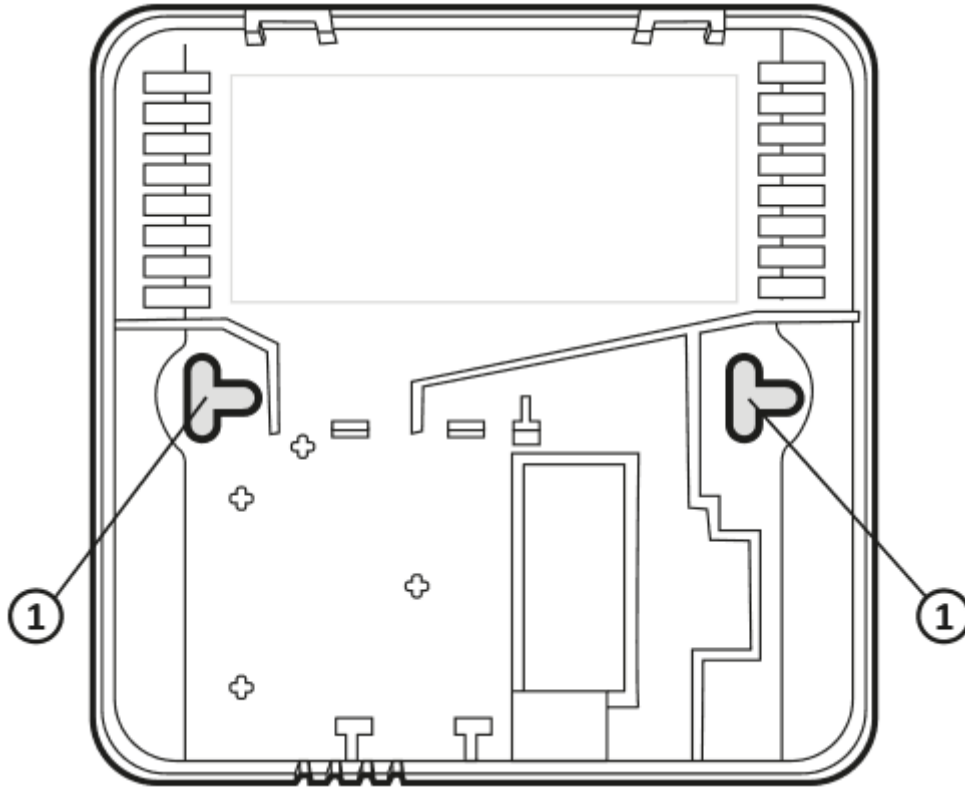
Mounting AURATON Auriga - a daily, wired temperature controller

To fix the AURATON Auriga controller to the wall:

1. Remove the cover (*as shown in the section "Connecting the cables to the AURATON Auriga"*).
2. Drill two holes 6 mm in diameter in the wall (*mark the spacing between the holes using the back part of the controller housing*).
3. Put the wall plugs in the drilled holes.
4. Screw the rear part of the controller housing to the wall using the screws included in the kit.
5. Put the regulator housing back on.

NOTE:

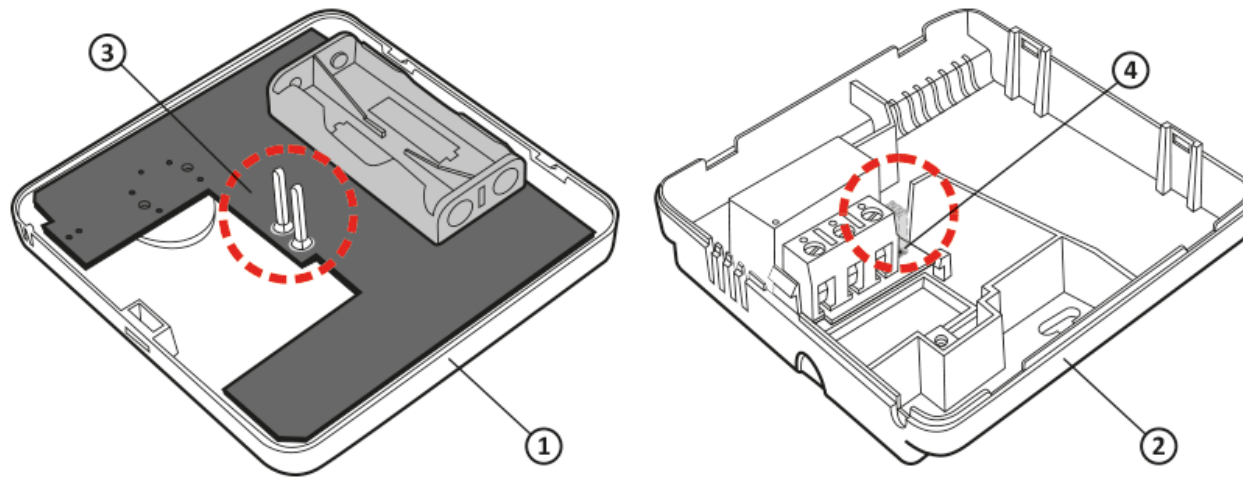
In the case of a wooden wall, there is no need to use expansion bolts. It is enough to drill holes with a diameter of 2.7 mm (instead of 6 mm) and screw the screws directly into the wood.



1 - fixing screw hole.

Putting the cover on: NOTE

When putting the front part of the housing back on the rear part, pay attention to the pins that control the relay.



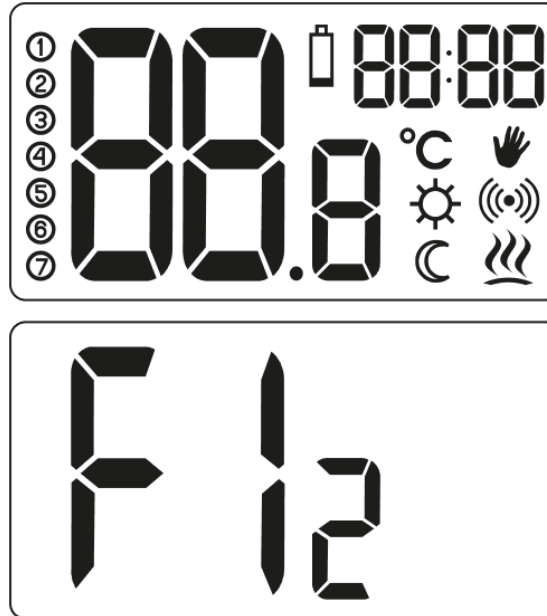
1. Front housing
2. Rear housing
3. Pins
4. Pin connector socket or the place where pins contact the board

ATTENTION:

When assembling the housing, make sure that the connection "pins" are not bent and fall into their place on the relay board. This is crucial for the proper operation of AURATON Auriga.

First launch of AURATON Auriga

After the batteries are correctly inserted into the sockets, all segments (display test) will appear on the LCD display for a second, followed by the software version number. After a while, the current room temperature will be displayed automatically. AURATON Auriga is ready for operation.



Temperature setting




NOTE:

The first pressing of any function button always turns on the backlight, and only the next call of the button function.

To set the desired temperature in the normal operation mode:


1. Press the or button . The segment responsible for displaying


the temperature will enter the edit mode and start blinking.

2. Use the  and  buttons to set the desired temperature with an accuracy of 0.2 ° C
3. The selection is confirmed by a short press of the  button



Setting the "temporary temperature reduction" mode

 If we would like to lower the temperature in the room by 3 ° C every day at the same time of the day, it is possible to temporarily reduce it for a period of 6 hours. To do this:

1. Press and hold the  button for 3 seconds . The display shows the moon symbol (☾) and the hour indicator (6: h).
2. AURATON Auriga enters the "temporary temperature reduction" mode and every day **at the same time** will lower the programmed temperature in the normal mode by 3 ° C for a period of 6 hours.


NOTE:

After 6 hours, the AURATON Auriga will return to its base temperature setting. Instead of the moon symbol (☾), the sun symbol (☀) will appear on the screen.

NOTE:


The "temporary temperature reduction" mode always starts when the function is turned on. This means that any temporary temperature reduction should be programmed at a time when we want such a change to take place.

Disabling the "temporary temperature reduction"

To disable the "temporary temperature reduction" mode, press the  button again for 3 seconds . The display will show only the room temperature and the AURATON Auriga will return to its normal operating mode.

FrostGuard function






AURATON Auriga is equipped with a special "FrostGuard" function, which protects the room against possible freezing. This function is activated when **AURATON Auriga is turned off** .

With the AURATON Auriga turned off, when the room temperature drops to 2 ° C, the Fr (Fr) And  symbols appear on the display and the relay will turn on. When the temperature rises to 2.2 ° C, the display will turn off again and the relay will disconnect the contacts.

Hysteresis change

The hysteresis is to prevent too frequent switching on of the actuator due to small temperature fluctuations.

*For example, for the **HI 2** hysteresis, when the temperature is set to 20 ° C, switching on will take place at 19.8 ° C, and switching off at 20.2 ° C. For the **HI 4** hysteresis, when the temperature is set to 20 ° C, switching on will take place at 19.6 ° C, and switching off at 20.4 ° C.*

To switch to the hysteresis change mode, hold down the ,  and  buttons simultaneously for 3 seconds. The hysteresis change mode is signaled by the **HI** inscription. Use the  and  buttons to change the hysteresis settings.

HI 2 - ± 0.2 ° C (*factory set*)

HI 4 - ± 0.4 ° C

HI P - PWM operating mode (*chapter "PWM operating mode"*).

Confirm your choice by pressing .

AURATON Auriga will return to normal operation.



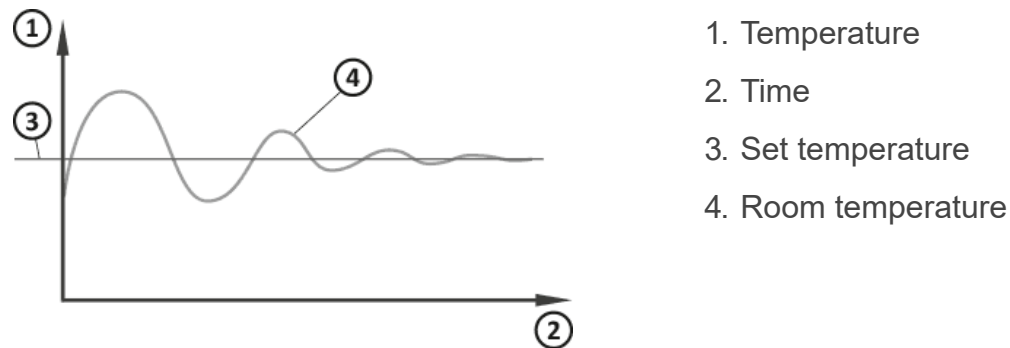
PWM operating mode

(Pulse-Width Modulation)

By changing the hysteresis settings (*chapter "Configuration settings"*), we can turn on the PWM operating mode.

In this mode, AURATON Auriga cyclically switches on the heating device in order to minimize temperature fluctuations. AURATON Auriga checks the temperature rise times and the temperature drop times.

Knowing these values, AURATON Auriga turns the heating device on and off in such cycles to keep the temperature as close as possible to the set value.





NOTE:

In PWM mode, AURATON Auriga can turn on the heating device despite the fact that the temperature in the room is higher than the set temperature. This is due to the PWM algorithm that aims to maintain the set temperature and anticipate the behavior of the thermal system.

Delay in switching on the relay

After the heating device is turned off, the relay will be turned on again not earlier than **after 90 seconds** .

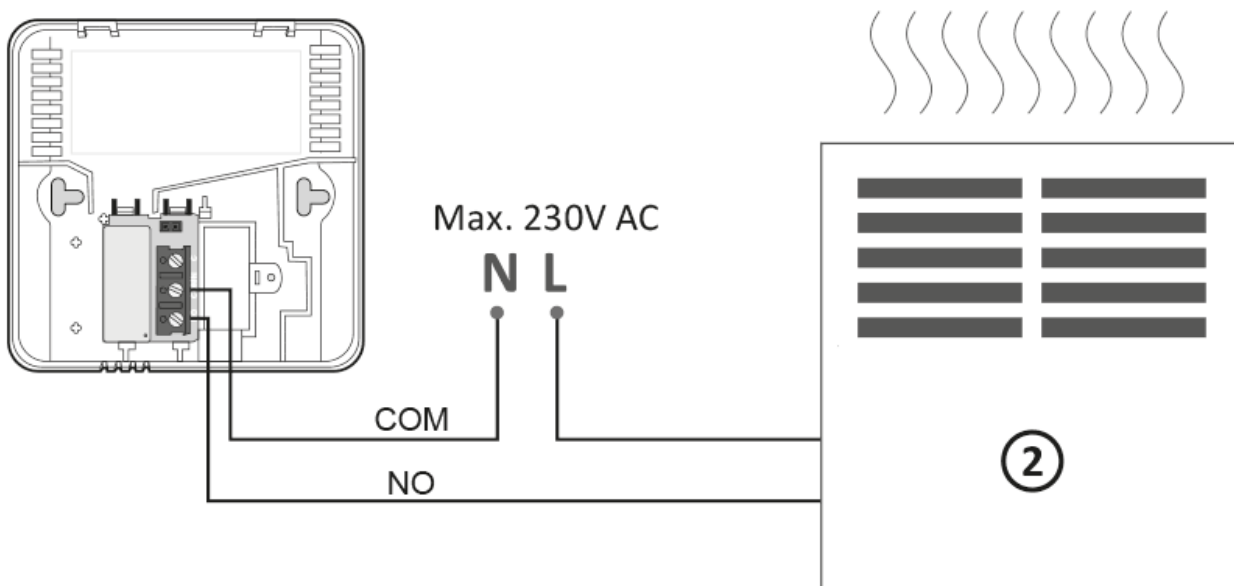
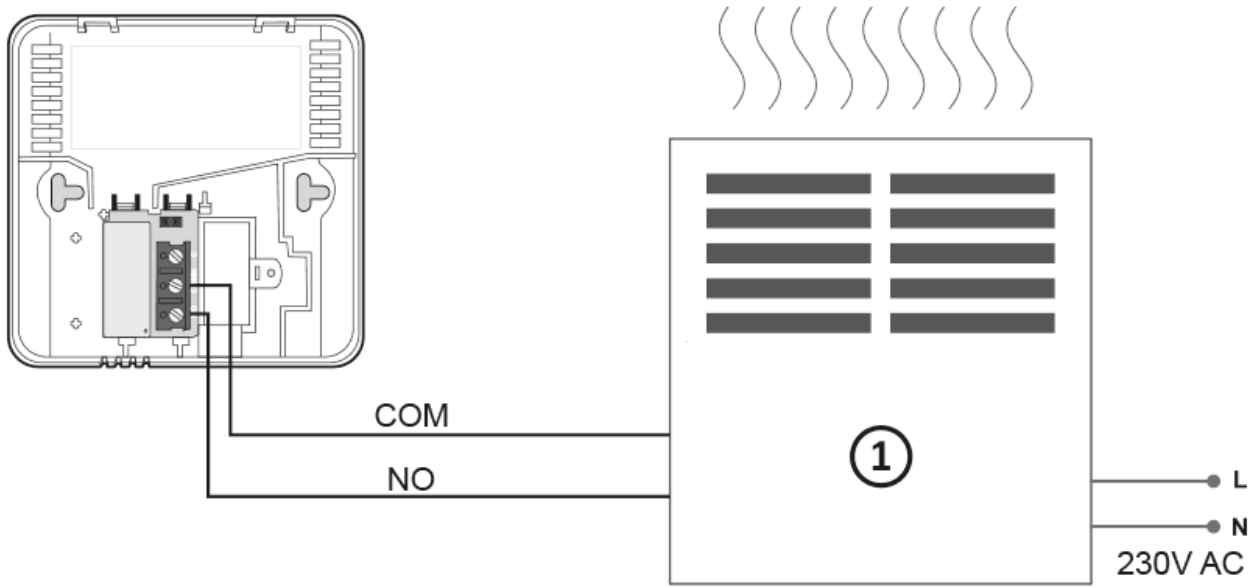
Remarks

1. The AURATON Auriga can be turned on or off at any time by momentarily holding down the  button .
2. The first pressing of any function button always turns on the backlight, and only the next call of the button function.
3. When programming any function, not pressing any button for 10 seconds is tantamount to pressing the  button .

Connection diagram of AURATON Auriga

ATTENTION:

Auraton Auriga can work with gas or electric heating device



1. Heating device, e.g. *gas stove*
2. Electric heater (MAX 230V AC, 16 A)

Cleaning and maintenance

- The outside of the device should be cleaned with a dry cloth. Do not use solvents (such as benzene, thinner, or alcohol).
- Do not touch the device with wet hands. It may cause electric shock or serious damage to the device.
- Do not expose the device to excessive smoke or dust.
- Do not touch the screen with a sharp object.
- Avoid contact of the device with liquids or moisture.

Technical data

Power supply:	2 x AAA (2 x 1.5V), alkaline
Working temperature range:	0-45 ° C
Operation status signaling:	LCD display

Number of temperature levels:	1
Anti-freeze temperature:	2 ° C
Temperature measuring range:	0-35 ° C
Temperature control range:	5 - 35 ° C
Temperature setting accuracy:	0.2 ° C
Hysteresis:	± 0.2 ° C / ± 0.4 ° C / PWM
Relay load capacity:	Max. 250 V AC, max. 16 A.
Work cycle:	Daily
Level of security:	IP20
Dimensions [mm]:	90 x 90 x 36

Disposal of the device



The devices are marked with the symbol of a crossed-out waste bin in accordance with the European Directive 2012/19 / EU on the Waste Electrical and Electronic Equipment Act, such marking indicates that this equipment, after its useful life, cannot be placed together with other household waste.

The user is obliged to return it to a waste electrical and electronic equipment collection point.