finder®
SWITCH TO THE FUTURE

CONFIGURATION MANUAL FOR ACTUATOR

Guide to the configuration of the Bliss2's RF Type 13.21.8.230.S000
868 MHz actuator

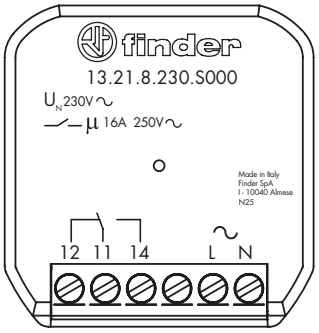
CONTENTS

CONFIGURATION MANUAL FOR THE TYPE 13.21.8.230.S000 ACTUATOR

INTRODUCTION

PRODUCT DETAILS

- Relay: SPDT 16 A 250 VAC
- Power supply 110…230 V AC
- 1 reset button on top
- Setup from Finder Bliss app
- QR code for pairing
- Works with the Bliss2 smart thermostat
- 868MHz long range transmission



WHAT IS IT USED FOR

The Type 13.21.8.230.S000 868 MHz radio frequency actuator is useful in cases where the switching circuit of the heating/cooling system and the thermostat are remote and cannot easily be directly connected. The cases in which this condition occurs can be several, and here are some examples:

The thermostat directly connected to the heating system may not be located in the best place for maintaining the comfortable temperature you require for your home. For example, a corridor is usually not ideal, but by utilising the RF actuator you can simply and wirelessly relocate the thermostat to the living room.

You have a system with several zones and you would like to have precise temperature control for each zone. So you can install a thermostat for each zone and activate the appropriate electro zone valves using the RF actuators.

You need to control humidity via a dehumidification or humidification system thanks to the RH sensor embedded in the Bliss2 thermostat.

A key feature of the Bliss2 Type 1C.B1.9.005.0007 smart thermostat is battery power. This allows you to install the device on the wall, anywhere in the system using screws or adhesive taking full advantage of the Type 13.21.8.230.S000 868 MHz radio frequency actuator.

Humidity management

No masonry works

Time saving

NB: The Bliss2 smart thermostat can still be powered via the 230V AC power supply Type 01C.02.8.230.0500

HOW IT WORKS

The Type 13.21.8.230.S000 actuator uses an 868 MHz radio frequency communication to reach the Type 1Y.GU.005.1 Gateway2, which acting as a central controller, receives the commands from the Bliss2 as previously configured.

The basic communication scheme is like this:

Type 1C.B1.9.005.0007 — Type 1Y.GU.005.1 — Actuator Type 13.21.8.230.S000

A maximum of 5 actuators can be associated with a single **Bliss2**.

Time saving:

Bliss

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TOPOLOGY

GATEWAY2
2nd Generation
Type 1Y.GU.005.1

A maximum of 10 BLISS2 can be associated with a single Gateway2.

Actuator
(general heating)
Type 13.21.8.230.S000

Actuator
(general cooling)
Type 13.21.8.230.S000

BLISS2
Digital thermostat
Type 1C.B1

A maximum of 5 actuators can be associated with a single Bliss2.

GATEWAY2
2nd Generation
Type 1Y.GU

Actuator
Type13.21.8.230.S000

Actuator
Type 13.21.8.230.S000

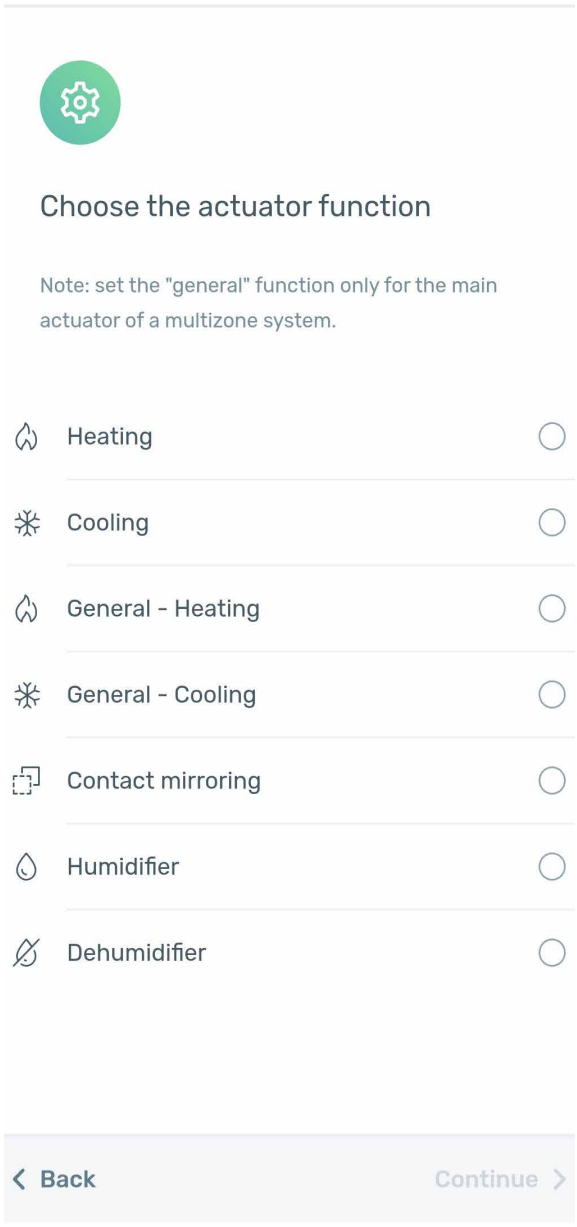
Actuator
Type13.21.8.230.S000

Actuator
Type 13.21.8.230.S000

Actuator
Type 13.21.8.230.S000

WORKING MODES

The Type **13.21-S000** actuator can be configured in different modes depending on its role in the system:



Heating:
The actuator closes its contact to increase room temperature. Contact closes when the temperature is below the set point. Only works if the Bliss2 is set in "Heating" mode (winter).

Cooling:
The actuator closes its contact to decrease the room temperature. Contact closes when the temperature is above the set point. Only works if Bliss2 is set in "Cooling" mode (summer).

General – Heating:
The actuator closes its contact whenever any Bliss2 associated with the same Gateway2 set as "Heating" closes its contact to increase the temperature.

General – Cooling:
The actuator closes its contact whenever any Bliss2 associated with the same Gateway2 set as "Cooling" closes its contact to decrease the temperature.

Mirror:
The actuator closes its contact every time the associated Bliss2 closes its contact, regardless of the operating mode of the Bliss2.

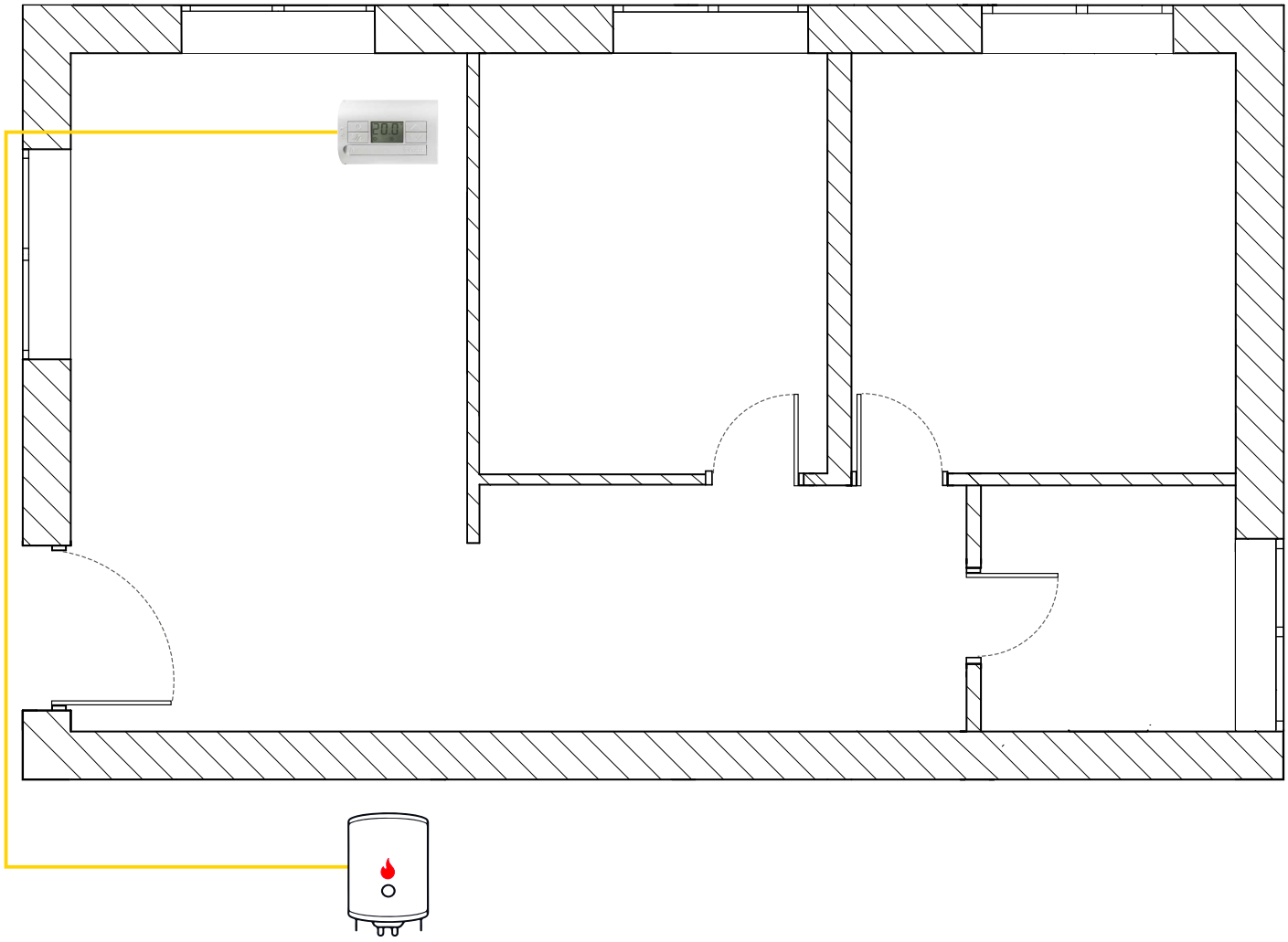
Humidificaton:
The actuator closes its contact if the humidity detected by the thermostat is lower than the low threshold and opens the contact if it is higher than the high threshold.

Dehumidificaton:
The actuator closes the contact if the humidity detected by the thermostat is higher than the high threshold and opens its contact if it is lower than the low threshold.

APPLICATION EXAMPLES

SINGLE HEATING SYSTEM WITH SINGLE BLISS2

During the replacement of an old thermostat or due to the need to move the temperature detection point for optimal comfort, it is possible to change the position of the device without invasively changing the structure of the electrical system and/or walls.

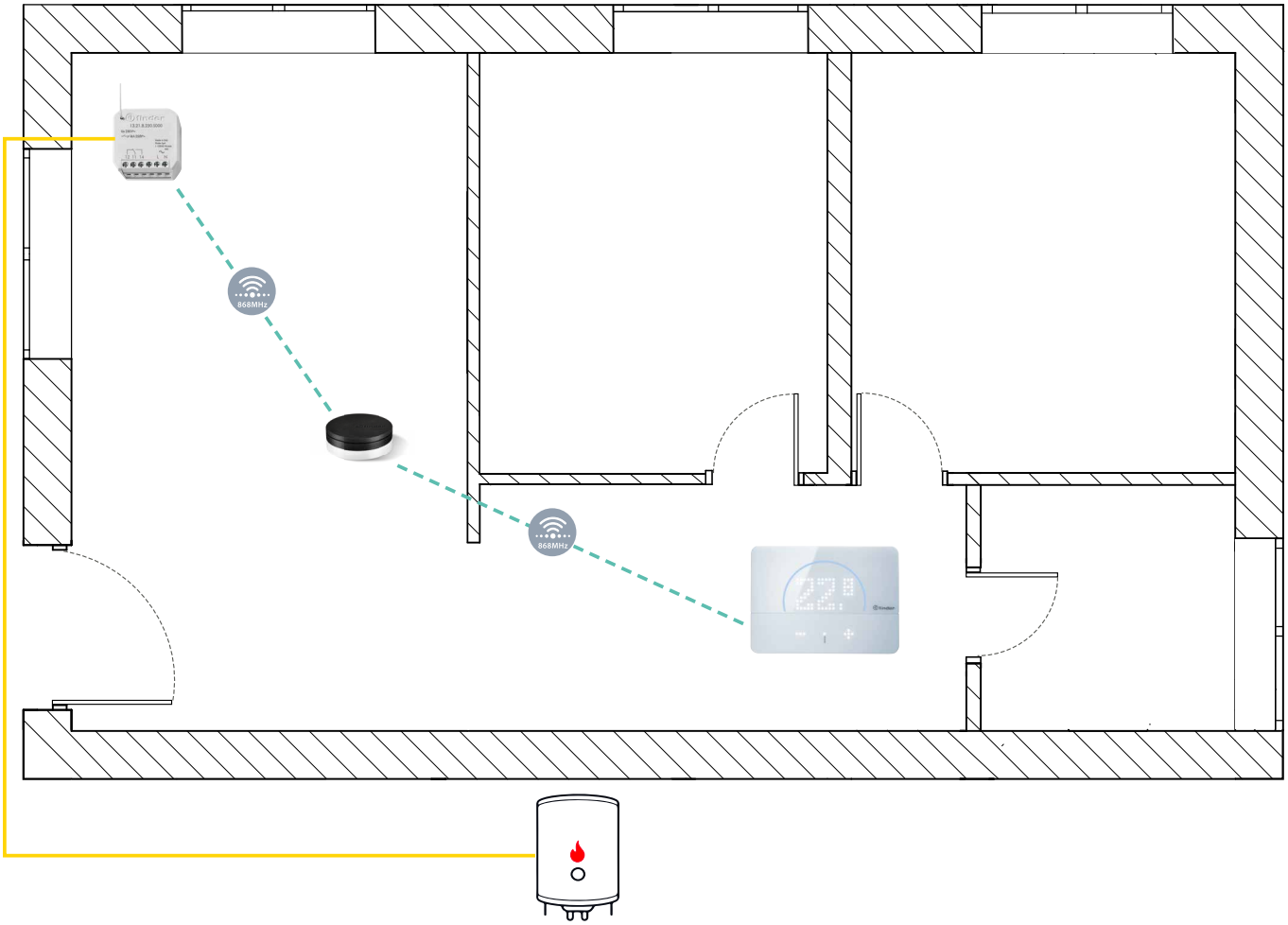


APPLICATION EXAMPLES

SINGLE HEATING SYSTEM WITH SINGLE BLISS2

Using the Bliss2 smart thermostat, the Gateway2 and a Type **13.21.8.230.S000** radio frequency actuator, you can improve the system in these two ways:

1)



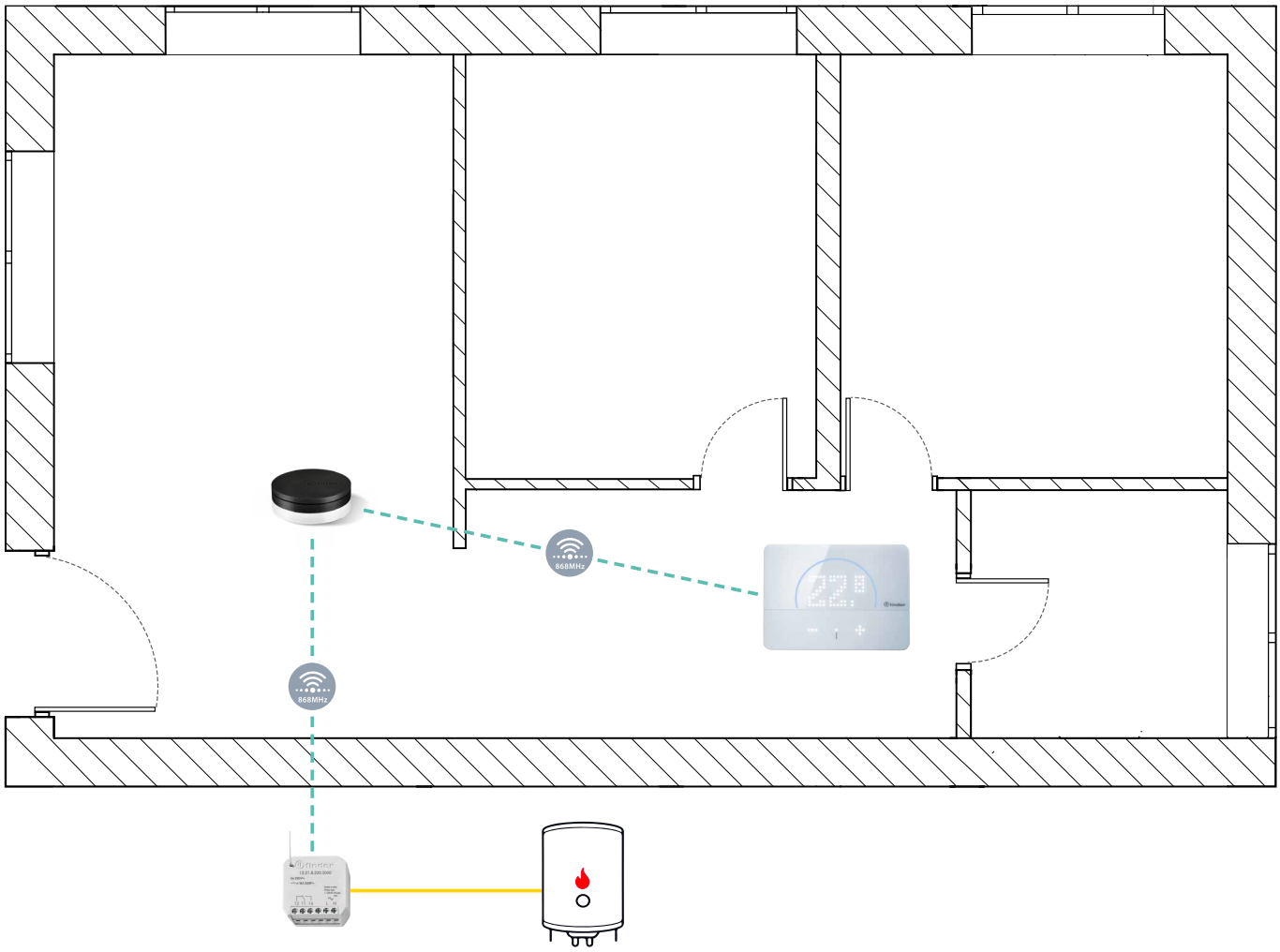
Bliss2 smart thermostat in the new position and the actuator replacing the previous thermostat.

Note: You have to power the actuator with Phase and Neutral.

APPLICATION EXAMPLES

SINGLE HEATING SYSTEM WITH SINGLE BLISS2

2)



Bliss2 smart thermostat in the new position and the actuator replacing the previous thermostat.
The Bliss2 smart thermostat in the new position and actuator installed close to the boiler.
In both cases, it is necessary to set the actuator on “Mirror” or “Heating”.

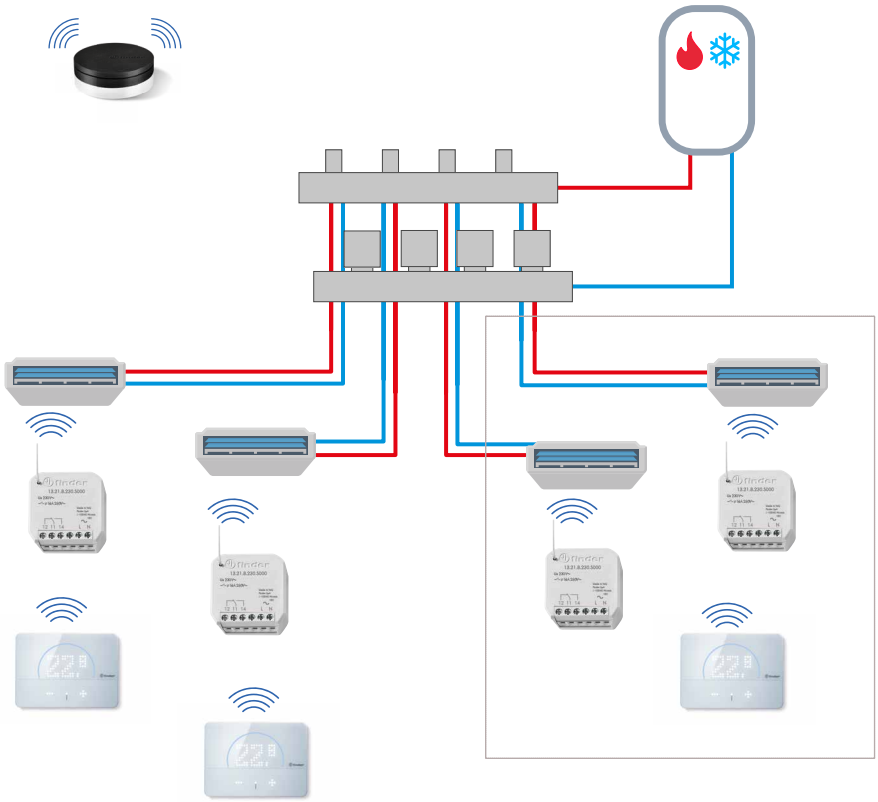
Note: You have to power the actuator with Phase and Neutral.

APPLICATION EXAMPLES

SINGLE CENTRAL HEATING AND COOLING SYSTEM

It is possible that some systems provide for winter heating and summer cooling with the same ducts and/or fan coils.

The mode change occurs upstream on specific dates and it is necessary to change the operating mode on the thermostat to switch the logic.



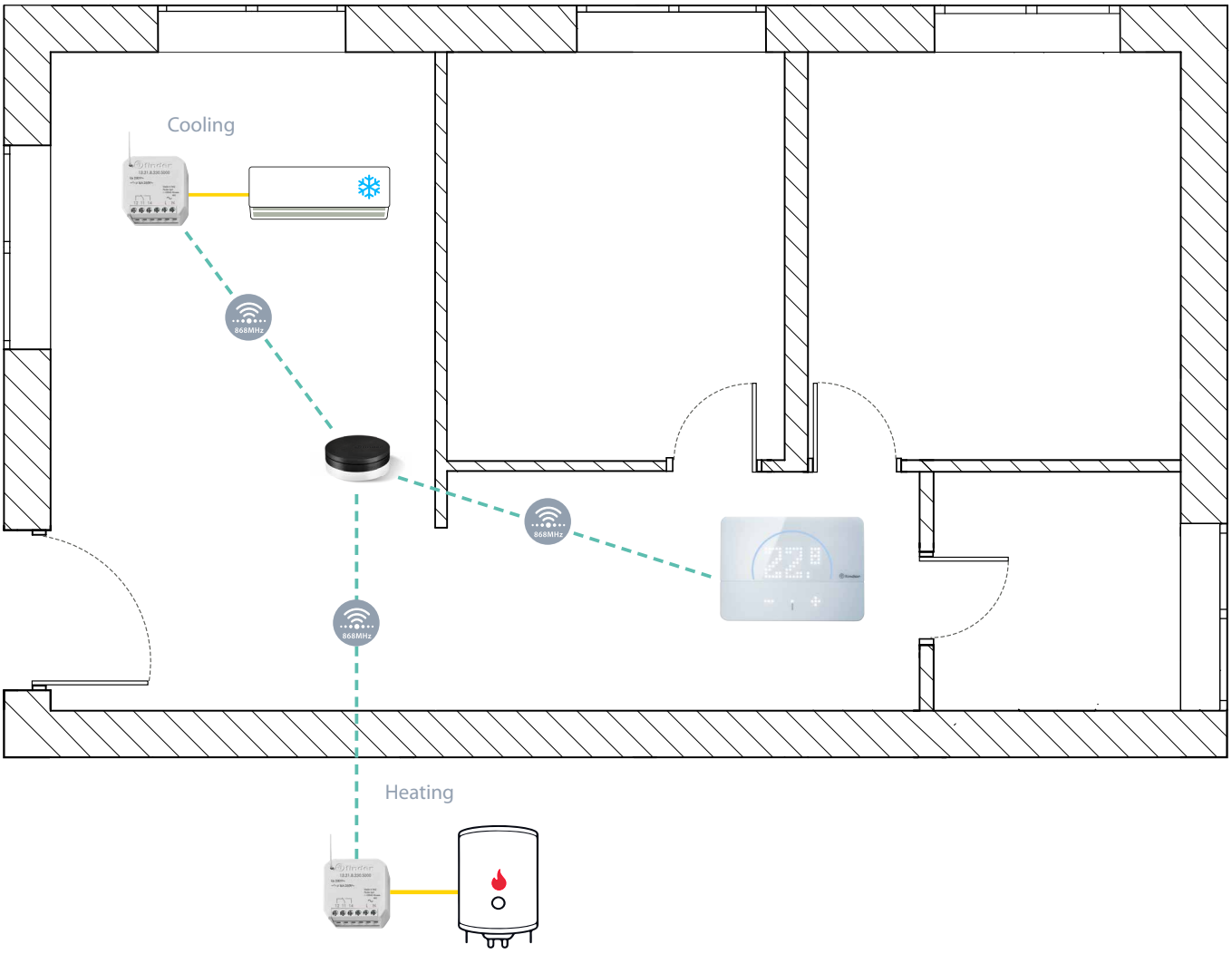
In this case, it is necessary to set the actuator of each Bliss2 on "Mirror" and change the operating mode of **Bliss2** (heating / cooling) when the main system is changed.
In this way, in winter it works only with heating logic and in summer only with cooling logic.

Note: It is necessary to supply the actuator with Phase and Neutral.

APPLICATION EXAMPLES

DIFFERENT HEATING/COOLING SYSTEMS WITH SINGLE BLISS2

Individual and separate heating (e.g. boiler) and cooling (e.g. air conditioning) systems but both controlled by a single Bliss2 which is set according to the season:



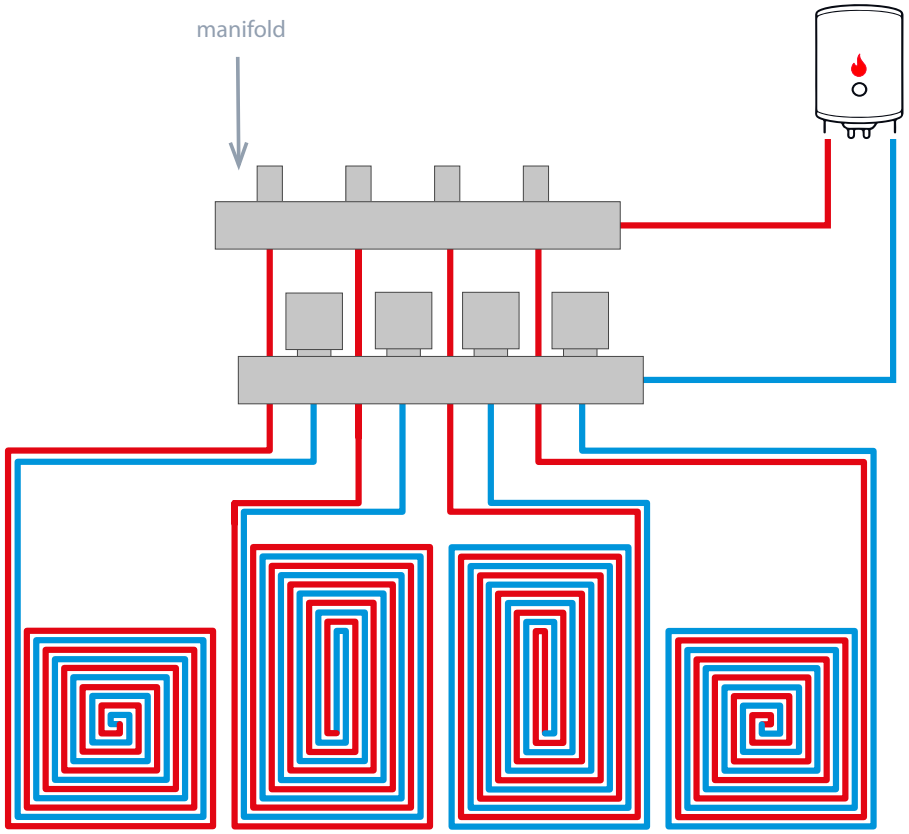
In this case, it is necessary to set the boiler actuator on "Heating" and the air conditioning actuator on "Cooling".
In this way, in winter it only works with heating logic and in summer only with cooling logic using a single chronothermostat.

NB: It is necessary to supply the actuator with Phase and Neutral.

APPLICATION EXAMPLES

MULTI ZONE - HEATING

If the heating system is already split into zones but they are not independent, i.e. a situation like this:



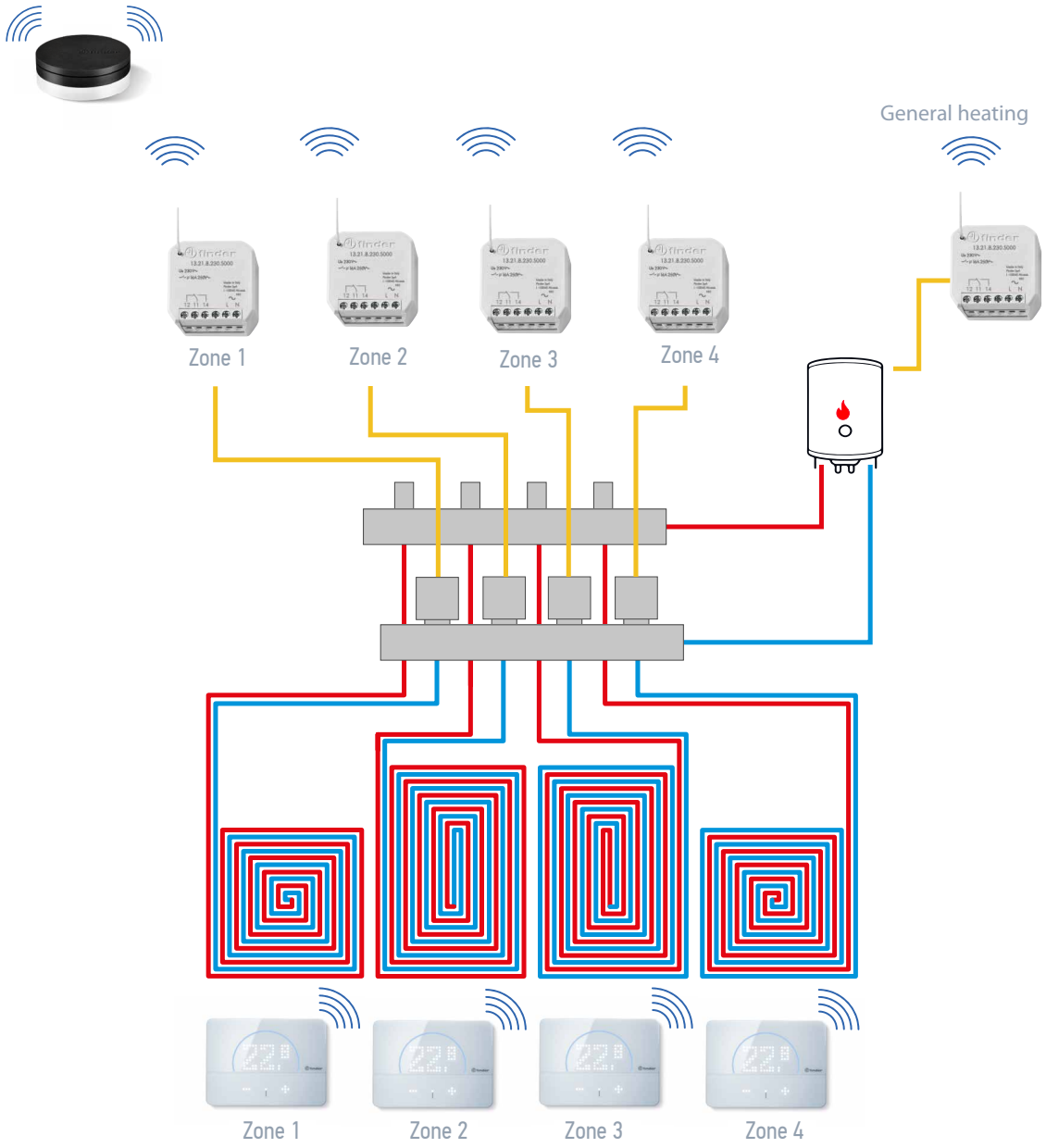
Then, to make each zone independent its own comfort temperature and its own weekly programming, it is necessary to install for each zone an electro-valve on the manifold and an associated Type 13.21.8.230.S000 radio frequency actuator managed by a Bliss2 located in each zone.
If necessary, a general actuator is required for the switching of the boiler or water circulation (see "Electro-valves notes").

In this case, it is necessary to set the zone actuators on "Mirror" or "Heating" and the general actuator (e.g. on the boiler) on "General heating".

APPLICATION EXAMPLES

MULTI ZONE - HEATING

To make the system divided into independent zones it is necessary to follow this scheme:



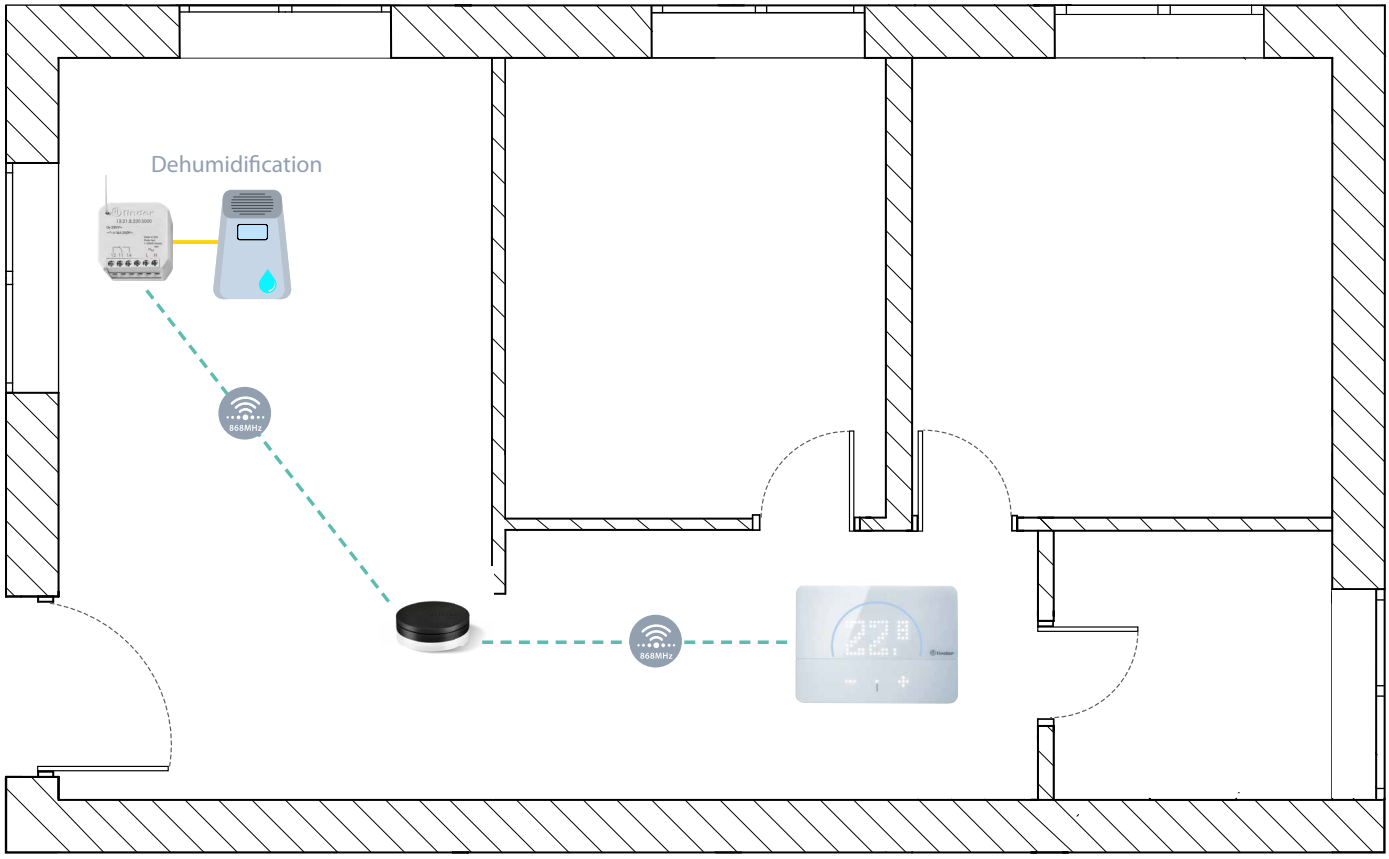
In this case, it is necessary to set the zone actuators on "Mirror" or "Heating" and the general actuator (e.g. on the boiler) on "General heating".

Note: It is necessary to supply the actuator with Phase and Neutral.

APPLICATION EXAMPLES

HUMIDITY CONTROL

In addition to its thermostat function, Bliss2 can manage a humidification or dehumidification system thanks to the radio frequency actuator. In this case, you may find a situation like this:



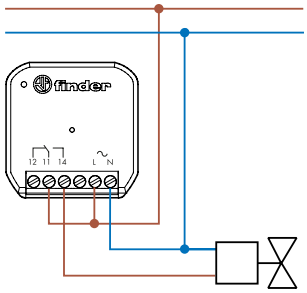
It is necessary to set the actuator on “dehumidification” if it has to manage a dehumidifier or on “humidification” if it has to manage a humidifier. From the app, it is possible to configure the comfort range within which the environment must be set to.

Note: It is necessary to supply the actuator with Phase and Neutral.

ELECTRO-VALVES NOTES

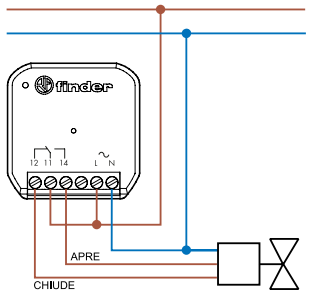
Electro-valves can be of different types:

2 wires:



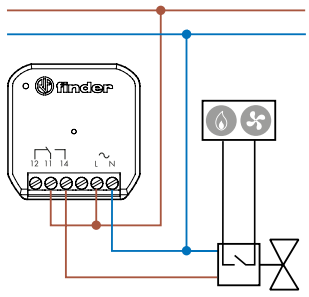
If the valve is powered, it opens the flow, if it is not powered it closes the flow.

3 wires:
If the valve is powered, the NC contact closes the valve flow, while the NO contact opens the valve flow.



In this case, the general actuator is required for the switching of the boiler or water circulation.

4 wires:
If the valve is powered, it opens the flow and closes the contact on the general heating system, if it is not powered it closes the flow and opens the contact on the general system.



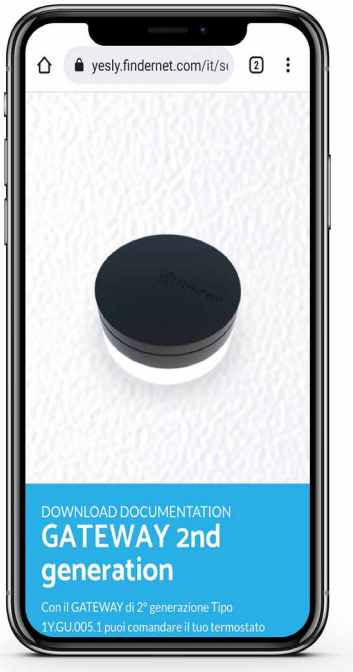
In this case, the general actuator is not necessary because it is the valves themselves that give consent to the boiler or to the circulation of water.

CONFIGURATION VIA BLISS2 APP

INTRODUCTION

Before starting the association of the Type 13.21.8.230.S000 radio frequency actuator, at least one Gateway2 and at least one Bliss2 must already be present in the system.
If this condition has not already occurred, consult the configuration tutorial for those devices at the following link:

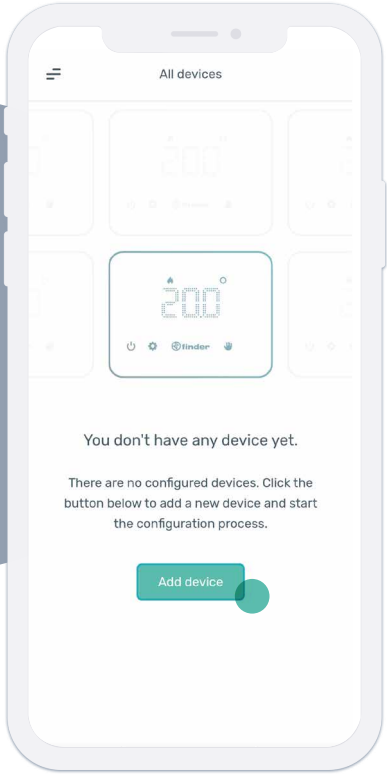
https://cdn.findernet.com/app/uploads/2021/02/26143352/Manual-Bliss2-EN.pdf



Scan for documents

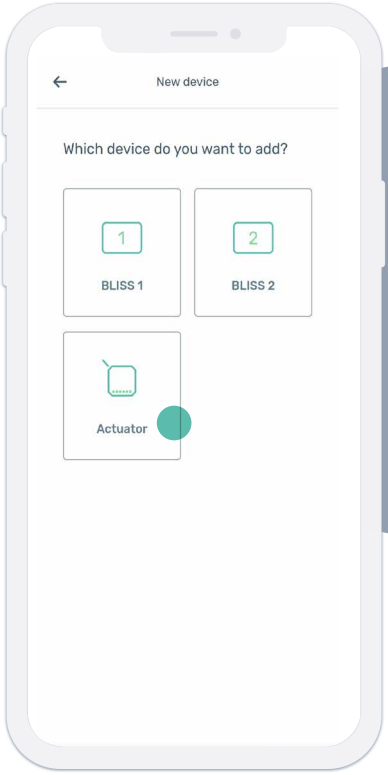
START

01



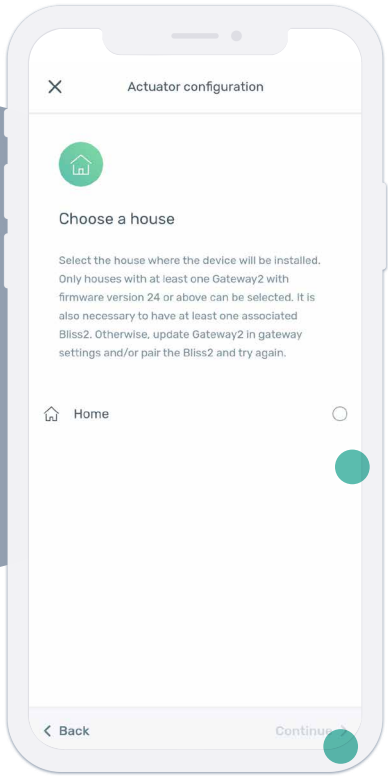
Once at least one Gateway2 and one **Bliss2** have been associated, it is necessary to press "Add device" to start the association of the actuator.

Select "Actuator".



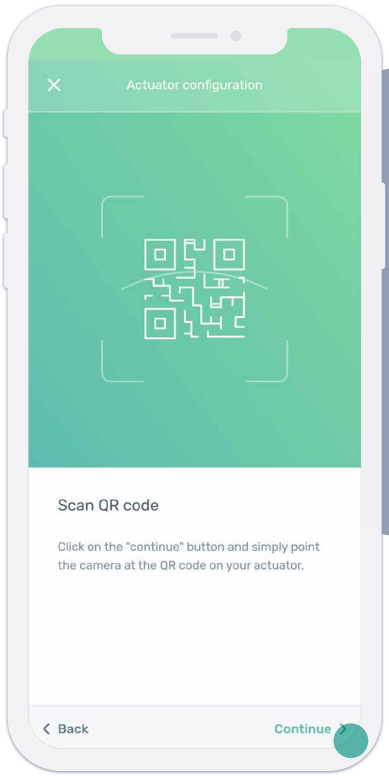
02

03



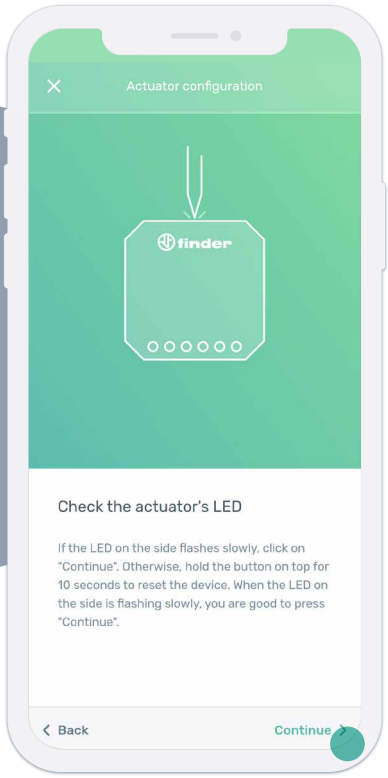
Select the house where there is at least one Gateway2 and one Bliss2 previously created, then press “Continue”.

Scan the QR Code on the side of the device you want to pair, then press “Continue”.



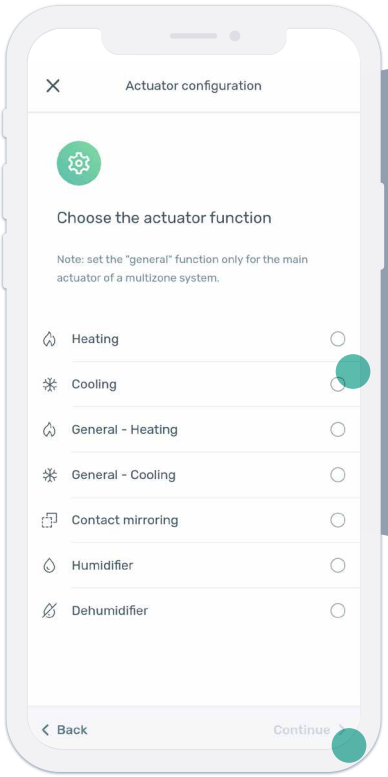
04

05



Check the actuator LED, if the white LED on the side flashes slowly, press “Continue”, otherwise hold the button for 10 seconds to reset the device. When the white LED flashes slowly, you can press “Continue”.

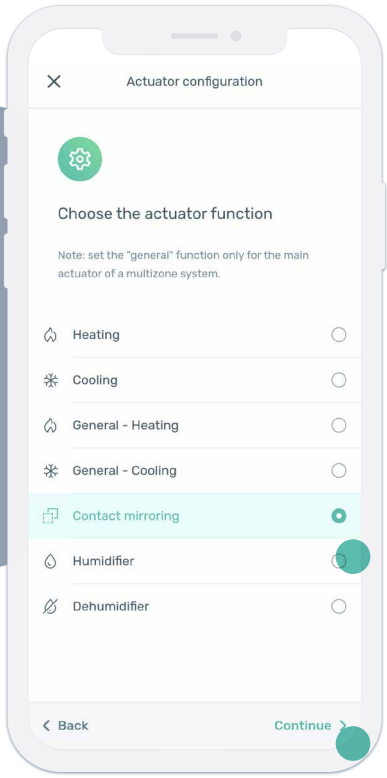
Select the actuator function based on the role it has in the system. See the “Working modes” section.



06

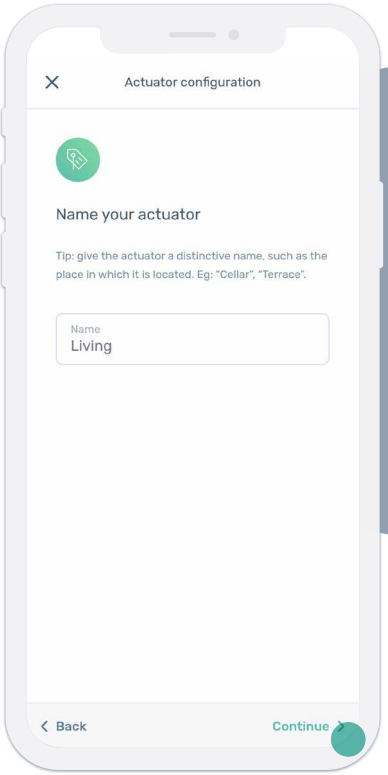
DIRECT FUNCTION

01



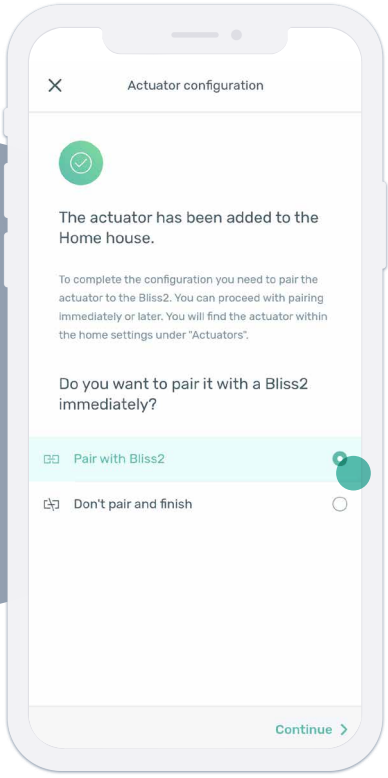
Once the "Heating", "Cooling" or "Mirror" function has been selected, press "Continue".

02



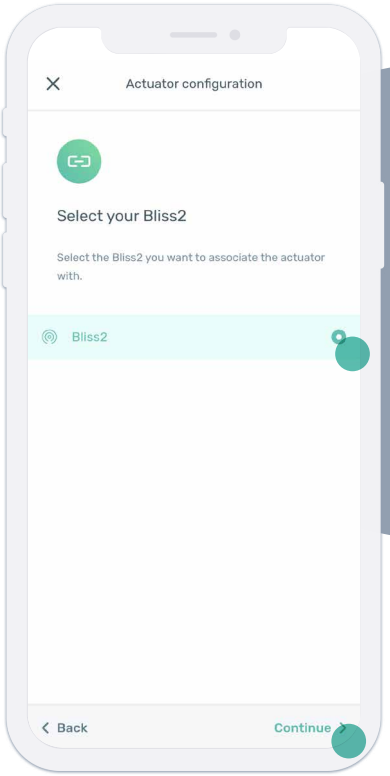
Name the actuator then press "Continue".

03



If necessary, it is possible to associate the actuator with Bliss2 later if it is not in the operating range.
Press "Pair with Bliss2", then click "Continue"

Select the Bliss2 you want to associate the actuator to, then press "Continue".



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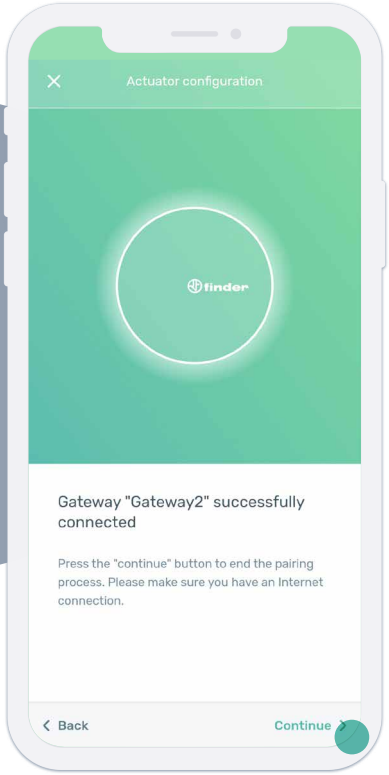
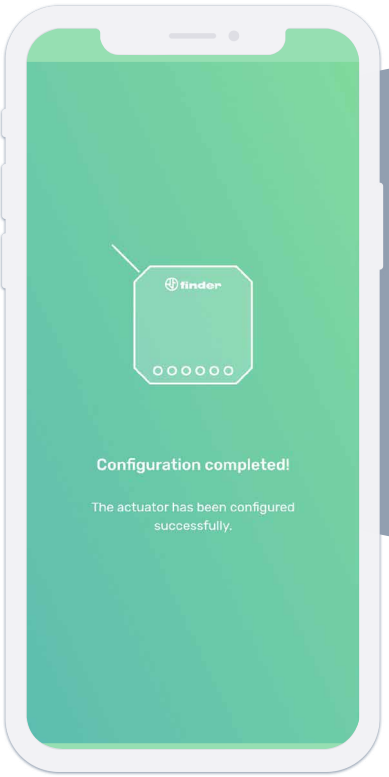


After the phone has connected with Gateway2, press “Continue” to go on.

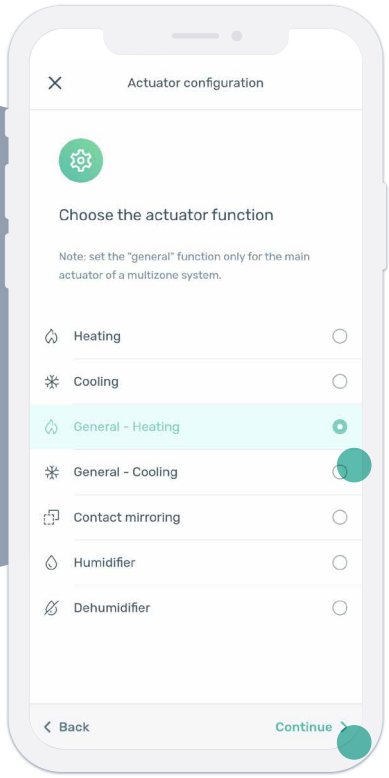
Procedure completed successfully.



06

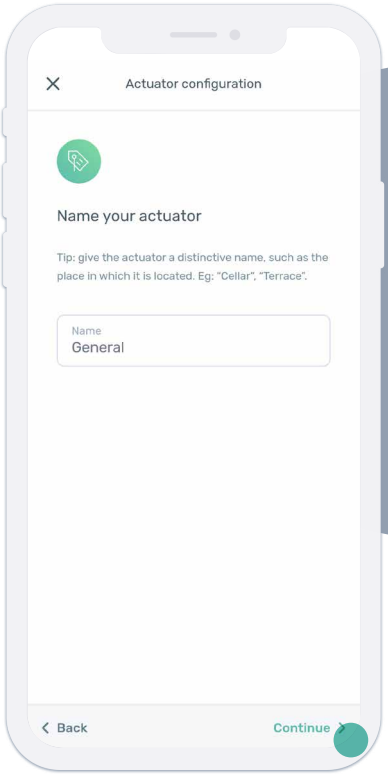
GENERAL FUNCTION

01



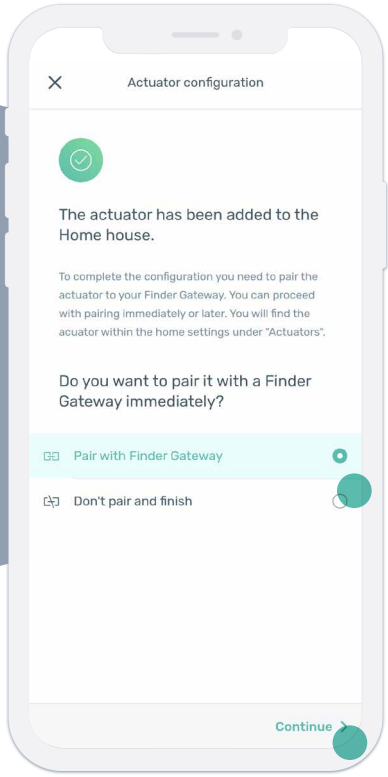
Once the “General - Heating” or “General - Cooling” function has been selected, press on “Continue”.

Name the actuator then press ”Continue”.



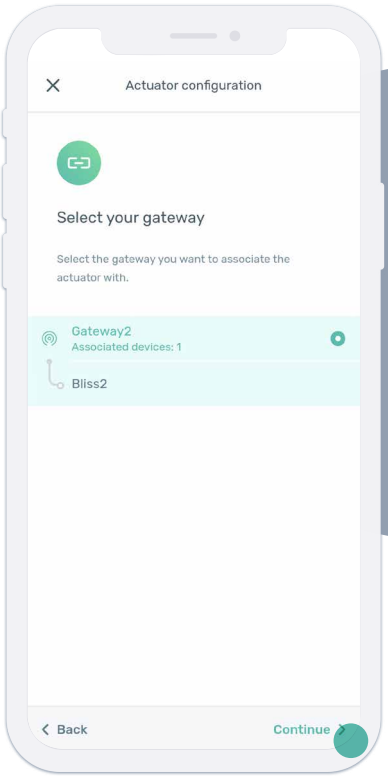
02

03



If necessary, it is possible to associate the actuator with the Gateway2 later if it is not in the operating range. Press "Pair with the Gateway", then press "Continue".

Select the Gateway2 to associate the general actuator with then click on "Continue".



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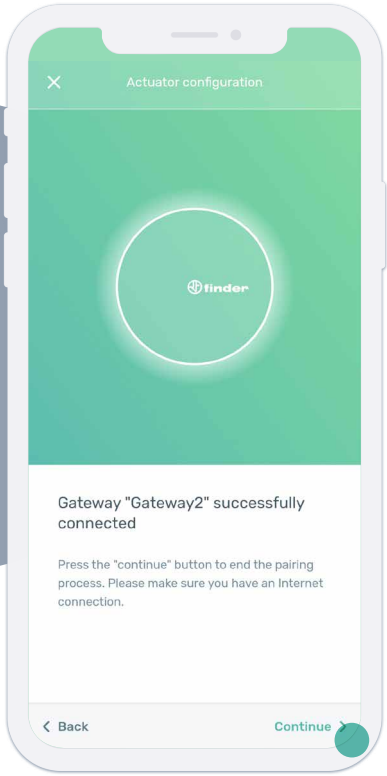
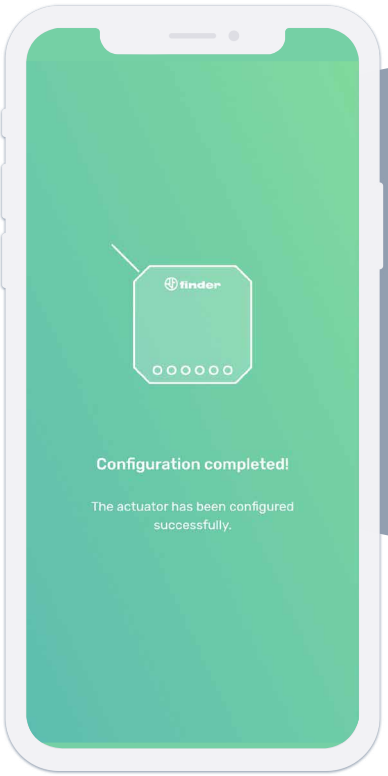


After the phone has connected with Gateway2, press “Continue” to finish.

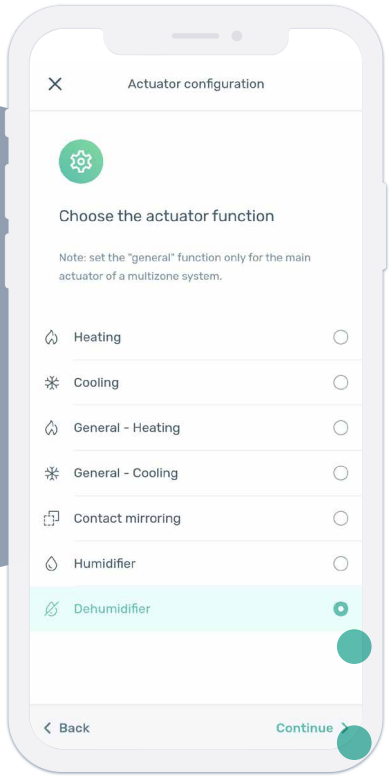
Procedure completed successfully.



06

HUMIDITY FUNCTION

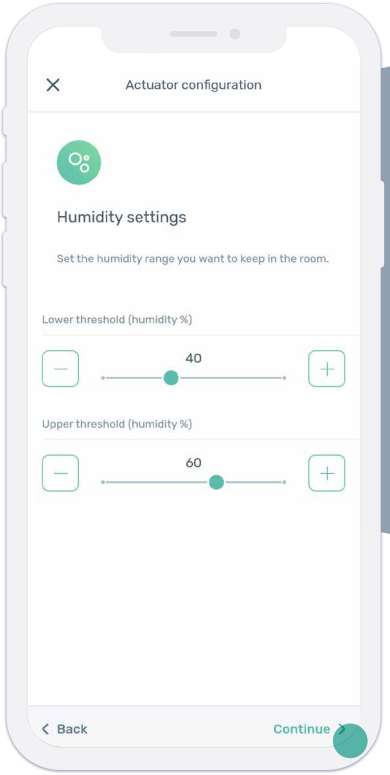
01



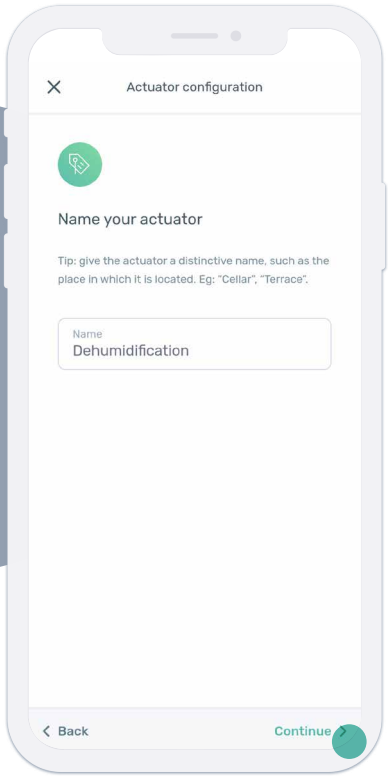
Once the "Humidifier" or "Dehumidifier" function has been selected, press "Continue".

02

Set the upper and lower humidity thresholds for the area where the Bliss2 is installed, then click on "Continue".

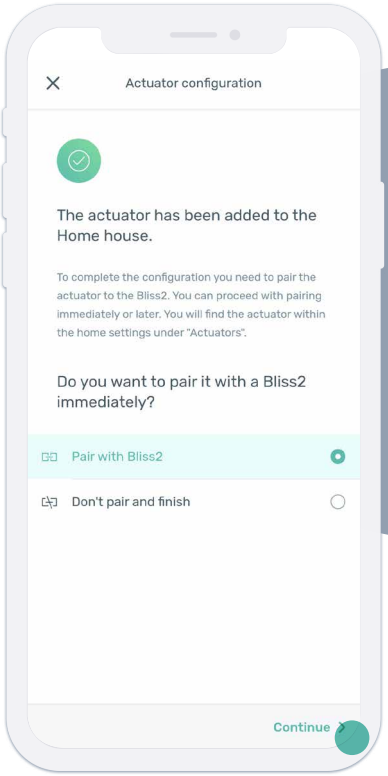


03



Name the actuator
then press "Continue".

If necessary, it is possible to associate the actuator with Bliss2 later if it is currently not within operating range. Press "Associate it with Bliss2", then press "Continue".



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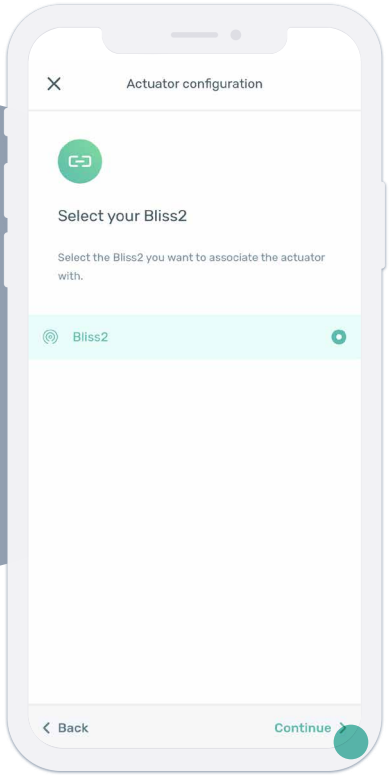
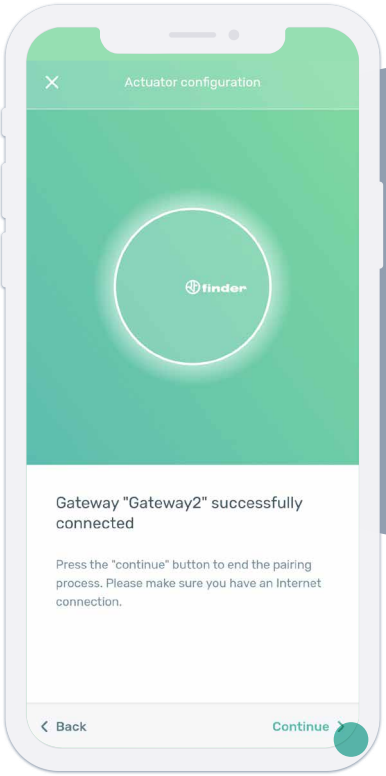


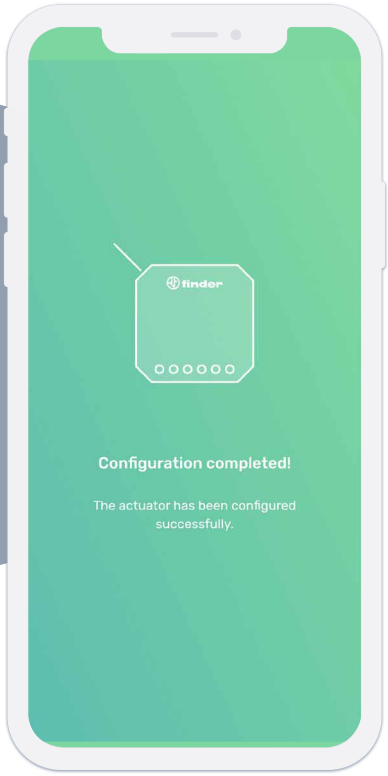
Select the Bliss2 you want to associate the actuator with, then press “Continue”.

After the phone has connected with Gateway2, press “Continue” to finish.



06

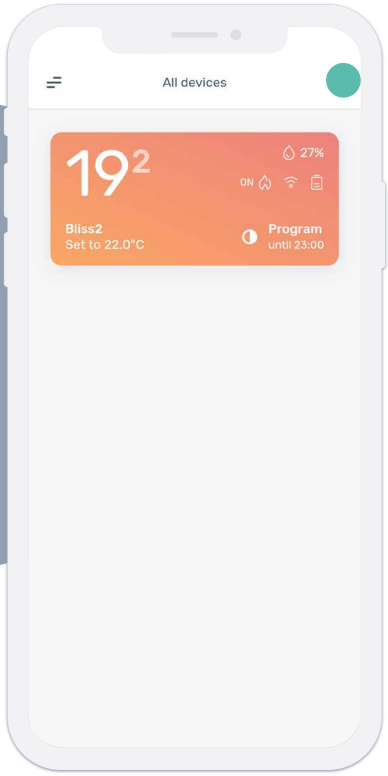
07



Procedure completed successfully.

REVIEW THE ACTUATORS

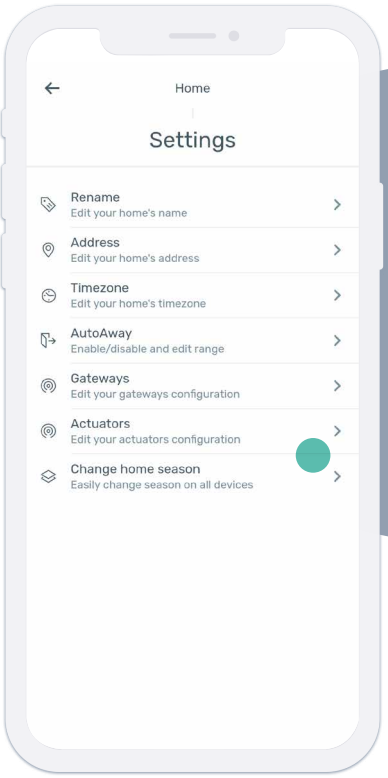
01



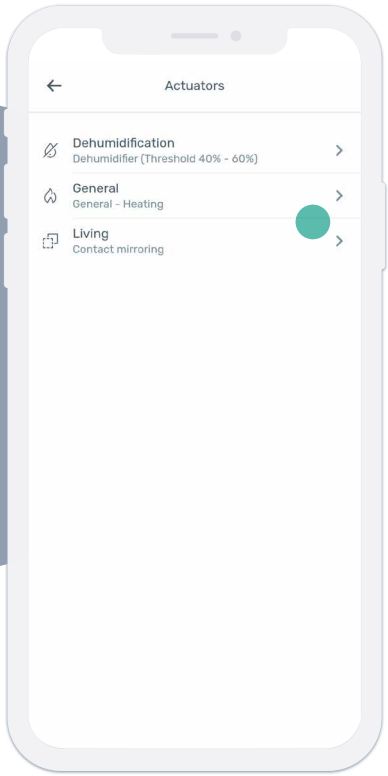
To view and manage all the actuators in the system, press the settings icon at the top right of the homepage.

02

Select “Actuator”.

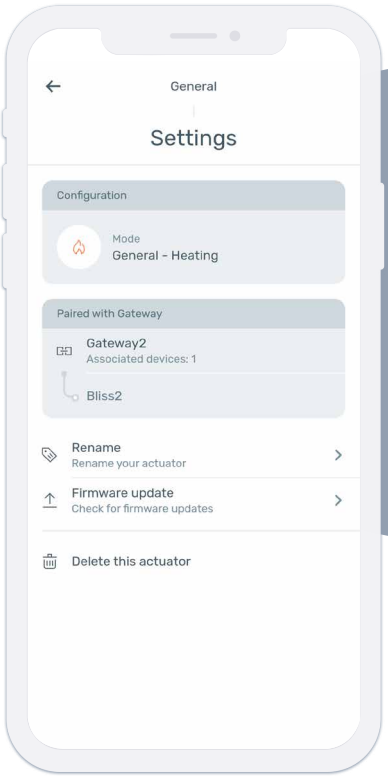


03



From here, all the actuators present in the system are visible. Select an actuator to access its details.

The information relating to the configuration of the actuator for the Gateway2 or Bliss2 is shown here. It can also be renamed, updated or deleted.



04

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Manual Actuator Bliss2 III/2022