

BEOK 2025 CATALOG

Hub controller



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About BEOK

CE RoHS RED EAC

Shanghai Beok Controls Co., Ltd, founded in 2010, has over 10 years experience to integrate the research, development and production of HVAC control system products. We adhere to the strict and practical product requirements, and take a serious and responsible attitude to provide every customer with better products and better services.



BEOK Service



Customize
Program



Customize
App



Design/
Printing



Customize
Product Color



Customize
Package



ODM
Service

Hub Controller

BEOK underfloor heating control centre is used in water underfloor heating system. It can control zone valves, or thermostats. As central control unit, it can also control boiler, thermal actuators and circulating pump.

Wired Hub controller

The thermostat is connected to the control center by cables.



Wireless Hub controller

The thermostat is connected to the control center via 433MHz radio frequency (RF) communication.



ATTENTION

- 1** Before installation, removal, cleaning or maintenance of controller, you must cut off the main power, unplug the fuse or turn off the switch circuit breaker;
- 2** You must read the instruction in detail before installing the controller, and strictly operate thermostat accordance to instruction;
- 3** Controller should be installed by professional engineering company with appropriate safety knowledge;
- 4** All wires connections should meet local and national standard;
Controller should be used strictly according to this instruction!

Wired

Hub controller

CCT-10

👉 P08



CCT-25 CCT-28

👉 P11



Wireless

Hub controller

CCT-10-X

👉 P16



CCT-28-X

👉 P20



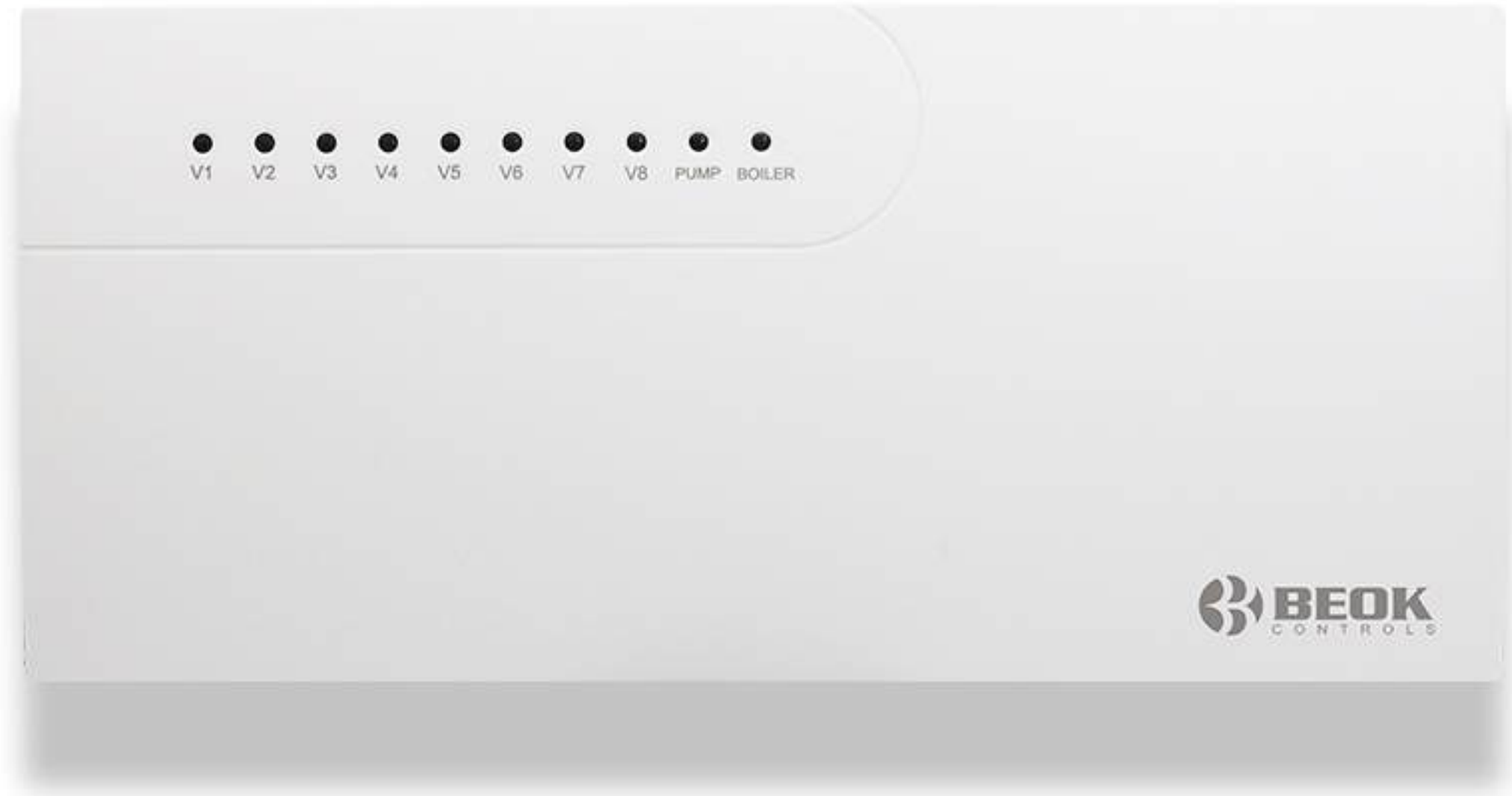
Wired

Hub Controller

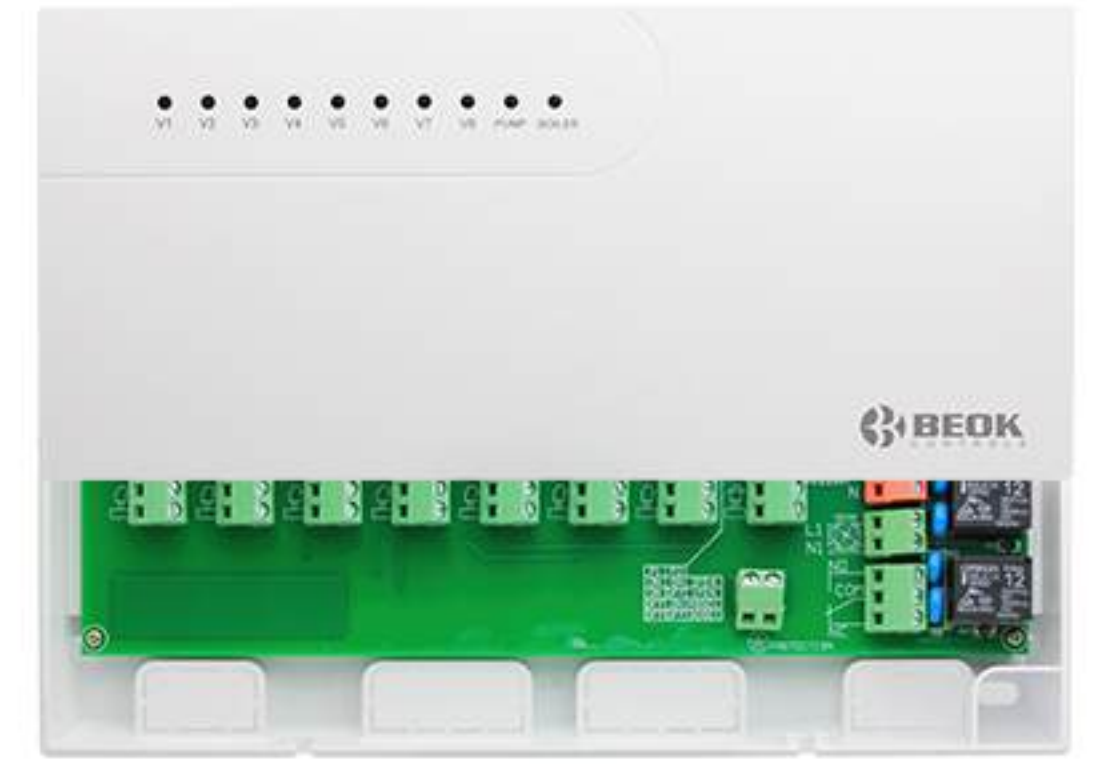
The thermostats is connected to the control center by cables.

Hub
Controller





CCT-10-NO



CCT-10-NC

Model No.
CCT-10
240x110x42mm

Technical Data

| | |
|--|--|
| Power supply AC170~240V; 50/60Hz | Working environment -20~60°C |
| Load current 3A | Storage temperature -20~70°C |

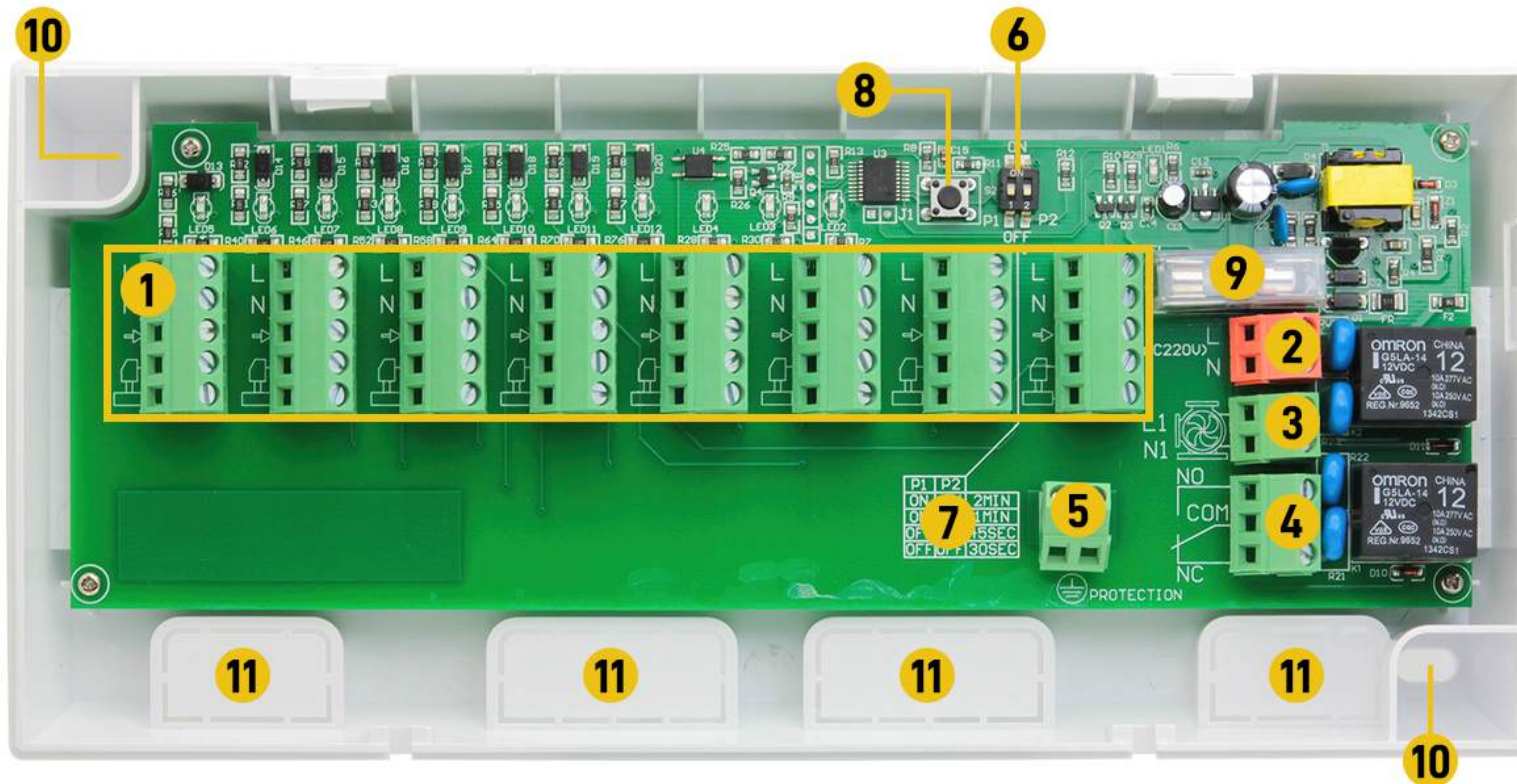


Product Advantage

- 1 Easy to connect with power:**
user only needs to reserve main supply in the place of manifold before installation, and directly connect one three-wires cable to thermostats. So user do not need professional wiring workers;
- 2 Easy to connect wires:**
user only needs to connect wires according to wire colors;
- 3 Easy maintenance after installation:**
all wires are very clear and neat;
- 4 To protect boiler or pump:**
because hub controller has time delay function, it opens boiler and pump only when water valve is totally opened, and closes boiler when temperature reaches requirements. Time delay to open boiler and pump when heating can realize the purpose of energy-saving;
- 5 To extend boiler and pump life:**
hub controller only start boiler and pump in appropriate temperature, in this way, it will reduce boiler and pump running time, to extend their working life.

Device Overview

- 1** Connect to thermostat and actuators. Each hub controller can control up to 8 thermostats and thermal actuators.
- 2** AC 220V
- 3** Connect to pump
- 4** Connect to gas boiler
- 5** Earth
- 6** Control delay time
- 7** Delay time
- 8** Power on debug key
- 9** 15A fuse
- 10** Fixed screw position
- 11** Threading hole

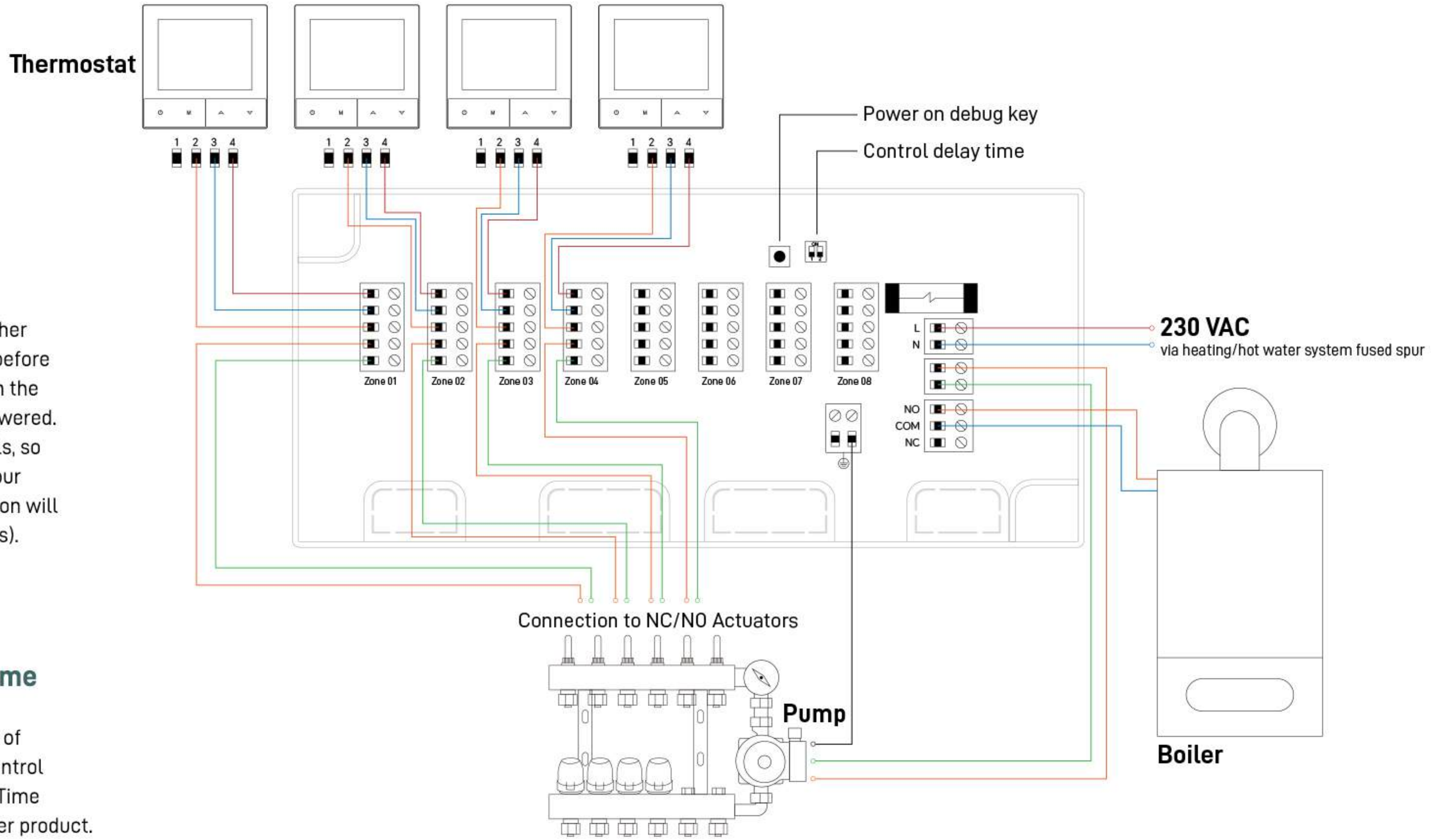


Input Indication

- When LED1 is constant light, it indicates that there is a power input;
- LED2 is flashing, it is a status indication (if breakdown occurs, light will be off or always on);
- When LED3-10 light is constant light, it indicates that motorized NC valve open. When light is off, valve is closed(NO valve is opposite);
- LED11 is pump working indication light; LED12 is boiler working indication light.



Wiring Diagram



About Debug

If you'd like to debug or check whether hub controller is working properly, before power on, you can press and hold on the debug key, then make controller powered. At this time, time delay function fails, so you can quickly check and debug your required function (debugging function will fail without operation for 20 minutes).

Change working delay time

You can change working delay time of pump/boiler through Delay Time Control Switch changes. See signed Delay Time Explanation printed on hub controller product.

Model No.

CCT-25

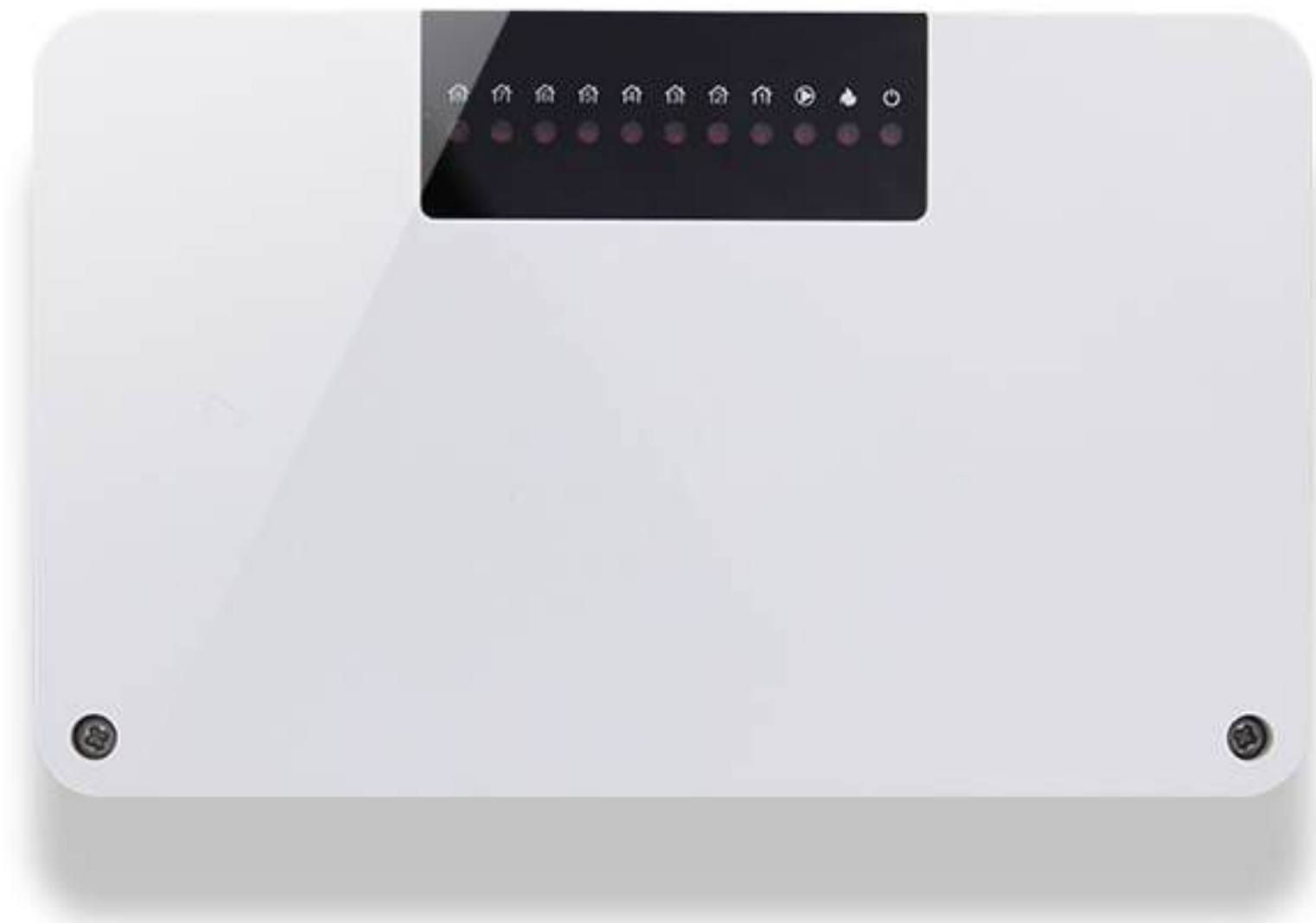
110x177x35mm



Model No.

CCT-28

110x177x35mm



Technical Data

Power supply

AC100~240V; 50/60Hz

Load current

10A

Passive output (Boiler)

8A

Circulating pump

output 250VAC, 8 (5)A

Number of circuits

8 loops or 5 loops

The max number of actuators

3pcs each terminal

Output delay

200s

Product Advantage

1 Easy to connect with power:

user only needs to reserve main supply in the place of manifold before installation, and directly connect one three-wires cable to thermostats. So user do not need professional wiring workers;

2 Easy to connect wires:

user only needs to connect wires according to wire colors;

3 Easy maintenance after installation:

all wires are very clear and neat;

4 To protect boiler or pump:

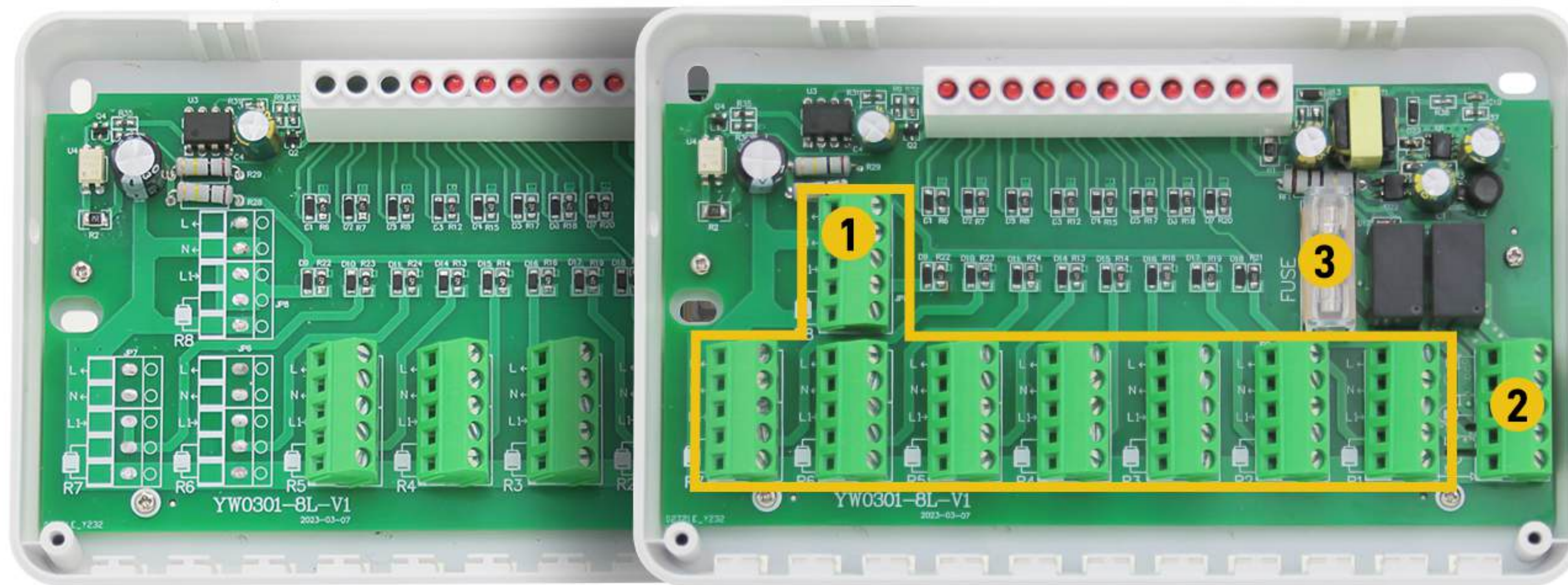
because hub controller has time delay function, it opens boiler and pump only when water valve is totally opened, and closes boiler when temperature reaches requirements. Time delay to open boiler and pump when heating can realize the purpose of energy-saving;

5 To extend boiler and pump life:

hub controller only start boiler and pump in appropriate temperature, in this way, it will reduce boiler and pump running time, to extend their working life.

CCT-25 internal (5-way hub)

CCT-28 internal (8-way hub)

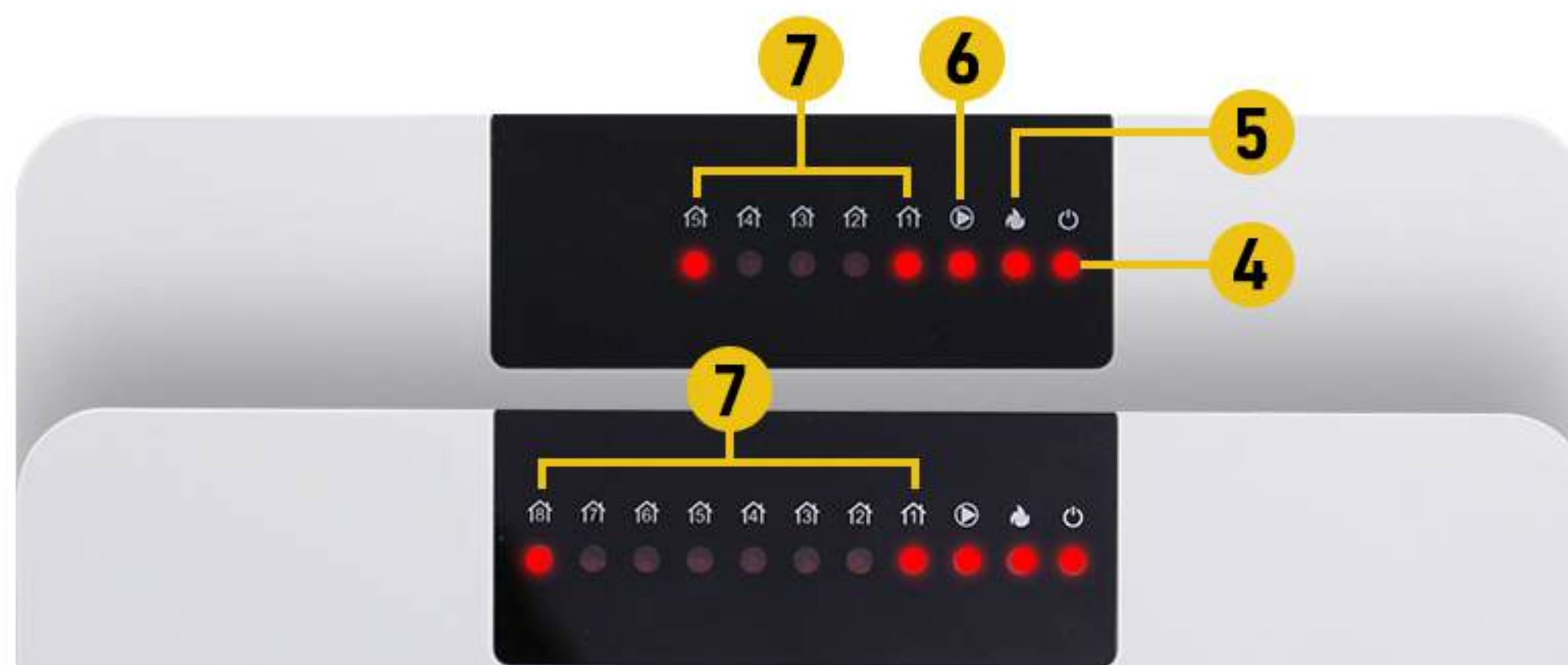


Device Overview

- 1** 8 or 5 outputs/channels. Each hub can be connected:
Up to 1 thermostat
Up to 8 actuators
- 2** Be connected to gas boiler, pump, AC 220V
- 3** Fuse

CCT-25 indicator light (5-way hub)

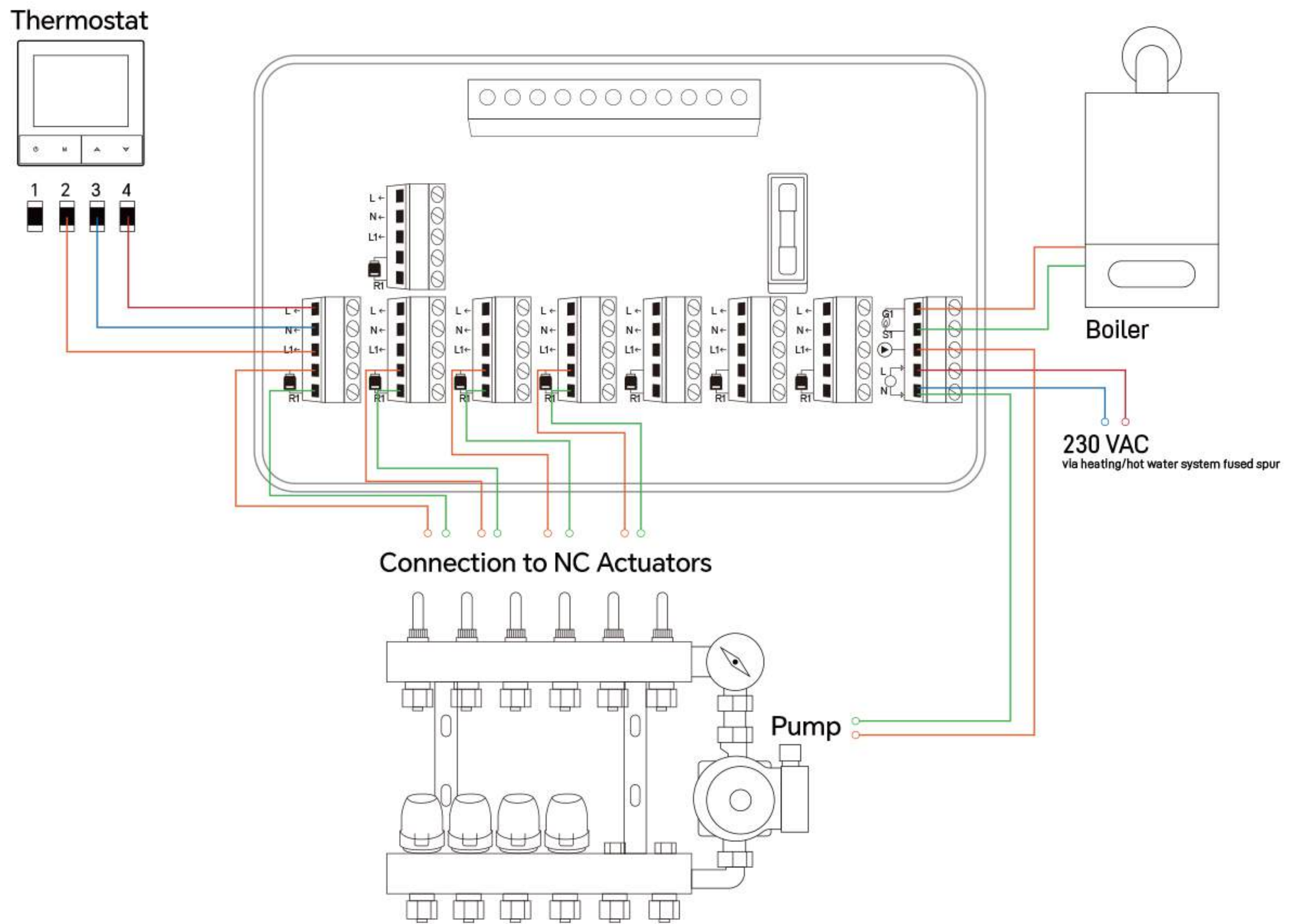
CCT-28 indicator light (8-way hub)



Input Indication

- 4** Power light
- 5** Boiler light
- 6** Pump light
- 7** Room lights

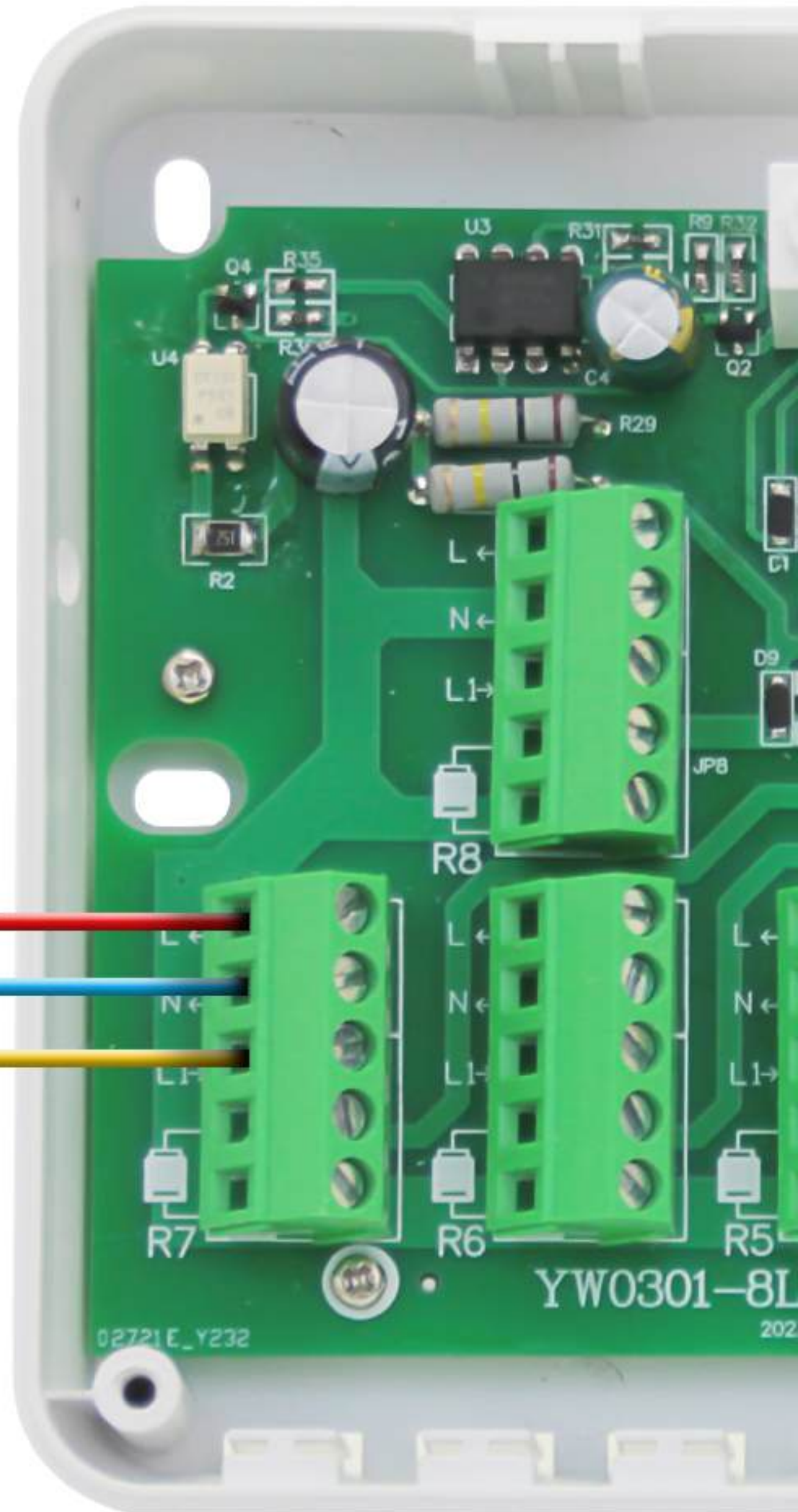
Wiring Diagram



CCT-10/CCT-25(8) Hub Controller Connected with Thermostats

We suggest use our wired hub controller with our Water Underfloor Heating Thermostats. Refer to the wiring diagram on the back of the thermostat on the right.

To get more information, please contact us to get our water underfloor heating thermostats catalogue.

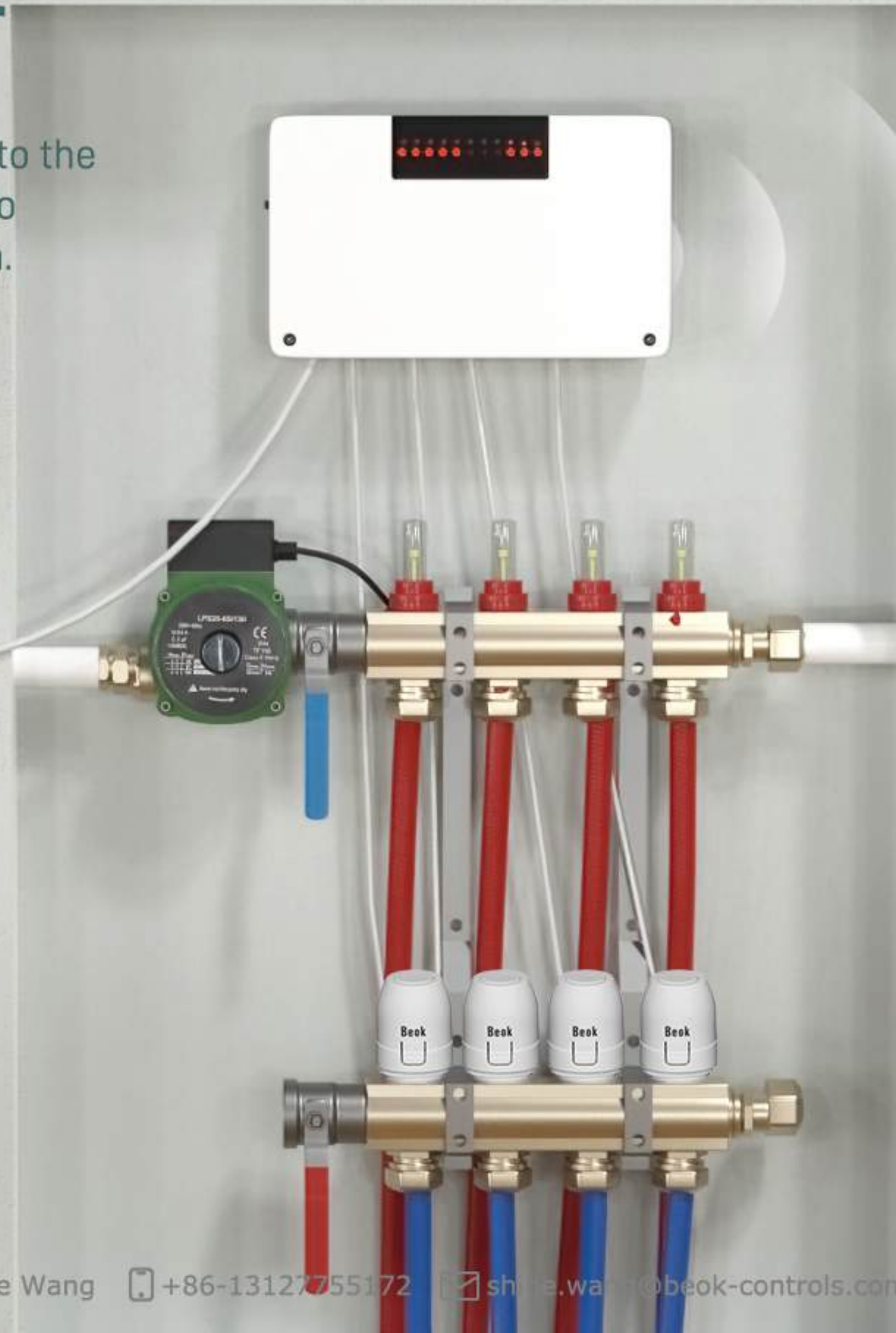


Wireless

Hub Controller

The thermostats is connected to the control center via 433MHz radio frequency (RF) communication.

Hub
Controller





Model No.
CCT-10-X

240x110x42mm

Technical Data

| | |
|--|--|
| Power supply AC170~240V; 50/60Hz | Working environment -20~60°C |
| Frequency 433MHz | Storage temperature -20~70°C |
| Load current 3A | |



Product Advantage

- 1 Easy to connect with power:**
user only needs to reserve main supply in the place of manifold before installation, and directly connect one three-wires cable to thermostats. So user do not need professional wiring workers;
- 2 Easy to connect wires:**
user only needs to connect wires according to wire colors;
- 3 Easy maintenance after installation:**
all wires are very clear and neat;
- 4 To protect boiler or pump:**
because hub controller has time delay function, it opens boiler and pump only when water valve is totally opened, and closes boiler when temperature reaches requirements. Time delay to open boiler and pump when heating can realize the purpose of energy-saving;
- 5 To extend boiler and pump life:**
hub controller only start boiler and pump in appropriate temperature, in this way, it will reduce boiler and pump running time, to extend their working life.

Device Overview

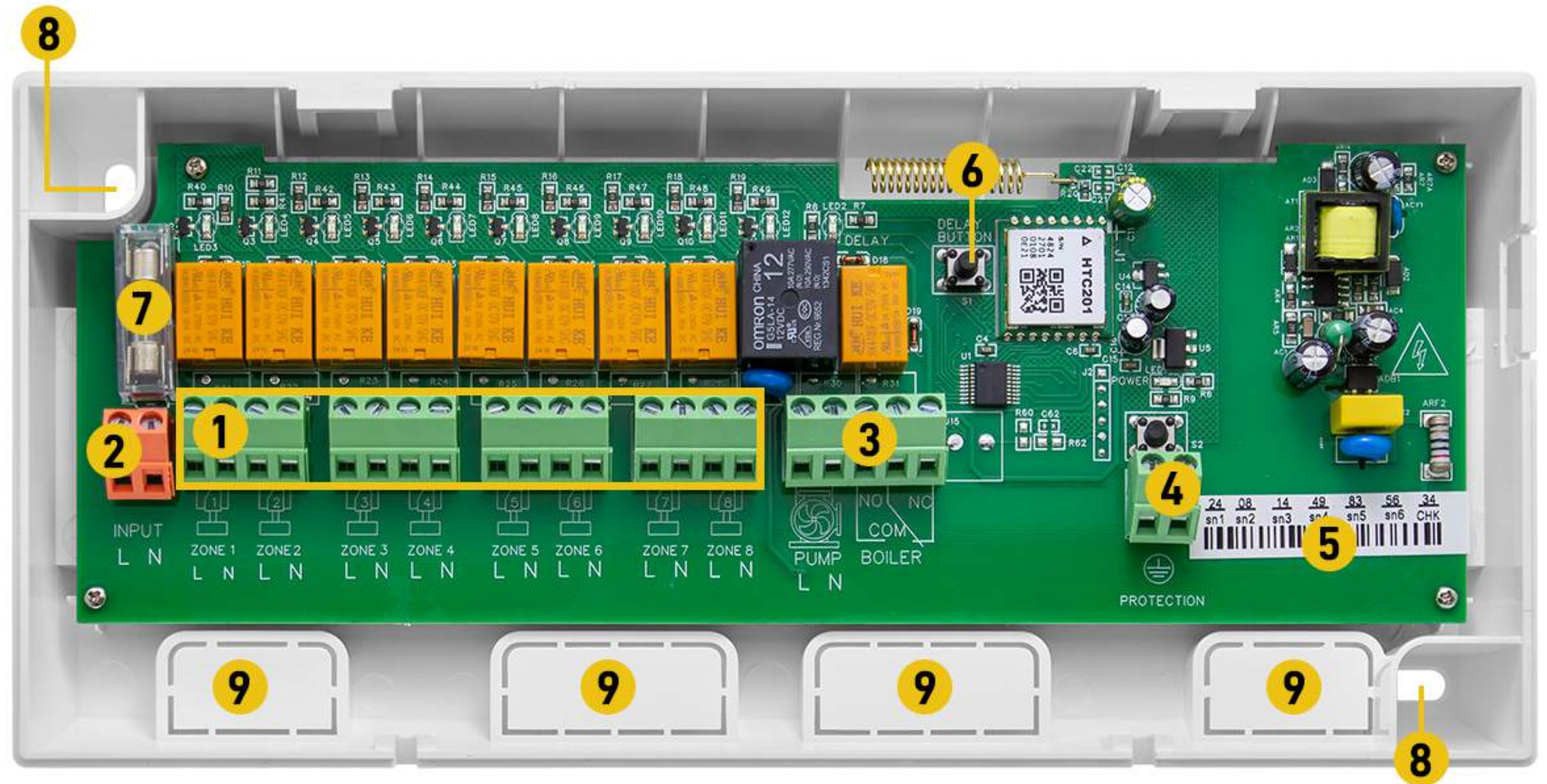
- 1** Connect to actuators. Each hub controller can control up to 8 thermal actuators.
- 2** AC 220V
- 3** Connect to pump and gas boiler
- 4** Earth
- 5** SN Code
- 6** Power on debug key
- 7** 15A fuse
- 8** Fixed screw position
- 9** Threading hole



Hub controller connects to thermostat via Wi-Fi. Each hub controller can control up to 8 thermostats.

Input Indication

- When LED1 is constant light, it indicates that there is a power input;
- LED2 is flashing, it is a status indication (if breakdown occurs, light will be off or always on);
- When LED3-10 light is constant light, it indicates that motorized NC valve open. When light is off, valve is closed(NO valve is opposite);
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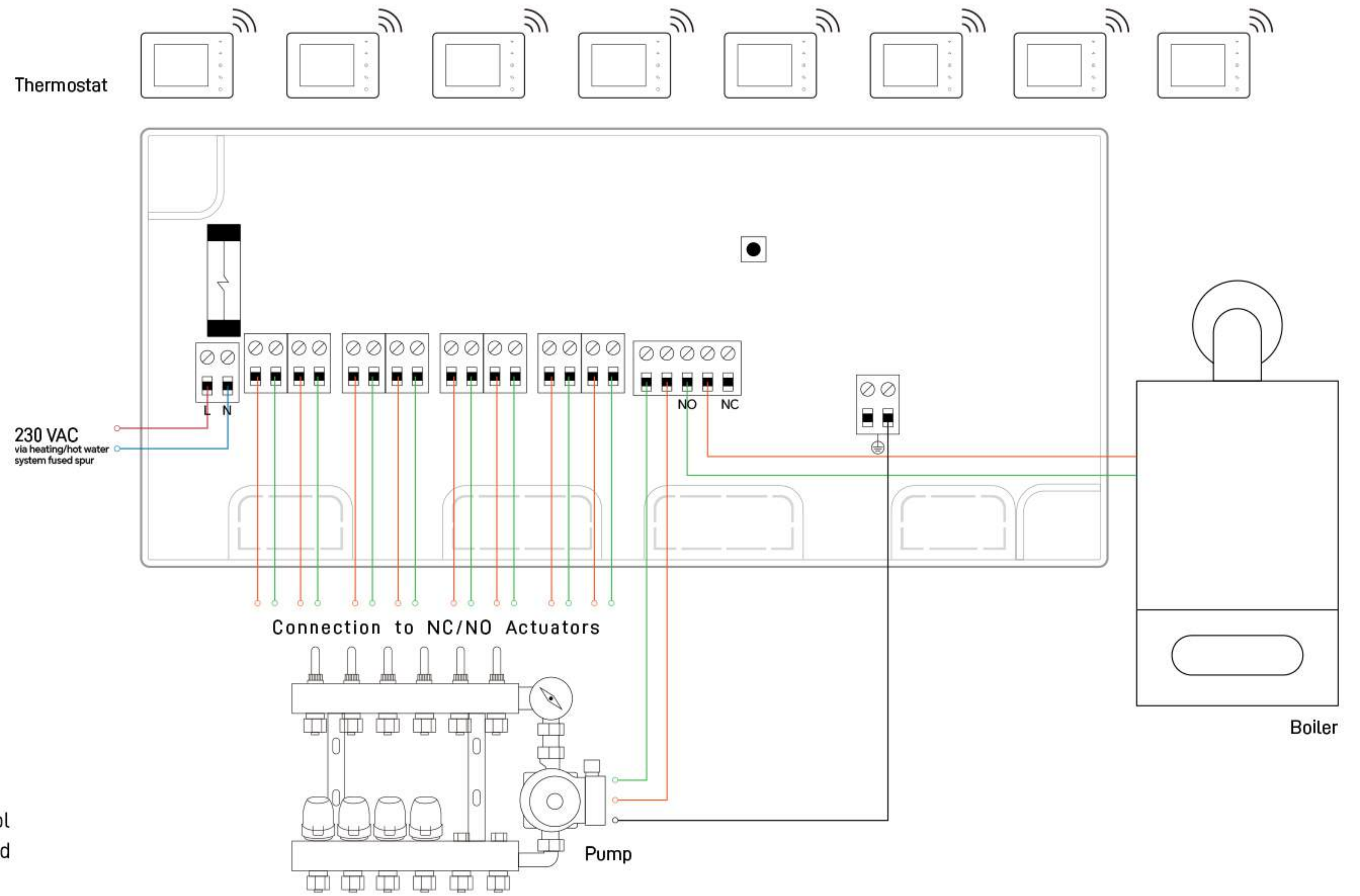
Wiring Diagram

About Debug

If you'd like to debug or check whether the controller is working properly, before power on, you can press and hold on the debug key, then make controller powered. At this time, time delay function fails, so you can quickly check and debug your required function (debugging function will fail without operation for 20 minutes).

Easy to Install

When controller is installed, you can pry 4 threading holes, and go through power control wires from bottom. Controller can be installed by 2 self tapping screws fixed.



Wireless Connection with Thermostat

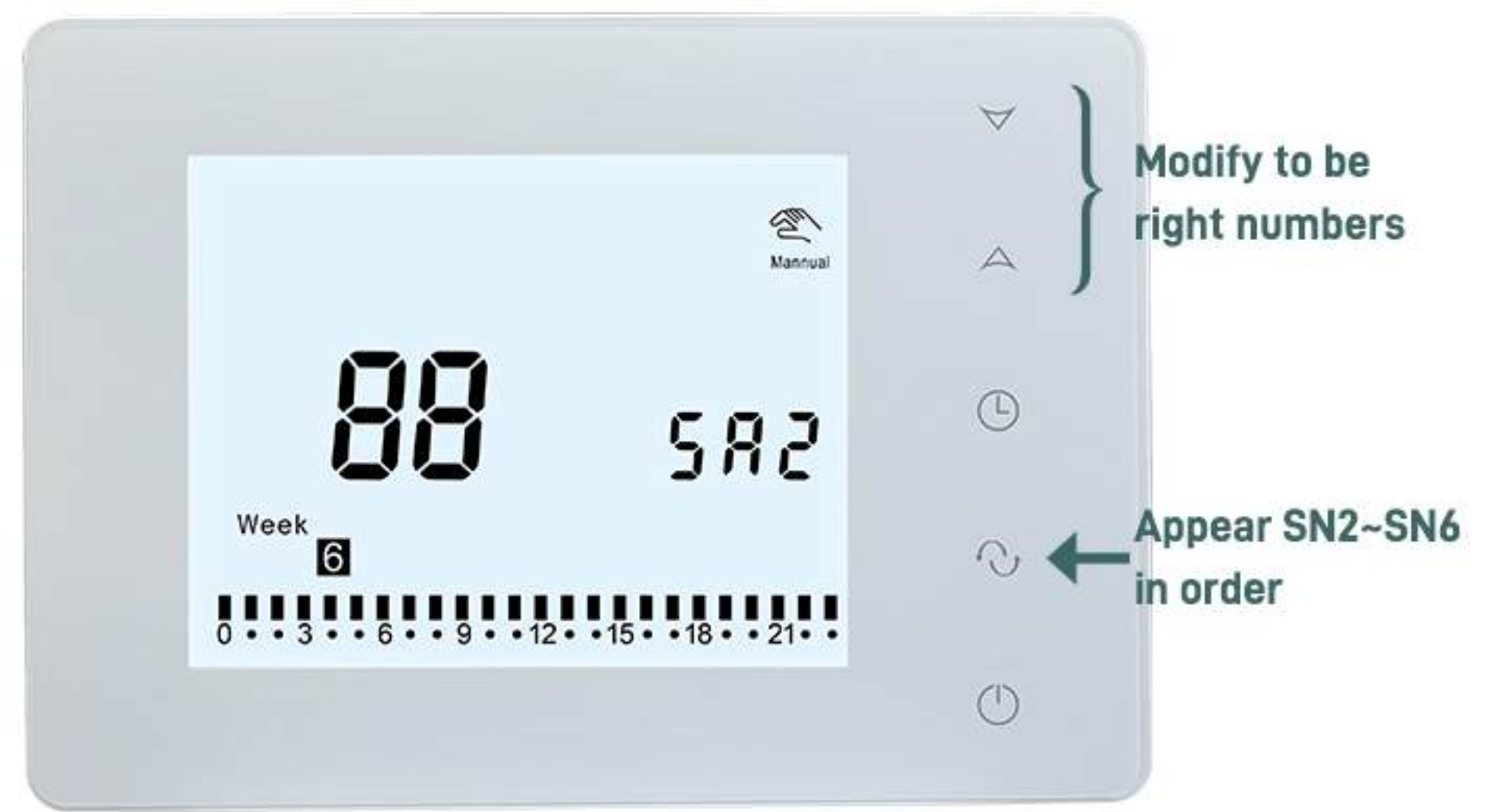
We suggest use this wireless hub controller with our **BOT-X306** or **BOT-306RF-WIFI** Wireless Boiler Thermostat.

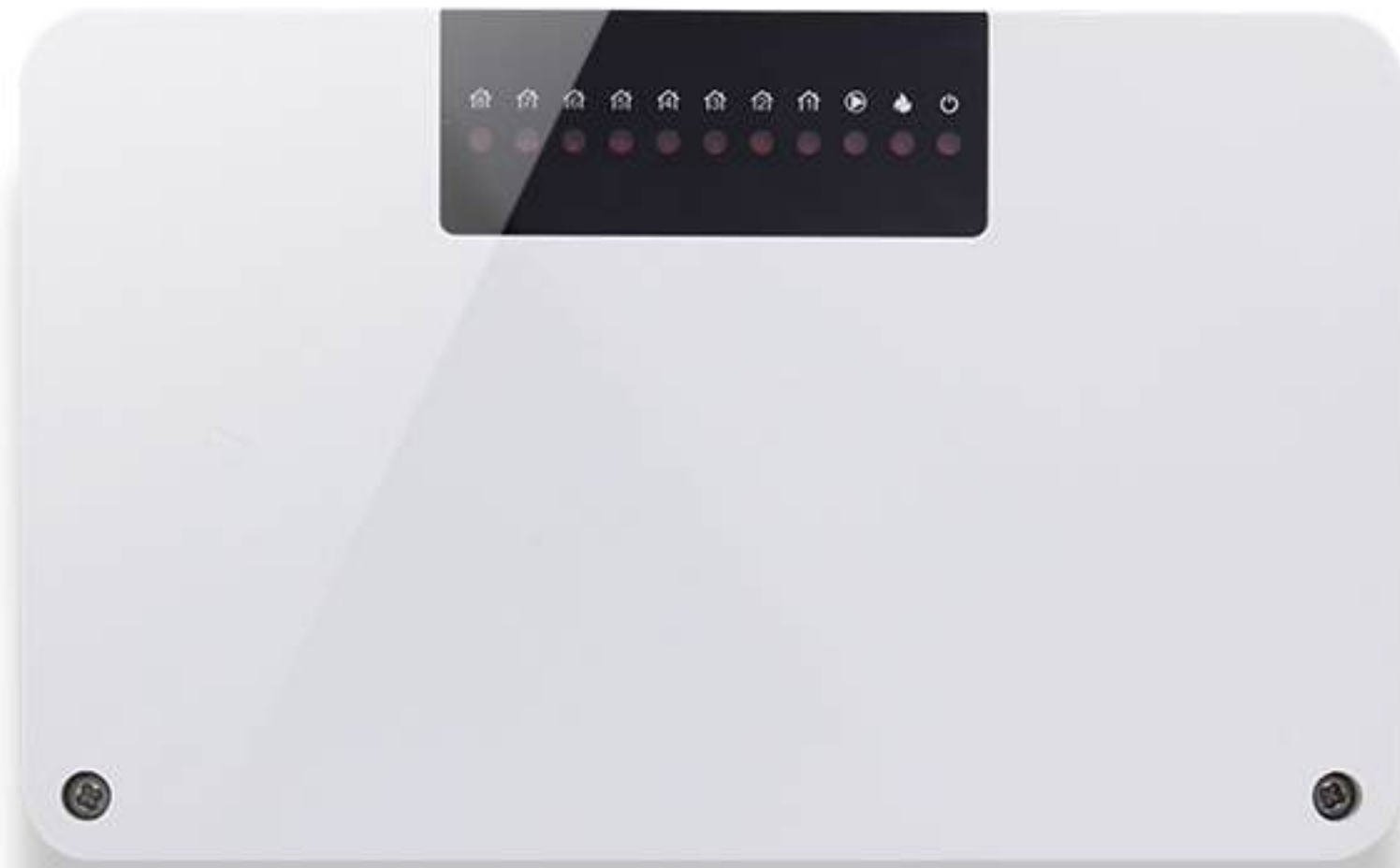


Matching Wireless Thermostat and Hub Controller

Every hub controller has a group of Sequence Number (printed on controller), and sequence number is unique. User can match wireless thermostat with hub controller by setting SN Code in thermostat Advanced Setting (See Thermostat Instruction).

Screen of BOT-X306 or BOT306RF-WIFI





Model No.

CCT-28-X

110x177x35mm



Technical Data

Power supply
AC220V; 50/60Hz

Frequency
443MHz

Load current
Max 20mA

The max number of actuators
8pcs each terminal

Wireless signal distance
30m(indoor), 200m(outdoor)

Ambient temperature
0~85°C

Pump output delay
5 min

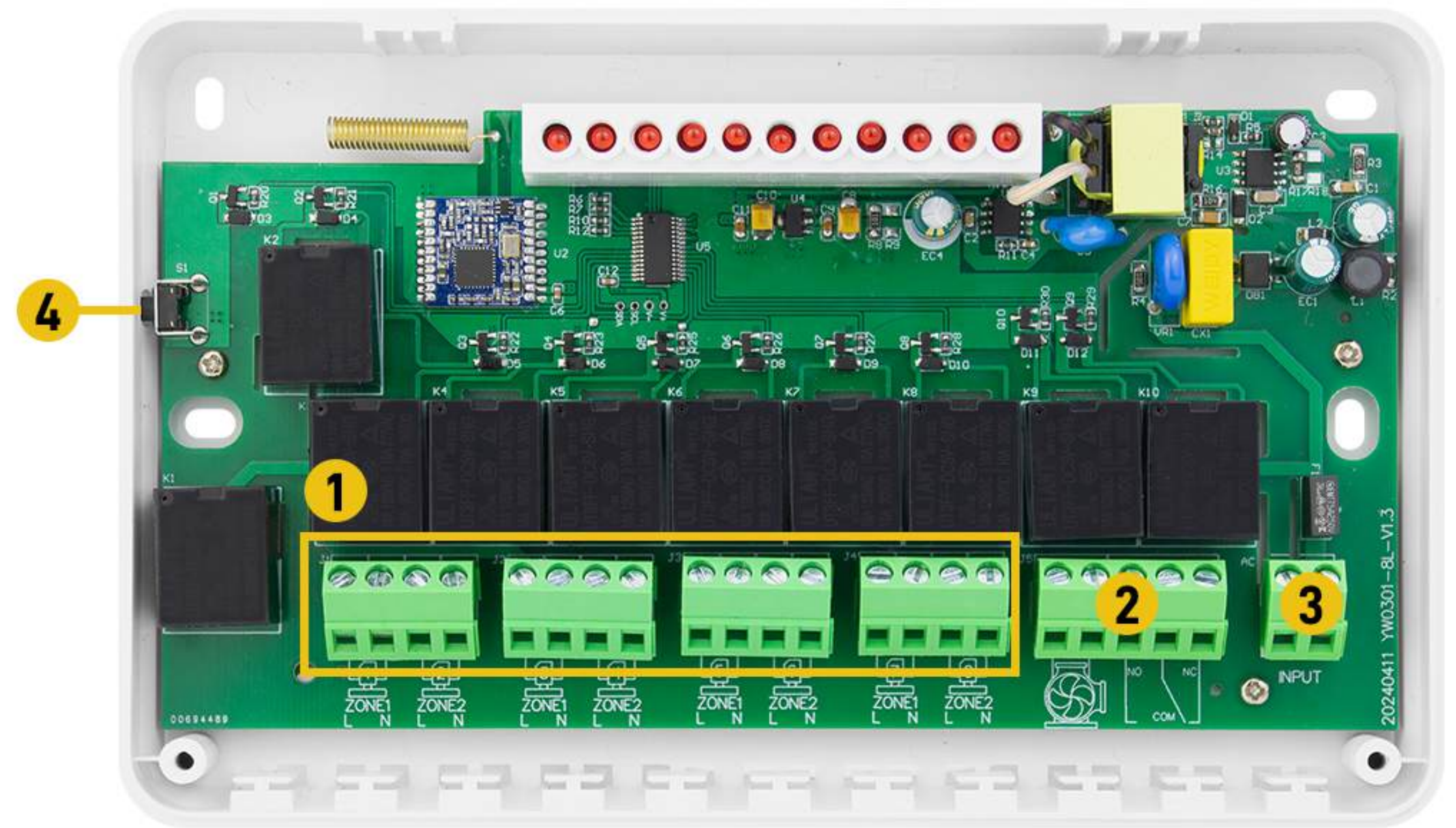
Max. Power of Pump
1000W

Product Advantage

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- 5 To extend boiler and pump life:**
hub controller only start boiler and pump in appropriate temperature, in this way, it will reduce boiler and pump running time, to extend their working life.

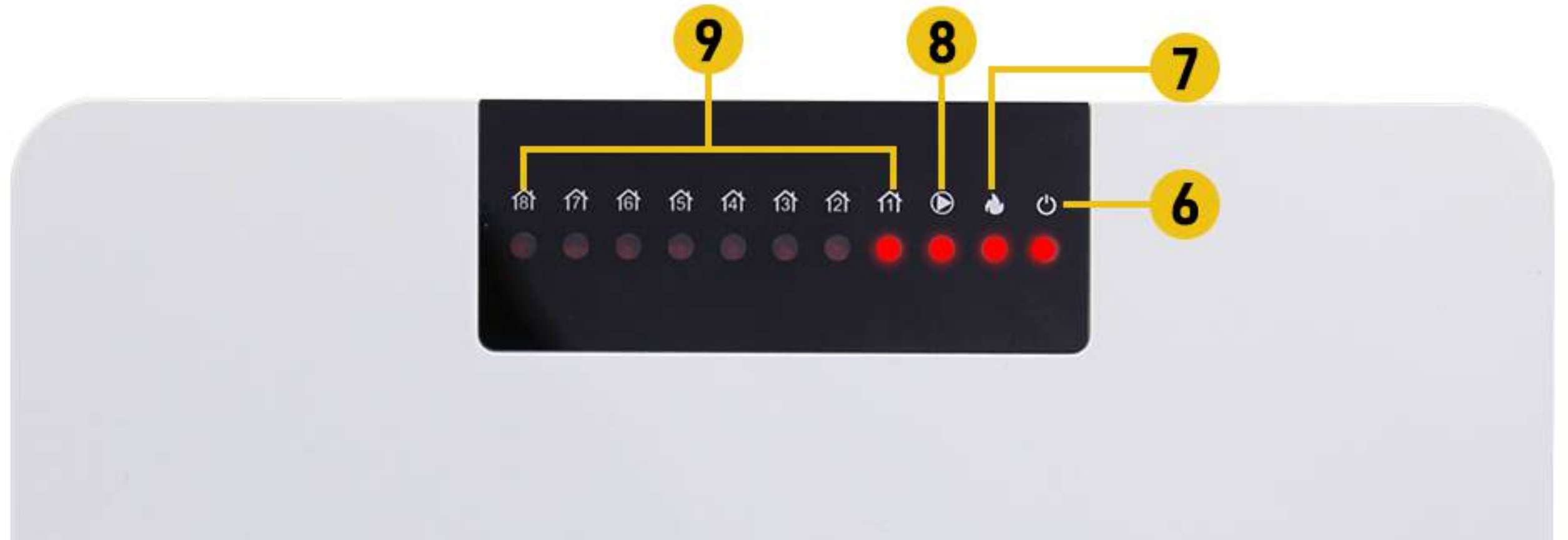
Device Overview

- 1** Connect to actuators. Each hub controller can control up to 8 thermal actuators.
- 2** Be connected to gas boiler and pump
- 3** AC 220V
- 4** RF signal pairing key
- 5** Fixed screw position

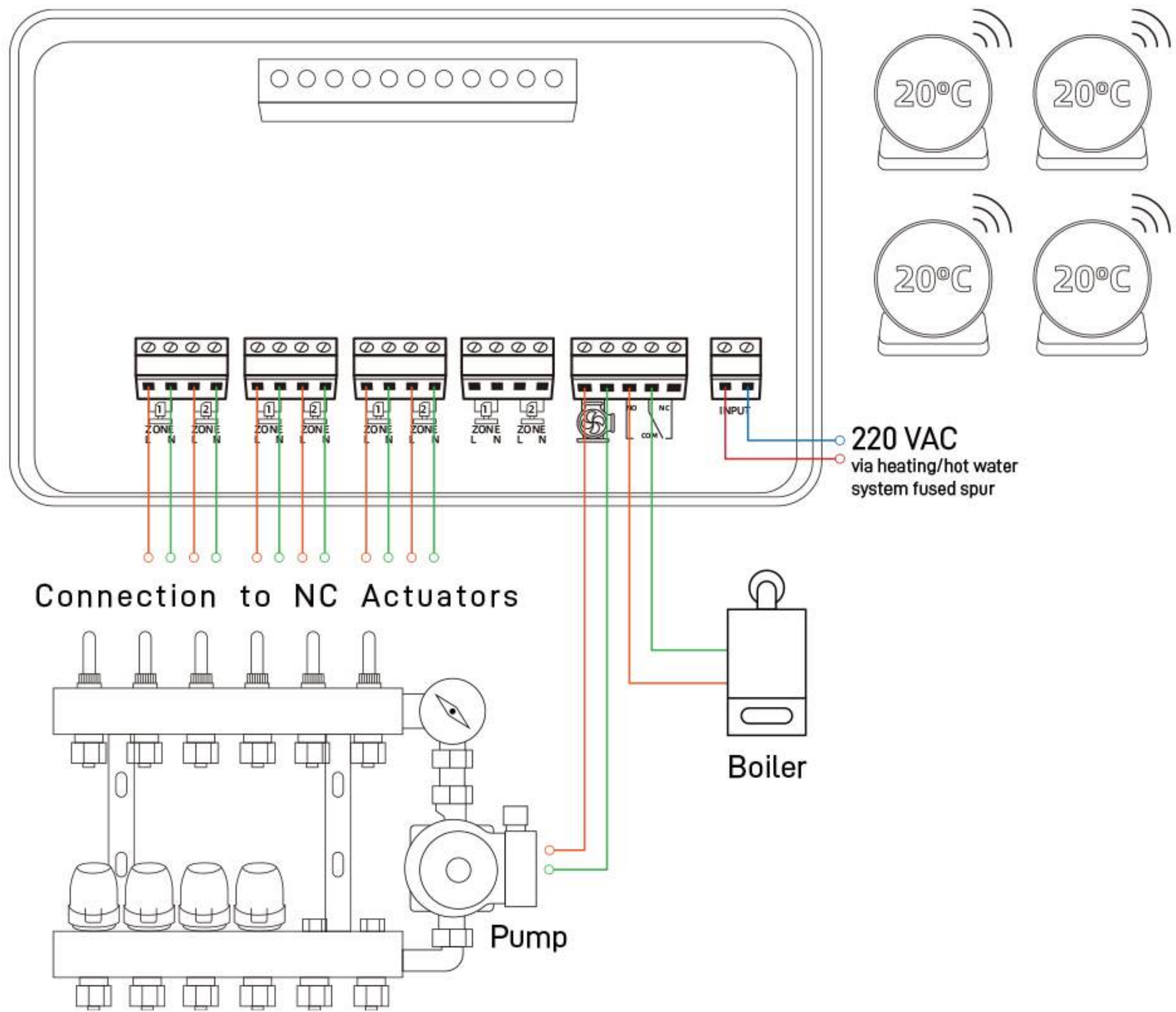


Output light indicator

- 6 Power indicator light**
The light is always on when the hub controller is powered on.
- 7 Boiler heating indicator light**
When the boiler starts heating, the LED light will light up; When the boiler stops heating, the LED light will go off.
- 8 Pump indicator light**
When the circulation pump is working, the LED light will light up; when the circulation pump stops working, the LED light will go off.
- 9 Thermostat indicator light**
When the thermostat starts heating, the LED light will light up; when the thermostat stops heating, the LED light will go off; when the thermostat is pairing, the LED light will flash.



Wiring Diagram



Signal Between Thermostat and Controller

The thermostat sends a signal to the controller every 30 minutes, the system will start working normally within 30 minutes after power is restored.

Wireless Connection with Thermostat

We suggest use this wireless hub controller with our **BOT-R6X series** or **BOT-R7X series** Wireless Boiler Thermostat.



CCT-28-X + BOT-R6X + BOT-R6X-WIFI



CCT-28-X + BOT-R7X + BOT-R7X-WIFI



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