

# HA209 Series Thermostat User Manual

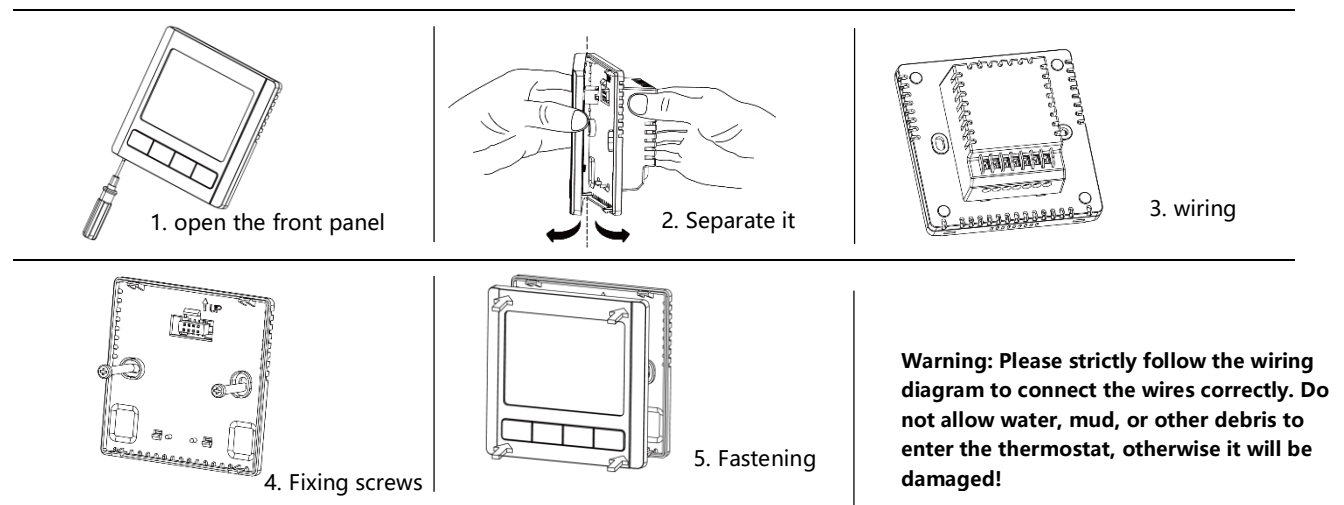
The HA209 series water heating thermostat is a continuation of Hailin's classic models. The appearance has been redefined; the slim body enhances the product's aesthetics, larger buttons make operation more convenient, and the minimalist interface design makes interaction intuitive. Suitable for indoor temperature control, controlling the opening and closing of electric valves. Room temperature and thermostat on/off can be set via buttons.



Model	System type	Valve type	Backlight
HA209-LC	Floor Heating	Electric thermostatic valve/electric ball valve	No
HA309-S2L	Electrical Heating	Electric thermostatic valve/electric ball valve	Yes

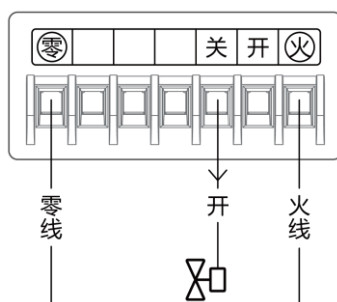
## —. Installation Guide

### Installation diagram



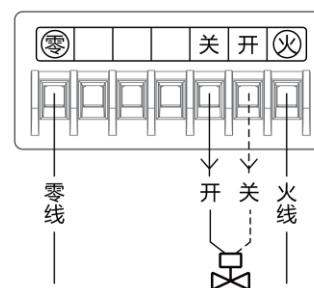
### Wiring diagram

Model: HA209-LC, HA309-S2L



Power supply: AC85~250V 50/60Hz

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If a normally closed two-wire valve is used on site, only the "open" terminal needs to be connected.

## 二. Instructions for use

### Basic functions

- Indoor temperature setting
- Low temperature protection function and key lock (optional)
- Power-off memory function (parameters optional)
- White backlight (-L, optional)









### Display status

- Temperature controller output
- Indoor temperature display
- Set temperature display
- Machine lock status display




### Technical indicators

- |   |   |
|---|---|
| • Temperature sensing element: NTC  | • Self-consumption power: < 2 W                                   |
| • Temperature control accuracy: $\pm 1^{\circ}\text{C}$                       | • Power supply voltage: AC85~250V, 50/60Hz                        |
| • Temperature setting: 5~35°C   | • Terminal blocks: 1.5mm <sup>2</sup> or 2.5mm <sup>2</sup> wires |
| • Display accuracy: 0.5°C   | • Load current: < 2A, < 1A  |
| • Display area: 0~50°C  | • Outer shell: Flame retardant PC                                 |
| • Work environment: temperature 0~45°C<br>humidity 5~95% RH (No condensation) | • dimensions: 86×86×11 mm   |
| • Press the button: Tap the button  | • Mounting hole spacing: 60 mm (standard)                         |
|   | • Protection rating: IP 30  |





### Basic Operating Instructions

Function	Model	Function Description
Power on/off	All Model	Press  once to turn on; press again to turn off, simultaneously shutting down the heating equipment.
Set temperature	All Model	Press  Key to lower set temperature, Press  Key to increase set temperature, Each button press sets the temperature change 0.5°C.
Valve control logic	All Model	When the room temperature is 1°C lower than the set temperature, the valve opens. LCD display  ; When the room temperature reaches the set temperature, the valve closes, and the symbol displayed on the LCD disappears  .
Button lock	All Model	Press  and  6 seconds to activate or deactivate button lock.
Low temperature protection	All Model	After being turned off, the heating will automatically turn on and display  when the room temperature is below 5°C, and the fan will run at high speed; heating will stop when the room temperature rises to 7°C.

### Parameter settings

Follow the instructions in the list to trigger the corresponding settings mode and use “” or “” Key to adjust parameter settings, Automatic confirmation will be granted after 6 seconds of inactivity, or you can press “” after setting up.

**Note: After confirmation, please keep the machine powered on for at least 30 seconds to allow the parameters to be memorized.**

Settings	Trigger settings	Factory default	Meaning of setting codes
Power on/off status selection after power failure and power restoration	powered off, press and hold  for 5 seconds	01	00: Power-off memory ; 01: Power on, device off ; 02: Power on, device on
Temperature display value correction	powered off, press and hold  and  for 3 seconds	Displays the current room temperature.	The actual room temperature is xx, ranging from xx-10 to xx+20.
Low temperature protection	powered off, press and hold  for 3 seconds	00	00: Disable low temperature protection; 01 Enable low temperature protection