

Instructions RT226-B25-B

0-10V EC Fan



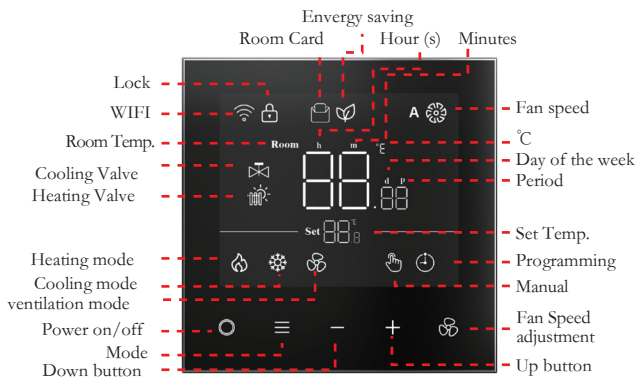
Appearance Features

- 1.LCD Display: High-end VA display with a wide viewing angle
- 2.Capacitive Touch Button
- 3.Ultra-thin 13mm
- 4.Side holes for heat ventilation and accurate room temp.

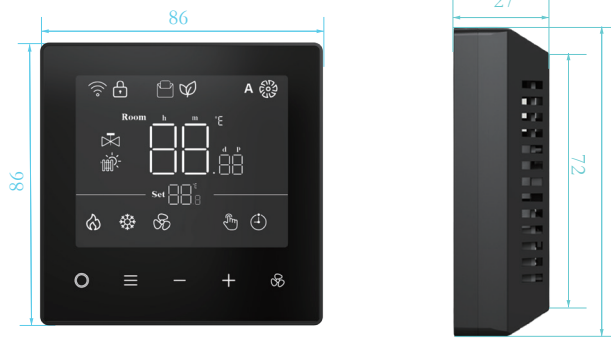
Functional Features

- 1.High-Precision Temperature Display: Display accuracy of $\pm 0.1^{\circ}\text{C}$, with a temperature adjustment $\pm 0.5^{\circ}\text{C}$.
- 2.Power Failure Memory Function: Safely saves all settings; no need to re-adjust after a power outage.
- 3.7-Day, 4-Time Period Programming: Flexible control to reduce energy consumption.
- 4.Child Lock Function: Prevents accidental operation by children, ensuring safety
- 5.Anti-Freezing Function: Protects home equipment from freezing under low temperatures
- 6.Building Control Communication: Employs an RS485 hardware interface executing the standard Modbus protocol, enabling a building control network with up to 32 thermostats connected in series.

Product description



Dimension Unit: mm

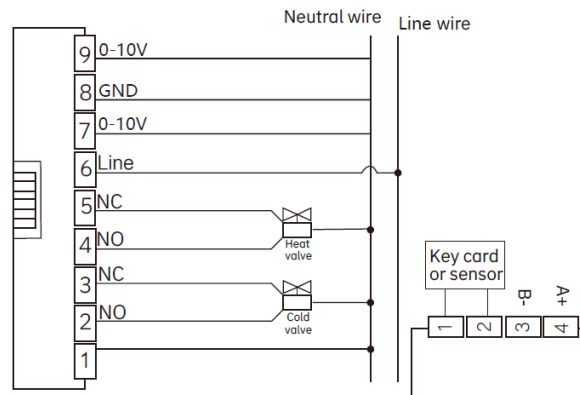


Technical Specifications

- Power Supply Voltage: AC 85~250V, 50/60Hz
- Operating Environment: 0°C to 50°C ,
Relative Humidity $\leq 90\%$, non-condensing
- Storage Temperature: -10°C to 60°C
- Product Power Consumption: $<1.5\text{W}$
- Temperature Sensor: NTC thermistor
- Temperature Setting Range: 10°C to 32°C
- Temperature Display Accuracy: $\pm 0.1^{\circ}\text{C}$
- Temperature Measurement Accuracy: $\pm 0.5^{\circ}\text{C}$
- Display Screen: LCD
- Buttons: Capacitive Touch Button
- Load Current: Resistive load 2A, Inductive load 1A
- Casing Material: ABS+PC, flame retardant rating UL94 V-0
- Dimensions: 86 x 86 x 13.3 mm (Width x Height x Depth)
- Mounting Hole Distance: EU or Standard Electric Box
- Wires on Terminals Wire $2*1.5\text{mm}^2$ or $1*2.5\text{mm}^2$

Wiring diagram

AC 95-240V 50/60HZ



Note

1. Professional wiring is required, following the wiring diagram and electrical specs.
2. Water, mud or any impurities should be kept out of the thermostat, or electric element will be damaged!
3. Not suitable for high-humidity environments.
4. Avoid direct sunlight.
5. External sensor cannot be more than 10 meters



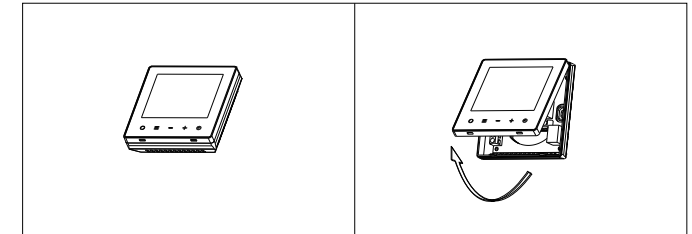
MAKE SURE POWER IS OFF BEFORE ELECTRIC CONNECTING
WARNING: RISK OF ELECTRICAL SHOCK.

Installation Instructions

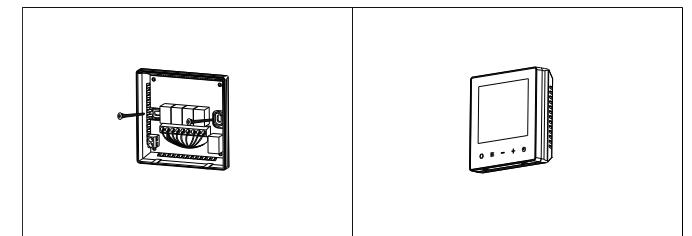
This thermostat is designed for surface-mounted installation, requiring a 35mm (minimum depth)

- Correct:
1. Install the thermostat at eye level for optimal visibility.
 2. Please read the manual to fully understand the product.
- Wrong:
1. Do not install the thermostat near heat sources, as this can affect the right temperature detecting
 2. Avoid pressing hard on the LCD screen, as this may cause irreparable damage.

1. Disassemble the Main Control Panel: Insert a 3.5mm-wide screwdriver into the 4mm slot.
2. Release the Clip: Push upward with force to open the clip.



3. Secure the Base: Use the two screws provided in the packaging to fix the base onto the wall.
4. Connect the Wiring: According to the wiring diagram, connect the wires to the terminals and secure them with a screwdriver.
5. Reattach the Control Panel: Push down firmly on the bottom of the panel to lock it into place, completing the installation.



Problems

NO.	Problem	Solutions
1	Power is on but display off	Check if the terminals between LCD and Power Unit Box is loose.
2	Without output but display on.	Use a new LCD panel or new Power Unit Box to replace the old one
3	Room Temp is not accurate	Temperature calibration in No.3 of advanced settings

Menu Operations

- Power On/Off:** Press the power button "⊙".
- Set Temperature:** Press the "—" or "+" button.
- Mode Selection:** Press the "≡" button to choose from the following 3 modes: Cooling, Heating, Ventilation.
- Fan Speed switch:** tap "⊗" to switch over Low, Med, High or Auto.
- Button Lock/Unlock:** Press and hold two buttons "—" + "+" simultaneously for 3 seconds to lock or unlock the buttons.
- Resetting to Factory Settings (Caution!)** Turn off the thermostat, disconnect the power, then reconnect the power and press and hold two buttons "—" and "≡" for 5 seconds until FSET shows. The device will restore to factory settings.
- Time Calibration**
Turn off the thermostat, press and hold the "⊗" button for 3 seconds.
 - Set Hour: The screen will display "⏰" and the hour will flash. Press the "+" or "—" button to set the hour.
 - Set Minute: Press the "⊗" button again, the minute "⏰" will flash. Press the "+" or "—" button to set the minute.
 - Set Day of the Week: Press the "⊗" button again, the day of the week "📅" will flash. Press the "+" or "—" button to select the day of the week.
- Programming mode setting**
7-Day, 4-Time Period Programming:
 - power on. press and hold "⊗" for 3 seconds. The day of the week flashes, press "+" or "—".
button to select the day of the week.
 - Press the button "⊗" again, the hour "⏰" flashes, press the "+" or "—" button to set the hour.
 - Press the button "⊗" again, the minute "⏰" flashes, press the "+" or "—" button to set the minute.

° Press the button "⊗" again, the temperature "⏰" flashes, press the "+" or "—" button to set the temperature. After setting the first time period, press the button "⊗" to move on to the second time period.

9. Network Query: Hold "⊗" and "+" button for 3 seconds to check status. "888" shows the IP, and the last "8" indicates "L" for connected or "n" for not connected (Modbus version).

Building Management System (BMS) Control:

Thermostat terminals A and B serve as communication ports for the building's BMS.

Protocol parameter

Communication protocol	MODBUS
Data transmission mode	RTU
Error detection	CRC-16/MODBUS
Communication bus	RS-485, half-duplex
Baud rate	9600bps
Word width	8bit
Parity check	No
Stop bit	1bit

9. Advanced Settings:

Turn off the thermostat, press and hold two buttons "⊗ ≡" for 3 seconds to enter the advanced settings. press the "≡" button to select options, press the "+" or "—" button to adjust the settings. The option adjustment interval is 60 seconds.

No.	Function	Operated by + / - button	Default
1	2/4 Pipe	2: Two Pipe 4: Four pipe	4
2	Working Mode	1. cooling 2. heating 3. cooling/Ventilation 4. heating /Ventilation 5. cooling/heating /Ventilation	5
3	Temp Calibration	-5°C -5°C	0
4	On Diff. Temp	0.5-5 °C	1
5	Max.setpoint	21°C ~32°C	32
6	Min.setpoint	10°C ~20°C	10
7	Fan Status (When room temp has reached setpoint)	OFF: the fan will turn off. AU: The fan will keep running. In auto fan, the fan goes to low speed. In manual fan, keep the same speed H,M,L	OFF

8	Lock buttons	1.Mode 2 Mode,Fan 3.Mode,Fan,+ ,4.all buttons	2
9	Anti-freezing	ON/OFF	ON
10	Anti-freezing temp	1-15°C	5
11	EEPROM: The status and settings are main -tained in case of electric power cut off	OFF :off AU: on status like before power shut down	OFF
12	Modbus IP	1~247	1
13	Control Permissions	1: Local Control Only 2: Remote Control Only 3: Both Local and Remote Control	3
14	Parity Settings	1.No Parity 2.Odd Parity 3.Even Parity	1
15	Baud Rate	1: 4800 bps 2: 9600 bps 3: 19200 bps 4: 38400 bps 5: 115200 bps	2
16	keycard or external sensor	1.keycard 2.external sensor	1
17	ECO	1.keycard normally open . 2.keycard normally close 3 Button:long press Power button ,goes to ECO	3
18	Heating temp of ECO	10~21°C	18°C
19	Cooling temp of ECO	22~32°C	26°C
20	Fan speed of ECO	1.Low 2.Auto	2
21	Standby brightness	0-10 don't sent more than 2 , to protect the lifetime of the LCD	2
22	P Band Range	2 3 4 5	2
23	I-time Range	1~60Sec	40
24	select the gear of the fan	3: Third gear of the fan. 5: Fifth gear of the fan.	3
25	The lowest speed voltage value	0<Setting voltage value<fan2	2
26	The second lowest speed voltage value	fan1<Setting voltage value<fan3	4
27	Medium wind voltage value	fan2<Setting voltage value<fan4	6
28	The second highest wind voltage value	fan3<Setting voltage value<fan5	8
29	The highest wind speed voltage value	fan4<Setting voltage value<10.0	10
30	The voltage of auto wind	1.Three fan speed 2. Modulating PID control	1
31	The minimum output voltage of auto wind (30th sets 2: PID control)	0~10v	2
32	The minimum output voltage of auto wind (30th sets 2:PID control)	0~10v	10
33	Version		001

We are at your service

The thermostat warranty period is 18 months from the date of purchase. Additional service charges may be charged after the warranty period. For more details, please contact us directly.