



Installation and Operation Manual

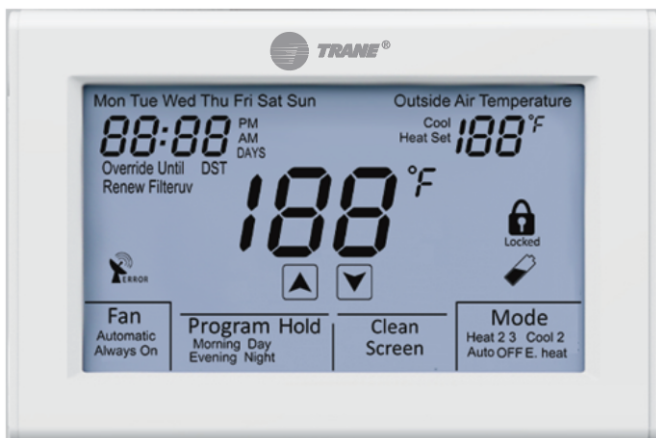
24V Digital Wall Controller

TCONTKJR125A



A SAFETY WARNING

The equipment must be installed and inspected only by qualified personnel. The installation, commissioning, and maintenance tasks of the heating, ventilation, and air conditioning equipment can be dangerous and require specific knowledge and training. Equipment installed, adjusted, or modified incorrectly by an unqualified person can cause personal injury, even death. When working on the equipment, observe all cautions in the documentation and those included in the brochures, labels, and stickers attached to the equipment.



TCONTKJR125A Series Thermostat can be used for conventional or heat pump system, please configure the thermostat according to the manuals before operation.

MAIN FUNCTIONS :

- Detect and Display Current Room Temp
- Set Room Temp
- Manually or automatically control the Fan
- Real Clock
- Electric Heating/Heat Pump/Mill-volt System
- White Backlight
- Memory function when power failure
- Calibrating temperature
- Multiple Models Select
- °C \°F transfer
- Compressor Delay
- Compressor High/Low temp protection
- Temperature Differential
- Cool-Heat-Auto-E.Heat-Off mode
- 7 Days 4 periods program
- Keypad lock/unlock
- Capacitive touch buttons
- Filter Alarm

TECHNICAL DATA:

Cooling Setpoint Range : 7 ~ 35°C (45 ~ 95°F)
 Heating Setpoint Range : 7 ~ 35°C (45 ~ 95°F)
 Temperature Display Accuracy : 1°C \1°F
 Working environment temp : 0 ~ 45°C
 Working Humidity : 5 ~ 95% RH (no condensation)
 Power Supply : 24VAC (17~32VAC) , 50/60Hz
 Relay Output : 24VAC (17~32VAC) , < 1A(Resistive Load)
 Self-Consumption Power : < 1W
 Display : LCD
 Temp Sensor : NTC 3950 100K
 Indoor temp display range : -10 ~ 50°C (0°F to 122°F)
 Outdoor temp display range : -19 ~ 60°C (-5°F to 140°F)
 Terminal block : 2×1.5 mm² or 1×2.5 mm²
 Plastic Case : PC + ABS
 Screen : Capacitive touch screen
 Dimensions : 124.5×84.5×22.5mm (L×W×H)
 Pitch Hole : 60 mm / 83.5mm /50mm (Standard)
 Protection Class : IP 20

OPERATIONS

1、MODE SELECTION

Tap "MODE" button to change to different working mode.
 Working mode is cycled in the following order:

Factory Default = Heat Pump

If other situations are needed, please further set according to parameters settings.

Model 1 Heat → Off

Model 2 Cool → Off

Model 3 Heat → Cool → Auto → Off → E.heat (Heat Pump)

Model 4 Heat2 → Cool → Auto → Off → E.heat(Heat Pump)

Model 5 Heat2 → Cool2 → Auto → Off → E.heat(Heat Pump)

Model 6 Heat3 → Cool2 → Auto → Off → E.heat(Heat Pump)

2、FAN SELECTION

Tap "Fan" button to switch the fan settings between 'Always On' and 'Automatic'.

3、CLEAN SCREEN

Tap "Clean Screen" button to enter 15 seconds countdown.
 During the countdown all buttons become invalid so that you can wipe the screen.

After 15 seconds countdown, will automatically exit and buttons can be operated as normal.

4、SET TEMPERATURE

Under the mode of Cool, Heat, Auto and E.heat, tap temp display area to enter the setting screen:

Tap "▲" or "▼" to change the setpoints, Each change is 1°C (1°F) Continuous pressing the buttons to fast increase/decrease the temp settings.

In the Auto Mode temp settings screen, you can switch current temp settings between cool mode and heat mode by touching the temp display area.

NOTE: If thermostat is in programmable function, the temperature settings is ONLY valid in current program period. When next program period arrives, it will automatically switch to the set temperature for the program period.
 If there's no any further operation in 10 seconds it will return back to the HOME.

5、HOLD FUNCTION

This function CAN'T be used in "OFF" mode.

Press "Program" button for 3 seconds to enter temperature hold setting screen.

Now the DAY flashing, tap "▲" or "▼" to change;

If set DAY=0, then cancel the function;

Tap "Hold" button to keep temperature figure flashing

Tap "▲" or "▼" to change the settings.

Tap "hold" button again to exit and return to the main screen.

In 10 seconds without any operation, it will return back to the main screen.

6、CLOCK SETTINGS

Press 'Clock Display' area for 3 seconds to enter CLOCK SETTINGS screen, now the HOUR start flashing

Tap "▲" or "▼" to set the hour;

Tap "Mode" again, the MINUTE start flashing

Tap "▲" or "▼" to set the minute;

Tap "Mode" again, the WEEKDAY start flashing

Tap "▲" or "▼" to set the week day;

Tap "Mode" again to save and exit to the main screen.

In 20 seconds if there's no any further operations, then return to the main screen.

7. PROGRAM PERIOD SETTINGS

Before using the program period function, you need set the C9 parameter according to the user to select the programmable mode. This function CAN'T be used in "OFF" mode.

Tap "Program" to enter the 4-periods program setting screen
Tap "▲ or ▼" to select the working days (Mon-Fri) or weekend days(Sat, Sun).

Tap "Program" to enter the 4-periods program setting screen. Now the first period HOUR start flashing;

Tap "▲ or ▼" to set the hour;

Tap "Mode" now the MINUTE start flashing;

Tap "▲ or ▼" to set the minute;

Tap "Mode" again now the TEMPERATURE start flashing;

Tap "▲ or ▼" to set the temperature;

Tap "Fan" button to reverse the selection of HOURS, MINUTES and set the TEMP;

Now the first period settings have been set.

Tap "Program" button to set the second, the third and the fourth period settings by following above steps.

When all period settings complete, tap "Program" to save and exit to the main screen.

During the settings, you can click the 'CLOCK display' area to switch between HOUR and MINUTE; click 'TEMPERATURE display' area to switch between cool temperature setting or heat temperature setting (under auto mode).

In 20 seconds if there's no any further operations, then return to the main screen.

You can also set the Programmable mode (C9) to 7 days program, so you can program the single day in a week; Or set the Programmable mode (C9) to 24 hours program, so you can program the Monday-Sunday slot simultaneously.

8. KEYPAD LOCK/UNLOCK

Press "Fan" for 3 seconds to enable keypad lock function, "🔒" will display on the screen, and when pressing any buttons will be without any feedback.

Press "Fan" for 3 seconds again to disable the function, "🔒" will disappear on the screen, and keypad works.

9. RESTORE FACTORY DEFAULTS

Press "Mode" to switch to "OFF" mode.

Press "Fan" and "Mode" for 10 seconds, screen will displays all icons, and restore all parameters to factory settings.

10. CLEAR FILTER ALARM

When filter alarm display, press and hold 'room temperature display' area for 3 seconds to eliminate the alarm. Now filter alarm time will start counting from 0.

11. ERROR DISPLAY

E1 = Internal sensor failure ;

E2 = external sensor failure

12. PARAMETERS SETTINGS

The parameters can be set in either turn-on or turn-off.

Press "Mode" for 3 seconds to enter the setting screen.

"C00" will display on the room temperature display area

Tap "Mode" or "Fan" to choose the options

Tap "▲ or ▼" to adjust the values.

You also can click 'C00' display area to choose the options.

Tap "Program" to save and exit to the main screen.

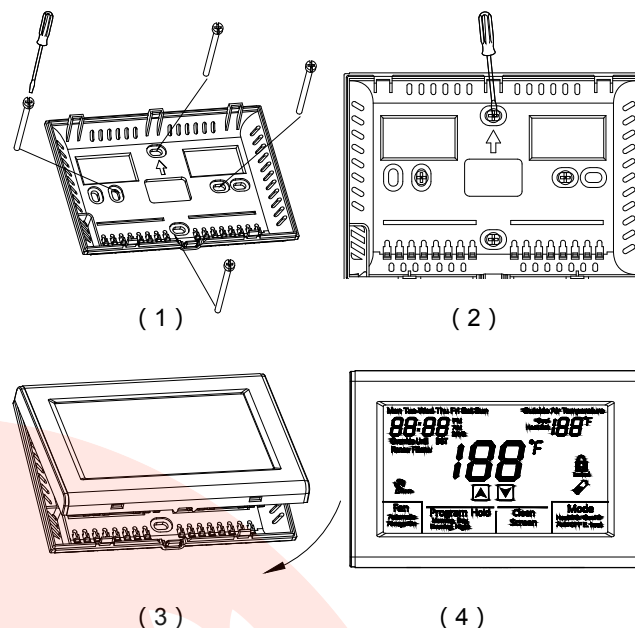
In 20 seconds if there's no any further operations, then save the latest setting and exit.

PARAMETERS LIST

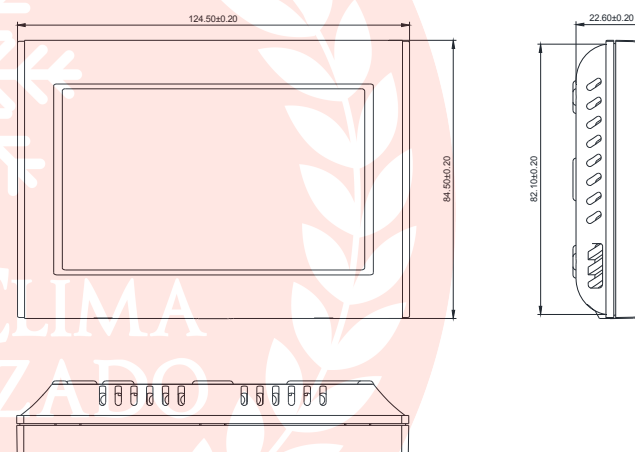
OPTs	FUNCTIONS	VALUES	DEFAULTs
C0	Standard or Heat Pump	00: standard system 01: heat pump system	01
C1	Models' list	01: Heat only (ONLY standard system) 02: Cool only (ONLY standard system) 03: 1 heat + 1 cool 04: 2 heat + 1 cool 05: 2 heat + 2 cool 06: 3 heat + 2 cool (ONLY heat pump)	06
C2	Electric or Gas system	00: Electric 01: Gas	00
C3	Fossil fuel auxiliary heating	00: Normal fuel 01: Fossil fuel (ONLY auxiliary heating)	00
C4	O/B output	00 = 'O' enable reversing valve 01 = 'B' enable reversing valve	00
C5	Compressor Delay	00 = without delay 01 = 4 minutes delay	01
C6	Filter alarm time	1~90 (=100~9000 hours) 00 = Close the filter alarm	90
C7	°C /°F	00: °C 01: °F	01
C8	Clock display format	12 =12 hours 24 =24 hours	24
C9	Programmable mode	00 = 5+2 day program 01 = 7 days program 02 = 24 hours program 03 = nonprogrammable	00
C10	Backlight setting	00 = backlight turns off it there's no operation in 10 seconds 01 = Always off 02 = Always on	00
C11	Temperature compensation	-18°F ~-18°F (min1°F) -10°C ~-10°C (min 0.5°C)	0°F /0°C
C12	1 stage temp differential	2, 4, 6°F / (1, 2, 3°C)	2°F/1°C
C13	2 stage temp differential	2, 4, 6°F / (1, 2, 3°C)	2°F/1°C
C14	3 stage temp differential	2, 4, 6°F / (1, 2, 3°C)	2°F/1°C
C15	Deadband	2~10°F / (1~5°C)	6°F/3°C
C16	Sensor mode	00 = Built-in only 01 = external only 02 = built-in + external	00
C17	Compressor high temp protection on heat mode	(25°C ~50°C) 77°F -122°F (ONLY heat pump or fossil fuel system)	86°F/30°C

C18	Compressor low temp protection on cool mode	(-8°C ~25°C) 0°F - 77°F (ONLY heat pump or fossil fuel system)	32°F/00°C
C19	Set sensor display	00 = no display 01 = display set temp 02 = display outdoor temp 03 = if outdoor sensor installed, then display outdoor temp; otherwise display set temp	03
C20	Auto enable emergency heating during compressor in low temperature protection	00 = OFF 01 = ON	00
C21	Compressor low temp protection settings	(-8°C ~25°C) 0°F - 77°F (ONLY heat pump or fossil fuel system)	5°F/-15°C
C22	Key lock	00 = disable 01 = lock program button 02 = lock fan button 03 = lock mode button 04 = lock fan + program + mode buttons 05 = lock all buttons	05
C23	Multi-stage output settings when room temp reach the	00 = OFF 01 = ON	01
C24	Memory when power failure	00 = OFF 01 = ON	01
C25	Pre-heat	00= off 01~05 = 1~5 hours	00
C26	Pre-heat rate	Automatically calculate	20
C27	Version No.	Read only	

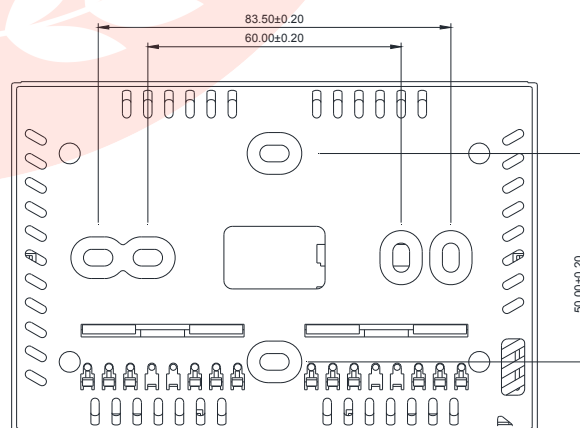
2、Installations



3、Dimensions



4、Pitch Holes distance

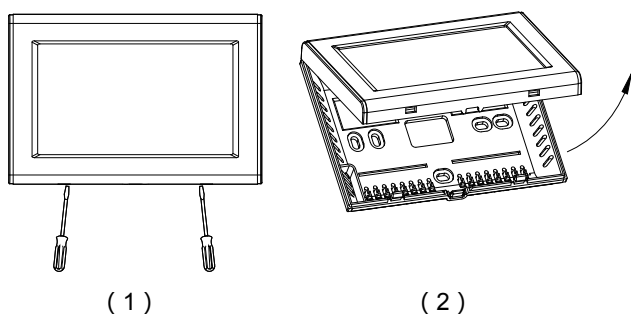


INSTALLATION PROCEDURES

DO
Mount the thermostat at eye level.
Read the instructions fully so you get the best from our product.

DON'T
Do not install near to a direct heat source as this will affect functionality.
Do not push hard on the LCD screen as this may cause irreparable damage.

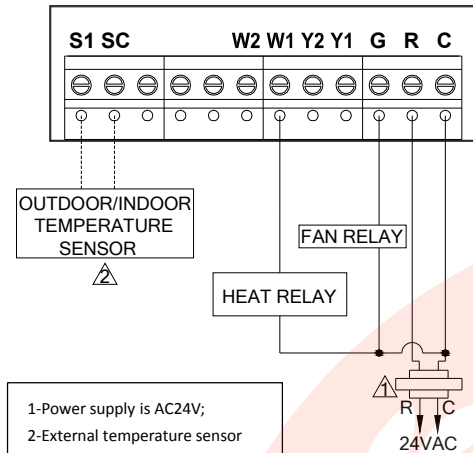
1、Dismantle the case



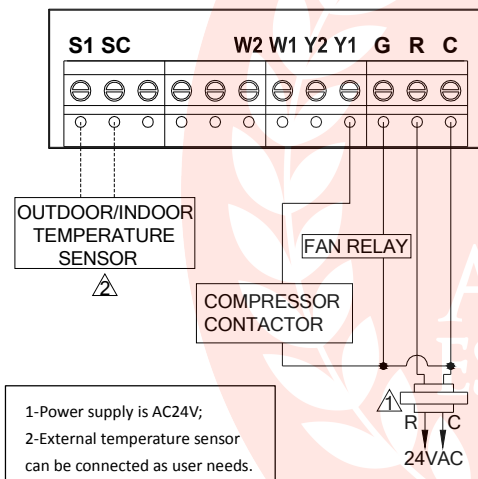
WIRING DIAGRAM

Notice: First look at the C0 and C1 parameter settings. You can use C0 setting the Standard or Heat Pump system mode. You can use C1 setting the Models.

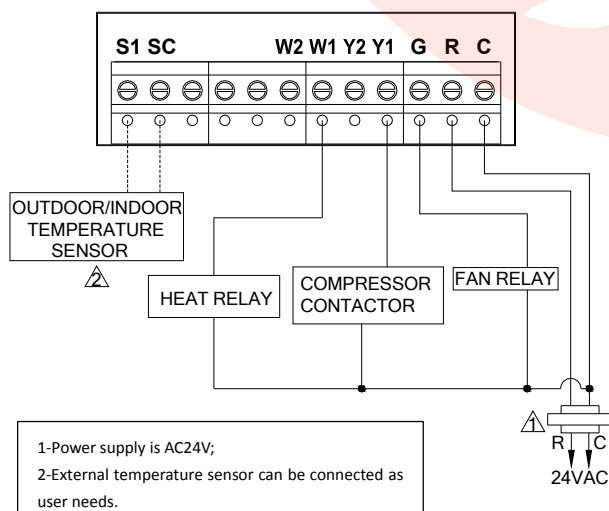
1、Standard System. Model 1 – Heat Only



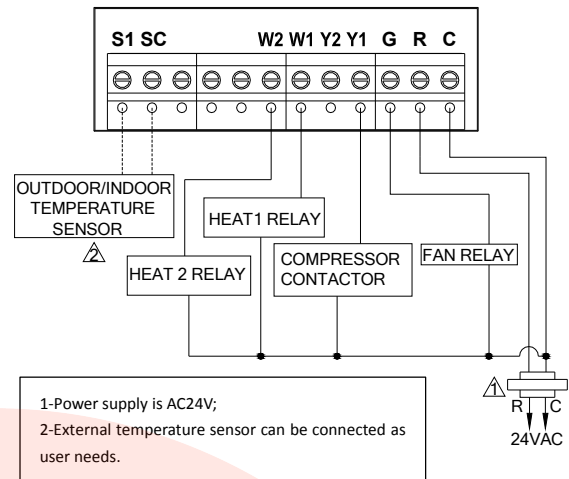
2、Standard System. Model 2 – Cool Only



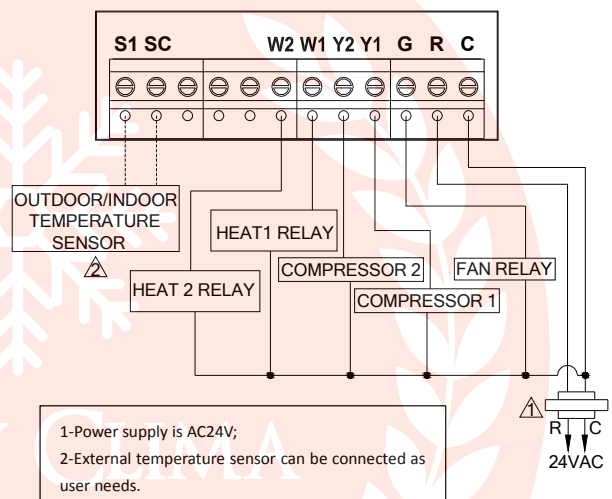
3、Standard System. Model 3 – 1 stage heat 1 stage cool



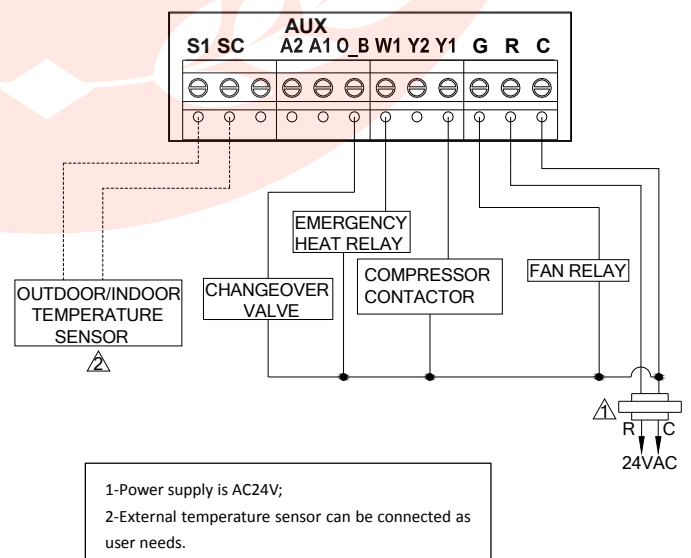
4、Standard System. Model 4 – 2 stage heat 1 stage cool



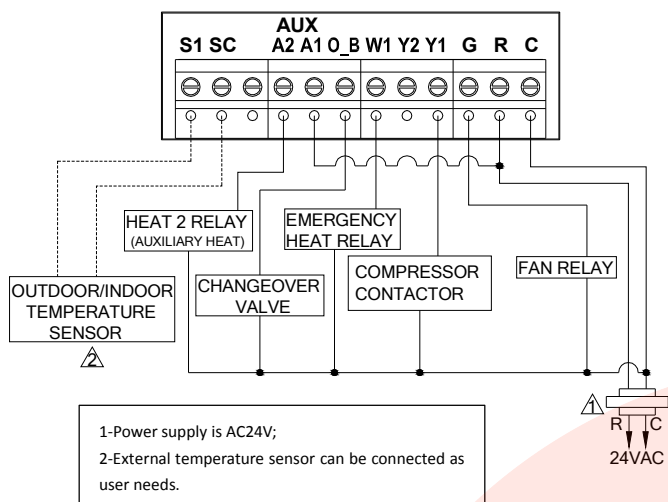
5、Standard System. Model 5 – 2 stage heat 2 stage cool



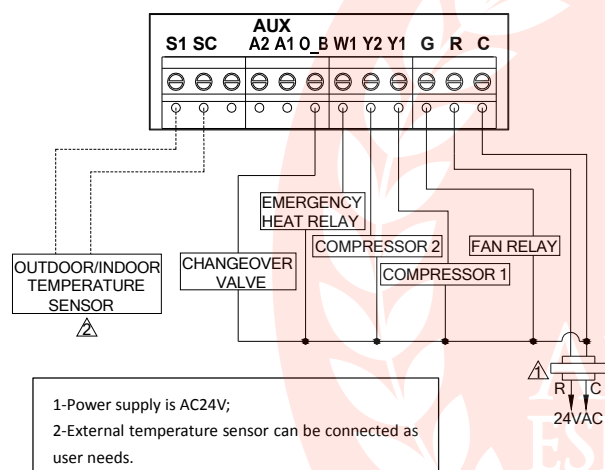
6、Heat Pump System. Model 3 – 1 stage heat 1 stage cool and Emergency heat



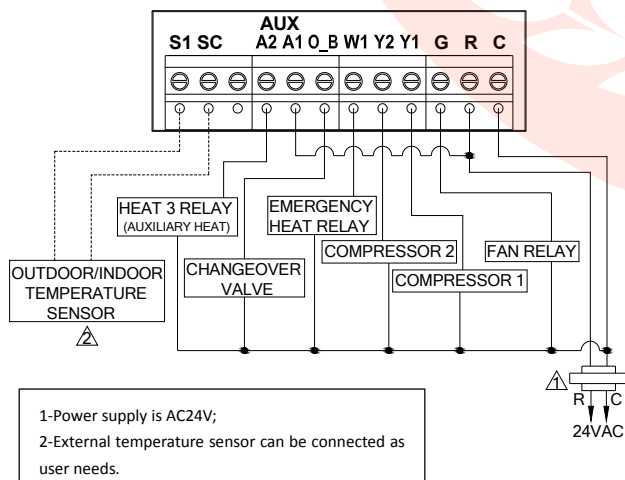
7、Heat Pump System. Model 4 – 2 stage heat 1 stage cool and Emergency heat



8、Heat Pump System. Model 5 – 2 stage heat 2 stage cool and Emergency heat



9、Heat Pump System. Model 6 – 3 stage heat 2 stage cool and Emergency heat



- Notice :**
- 1、 this product must only be installed by a qualified electrician and comply with local installation regulations.
 - 2、 Prevent liquid or dust from entering the thermostat
 - 3、 The product is not suitable for installation in high humidity environments
 - 4、 Do not install in direct sunlight
 - 5、 Do not install in environments with explosion-proof requirements