Data Sheet

REND Series Thermostat

REND series thermostat adopts button-hidden fashion appearance design. It is used to control temperature for industry, commercial and residential. Models are available for heating, cooling, ventilating control. The application is Fan Coil control.
REND series thermostats are with microprocessor and big LCD display included working state(cooling, heating, ventilating), fan speed, ambient temperature, setting temperature etc. pushbutton includes turn on/off ( ),mode(M),clock( ), fan speed( ) and temperature adjustment (▲▼).
Shell is Fire retardant PC ABS, as figure 86x86mm, thicker 13mm.

MODEL DENOMINATIONS

REND – □

C1: Cool only. Control Motorized Valve and 1-speed fan. When the temperature reaches the set-point, it will close the Motorized Valve and Fan both.
C3: Cool only. Control Motorized Valve and 3-speed fan. When the temperature reaches the set-point, it will close the Motorized Valve and Fan both.
HC2: Control Motorized Valve and 3-speed fan. When the temperature reaches the set-point, it will close the Motorized Valve and Fan both.
HC4: Control 4 pipe fan coil units, Control two Motorized Valves and 3-speed fan. when the temperature reaches the set-point, it will close the Motorized Valve and Fan both.

BASIC FEATURES

- Room temperature setting
- Manual or Auto 3-speed changeover
- Defrost (low temperature protection)
- Clock
- Blue backlight

STATUS DISPLAY

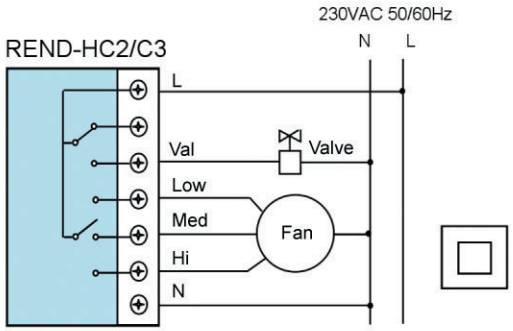
- Working Status: Cool , Heat , Ventilation
- Fan Speeds: Low , Medium , High and Auto
- Room temperature display
- Temperature setting
- FCU valve
- Clock

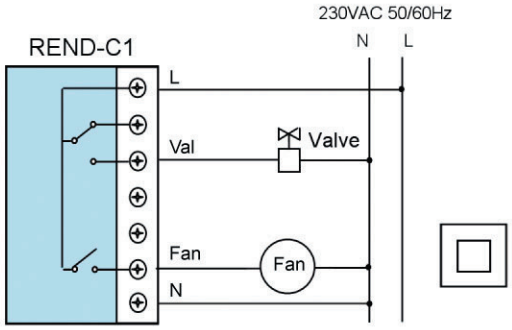
Specifications

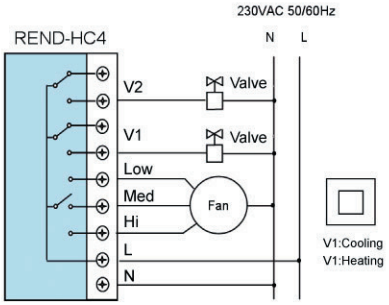
- Sensing element: NTC
- Accuracy : ±0.5˚C
- Set-point range: 5˚C to35˚C
- Operating Temperature: 0~45˚C
- Operating Humidity: 5~90%RH (non-condensing)
- Power supply: AC230V±10%, 50/60Hz
- Switch current rating: Fan: 2(1)A Valve: 2(1)A
- Power Consumption: < 2W

- Wirings: Screw-in terminals, each terminal capable of accepting2 x 1.5 mm^2 or 1 x2.5mm^2 wires
- Housing: ABS Flame Retardant
- Dimensions: 86x86x13 mm
- Hole pitch: 60mm
- Protection Class: IP30
- Display: LCD

WIRING DIAGRAMS







OPERATION

On/Off: Press“ ⏻ ”to turn on, press“ ⏻ ”again to turn off thermostat and its output.

Setting temperature: press“ ▼ ”to reduce temperature, press“ ▲ ” to raise temperature(0.5℃ changed each press) set point only valid in current period of time; Clock adjustment, turn on/off or 7 days programming modification, it will perform new settings.

Cool: Press “M” till to display “ ❄ ”and flash, ¨it will be confirmed automatically after 6 seconds.

Heat: Press “M” till to display “ ☀ ”and flash, ¨it will be confirmed automatically after 6 seconds.

Ventilation: Press “M” till to display “ ”and flash, it will be confirmed automatically after 6 seconds.

Fan speed select: Press “ ” to select “ (Hi), (Med), (Low), (Auto)”. In mode“ (Auto)”, the fan-speed changed automatically. Auto LOW-speed When the difference between room-temperature and setting-temperature exceed 1℃, Auto MED-speed When exceed 2℃, Auto HI-speed When exceed 3℃ .

Clock

Clock calibration: Press“ 🕘 ” till to display “hh:mm” and “hh” flash, press “ ▲ ” or “ ▼ ” to adjust hour, press “ 🕘 ”, “mm” flash, press “ ▲ ” or “ ▼ ” to adjust minute; Press “ 🕘 ”, “week” flash, press “ ▲ ” or “ ▼ ” to adjust Mon to Sun.

Timer On and Timer Off

Timer on: Press“ 🕘 ”, till to display “ 🕘 ” and “ON” and all flash, and also “hh” flash, press “ ▲ ” or “ ▼ ” to adjust hour. Press “ 🕘 ”, “mm” flash, press “ ▲ ” or “ ▼ ” to adjust minute.

Timer off: Press“ 🕘 ”, till to display “ 🕘 ” and “OFF” and all flash, and also “hh” flash, press “ ▲ ”or “ ▼ ” to adjust hour. Press “ 🕘 ”, “mm” flash, press “ ▲ ” or “ ▼ ” to adjust minute.

Canceling timer on: Press“ 🕘 ”, till to display “ 🕘 ” and “ON” and all flash, and also “hh” flash, press “ ▲ ” or “ ▼ ” to adjust hour to “--:--”. Press “ 🕘 ”, “mm” flash, press “ ▲ ” or “ ▼ ” to adjust minute to “--:--”.

Canceling timer off: Press“ 🕘 ”, till to display “ 🕘 ” and “OFF” and all flash, and also “hh” flash, press “ ▲ ” or “ ▼ ” to adjust hour to “--:--”. Press “ 🕘 ”, “ mm” flash, press “ ▲ ” or “ ▼ ” to adjust minute to “--:--”.

DEFROST (Low temperature protection)

Description: when the thermostat turns off and the room temperature is lower than 5℃, it will be turned on automatically in heating mode with " ⚠ " showing, thermostat will be in heat mode and fan runs in high speed. The thermostat will turn off when temperature is higher than 7℃.

Set low temperature protection: Turn off the thermostat, press "M" and hold for 3 seconds, it will display "ON"or "OF", Press" ▲ "or" ▼ "key to adjust. "OF" indicates invalid low temperature protection, "ON" indicates valid low temperature protection function. The default is "OF".

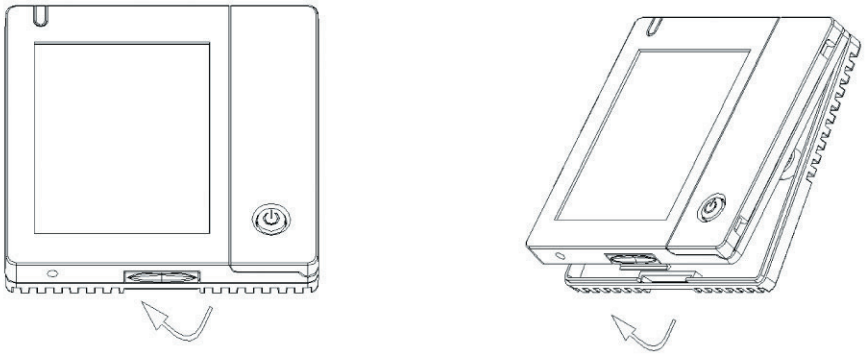
Alarm: Trouble appears for sensor, fan and valve will be turned off by thermostat, as indicating " 🔧 "and "E1"or"E2".

E1: alarming for short circuit of sensor.

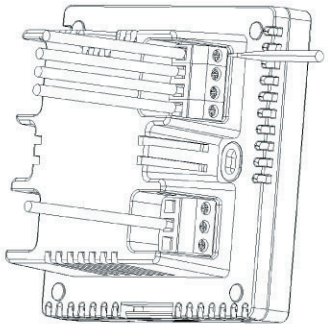
E2: alarming for open circuit of sensor.

"HI" indicated when temp. is more than 55℃, "LO" indicated if temp. is lower than 0℃.

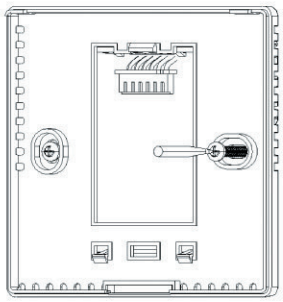
INSTALLATION



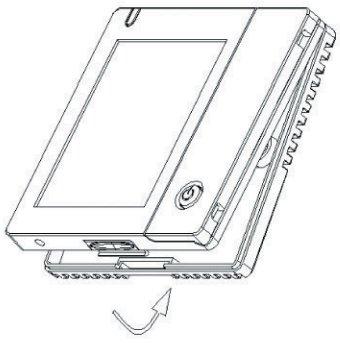
1. Open the clip



2. Wiring



3.Fix thermostat with two bolts



4. Lock surface and finished

Attention: wiring work should be done according to wiring diagram. Water,mud etc. impurity should be kept outside of thermostat, or electric element will be damaged!

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