

MR2008 Series Thermostat User Manual

MR2008 Series thermostats are available for individual room temperature control in residential, industrial and business premises. Suitable for 2-pipe or 4-pipe Fan Coil configuration.

MR2008 adopts digital control technology with large LCD display, It shows the following items: working states (cool, heat or ventilation), the speed of fan coil, room temperature, set-point. There are following keys on the panel: On/Off "\bigcup", Exchange mode (cool, heat or ventilation) "M", timer "⊕", Select fan speed (high, medium, low or auto) "♣", set-point temperature "♠" and "♥".



MODEL DENOMINATIONS



T: Clock and timing on/off. Blank is invalid.

R: IR remote function. Blank is invalid. (remote controller should be ordered additionally)

STATUS DISPLAY

L: Backlight available. Blank is invalid.

E: Auto Recovery. Blank is invalid.

BASIC FEATURES

- Room temperature setting
- Manual or Auto 3-speed changeover
- Defrost (low temperature protection)
- Auto Recovery (E, Option)
- Clock and Timer (-T, Option)
- IR remote control (-R, Option)
- Blue Backlight (-L, Option)

SPECIFICATIONS

Sensing element: NTC Accuracy : ±1°C 5°C to 35°C Set-point range:

0~50℃ Display range:

Operating Humidity: 5~90%RH (non-condensing) Power supply: AC 85~260V, 50/60Hz

Switch current rating: Resistive: 2 A; Inductive: 1 A

Rated Power: < 1 W</p>

Wirings: Screw-in terminals, each terminal capable of accepting 2 x 1.5 mm² or 1 x2.5 mm² wires

■ Working Status: Cool

★ , Heat

★ , Ventilation
⑤

Auto 🔘

Clock week display (-T, Option)

Room temperature display

Temperature setting

Dimensions: 86 × 86 × 13 mm (W × H × D)

Hole pitch: 60mm (Standard)

Protection Class: IP30

Display: LCD

OPERATION

- On/Off: Press "()" to turn on, press "()" again to turn off thermostat and its output.
- Setting temperature: Press "▼" to reduce set-point, press "▲" to raise set-point.
- will flash, and it will be confirmed automatically after 5 seconds. The ventilation function is invalid for HR2008Y(E).
- Fan Speed Selection (HR2008DA[E]/DB[E]/DA2[E]/DB2[E]/FCV2[E]): Press "," to change fan speed among "\$ (Hi)", "\$ (Med)", "\$ (Low)" or "Q (Auto)".

Under auto fan speed "Q", the fan-speed will be changed automatically. Auto LOW-speed When the difference between room-temperature and set-point exceed 1°C, Auto MED-speed When exceed 2°C, Auto HI-speed When exceed 3°C.

- Control Damper (HR2008Y[E]): The damper will be open when the room temperature is higher than set-point in cooling, or room temperature is lower than set-point in heating, Otherwise the damper will be closed.
- Control Motorized Valve under 2-pipe configuration (HR2008DA[E]/DB[E]/DA2[E]/DB2[E]): If the difference between room temperature and set-point exceed 1°C, FCU valve will be open; if room temperature and set-point are equal, HR2008DA[E]/DA2[E] will close the FCU valve with the fan still running, HR2008DB[E]/DB2[E] will close the FCU valve and Fan
- Control FCU Valve under 4-pipe configuration (HR2008FCV2[E]): In cooling, when the room temperature is higher than set-point, the cooling valved will be opened. Otherwise it will be closed. Heating valve is always closed. In heating, When the room temperature is lower than set-point, the heating valve will be opened. Otherwise it will be closed. Cooling valve is always closed.



AUTO RECOVERY (Option)

- When the thermostat is at ON status for one minute, if power cut, it will return back to running automatically with the status how it is one minute ago after power coming back.
 - When the thermostat is at OFF status for one minute, if power cut, it will keep OFF status after power coming back.

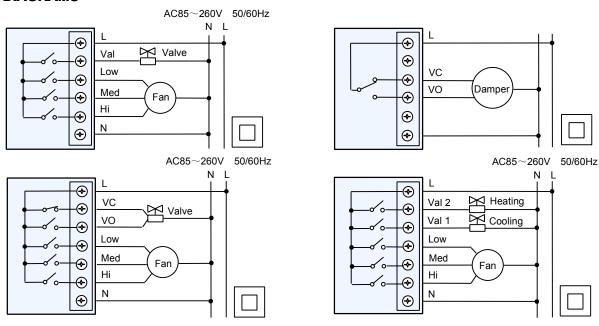
FUNCTIONS ASSOCIATED WITH TIMER ARE IN THE FOLLOWING (Option)

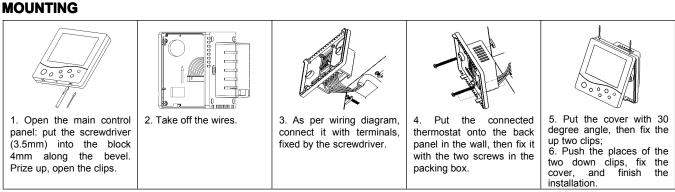
- Clock calibration: Press "⊕" till to display "hh:mm" and "mm" flash, press "▲" or "▼" to adjust minute, press "⊕", "hh" flash, press "▲" or "▼" to adjust hour; Press "⊕", "week" flash, press "▲" or "▼" to adjust Mon to Sun.
 - Sleep function setting: Press "⊕", till to display ")" and flash, press "▲" to confirm, press "▼" to cancel.
- Timer on /Timer off: Press "⊕" till to display "⊕" and "TIMER ON" and all flash, and also "mm" flash, press "▲" or "▼" to adjust minute, press "⊕", "hh" flash, press "▲" or "▼" to adjust hour; Press "⊕" till to display "⊕" and "TIMER OFF" and all flash, and also "mm" flash, press "▲" or "▼" to adjust minute, press "⊕", "hh" flash, press "▲" or "▼" to adjust hour.
- © Canceling timer on / Canceling timer off: Press "⊕" till to display "⊕" and "TIMER ON" and all flash, and also "mm" flash, press "▲" or "▼" to adjust minute to "00". press "⊕", "hh" flash, press "▲" or "▼" to adjust hour to "00"; Press "⊕" till to display "⊕" and "TIMER OFF" and all flash, and also "mm" flash, press "▲" or "▼" to adjust minute to "00". press "⊕", "hh" flash, press "▲" or "▼" to adjust hour to "00".

DEFROST (LOW TEMPERATURE PROTECTION)

- $\ensuremath{\mathscr{G}}$ Description: when the thermostat turns off and the room temperature is lower than 5 $\ensuremath{^{\circ}}$ C, it will be turned on automatically in heating mode with " $\ensuremath{^{\circ}}$ " showing, under HR2008DA[E]/DB[E]/DA2[E]/DB2[E]/FCV2[E] models, the system will be in heat mode and fan runs in high speed. under HR2008Y[E] model, the motorized damper will be open. The thermostat will turn off when room temperature is higher than 7 $\ensuremath{^{\circ}}$ C.
- Set low temperature protection: Turn off the thermostat, press "M" and hold for 3 seconds, it will display "00" or "01", press "▲" or "▼" key to adjust. "00" indicates low temperature protection invalid, "01" indicates low temperature protection function valid. The default is "00".

WIRING DIAGRAMS





Note: Be sure to connect all the wires as per the wiring diagrams and keep it away from water, mud and other material so as to prevent the unit being spoiled!