




H7990 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.

H7990 adopt 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  Exchange mode (cool, heat or ventilation)  Select fan speed (high, medium, low or auto) , set-point temperature “▲” and “▼”.



MODEL DENOMINATIONS

H7990 08 ☐ - ☐

R: IR remote function. Blank is invalid. (*Remote controller should be ordered additionally*)
L: Backlight available. Blank is invalid.

Y: Control damper to open or close.

DA/DA2: Control Motorized Valve (DA: Control 2-wire N.C. FCU valve; DA2: Control 3-wire FCU valve) and 3-speed fan; When the temperature reaches the set-point, it will close the Motorized Valve with the fan still running.







DB/DB2: Control Motorized Valve (DB: Control 2-wire N.C. FCU valve; DB2: Control 3-wire FCU valve) and 3-speed fan; When the temperature reaches the set-point, it will close the Motorized Valve and Fan both.

FCV2: 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 Valves with the fan still running.

BASIC FEATURES

- ☐ Room temperature setting
- ☐ Manual or Auto 3-speed changeover
- ☐ Defrost (low temperature protection)
- ☐ IR remote control (Option)
- ☐ Blue Backlight (Option)


STATUS DISPLAY

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


SPECIFICATIONS




- | | |
|---|--|
| ☐ Sensing element: NTC | ☐ Rated Power: < 2 W |
| ☐ Accuracy : ± 1°C | ☐ Wirings: Screw-in terminals, each terminal capable of accepting 2 x 1.5 mm ² or 1 x 2.5 mm ² wires |
| ☐ Set-point range: 5°C to 35°C | ☐ Housing: ABS + PC Flame Retardant |
| ☐ Display range: 0~50°C | ☐ Dimensions: 86 x 86 x 13 mm (W x H x D) |
| ☐ Operation environment: 0~45°C | ☐ Hole pitch: 60 mm (Standard) |
| ☐ Operating Humidity: 5~90%RH (non-condensing) | ☐ Protection Class: IP30 |
| ☐ Power supply: AC 85~260V, 50/60Hz | ☐ Display: LCD |
| ☐ Switch current rating: Resistive: 2A, Inductive: 1A | |

OPERATION

☞ On/Off: Press “

☞ Setting temperature: Press “▼” to reduce set-point, press “▲” to raise set-point, and 0.5°C changed once.

☞ Mode Selection: Press “

☞ Fan Speed Selection H7990 08 :Press “ (Hi)”, “ (Med)”, “ (Low)” or “Auto”.

Under auto fan speed “Auto”, 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 (H7990 Y): The damper will be open when (1) room temperature is higher than set-point in cooling; (2) room temperature is lower than set-point in heating, Otherwise the damper will be closed.

☞ Control Motorized Valve under 2-pipe configuration (H7990 08 DA/DB/DA2/DB2): 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, H7990 08 DA/DA2 will close the FCU valve with the fan still running, H7990 08 DB/DB2 will close the FCU valve and Fan both.

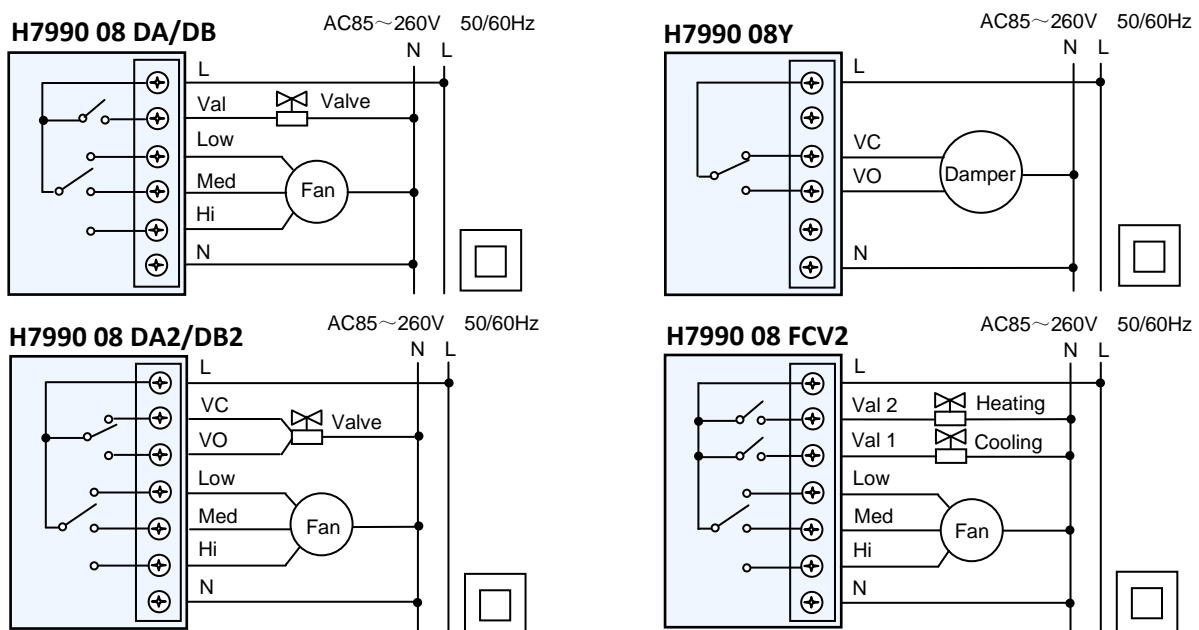
☞ Control FCU Valve under 4-pipe configuration (H7990 08 FCV2): In cooling, when the room temperature is higher than set-point, the cooling Valve will be opened. Otherwise it will be closed. Heating valve is always closed. In heating, When the room temperature is lower than set-point, the heating valve will be opened. Otherwise it will be closed. Cooling valve is always closed.

DEFROST (LOW TEMPERATURE PROTECTION)

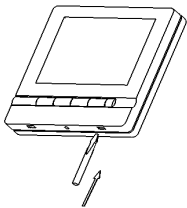
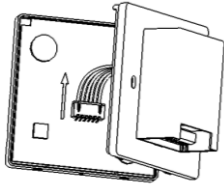
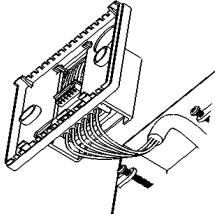
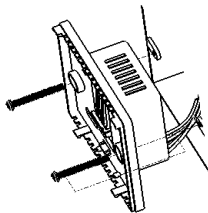
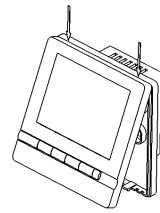
☞ Description: when the thermostat turns off and the room temperature is lower than 5°C, it will be turned on automatically in heating mode with  showing, under H7990 08 DA/DB/DA2/DB2/FCV2 models, the system will be in heat mode and fan runs in high speed. Under H7990 08 Y model, the motorized damper will be open. The thermostat will turn off when room temperature is higher than 7°C

☞ Set low temperature protection: Turn off the thermostat, press “” and “▲” buttons simultaneously 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



MOUNTING

 <p>1. Open the main control panel: put the screwdriver (3.5mm) into the block 4mm along the bevel. Prize up, open the clips.</p>	 <p>2. Take off the wires.</p>	 <p>3. As per wiring diagram, connect it with terminals, fixed by the screwdriver.</p>	 <p>4. Put the connected thermostat onto the back panel in the wall, then fix it with the two screws in the packing box.</p>	 <p>5. Put the cover with 30 degree angle, then fix the up two clips. 6. Push the places of the two down clips, fix the cover, and finish the installation.</p>
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