

EXT-HA-8023 Series Thermostat

EXT-HA-8023 Series Touch Pad fan coil unit thermostats are designed to control the room temperature in air-conditioning fan coil unit system or duct pipe channel system. EXT-HA-8023 series thermostats with microprocessor and big LCD display. It shows the following items: working status (cool, heat or ventilation), fan speed, room temperature, set-point temperature etc. Keys include on/off (⏻), mode (M), fan speed (🌀) and temperature adjustment (▼▲).



BASIC FEATURES

- Room temperature setting
- Manual or auto 3-speed changeover
- Defrost (low temperature protection)
- Blue back light
- Key lock (Optional)
- Auto-restart

LCD Display

- Working Status: Cooling ❄️, Heating 🔥 or Ventilation 🌀
- Fan Speed (Low 📊, Med 📊📊, High 📊📊📊 or AUTO)
- FCU valve status 🚰
- Room temperature display
- Temperature setting display

SPECIFICATIONS

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| <ul style="list-style-type: none"> ■ Sensing element: NTC ■ Accuracy: ± 1°C ■ Set-point range: 5°C to 35°C ■ Display range: 0~55°C ■ Operation environment: 0~45°C ■ Operating Humidity: 5 ~ 90%RH (non-condensing) ■ Key: Soft touch | <ul style="list-style-type: none"> ■ Power supply: AC 85~260V, 50/60Hz ■ Wirings: Accepting 2 × 1.5 mm² or 1 x 2.5 mm² wires ■ Switch current rating: Resistive: 2 A, Inductive: 1 A ■ Housing: PC + ABS Fire Retardant ■ Dimensions: 90×88×15.5 mm (W × H × D) ■ Hole pitch: 60 mm (Standard) ■ Protection Class: IP30 ■ Rated Power: < 1W |
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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, and 0.5°C changed once.
- Mode Selection: Press “M” to change system working in cooling “❄️”, heating “🔥” or ventilation “🌀” mode, the related icon will flash
- Fan Speed Selection: Press “🌀” to change fan speed among “📊📊📊 (Hi)”, “📊📊 (Med)”, “📊 (Low)” or “AUTO (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 is 1°C; Auto MED-speed When difference is 2°C; Auto Hi-speed When difference is 3°C.

- Control Motorized Valve: If the differential temperature between room temperature and set-point exceed 1°C, FCU valve will be open; if room temperature and set-point are equal, EXT-HA-8023 will close the FCU valve with the fan still running.

Keyboard Lock Function

- Keypad Lock: its keypad would be automatically locked in 30 seconds in case that no one uses the thermostat, so as to prohibit other persons from operating the thermostat.
- Keypad Unlock: Press “” for 5 seconds to unlock (In case that no one uses the thermostat, its keypad would be automatically locked in 30 seconds) .

Low Temperature Protection Function

- Turn off: When the room temperature is lower than 5°C, the thermostat would automatically turn on the fan and valve with “” showing, When the room temperature reaches to 7°C, the thermostat will automatically close the output.

Low Temperature Protection Setting

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

Temperature Adjustment

- Temperature adjustment ($\pm 5^{\circ}\text{C}$) can be done by following step:
- Turn off the thermostat, press “▲” and “▼” hold for 3 seconds, it will display “XX °C” (not displaying the thermostat model) , press “▲” or “▼” to adjust the temperature value, it will be automatically confirmed after 6 second.

Alarm

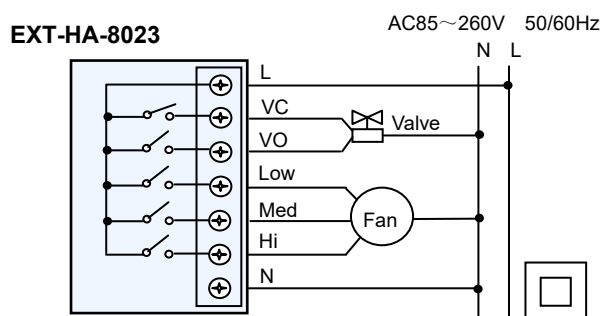
- Once the sensor fails, the thermostat will close the fan and valve, displaying “E1” or “E2”.

E1: Sensor in short circuit alarm



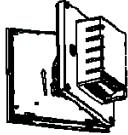
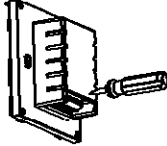
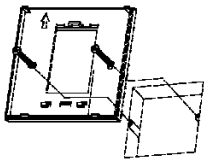

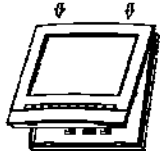
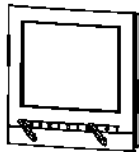
E2: Sensor in open circuit alarm.

It is displaying “HI” when the temperature is higher than 55°C, displaying “LO” when the temperature is lower than 0°C.

WIRING DIAGRAMS



INSTALLATION

 <p>1.Put 3.5mm width screwdriver into the slot.</p>	 <p>2.Open the face cover.</p>	 <p>3.Remove the cables from the control board</p>	 <p>4 . As per wiring diagram, connect it with terminals,</p>
 <p>5. Fix the installation backboard with two bolts on the wall.</p>	 <p>6. Connect the cables on the control board</p>	 <p>7. Firstly hang up the two hooks with 30 degree angle</p>	 <p>8. Press down the both down sides to fix the cover and finish the installation</p>

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!