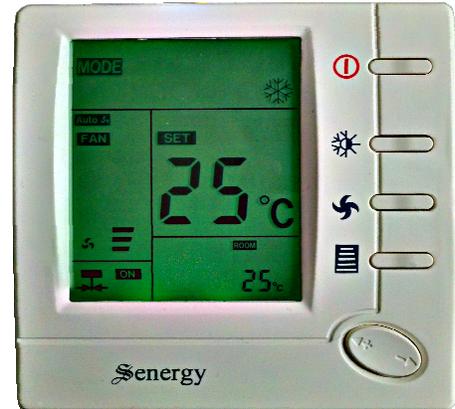


SEN803FCT-RC/2 FAN COIL THERMOSTAT

Applications : Control FCU with Cooling/Heating Mode, 03-Fan Speed

INTRODUCTIONS-----

The 803FCT/2 Series of Digital thermostats are specifically designed for control of commercial heating and cooling equipment such as rooftop units (with and without economizers), heat pumps, and fan coil unit. The large LCD display is easy to set up and program through the use of a plain text menu driven backlit display that walks the user through the programming process. Additionally, the 803FCT/2 has over four configurable parameters, enabling the thermostats to adapt to a variety of applications..



SPECIFICATION-----

Power Supply.....	100~240VAC,50/60Hz
Fan speed Relay.....	2A
Cooling/Heating Relay.....	0.5A
Room Temperature Scale.....	5°C to 35°C
Dimensions.....	86x86x15mm (3.38x3.38x0.6inch)

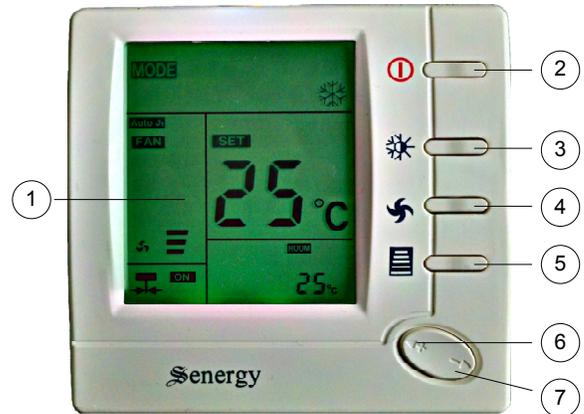
FEATURES AND BENEFITS-----

- Large LCD display with backlight
- Temperature adjustments are simple with the large up-down arrows
- Display shows both set points and room temperature simultaneously
- Maintains the temperature to within 1 degree set point
- Auto fan with adjustable 3-fan speed
- Permanent user setting retention during power loss, no batteries are required
- Input room card for energy saving mode Room Card Function

FRONT VIEW-----

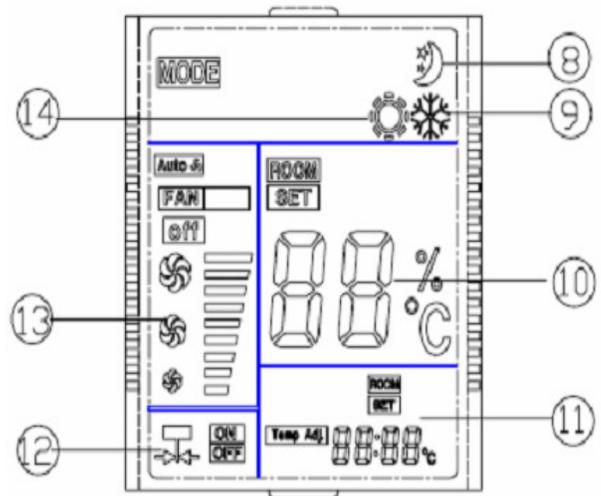
The Thermostat Buttons and Switches

- (1) Display area
- (2) Power button
- (3) System button (COOL, HEAT)
- (4) Fan speed option button
(HI MED LOW AUTO)
- (5) Sleep operation button
- (6) Raises temperature setting
- (7) Lowers temperature setting.



Display area:

- (8)  Show when thermostat is in sleep mode operation
- (9)  Show thermostat is in Cooling mode operation
- (10) Show room temperature or setpoint temperature
- (11) Show setpoint temperature or room temperature
- (12) Indicate the output to motorized valve is ON or OFF
- (13)  Show fan speed option
- (14)  Show thermostat is in Heating mode operation



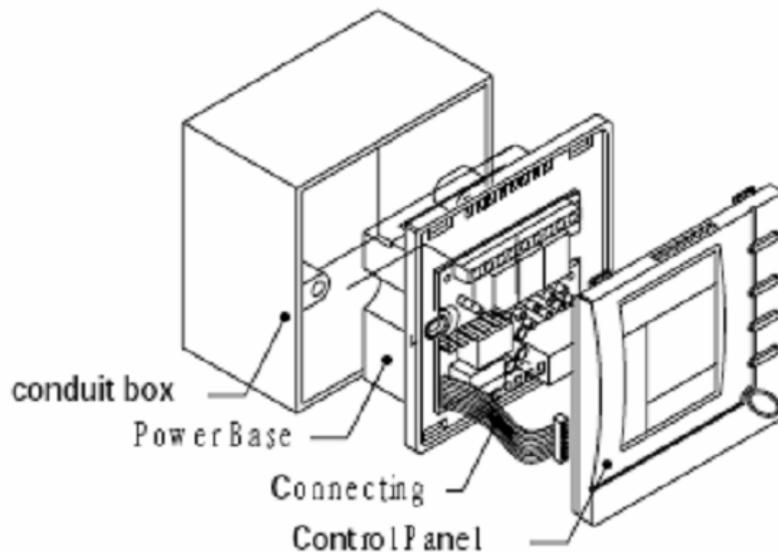
INSTALL THE THERMOSTAT: -----

WARNING : ELECTRICAL SHOCK HARZARD

- **Turn off power at the main service panel by removing the fues or switch the appropriate circuit breaker to the OFF position before removing the existing thermostat.**

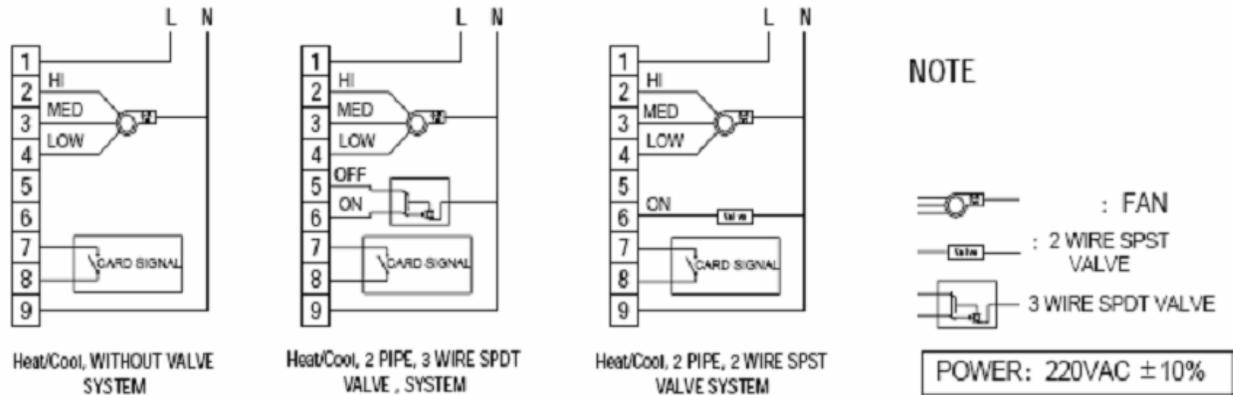
IMPORTANT :

- **Thermostat installation must conform to local and nationl building electrical codes and ordinances.**



1. Remove the packing material from the thermostat. Gently pull the control panel straight off the base. Forcing or prying on the thermostat will cause damage to the unit.
2. Connect wires beneath terminal screws on power supply module using appropriate wiring schematic.
3. Push power base into 86mmX86mm conduit box.
4. Using two mounting screws mount the power base to the wall. Place a level against bottom of base, adjust until level, and then tighten screws. (Leveling is for appearance only and will not affect thermostat operation.)
5. Replace control panel on the power base by snapping it in place.

WIRING DIAGRAM-----



CHECK THERMOSTAT OPERATION:-----

Fan operation

1. Press fan button, display will show and Auto separately means fan rotate in HI MED LOW or AUTO speed.
2. If you select AUTO speed, fan operation will change speed according to the difference between the room temperature and set temperature.
 - a. If room temperature is 3°C higher than setting temperature in cooling or 3°C lower than setting temperature in Heating. Fan will run in HI speed.
 - b. If room temperature is 2°C- 3°C higher than setting temperature in cooling or 2°C-3°C lower than setting temperature in Heating. Fan will run in Medium speed.
 - c. If room temperature is 0°C-2°C higher than setting temperature in cooling or 0°C-2°C lower than setting temperature in Heating. Fan will run in Low speed.

Heating system operation

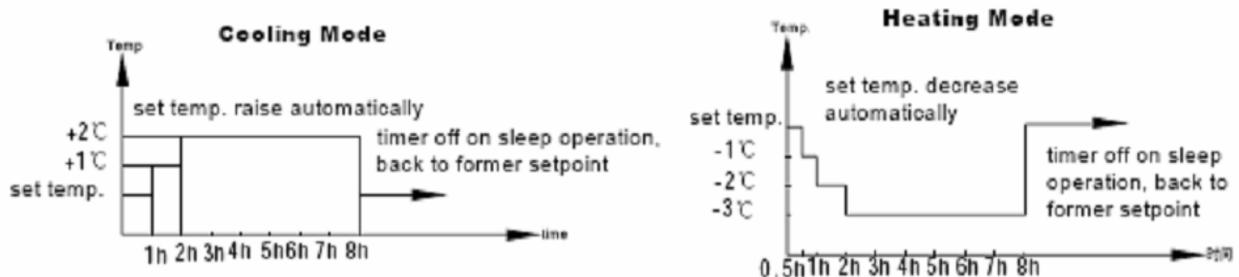
1. Press system switch to heat mode
2. Press “+” to adjust the thermostat setting above the room temperature. The heating system should start to operate.
3. Press “-“ to adjust the thermostat setting below the room temperature. The heating system should stop operating.

Cooling system operation

1. Press system switch to cool mode 
2. Press “-“ to adjust thermostat setting below room temperature. The cooling system should start to operate.
3. Press “+” to adjust temperature setting above room temperature. The cooling system should stop operating.

Sleep mode operation

Push sleep operation button ⑤, appears indicate during the following 8 hours, the thermostat will control heating or cooling according to following curve. Push sleep operation button again, disappears indicate the sleep operation feature is canceled.



- **System switch on cooling mode:** To achieve better sleep, 1 hour after sleeping mode setting, set point temperature will raise 1°C automatically, and 2 hours later, setting point temperature will raise 2°C and keep on with this temperature until timer off, which is 8 hours. After timer off, set point will be restored to formal setting automatically.
- **System switch on heating mode:** To achieve better sleep, 0.5 hour after sleeping mode setting, set point temperature will decrease 1°C automatically, and 1 hour later, setting point temperature will decrease 2 °C , 2 hours later, setting will decrease 3°C and keep on with this temperature until timer off, which is 8 hours. After timer off, set point will be restored to formal setting automatically.

Room card function operation (Energy Saving Mode)

1. The temperature will keep in auto mode and temperature can not be adjust when the room card removed (auto mode, the temperature will keep setting of 25°C in cooling mode; and 18°C in heating mode. See programming and configuration)
2. The temperature could be adjust when plug in the room card , others function would be available .(terminal 7and 8 will connect).

PROGRAMMING AND CONFIGURATION-----

The configuration menu allows you to set certain thermostat operating characteristics to your system or personal requirements. Switch off the thermostat and hold the sleep operation Button ⑤ for over 4 second till power on again means you have entered the first configuration menu item. There are 7 menu items. Press button ⑤ to change to the next item. To exit the menu and return to the normal operation, switch off the thermostat and switch it on again. If no keys are pressed within 20 seconds the thermostat will be switched off.

Item	Button	Display(default)	Press +,- to select	Description
1	(4) 3 sec	01 (0)	-3 ... 3	Temperature adjustment
2	(4)	02 (35°C)	26°C ... 35°C	Set Maximum Temperature Limitation
3	(4)	03 (5°C)	5°C ... 24°C	Set Minimum Temperature Limitation
4	(4)	04 (On)	OFF/ON	Select Fan Mode
5	(4)	05 (SC)	SC/0C/00	Active Room Card Mode
6	(4)	06 (25°C)	25°C ... 30°C	Energy Saving Setpoint in Cooling Mode
7	(4)	07 (18°C)	10°C ... 18°C	Energy Saving Setpoint in Heating Mode
8	(4)	08 (COOL)	COOL/ALL/HEAT	Select Mode

Item 1: The display will show “Temp adjust” and its default setting value is 0 in the configuration menu. Selecting between “-3” to “+3”. You can adjust the room temperature display up to 3 deg. lower or higher.

Item 2: The display will show 37°C which is the default factory maximum temperature limitation. Using “+” & “-” button to set the maximum limitation. It can be change between 26°C to 37°C.

Item 3: The display will show 5°C, which is the default factory minimum temperature limitation, Using “+” & “-” button to set the minimum temperature limitation. It can be change between 5°C to 24°C.

Item 4: The display will show “On” which is the factory default setting for fan option. Using “+” & “-” button to select between “On” and “OFF”. If you select “On”, the thermostat will turn on the fan at a speed provided by the Fan Switch and will not stop the fan when there is no call for heat or cool. If you select “OFF”, the thermostat will stop the fan when there is no call for heat or cool.

Item 5: The display will show “SC” which is the factory default setting for room card input option. Using “+” & “-” button to select between “SC”, “OC” or “00”. If you select “SC”, the thermostat will be operated in energy saving mode when the room card input dry contact is closed. If you select “OC”, the thermostat will be operated in energy saving mode when the room card input dry contact is open. If you select “00”, the energy saving mode will be disabled.

Item 6: The display will show 25°C which is the factory default setting for energy saving temperature setpoint in cooling mode. Using “+” & “-” button to select between 25°C to 30°C.

Item 7: The display will show 18°C which is the factory default setting for energy saving temperature setpoint in Heating mode. Using “+” & “-” button to select between 10°C to 18°C.

Item 8: The display will show Cooling Mode which is the factory default setting. There are three modes : Heat/Cool/All