

SAS920PIT-CO-F3 FAN COIL THERMOSTAT

Application: Cool Only, 3speed fan

Installation and operation instructions

SPECIFICATION:

Input Voltage.....	18-30VAC, 50/60 Hz
Fan Relay Amps inductive.....	8(5)A
Modulating output Voltage.....	4 to 20mA or 0 to 10VDC
Room Temperature Setting Range.....	5°C to 35°C
Dimensions.....	88mm×88mm×44mm

FEATURES:

- 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
- 0 to 10VDC or 4 to 20mA cool output.

OPERATION

The Thermostat Buttons and Switches

- ① Display area
- ② Power On /off button.
- ③ Fan speed option button
- ④ Mode option button
- ⑤ Raises temperature setting
- ⑥ Lowers temperature setting.

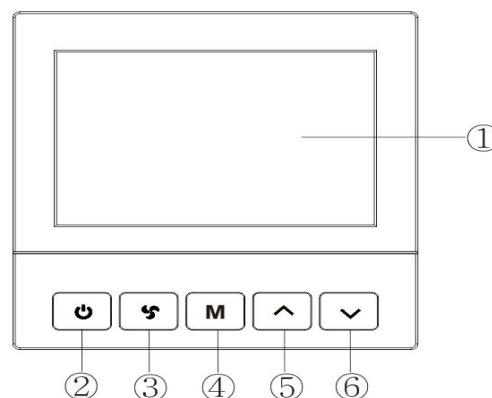


Figure 1

The Display

- (1) Shows fan speed state (HI、MED、LOW)
- (2) Shows cooling mode
- (3) Shows cooing mode
- (4) Fan mark
- (5) Shows sleep mode
- (6) Shows room temperature

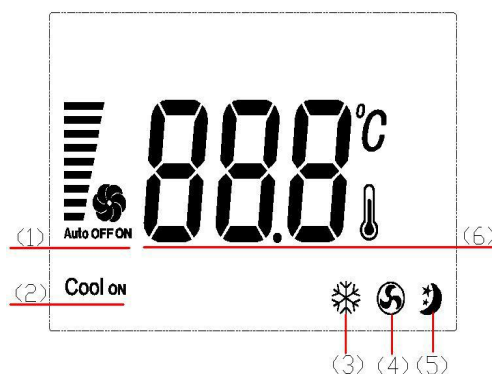
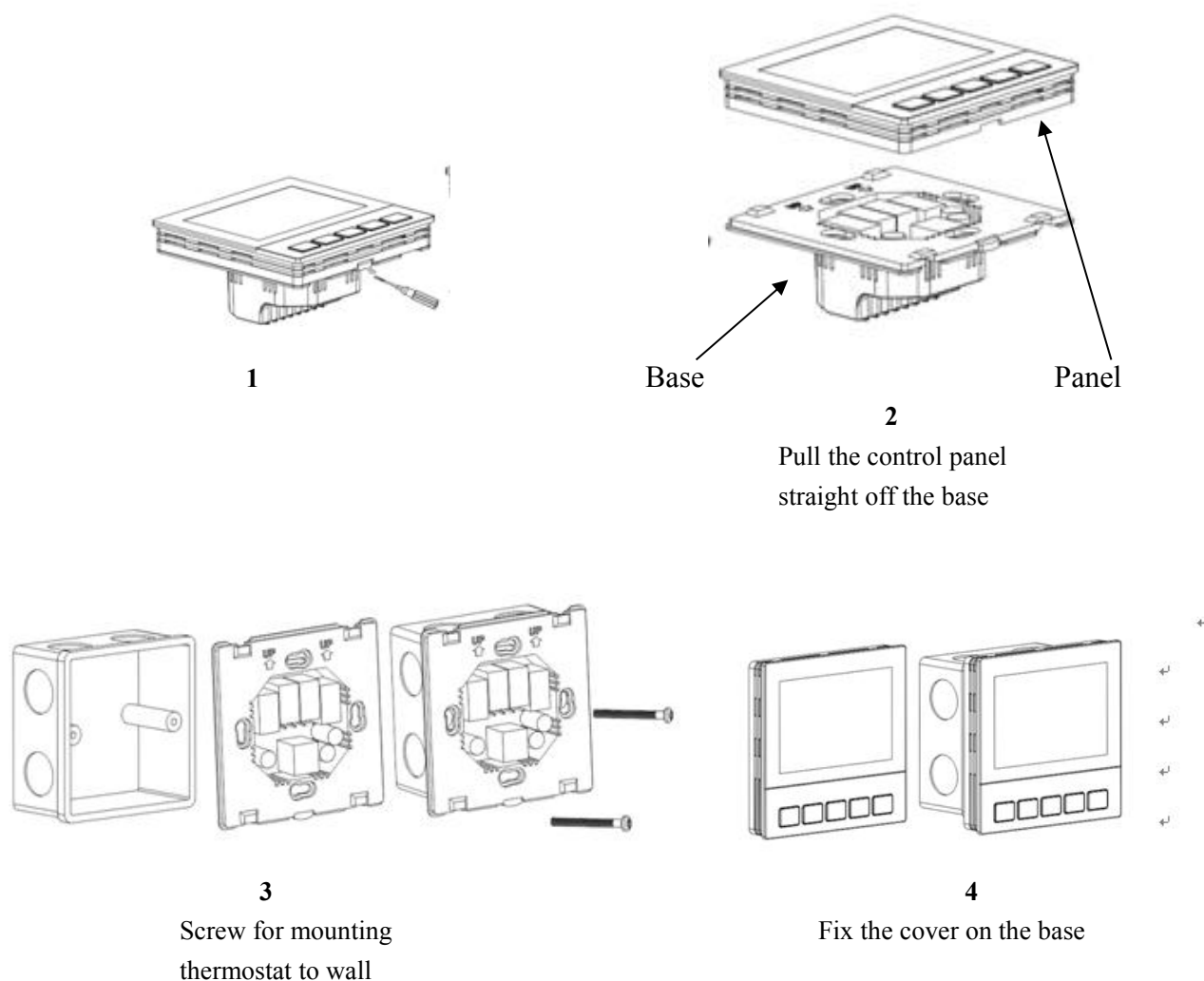


Figure 2

INSTALL THE THERMOSTAT



WIRING DIAGRAM

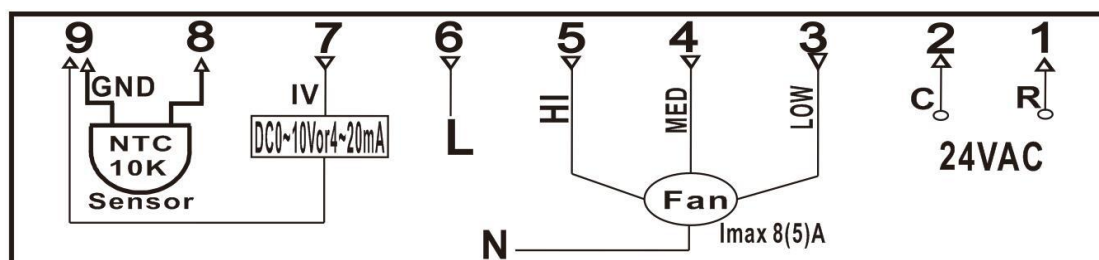


Figure 3

Dip Switch: A two-way DIP switch allows selection of modulating analog output between 4 to 20mA and 0~10V. Open the thermostat, you will find the JP3 in the rear board. Following figure showing you how to select 0~10V output and 4~20mA output via change the dip switch position.

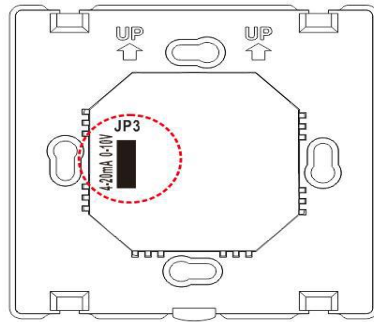


Figure 4

CHECK THERMOSTAT OPERATION

Switch on the thermostat

Fan operation

Push  button can select HI /MED /LOW /AUTO speed.

Sleep mode

Long press  button above 5s will run sleep mode .

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 **M** Button for over 4 seconds entered the configuration menu item setting, and will show the first configuration menu item. press **M** Button to change to the next item. Press  and  button to select .

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 30 seconds the thermostat will be switched off.

To revert to factory default setting, push  button for over 3 seconds. Display will show “DEF” blinking 3 times indicates all the configuration setting has reverted to factory default setting.

Item	Press buttons	Displayed (factory default)	Press“▲”、“▼”to select	Descriptions
1	M	CL (0)	-4—+4	Adjust temperature coefficient
2	M	RH (35℃)	20℃—35℃	Select maximum setting temperature
3	M	RL (5℃)	5℃—20℃	Select minimum setting temperature
4	M	rE (rE)	rd/ rE	Memorize power on/off option before power loss
5	M	PH (2)	1— 10	Select P-band
6	M	LP (5)	0min— 10min	Integral action time

1) Select temperature recalibrates Adjustment 4 LO to 4 HI

The display will show “**Temp adjust**” and its default setting value **0** flashing in the configuration menu. Using “▲”, “▼” button to select from “-4” to “+4”. You can adjust the room temperature display up to 4 lower or higher.

2) Select maximum temperature

The display will show 35°C which is the default factory maximum temperature limitation. using “▲” or “▼” button to set the maximum limitation. It can be change from 20°C to 35°C.

3) Select minimum temperature

The display will show 5°C, which is the default factory minimum temperature limitation, Using “▲” or “▼” button to set the minimum temperature limitation. It can be change from 5°C to 20°C.

4) Memorize power on/off option before power loss

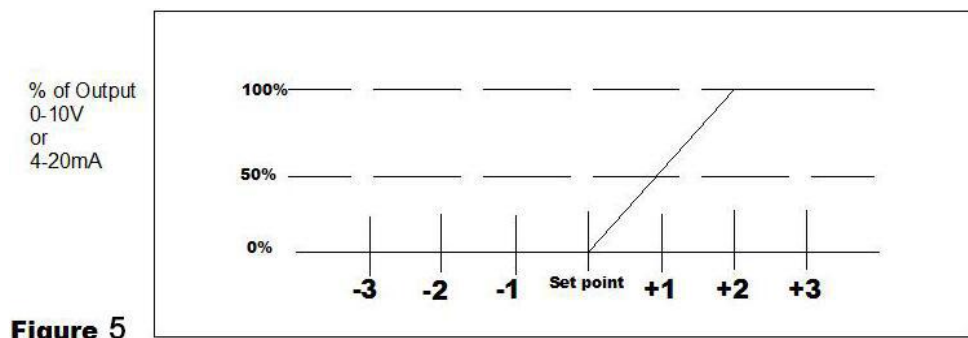
Using “▲” or “▼” button to select between “rE” or “rd”. Factory default is “rE”. “rE” means the thermostat will Memorize its ON or OFF status before power loss. After power supply comes to normal again, the thermostat will remain ON or OFF according to what it is before power loss. “rd” means no matter the thermostat is switched on or off before power loss, after the power supply comes to normal again the thermostat will keep power off.

5) Select P-band

The proportional band is the amount of change required by the ambient temperature for the output to go from 0 to 100%. It can be adjust from 1~10°C. Factory default setting is 2°C. For example if the P-band is set in 2°C in the cool mode, with a 25°C set point and an ambient temperature of 25°C, the modulating output is 0%; at 26°C the output is 50%; and at 27°C the output is 100%. The integral gain implies that the longer the error between the ambient and the set point temperatures exists, the more the output will change to eliminate the error. The integral portion of the algorithm eliminates the temperature offset from the set point.

Cool mode(P-band: 2°C)

When the ambient temperature is above the set point the output is somewhere between 0 and 100%



6) Select integral action time

This feature allows you to set the integral action time for the integral to run from 0 to 100%. The value required depends on the reaction time of the control loop. If the time is chosen too short, the control loop will become unstable and oscillate. If the time is chosen too long, the control loop will become sluggish.