

SAS908MTW-0-S FAN COIL THERMOSTAT

Application: 24VAC, 2Heat/2Cool, Remote sensor available

Installation and operation instructions

SPECIFICATION

Electrical Rating.....	24VAC (18~30VAC 50/60Hz)
Fan Relay Amps inductive.....	3(2)A
Heat/Cool (Y1、W1) Relay Amps inductive...	3(2)A
Heat/Cool (Y2、W2) Relay Amps inductive...	3(2)A
Set point Temperature Range.....	5℃ to 35℃
Dimensions.....	115mm×90mm ×28mm

FEATURE

- Large LCD display with backlight
- Set points and room temperature display simultaneously
- Maintains the temperature within the range of 0.5℃ to the set point
- Fans switch with on and auto
- Manual change over
- Never lost user setting in the event of power-off, no battery is required
- Display temperature recalibrates
- Sleep mode option
- Compressor short cycling protection available
- Remote sensor available (connected to external sensors, built-in sensor failure)

OPERATION

The Thermostat Buttons and Switches

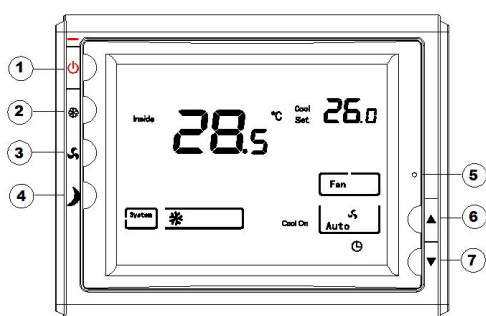


Figure 1

- ① Power button
- ② System switch (**HEAT, COOL**)
- ③ Fan switch (**AUTO, ON**)
- ④ Sleep operation button
- ⑤ Reset switch
- ⑥ ▲ Raises Temperature setting
- ⑦ ▼ Lower Temperature setting

The Display

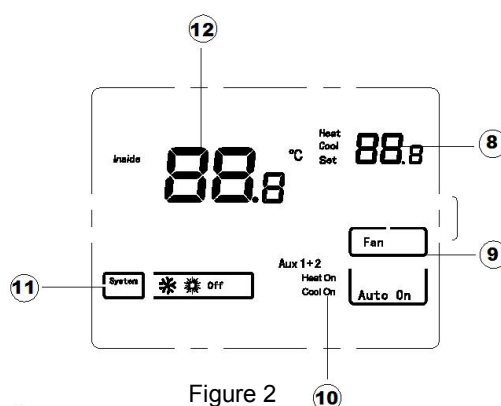
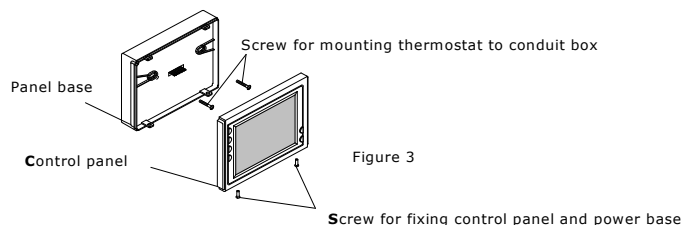


Figure 2

- ⑧ Setting temperature
- ⑨ Indicate fan switch position
- ⑩ **Heat on** shows when the thermostat is calling for heat
- Cool on** shows when the thermostat is calling for cool
- ⑪ Shows system mode
- ⑫ Room temperature

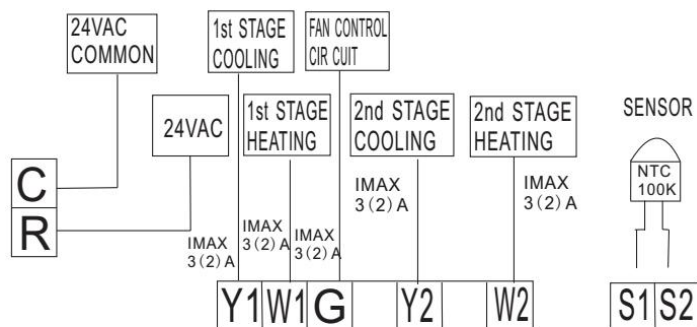
INSTALL THE THERMOSTAT

ATTACH THERMOSTAT BASE TO WALL



1. Remove 2 screws from the bottom of 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. See figure 4
3. Push power base into wall or 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 and fix power base and control panel by removed two screws in item 1.

WIRING DIAGRAM



POWER: (R, C) 18-30VAC 50/60Hz

Figure 4

Please note:

Terminals S1& S2 connected with remote sensor for measuring room temperature. Inner sensor & remote sensor can automatic exchange . When you connected with remote sensor, the inner sensor will lose function. It means you can only select one sensor for measuring room temperature.

CHECK THERMOSTAT OPERATION

Switch on the thermostat

Fan operation

Set fan button to **On** or **Auto**

Auto is the most commonly selected setting and runs the fan only when the heating system is on. .

When the cooling is on, the valve start working, **Auto** is flashing and runs the fan.

Fan **On** runs the fan continuously for increased air circulation.

Heat system operation

1. Press system switch to heat mode ().

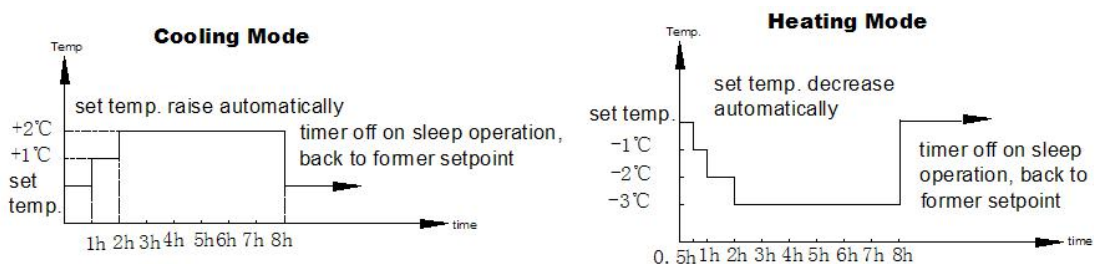
- Press “▲” to adjust the thermostat setting above the room temperature 0.5℃. The 1st stage heating system should start to operate; When press “▲” to adjust the thermostat setting above the room temperature 2℃. The 2nd stage heating system should start to operate. If the +2 display is flashing, The slow heating is Selected. (Note: See Configuration menu item 5).
- Press “▼” to adjust the thermostat setting below the room temperature. The heating system should stop operating.

Cooling system operation

- Press system switch to cool mode ().
- Press “▼” to adjust thermostat setting below room temperature 0.5℃, The 1st stage cooling system should start to operate; When Press “▼” to adjust thermostat setting below room temperature 2℃, The 2nd stage cooling system should start to operate. If the **Cool On** display is flashing, the compressor lockout feature is operating. (Note: See Configuration menu item 8).
- Press “▲” to adjust temperature setting above room temperature. The cooling system should stop operating .

Sleep operation

Push sleep operation button ④,  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.



Applications

System switch on cool mode: To achieve better sleep, 1 hour after sleeping mode setting, set point temperature will raise 1℃ automatically, and 2 hours later, setting point temperature will raise 2℃ 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 heat mode: To achieve better sleep, 1 hour after sleeping mode setting, set point temperature will decrease 1℃ automatically, and 1 hour later, setting point temperature will decrease 2℃, 2 hours later, setting will decrease 3℃ 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.

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 ④ for over 3 seconds till power on again means you have entered the first configuration menu item. There are 8 menu items. Press button ④ 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.

Return to factory default : Switch off the thermostat, Press button ④ over 4 seconds till power on again means you have entered the menu, long press button ④ at the same time over 4 seconds after "dEF" blinking readout three times, it means return to factory default. (**Caution: Please don't operate before malfunction happened.**)

Step	Press buttons	Displayed (factory default)	Press ▲、▼ to select	Descriptions
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1	④ 3 seconds	01 (0)	-3 --- +3	Adjust temperature coefficient
2	④	02 (35℃)	18℃—35℃	Select maximum setting temperature limitation.
3	④	03 (5℃)	5℃—20℃	Select minimum setting temperature limitation.
4	④	04 (rE)	rd, rE	Memorize option before power loss
5	④	05 (FA)	FA,SL	Select fast heating or slow heating
6	④	06 (1)	1、2、3	Display backlight option
7	④	07 (On)	On,Off	Fan option is heating mode.
8	④	08 (3)	0,3,5	Minimum compressor off-time setting

1) Select temperature recalibrates Adjustment 3 LO to 3 HI.

You can adjust the room temperature display up to 3 higher or lower. The default setting is 0. Your thermostat was accurately calibrated at the factory but you have the option to change the display temperature to match your previous thermostat.

2) Select maximum setting temperature limitation.

This feature provides a maximum setpoint temperature for heat. The default setting is 35℃, It can be changed between 18℃ to 35℃.

3) Select minimum setting temperature limitation.

This feature provides a minimum setpoint temperature for cooling. The default setting is 5℃, It can be changed between 5℃ to 20℃.

4) Memorize option before power loss.

Using ▲ & ▼ button to select between “rE” and “rd”, The default setting 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 fast heating or slow heating.(The default setting is FA)

Select FA to start fast heating when the 2nd stage heating system.

Select SL to start slow heating for when the 2nd stage heating system.

6) Display backlight option.

Select 1 the light will be on when any button of the thermostat is touched. Select 2 the display will keep the light off continuously. Select 3 the display will keep the light on continuously .Factory default is 1.

7) Fan option in heating mode. (The default setting is On)

If your system requires the thermostat to turn on the fan on a call for heat, select **On**. If your system does not require the thermostat to energize the fan on a call for heat such as fossil fuel (gas, oil, etc.), forced air system as well as hydraulic heating system, select **Off**.

8) Minimum compressor off-time cycle setting.

To protect compressor from short cycling, you can select compressor off-time cycle, 3 means off-time cycle is 3 minutes, 5 means off-time cycle is 5 minutes. When the thermostat compressor time delay occurs it will flash Cool on display for the time you have selected. Select 0 means you have canceled the function. The default setting is 3.

Mark: RESET function.

*This function can help operator to recovery system when fault happened , display outoforder or system h
Please use a pin to insert in button ⑤ hole till sounded click, then loosen it. Switch on thermostat and obsen
there still have troubles, please don't hesitate to contact with local agency for warranty.*