

SRE05K ON/OFF THERMOSTAT

DESCRIPTION

SRE05K series on/off thermostat is mainly used in central air-conditioning heating and cooling system. It works with TSC series temperature sensor. It provides temperature control for central air-conditioning fan coil cooling/heating motorized valve or other electric actuator by the control signal which produced by comparison of actual tested ambient temperature and setting temperature.



CHARACTERISTICS

- Power surge and instant pulse protection.
- LCD (with backlight) showing ambient temperature and state.
- Built-in or external long-distance temperature sensitive element (NTC thermistor).
- With fan speed switch
- With PC plastic housing, in compliance with UL-94V0 standard.
- With flexible installation and convenient wiring.

TECHNICAL DATA

PRODUCT NAME	SRE05KA (Heat/Cool) SRE05KB (Cool Only)	SRE05KC
	2-PIPE	4-PIPE
POWER SUPPLY	AC220/230V	
OUTPUT	AC220/230V 1(1)A	
FAN OUTPUT	AC220/230V 1(1)A	
POWER CONSUMPTION	6VA (without load)	
CONTROL PRECISION	±0.5°C(±1°F)	
CONTROL RANGE	10°C ~ 30°C or 50°F ~ 86°F	
SENSITIVE ELEMENT	NTC thermistor 10kΩ (at 25 °C) ±3435	
DISPLAY PRECISION	0.5°C/ 1 °F	
BACKLIGHT COLOR	Green-G, Blue-B, Yellow-Y (three backlight colors for option)	
BACKLIGHT CONTROL	Button-press operation (It will automatically go out in 5 seconds after stop pressing the button.)	
WORKING TEMPERATURE	0 ~ 55 °C	
STORAGE TEMPERATURE	-10 ~ 60 °C	
AMBIENT HUMIDITY	Max. 90% RH no condensation	

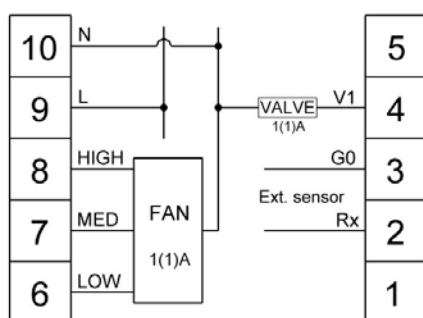
INSTRUCTION

1. **Power on/Power off:** When there is power supply, the default setting of the system is **power off**. After user presses the on/off button (keep for 2 seconds and then release), the system will enter into **power on** state. The LCD backlight will turn on for about 5 seconds and then off automatically. Then it is the temperature control ON/OFF mode. During system operation, when user presses the on/off button, the LCD will turn off. The system will enter into **power off** state. When user presses the on/off button, the **power on/power off** state will automatically shift.
2. **Cool/heat shift:** When the system is on Cooling state, user presses the cool/heat button (only suitable for heat/cool system), will to change over Cooling/Heating state, the cool/heat (❄/☀) symbol will be shown on the LCD. When it is for 2-pipe application, the cool/heat signal is output through the same terminal. When it is for 4-pipe application, the cool/heat signal is output through the different

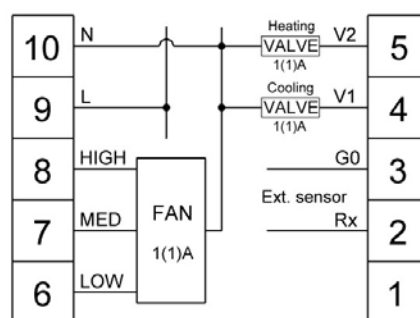
terminal; when the system is on Heating state, there is no signal output through the Cooling terminal, vice versa.

3. **Temperature setting:** When user presses Δ (increase) / ∇ (decrease) button, LCD display temperature setting will show increase or decrease accordingly. The increase/decrease rate is 1 $^{\circ}\text{C}/1^{\circ}\text{F}$. The adjusting range is 10~30 $^{\circ}\text{C}/50\sim 86^{\circ}\text{F}$. When user stops pressing the button for over 5 seconds, the thermostat will change the setting temperature data in memory, and save the updating data. The LCD will show the ambient temperature. (Default setting is 23 $^{\circ}\text{C}$ /73 $^{\circ}\text{F}$.)
4. **Built-in/external sensor:** When it is using the built-in NTC thermistor, the jumper J3 should be put to "Int" position (Default setting position is "Int"). If it is using the external NTC sensor, the jumper J3 should be put to "Ext" position. The external sensor should connect to the PCB between Rx and G0.
5. **Fan control:** After power is on, the fan speed will be changed by switching the fan switch. And the fan will be closed after the power is off.

WIRING DIAGRAM



SRE05KA / SRE05KB



SRE05KC

INSTALLATION DIAGRAM

