

# STC-3008 Temperature Controller Operating Manual

## 1. Overview

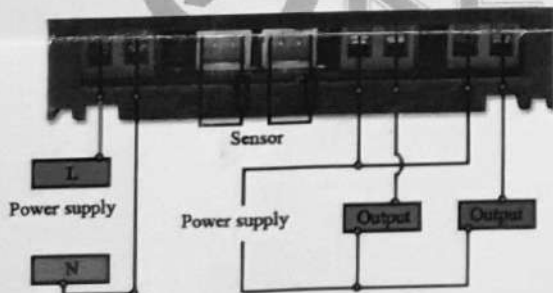
- Dual temperature controller in one thermostat with Independent sensor and output.
- Alarm when temp exceed setting limit or sensor error
- All parameters setting can be saved when power off.
- Can be used for domestic freezer, water tanks, refrigerator, industrial chiller, steamer, industrial equipment and other temperature control applications.

## 2. Specifications

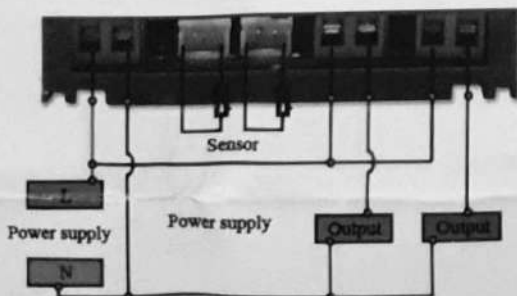
- Power Supply: 12VAC/DC, 110V-220VAC
- Temperature control range: -50~120°C
- Resolution Ratio: 0.1°C(-9.9-99.9); 1°C(other range)
- Measurement accuracy: ±0.1°C
- Control accuracy: ±1°C
- Refresh rate: 0.5S
- Sensor: NTC10K Waterproof sensor
- Ourput Relay contact capacity: 10A max
- Environmental requirements: -10-60°C, humidity 20% -85%RH
- Size: 75mm(L)\*34mm(W)\*85mm(Depth)
- Mounting size: 71(L)\*29(W)mm

## 3. Wiring Diagram

Connection 1: Independent power supply for controller and load



Connection 2: Same power supply for controller and load



## 4. Key Operation Instruction



In normal working status, ① and ② LED screen display real time temperature. press  $\Delta$  key once. Red led display controller ① start temperature. press  $\nabla$  key once. Red led display controller ① stop temperature. Hold  $\Delta$  key for 3s. led flash, press  $\Delta$  or  $\nabla$  to change start temperature. Hold  $\nabla$  key for 3s. led flash, press  $\Delta$  or  $\nabla$  to change stop temperature. It is the same way to use  $\Delta$  and  $\nabla$  to change the start temperature and stop temperature of controller ②.

## 5. Operation Instruction

- You can set different start temperature and stop temperature in controller ① and controller ②.
- **Cooling mode:** When set start temperature  $\geq$  stop temperature, the controller will work in cooling mode. You can use cooler as load. For example, set start temperature 35°C, stop temperature 32°C. Cooler work when temperature  $\geq$  35°C, Cooler stop when temperature  $\leq$  32°C
- **Heating mode:** When set start temperature  $\leq$  stop temperature, the controller will work in heating mode. You can use heater as load. For example, set start temperature 45°C, stop temperature 60°C. Heater stop when temperature  $\geq$  60°C, heater work when temperature  $\leq$  45°C

### Setting function:

- In normal working status, hold  $\Delta$  and  $\Delta$ , the screen will go into setting mode and display P0. Press  $\Delta$  and  $\nabla$  to change P0 value. Press  $\Delta$  to change to P1. Press  $\Delta$  and  $\nabla$  to change P1 value. Using the same way to change P2 and P3

Code	Function	Set Range	Default
P0	Compressor 1 delay time	0-60min	0min
P1	Compressor 2 delay time	0-60min	0min
P2	High temperature alarm value	-55-120 °C	120 °C
P3	Low temperature alarm value	-55-120 °C	-55 °C

### Reset:

- In normal working status, hold  $\nabla$  and  $\nabla$ , the screen will display 888 to reset the controller.

### Temperature Calibration:

- In normal working status, hold  $\Delta$  and  $\nabla$  for 2S to enter calibration mode of temperature ①. Press  $\Delta$  or  $\nabla$  to set value between -30-30.
- In normal working status, hold  $\Delta$  and  $\nabla$  for 2S to enter calibration mode of temperature ②. Press  $\Delta$  or  $\nabla$  to set value between -30-30.
- For example, the tested temperature ② display 25°C, but the real temperature is 30°C, If we set value 5, the tested temperature ② will change to display 30°C (25°C+5°C). If we set value -5, the tested temperature ② will change to display 20°C (25°C-5°C)