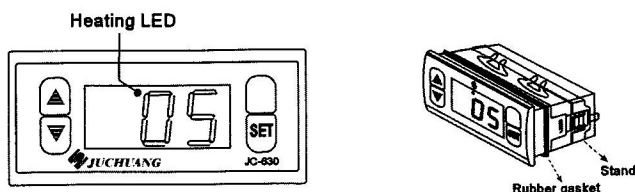# Model: JC-630 Temperature Controller Manual

Heating LED



## Features of function

• This temperature controller adopt world well-known brand SCM. It is reliable and durable. The relay is exclusive use for compressor load which make it safer. The way of controlling temperature is return type and easy to operate.
• Mini-sized and integrated intelligent control, suit for all heating equipment.

## The main functions

• Temperature display
• Temperature control
• Parameter sets and value storing
• Heater re-start delay
• Parameter locking
• The factory default resumption
• Offset on sensor temperature
• Self testing

## Specifications

• Power supply: 12V~, 50/60Hz;  Power consumpfion: <5W
• Range of Temperature displayed: -10 ~ 120℃.  • Accuracy: ±1℃
• Range of set temperature: -10 ~ 120℃.
• Temperature sensor: NTC, one sensor.
• Output contact capacity for heater:  (Attached relay) N.O. 30A/240V~; 50/60Hz.
• Main controller panel dimension: 78×35×37mm. Mounting dimension:71×29mm

## Indicator

• Heating: The heating LED on, the heater works.
• Constant temperature: The heating LED off, the heater stops.
• Delay: The heating LED flashes, the heater stops.

## Front panel operation

• Set temperature: Press SET button, the set temperature is displayed; Press △ or ▽ button to modify and store the displayed value, press SET button to exit the adjustment and display the sensor temperature.

## Parameter setup

• Indication for setting parameter: The parameter can be adjusted only after correct PA to be entered, if wrong. All parameter can only be checked, but can not be adjusted; however it is available for temperature controlling.
• Setting parameter: press SET for 6s, start parameter menu, and PA (menu password) flashing; enter the password by pressing △ or ▽ . Press SET again to choose the parameter, press △ or ▽ , the parameter can be displayed and adjusted. After the adjustment, if no button to be pressed in 30s, the system will restore new parameter and go back to normal operations.
• Changing menu password (CPA): The CPA can be checked or changed only after correct menu password to be entered. When it shows CPA, press △ or ▽ , the present password is displayed and can be changed to new password, press ☐ confirming and restoring the new password. (Please memory the new password, or you can neve adjust other parameter.)
• The factory default resumption: Press ▽ button 1s and then press △ button simultaneously for 6s, the indicator flashes, all parameters will be resumed as same as factory defaults. After 10s, it returns to normal operation.

## Function details

| Parameter | Function | Set range | Default |
|---|---|---|---|
| PA | Menu password | 00 ~ 99 | 00 |
| E1 | Lower set point limit | -10℃ ~ Set temperature | 00 |
| E2 | Higher set point limit | Set temperature ~ 120℃ | 80 |
| E3 | Temperature hysteresis | 01 ~ 30℃ | 05 |
| E4 | Heater start delay time | 00 ~ 10Min | 00 |
| E5 | Offset on room temp. | -05 ~ 05℃ | 00 |
| CPA | Changing menu password | 00 ~ 99 (Setting "00" , the menu password is cancelled) | 00 |

Notes:
• The parameter can be changed only after the correct PA to be entered, or it can only be checked, except temperature controlling.
• It means locking cancelled if PA is set "00" , no password required for checking and/or changing.

## Parameter details

• Temperature controlling: After turning on for the delay time (E4), the heater starts operating when room temperature ≤ set temperature, and will be of when room temperature ≥ (set temperature + hysteresis).
To protect the heater, it can be re-started unless the time when the heater stops every time is longer than the delay tim

• Sensor unorderly work mode: The sensor is short circuit or overheated, "HH" is displayed, sensor open circuit or to low temperature, "LL" is displayed. At then time the heater off.