

# KL-003 Microcomputer Temperature Controller Operating Instructions

## Technical data:

1. Operating Voltage: AC220V ±10% 50Hz.
2. Output Load: 220V/5A
3. Power Consumed: ≤3W
4. Operating environment: -10°C~50°C Rh ≤ 95%.
- Input Signal: One way for temperature sensor, one way for switch testing.

6. Output Control: One way for temperature control
7. Control Range: Heating control range: 0~120°C; Cooling control range: -45~50°C.
8. Resolving Power: 1°C Precision: ±1°C.
9. Dimensions of the whole machine: 76 (W) x 34 (H) x 62 (D) (mm).
10. Dimensions of the hole: 71 (W) x 29 (H) (mm).

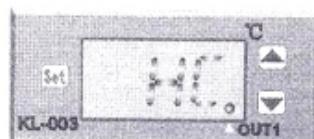
## Operating principle Control temperature setup

**The first step:** Slightly press [Set] to indicate the temperature control

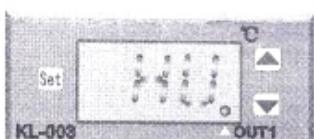
**The second step:** Press **▲** or **▼** to modify the temperature control. After the setup is set, it will return to the original status and indicate the current temperature, and operate according to the newly set up data.

## Introduction to the control procedure

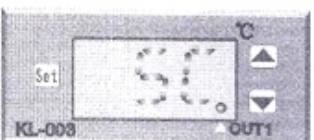
Enter the set up procedure by pressing the [Set] key for 6 seconds, when entering the set procedure, it will indicate **H C**. Pressing [Set] key can select various menus, when the menu is chosen, pressing **▲** or **▼** key can reset the data from **H C S L H E L E**.



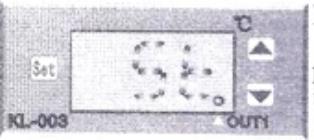
Entering the menu by keeping pressing [Set], and then press **▲** or **▼** to select **H C**.  
**H** stands for Heating mode  
**C** stands for Cooling mode



Entering menu by keeping pressing on [Set], and then press [Set] once to indicate ,press **H C** again **▲** or **▼** arrow key to reset the data of return difference temperature.

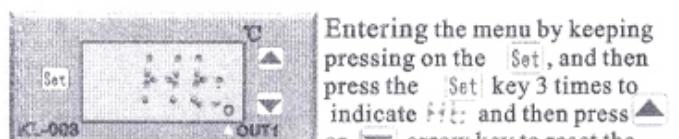
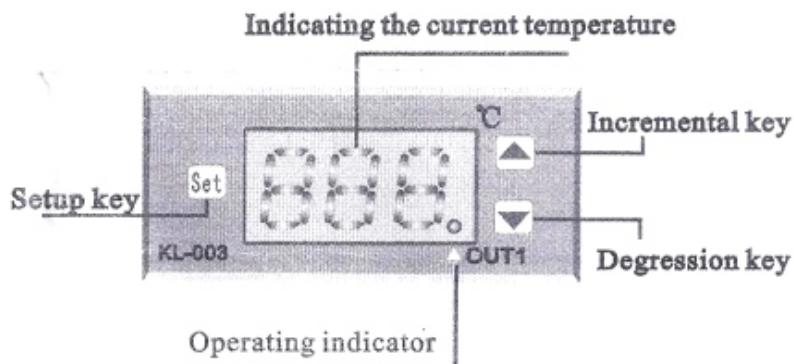
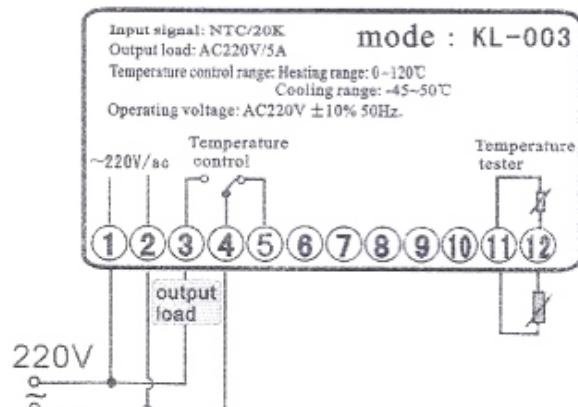


Entering the menu by keeping pressing on the [Set], and then press the [Set] key twice to indicate **S L**, press **▲** or **▼** arrow key to calibrate the temperature indicated.

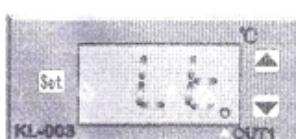


Entering the menu by keeping pressing on the [Set], and then press the [Set] key 3 times to indicate **S U**, and then press **▲** or **▼** arrow key to reset the data for starting the delayed time.

## Temperature controller wiring diagram

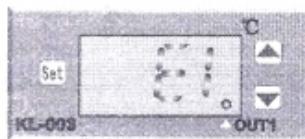


Entering the menu by keeping pressing on the [Set], and then press the [Set] key 3 times to indicate **H C**; and then press **▲** or **▼** arrow key to reset the data for starting the delayed time.



Entering the menu by keeping pressing on the [Set], and press the [Set] 5 times to indicate **S L**; and the press **▲** or **▼** arrow key to reset the data of lower limit and super low temperature.

## Malfunction code



Sensor self check:  
When the sensor is open circuit or short circuit,  
**E 1** code indicated.

## Procedure data diagram

Symbol	Function	Setup range	Original setup	Unit
<b>H C</b>	Heating/cooling	H/C	C	
<b>H U</b>	Temperature return difference	1~30	2	°C
<b>S C</b>	Temperature calibration	-10~10	0	°C
<b>S t</b>	Delay time	0~5	1	Minute
<b>S U</b>	upper limit	Setup value The highest measure range	100	°C
<b>S L</b>	lower limit	Setup value The lowest measure range	-45	°C