

KTF0091 Temperature Controller Operating Manual

1. Overview

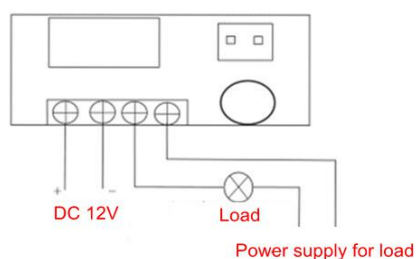
- A mini temperature controller.
- With clear LED display for better readability.
- Wide temperature measuring range.
- Heating or cooling control.
- All parameters setting can be saved after short circuit.
- Built-in alarm
- high Control precision 0.1 centigrade
- Can be used for domestic freezer, water tanks, refrigerator, industrial chiller, steamer, industrial equipment and other temperature-controlled system.

2. Specifications

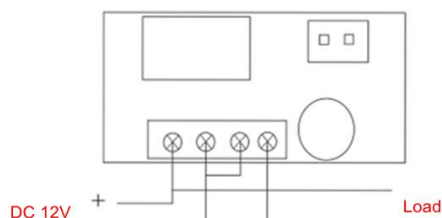
- Power Supply: DC 12V
- Temperature control range: -50~110°C
- Difference Set Value: 0.1~30°C
- Resolution Ratio: 0.1°C(-9.9-99.9); 1°C(other range)
- Measurement accuracy: $\pm 0.1^{\circ}\text{C}$
- Control accuracy: 0.1°C
- Refresh rate: 0.5S
- Measuring inputs: NTC(10K0.5%) Waterproof sensor
- Output: Relay Contact Capacity 10A/220V or 20A/110V
- Environmental requirements: -10-60°C , humidity 20% -85%RH
- Size: 48mm(L)*29mm(W)*32mm(Depth)
- Hole size: 46(L)*26.5(W)mm
- Power consumption: Static current: $\leq 35\text{MA}$, attract current: $\leq 65\text{MA}$

3. Wiring Diagram

Connection 1:Independent power supply for load



Connection 2:Same power supply for load



4. Key Instruction

Set Key: Confirm the setting value, Entry, Exit and Set parameter ,Increase Value,

°C/°F: Switch Celsius and Fahrenheit, decrease value

Red Led: Current Temp value

Blue Led: Setting Temp value



5. Key Operation Instruction

- In normal working status, press **set** key once. The blue led flash. Press **Set** or **°C/°F** to increase or decrease the setting temperature value. Waiting for 3seconds to save it and back to normal display screen.
- In normal working status, press **set** key for 5s to enter set mode. press **Set** or **°C/°F** to switch from P0-P8.
- If you want to adjust P0, when it display P0, press **Set** and **°C/°F** at the same time, and the P0 figure will flash, Then press **Set** or **°C/°F** to adjust. Then press **Set** and **°C/°F** at the same time to save. The setting way of P1-P8 is the same as P0.

6. Operation Instruction

- In normal working status, screen displays the current measuring value and setting value.
- When P0 set to be C, it turns to be cooling mode. If the measuring temperature $\geq \text{TS}$ (temperature set value) + DS (difference set value), the output relay is connected. The load start working. If the measuring temperature $\leq \text{TS}$, the cool indicator lamp turns off, the output relay is disconnected, and the load stop working.
- When P0 set to be H, it turns to be heating mode. If the measuring temperature $\leq \text{TS}$ (temperature set value) - DS (difference set value), the output relay is connected. The load start working. If the measuring temperature $\geq \text{TS}$, the cool indicator lamp turns off, the output relay is disconnected, and the load stop working.

7. Parameters

Code	explain	Setting Range	Factory Setting
P0	Heating/Cooling	H/C	C
P1	Return Difference	0.1-30	2.0
P2	Set Limit Max.	+110	110
P3	Set Limit to the Min.	-50	-50
P4	Temperature Correction	-15~15	0
P5	Delay Start	0-10	0
P6	High Temperature Alarm	-50~110	OFF
P7	°C/°F	CS/FH	CS
P8	Factory Reset	ON-OFF	OFF