

5V 12V 2-3Wire 10cm/40cm(Fan shutdown function at low temperature)

Note:

1. This controller supports 2-3 wire fan temperature control and speed regulation with DC 5V-12V current not exceeding 0.9A, through smooth voltage reduction control, and supports low temperature shutdown of the fan power.
2. Please note that the power supply voltage must match the fan voltage!
3. For wiring, please pay attention to the positive and negative polarity of input! If the connection is reversed, the circuit board "FUSE bit" may be burnt

Basic parameters:

Working voltage: DC 5-12V (board working range DC 4.6-13.5V, over-range protection)

Control fan current: 0.1-0.9A (lower than 0.1A fan control effect is poor)

Circuit self-consumption: 10-30mA

Temperature probe model: 50K B=3950

Circuit operating temperature: -10°C to 60°C

Probe temperature resistance: small blackhead 120°C, ring probe 110°C

Board size: 54mm*13mm*8mm (without interface), the fan interface extends 7mm

Factory default settings: basic speed control output $P_o=35\%$, acceleration temperature $T_u=30^\circ\text{C}$, temperature control interval $T_d=5^\circ\text{C}$ (35°C full speed), and the fan does not shut down when the temperature is low.

note:

1. The fan current cannot exceed 0.9A
2. The controller does not participate in speed measurement
3. Do not connect the reverse polarity!!

Board operating voltage range: DC 4.5-13.5V

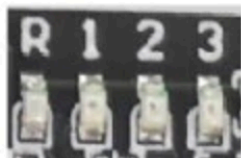
Abnormal status indication:

No output "1" light flashes quickly: power supply voltage is too low

No output "3" light flashes quickly: power supply voltage is too high

Package Included:

1 fan temperature control speed controller



R light: green

Operation instructions

Fan power when lit

123 light: red

Parameter setting indicator

Combination of lighting/flashing

Basic speed Po setting

Enter the demo state

(Not controlled by temperature control)

Operating mode
R 1 2 3
or
1 2 3

Click on → elevated 5% → highest
Double click → reduce 5% → lowest

After 20 seconds, the "2" light is always on, the chip saves the set value and exits the demo state and returns to the working mode

Temperature control zone setting

1 2 3

Operating mode

Press button

1 2 3
70°C ↑ Click up
60°C
50°C
45°C → Press
40°C
35°C ↓ Double click down
30°C
Slow flashing
Speed up temperature Tu adjustment

1 2 3
50°C ↑ Click up
40°C
30°C
20°C → Press
15°C
10°C ↓ Double click down
5°C
Flash
Temperature control range Td adjustment

Back to working mode

Parameters are automatically saved

Function setting

Power-off state

Hold down button → power ups

1 2 3
Single short flash

let go

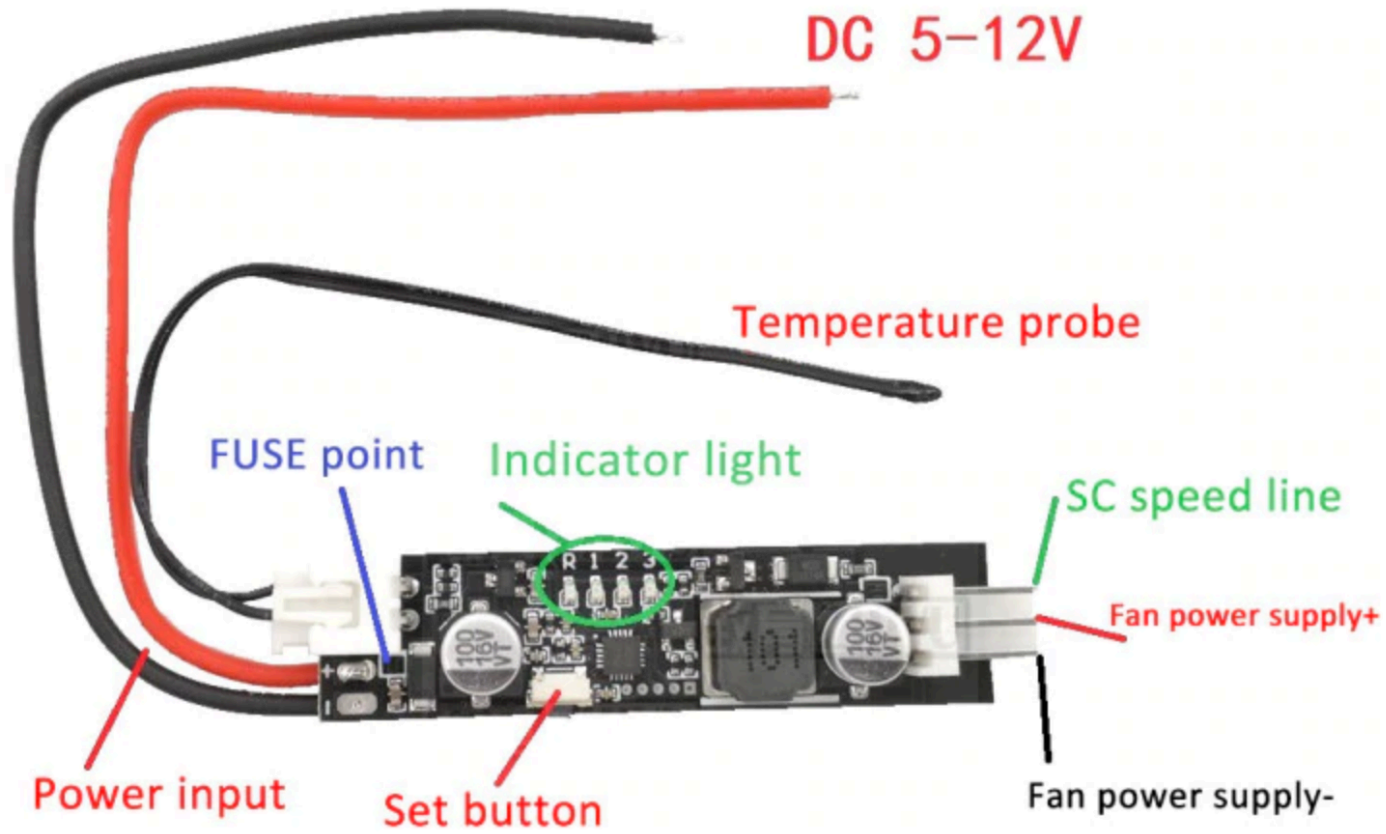
1 2 3 Normally open
Tu-2°C
Tu-5°C

Press button

Low temperature shutdown setting
Click to cycle through

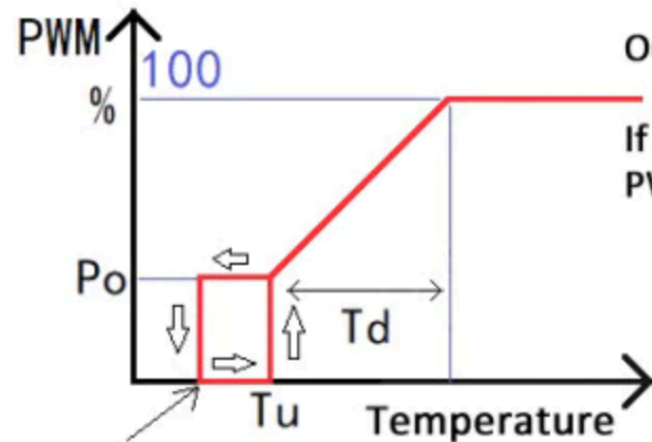
Back to working mode

Parameters are automatically saved



Output curve

The temperature is lower than the shutdown temperature



Output off

If low temperature is closed and normally open, $PWM = P_o$

Temperature exceeds T_u

Output on

PWM increases uniformly with temperature

Temperature exceeds $T_u + T_d$

PWM full output

Turn off temperature