User manual
VER:V3

NF-567

Temperature Time Controller
EU / US Power Socket Output

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1. Overview

NF-567 is a temperature Time Controller. The product uses micro computer control technology and micro processor as the base to realize intelligent control output of temperature and time. The operation is simple. Users can set and control the work and stop of other equipment according to their own use. It is suitable for temperature and time control of breeding room, farm, incubator, cold and hot ventilator, electric heating equipment, water pump, boiler, and various household appliances.

2. The working principle

The instrument automatically get environment temperature sample data through the temperature sensor and detects it. When the environment temperature is the same as the starting temperature set on the controller, the controlling circuit of the device starts to work; When the ambient temperature is the same as the stop temperature set on the controller, the controlling circuit of the device stops to work.

3. Product buttons description

Stop status

Start Temperature / Time Setting

Stop temperature

Setup / Calibration

Engineering plastics

Working status

End Temperature / Time Setting

Start temperature

US Socket   EU Socket

Power Socket Output

Instruction for mode switching

Mode 0:

1: Heating mode (Default): Start Temperature on the left and End Temperature on the right, Real-time temperature shown in the middle.

2: Cooling mode: Start Temperature on the right and End Temperature on the left, Real-time temperature shown in the middle.

Mode 1:

Stop time on the left, Working time on the right, Display F1 in the middle (Cycle from Stop time to Working time)

Mode 2:

Stop time on the right, Working time on the left, Display F2 in the middle. (Cycle from working time to Stop time)

Mode 3:

Display F3 in the middle, Operating time displayed on both sides (Thousands on the right, Hundreds time on the left), the device stops when the operating time ends.

4. Operating Instructions

4.1 The temperature setting range of the temperature Time Controller

The temperature setting range of the temperature controller is -9°C to 99°C. The current environment temperature was displayed in red in the middle of the screen , and the left and right area were designed to display the stop and start temperatures set by the user.

4.2 Stop /start temperature

After 2 seconds of power-on display, the red value in the middle shows the actual temperature tested by the sensor, and the white on the left and right show the stop temperature and start temperature set by the user respectively.

4.3 Higher temperature start (Refrigeration control)

When "stop temperature" is lower than the "start temperature", the temperature controller is in the "higher temperature start" state shown in the figure. At this time, the green light is on, and the socket is powered. It is mainly used for cooling, such as turning on the air conditioner, exhaust fan, etc.

4.4 Lower temperature start (Heating control)

When "stop temperature" is higher than the "start temperature", the temperature controller is in the "lower temperature start" state shown in the figure. At this time, the red light is on, and the socket is powered off. Mainly used for heating.

4.5 Local calibration function

Press the SET key for longer than 3 seconds to enter the calibration menu, use the up and down keys to calibrate between -5 and 5 degrees, and select 0 without correction.

5. Description of the temperature control function of the device.

5.1 Refrigeration control

When "stop temperature" is lower than the "start temperature", the temperature controller is in the "higher temperature start" state shown in the figure. At this time, the green light is on, and the socket is powered. It is mainly used for cooling, such as turning on the air conditioner, exhaust fan, etc.

5.2 Heating control

When "stop temperature" is higher than the "start temperature", the temperature controller is in the "lower temperature start" state shown in the figure. At this time, the red light is on, and the socket is powered off. Mainly used for heating.

5.3 Alarm Function

When the actual temperature value is higher than 90°C, the red and green indicator lights will flash to send alarm at the same time.

5.4 Power off memory

If there is a power outage during operation, all the last settings will be automatically saved, and it will automatically run according to the settings before the outage after the power supply is restored.

6. Time control of Temperature Time Controller.

Temperature controller time control mode:
Use the internal clock signal of the MCU.

6.1 Intermittent time control function

Press the middle setting button to display F1 as an intermittent time control function, the left side of F1 corresponds to the stop time, and the right side corresponds to the start time to realize the cycle.

Press the up and down keys (1-99 minutes) to set. For example, if the left side of F1 is set to 10 and the right side is set to 20, it means that the red indicator light is on when the control has stopped controlling for 10 minutes; the green indicator light is on when the control has run for 20 minutes, to make it as a cycle.

6.2 Countdown time control function

Press the middle setting key, displaying F2 is the countdown time control function: the setting time range is between 0001 to 9999 minutes. Corresponding time on the left: 1~99 settings. The left corresponds to the thousands and hundreds of the timer; Corresponding time on the right: 1~99 settings, corresponds to the tens and ones of the timer.

For example, the left figure was set to 06, and the right set to 00, then the countdown timer is 600 minutes (10 hours). After 10 hours, the device stops to work, the green indicator light is off, and the red indicator light is on. Used for charging etc.

6.3 Reservation time control function

Press the middle setting key, to enter the reservation time function when the screen displaying F3: the setting range is between 0001-9999 minutes. The left and right correspond to the time setting of 1-99, The left side corresponds to thousands and hundreds of times of the timing time and the right side corresponds to the tens and ones of the timing time.

For example, if the left side is set to 00 and the right side is set to 20, it means that after 20 minutes, the green indicator light of the temperature controller will be on, and the temperature controller is in the running state, which is suitable for scheduled start-up.

7. Product packing list

Name	Quantity
Temperature Time Controller	1PCS
Manual	1PCS
Certificate	1PCS
US Socket	EU Socket

8. Parameters of Description

Product Name	Temperature Time Controller	
Product Model	NF-567	
Temperature Sensing probe	NTC10K-100cm	
Power Supply Voltage	☐ 110V AC 50/60Hz Max Power 800W	
	☐ 220V AC 50/60Hz Max Power 1200W	
Temperature Control Range	-9~99℃	
Overload protection current	10A	
Temperature control accuracy	±1℃	
Temperature sensing element	NTC	
Alarm Function	When the actual temperature is higher than 90°C, the indicators will flash to send alarm	
Power off memory function	Yes	
Calibration function	Yes	
Temperature control function	Refrigeration control	Hot start
	Heating Control	Cold start
Time control function	Intermittent time control function	Yes
	Countdown function	Yes
	Function when making an appointment	Yes
Working environment temperature	-10~60℃	
Working relative Humidity	20~90%	
Protection Level	IP20	
Appearance size	145X78X40 mm	

9. Precautions

- Make sure that the host and electrical appliances are installed out of the reach of children.

- When overhauling the electrical appliances, the output socket must be disconnected first, otherwise, the electrical appliances will cause personal injury when unexpected turning on happens.

- Electrical equipment needs to be tested regularly to ensure normal operation, and stop using it immediately before troubleshooting.

- For places involving temperature monitoring of important properties, multiple protection schemes should be adopted.

- Electrical appliances exceeding the load power must use an AC receiver and be installed by a professional electrician.

设 计	品名	样式	印刷要求
CZG	NF-567说明书折页英文-V3 20231117	4折页	彩色
日期	品号	页码	
2023.11.17		无	
样品	尺寸	材质	
	420 x 148mm	128g铜版纸	
变更记录	V2较V1版本，更新技术参数表，修改电压参数		
	V3较V2版本，更新了参数表信息，去掉了logo		