

Operating Instructions (TPM-600)

Pre-use Inspection

- ◆ Please carefully read the instructions before using the machine and put the manual at a safe place.
- ◆ Separate sockets of the pilot wire of the power and sensor from each other.
- ◆ The supply voltage should conform to the one marked on the machine and be sure of the voltage stability of the power.
- ◆ The pilot wire of the sensor and the power should be kept distanced.
- ◆ The machine is forbidden to be used in high temperature, over moist and corrosive environments.

Dimensions

- ◆ Fixing Size:
 - ◇ Panel Size: 97.5 x 50 ± 1mm
 - ◇ Hole's Size: 92.5 x 46.5 ± 1mm
- ◆ Operation Environment
 - ◇ Temperature range: 0°C~60°C
 - ◇ Humidity range: 20%~85% (Not allow to frost)
- ◆ Main Function Parameter:
 - ◇ Power Voltage: 220VAC ± 10% 50~60HZ
 - ◇ Power: Less than 2W
 - ◇ Four digital super-light LED display
 - ◇ Display range for temperature measuring: -40°C~+70°C
 - ◇ Resolution: When the temperature is higher than -20°C, the resolution is 0.1°C; when the temperature is no more than -20°C, the resolution is 1°C.
 - ◇ Accuracy: ± 1°C
 - ◇ At most four-way temperature checking or at fixed points
 - ◇ Each way's upper and bottom temperature limits can be set.
 - ◇ Alarm output when the temperature is higher than the set upper and bottom limits: buzzer plus relay output;
 - ◇ Alarm delayed function adjustable: 0~30 minutes;
 - ◇ Displays error code with EEE and alarms when the probe tip errors
 - ◇ Displays error code with EEE and alarms when the temperature is higher than the range.

Definitions for the key operation and functions

- ◆ Panel:

The first one is a 0.4 inch green super-light digital tube, showing which way the temperature is for. And the late three are 0.56 inch red super-light digital tubes that show the temperature measured.
- ◆ Function Setting

When being electrified and showing normal temperature, press key ▲ about 3 seconds, the digital tube displays 1d, meaning that the first way is measuring the temperature in a fixed place and consequently press key ▲, it will show 2d, 3d, 4d, 2c, 3c and 4c, and once more consequently press ▼, it will display 3c, 4d, 3d, 2d, 1d and 2d, showing that the second way is measuring the temperature in a fixed place. For the same reason, 3d means the third way and 4d means the fourth way. And 2c means the cycling temperature measuring for the first and the second ways and 3c means the cycling temperature measuring for the first, second and the third ways and 4c means the cycling temperature measuring for the first, second, third and fourth ways. When one of the functions is selected and while at the same time simultaneously pressing keys ▲ and ▼, the digital will flash for 3 seconds to show the item has been

selected, meaning that the items has been confirmed and returns out of this function to the status of temperature measuring. Under the status of cycling temperature measuring, the figure of each way's temperature will display for about 4 seconds.

◆ Upper and bottom limits setting

Under the status of temperature measuring, press key ▼ about 3 seconds, and the screen will display the upper figure of the first way set in the latest time together with the green digital tube showing 1 and when the first red digital tube lights in its upper point, it means that it has entered into the status of setting the upper limit of the first way. Press ▲ key to increase, and press ▼ key to decrease, if pressed a little longer, it will fast increase or decrease and when reaches the required figure, simultaneously press ▲ keys ▼ and to confirm it, this time, the first red digital tube will light at its bottom point, which means that it has entered into the status of setting its bottom limit, and how to set it, refer to the methods mentioned above. When the green digital tube displays 2, it means that it has entered into the status of setting the second way's upper and bottom limits and when displays 3, it means it has entered into the status of setting the third way's upper and bottom limits and when it displays 4, it means it has entered into the status of setting the fourth way's upper and bottom limits. And when the setting for the fourth way gets finished, then simultaneously press ▲ keys and to confirm it, the digital tube will flash for about 3 seconds while showing the upper and bottom limits of the fourth way to return out of the status of upper and bottom limits setting.

◆ Alarm delayed function setting

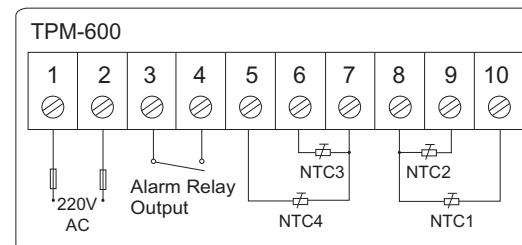
Under the status of temperature measuring, simultaneously press keys ▲ and ▼ for about 3 seconds, the screen will display the latest figures set for alarm delayed function. And press key ▲ to increase or press key ▼ to decrease, and when simultaneously press keys ▲ and ▼ for about 2 seconds, the figure being set will flash and then return out of the alarm delayed function setting status to the status of temperature measuring. The range for alarm delayed function setting is from 0 to 30 minutes. When the figure is zero, it will alarm directly the time the temperature reaching the upper and bottom limits. And when the figure is 30, the alarm function will be cancelled. When the figure set is between 1 and 29, and the delayed time has been executed, if the temperature measured is higher than the upper limit, or the temperature measured is lower than the bottom limit, the machine will start its alarm function together with the buzzer humming. And under the status of measuring the temperature in a circle, if the figure set of each way's alarm delayed function is 30, the machine will not alarm and if under other conditions, it will immediately alarm.

◆ Alarm muting

Under alarm status, the buzzer will continue humming, and pressing any key can mute the alarming noise. When the temperature measured is again out of the limits while instantly being in the range between the upper and bottom, the machine will again start its alarm function and can mute its alarming noise.

◆ Alarm Output

When the temperature to be measured is out of the limits set, the machine will start its alarm function. If the delayed alarm function is set and the temperature measured continuously is out of the range together with the time set for delayed function being executed, the buzzer will hum. At the same time, the alarm relay will work to warn the user by driving the outside alarm equipment.



Attention:

- ★ The supply voltage should conform to the one marked on the machine and be sure of the voltage stability of the power.
- ★ Be sure to separate the sockets of the power, alarm relay and sensor from one another.
- ★ When connecting the wire, the connection wire should be connected firmly with the ends.