Heating Room Thermostat

Series of TC43

Installation Manual

okonoff

A. Product Summary

TC43 series of thermostats are LCD digital heating thermostat.

TC43E is used to control the temperature of electrical heating system.

TC43W is used to control the valve of water-circulation heating system.

Can be installed directly on the wall with standard EU installing box.

Model Name Explanations

TC43□-□□-□□□

Rated working voltage, example:
110 means 110v,220 means 220v.

Output current: example:
03 means 3A,16 means 16A.

E: Electrical heating
W: Water-circulation heating

Example: TC43E-16-220
Output current is 16A
Rated working voltage is 220VAC
Note:
TC43E has additional accessory:
3 meter external sensor.
Sensor type: TS7205/5K

B. Main Technical Parameter

Intellectual Property Rights Explanation：

　　TC43 Series Room Thermostat has got multinomial patents, such as Appearance Design, Utility Model and so on, and it is also protected by the laws of the People's Republic of China.

　　"**okonoff**" is belong to registered trade mark.

Warning:

The symbol means the unit is being installed, it may cause electrical shock hazard during maintaining, so please make sure it is operated by the professional technical worker.

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TC43E/W100531

1.Output format : Relay contact
2.Self Power consume : < 5W
3.Temperature controlling range : 5～60℃
4.Temperature controlling precision : ±1℃
5.The surface material : PC＋ABS engineer plastic

C. Main Functions and Characteristics

1. The temperature measuring precision is 0.1℃,more accurate and comfortable.
2. With time period controlling mode and manual controlling mode.
3. Can revise the initial temperature value, adjust it by the keys directly .
4. Professional setting choice, when the power is cut off , it will recover the power or standby.
5. When the sensor is short circuited or not connected, it will display the code on the screen.
6.The displaying screen and power board are fit together conveniently and quickly.

D. External Dimension (mm)

83.5

83.5

22 27.5
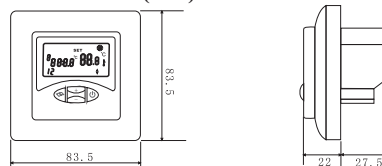
E. Instructions Before Installation

1. Be sure that the power voltage match with the rated voltage of thermostat.
2. Do not operate when the power is on, or else it may cause an electric shock or damage the product.
3. Choose the correct installing location, do not place the product under sunshine, in high humidity areas or at the places where the air flows directly.
4. Installation environment temperature: -5~65℃,
   Relative humidity:≤92%（no‑dewing).
5. The cables you installed must be safety and standard loading. And make sure the connection is firm.
6. Bathroom temperature control: Please install the thermostat out of the bathroom, and can use the external sensor to measure the temperature of bathroom.
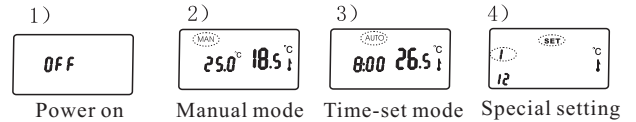
F.Installation Sketch Map

Do not open the product with big force
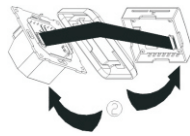
Install into junction box

2. Displaying screen illustration（The data below is just as an example, it will change according to the actual situation）

1）   2）   3）   4）

OFF   MAN 25.0℃ 18.5℃   AUTO 8:00 26.5℃   SET 12 ℃

Power on   Manual mode   Time-set mode   Special setting

3. Setting temperature

Press "＋/－" key to set the temperature; the adjustive step is 1℃,

Or press the "🗏" key to display the setting temperature.

MAN 1 25.0℃ ℃

➡ " － " To reduce the setting temperature
➡ " ＋ " To increase the setting temperature
➡ " ⏻ " Return to the working mode
➡ " 🗏 " Go to the next mode

4. To choose the temperature range

Press "🗏" key twice, it will display the temperature range
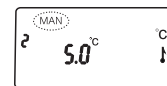
MAN 2 5.0℃ ℃

➡ " － " To reduce the setting temperature
➡ " ＋ " To increase the setting temperature
➡ " ⏻ " Return to the working mode
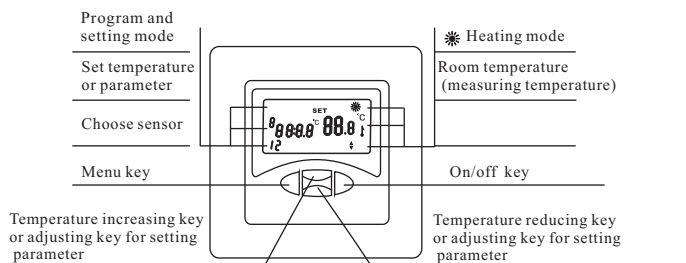➡ " 🗏 " Go to the next mode
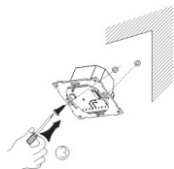
Fix the product

Cover the outside cover and the installation is finished.

G. Introduction of operation:

1. Function of the key and display screen

Program and setting mode

Set temperature or parameter

Choose sensor

Menu key

Temperature increasing key or adjusting key for setting parameter

☀ Heating mode

Room temperature (measuring temperature)

On/off key

Temperature reducing key or adjusting key for setting parameter

SET ☀ 88.8℃ 88.8℃ 12

5. To choose Manual setting mode and program-controlling mode

Press "🗏" key for 3 times

MAN 3 0   or   MAN 3 1

➡ " － " To choose manual mode
➡ " ＋ " To choose time period mode
➡ " ⏻ " Return to working mode
➡ " 🗏 " Go to the next mode
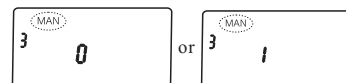
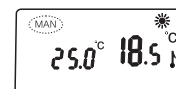"0" manual mode "1" Program mode

6. Setting time

MAN 4 8:00

➡ " － " To reduce time
➡ " ＋ " To increase time
➡ " ⏻ " Return to the working mode, the time setting invalid.
➡ " 🗏 " Return to the working mode, the time setting valid.

Press the "＋" or "－" key more than three seconds, the value will change quickly

7. Close down

Under the working mode, press the " ⏻ " key one time

MAN 25.0℃ 18.5℃ ☀   ⟹   OFF

Working mode

Standby mode

8.Cut off the power:

If you will not use it for a long time(over one month), please cut off the power supply to avoid working in standby mode for a long time. It will save the energy and protect the thermostat.
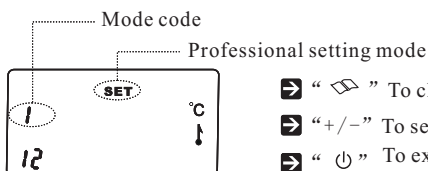
OFF ⟹ [blank display]

Standby mode (power is working)   No display when power is off

E. Professional setting (Program at the scene):

Should be operated by engineer according to the instructions.

1 Enter into professional setting mode

Press the " ✍ " key for about 5 sec, then loose ; it will go into the setting mode (Mode No1)

Mode code
Professional setting mode

[display: SET °C, 1, 12]

➔ " ✍ " To choose mode 1-6
➔ "+/−" To set parameter
➔ " ⏻ " To exit the setting mode and return to the working mode.

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4. Mode 3:set to choose the standby mode or working mode when power is on

[display: SET, 3, 1]
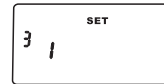
➔ " +/- " Set parameter under the working mode
➔ " ⏻ " Return to the working screen

[display: SET, 3, 0]

"0" means standby, "1" means working

5. mode 4:set time

[display: SET, 4, 8:00]

➔ " +/- "Set time, the adjustive step is 15 minute
➔ " ⏻ " Return to the mode 1
➔ " ✍ " Enter into the mode 5
➔ "1" the code of time

6. mode 5:set temperature

[display: SET, 5, 8:00 26.0 °C]

➔ "+/-" Set temperature
➔ " ⏻ " Return to the mode 1
➔ " ✍ " Return to the mode 4

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2. Mode1: choose sensor

The controller has internal, external sensors; also say No.1 sensor and No.2 sensor. No.1 sensor is used to measure the environment temperature where the controller locates .No.2 sensor is connected with the terminal6,7,it is always used to measure the floor, cable or water temperature, as accessory sensor to help to limit the temperature . If you have special requirement, you can set the No.2 sensor as the main sensor (for example :in the bathroom)
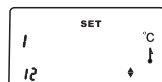
Setting method: under the mode 1,press "+/-" key to set

[display: SET °C, 1, 1]   [display: SET °C, 1, 2]   [display: SET °C, 1, 12]
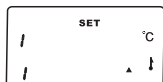
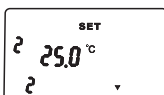No.1 sensor is the main mode sensor, no external sensor

No.2 sensor is the main controlling sensor

No.1 sensor is the main controlling sensor, No.2 sensor is the accessory controlling sensor

3. Mode 2: set limit temperature value

The limit temperature when the external sensor is the accessory controlling sensor.

[display: SET, 2, 25.0 °C, 2]

➔ "+/-" set temperature value
➔ " ⏻ " Return to the working screen

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When you set the second time period, repeat the steps mentioned above until four time periods settings are finished

Notice:
1)The time of the second period must be 15 minutes later than the first period.
2)The time is the 24 hours system.

7. Revise the measuring temperature

For reason of sensor temperature'sdifferential, installation place , the ventilation of the room and some other reasons, it need to revise or compensate the temperature measuring value, the revised value is ±6

[display: SET, 6, 25.3 °C]

➔ "+" Temperature measuring value increase :0.1℃
➔ "-" Temperature measuring value reduce :0.1℃
➔ " ✍ " Return to the working mode

Temperature revising is only valid for main controlling sensor ,when choose the external sensor(No.2 sensor) as the main sensor ,then the revised sensor is external sensor .
Main controlling sensor: It measures actual temperature under the working mode.Accessory controlling sensor: as the limited temperature sensor, and only the external sensor can be the accessory sensor.

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J.**Notice**

1. When you find the system abnormal or the equipment could not work, please try to turn off the power then reset the thermostat.
2. The preplaced power controlling device of the thermostat should have the protecting function of the power leakage and current over load, and it should be able to cut off the power at the emergency.
4. Should be installed by professional technicians according to the instruction.
5. Do not install the thermostat near the high-temperature resource or in bad environment places.
6. Be sure the voltage is match with rated voltage of the thermostat before the installation.
7. Please read the instruction carefully before using the product.
8. The connections must be done with safety and standard loading
9. Keep the instruction carefully for the late use.

Dear users:

Thanks very much for using our products. Please carefully refer to the explanation before using products.
While providing high quality and reliable products, we will provide consummately technical support and after service at any time in any place.if you have any question, please contact with us in time.

Thanks again.

TC43E/W系列采暖房间温控器说明书

（英文）

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