

# INSTRUCTIONS ATC-800

## Inspect before use:

Please read through the manual carefully, damages caused by failing to read the manual are beyond the responsibility of manufacturers and agents.

Power supply must accord with the output voltage marked in PVC of the back panel.

Be aware of the stability of power supply. When awful fluctuate power off promptly to avoid the damages.

The product cannot be used in water or overmoist circumstances.

No contact and closeness between sensor wire and electrical wire are allowed. Moderate distance is required.

Please distinguish the points of sensor tip, current connection and relay output.

Make sure that electric current in the relay is not over-relayed.

Carefully check the fittings list.( inclosure is fitting list)

## Specifications:

Entire size: 180\*100\*54mm

Recommended installing size: 169.5\*89.5mm

Parameters of operation circumstances:

Operating temperature: -5 ~ +70℃

Relative humidity: 20% ~ 85%(No frost)

Main technology parameters:

Power supply: 220VAC±10% 50hz

Outputs: <4W

Accuracy: ±1℃

Distinguish: 0.1℃

Display range:0-45℃

Control range:5-40℃ adjustable

Control temperature difference: 1-5℃ adjustable

Sensor: NTC,shielded line

Relay contact capacity point volume: heating, 10A(max) 240VAC; refrigeration,25A(MAX) 240VAC

Compressor delayed protection time: 3 minutes (forcible)

Alarming output: buzzer

## Work flow

When powered, display 888 to open the mode of refrigeration and heating. Indicator light shines; display the current temperature value and auto-switch the mode of refrigeration and heating(when the current temperature value higher than the setting temperature value+the setting of temperature difference, it will refrigerate; when the current temperature value lower than the setting temperature value-the setting of temperature difference, it will heat. The stop point is the setting of temperature value.); in refrigeration mode compressor work needs 3 minutes to delayed protection, when delayed, the refrigerant indicator light flashes, when finish the delay, the refrigerant indicator light shines and compressor works;in heating mode heating refrigeration light shines and heats immediately. Refrigerant and heating don't work at the same time.

## Function of key

Set key:to alter the temperature and temperature difference. In the normal state, press it inefficacy. Press it for 6 seconds enter into setting state. When finish the setting press it for 3 seconds to auto-save and exit.

Temperature key:in normal state, press it gently to display the current setting temperature value for 1 second then display the current temperature measuring value; in setting state,to switch to the temperature setting state.

Temperature difference key: in normal state,press it gently to display the current setting temperature difference value for 1 second then display the current temperature measuring value; in setting state,to switch to the temperature difference setting state.

Adjust(upper/below) key: in normal state, both inefficacy. When in the setting state efficiency.

On/off key: in normal stae, press it gently inefficacy. But press it for 3 seconds to switch on/off. The on/off light on:open the mode of refrigeration and heating. The on/off light off: close the mode of refrigeration and heating.

## Setting state description

When the equipment in the norma running state fress set for 6seconds enter into setting state. The primal state is temperature setting. Temperature setting light shines, to alter the setting value by the adjust(upper/below) key; finish setting temperature press the temperature difference key to swtich into this state, the temperature difference light shines , to alger the setting value by the adjust(upper/below) key; when finished press set key for 3 seconds to exit and auto-save the setting and the equipment will run in the new setting; If not exit normally, no operation for 30 seconds to exit forcibly, and the alter inefficacy, the equipment will run in the primary setting.

## Alarming state description

Sensor failure alarming: when open circuit and short circuit occurs to open the sensor tip failure alarming and close all running state. Buzzer alarms and screen display EEE. After overcome the failure return to the normal state.

Excessive temperature alarming:when temperature is above the temperature measuring range, the controller will open the alarming mode and close all running state. Buzzer alarms. If excessive the max. limit will display HHH; if excessive the min. limit will display LLL. Press any key to stop buzzer. When the temperature return to the measuring range it will in the normal state.

## Notices:

Screen displays EEE: If displays EEE and buzzer works pls check the sensor is open circuit or short circuit.

Temperature displays unsteadily because of interfefering. The interfeferential cause is complicated. To control it effectively as following:

The grounded point of controller connects steadily.

Temperature tip down-lead separate from the power down-lead and avoid near to the power down-lead. The power down-lead is a powerful electromagnetic interferon. Pls removed.

Hidden is better than tip down-lead, but must connect the earth steadily.

If excessive the temperature measuring range, the screen displays HHH , LLL.

If the primary setting temperature altered: due to the powerful interferon, this case is seldom; If occurs, pls power off for 1 minute. When power on to re-adjust the moderate value and exit normally to auto-save the setting.

When installed it is better to keep away from the interferon, such as alternating connector, electric machinery.

## Wiring diagram:

### Accessory list:

ATC-800 mainframe 1 set

NTC sensor 1 piece

Manual: 1 pece

Fixed card:1piece

Fixed thread:1piece.

