

FTHC01 temperature humidity controller manual

Thank you for purchasing our products. Please read this manual carefully before using it, and keep it properly for future reference.

■ Features:

- ① The controller using the latest digital temperature and humidity measurement technology, with the advantage of high precision, stable and reliable, easy to install, low power consumption.
- ② Real-time temperature and humidity display, overrun alarm, control function.
- ③ 4 working modes can be selected: 1 heating dehumidification; 2 heating humidification; 3 refrigeration dehumidification; 4 refrigeration humidification.

■ Performance parameters:

- ① Input voltage: 110VAC-250VAC.
- ② Temperature and humidity display accuracy: 0.1°C; temperature setting accuracy: 0.1°C; humidity setting accuracy: 0.1%RH; SHT10 temperature error: $\pm 0.5^{\circ}\text{C}$; humidity accuracy: $\pm 4.5\%RH$.
- ③ Humidity display range: 0-99.9%RH.
- ④ Temperature display range: -40°C - 100°C .
- ⑤ Temperature alarm Humidity alarm: buzzer for default, can connect an external 220V large decibel buzzer.
- ⑥ Output: 30A relay, its life is more than 10 million times.

■ Operating instructions:

- ① Install the controller in a dry, no direct sunlight, no rain location.
- ② Connect the power cord correctly according to the wiring diagram.
- ③ Turn on the power, after the controller's self-test, it display control mode 5 seconds, display the current temperature.
- ④ Press and hold the **SET** button for 3 seconds to enter the setting mode. You can press  or  to adjust the setting item and press **ENT** to confirm.

-TE- represents the temperature control menu;

-HU- represents the humidity control menu;

-C- represents the temperature alarm menu;

-rH- represents the humidity alarm menu;

L-3-: L for digital tube brightness setting, 3 for brightness value;

U-4: U stands for control mode setting, 4 stands for control mode, digital 1-4 control mode means: 1 heating dehumidification 2 heating humidification 3 refrigeration dehumidification 4 refrigeration humidification.

Temperature and humidity settings:

Select the control mode and press the **SET** button to enter the settings.

-TE-: TE-H represents the temperature upper limit value, TE-L represents the temperature lower limit value.

-HU-: HU-H represents the humidity upper limit value, HU-L represents the humidity lower limit value.

Note that the lower limit value can not exceed the upper limit, otherwise it will cause the controller to work abnormally.

Alarm:

BELL represents the buzzer switch, 000.1 represents the alarm on, 000.0 represents the alarm off.

- C-H represents the upper limit alarm temperature, -C-L represents the lower limit alarm temperature,

-r-H represents the upper limit alarm humidity, -r-L represents the lower limit alarm humidity; Press

ENT key to select:

Set up and press **ENT** key to exit, the alarm output interface is an active output (direct output 220V), can directly connect to 220V alarm.

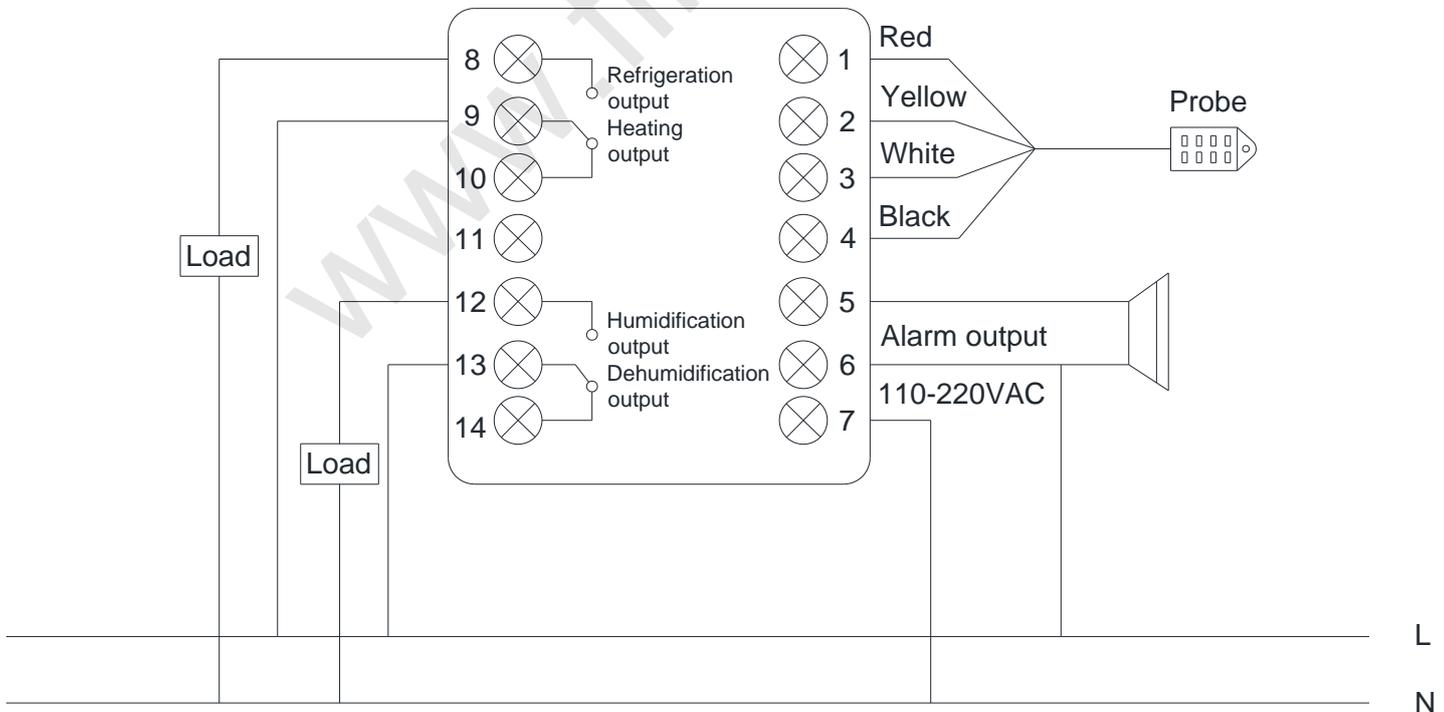
- ⑤ It can cancel the alarm state when press the **ENT** key in alarm, but can't cancel when it constant in over-limit alarm, it will only alarm when the temperature and humidity are normal, and over-limit again.
- ⑥ Cut off the power, hold down the **SET** key and switch on power, will restore the factory settings.
- ⑦ Cut off the power, hold down the **△** key and switch on power, will enter the error adjustment interface, - T refer to temperature error settings, --- r refer to humidity error adjustment.
- ⑧ Cut off the power, hold down the **▽** key and switch on power, will enter the brightness adjustment interface.

■ **Note:**

- ① Do not place the device in an environment where the power supply is seriously disturbed.
- ② Check the power supply voltage is appropriate when turning on the power.
- ③ Do not place the device in high temperature, high humidity, rain and other environments
- ④ Should always check the alarm running, if it appear bad situation, should be promptly repaired.
- ⑤ If the temperature window shows EEEE, the controller and the probe communication failure, please check the probe line, whether it connect wrong or loose.
- ⑥ The host's warranty is one-year (except man-made damage, such as the wrong line burned, soaked etc, it provide paid maintenance).

■ **Connection:**

Wiring Note: the output is switch type output, not 220 power output, you need to connect it by the the wiring diagram:



■ **Setting example:**

1, The temperature output relay switch on when the temperature is higher than 35.6 °C, and switch off when lower than 33.6°C, the humidity output relay switch on when the humidity is higher than 75.2%RH, and switch off when lower than 70.2% RH. Can set it as following:

Press **SET** key to enter the setting interface, the page display (U-1-), At this time press **△** twice, then display cooling dehumidification (U-3-) mode, press **ENT** key to enter cooling dehumidification parameter settings, the upper digit display TE-H (temperature upper limit), lower digit display temperature set value, Press the **▽** or **△** key to adjust the parameter to 35.6 ° C, then press **ENT** to save and automatically enter the temperature lower limit (TE-L) setting. Press **▽** or **△** to adjust the parameters to 33.6 °C, and press **ENT** to save and automatically enter the humidity upper limit, set HU-H to 75.2, set HU-L to 70.2.

2, The temperature output relay switch on when the temperature is lower than 18.0°C, and switch off when higher than 20.0°C, the humidity output relay switch on when the humidity is lower than 50.0%RH, and switch off when higher than 55.0% RH. Can set it as following:
Set it to heating and humidification (U-2-) mode first, then set TE-H to 20.0, TE-L to 18.0, HU-H to 55.0 and HU-L to 50.0.

3, The temperature output relay switch on when the temperature is lower than 18.0°C, and switch off when higher than 20.0°C, the humidity output relay switch on when the humidity is higher than 75.0%RH, and switch off when lower than 70.0% RH. Can set it as following:
Set it to heating and dehumidification (U-1-) mode first, then set TE-H to 20.0, TE-L to 18.0, HU-H to 75.0 and HU-L to 70.0.

4, The temperature output relay switch on when the temperature is higher than 35.0°C, and switch off when lower than 33.0°C, the humidity output relay switch on when the humidity is lower than 50.0%RH, and switch off when higher than 55.0% RH. Can set it as following:
Set it to cooling and humidification (U-4-) mode first, then set TE-H to 35.0, TE-L to 33.0, HU-H to 55.0 and HU-L to 50.0.

5, Alarm settings (when the temperature is greater than the temperature upper alarm or lower than temperature alarm lower limit or humidity is above the humidity alarm upper limit or below the humidity alarm lower limit, will trigger the alarm): Press the **SET** key to enter the setting interface, at this time, it display (U-1-), press the **▽** key for five times, it display alarm setting (--C-) mode. Then press **ENT** key to enter the alarm parameters setting. BELL represents the buzzer switch, 000.1 represents the alarm on, 000.0 represents the alarm off.

-C-: -C-H refer to upper limit alarm temperature, -C-L refer to lower limit alarm temperature, -r-H refer to upper limit alarm humidity, -r-L refer to lower limit alarm humidity, and **ENT** key to select.