WH8040 Humidity Controller Product Manual

① Installation opening size:
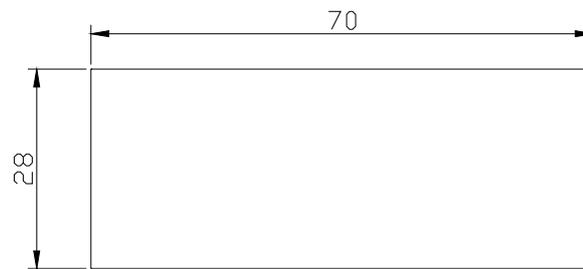
② Wiring diagram：
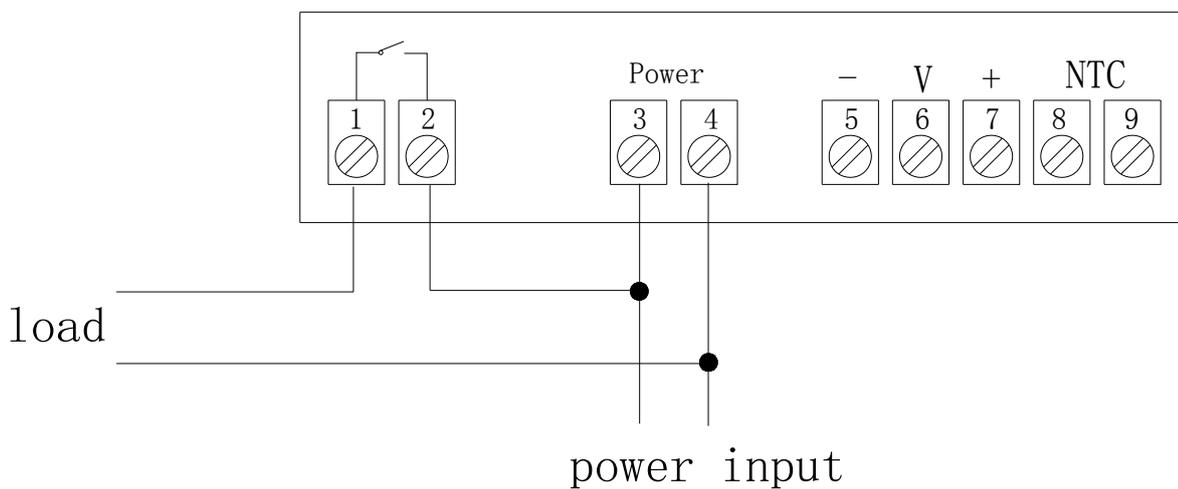
erminals 1 and 2: Normally opened contact of relay
Terminals 3 and 4: Connect the power
Terminals 5 and 6 and 7 : Connect   the Humidity sensor
Terminals 8and9: Connect   Temperature   sensor

③ **Electrical performance:**
  Humidity measurement range: 1% ~99%
  Humidity control range: 1% ~99%
  Humidity measurement error: 3%
  Sensor Type: HM40
  Control accuracy: 1 %
  Working voltage : for detailed information of the input voltage, please see the notes on the products
  Working current: <2W
  Relay contact point current: AC 5A/220V
  Data storage : Yes
  Working temperature: 0 ℃ ~ 50 ℃
  Storage temperature: -10 ℃ ~ 60 ℃

④ **Key Instructions:**
   1. RST: Press RST key to switch on and off, press the RST key on the power-off state once to turn on, on the power-on state, press the RST key for three seconds and hold on, then it will be off.
   2. SET:
   A: Press the SET key once to enter the temperature control setting, press ▲ or ▼ button to adjust, press ▲ or ▼ button for three seconds and hold to enter the fast adjusting mode, press the SET key again to exit setting mode.
   B: Press and hold SET key for three seconds to enter the system menu settings, press the ▲ or ▼ key to select the adjustment menu, press SET key once to enter the appropriate parameter settings, press ▲ or ▼ to adjust the parameters needed to be modified, after being adjusted, press the RST key to exit, or exit as the system delay for 5 seconds.
   ▲: Up key
   ▼: Down key

⑤ **Operating Instructions:**
  LED Status Description:
  The **WORK** lights at the left side of the screen is used as working indicator lights, flashing is to indicate the delay of cooling or heating, if the LED is always on ,it indicates it is on the status of Humidification or Dehumidification .
  The **SET** light at the left side of the screen lights is used as setting indicator lights, if the LED is always on ,it indicates it is on the status of setting.
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Function Instructions:
  Press **RST** key to open the Humidity Controller, on the running status, press this key for 3 seconds, then the Humidity Controller　can be turned off.
  ◆**Humidification, Dehumidification　function:**
  Dehumidification Mode: When the measured Humidity is higher than or equal to the set value + hysteresis, the relay picks up to start the output; When the measured Humidity below the set value, the relay off and close the output.
  Humidification mode: When the measured Humidity is higher than or equal to the set value, the relay off, turn off the output; When the measured Humidity below the set value - hysteresis, the relay picks up to start the output.
Example for Setting: If it is set to Humidification mode, set the Humidity to 75%, hysteresis is set to 5, then when the measured Humidity is higher than or equal to 75%, the relay is off, close the output. When the temperature is below 70%, pick up the relay again, to start the output.
Example for Setting: If it is set to Dehumidification mode, set the Humidity to 75%, hysteresis is set to 5, then when the measured Humidity is below 75%, the relay is off, close the output. When the Humidity is higher than or equal to 80%, pick up the relay again, to start the output.

◆Humidification, Dehumidification mode setting:

Press "SET" key and hold more than 3 seconds to enter the menu display, the screen appears "HC" code, press the "SET" key to display the working mode, press the "▲" or "▼" to adjust the display, C means Dehumidification mode; H means Humidification mode.

◆ Hysteresis function:

Hysteresis setting limits the maximum interval between the opening and stopping, this machine minimum interval between the opening and stopping is 1 %, the maximum is 15 %.

◆ Hysteresis settings:

Press "SET" key and hold more than 3 seconds to enter the menu display, with "▲" or "▼" key adjusted to the screen, appearing "D" code, press the "SET" key to display the hysteresis set value, press "▲ "Or"▼"key to adjust the parameters.

◆Humidity calibration funtion:

When there is deviation between the measuring Humidity and standard Humidity, use the Humidity calibration function, make the machine measurements value consistent with the standard Humidity, the after calibration Humidity = the before calibration Humidity + calibration value (calibration value can be positive number, negative number, and 0) .

◆Humidity calibration settings:

Press "SET" key and hold more than 3 seconds to enter the menu display, with "▲" or "▼" key adjusted to the screen, appearing "CA" code, press the "SET" key to display the temperature calibration settings, press "▲ "Or"▼"key to adjust the parameters.

For example: When we measure the probe Humidity was 75 %,it displays 75%   as the CA is 0, it displays 76% as the CA is 1, it displays 74 % as the CA is -1. This function is generally applied when the probe can not measure directly the measured object.

◆ Delay Protection Funtion:

Set the device boot twice the shortest time interval

◆ Delay Protection Setting:

Press "SET" key and hold more than 3 seconds to enter the menu display, with "▲" or "▼" key adjusted to the screen, appearing "PT" code, press the "SET" key to display the delay setting value, then press the "▲ "or "▼"key to adjust the parameters.

◆ Upper and lower limit functions:

The setting of HS and LS limit the set range of control Humidity point , for example: HS is set to 75, LS is set to 50, the control Humidity can only be adjusted between 50 and 75, when the control Humidity to 50 then press "▼" key, the display will remain on the status of 50 and not decrease; when the control temperature to 75 then press "▲" key, the display will on the status of 75 and not incease. If the set point outside this range, it needs to firstly change the value of HS and LS, then it can be achieved.

◆Upper and lower limit settings:

Press "SET" key and hold more than 3 seconds to enter the menu display, with "▲" or "▼" key adjusted to the screen, appearing "HS" or "LS" code, press the "SET" key to display the upper or lower limit set value, Then press "▲" or "▼" key to adjust the parameters. HS means upper limit. LS means lower limit.

For example: the upper and lower limits are used to limit the range of control temperature that can be set, such as: LS is 10, HS 20, then press the SET key to adjust the temperature control, it can only be varied between 10 and 20.

◆ Menu code selection:

Symbol	Details	Setting range	Factory settings	Units
HC	Humidification, /Dehumidification	H/C	C	
D	Hysteresis	1～15	5	℃
LS	The minimum set limit	-50～110	-50	℃
HS	The maximum set limit	-50～110	110	℃
CA	Humidity calibration	-5～+5	0	℃
PT	Delay time	0～10	1	Minutes

⑥ fault tips:
1)When the sensor disconnected, the screen displays --- and close the output
2)When the sensor detects the temperature is below 1%, the screen displays LLL
3)When the sensor detects a temperature higher than 99%, the screen displays HHH

⑦ Caution for using:
◆the load must not exceed the output contact capacity, or it may result in machine damage and cause a fire.
◆ Various connecting wire must be well connected with the terminal, otherwise, it would result in reducing the reliability of machine.
◆ When connecting the wire, please separate power supply, relays, sensors, otherwise it will damage the machine.