

XY-DTH1 SHT30 Temperature Humidity Controller

1. Description:

XY-DTH1 is a SHT30 Temperature Humidity Controller. LCD display, very clear, easy to use, powerful. It can be widely used at Smart home, Industrial control, Automatic irrigation, Indoor ventilation. Protection equipment for DIN35 rail.

XY-WTH1 Temperature and humidity control module high precision digital display and double output automatic constant temperature and humidity control panel.

Product adopts industrial-grade chip, high-precision SHT20 temperature and humidity sensor.

2. Features:

- 1>.Standard 35mm DIN rail mounting
- 2>.Power-down memory function
- 3>.Adjustable work mode
- 4>.Automatic constant temperature and humidity control
- 5>.Real time monitoring display

3. Parameters:

- 1>.Product name:XY-DTH1 SHT30 Temperature Humidity Controller
- 2>.Model:XY-DTH1
- 3>.Working Voltage:DC 6V-30V
- 4>.Control Load Current:10A(Max)
- 5>.LCD refresh rate:0.5 second
- 6>.Sensor:SHT20 Humidity Temperature sensor
- 7>.Temperature range:-20℃~60℃
- 8>.Temperature Control precision:0.1℃
- 9>.Humidity range:0%-100%RH
- 10>.Humidity Control precision:0.1%RH
- 11>.Output type:Relay switch output(No voltage output!)
- 12>.Size of Controller:90*55*45mm
- 13>.Size of Sensor probe:60*30*20mm
- 14>.Length of Sensor cable:1.0 meter

4. Temperature function:

1>.Automatic recognition of working mode:

XY-DTH1 automatically selects the working mode according to the Start Temperature and Stop Temperature.

Start Temperature is more than Stop Temperature, Turn ON cooling mode 'C'.

Start Temperature is less than Stop Temperature, Turn ON heating mode 'H'.

'H' or 'C' will flashing when in the right work mode.

2>.Cooling Mode 'C':

Relay turn ON and Red Indicator turn ON and Refrigeration equipment starts working if connect load when Current Temperature is less than Start Temperature.

Relay turn OFF and Red Indicator turn OFF and Refrigeration equipment stops working if connect load when Current Temperature is less than Stop Temperature.

3>.Heating mode 'H':

Relay turn ON and Red Indicator turn ON and Heating equipment starts working if connect load when Current Temperature is less than Start Temperature.

Relay turn OFF and Red Indicator turn OFF and Heating equipment stops working if connect load when Current Temperature is more than Stop Temperature.

4>.Temperature Correction ' OFE '(-10.0~10.0℃):

The system may have errors if it works for a long time, it can be corrected by this function.

Actual Temperature = Measured Temperature + Calibration Value.

Setting method:

4.1>.Double-click button 'TM+' in the normal running interface into Temperature Correction setting interface.The first line shows the specific value. The second line shows the type of correction value(OFE or RH).

4.2>.Switch to select modified parameters by short press button 'TM-'.

4.3>.Short press button 'RH+' and 'RH-' to set the specific value.Support long press.

4.4>.After the parameters have been modified, double-click button 'TM+' to save the data and exit the correction value setting interface.

5>.Set Start/Stop Temperature:

Keep press button 'TM+' for 3second in the normal running interface into Start Temperature setting interface.Short press button 'TM+' or 'TM-' to set parameters value.After the parameters are modified and then wait for 6s to automatically save and exit.

Keep press button 'TM-' for 3second in the normal running interface into Stop Temperature setting interface.Short press button 'TM+' or 'TM-' to set parameters value.After the parameters are modified and then wait for 6s to automatically save and exit.

6>.Relay enable (default on):

Short press button 'TM-' in the normal running interface.Turn ON or OFF temperature relay output enable.Screen will display '°C' and flashes if If the temperature relay is OFF.

5.Humidity function:

1>.Automatic recognition of working mode:

The module automatically selects the working mode according to the Start Humidity and Stop Humidity.

Start Humidity is more than Stop Humidity, Turn ON dehumidification mode 'd'.

Start Humidity is less than Stop Humidity, Turn ON humidification mode 'E'.

2>.Dehumidification Mode 'd':

Relay turn ON and Green Indicator turn ON and Dehumidification equipment starts working if connect load when Current Humidity is more than Start Humidity.

Relay turn OFF and RED Indicator turn OFF and Dehumidification equipment stops working if connect load when Current Humidity is less than Stop Humidity.

3>.Humidification mode 'E':

Relay turn ON and Green Indicator turn ON and Humidification equipment starts working if connect load when Current Humidity is less than Start Humidity.

Relay turn OFF and Green Indicator turn OFF and Humidification equipment stops working if connect load when Current Humidity is more than Stop Humidity.

4>.Humidity Correction ' RH '(-10.0~10.0%RH):

The system may have errors if it works for a long time, it can be corrected by this function.

Actual Humidity= Measured Humidity+ Calibration Value.

4.1>.Double-click button 'TM+' in the normal running interface into Temperature Correction setting interface.The first line shows the type of correction value(OFE or RH).The second line shows the specific value.

4.2>.Switch to select modified parameters by short press button 'TM-'.

4.3>.Short press button 'RH+' and 'RH-' to set the specific value.Support long press.

4.4>.After the parameters have been modified, double-click button 'TM+' to save the data and exit the correction value setting interface.

5>.Set Start/Stop Humidity:

Keep press button 'RH+' for 3second in the normal running interface into Start Humidity setting interface.Short press button 'RH+' or 'RH-' to set parameters value.After the parameters are modified and then wait for 6s to automatically save and exit.

Keep press button 'RH-' for 3second in the normal running interface into Stop Humidity setting interface.Short press button 'RH+' or 'RH-' to set parameters value.After the parameters are modified and then wait for 6s to automatically save and exit.

6>.Relay enable (default on):

Short press button 'RH-' in the normal running interface.Turn ON or OFF humidity relay output enable.Screen will display '%' and flashes if If the temperature relay is OFF.

6.Use steps:

- 1>.Connect sensor to controller.
- 2>.Connect to power supply to controller.
- 3>.Adjust Start Temperature,Stop temperature and Temperature Correction.
- 4>.Adjust Start Humidity,Stop Humidity and Humidity Correction.
- 5>.Enable relay output according requirement.
- 6>.Remove power supply.
- 7>.Connect to load with power supply at relay output terminal if need at Step5.
- 8>.Connect to power supply for controller again.
- 9>.Test and working!

7.Application:

- 1>.Control cabinet
- 2>.Production workshop
- 3>.Hatching aquaculture control
- 4>.Tobacco industry
- 5>.Printing house
- 6>.Aquarium temperature control
- 7>.Bedroom

8.Note:

- 1>.It is a relay output mode and cannot be used as a power module. It cannot output voltage. The load needs to be connected to a separate power supply
- 7>.Please read use manual and description before use.

9.Package:

- 1>.1pcs XY-DTH1 SHT30 Temperature Humidity Controller
- 2>.1pcs SHT30 Sensor

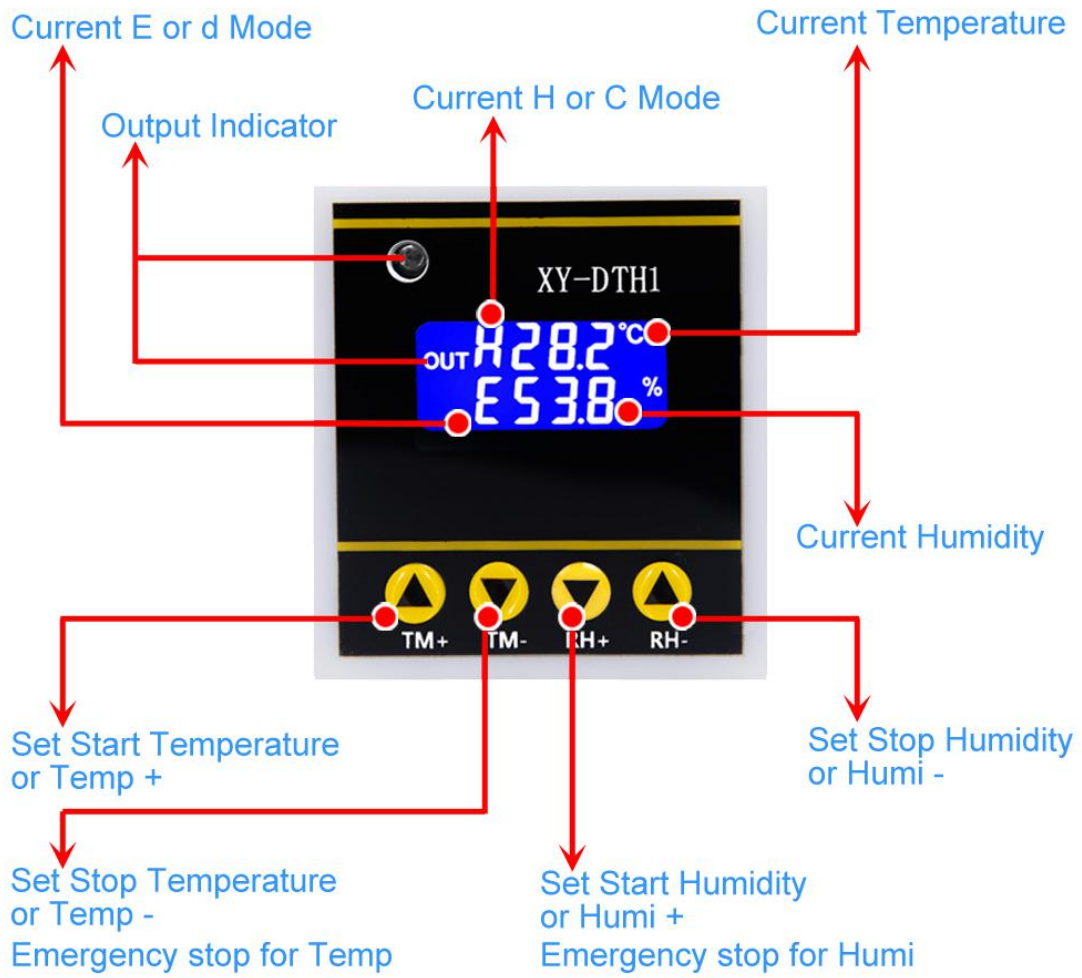
XY-DTH1 SHT30 Temperature Humidity Controller

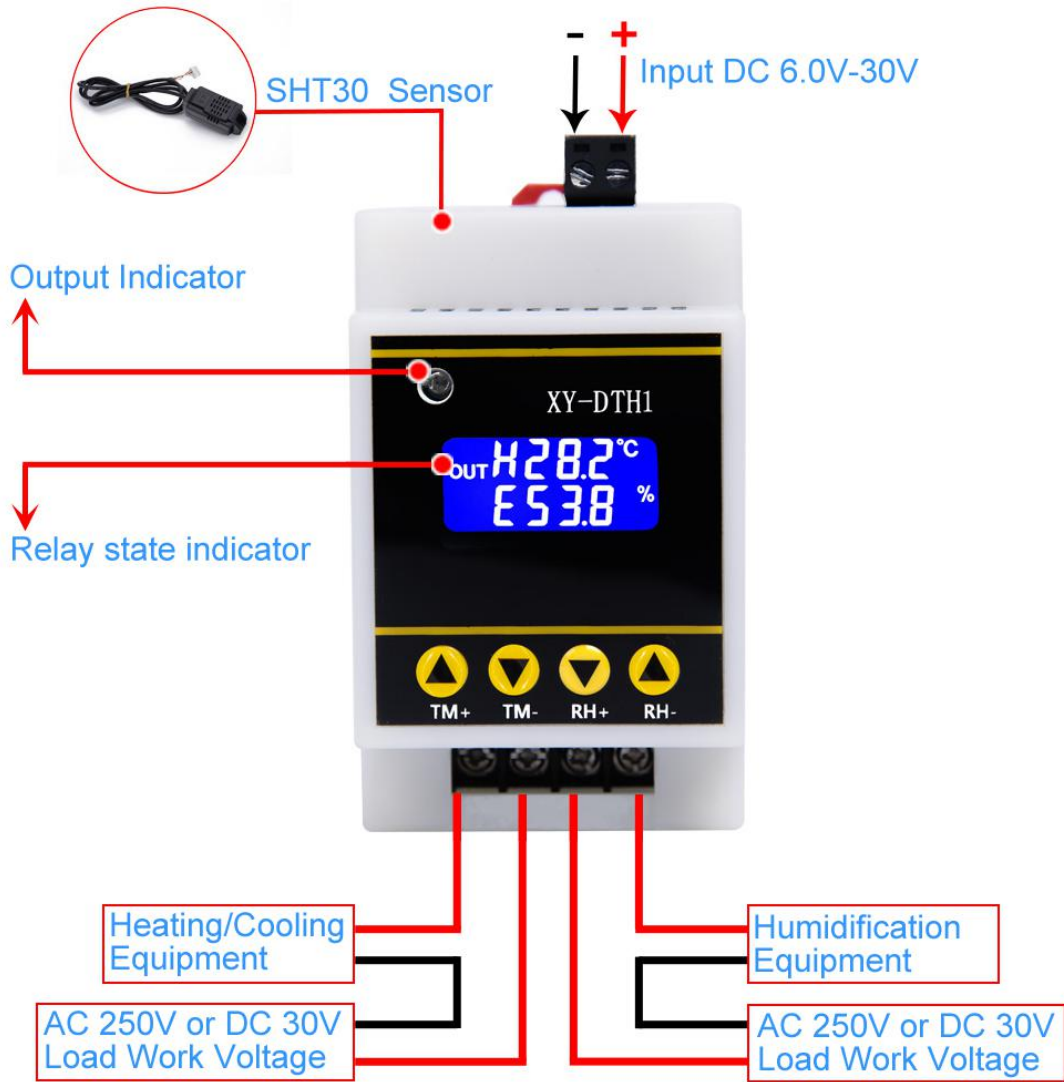
-20°C~60°C

0%-100%RH

LCD Display







Standard 35mm DIN rail mounting

