TH-D/OLED Digital Controller

Version：V2.1(20150514)。

Specifications

Supply voltage：DC 88V～370V,
AC 85V～265V,47Hz～63Hz

Temperature measuring range：-40℃～+85℃，precision ±0.5℃（25℃）, resolution 0.1℃

Humidity measuring range：0～99.9%RH,precision ±5%RH(20～80%RH), resolution 0.1%RH

Operating conditions:
temperature-40℃～+70℃, humidity≤95%RH without condensation

Insulation resistance：between operating power and contacts：be equal or more than 20MΩ

Dielectric strength：between operating power and contacts：
2000VAC, 50Hz, 1min

Contact capacity：
heater（normally open）、fan（normally open）:
Current carrier capacity 6A@250VAC

Terminals

6	NC	+KM	1
7	+5VDC	-KM	2
8	DATA	HEAT	3
9	SCK	COM	4
10	GND	FAN	5

In the figure above :the NO.1 and NO.2 terminals contact with power supply,NO.7,8,9,10 terminals contact with +5VDC、DATA、SCK、GND in sensor in turn,NO.3，4 terminals contact with heater, NO.4,5 terminals contact with fan.

Function

① When measured value of temperature＜low-limited value of temperature，or measured value of humidity ＞up-limited value of humidity also measured value of temperature＜up-limited value of temperature - up-limited returning difference pf temperature，turn on heater.

②When measured value of temperature＞low-limited value of temperature + low-limited returning difference of temperature，or measured value of humidity < up-limited value of humidity - returning difference of humidity , turn off heater.

③When measured value of temperature > up-limited value of temperature , or measured value of humidity > up-limited value of humidity ,turn on fan.

④When measured value of temperature < up-limited value of temperature - up-limited returning difference of temperature ,or measured value of humidity < up-limited value of humidity - returning difference of humidity ,turn off fan.

⑤When turn on and turn off fan at the same time , turn on fan。

⑥When turn on and turn off heater at the same time ,when measured value of temperature <(up-limited value of temperature - up-limited returning difference of temperature)，turn on heater ;when measured value of temperature >(up-limited value of temperature - up-limited returning difference of temperature + 0.4℃)，turn off heater.

⑦Real-time display the current value of temperature and humidity.

Named rules

Model	TH	-D	-11	/OLED

Model series
TH=temperature & Humidity
T=temperature

Struction
D=48*48

Installation
11=Guide
10=embed

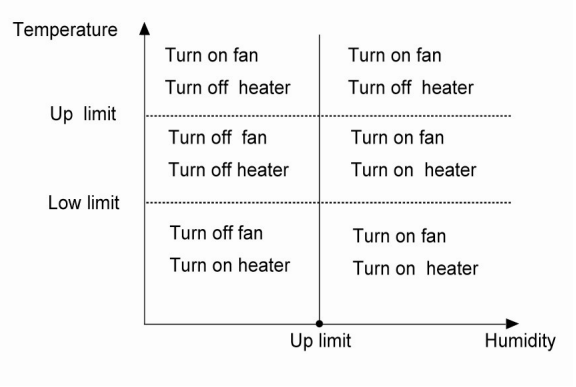
Display mode
OLED=OLED display

地址：南京市江浦经济开发区东方红河滨路5号

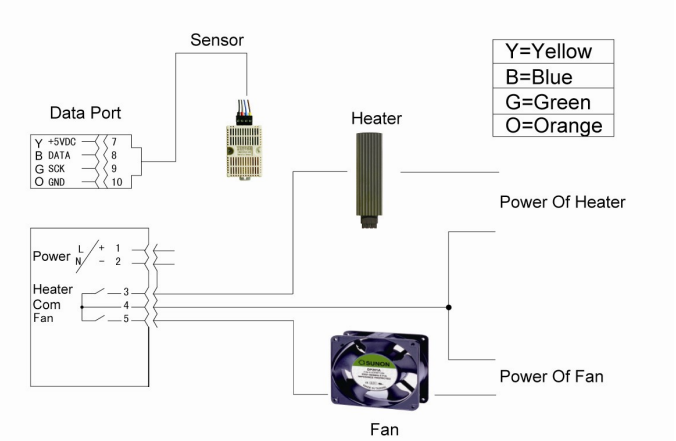
http://www.odes.com.cn 邮编：211800

电话：86-025-58196277 传真：86-025-86552801

Control graph



Connection graph



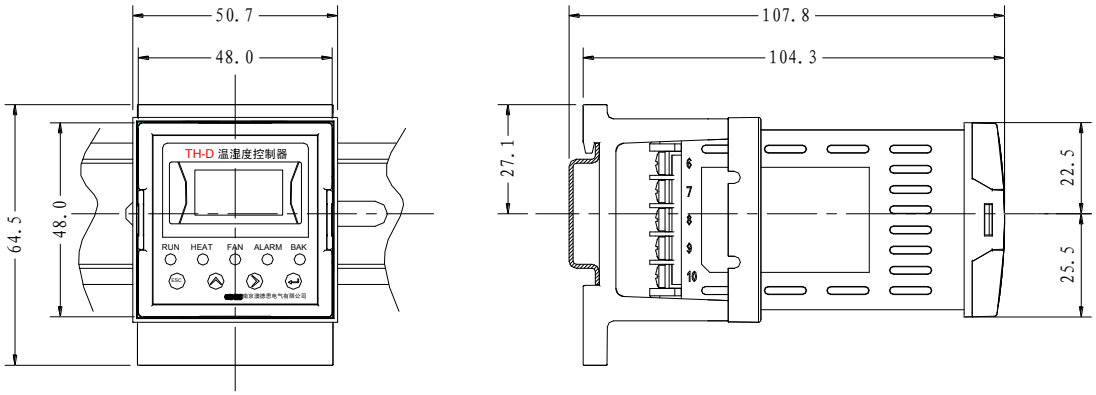
LED indication

“RUN”：run normally **“HEAT”**：heater runs

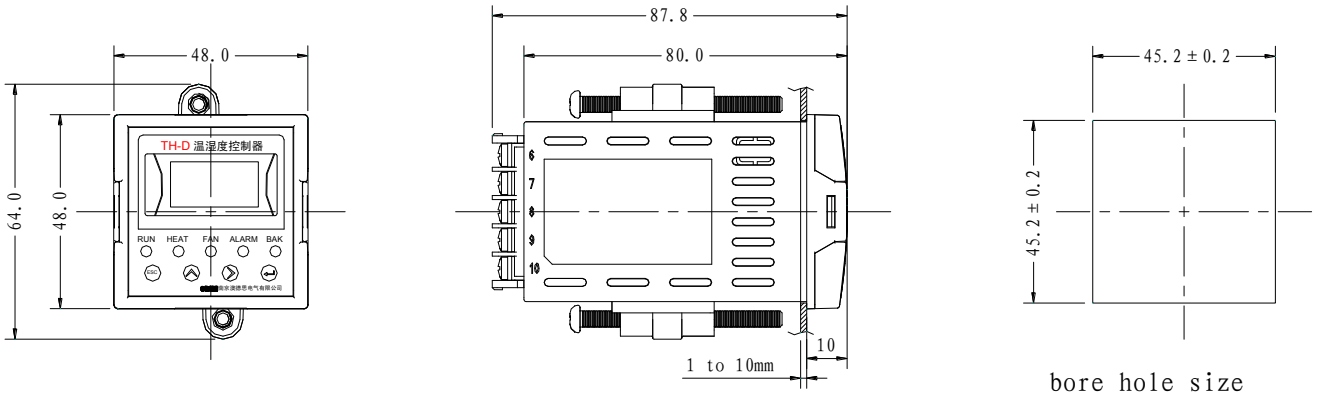
“FAN”：fan runs **“BAK”**：reserve

“ALARM”:fault（disconnection of sensor or over-run of measurement or sensor failure or EEPROM failure）

Installation size diagram（mm）



Guide installation



Embedded installation

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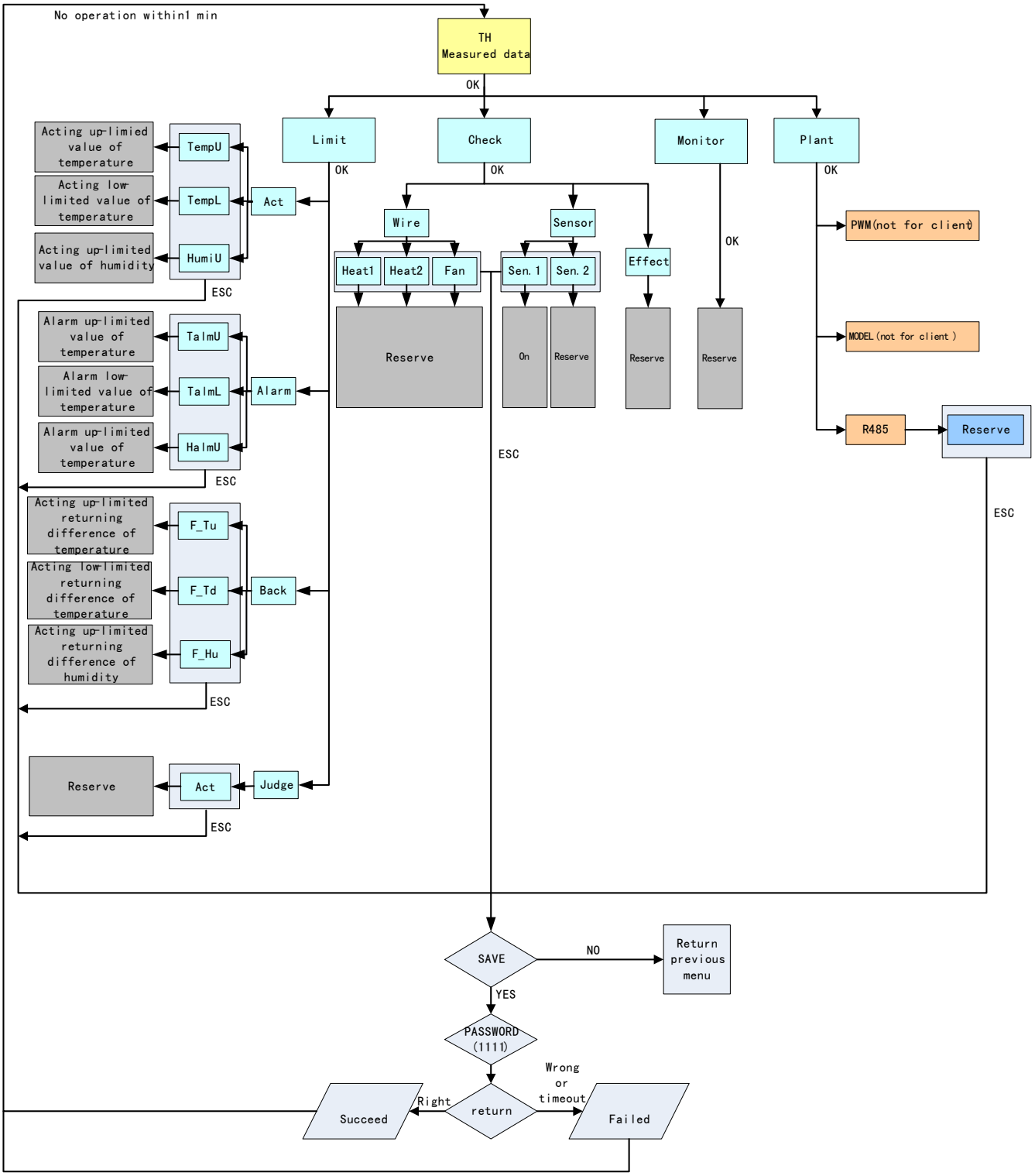
Operation Menu



Limit value setting for acting		Overrun setting for alarm	
Up-limited of temperature	40℃	Up-limited of temperature	40℃
Low-limited of temperature	0℃	Low-limited of temperature	0℃
Up-limited of humidity	70%RH	Up-limited of humidity	70%RH
Up-limited returning differ-ence of temperature	10℃		
Low-limited returning differ-ence of temperature	5℃		
Up-limited returning differ-ence of humidity	10%RH		

Default value is in the table above.

Press "▲" to choose, press "►" to move, press "OK" to confirm , press "ESC" to return or save setting.

A、Press "OK" to enter into "Device_Setup" interface. Press "OK" to enter into "Limit_Setup" inter-face . Choose "Act", then press "OK" , and choose "TempU" , then press "OK" , then press"►"to move the bit of reverse display , and press"▲""▼"to modify the value of this bit ,in this way, modify TempU to 040.0. After finishing setting , press "OK" to return to the previous menu.

B、Like steps above , in order to set "TempL = 000.0", "HumiU = 70.0".

C、after finishing setting , press "ESC" to enter into "Save" interface , then choose "Yes", and press "OK" to enter into "Password" interface , then press"▲"to modify current bit and press"►"to move the bit of reverse display . Enter the password"1111"in final and then press "OK" to complete set-ting.

D、Like steps above , enter into "Limit_Setup" interface , then choose "Alarm" to set alarm value of overrun.

E、Like steps above , enter into "Limit_Setup" interface , then choose "Back" to set limited returning difference of operation.

F、During the setting process , if there is no keyboard operation within 1 minute the controller will fail to save the current setting and exit the setting interface.

Setting rules

Range of temperature for acting：-30℃～+70℃

Returning difference of setting temperature for acting should be set within 1℃～10℃

Up-limited value of temperature for acting≥Low-limited value of temperature for acting +10℃

Up-limited value of temperature for acting - Up-limited returning difference of temperature for acting≥Low-limited value of temperature for acting + low-limited returning difference of temperature for acting

Setting range of humidity for acting：20%RH～85%RH (indicate Up-limited value ,not refer to Low-limited value)

Returning difference of humidity for acting should be set within 5%RH～20%RH

Range of temperature for alarm：-30℃～+70℃

Up-limited value of temperature for alarm≥Low-limited value of temperature for alarm +10℃

Setting range of humidity for alarm：20%RH～85%RH (indicate Up-limited value ,not refer to Low-limited value)