

Reference No.: KSTAT-WF11-FC-4DMW24 Series



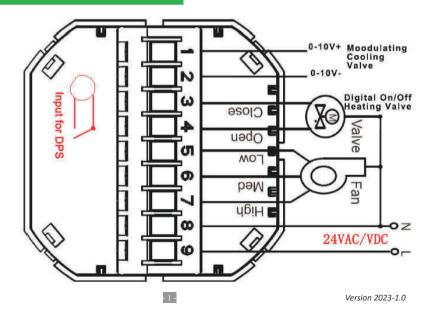
#### General

KSTAT-WF11-FC-4DMW24 series fan coil thermostat is designed with 3 fan speed and 1 cool modulating valve and 1 digital on/off valve output solution, it is widely used in these environment like Homes, Residential buildings, Schools, Hotels, Hospitals, Offices and etc. to main an ideal room temperature purpose.

#### **Features**

- Snap-In Easy Installation
- Fit for EU & Standard Junction Electric Box
- Fashion Sense of Science and Technology
- WiFi

# **Typical Wiring**





## **Fan Coil Thermostat**

Reference No.: KSTAT-WF11-FC-4DMW24 Series

## **Specification**

Power Supply	24Vac/Vdc, 50/60Hz	Sensor	NTC3950, 10K
Current Load	Fan Relay 5A(3A-inductive)	Temperature Accuracy	$\pm$ 0.5°C or $\pm$ 1°F
	Valve Relay 3A(1A-inductive)	Set-Point Range	5~35°C
Storage Temp.	-5 ~ 45 °C	Display Temp. Range	5~99°C
Power Consumption	< 1.5W	Timing Error	< 1%
Housing Material	PC +ABS ( Fireproof)	Installation Box	EU or Standard Electric Box
Wires on Terminals	Wire 2 x 1.5 mm <sup>2</sup> or 1 x 2.5 mm <sup>2</sup>		
<b>Protection Class</b>	IP20	<b>Operating Buttons</b>	Capacitive Touch Buttons

#### Installation

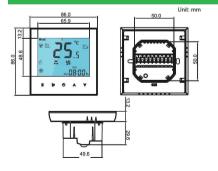


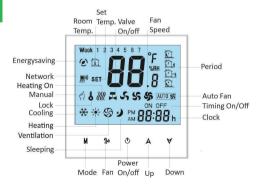


WARNING: RISK OF ELECTRICAL SHOCK. Disconnect power supply before making electrical connection. Contact with components carrying hazardous voltage can cause electrical shock and may result in severe personal injury or death.

- Make sure the power is OFF! Try turning ON your heating/cooling system by changing the temperature. If you can't get the system to turn ON in 5 minutes, you'll know the power is OFF.
- Take off the installation faceplate by rotating and gently pulling, then connect voltage supply/load output/external sensor(if with) wires respectively to appropriate terminals.
- Fix the installation plate onto the electric junction box with screws packed in the box.
- Fasten the thermostat display part and the installation faceplate through the groove. (Installation process completed)

# **Dimensions and Display**





- 2 -



Reference No.: KSTAT-WF11-FC-4DMW24 Series

## **Operation**

<b>Buttons/Functions</b>	Operation		
Ф	Switch thermostat power On or Off		
y A	Increase or decrease set-point or parameters		
\$	Select the Fan Speed in Auto-Hign-Medium-Low-Auto		
Lock/Unlock	Press these 2 buttons <b>A Y</b> simultaneously and hold for 5 seconds to lock/unlock thermostat.  Notes: In parameter 3 of ISU process, Full/Half lock configurable.		
M	Switch among Heating or Cooling or Ventilation mode		

# **Installer Set-UP Process (ISU)**

The installation personnel with non-professional training shall not perform this operation!

During thermostat power off, Press these 2 buttons M & simultaneously and hold for 5 seconds to enter ISU process. Press ★ ▼ to adjust the configurable parameter value, and press M to switch to next parameters.

The ISU process will automatically exit and be confirmed after 5 seconds with no operation.

Parameter	Function	Configurable Value	Default
1	Temperature calibration	-9°C to +9°C (internal sensor)	-3
2	Fan Control Type	00:When room temp. reaches set point, the fan turns off 01:When room temp. reaches set point, the fan turns to low	00
3	Keypad Lock type	00: = All buttons will lock except the Power button 01: = All buttons will lock	01
4	Heating/Cooling	00: Cool only 01:Heating and Cooling	01
5	Min. set-point limit	5°C – 15°C	05
6	Max. set-point limit	15°C – 35°C	35
7	12/24 hours format	00:12h 01:24h	01
8	Temperature Display	<ul><li>00: display both set-point and room temp.</li><li>01: display set-point only</li></ul>	00
9	Dead Zone	1°C to 5°C (Switching differential)	1
10	Heating Valve Type	0=Normally Open, 1=Normally Closed	0
Р	P value-Note 1	1-10	02
I	I value- <sup>Note 2</sup>	1s-60S	40S
С	Device Program Version Nur	nber	905

- 3 -



#### **Fan Coil Thermostat**

Reference No.: KSTAT-WF11-FC-4DMW24 Series

Notes:

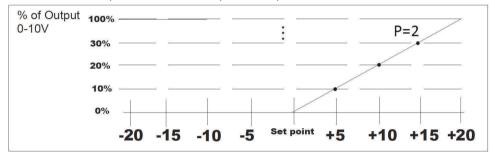
#### 1.Definition of P value

The proportional band is the amount of change required by the ambient temperature for the output to go from 0 to 100%. It can be adjust from  $1^{\sim}10$ . Factory default is 2.

The P value is bigger, the change of valve output will be bigger; The P value is smaller, the change of valve output will be smaller. For example, when P=2, the temperature difference between ambient temperature and setpoint is 5°C, the valve will open about 10%; when P=4, the temperature difference between ambient temperature and setpoint is 5°C, the valve will open 20%.

#### Cool mode(P-band: 2)

When the ambient temperature is above the set point the output is somewhere between 0~100%.



#### 2. Definition of I value

This feature allows you to set the integral action time for the integral to run from 0-100%.

The value required depends on the reaction time of the control loop.

If the time is chosen too short, the control loop will become instable and oscillate.

If the time is chosen too long, the control loop will become sluggish.

It can be adjusted from 1s-60s.

Factory default set as 40s.

# Warranty



- Products are warranted for 2 full year (checking and repairing services) from the date of purchase which products are not being damaged by any man-made factors.
- Service outwith the warranty period may incur an extra charge.
- More details please contact with supplier directly.

Version 2023-1.0 -4 - Version 2023-1.0



Reference No.: KSTAT-WF11-FC-4DMW24 Series

#### Wifi Connection

#### Step 1- Download and Install APP

Use your smart phone or tablet PC to scan the QR code below or Search "SMART LIFE" in the app store /Google play to download and install APP.







App Icon

For ios system

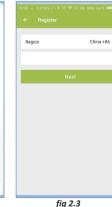
For Android system

#### Step 2- Register your account

- Open "SMART LIFE" application, click "Allow" on the pop up notification dialog(fig 2.1)
- Press "register" button on the register page(fig2.2)
- Select your region and type in your phone No. or email (fig 2.3) then you may get a verification code.
   Type in your password and confirm (fig 2.4) to complete your registration.
- If you already have an account, please just log in.









**Step 3- Connect App with Thermostat** 

#### On the thermostat

fig 2.1

During power off status, press and hold the arrow icon ♥ for 8 sec until the connecting icon 🗐 appears on the thermostat screen and flashes once a sec.

- 5 -

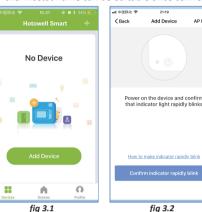


## **Fan Coil Thermostat**

Reference No.: KSTAT-WF11-FC-4DMW24 Series

#### On the App

- Press the "+" on the upper right corner of the page (see Fig 3.1) or "Add Device" to add "Thermostat".
- Click "Confirm indicator rapidly blink" (Fig 3.2) then select your network and back to your App to enter the password of your wireless router(Fig.3.3) and confirm.
- The App will connect with the thermostat successfully. The connecting process takes 5~90 sec, the thermostat name can be editable once connected.(Fig.4.4)







,,9 -

fiq 3.4

Version 2023-1.0

## **Alternative AP mode Connection**

### \*\*\*If the thermostat has already been connected under above steps, please ignore this process.\*\*\*

This **SMART LIFE** App is only supported on 2.4GHz Wi-Fi channels.

If the router does not be supported, or the wi-fi signal is weak or thermostat can not be connected as above steps, please try this AP mode connection process.

#### On the thermostat

- During power off status, press and hold the arrow icon ▼ for 8 sec until the )necting icon appears on the thermostat screen and flashes once a sec.
- press and hold the arrow icon  $\forall$  for 8 sec again, the icon  $\bigcirc$  will flash once per 3 sec. (fig 4.1)



Indicates connecting from AP mode.

#### On the App

- Click "Confirm indicator slowly blink" (fig 4.1) then select your network and back to your app to enter the password of your wireless router (fig 4.2) and confirm. The app will go into the page(fig 4.3)
- Press "Connect now" to select the wifi signal Smart life-XXXX from the thermostat(fig 4.3).
- This AP mode connection process may typically take approx. 5~90 seconds to complete.
- The thermostat name can be edited after connection (fig 4.4).

Version 2023-1.0 - 6 -



Reference No.: KSTAT-WF11-FC-4DMW24 Series









Version 2023-1.0

fig 4.1

## **Operation Icons on APP**

App Icons	Functions
<b>©</b>	Switch thermostat power On or Off
<b>6</b>	Lock/Unlock Icon. Locked=Green, Unlocked=Grey
0	Economy mode. The thermostat runs with the set-point configured as Parameter B in ISU Economy set-point=20°C in default.
0	Thermostat runs in Manual Mode
<b>@</b>	Thermostat runs in Programmable Mode
•	System in Cooling Mode
	System in Heating Mode
	System in Ventilation Mode
😽 Low >	Fan Speed Indicator

# **Programmable Schedule Setting**

When thermostat runs in programmable mode, click the "schedule setting" to switch to the schedule page, where you can simply configure the weekly programmable 5+2 schedule up to 6 period each day. (Workdays=Monday~Friday, Weekend=Saturday and Sunday)

Click "Complete" to save the configuration.



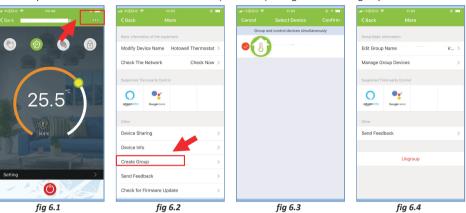


## **Fan Coil Thermostat**

Reference No.: KSTAT-WF11-FC-4DMW24 Series

## **Group Control and Info. Modify**

- Press the menu button as fig 6.1, then click "Create Group". Select all the rooms you want and confirm.(fig 6.2 and fig 6.3), edit the group name or ungroup as fig 6.3 and fig 6.4
- Group Control allows to control all thermostats( $+\infty$  units) configuration in the group at the same time.



## **Share Thermostat with Others**

- Method 1: Click "Share with Familay" as fig 4.4.
- Method 2: Click "Profile">"Sent">"Add">Switch on the device>"Share with New Member">Type in the telephone number you would like to share with.
- Method 3:Home page of the device>Menu(as fig 6.1)>"Device Sharing">"Add">>Type in the telephone number you would like to share with.

## **Work with 3rd party Echo Control**

Click "Profile">"Integration">Select amazon echo/Google Home/IFTTT>"Use Now" Details as below fig 7.1 and 7.2.



fig 7.1

fig 7.2

Version 2023-1.0



Reference No.: KSTAT-WF11-FC-4DMW24 Series

## **Customize Scene**

- This process is to customize your own personal scenes to suit your needs, for example, set your home temperature automatically when you come back home.
- There are 4 scenes in default setting, and can be added/deleted at will.
- Here set an example of a specific scene: "leave home for holiday" and turn on the thermostat when temperature lower than 5°C
- Scenes(fig 8.1)>+>Enter a name for the scene(fig 8.2)>Add a condition(Below 5°C as fig 8.3)>Add a Task(fig 8.4)>Save



# **Trouble Shooting**

No.	If	Then
1	Power is on but without display.	■ Check if the terminals between LCD panel and Relay/Power Module is loosen.
2	Without output but display works.	■ Use a new LCD panel or new Relay/Power Module for Replacement
3	Room Temp. on display is not correct	■ Do temperature calibration in parameter in ISU
4	Heating system does not respond	<ul> <li>Set the mode to heating by press-ing the M button.</li> <li>Make sure the temperature is set above the room temperature.</li> <li>Make sure "heat on" icon shows on the display.</li> <li>Wait 5 minutes for the system to respond.</li> </ul>
5	The M or Increase/Decrease button doesn't work	<ul><li>Make sure keypad is unlocked.</li><li>Check that thermostat is on.</li></ul>

Notice: Hotowell reserves all the right for the final explanation. The manual is subject to change without further notice.



Version 2023-1.0