



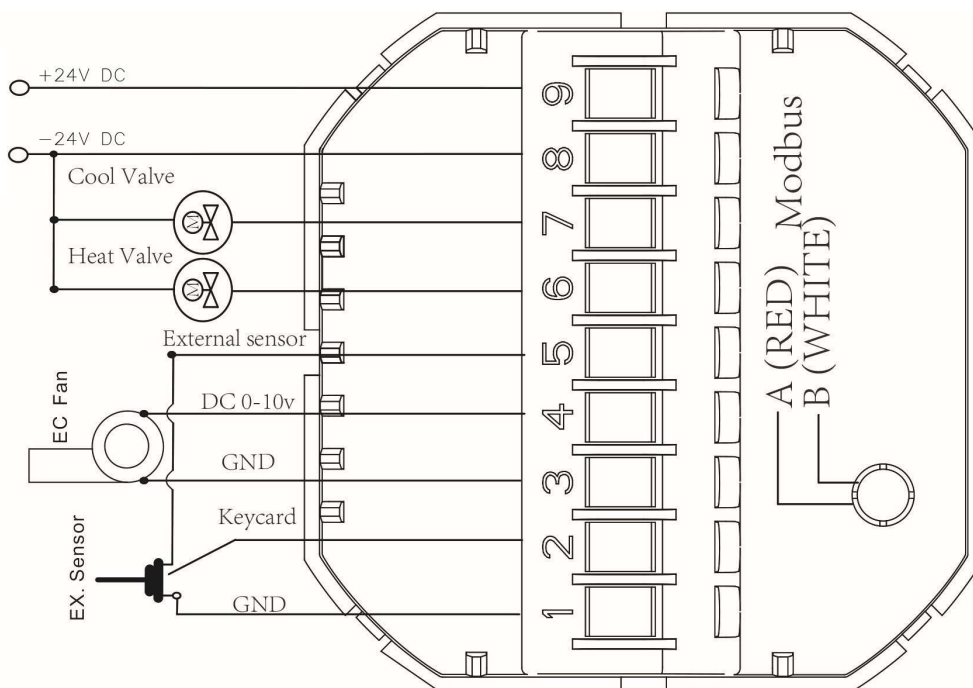
General

VERANO-1 series Modbus fan coil thermostat is widely used in these environment like Homes, Residential buildings, Schools, Hotels, Hospitals, Offices and etc. to main an ideal room temperature purpose.

Features

- EC fan control with starting voltage configurable
- Snap-In Easy Installation
- Fit for EU & Standard Junction Electric Box
- Modbus Communication
- 2/4 pipe system configurable
- Fashion Sense of Science and Technology
- Key-Card, External Sensor
- Auto Heat/Cool Changeover

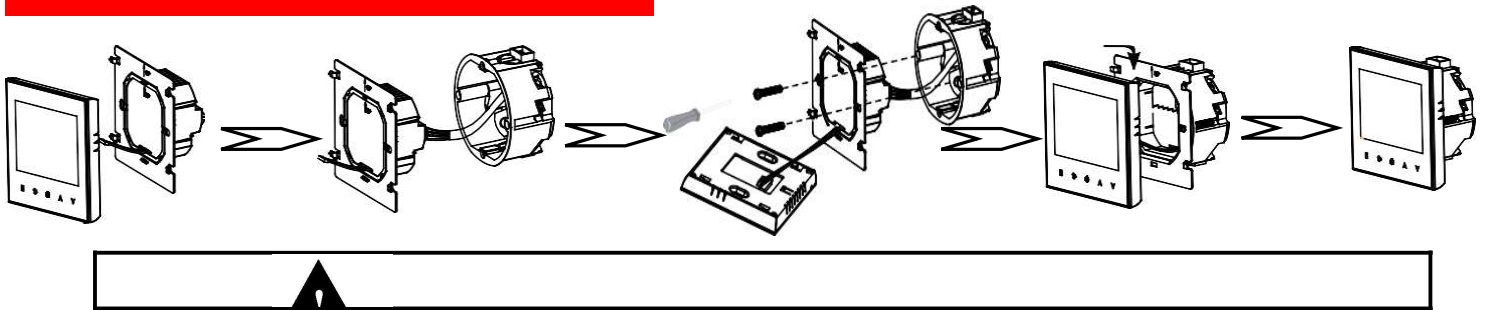
Typical Wiring



Specification

Power Supply	24Vac/24Vdc, 50/60Hz	Sensor	NTC3950, 10K
Current Load	EC Fan DC 0-10V Valve Relay 5A(3A-inductive)	Temperature Accuracy	±0.5°C or ±1°F
Storage Temp.	-5 ~ 45 °C	Set-Point Range	5~35°C
Power Consumption	< 1.5W	Display Temp. Range	5 ~ 99°C
Housing Material	PC +ABS (Fireproof)	Timing Error	< 1%
Wires on Terminals	Wire 2 x 1.5 mm ² or 1 x 2.5 mm ²	Installation Box	EU or Standard Electric Box
Protection Class	IP20	Operating Buttons	Capacitive Touch Buttons

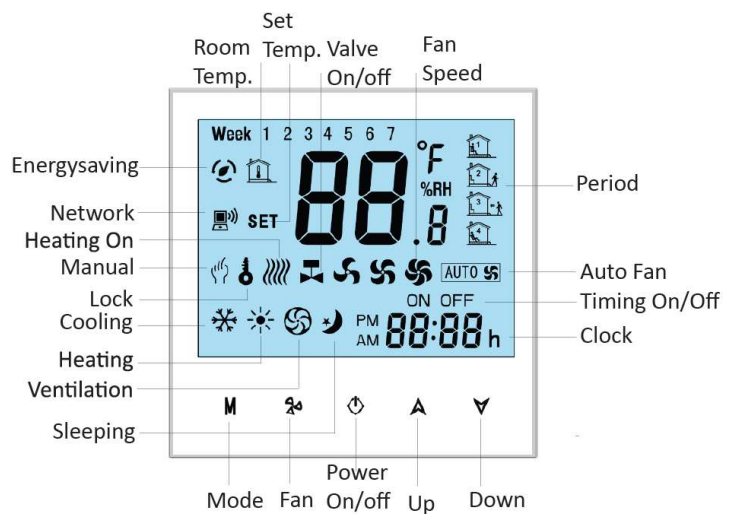
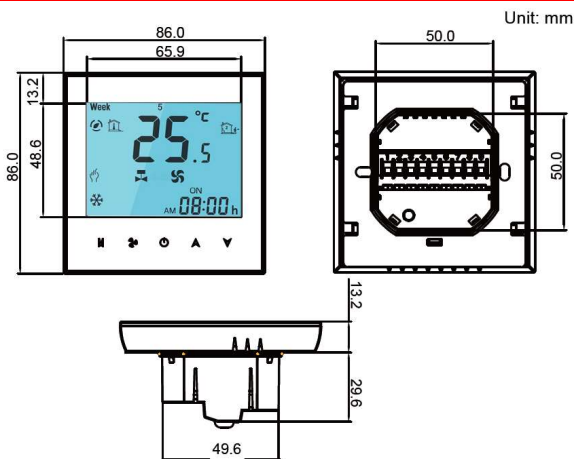
Installation








WARNING: RISK OF ELECTRICAL SHOCK. Disconnect power supply before making electrical connection.

- 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



Operation

Buttons/Functions	Operation
	Switch thermostat power On or Off
	Increase or decrease set-point or parameters, press and hold 6 s to lock/unlock keypads
	Select the Fan Speed in Auto-High-Medium-Low-Auto
Lock/Unlock	Press these 2 buttons  simultaneously and hold for 5 seconds to lock/unlock thermostat. <i>Notes: In parameter 3 of ISU process, Full/Half lock configurable.</i>
M	Short press M switch among Heating/Cooling/Ventilation(P4=02)
External Temp. Display	Press and hold the  for 5 sec. to display the temp. of external sensor(if with).

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 150 seconds to enter ISU process. Press  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)	-2
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 Changeover Possibility	00: Cool only; 01= Heat Only; 02:Manual Heating/Cooling/Ventilation; 03=Auto Mode <i>Note ①</i>	03
5	Min. set-point limit	5°C - 15°C	05
6	Max. set-point limit	15°C - 35°C	35
7	Return to Factory Setting	00:No 01:Activated. <i>Please long press Power Button for 5 sec after configured as 01 to return to factory setting.</i>	00
8	Temperature Display	00: display both set-point and room temp. 01: display set-point only	00
9	System status when Key-card removed	00: Energy Saving mode 01: Standby Mode(stop all outputs)	00
10	2/4 pipe system	2=2 pipe system 4=4 pipe system	4
11	S1: EC Fan starting voltage	0-S2	1
12	S2: EC Fan Max. voltage	S1-10	8

13	P1=Low Speed	% (S2-S1) +S1, Range:0-15	10
14	P2=Medium Speed	% (S2-S1) +S1, Range:30-75	65
15	P3=High Speed	% (S2-S1) +S1, Range:80-100	100
16	Sensor Selection	1=Internal Sensor 2=External Sensor 3=Internal and External Sensor	1
A	Auto Working Mode Types ^{Note ②}	1= RT/ST Auto Mode ^{Note ③} 2= RS Auto Mode ^{Note ④}	1
B	Heating Economy Temperature	10°C - 20°C	15
C	Cooling Economy Temperature	25°C - 35°C	30
D	Dead Zone	1°C to 5°C (Switching differential)	1
E	Modbus IP MAC	0X00-0XFF	01
F	Baud Rate	1: 9600; 2: 19200; 3: 38400; 4: 56000; 5: 115200	1
G	EC Fan Running Delay	0=No delay, 1=2min delay	1
H	Key Card Type	0=Normally Open type, 1=Normally Closed type	0
L	Software Version		802

Notes:

① When P4=03=Auto Mode, M button operation invalid, and the system Heating/Cooling changeover automatically switched according to the method of PA configured.

② Only when P4 configured= 03 Auto Mode can PA-Auto Working Mode Types be configurable.

>>if P10=2 pipe system, PA auto configured as RS Auto Mode

>>if P10=4 pipe system(default), PA auto configured as RT/ST Auto Mode

③ RT/ST Auto Mode=The Heating/Cooling mode auto switched according to the temperature distance between Room Temperature(RT) and Set-Point(ST):

ST>RT, system works in heating mode, ST<RT, system works in cooling mode.

RT/ST Auto Mode only activated in 4 pipe system, i.e. P10=4.

④ RS Auto Mode=Remote Sensor Auto mode, The Heating/Cooling mode auto switched according to the temperature distance between Room Temperature(RT) and Remote Sensor Temperature(RS).

RS>RT, system works in heating mode, RS<RT, system works in cooling mode.

RS Auto Mode only activated when below 3 conditions achieved:

>>P10=2 pipe system

>>P16=3 Internal and External Sensor active.

>>When the External Sensor

“ERR” will display if P4 and P16 wrongly configured.