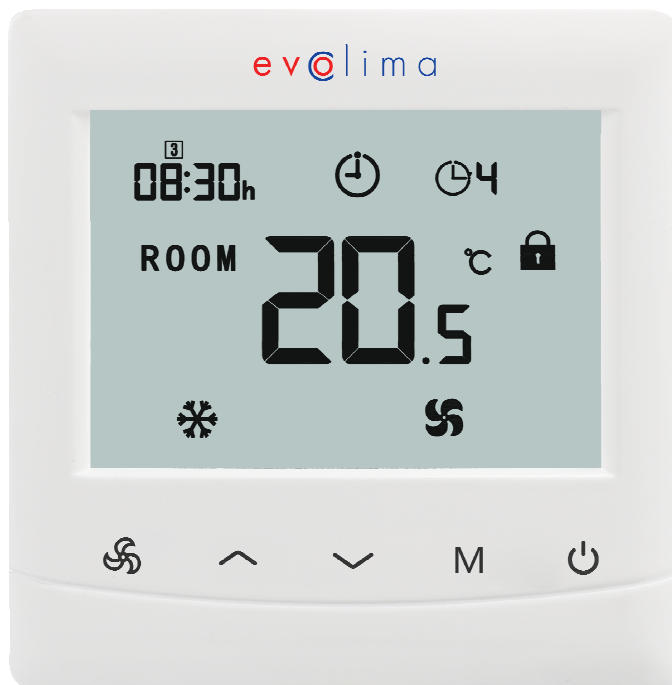


Evoclima Room Thermostat (2/4 Pipes, WIFI, MODBUS RTU)



This digital thermostat is designed to controls the fans, valves, dampers or electric heater in fan coil units and heating applications in industrial, commercial or residential environment.



Technical Data

Power Supply	- 230V	Backlight	- White
Power Consumption	- 1.5A	Sensor	- NTC 10K, 3950ohms at 25°C
Set Point Range	- 5~35°C	Accuracy	- ± 1°C (step control by +0.5°C)
Ambient	- 0~50°C	Protection Class	- IP30
Relative Humidity	- 85%	Housing	- ABS to UL94-5 fire retardant plastic



Features

- Attractive modern styling
- Adjustable heating/cooling/ventilating mode control
- 3 fan speed
- 4 pipe system
- Lock/Unlock
- Modbus
- External sensor

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Child Lock

Refer to the Menu 20 of Parameter setting to lock it, Press  and  button at the same time to unlock it.




Mode setting

Press **M** to adjust Heat Mode, Cool Mode, Heat/Cool Mode, and Ventilation Mode

Fan Speed Adjust

Press  icon can adjust the fan speed from off-low-medium-high the fan.

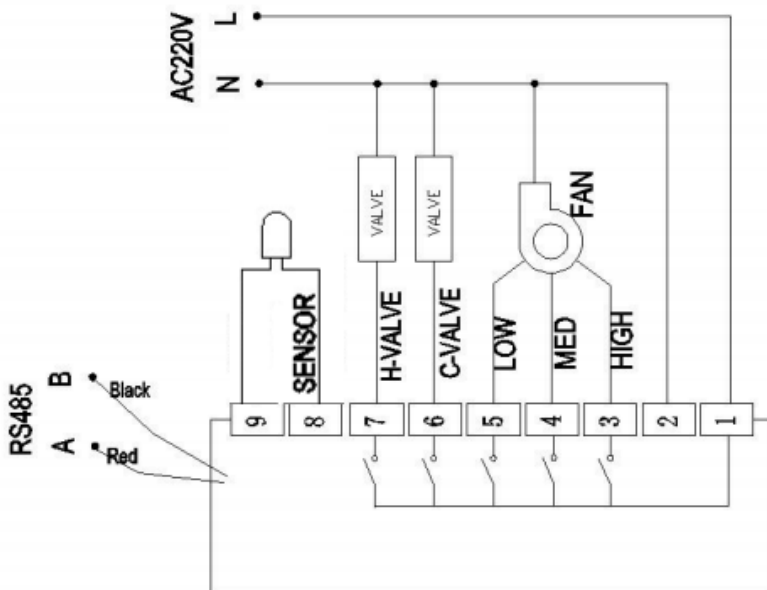
Parameters setting

To access parameter, turn thermostat off, long press **M** and  button. You can use **M** to adjust the Menu item, and use   to adjust the value each menu

<u>Menu</u>	<u>Description</u>	<u>Range</u>	<u>Default</u>
01	Temp. Offset	-8 °C ~8°C	0 °C
03	Working Mode Select	Heat Mode; Cool Mode; Heat&Cool Mode; Ventilation Mode	Heat&Cool Mode
04	Set Point High Limit	5 °C ~35°C	35°C
05	Set Point Low Limit	5 °C ~35°C	5°C
11	Dead Band	0.5 °C ~3°C	1°C
12	Sensor Select	0: Internal sensor (as room temp.) 1: External sensor (as room temp.) 2: Internal & External sensor(internal sensor as room temp. , external sensor as water temp. probe) 3: Internal or External sensor (as room temp.)	3
14	Modbus address	1-254	1
15	Fan Settings when arrive setpoint.	0: No stop, work in low fan speed 1: Stop	0
16	Child Lock	0: Unlock 1: Lock	0
17	2/4 pipe system select	2: 2 pipe 4: 4 pipe	2
18	Factory Reset	0: NO	

		1: Yes, then long press on/off until restart	
19	Software version		
30	Bandrate select	24: 2400bps 48: 4800bps 96:9600bps 144:14400bps 192: 19200bps	48
31	Parity	0: NONE E: EVEN Odd: Odd	0
51	The water temperature max. in heat mode	30°C ~60°C	35°C
52	The water temperature max. in cool mode	5°C ~30°C	20°C
53	Water Temperature Offset	-8 °C ~8°C	0°C

Wiring Diagram



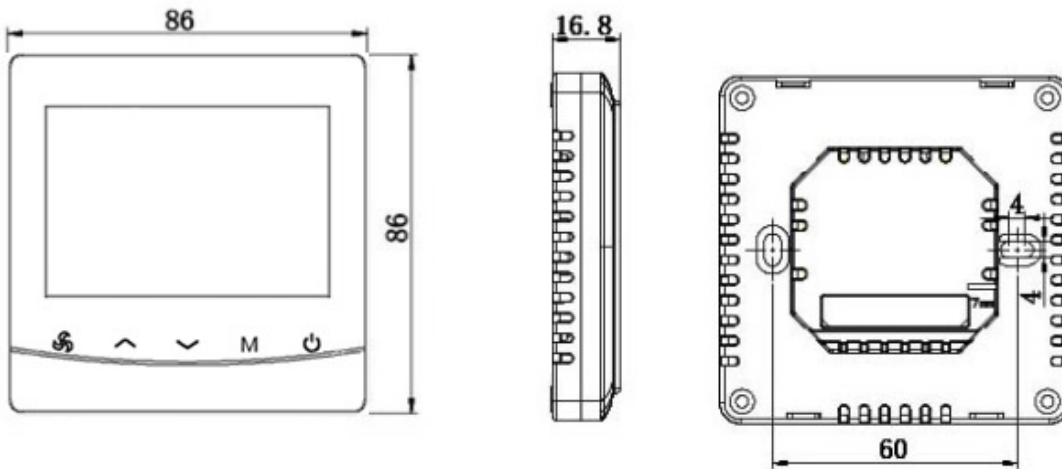
Notes:

When sensor select 2 at parameter setting item2, terminal 8 and terminal 9 connected sensor will be used for water temperature probe.

At heating mode, when water temperature below 35°C (settable at parameter setting menu 51) thermostat will stop fan coil and valve no matter room temperature arrive or not;

At Cooling mode, when water temperature above 20°C (settable at parameter setting menu 52), thermostat will stop fan coil and valve no matter room temperature arrive or not.

Size




Modbus Protocol

Default: Baud rate : 4800 No Parity bit, 8 Data bit, 1 Stop bit, address 1.

Address	Item	R/W	Description								
40000	On/off	RW	0x55:ON; 0xAA:OFF								
40001	Key lock	RW	0x55:Lock; 0xAA:Unlock								
40002	Work mode	RW	0x00:Fan; 0x11:Cool; 0x22:Heat; 0x33:Auto (Only 4 pipes)								
40003	Fan speed	RW	0x00:Auto; 0x01:Low; 0x02:Middle; 0x03:High								
40004	Relay status	R	<p>Bit define</p> <table border="1" style="margin-left: 20px;"> <tr> <td>BIT7</td> <td>BIT6</td> <td>BIT5</td> <td>BIT4</td> <td>BIT3</td> <td>BIT2</td> <td>BIT1</td> <td>BIT0</td> </tr> </table> <p>1: Relay output; 0: No relay output</p> <p>BIT0: Low fan</p> <p>BIT1: Mid fan</p> <p>BIT2: High fan</p> <p>BIT3: Valve status (2 pipes) OR Cold valve status (4 pipes)</p> <p>BIT4: Heat valve status (4 pipes)</p>	BIT7	BIT6	BIT5	BIT4	BIT3	BIT2	BIT1	BIT0
BIT7	BIT6	BIT5	BIT4	BIT3	BIT2	BIT1	BIT0				
40005	Room temp.	R	Data = Room temp. * 10								
40006	Setpoint	RW	Data = Setpoint * 10								
40007	Key-card status	R	0: Unoccupied 1: Occupied								
40008	Extern temp.	R	Data = Extern temp. * 10								
40009	PI Output1	R	Valve 0~10V Output Value (2 pipes) OR Cold Valve 0~10V Output Value (4 pipes) Data = Value * 10								

40010	PI Output2	R	Heat Valve 0~10V Output Value (4 pipes) Data = Value * 10
40011	Window Contact status	R	0: Unoccupied 1: Occupied
40012	Software version	R	

Connecting to Tuya SmartLife (WIFI):

To enter pairing mode, while the unit is ON, long press the power button until the WIFI icon appears, then press “  ” button until the WIFI icon flashes.