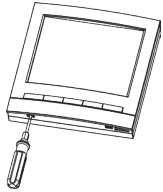
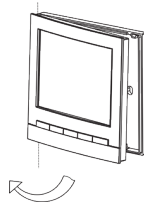


The fan coil thermostats are designed for use in commercial buildings, hotels, hospitals, and airports etc. These devices support 2-pipe and can integrate with BMS via the Modbus protocol. Equipped with microprocessor-based control and large backlit LCD screens, the thermostats provide clear information on operational status (cooling, heating, and ventilation), fan speed, room temperature, and set point.

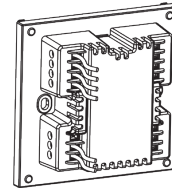
**Mounting Method**



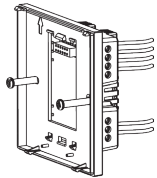
**Step 1**  
Disassemble the main control board by using a 3.5mm wide flat screwdriver. Insert it 4mm deep into the card slot along the slope, then gently pry upward with slight force to release the hook mechanism.



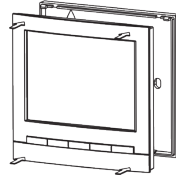
**Step 2**  
Lift the upper shell upward to separate it from the lower shell.



**Step 3**  
Connect the wiring correctly according to the provided wiring diagram.



**Step 4**  
Take out the screws from the packaging box, then mount the lower case onto the wall junction box following the orientation shown in the figure.



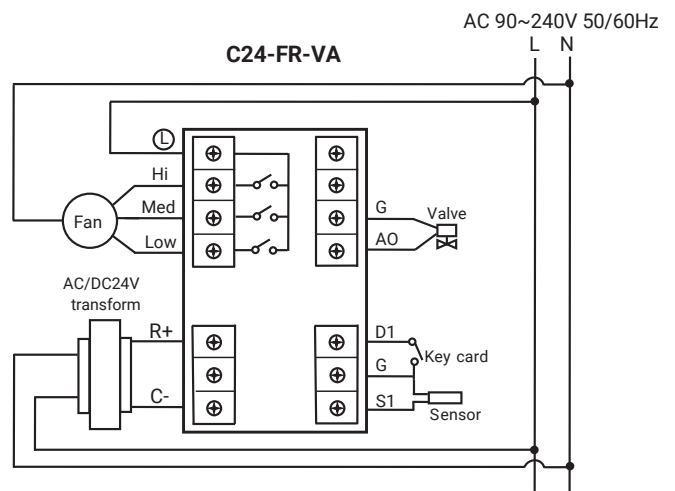
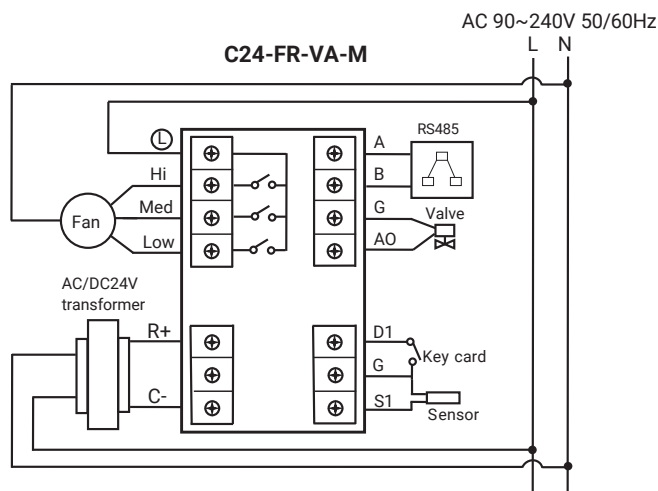
**Step 5**  
Align the pin headers and female connectors between the upper and lower shells of the thermostat. Push the upper shell straight back onto the lower shell until you hear a "click" sound, confirming that the installation is complete.



**Warning:**

This product must be installed by a qualified professional. Please read this manual thoroughly before installation. Improper installation may result in damage to the equipment. Ensure all wiring is done correctly and strictly follows the provided wiring diagram.

**Wiring Diagram**







## Parameter Setting

Parameter ID	Parameter Name	Default Value	Function Description
1	Key Lock Range	0	00: No lock
			01: Lock power key only
			02: Lock temperature adjustment, no temperature settings only
			04: Lock fan speed key, no fan speed adjustment only
			08: Lock mode setting, no mode adjustment only
4	Temperature Display Correction / Offset	0	Range: -5°C to 5°C, step: 0.5°C
5	Power Restoration Setting	2	00: Device off when power is restored
			01: Device on when power is restored
			02: Maintain original ON/OFF status when power is restored
6	Low-Temperature Protection	0	00: Disable low-temperature protection
			01: Enable low-temperature protection
7	Low-Temperature Protection Threshold	5	Range: 0°C to 17°C, step: 0.5°C
8	Clock and Timer Settings	0	00: No timer
			01: One-time timer (saves timer setting without refresh)
			02: Repeating timer
9	Clock and Period Programming	0	00: No programming
			02: 7-day, 4-period programming
11	Main Display Content	0	00: Indoor temperature
			01: Setpoint temperature
12	Maximum Setpoint Temperature	35	Range: 2°C to 90°C, step: 0.5°C
13	Minimum Setpoint Temperature	5	Range: 0°C to 88°C, step: 0.5°C
16	Differential Setting	1	Range: 1°C to 5°C, step: 0.5°C
26	Door Card Input Type	1	00: Connected: occupied; disconnected: unoccupied
			01: Connected: unoccupied; disconnected: occupied
27	Occupancy Status Options	0	00: Disabled
			01: Unoccupied, energy-saving mode on
			02: Unoccupied, power off
28	In case of External Sensor Failure	0	00: Automatically switch to internal sensor
			01: External sensor failure alarm
29	High-Temperature Alarm Threshold	55	Range: 35°C to 90°C, step: 0.5°C
02U	Cooling/Heating Mode Setting	2	00: Heating only
			01: Cooling only
			02: Cooling/Heating (manual changeover)
06U	DA / DB	0	00: DA: electric valve closed, fan continues to run.
			01: DB: electric valve closed, fan is stopped.
07U	Ventilation Mode	1	00: Disabled
			01: Enabled
08U	Anti-cold Air Delay	0	Range: 0 to 300 seconds, step: 10 seconds
10U	Number of Fan Speed Available	2	00: Single-speed fan
			02: Three-speed fan
			03: No fan speed
01E	Setpoint Temperature in Energy-Saving Mode for Cooling	28	Range: 22°C to 32°C, step: 0.5°C
02E	Setpoint Temperature in Energy-Saving Mode for Heating	16	Range: 10°C to 21°C, step: 0.5°C
03E	Fan Speed in Energy-Saving Mode	1	01: Low speed
			02: Medium speed
			03: High speed

## Parameter Setting

04E	Differential Setting in Energy-Saving Mode	2	Range: 1°C to 5°C, step: 0.5°C
30E	Setpoint Temperature in Sleep Mode for Cooling	28	Range: 0°C to 32°C, step: 0.5°C
31E	Setpoint Temperature in Sleep Mode for Heating and Automatic Mode	7	Range: 0°C to 32°C, step: 0.5°C
01C	Address (Only applicable for C24-FR-VA-M)	1	Range: 01 to 64
02C	Baud Rate (Only applicable for C24-FR-VA-M)	1	00: 4800
			01: 9600
			02: 19200
			03: 38400
03C	Parity Bit (Only applicable for C24-FR-VA-M)	0	00: No parity
			01: Odd parity
			02: Even parity
10A	Cooling Ratio Parameter (P)	10	Range: 1 – 99, step: 1
11A	Heating Ratio Parameter (P)	10	Range: 1 – 99, step: 1
12A	Integration Parameters (I)	1	Range: 0 – 99, step: 1
14A	Control Period	10	Range: 1 – 99 sec, step: 1
16A	Proportional Valve Control Dead Zone	5	Range: 1 – 99 Note: 5 = 0.5°C. When the temperature difference exceeds 0.5°C, the proportional valve begins to operate
17A	Low Voltage / 4mA of the Proportional Valve	2	Range: 0 – 5V, step: 0.1 4mA: Set as 0
18A	High Voltage / 20mA of the Proportional Valve	10	Range: 17A setting value – 10V, step: 0.1 20mA: Set as 10
01o	Software Version	--	Displays current software version
02o	Restore Default Parameters	0	00: Retain user-defined parameters
			01: Restore factory parameters
05o	Protocol Version (Only applicable for C24-FR-VA-M)	--	Displays current protocol version

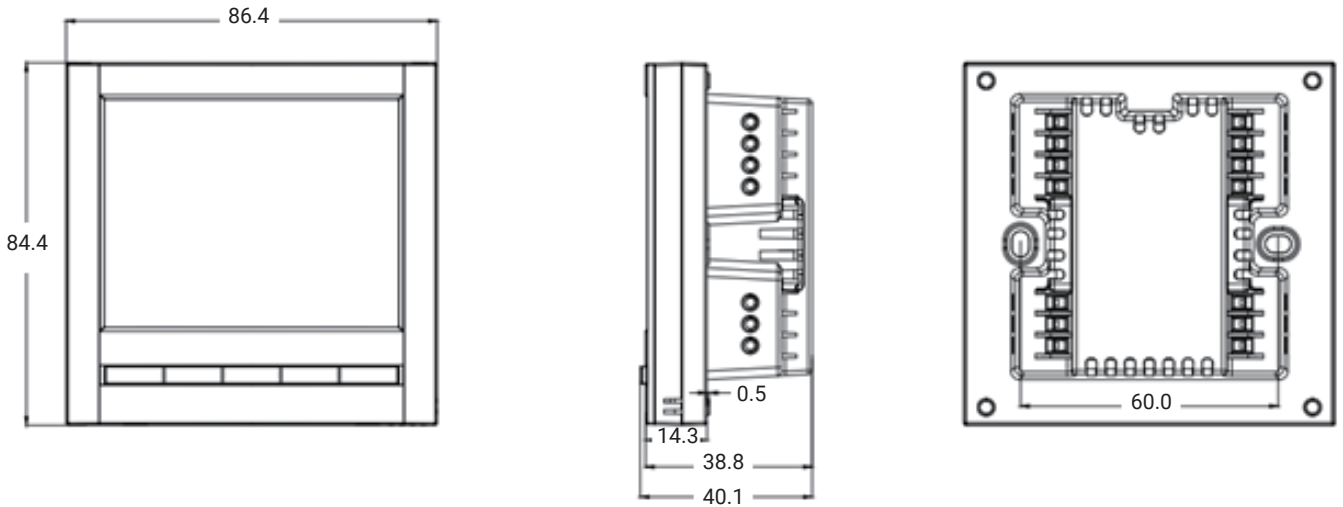
## Basic operation

Mode	Press "M" to change between cooling, heating, and ventilation modes.
Fan speed	Low  Med  High  Auto 
Power restoration setting	Last status will resume after power failure or switch off.
Temperature offset	In powered-off state, press and hold "A" up and "V" down keys for 5 seconds, range: -5° to 5°C.
Keyboard unlock	Press "M" and "V" down keys for 5 seconds.
Sleep mode	Press "M" key for 3 seconds.
View parameters	With the device powered off, press and hold "U" + "V" down keys for 5 seconds.
Set parameters	In the parameter settings interface, press "M" or "⌘" keys to switch between parameters. Use "A" up or "V" down keys to adjust the parameter settings. The settings will be automatically confirmed after 6 seconds of inactivity, or you can press "U" key to save immediately. <i>Note: After confirming, keep the device powered on for at least 30 seconds to save the parameters to memory.</i>

## Specifications

Terminal sizing	2 x 1.5 mm <sup>2</sup> or 1 x 2.5 mm <sup>2</sup> conductors
Screw terminals maximum torque	0.44 Nm
Mode of operation	Type 1 (according to EN 60730-1)
Pollution degree	2 (according to EN 60730-1)
Protection class	II Double Insulation
Rated impulse voltage	4000V

Dimensions [mm]



Safety notes



Read and understand instructions manual before using this equipment. Failure to follow operating instructions could result in death or serious injury.



[www.belimo.com/safety-notes](http://www.belimo.com/safety-notes)

For customer information according REACH regulation (EC) No 1907/2006 Article 33 on substances of very high concern (SVHC) follow the link or QR code



Importer to UK  
BELIMO Automation UK Ltd, Shepperton Business Park, Govett Avenue, SHEPPERTON, MIDDLESEX, TW17 8BA, ENGLAND

质量检验合格 Quality Inspection Passed

China RoHS - Product Declaration

Applicable to your product if it shows the China RoHS Symbol on the Label

- Electric actuators
  - Rotary actuators
  - Globe valve actuators
  - Linear actuators
- Actuator-valve-combinations
  - Electric actuator + Linkage +
  - Globe valve or
  - Rotary valve
- Energy Valve
- EPIV
- Sensors
- Electrical accessory

Part Name <sup>1)</sup>	Hazardous Substances Declaration									
	Pb (Lead)	Hg (Mercury)	Cd (Cadmium)	CrVI (Hexavalena Chromium)	PBB (Polybrominated biphenyls)	PBDE (Polybrominated diphenyl ethers)	DEHP (Diethyl hexyl phthalate)	BBP (Butyl benzyl phthalate)	DBP (Di-butyl phthalate)	DIBP (Diisobutyl phthalate)
Electronics	x	o	o	o	o	o	o	o	o	o
Motor <sup>2)</sup>	x	o	o	o	o	o	o	o	o	o
Gearbox <sup>2)</sup>	x	o	o	o	o	o	o	o	o	o
Accessory (metallic removable parts)	x	o	o	o	o	o	o	o	o	o
Valve, Flow unit <sup>3)</sup>	x	o	o	o	o	o	o	o	o	o

1) Note that some of the listed parts may not be part of the enclosed product.  
 2) Actuators only  
 3) For actuator-valve-combinations, EPIV and Energy Valve only  
 This table is prepared in accordance with the provisions of SJ/T 11364.  
 o: Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572.  
 x: Indicates that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572.