



Application

EXT-RC series of proportional and floating thermostats are used to control room temperature in commercial applications.

Features

- LCD with green backlight
- Detects and displays room temperature
- On/Off capability of cooling and heating equipment
- Room temperature setting
- Fahrenheit (°F) or Celsius (°C) display
- Selectable single or three speed fan control
- Remote sensor input

Technical Data

Power	AC 24V $\pm$ 10%, 50Hz/60Hz
Output signal	AC 24V x 2 (0.5A resistive)
EXT-RCP-24	0-10 VDC (5 mA) / 4-20 mA (600 Ω)
Output signal	AC 24V x 2 (0.5A resistive)
EXT-RCF-24	floating point control
Input signal	dry contact (NO)
Dimensions	3.4" w x 3.4" h x 0.9" d [86mm x 86mm x 23mm]
Fixing screw width	60mm (standard)
Set temperature range	0° to 99.5° adjustable
Accuracy displayed	0.1°
Accuracy	$\pm$ 0.5°
Rated power	< 1W
Sensor type	NTC
Display	LCD

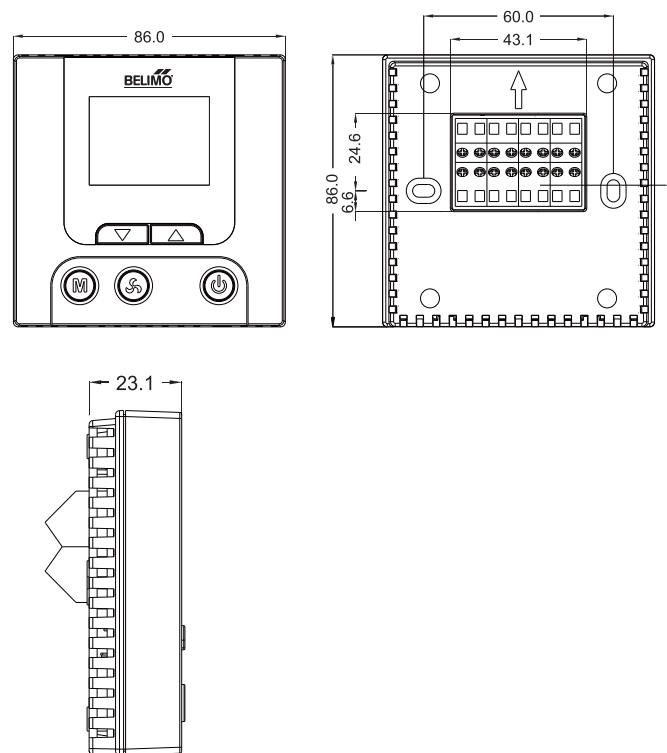
Basic Features

Working modes	Cooling ❄, Heating 🔥, Ventilating 🌀, Auto 🔄
Fan speed	3 speed (Low 🌀, Medium 🌀, High 🌀) / Auto 🔄

Operation Instructions

On/Off	Press ⏻ button.
Setpoint	Press ⬇ to reduce the setpoint, press ⬆ to increase the setpoint in 0.5°C increments. The setpoint will be confirmed automatically after 5 seconds and then will return to display status. Press ⬆ or ⬇ to check setpoint.
Mode	Press ⏻ to change the working mode- Cooling ❄, Heating 🔥, Vent 🌀.
Fan speed	Press 🌀 to select the desired speed- low 🌀, medium 🌀, high 🌀, or auto 🔄. If single speed fan is chosen, only medium speed 🌀 will be available.
Auto speed	The fan speed will be changed automatically to the following: Low speed- when room temperature is 1° difference with setpoint. Med. speed- when room temperature is 2° difference with setpoint. High speed- when room temperature is 3° difference with setpoint.
Sleep	Thermostat will go into sleep function after programming.
To set:	Press ⏻ button for 3 seconds until 🌀 display shows. A countdown will start in the center of the screen. Use ⬆ or ⬇ to adjust the desired sleep time. The maximum setting is 48 hours. Thermostat will return to working status after 5 seconds. 🌀 will flash to start countdown. The setpoint will be replaced by the sleep setpoint.
To quit:	When the thermostat is in sleep function, 🌀 will flash. Press ⬆ or ⬇ to quit.
Keypad lock	Press ⬆ and ⬇ for 10 seconds. This will activate the 🔒 display. under this function, the keypad is locked. To unlock, press ⬆ and ⬇ for 10 seconds until 🔒 disappears.
Set parameters	With thermostat off, press ⏻ for 10 seconds to enter the menu to set all parameters.

Dimensions (mm)



Parameter Settings

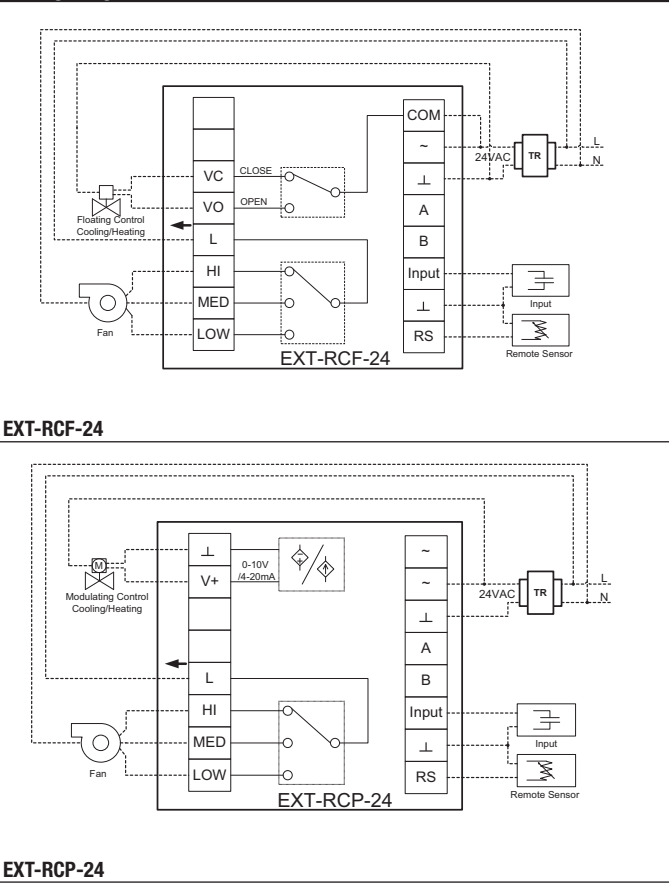
Parameter	Description	Default	Range
1	Power on status (0: off, 1: on, 2: hold)	2	-
2	Fan speed (0: single speed, 1: three speed)	1	-
3	Fan mode (DA: When the temperature reaches the set-point, the valve will close with the fan still running. DB: When the temperature reaches the set-point, the valve will close and the fan will shut off.)	0	-
4	Sensor selection (0: internal, 1: remote)	0	-
5	Temp. display (0: Celsius, 1: Fahrenheit)	0	-
6	Temperature calibration	0	-20 to +20
7	Minimum setpoint	5° / 41°	0 to 99
8	Maximum setpoint	35° / 96°	0 to 99.5
9	Dead band	2	-

Modulating Output Options

Location	ON	OFF
1	120 ohm resistance between AB wires	No resistance between AB wires
2	Port 1 modulation 0-20 mA	Off
3	Port 1 modulation 0-10 VDC	Off
4	Port 2 modulation 0-20 mA	Off
5	Port 3 modulation 0-10 VDC	Off

Note: Switch (5 pole switch on PCB)

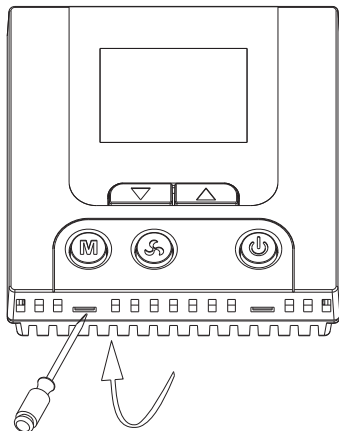
Wiring Diagrams



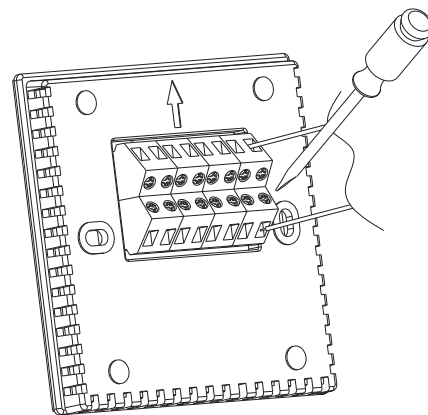
Installation Manual

Mounting Method

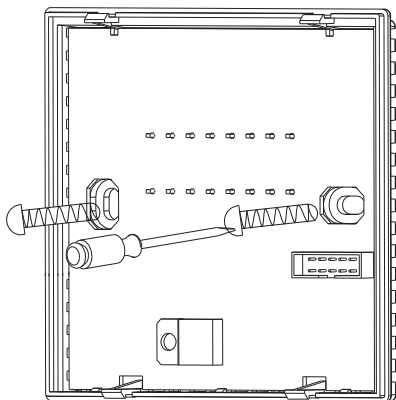
1 Open the back panel with a screwdriver.



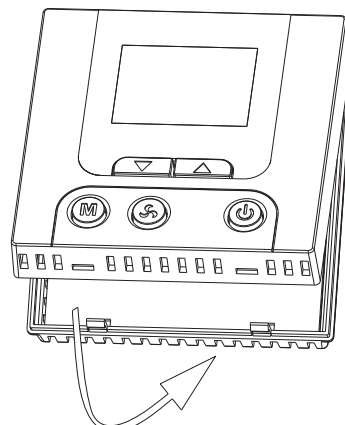
2 Connect the wires per the wiring diagram.



3 Secure the base with the screws provided.



4 Reattach the front panel.



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