EPH CONTROLS RFCV2 Cylinder Thermostat with Boost Button Instruction Manual

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Product Information

Product Specifications

- **Power supply:** 2 x AAA Alkaline Batteries
- **Power consumption:** 50 uA
- **Battery replacement:** Once a year
- **Dimensions:** 80 x 80 x 25.7mm

Product Information

The RFCV2 RF Cylinder Thermostat with Boost Button is designed to control the temperature of a cylinder by activating the demand for heat based on the user-selected target temperature. It operates with two AAA batteries and offers various features such as a boost function and keypad lock for enhanced usability.

Product Using Instructions

Installation Instructions:

1. Remove the thermostat from its packaging.
2. Choose a suitable mounting location to ensure accurate temperature measurement.
3. Insert the provided AAA batteries and plug in the temperature sensor.
4. Fix the base plate to the wall using the screws provided.
5. Attach the front housing to the base plate.

Operating Instructions:

- Adjust the target temperature by turning the dial clockwise or anti-clockwise.
- Activate the boost function for a temporary heat increase.
- Lock the keypad to prevent unauthorized changes.
- Monitor the current cylinder temperature on the screen.

FAQ

- **Q:** How often should I replace the batteries?
  - **A:** The batteries should be replaced once a year to ensure optimal performance of the thermostat.
- **Q:** How can I disconnect the RFCV2 from other devices?
  - **A:** Follow the instructions provided in the manual to disconnect the thermostat from R_7-RFV2 or UFH10-RF.

Factory Default Settings

Factory Default Settings 

- **Temperature indicator:** °C
- **Hysteresis:** 5°C
- **Keypad lock:** Off

Specifications

- **Power supply:** 2 x AAA Alkaline Batteries
- **Power consumption:** 50 uA
- **Battery replacement:** Once a year
- **Temp. control range:** 10 … 90°C
- **Dimensions:** 80 x 80 x 25.7mm
- **Temperature sensor:** NTC 10K Ohm @ 25°C
- **External sensor length:** 1950mm ± 80mm
- **Temperature indication:** °C
- **Switching differential:** Adjustable 0.0 … 10°C

Note: Good quality batteries are essential to ensure the correct operation of this product. EPH recommend using Duracell or Energiser batteries.

RFCV2 Cylinder Thermostat works

How a RFCV2 Cylinder Thermostat works

- When a RFCV2 thermostat is calling for heat, it will operate according to the target temperature selected by the user.
- The target temperature is defined by turning the dial clockwise for a higher target temperature or anti-clockwise for a lower target temperature.

- If the cylinder temperature is lower than the target temperature then the thermostat will activate the demand for heat.
- This will be indicated with a flame symbol on the screen.
- Once the desired target temperature has been achieved, the thermostat will stop demanding heat, and the ame symbol will disappear from the screen.
- The screen will always display the current cylinder temperature.

Mounting & Installation

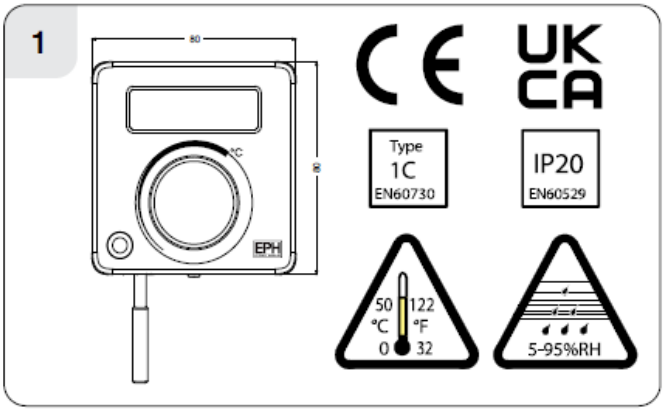
Caution!

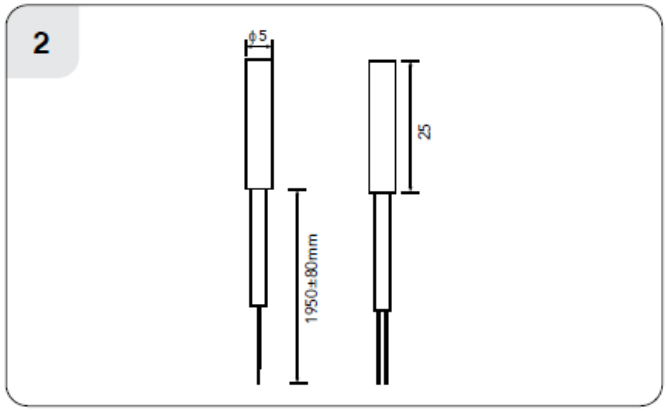
- Installation and connection should only be carried out by a qualified person.
- Only qualified electricians or authorised service staff are permitted to open the programmer.
- If the thermostat or programmer are used in a way not specified by the manufacturer, their safety may be impaired.
- Prior to setting the thermostat, it is necessary to complete all required settings described in this section.

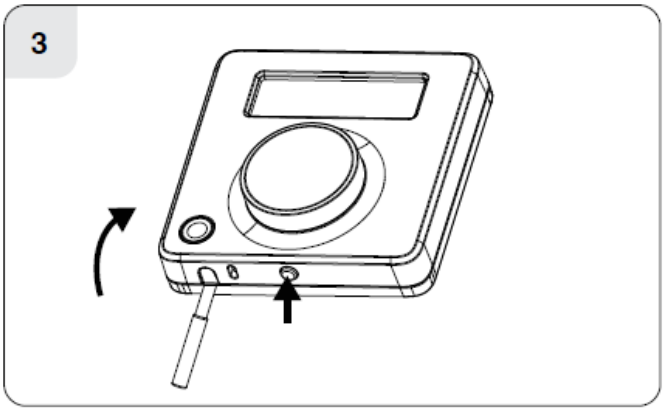
This thermostat can be mounted in the following ways:

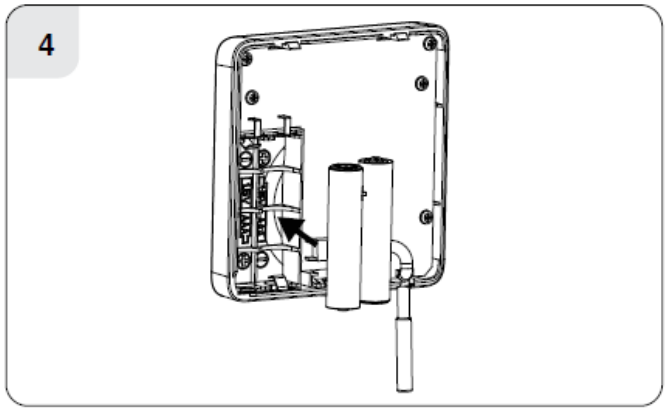
1. To a recessed conduit box
2. To a surface mounted box
3. Directly mounted on a wall

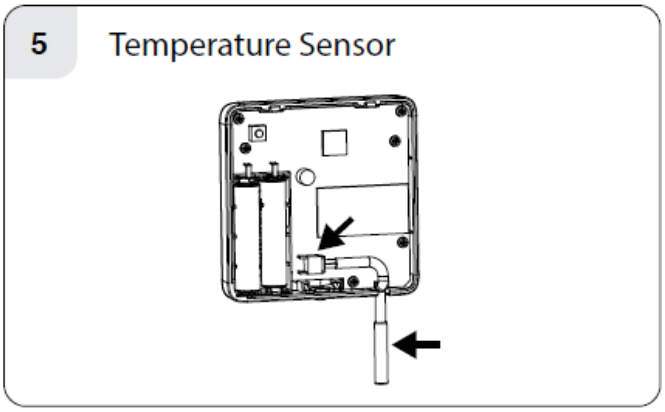
Mounting & Installation

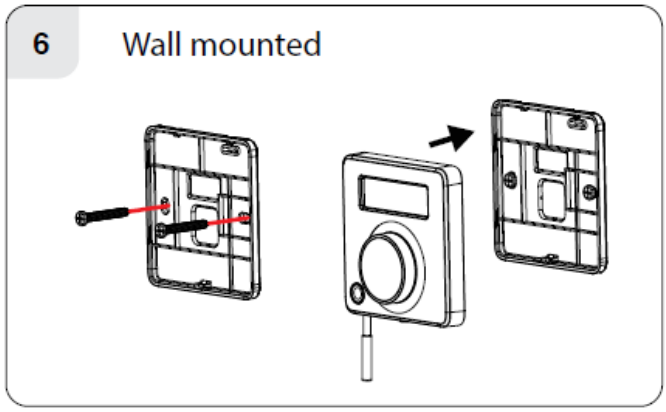












1. Remove the thermostat from its packaging.
2. Choose a mounting location so that the thermostat can measure the temperature as accurately as possible.
    - Choose a mounting location for the temperature probe as per the instructions on Page 8.
    - Prevent direct exposure to sunlight or other heating / cooling sources.
3. Press and hold the release button on the bottom of the thermostat to detach the front housing from the base plate.
4. Insert the 2 x AAA batteries provided and the thermostat will turn on.
5. Plug the temperature sensor into the connector on the PCB.
6. Fix the base plate directly to the wall with the screws provided. Attached the front housing to the base plate.

Mounting of Temperature Sensor

Cylinder

Surface

- The temperature sensor should be fitted on the bottom 1/3 of the cylinder.
- Remove a section of insulation on the cylinder to reveal the copper surface.
- Attach the temperature sensor to the surface of the cylinder using the foil tape provided.

Cylinder Pocket

- Insert the temperature sensor into the appropriate pocket on the cylinder. Secure the temperature sensor to the pocket using the foil tape provided.

Pipe

Adjacent Room

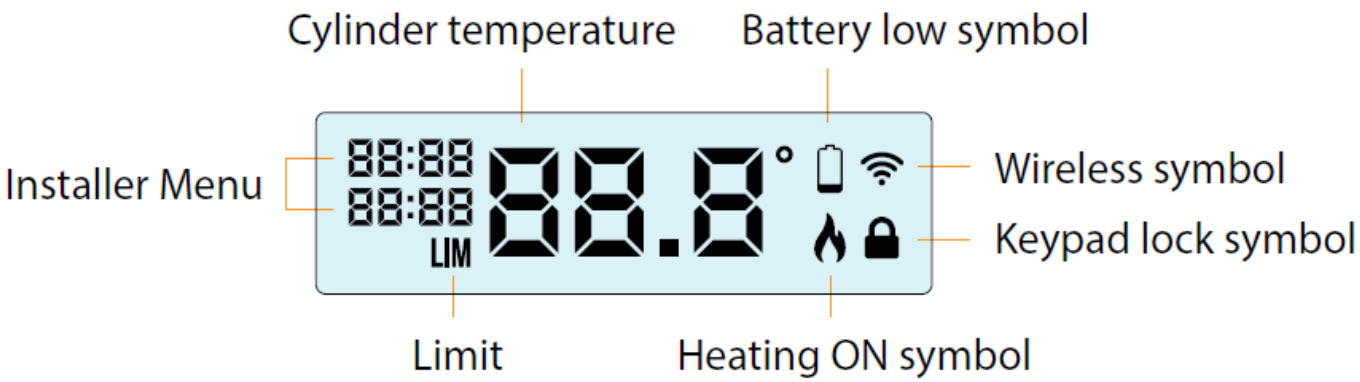
- Remove any insulation on the pipework to reveal the pipe.
- Attach the temperature sensor to the surface of the pipe using the foil tape provided.
- Mount the NTC sensor housing 1.5 meters above floor level.
- Ensure the temperature sensor is secured tightly in the NTC sensor housing.

Note:

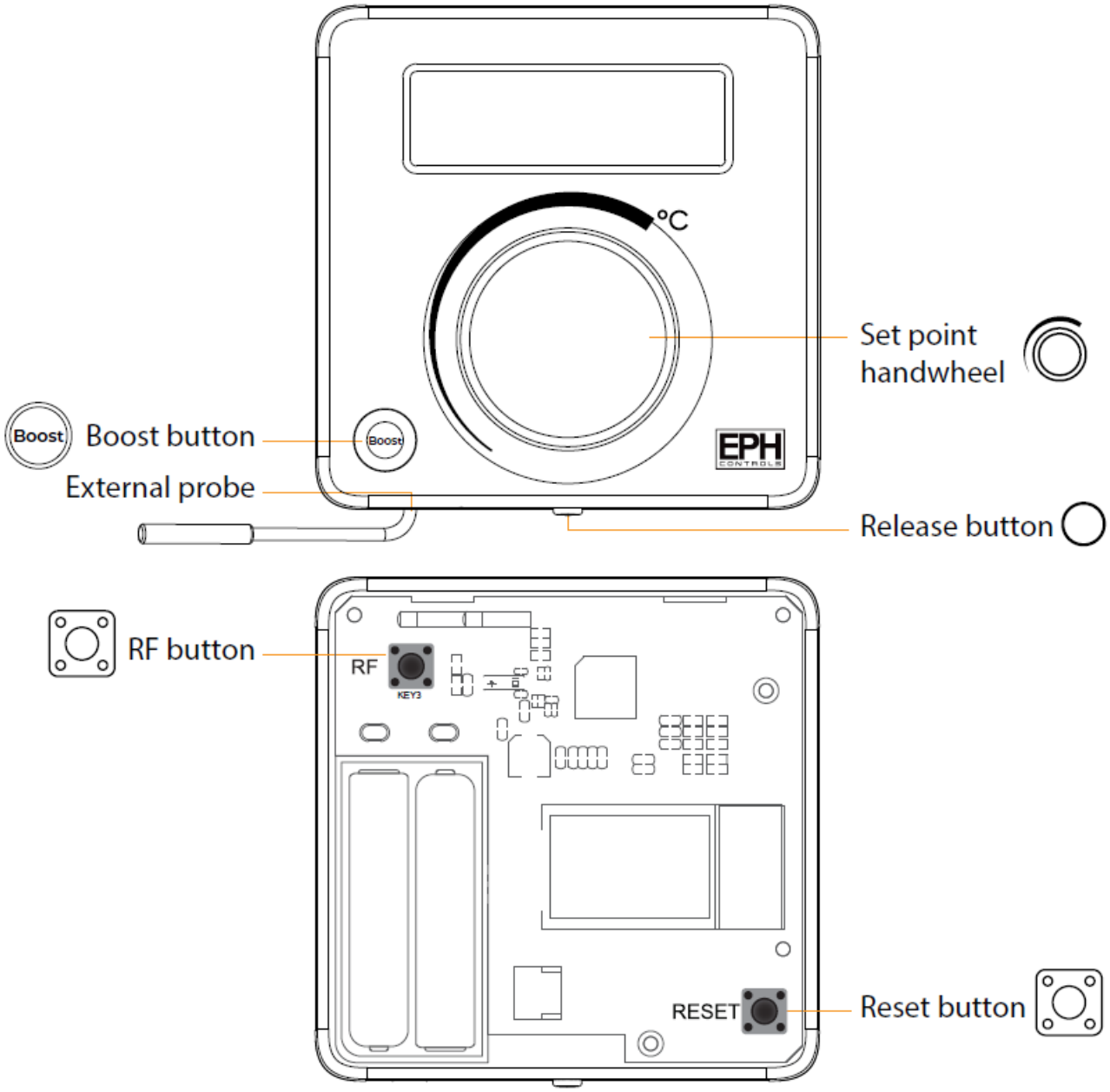
- NTC sensor housing can be purchased as an accessory from EPH Controls.
- Product code: NTC-Housing

Operating Instructions

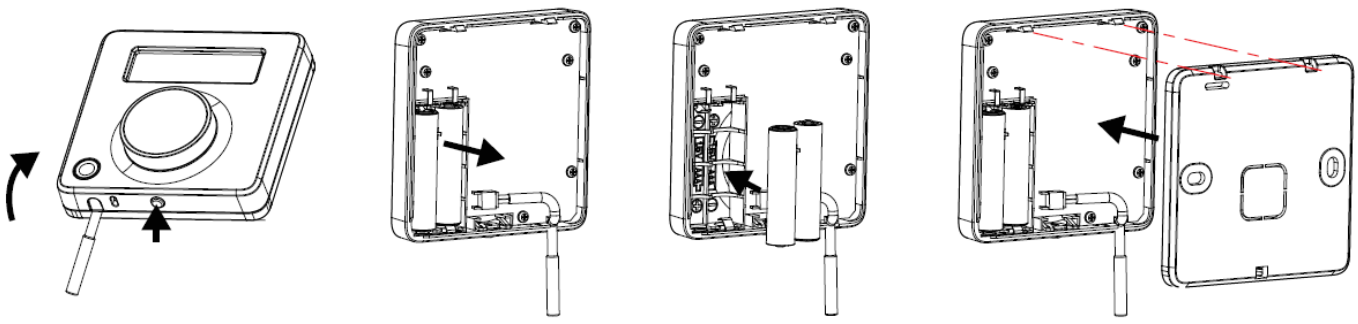
LCD Symbol Description



Button Description



Replacing the Batteries



- Press and hold on the bottom of the thermostat, while holding pull from the bottom to detach the front housing from the baseplate.
- Insert the 2 x AAA batteries and the thermostat will turn on.
- Reattach front housing to baseplate.

Battery Low Warning

- When the batteries are almost empty, the  symbol will appear on the screen. The batteries must now be replaced or the unit will shut down.

Boost Function

- The thermostat can be boosted for 30 minutes, 1, 2 or 3 hours.
- Press 

1, 2, 3 or 4 times, to apply the desired boost period.
- To cancel a boost, press 

again.

Locking the Keypad

- To lock the thermostat, press and hold  for 10 seconds.  will appear on the screen. The buttons are now disabled.
- To unlock the thermostat, press and hold  for 10 seconds.  will disappear from the screen. The buttons are now enabled.

Adjusting the Target Temperature

- Rotate  clockwise to increase the target temperature.
- Press  or wait 5 seconds. The target temperature is now saved.
- Rotate  anti-clockwise to decrease the target temperature.
- Press  or wait 5 seconds. The target temperature is now saved.

To connect a RFCV2 to a R_7-RFV2

On the R_7-RFV2:

- Press MENU, ‘P01 rF COn’ will appear on the screen.
- Press OK, ‘RF CONNECT’ will appear solid on the screen.

On the RFCV2:

- Remove the back cover & press the RF button  on the PCB.

On the R_7-RFV2:

- Once ‘ZONE’ flashes, press Select on the desired zone.

On the RFCV2:

- When ‘r01’ appears, press the  to confirm the thermostat is connected.

On the R_7-RFV2:

- Put the next thermostat into pairing mode or press OK to return to the main screen.

Note

- When pairing additional zones to a R_7-RFV2, ‘r02’ , ‘r03’, ‘r04’ can appear on the thermostat screen.

To connect a RFCV2 to a UFH10-RF

On the UFH10-RF:

- Press MENU , ‘P01 rF COn’ will appear on the screen.
- Press  , ‘RF CONNECT’ will appear solid on the screen.
- Rotate  to choose the zone you would like to connect to.
- Press  to confirm. The zone will stop flashing and appear solid.

On the RFCV2:

- Remove the back cover & press the RF button  on the PCB.
- When ‘r01’ appears, press the  to confirm the thermostat is connected.

On the UFH10-RF:

- Rotate  to choose another zone you would like to connect to or press MENU ’ to return to the menu.

Note

- When pairing additional zones to a UFH10-RF, ‘r02’ , ‘r03’, ‘r04’ …’r10’ can appear on the thermostat screen.

To disconnect a RFCV2 from both R_7-RFV2 or UFH10-RF

On the RFCV2:

1. Detach the front housing of the thermostat from the baseplate by pressing the  on the bottom of the thermostat and pull the front housing away from the baseplate.
2. Press the RF button  once on the PCB. ‘nOE’ will appear on the screen followed by ‘- – -’.
3. Press and hold the RF button  again for 10 seconds until ‘Adr’ appears on the screen.
4. Press the  twice to confirm.
    - The thermostat is now disconnected from the.

Note

- The thermostats can also be disconnected at the R_7-RFV2 or UFH10-RF.
- Please see R_7-RFV2 or UFH10-RF operation guide for details.

Menu Function

This menu allows the user to adjust additional functions.

- **P0 1:** Setting High and Low limits
- **P0 2:** Hysteresis HOn & HOFF
- **P0 3:** Calibration
- **P0 4:** Resetting the Thermostat

P0 1 Setting High & Low limits  **Hi 90°C Lo 10°C**

This menu allows the installer to change the minimum and maximum temperatures that the thermostat can operate between.

- To access this setting press and hold  and  together for 5 seconds.
- ‘P01 + HILO’ will appear on the screen. Press  to select.
- ‘LIM + OFF’ will appear on the screen.
- Rotate  to select ‘ON’, press  to confirm.
- ‘HI + LIM’ will appear on the screen and the temperature will begin to flash. Rotate  to set the high limit for the thermostat.
- Press  to confirm.

- ‘LO + LIM’ will appear on the screen and the temperature will begin to flash.
- Rotate  to set the low limit for the thermostat.
- Press  to confirm.
- The settings will be saved and the user will be returned to the previous screen.
- Press  to return to normal operation. When limits are set on the thermostat the word ‘LIM’ will be displayed on the screen permanently.

P0 2 Hysteresis  **HOn 5°C HOFF 0.0°C**

This menu allows the installer to change the hysteresis of the thermostat when the temperature is rising and falling. If HOn is set to 5°C, this will allow a temperature drop of 5°C below the target temperature, before the thermostat turns on again. If HOFF is set to 0.0°C, this will allow the temperature to rise 0°C above the target temperature before the thermostat turns off. To access this setting press and hold  &  together for 5 seconds. ‘P01’ will appear on the screen.

- Rotate  clockwise until ‘P02 & HOn’ appears on the screen.
- Press  to select. Use to select the ‘HOn’ temperature.
- Press  to confirm. ‘HOFF’ appears on the screen. Use  to select the ‘HOFF’ temperature, press  to confirm. The settings will be saved and the user will be returned to the previous screen.
- Press  to return to normal operation.

P0 3 Calibration

- This menu allows the installer to calibrate the temperature of the thermostat.
- To access this setting press and hold  and  together for 5 seconds.
- ‘P01’ will appear on the screen.
- Rotate  clockwise until ‘P03 & CAL’ appears on the screen.
- Press  to select.
- Current actual temperature will appear on the screen.
- Rotate  clockwise or anti clockwise to calibrate the temperature.
- Press  to confirm the temperature.

- The current temperature will be saved and the user will be returned to the previous screen.
- Press 

to return to normal operation.

P0 4 – Resetting the Thermostat

- This menu allows the user to reset the thermostat to factory settings. To access this setting, press and hold  and 

together for 5 seconds.
- P01' will appear on the screen
- Rotate  until 'P04 & rSt' appears on the screen.
- Press  to confirm.
- 'rSt' will appear on the screen an 'nO' will flash.
- Rotate  clockwise.
- 'rSt' will remain and 'YES' will flash on the screen.
- Press  to confirm.
- The thermostat will restart and revert to its factory defined settings.

Note:

- The thermostat may also be master reset by using the reset button  located on the PCB inside of the thermostat.
- Press  and follow the instructions above.

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Documents / Resources

	EPH CONTROLS RFCV2 Cylinder Thermostat with Boost Button [pdf] Instruction Manual RFCV2 Cylinder Thermostat with Boost Button, RFCV2, Cylinder Thermostat with Boost Button, Thermostat with Boost Button, Boost Button, Button

References

- User Manual