*Datasheet*

# Thermostatic Radiator Valves

***Important: Keep this document***

These Thermostatic Radiator Valves are specifically designed for use in domestic applications only.

**CAUTION!** Installation and connection should only be carried out by a qualified person and in accordance with local regulations.

- The Thermostatic Radiator Valves should be positioned with sufficient space around that allow free flow of air so it can sense the room temperature.
- Please read all instructions before you install and set the Thermostatic Radiator Valves. Failure to adhere to these guidelines may affect the operation of the valve.

## This datasheet applies to the following products:

| MODEL | CONNECTION TYPE | PACKAGE TYPE | COLOUR |
|---|---|---|---|
| CTRV10 | 10mm Compression, Angled | Single | White |
| CTRV15 | 15mm Compression, Angled | Single | White |
| CTRV15C | 15mm Compression, Angled | Single | Chrome |
| EMTRV10 | 10mm Compression, Angled | Twin | White |
| EMTRV15 | 15mm Compression, Angled | Twin | White |
| EMTRV15C | 15mm Compression, Angled | Twin | Chrome |

## Description

Thermostatic Radiator Valves are self-regulating valves and operate by sensing the air temperature around them. They are fitted to radiators and are used to control the temperature of a room by changing the flow of hot water to the radiator.

You should set the Thermostatic Radiator Valves to suit each room for a desired temperature. The sensor head contains a temperature sensor which controls the opening and closing of the valve thereby keeping the room at a constant temperature.

**Limited Warranty**

EPH warrants this product for 1 year from date of purchase. Should a product become defective within 1 year as a result of faulty or defective materials, we undertake to replace or repair at our discretion.

If the product has not been installed in accordance with EPH instructions the warranty will be invalidated.

This warranty does not cover damage or installation costs arising from a defective product. If you believe the product to be defective, return it with proof of purchase to the place of purchase.

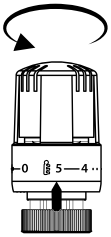
## Technical Data

| TEMPERATURE RANGE | MAXIMUM DIFFERENTIAL PRESSURE | MAXIMUM STATIC PRESSURE | MAXIMUM FLOW TEMPERATURE | Kvs VALUE @ 1 BAR |
|---|---|---|---|---|
| 7 ... 28˚C | 0.6 Bar | 10 Bar | 90˚C | 1 $M^3/H$ |

## Application

### 1. Setting the temperature

The calibration marks present on the sensor head, correspond to the following temperatures:




| 0 | * | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 0˚C | 7˚C | 12˚C | 16˚C | 20˚C | 24˚C | 28˚C |

Select the desired room temperature from the table above and rotate the sensor head so that the black indicator points to the appropriate number. Allow at least one hour for the temperature to stabilise.

Please note, by turning to a higher figure setting will not heat up the room any faster. How quickly your room heats up depend on your boiler size and setting.

### 2. Frost protection

If heating is not required but there is a risk of freezing, the sensor head may be rotated so that the black indicator points to *. This will allow the valve to open if the temperature falls below 7°C. The boiler must remain operational, controlled by a frost thermostat.

### 3. Radiator removal

To remove a radiator it is necessary to use the manual closing cap supplied with the valve. Remove the sensor head and fit the manual cap by screwing it onto the valve in a clockwise direction. If the sensor head is used to close the valve there is a risk of water damage if the temperature falls and the valve opens unexpectedly.

### 4. Summer operation

If the heating system is turned off for long periods like the summer months, it is recommended that all TRV valves are set to the fully open position (position "5").

**NOTE**

- By turning to a higher figure setting will not heat up the room any faster. How quickly your room heats up depend on your boiler size and setting.
- Store the manual closing cap (provided) in a safe place for future use.

## Installation Options

The thermostatic radiator valve can be installed on either side of the radiator, in a vertical or horizontal position. If a lockshield valve is also used on the same radiator, install it on the opposite side of the radiator. See Figure 1.0:

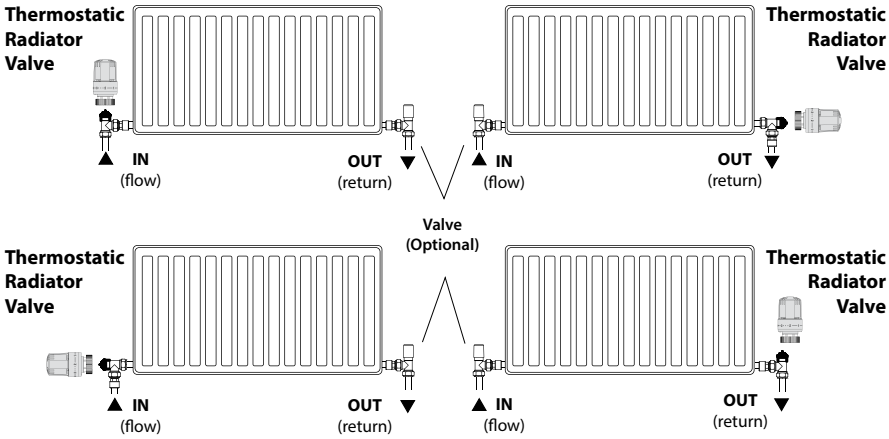



*Figure 1.0 Installation Options*

## Installation Instructions

1. Fit the manual closing cap and screw clockwise to close the valve. Do not over-tighten.
2. Apply PTFE tape to the 1/2" BSP tail and screw it into the radiator.
3. Connect the valve body by sliding the nut and olive onto the tail. A jointing compound should be applied to the olive. The valve may be used with the sensor head in the vertical or horizontal position. Do not over-tighten.
4. Mark the supply pipe ensuring there is sufficient length to reach the stop in the valve and cut pipe to length. Use an appropriate reducing set for 8mm and 10mm pipe sizes.
5. Undo the valve body from the tail piece. Slide nut and olive onto the supply pipe. Apply a suitable jointing compound and refit the valve body ensuring that all connections are firmly tightened. Do not over-tighten.
6. Fill the system, bleed the radiator and check for leaks. After commissioning, remove the manual closing cap and store it in a safe place for future use.
7. Turn the sensor head to the fully open position (position "5")
8. Mount the sensor head to the valve body ensuring that the indicator can be seen. Hand tighten the securing ring - do not over-tighten or use tools.

### WARNING!

- The sensor head must not be shielded by any object or come in contact with direct sunlight.
- Before installing this TRV, the system must be flushed to ensure it is free from debris / contamination in accordance with good plumbing practice. Use the manual closing cap (provided) to protect the valve during installation.

## Valve Installation

1. Removing the manual closing cap (provided) and undo the valve body from the tail piece.

2. Screw the tail piece onto the radiator, slide on the nuts and olives and then fit the valve.

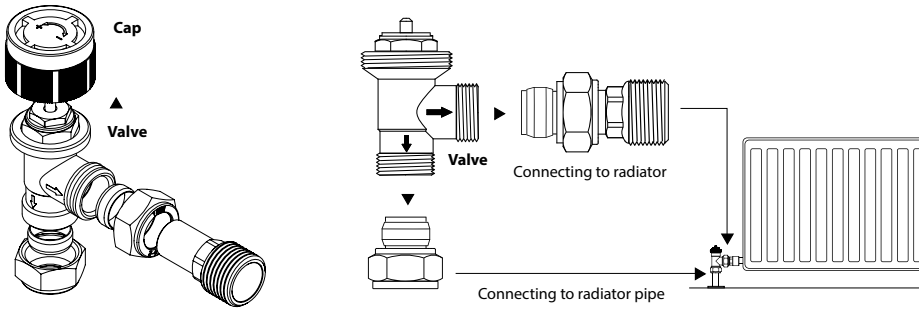



*Figure 2.0 Valve Installation*

## Sensor head Installation

1. Turn the Thermostatic sensor head to the fully open position (position "5") before fitting it onto the valve.

2. Hand tighten the securing ring, do not over tighten or use tools.

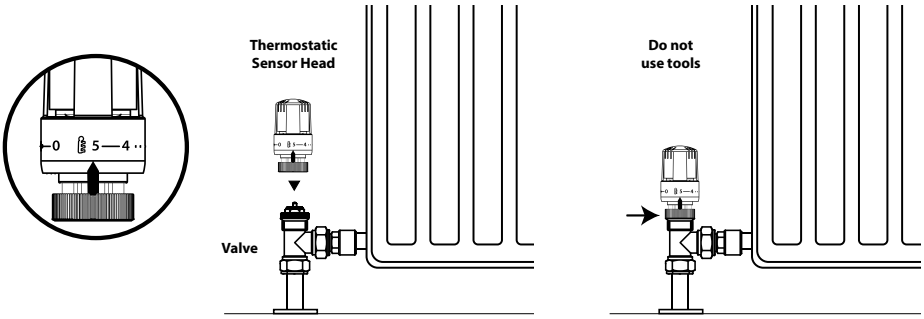



*Figure 3.0 Sensor head Installation*

## NOTE

- It is strongly recommended that the differential pressure should not exceed 0.6 Bar to avoid flow related noise. A differential bypass valve must be fitted to ensure that the pumped pressure does not exceed 0.6 Bar under all operation conditions.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