



### **Q** What is a Thermostatic Radiator Valve?

**A** TRVs sense the air temperature around them and regulate the flow of water through the radiator which they are fitted to. They do not control the boiler. They should be set at a level that gives you the room temperature you want. These settings may have to be different in each room, and you should set the TRVs to suit each room and then leave them to do their job.

Turning a TRV to a higher setting will not make the room heat up any faster. How quickly the room heats up depends on the boiler size and setting, and the radiator size. Turning a TRV to a lower setting will result in the room being controlled at a lower temperature, and saves energy.

TRVs need a free flow of air to sense the temperature, so they must not be covered by curtains or blocked by furniture. TRVs cannot turn off the boiler when the whole house is warm. To do that, you will need a room thermostat as well. The radiator in the room with the room thermostat should not normally have a TRV, but, if it does, keep the TRV on the maximum setting and adjust the room thermostat as explained within the instructions.

Remote sensor versions are available for radiator thermostats in situations where a representative room temperature is difficult to detect.

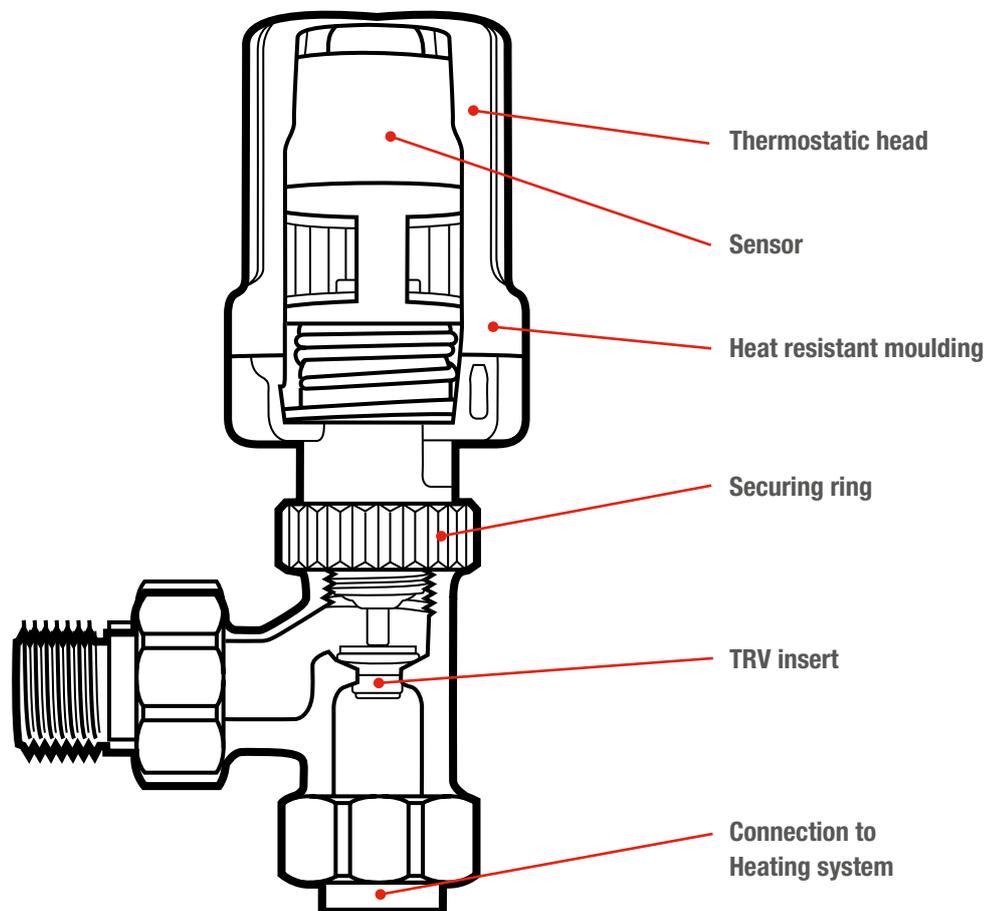
**Q How does a thermostatic radiator valve (TRV) work?**

**A** TRVs consist of two main parts, a Thermostatic Head which senses the air temperature around them and the valve body, which together regulate the flow of water through the radiator which they are fitted to.

Inside the Thermostatic Head is a sensor containing a wax or liquid material which expands as the room temperature warms up and contracts when it cools down.

The sensor is connected, in turn, to a valve seat inside the body which opens as the sensor expands and closes as the sensor contracts.

As the TRV opens to allow more hot water from the boiler through the radiator, more heat will be given out by the radiator. As the TRV closes and restricts the flow through the radiator, less heat will be given out by the radiator, however, please note that the TRV does not switch the boiler on / off, it only regulates the flow of the available hot water.



**Q What are the settings on the TRV Thermostat used for?**

**A** TRV's are designed with a range of temperature settings to allow individual rooms to be maintained at different room temperatures and even allow unused rooms to be switched off, to save energy. However, the TRV can only provide heat to the radiator if the boiler is providing hot water. In many cases the TRV will not have a temperature setting marked on the case but just a range of numbers denoting a setting that provides more heat (high number) or less heat (low number) to the surrounding area.

**Q Does it matter where TRVs are fitted ?**

**A** Yes, to provide good control and save energy, it is very important that TRVs are mounted in 'free air' and not blocked by, for example, furniture, curtains, or enclosed within decorative cabinets. The TRV can only work to the temperature which it can sense so, if it is covered, it cannot sense the room temperature properly and may underheat or overheat the room. Where this cannot be avoided, Honeywell 'remote sensor' TRV thermostats are available.

**Q How can I fit a thermostat away from the radiator ?**

**A** Where it is impossible to fit a TRV without it being covered (eg. Decorative Radiator Covers) Honeywell offers a range of remote sensing or remote sensing and control TRVs.

**Q What is a Drain-off fitting used for?**

**A** A 'drain-off' fitting is an optional item which should be fitted to radiators to make it easy for Installers to remove water from the the heating system when, for example, a radiator is needed to be removed, replaced or a system is upgraded or extended. There are many ways of this being provided and it is not necessary to be fitted to every radiator, however, the more drain-off fittings that are used, the easier and more convenient it will be to remove the water.

Please note that the heating system water contains specialist chemicals and a qualified installer should always be asked to carry out this work. You can find a recognised honeywell Installer by visiting [www.honeywelluk.com](http://www.honeywelluk.com) and using the Find an Installer feature.

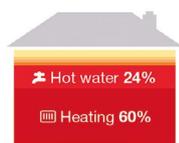
**Q What is a Lockshield Valve?**

**A** A lockshield valve sits on the other end of the radiator to the TRV and provides one way of balancing the flow of water through the radiator so that the overall system performance is maximised. Once set by your installer, they should not be tampered with or adjusted again as this may affect the efficiency and performance of your heating system.

**Q Can TRV's reduce my heating bills?**

**A** Yes, when installed as part of a complete set of heating controls that include timers and a room thermostats, TRV's can provide householders with substantial savings in the major area of energy expenditure, 84% of the energy use in a domestic house is in heating and hot water (Ref. Department of Energy and Climate Change).

Typical home energy consumption...



**84%\***

of your home energy use is heating and hot water

\* Government figures from DECC

Tests carried out in 2013 at The Energy House at Salford University by The BEAMA heating controls association, TACMA, found that savings of 40% can be achieved in a standard terraced house. They also calculated that, at 2013 energy prices, this could save a householder £409.46 per year (if they fitted a full set of controls where none were previously present.)

## **Q Why should I install a Honeywell TRV?**

**A** At Honeywell, we want to make sure we offer the most energy efficient products we can, so our products are designed to provide the levels of control and comfort that support high levels of energy efficiency.

We always look to work with reputable classification systems so we can visibly demonstrate the efficiency of our products. The European TELL certification promotes responsible energy usage and provides information to customers when selecting products. Our VT200 , VT117 and VTL120 TRV families are all now 'A' rated for efficiency.

## **Q Should I consider changing my existing TRVs?**

**A** If your TRVs are older than 10 years, you should consider upgrading at least the TRV heads because old TRVs can lose their accuracy and performance over time.

This can often be done without changing the bodies or draining down the system because Honeywell TRV heads are compatible with many other manufacturers bodies and we offer other adaptors for those which do not.

## **Q How can I upgrade my existing TRVs to maximise my energy savings?**

**A** Electronic TRVs deliver the most efficient control of your radiators and Honeywell offers both 'stand alone' programmable TRVs (HR90) and centrally controlled 'wireless' TRVs. Further information for both can be found on our website.

Honeywell are proud to offer a wide range of classic and modern styles of TRVs and Lockshields, some with integrated drain off valves.

Style		Why buy Honeywell?
Traditional		<ul style="list-style-type: none"> <li>• Approved to EN215 and 'A' Rated for efficiency</li> <li>• Bi-directional flow design</li> <li>• Can be mounted vertically or horizontally</li> <li>• Easy to grip TRV head</li> <li>• Energy saving 'green' button</li> <li>• Liquid sensor</li> </ul> <p><b>Options</b></p> <p>The Honeywell service tool allows the TRV insert removal, cleaning and replacement without having to drain down the system</p> <ul style="list-style-type: none"> <li>• Frost protection setting to open the valve if it gets too cold</li> <li>• Positive shut off</li> <li>• Integral radiator balancing insert</li> </ul>
Classic		<ul style="list-style-type: none"> <li>• Approved to EN215 and 'A' Rated for efficiency</li> <li>• Bi-directional flow design</li> <li>• Can be mounted vertically or horizontally</li> <li>• Stylish TRV head</li> <li>• Liquid sensor</li> <li>• Frost protection setting</li> <li>• Integral radiator balancing insert</li> </ul> <p><b>Options</b></p> <p>The Honeywell service tool allows the TRV insert removal, cleaning and replacement without having to drain down the system</p>
RadPlan Pack		<ul style="list-style-type: none"> <li>• 'A' Rated for efficiency</li> <li>• Bi-directional flow design</li> <li>• Can be mounted vertically or horizontally</li> <li>• Easy to grip TRV head</li> <li>• Energy saving 'green' button</li> <li>• Liquid sensor</li> <li>• Frost protection setting</li> <li>• Positive shut off</li> <li>• The Honeywell service tool allows the TRV insert removal, cleaning and replacement without having to drain down the system</li> <li>• Includes a matching in style lock shield</li> </ul>

Full product codes and further information on the full range of Honeywell TRV's can be found by visiting [www.honeywelluk.com](http://www.honeywelluk.com).

## Other Honeywell FAQ's

There are a wide range of FAQ's available on a variety of different topics. They can all be accessed via our website [www.honeywelluk.com](http://www.honeywelluk.com).

## Installation & User Guides

All our Installation and User Guides for Honeywell heating control products sold in the UK can be found on the website [www.honeywelluk.com](http://www.honeywelluk.com).

Full details of our product range can also be accessed by visiting [www.honeywelluk.com](http://www.honeywelluk.com).

Our products can be purchased from Professional Plumbing & Heating Merchants; Builders Merchants and other suppliers of professional products to the heating and plumbing industry across the UK.

## Contacting Honeywell:

**Technical Support:** Please note, we are unable to offer technical support to householders. Please contact your local installer for assistance.

**08457 678999** (charged at local rates) **+44 (0)1344 656125** (calls from outside the UK)

Available from Monday - Thursday 09:00 - 17:00 Friday 09:00 - 16:00

This line is often busy during peak periods. If your enquiry is not of an urgent nature, please send an email, an automatic email form is available on the contact page on

[www.honeywelluk.com](http://www.honeywelluk.com).

## Installer Training Courses : 01344 656352

Please note that calls cannot be transferred between geographical numbers.

This FAQ sheet is for guidance only and at the time of production represented the latest information available to Honeywell from various sources. Honeywell reserves the right at any time and without notice to change any product, specification or any other information contained in this publication and cannot accept any responsibility for loss or damage arising out of any errors that may inadvertently be contained herein.