



Heating



Hot water



Renewables

# Vaillant controls - perfect for a complete system solution



#PROUDLY  
SUPPORTING  
INSTALLERS

 **Vaillant**



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Please note the information contained in this guide is for the use of competent and qualified heating engineers in the UK. We always recommend attending a training course provided by Vaillant to ensure complete knowledge of the appliance and/or accessories you are installing. The Vaillant Group does not warrant the accuracy or completeness of any of the information provided in this brochure. Should you require any clarification or further information, please speak with your Regional Business Manager or call our technical helpline. The Vaillant Group does not accept liability or responsibility resulting from the installer's failure to comply with the guides or otherwise. For more detailed information, please refer to the installation manual for each product you are using.

# About Vaillant



## The Vaillant Group

Vaillant UK is proud to be part of the worldwide heating and hot water corporation Vaillant Group, a family-owned business that was founded by Johann Vaillant in his workshop in Remscheid, Germany in 1874.

In 1894, Johann patented a new closed-system gas-fired bathroom boiler. Over the years, Johann's technical innovations continued and in 1924, he launched the world's first central heating boiler. Since these revolutionary inventions, Vaillant continues to drive the evolution of heating technologies, launching the first ever combi boiler in 1967, and the game changing aroTHERM plus in 2020.

Today, Vaillant is still setting the standard in the heating marketplace, developing market leading products that work seamlessly together, to provide a full systems solution. With a growing focus on developing products that use renewable energy, Vaillant became the first boiler manufacturer in the UK to launch a heat pump production line, which opened at their headquarters in Belper, 2022. This, together with the research and development of on-going hydrogen trials, marks a huge milestone for Vaillant in supporting the brands mission to create a better climate, inside each home and the world around it.

# Setting the standards since 1874

## Manufacturing at its finest

At Vaillant, we think ahead. By choosing our heating appliances, you choose the pioneering excellence of German design and UK manufacturing expertise that create reliable products specially designed for application in all markets.

As well as designing products to be as efficient as possible, we constantly review and update our manufacturing processes and environments.

Our UK factory continues to receive awards year after year in many categories. In addition to the many manufacturing awards we have received, we are especially proud to have been awarded the RoSPA Gold Award for world-class health and safety management systems for seven consecutive years. Since 2017, we have been accredited a gold Investors in People award.

Vaillant has very high standards in manufacturing to ensure we make outstanding products. Our products are manufactured to meet ISO 9001, 18001, 14000 and many are Quiet Mark™ approved, which means that they use innovative and efficient technology that guarantees reduced noise levels.



# Why choose Vaillant controls

To get the very best out of the Vaillant boiler or heat pump you install for your customer, it is always best to fit Vaillant controls. Our controls are designed and tested to work with our products only. Not only will they enhance the heat generator but also offer additional bonuses to you, the installer, by offering extended guarantees and rewards for your customers. Fitting a complete Vaillant controls system can increase efficiency by up-to 4%.\*

## What is eBUS?

The eBUS protocol is the language used by Vaillant products so they can 'talk' to each other. It is this intelligent communication that allows Vaillant boilers to carry out more complex decisions rather than just turning on and off.

eBUS allows our products to make decisions based on what the heating system requires. For example, eBUS allows our controls to activate the boiler at only 20% modulation if only a slight increase in room temperature is required. It's this modulation that makes the boiler run at its most efficient point. This process is called enhanced load compensation.



Weather compensation is technology that uses environmental data to understand the thermal behaviour in and around a property. A weather compensating control uses eBUS to communicate with the heating appliance to ensure that when you want 21°C, you get 21°C. This feature is available with the vSMART, VRC 700/VRC 700f, and our range of senso controls\*\*.

## Industry leading diagnostics

eBUS captures data points across the whole heating system. With this data, it can send fault codes and alerts to Vaillant appliances to alert the user to any issues. It also notifies when services are due. These alerts can be sent to a mobile device if an app is installed.



# Weather Compensation

## What is weather compensation?

The weather compensation feature on Vaillant's smart controls uses local weather data to understand the outside temperature. It then adjusts the heat going to the radiators or underfloor heating system for optimum efficiency.

When the outside weather temperature is seen to drop, Vaillant's smart controls will increase the temperature going to the heating system to ensure it reaches the temperature set for optimum comfort. Likewise, when the temperature is seen to rise, the weather compensation feature reduces the output of the boiler to ensure it is operating with maximum efficiency.

Our state of the art controls can either be fitted with an outside sensor or use local weather services for ultimate heating comfort and efficiency.

These smart controls can learn the thermal behaviour of the building and use weather compensation to ensure that when your customer wants 21°C, they get it automatically.

\* When fitted with a weather compensating thermostat

\*\* An additional outdoor sensor is required for the sensoHOME Only compatible with single zone systems.



# Enhanced Load Compensation

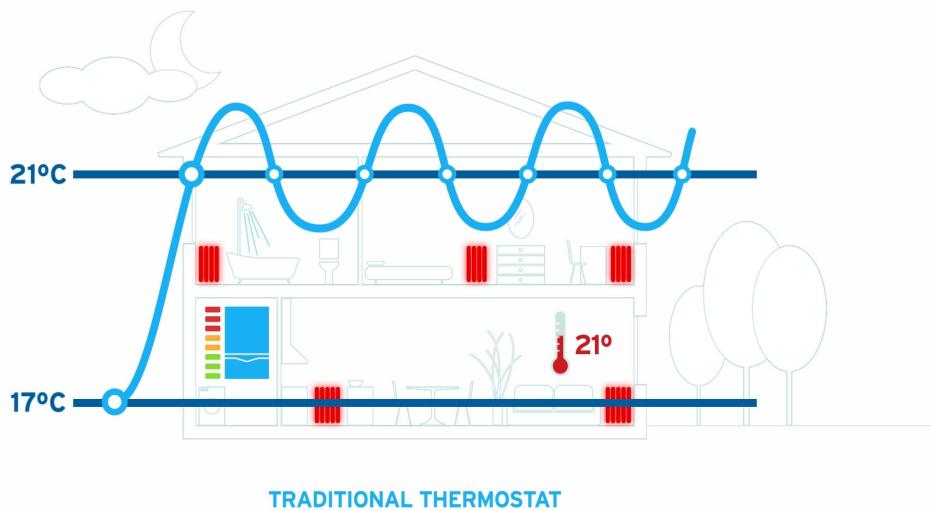
## Traditional ON/OFF thermostat

A traditional 3rd party thermostat senses the temperature and heats or cools the water going to the radiators. It instructs the boiler to work at 100% until the required set temperature is achieved.

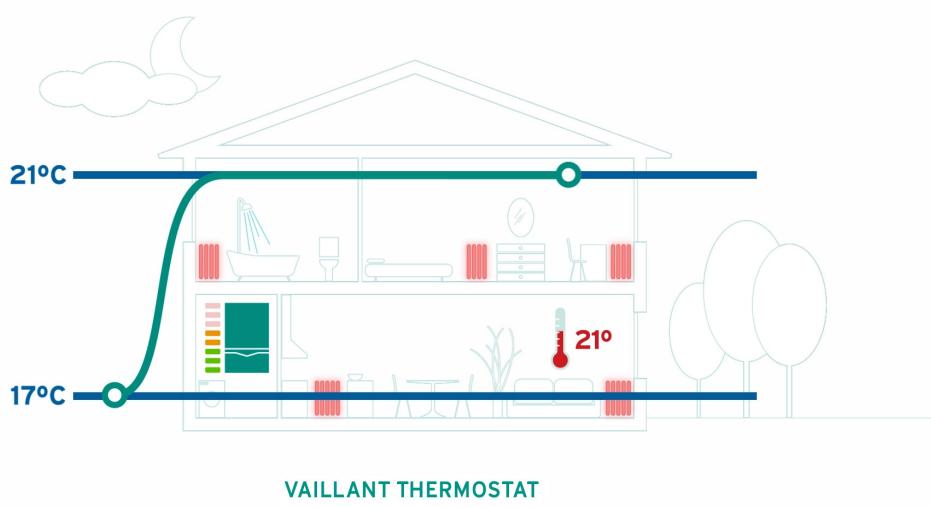
## Vaillant intelligent load compensating thermostat

Enhanced load compensation is a feature that automatically adjusts the temperature of the water leaving the boiler and entering the heating system (radiators or underfloor heating).

Load compensation works with a room thermostat to determine the amount of energy needed to reach the desired temperature. When only a small increase is required to meet the set temperature, the boiler will work at a reduced output to use the minimum amount of energy needed. So, not only is your customers home at the perfect temperature for maximum comfort, this feature saves money and energy, as well as improving the lifetime of the boiler.



3rd party thermostats, which have no communication with the boiler other than turn on and off, will result in the boiler working at 100% output to reach the desired temperature and will mean the temperature will often overshoot above the desired temperature, the boiler will then switch off and cool down, when the room falls below the desired temperature, the boiler may take some time in heating back up causing this wave seen above. This cycle continues in order to maintain the temperature.



A Vaillant heating appliance and a Vaillant control operates in perfect harmony using the eBUS protocol. The control intelligently instructs the boiler to come on at the required output which is maintained for peak efficiency.

# myVAILLANT - welcome to the world of smart home heating



## Making your customers homes more comfortable, just got easier

With a myVAILLANT smart home ecosystem, give your customers the ability to manage their appliance through the ease of their smart phone or tablet, set routines easily and offer true home comfort, while keeping energy costs under control. Plus, added peace of mind with smart home services.

## More than an app, a smart home heating ecosystem, making homes even more comfortable\*

<b>Ultimate Smart Home Comfort</b>	<b>Reduce energy consumption</b>
Provides full control of the appliance through myVAILLANT app.  Full smart home integration with myVAILLANT allows homeowners to conveniently adjust the temperature through simple voice commands, from the comfort of their sofa. Compatible with Amazon Alexa and Apple HomeKit.	Why heat an empty home? myVAILLANT saves energy when away and makes sure the temperature is perfect when your customer returns home. Plus it will even show full consumption stats so your customers can see if there is potential for even more savings.
<b>Next level reliability</b>	<b>Fit for the future</b>
Faster service, less downtime, more peace of mind: in the world of myVAILLANT, everything is connected. Which means you or Vaillant technical support can quickly check the appliance's status remotely when needed.	myVAILLANT is not just an app that makes controlling your customers heating more convenient. It's a smart ecosystem that constantly improves and expands. Frequent updates will add more useful functions and smart ideas. And we will continue to incorporate innovations that make your home even more comfortable, sustainable, and efficient.

\* Speak to your Vaillant Regional Business Manager for more details.

# myVAILLANT smart home heating products

## Which components / products do you need to connect the appliance?

Compatible with all Vaillant heat pump and boiler ranges from 2006 onwards (must have eBUS protocol), the new myVAILLANT connect internet gateway is perfect for new or retrofit installations.



myVAILLANT connect



Smart thermostat



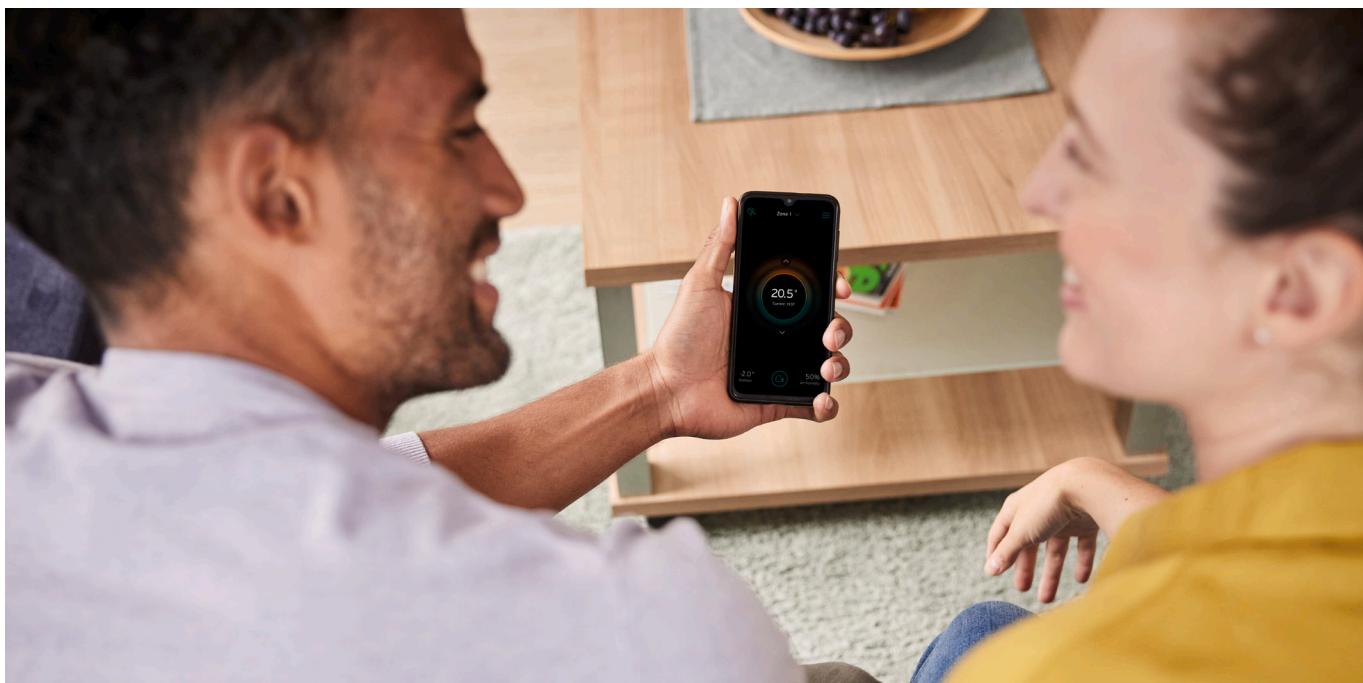
Smart control

myVAILLANT connect internet gateway	myVAILLANT connect and sensoROOM wireless room thermostat	myVAILLANT connect and sensoHOME (RF)
Contains the gateway that connects the Vaillant appliance to the home network so your customers can control it through myVAILLANT app.	For customers looking for a smart but simple wireless room thermostat that will use the gateway as its receiver. Your customers can use the sensoROOM for everyday use to adjust the desired temperature while changing schedules and settings via the myVAILLANT app. The app will use local weather stations to see the outside temperature and modulate the system.	Contains the myVAILLANT connect internet gateway plus the elegant and modern, wall-mounted sensoHOME: a wireless, easy-to-use touchscreen control with full-text interface, capable of measuring the room temperature and adapting to it. Giving your customer flexibility of using the myVAILLANT app or the control for all their settings.

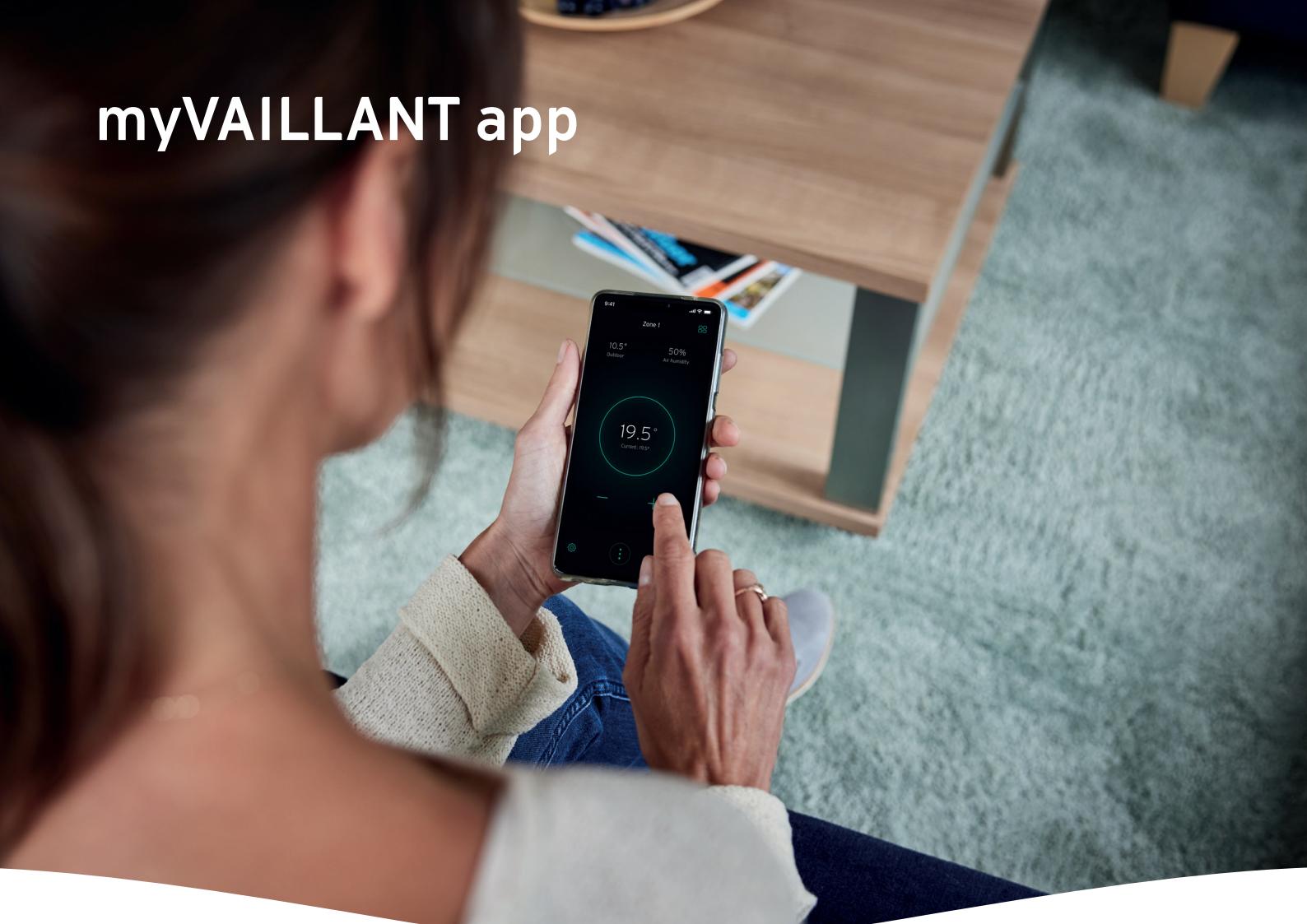
New plug-and-play solution - Only one cable connection allows for easy installation with our new ecoTEC plus range. No need for an external power supply.

Connecting to other products - Previous models of the ecoTEC range, including the ecoTEC plus manufactured between 2012 - 2023, can be installed with a VRA 42. The VRA 42 eliminates the need for an external power supply as the gateway is instead powered from the heat generators circuit board. The VRA 42 is installed in the ebox for a discreet installation meaning only one wire is used to connect to the gateway. Please visit [Vaillant.co.uk](http://Vaillant.co.uk) for compatibility of the VRA 42.

## Even more great benefits for your customers with myVAILLANT app



# myVAILLANT app



## Smart heating for your customers

Manage appliances directly or set routines easily. myVAILLANT app offers advanced comfort while keeping energy consumption and costs under control. myVAILLANT shows full consumption stats so anyone can see if there is potential for saving even more on homeowners energy bills.

## Taking comfort to a new level

The myVAILLANT app for homeowners makes controlling Vaillant appliances smarter, faster, more intuitive, more beautiful and more technologically advanced than ever before.

### Features & benefits



#### Smart heating

Give customers full control of their appliance, at their fingertips. Anytime, anywhere.



#### Smart home integration

myVAILLANT allows users to conveniently adjust the temperature through simple voice commands with Amazon Alexa and Apple HomeKit.



#### Increased comfort

Always at the exactly right temperature: customers can let the appliance know when they're on their way home - and the perfect climate will welcome them home.



#### Higher reliability

Faster service, less downtime, more peace of mind for you and your customers: in the world of myVAILLANT, everything is connected.



#### Fit for the future

Smart ecosystem that constantly improves and expands. Frequent updates will add more useful functions and smart ideas.



#### Lower consumption

myVAILLANT can save energy when customers are away and makes sure the temperature is perfect when they return.

Download the myVAILLANT app from Google Play here:



Download the myVAILLANT app from App Store here:



# Simply smart: with myVAILLANT connect smart home subscription



## myVAILLANT connect smart home subscription

Give your customers even more peace of mind with an optional myVAILLANT connect smart home subscription. Through the myVAILLANT connect internet gateway and the myVAILLANT app. Whether at home or away, homeowners will benefit from assisted appliance monitoring, appliance health check reports and energy optimisation tips at the touch of button.



### Smart comfort with quick and easy assisted appliance support

myVAILLANT connect smart home subscription can monitor the health of the appliance and if a problem should occur, through assisted appliance support a Vaillant technician can remotely check the issue and help resolve it quickly.

### Smart reassurance with appliance health checks

Total reassurance for your customers with a quarterly appliance status report to check key system components are running to optimum performance.

### Regular health reports

With the quarterly health check report, we'll even send handy hints and tips on how to increase the energy optimisation of their appliance.

Your customers can simply activate their myVAILLANT connect smart home subscription through the myVAILLANT Web, which will be incorporated into the myVAILLANT app when registering their account.

† Only compatible with Vaillant boilers. Compatibility with heat pumps coming soon.

\* myVAILLANT connect and smart homes subscriptions are only compatible with Vaillant boiler ranges from 2006 onwards.

\*\* To access smart home subscriptions, myVAILLANT connect gateway must be installed and subscription services activated.

# myVAILLANT Pro



## myVAILLANT Pro to help you - help your customers

Vaillant's eBUS communication technology enables Vaillant appliances to talk to each other and offers data on the performance of the heating system and its components. This technology now means that Vaillant can support your installations further by giving you the tools to offer your customers extra levels of service and support - using myVAILLANT Pro which can be used on desktop as well as via an app.

The solution enables the ability to remotely monitor boiler and heat pump installations, with access to detailed performance data, fault code history and offer diagnostic insights - all at the click of button.

### Features & benefits



#### Improved service efficiency

Be notified immediately of a fault on a customer's appliance, with insights on how to rectify it.



#### Customer management

Easily manage customers in the secure customer database with quick visibility of appliance model and serial number.



#### Plannable business

Schedule multiple service and repair visits more efficiently using the failure and spare part insights provided.



#### Detailed fault and status history information

Time and date stamped service and fault history for each connected appliance and the latest fault information available for all supported appliances.



#### Diagnostic insights

Data driven insights on failures to aid repairs and spare part identification.



#### Remotely monitor multiple appliances and thermostats

Easily review appliance data points whilst on the move and manage customer's time programs set on their thermostat.



#### Intelligent repairs

Improve first-time fix rates by knowing which parts you need before you arrive.



#### Installation and manufacturing date

Complete transparency of the appliance production and installation.

Download the myVAILLANT Pro app from Google Play here:



Download the myVAILLANT Pro app from App Store here:

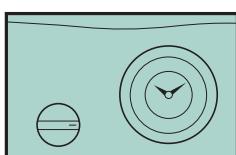


# Types of controls

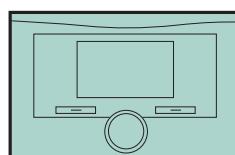


## Sit back, relax and let Vaillant take care of your customer's heating

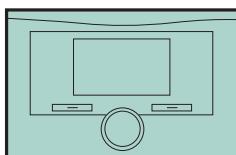
Vaillant makes a variety of controls to suit your customers needs. These range from basic mechanical timers to sophisticated app-based smart controls.



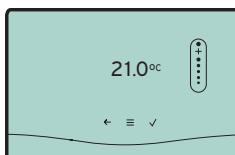
Mechanical timers offer an easy to use, basic solution. Users simply set gears on a dial that turns the boiler on and off at the same time each day.



A plug-in control fixes to the front of the boiler allowing your customer to control the heating and hot water functions where the boiler is sited.



Programmable thermostats are room thermostats that monitor the temperature. As well as having timer programs, they have lower and higher temperature parameters to ensure the temperature doesn't reach an uncomfortable level. This type of control usually also has a holiday function.



Internet connected controls are controlled remotely and offer the same functionality as programmable room thermostats. These controls have complimentary apps\* so they can be controlled via mobile devices and connect to smart devices, e.g. Alexa and Apple HomeKit.

\* Simply search for Vaillant on Google Play or the App Store.



# sensoCOMFORT

## System controls



### Overview

The sensoCOMFORT is Vaillant's latest control for multi-zone heating systems. It's been designed to be simple to install and use, and operates with Vaillant's proprietary eBUS protocol. This ensures all the components of the system can easily communicate with each other to provide optimum system performance. It's perfect for multi-zone gas-fuelled systems, and hybrid, or renewable installations.

The sensoCOMFORT has been designed to be simple to install, with guided commissioning that detects all the components of a system and proposed pre-defined settings.

The sensoCOMFORT is available in a wireless version (RF) that can control up to three heating zones.

### Features & benefits



#### Boiler modulation

eBUS connection allows the boiler to modulate, ensuring peak performance and optimum efficiency for a Vaillant heating system.



#### Weather compensating

sensoCOMFORT comes with an outdoor sensor which provides an understanding of the thermal behaviour in and around the property and adjusts the flow temperatures to ensure optimal efficiency.



#### Intuitive Interface

The touch interface provides a simplistic method of navigating the control to undertake simple tasks.



#### Energy dashboard

Provides enhanced insight into your customers heating system performance and energy consumption.



#### Time programme assistant

Effortlessly set heating programmes within minutes using the time programme assistant.



#### Vaillant App

With a Vaillant internet gateway, the dedicated app can be downloaded and used to manage heating and hot water requirements on the go.



#### Available wired and wireless

The sensoCOMFORT is available wired and wireless. The wired sensoCOMFORT can support up to 5 heating zones, while the wireless sensocomfort can support up to 3 heating zones. VR 92 thermostats can be added to control individual zones.

# VRC 700 / 700f

## System controls



### Overview

The VRC 700 system control allows the management of all gas, hybrid, or renewable heating systems. The VRC 700 effortlessly ensures the appliances are working to their peak performance and always maintaining optimum efficiency. Available in a wired version (VRC 700) or wireless version (VRC 700f) and with the addition of myVAILLANT connect, the VRC 700/700f can be controlled via the smartphone app.

The VRC 700 control allows for a single interface that will communicate and control all Vaillant appliances. The VRC 700 will automatically identify and use the most efficient, and therefore most cost effective product at any time. This functionality makes it the perfect controls for hybrid systems.

### Features & benefits



#### Control multiple heating products

VRC 700 works with all Vaillant heating appliances including boilers, heat pumps and hybrid systems. Control up to seven heating zones with VR 91s as additional thermostats.



#### Comfort and control wherever you are

The dedicated app\* makes it easy for you to control heating and hot water anytime, anywhere. So, if you're going to be late home, you can delay your heat coming on unnecessarily.



#### Control heating room by room

Reduce heating bills by controlling ambiSENSE\* wireless TRVs with the VRC 700. Heating and timings can be adjusted for individual rooms to maximise comfort and system efficiency.



#### ErP class VI

High ErP performance for up to 4% increased efficiency.



#### Change with the season

The VRC 700 uses its weather compensation feature to check conditions outside and tell the boiler how hard it needs to work to reach the right temperature without wasting any energy.



#### Reduce energy bills

The VRC 700's intelligent control means the appliance will run in the most efficient way possible, using the minimum energy and saving your customer money.



#### Choose from a range of programmes

The VRC 700's clear, high contrast display has programming options for 7 days, weekdays and weekends or 24-hour time periods, making it easy to create your customers comfort zone.



#### Flexible control

The simple menu and override functions allow you to quickly boost the heating and hot water whenever needed.

\* Vaillant internet gateway required.

# ambiSENSE

## Connected thermostatic radiator valve



### Overview

ambiSENSE is the name of Vaillant's intelligent thermostatic radiator valves (TRVs). They fit onto radiators to control the temperature in the most precise way possible. ambiSENSE is an accessory to the VRC 700 and sensoCOMFORT system controls.

Controlled via an app\*, ambiSENSE TRVs allow users to create personalised heating schedules to ensure each room has its own temperature and timing programs. Up to 20 zones can be created as each valve head has its own signal booster, so distance from the controller is never a problem.

ambiSENSE valves can save energy as well as creating perfect comfort for each individual room.

### Features & benefits



#### Control heating on the go

The dedicated app for either the sensoCOMFORT or VRC 700 means that heating can be controlled on the go to boost or delay heating if required.



#### Manually alter the temperature

Simply turn the dial on the valve heads to directly alter the temperature for an hour without disrupting time programmes.



#### Create up to 20 zones

Each control can work with up to 20 valves. Create profiles for each room of the home for easy time and temperature control.



#### Detects open windows

If a window is open the ambiSENSE valve will detect this and stop trying to heat the room, saving energy.



#### Easy to install

To install, simply remove the old TRV, follow the easy to follow instructions in the dedicated app to connect the device and attach it to the radiator valve.



#### Weather compensating

Automatically compensates for the weather outside using weather data via the VRC 700 or sensoCOMFORT.



#### Child lock

Prevent unsuspected temperature changes by activating the child lock through the app.

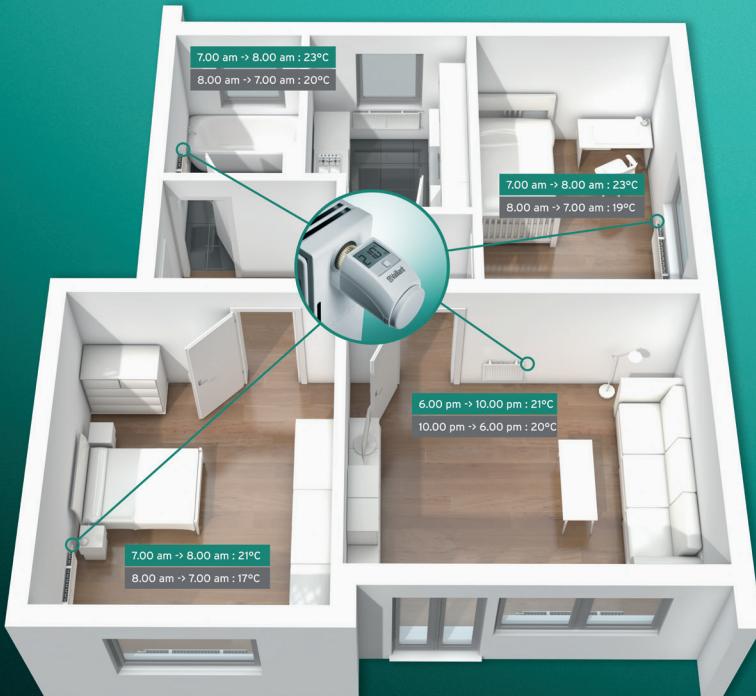


#### Install up to six valve heads and a VR 51 thermostat in each room

6 valve heads + 1 thermostat. All devices will automatically sync with each other.

\* sensoNET internet gateway required.

# Personalised comfort with ambiSENSE technology



## Overview

ambiSENSE is Vaillant's intelligent thermostatic radiator valves (TRVs). They fit onto radiators to control the temperature in the most precise way possible.

Controlled via an app, ambiSENSE TRVs allow users to create personalised heating schedules to ensure each room has its own temperature and timing programs. Up to 20 zones can be created.

The ambiSENSE valves can save energy as well as creating perfect comfort for each individual room.

ambiSENSE TRV's are available as a starter pack from your local merchants and include a sensoNET with three TRV's.



Easy to use



Zone control



App

## ambiSENSE accessories

For greater control and comfort for your customers, Vaillant offer two types of accessories that may be fitted to an ambiSENSE system.



### VR 51

If more than one TRV has been installed in a room, your customer may prefer one central point of control for that zone. The VR 51 is a wireless, wall mounted thermostat that collects the information from the TRVs in its zone. The VR 51 will then show the actual room temperature and allow the user to make changes without needing to alter each TRV individually. Up to twelve VR 51's can be installed per system, one per room.



### VR 52

While the VR 50 TRV's boost each other's signal to the Vaillant internet gateway, RF signal may be lost in large properties. If this is the case, up to two VR 52s can be installed in a property to act as signal boosters for the smart TRVs.

# sensoHOME

## Load compensating control



### Overview

The sensoHOME is Vaillant's control for heating systems that have just one or two zones. It's been designed to be simple to install and use, and operates with Vaillant's proprietary eBUS protocol, ensuring all the components of the system can easily communicate with each other to provide optimum system performance. It's perfect for gas fuelled systems in domestic properties.

Installation of the sensoHOME has been designed to be as easy as possible, with guided commissioning that detects the eBUS components of the system automatically and proposes pre-defined settings.

A simplified interface means that homeowners will also find this control more intuitive to use. Time programs can be created in minutes by answering a few questions, and the dedicated app (available when a Vaillant internet gateway is fitted) makes it easy to use on the go. Weather compensation automatically adjusts the flow rate of the boiler for ultimate modulating efficiency.

The sensoHOME is available in a wireless version (RF) for heating systems that have one heating zone.

### Features & benefits



#### Effortless operation

The touch interface provides a simplistic method of navigating the control to undertake simple tasks.



#### Choose from a range of programmes

The sensoHOME has programming options for 7 days, weekdays and weekends or 24-hour time periods, making it easy for your customer to create their perfect comfort zone.



#### Reduce your customers energy bills

sensoHOME will ensure the Vaillant appliance will run in the most efficient way possible, using the minimum energy to get the temperature required and saving your customer money.



#### Flexible control

The simple menu and override functions allow you to quickly boost the heating and hot water whenever needed.



#### Comfort and control wherever you are

The dedicated app\* makes it easy to control heating and hot water anytime, anywhere. So, if the homeowner is late home, they can delay the heat coming on so an empty house isn't being heated.



#### ERP class V

ERP class V is 3% but can be upgraded to class VI, 4% if an outdoor sensor is fitted.\*\*

\* Vaillant internet gateway required.

18 \*\* Only compatible with single heating zones.

# VRT 350 / 350F

## Load compensating control



### Overview

The VRT 350 is designed to be easy to use while maximising efficiency to reduce your energy consumption. It comes with wired or wireless options and it communicates with your customers boiler to adapt its energy consumption depending on what is required.

### Features & benefits



#### Easy to use

The VRT 350 has a familiar menu structure to make controlling heating systems as simple as possible.



#### Choose between wired and wireless controls

You can fix the device to the wall or go wireless so your customer can take it anywhere around their home.



#### Reduce your customers energy bills

VRT 350's intelligent control means the Vaillant appliance will run in the most efficient way possible, using the minimum energy to get the temperature required want and saving your customer money.



#### Flexible control

The simple menu and override functions allow your customer to quickly boost the heating and hot water whenever needed.



#### Choose from a range of programmes

The VRT 350's clear, high contrast display has programming options for 7 days, weekdays and weekends or 24-hour time periods, making it easy to create your customers comfort zone.



#### Enhanced load compensation

Enhanced load compensation ensures the boiler modulates so it only ever uses the energy it needs.



#### Service, maintenance and fault indicator

Appliance service, fault and maintenance indication is displayed on the screen.



#### ErP class V

High ErP performance for up to 3% increased efficiency.

# VRT 15

## Room thermostat



### Overview

Vaillant room controls have been designed to feel familiar and easy to use. The VRT 15 is our simple but accessible, 230Vac thermostat. Suitable for customers with impaired vision, the VRT 15 has a braille feature so customers can easily understand where the 20°C set point is located.

Compatible with timeSWITCH 160 for single zone system and open vent set ups.

### Features & benefits



#### Automatic daylight saving

Automatically adjusts to British summer/winter time.



#### Discreet plug-in timer

Plugs directly into the fascia of the Vaillant boiler without the need for any cable harnesses.



#### Holiday function

Holiday mode ensures heating is off whilst your customer is away and ready for their return.



#### Easily control traditional S and Y plan systems

Can control either an S or a Y plan system when used with our VR 66 wiring centre.



#### Compatible with Vaillant heating systems

This easy-to-use, simple room thermostat works with the timeSWITCH 160. This thermostat is compatible with all ecoTEC boiler models.



#### ERP class 1

When fitted with timeSWITCH 160.

# sensoROOM

## Wireless thermostat



### Overview

The sensoROOM is an easy-to-use, wireless thermostat that may be used as the room thermostat with the myVAILLANT connect internet gateway. Perfect for customers who want a simple thermostat that still offers weather compensation. The sensoROOM will suit any customer looking for a small thermostat to hide and only wish to control their heating through their phone should be pleased with this simple setup.

### Features & benefits



#### Boiler modulation

ebus connection, via the wireless connection to the Vaillant gateway, allows the boiler to modulate. Ensuring peak performance and optimum efficiency for your customer's home.



#### Simple installation

Quickly establish the wireless connection to the myVAILLANT connect through the myVAILLANT app.



#### Weather compensating

Optimises system flow temperatures and efficiency based on the temperature outside your home via internet weather data.



#### Wide range of temperatures for your comfort

The room temperature can be adjusted between 5 - 30°.



#### ErP class VI (weather compensated via internet data)

When installed with the myVAILLANT connect.



#### App control

Appliance service, fault and maintenance indication is displayed on the screen.

# sensoROOM pure

## Simple digital thermostat



### Overview

The VRT 50/2 (also known as sensoROOM pure) is an easy-to-use digital thermostat that has a contemporary look and familiar dial to provide an easy interface to manage the heating system. Available as a wired room thermostat and utilising Vaillant's eBUS communication protocol, when installed on a Vaillant boiler the control will take full advantage of enhanced load compensation to modulate the Vaillant heating system.

### Features & benefits



#### Boiler modulation

eBUS connection allows the boiler to modulate, ensuring peak performance and optimum efficiency for a Vaillant heating system.



#### Service, maintenance and fault indicator

Appliance service, fault and maintenance indication is displayed on the screen.



#### Enhanced load compensation

Uses enhanced load compensation to adjust the output of the Vaillant boiler, ensuring it only uses the energy needed.



#### Simple installation often utilising existing cable

Two core voltage wired connection for simplicity.



#### Hot water warm start

With the sensoROOM pure, the hot water warm start feature ensures the water is warm allowing for quick availability of hot water through your customers taps.



#### Wide range of temperatures for your comfort

The room temperature can be adjusted between 5 - 30 °C.



#### ERP class V

When fitted with timeSWITCH 150 or new ecoTEC Plus boiler.



#### Inbuilt timer

Unlock inbuilt timer on the new ecoTEC plus boiler facia.

# timeSWITCH 150

Mechanical plug-in timer



## Overview

Our simple mechanical timer allows your customer to adjust their heating programme by choosing when the system should be switched on and off, and how long the boiler should operate for.

Vaillant traditional mechanical controls have been designed to be easy to use and feel familiar, all whilst automatically offering advanced intelligent functionality compatible with Vaillant combination boiler ranges.

## Features & benefits



### Easy to use

Sliding tappets and a large analogue clock display for easy setting of your customers time programmes.



### Load compensation

When used with a VRT 50 thermostat. Load compensation ensures the perfect temperature for maximum comfort, this feature saves money and energy.



### 24-hour programming

Simple 24-hour timer allows for easy programming, with up to 48 heating on/off times.



### Compatible with Vaillant heating systems

Compatible with all Vaillant combination boilers and the VRT 50 digital room thermostat.

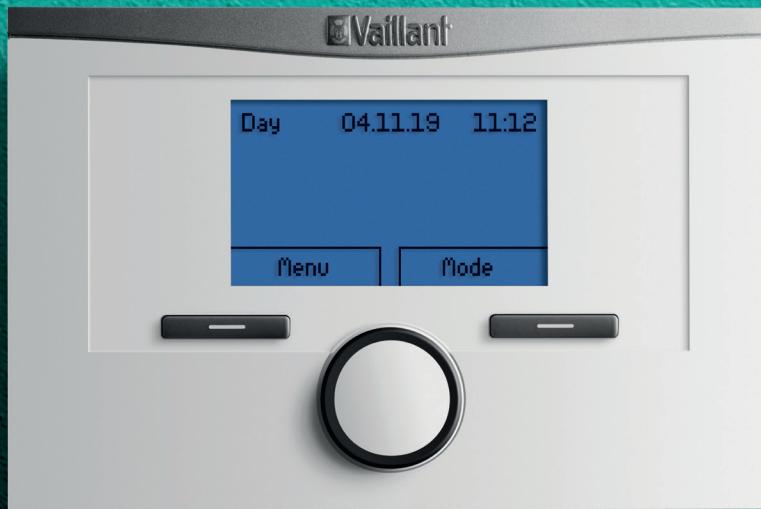


### ERP class V

When fitted with sensoROOM pure.

# timeSWITCH 160

Digital plug-in timer



## Overview

The timeSWITCH 160 digital plug-in control has been designed to be easy to use. It allows homeowners to choose three heating and hot water time periods over the course of a day. Whilst feeling familiar, the timeSWITCH 160 also offers intelligent functionality via the eBUS language.

## Features & benefits

### Easy to use

The TimeSWITCH 160's digital display let's you control your heating system with minimal fuss, with a full range of programmes and simple override functions.



### Flexible control of heating

The device comes with multiple heating and hot water programmes to give you flexibility over what time your customers heating and hot water goes on and off.



### ErP class I\*

When fitted with VRT 15 which should be installed in your customers comfort zone.



### Annual service reminder

The device reminds you when your customers boiler is due for its annual service.



### Avoid unnecessary heating bills

The holiday function means your customer can stop your heating from coming on while you're away and put it back on when you return.



\* timeSWITCH 160 needs to be bought with a Vaillant VRT 15 room thermostat.

# vSMART

## Internet connected control



### Overview

vSMART is a wireless heating and hot water control that is managed via an app, allowing for control from a mobile device, anywhere, anytime.

The vSMART room thermostat can be either wall mounted or free-standing, depending on the homeowner's preference and can be fitted in as little as 25 minutes. It uses quick-fit connections from the gateway wires, which are fed straight into the boiler, using our intelligent low voltage eBUS connection which requires easily available 0.75mm, 2 core cable.



#### Boiler modulation

eBUS connection allows the boiler to modulate, ensuring peak performance and optimum efficiency for a Vaillant heating system.



#### Weather compensating

Optimises system flow temperatures and efficiency based on the temperature outside your home via internet weather data.



#### ErP class VI (weather compensated via internet data)

High ErP performance for up to 4% increased efficiency.



#### Android and Apple iOS application

Provides enhanced insight into your customers heating system performance and energy consumption.



#### Multi-user sharing and multi-home control

The app allows for multiple users to access one control. Your customer can also use one app to connect to multiple controls, e.g. family home and holiday home.



#### Holiday function

Preventing the heating from coming on whilst your customer is away and putting it back on ready for when they return.

# Wiring centres

## Overview

Part of creating the Vaillant system or improving customers comfort can involve adding zones and therefore zone valves. Vaillant controls are only compatible with Vaillant wiring centres. Below is a description of the wiring centres we offer and how and when they can be used.

Wiring centre	Article number	Notes
VR 66/2	0020135785	<p>Control up to 2 heating zones and hot water.</p> <p>Works with 2 and 3 port valves.</p> <p>Compatible with cylinder thermostats and the Vaillant VR 10 sensor (sold separately - 306787).</p>
VR 70	0020184844	<p>Control up to 2 heating zones and hot water.</p> <p>Includes 2x VR 10's.</p> <p>Only to be used with 2 port zone valves.</p> <p>Can be used as secondary wiring centre in conjunction with VR 71.</p>
VR 71	0020184847	<p>Control up to 3 heating zones and hot water.</p> <p>includes 3x VR 10's and 1x VR 11.</p> <p>Only to be used with 2 port zone valves.</p>

# Controls compatibility finder

## Combination boiler

Control	1 heating zone	2 heating zones	Multiple heating zones
<b>Weather compensating</b>			
	sensoCOMFORT**	✓	✓ with VR 71 ✓ up to 5 with VR 71 + VR 70
	sensoCOMFORT RF**	✓	✓ with VR 71 ✓ up to 3 with VR 71
	VRC 700***	✓	✓ with VR 70 ✓ up to 7 with VR 71 + 2 x VR 70
	VRC 700f***	✓	✓ with VR 70 ✓ up to 3 with VR 71
	sensoHOME + outdoor sensor*	✓	
	sensoROOM + myVAILLANT connect	✓	
	vSMART	✓	
<b>Load compensating</b>			
	sensoHOME**	✓	✓ with VR 66/2
	sensoHOME RF	✓	
	VRT 350****	✓	✓ with VR 66/2
	VRT 350f	✓	
	sensoROOM pure + (timeSWITCH 150 or new ecoTEC)	✓	

## System/Open vent boiler

Control	1 heating zone	2 heating zones	Multiple heating zones
<b>Weather compensating</b>			
	sensoCOMFORT**	✓ with VR 71	✓ with VR 71 ✓ up to 5 with VR 71 + VR 70
	sensoCOMFORT RF**	✓ with VR 71	✓ with VR 71 ✓ up to 3 with VR 71
	VRC 700***	✓ with VR 70	✓ with VR 70 ✓ up to 7 with VR 71 + 2 x VR 70
	VRC 700f***	✓ with VR 70	✓ with VR 70 ✓ up to 3 with VR 71
	sensoHOME + outdoor sensor*	✓ with VR 66/2	
	sensoROOM + myVAILLANT connect	✓ with VR 66/2	
	vSMART	✓ with VR 66/2	
<b>Load compensating</b>			
	sensoHOME**	✓ with VR 66/2	✓ with VR 66/2
	sensoHOME RF	✓ with VR 66/2	
	VRT 350****	✓ with VR 66/2	✓ with VR 66/2
	VRT 350f	✓ with VR 66/2	
<b>Basic setup</b>			
	timeSWITCH 160 + VRT 15	✓ with VR 66/2	

\* Outdoor sensor sold separately.

\*\* VR 92(F)s required for additional zones.

\*\*\* VR 91(f)s required for additional zones.

\*\*\*\* second VRT 350 required for additional zone.

 Controls with the phone symbol may be controlled on a smart phone when installed with a Vaillant internet gateway. Gateway may need to be purchased separately.

# Heat pumps with Vaillant controls

## Heat pumps

Almost all of our current range of heat pumps can and should be fitted with either a sensoCOMFORT or VRC 700 control.

Vaillant can offer an aroTHERM hybrid renewables heating system for those properties that have heat loss outside the scope of a single heat pump or that have a fossil fuel boiler that is expensive to run.

An aroTHERM hybrid system should always be fitted with either a sensoCOMFORT or VRC 700 control\*, which features Vaillant's unique intelligent tariff selection tool, triVAI®.

## What is triVAI®?

The triVAI intelligent tariff selection tool ensures a Vaillant hybrid system works as efficiently as possible. It assesses the energy use of each part of the system, analyses the Coefficient of Performance of the heat pump, the efficiency of the boiler and energy tariff prices. With this data, triVAI is able to select the most cost-effective heat source in the system. It does all of this automatically with no intervention required from the user.

This smart approach to integrating renewables (either at the beginning of a building project or as a retrofit solution) offers more flexibility and options for a wide range of properties.



### Unique triVAI® intelligent control system

Controlled via the VRC 700(f) or sensoCOMFORT (RF). There are three possible energy tariffs that can be entered - providing maximum cost savings.



### Reduced maintenance costs

Glycol only needed in the outdoor circuit to the heat pump.



### Excellent green credentials

Provides significant carbon and energy bill savings.



### Easy to install and commission

Uses the Vaillant set-up wizard.



### Compatibility

Compatible with all boiler systems including oil and LPG.



### Suitable for a wide range of properties

Can be installed in new build properties as well as retrofitted into older properties or those that already use an expensive heating system.



\* VRC 700(f) and sensoCOMFORT (RF) control supplied separately.

# Boiler Plus

All of Vaillant's current range of controls or combination of controls exceed the requirements of the Boiler Plus legislation introduced in 2018. We have always been proud to provide our customers with the most efficient controls on the market.

Sustainability and efficiency are at the heart of everything we do.

## What is Boiler Plus?

Boiler Plus is government legislation that aims to regulate and improve the way homes use energy by increasing the efficiency of their heating systems. If you're looking to update your customers heating system, or simply want to ensure your customer is receiving the best efficiency possible, we'll help you understand the steps necessary to comply with the government regulation, as well as answer a number of questions frequently asked on the topic.

There are a number of ways you can comply with the Boiler Plus regulations. We have outlined the absolute requirements below:

**Your heating system must meet or exceed an Energy Related Products (ErP) efficiency of 92% during operation.**

**All installations must have time and temperature controls fitted, if they aren't already present and working correctly.**

## How to comply?

In addition, combination boilers, which make up a significant proportion of the market will require one of four additional requirements to be fitted. It will mean each installation will include a consultancy aspect needed for each boiler swap. The measures available are:

**Load compensation** - the ability to modulate the flow temperature from the boiler based on the actual room temperature, this requires the control and boiler to 'speak' the same language.

**Weather compensation** - the ability to modulate the flow temperature from the boiler based on the outdoor temperature.

**Smart control** - A control that provides automation and optimisation.

**Passive Flue Gas Heat Recovery** - a method of preheating a hot water demand by utilising any excess heat in the flue.

## What's new?

**As of late 2022, Boiler Plus standards have been introduced in Scotland and Wales with some slight differences to those set in England.**

## Boiler Plus in Wales

Boiler Plus policy in Wales introduces the requirement for the smart thermostat to also feature remote access.

For a complete solution that meets the four additional measures of Boiler Plus in Wales, we would recommend pairing an ecoTEC exclusive with a sensoHOME or sensoCOMFORT with an internet gateway.

## Boiler Plus in Scotland

Boiler Plus policy in Scotland meanwhile has been expanded to apply to all gas boiler replacements (so includes system and open vent boilers as well as combination).

Control requirements remain the same as England.

# Tested. secure. Peace of mind.

## Vaillant works with VDE to ensure data is secure

The VDE institute is an independent and neutral European technical-scientific association that tests and certifies electrotechnical devices, components and systems. They test products for their safety, electromagnetic compatibility and other product characteristics.

Products carrying the VDE mark have been independently assessed against international standards and legal protection requirements.

One of the areas the VDE works in is the assessment of products and services for smart home security.

All of Vaillant's products have been rigorously tested and have met VDE's strict testing criteria for approval by the Institute. You can therefore rest assured that Vaillant products are secured and protected to the highest level.



## Order numbers

Article description	Article code
<b>Connected products</b>	
myVAILLANT connect	0010037346
myVAILLANT connect + sensoROOM	0010038369
myVAILLANT connect + sensoHOME RF	0010038370
myVAILLANT connect + VRA 42	0010038367
VRA 42	0010040289
<b>Weather compensating controls</b>	
sensoCOMFORT	0010036819
sensoCOMFORT RF	0010036820
VR 92	0020260925
VR 92f	0020260940
VRC 700	0020236291
VRC 700f	0020259829
VR 91	0020171334
VR 91f	0020231566
ambiSENSE starter pack	0020290348
VR 50 ambiSENSE radiator valve	0020242487
VR 51 ambiSENSE thermostat	0020247923
VR 52 signal repeater	0020253437
vSMART combination boiler pack	0020223154
vSMART system/open vent boiler pack	0020223158
<b>Load compensating controls</b>	
sensoHOME	0020260951
sensoHOME RF	0020260961
VRT 350	0020124475
VRT 350f	0020124482
<b>Simple controls</b>	
sensoROOM	0010035748
timeSWITCH 160	0020124498
timeSWITCH 150	0020116882
VRT 15	306777
sensoROOM pure	0010038663
<b>Wiring centres</b>	
VR 66/2	0020135785
VR 70	0020184844
VR 71	0020184847

# Contacts

## Sales enquiries

Vaillant sells its products through plumbing and heating merchants in the UK. For further information, contact your local Vaillant sales representative.

Phone: **0345 602 0262**

## Training

For information on training centres and courses in your area.

Phone: **0345 601 8885**

Email: [training@vaillant.co.uk](mailto:training@vaillant.co.uk)

## Technical enquiries

If you have a technical query, you can contact us by phone or email.

Phone: **0344 693 3133**

Email: [technical@vaillant.co.uk](mailto:technical@vaillant.co.uk)

## Advance support line

There's a Regional Business Manager near you to support your business, along with dedicated Advance support lines.

Call us: **0330 678 0878** or

Email us: [advance-support@vaillant.co.uk](mailto:advance-support@vaillant.co.uk)

## General enquiries

If you are unsure of who you need to speak to or you have a general enquiry, our friendly reception staff will happily point you in the right direction.

Phone: **0345 602 2922**

## System, Sales & Design

Phone: **0330 123 1767**

Email: [systemdesignuk@vaillant.co.uk](mailto:systemdesignuk@vaillant.co.uk)



Heating



Hot water



Renewables

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