

Why Vaillant?

Because our systems are the choice of a professional.



■ ecoTEC exclusive

■ ecoTEC plus

■ ecoTEC pro

Because  **Vaillant** thinks ahead.

Simply high performance

Introduction

Vaillant - Intelligent System Solutions

Vaillant has been setting the standards in the heating market for more than 135 years, creating products that have revolutionised the industry.

Today, as one of Europe's largest heating technology manufacturers, our heating systems cover renewable technologies, domestic gas boilers, hot water cylinders, controls and products for commercial applications. All systems provide the same enviable reputation for performance, efficiency, quality and reliability that has become synonymous with the Vaillant brand.

This brochure has been designed to provide all the information needed to select your next heating and hot water system. Should you need any additional information please contact us to see how we can help.

Domestic and commercial heating

For both domestic and commercial heating, our products boast the highest energy efficiency ratings and lowest emissions. At the same time we continue to develop new solutions that further simplify boiler installation, commissioning and servicing and ease of use, both at home and in the workplace.

Renewable energy

The Vaillant solar domestic hot water system is the most advanced complete solar heating system available. As constant innovators committed to renewable energy, Vaillant are always developing new products such as the geothermal heat pump which uses the natural heat stored in the earth to help provide hot water for your home.

You can be sure that when it comes to creating the perfect environment, Vaillant has it all under control.

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Combination boilers

ecoTEC exclusive

The two ecoTEC exclusive combination boilers feature an innovative low energy pump and eBUS electronics, which allows the use of the full range of Vaillant energy saving controls. For use with sealed heating systems both models are SEDBUK band A rated, have a 3 year warranty and offer outputs of 32kW DHW-27kW CH or 38kW DHW-30kW CH. The stylish appearance includes an intuitive user interface with back light and plain text display, making it an attractive addition to any household.

ecoTEC exclusive key features

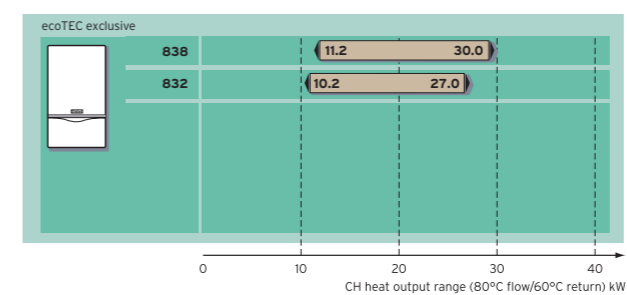
- 2 models - higher outputs to suit larger hot water and heating applications
- New low energy circulation pump
- Compatible with the Vaillant range of high efficiency flues and Variable Termination Kit
- Compatible with the Vaillant eBUS controls range, including VRT 392 programmable room thermostat and VRC 430 weather compensator
- Compatible with ecoLEVEL condensate pump
- Stainless steel heat exchanger
- Easy to install
- Back lit plain text display
- Built-in two stage frost protection

Easy installation

- Case dimensions 800mm x 480mm x 450mm
- Lift weight from 44kg
- Easy wiring
- Push-fit flue system with telescopic accessories
- All models can be converted to LPG
- Compatible with a wide range of existing controls
- Compatible with the full range of easy to install, advanced controls from Vaillant
- Filling loop for fast installation



ecoTEC exclusive CH range chart



ecoTEC exclusive



Combination boiler

ecoTEC plus 937

The ecoTEC plus 937 high efficiency storage combination boiler provides a high level of hot water comfort and is ideally suited to properties with higher hot water demands. It is SEDBUK band A rated, has a 2 year warranty and offers an output of 37kW DHW-28kW CH.

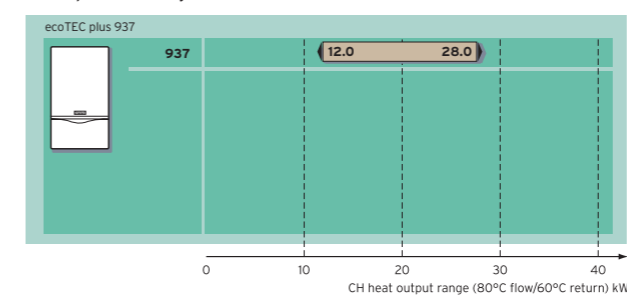
ecoTEC plus 937 key features

- High efficiency SEDBUK band 'A' rating
- Fully modulating low NOx burner and fan (Class 5)
- Separate 15 litre "actoSTOR" provides exceptional hot water delivery and comfort
- Powerful bath filling and shower performance - up to 200 litres of blended hot water ($\Delta T=35^{\circ}\text{C}$) in 10 minutes
- "actoSTOR" fully recharges in just 2 minutes
- DHW output up to 37.0 kW
- Compatible with ecoLEVEL condensate pump

Easy installation

- No G3 qualification required
- Boiler and tank separate for easier handling
- Boiler case dimensions 720mm x 440mm x 598mm
- All major components built-in
- Push-fit flue system with telescopic accessories
- Operation on low water pressure (1.3 bar)
- Compatible with the full range of easy to install, advanced controls from Vaillant
- LPG conversion kit available
- Installation weight storage bank 17kg
- Installation weight combi unit 38kg

ecoTEC plus 937 CH range chart



ecoTEC plus 937



Combination boilers

ecoTEC plus

ecoTEC plus high efficiency combination boilers are all SEDBUK Band A rated, have a 2 year warranty and offer outputs of 23-37kW DHW and 19-28kW CH across three models. With Vaillant's 'AquaComfort' system, ecoTEC plus combination boilers offer excellent hot water performance providing instantaneous hot water at a constant temperature.

ecoTEC combination boilers key features

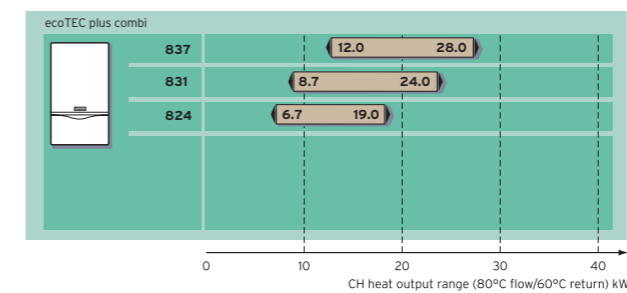
- 3 models with powerful hot water performance
- Large surface area stainless steel heat exchanger to maximise heat transfer
- Comprehensive status and diagnostic information and push button programming
- Compatible with ecoLEVEL condensate pump
- Compatible with the Vaillant range of high efficiency flues and Variable Termination Kit
- Built-in two stage frost protection

Easy installation

- Compact case dimensions
 - 824: 720mm (H) x 440mm (W) x 335mm (D)
 - 831: 720mm (H) x 440mm (W) x 335mm (D)
 - 837: 720mm (H) x 440mm (W) x 403mm (D)
- Low lift weight from 35kg
- Easy wiring
- Push-fit flue system with telescopic accessories
- Compatible with a wide range of existing controls
- Compatible with the full range of easy to install, advanced controls from Vaillant



ecoTEC plus combi CH range chart



ecoTEC plus combination boiler



System boilers

ecoTEC plus

The ecoTEC system boiler range comprises 6 models, all are SEDBUK band A rated, have a 2 year warranty and offer outputs of 12, 15, 18, 24, 30 and 37kW CH.

ecoTEC plus system boilers key features

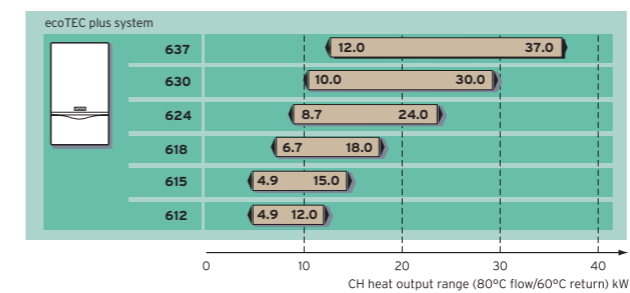
- Compact and lightweight for easy installation and excellent siting flexibility
- Built-in two stage frost protection
- Large surface area stainless steel heat exchanger to maximise heat transfer
- Comprehensive status and diagnostic information and push button programming
- Compatible with ecoLEVEL condensate pump
- Compatible with the Vaillant range of high efficiency flues and Variable Termination Kit

Easy installation

- Compact case dimensions
 - 612, 615, 618, 624: 720mm (H) x 440mm (W) x 335mm (D)
 - 630: 720mm (H) x 440mm (W) x 369mm (D)
 - 637: 720mm (H) x 440mm (W) x 403mm (D)
- Low lift weight from 35kg
- Easy wiring
- Push-fit flue system with telescopic accessories
- Compatible with a wide range of existing controls
- Compatible with the full range of easy to install, advanced controls from Vaillant



ecoTEC plus system CH range chart



ecoTEC plus system boiler



Open vent boilers

ecoTEC plus

ecoTEC plus open vent boilers are the perfect solution for traditional open-vented heating systems. All four models are SEDBUK band A rated, have a 2 year warranty and offer outputs of 15, 18, 28 and 38kW CH.

ecoTEC plus open vent boilers key features

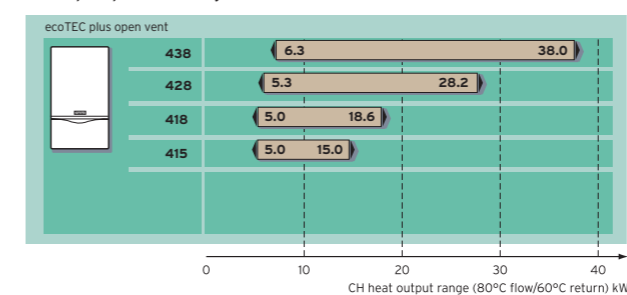
- Compact and lightweight for easy installation and excellent siting flexibility
- Built-in two stage frost protection
- Large surface area stainless steel heat exchanger to maximise heat transfer
- Comprehensive status and diagnostic information and push button programming
- Compatible with ecoLEVEL condensate pump
- Compatible with the Vaillant range of high efficiency flues and Variable Termination Kit

Easy installation

- Compact case dimensions 600mm (H) x 375mm (W) x 340mm (D)
- Low lift weight from 31kg
- Easy wiring
- Push-fit flue system with telescopic accessories
- Compatible with a wide range of existing controls
- Compatible with the full range of easy to install, advanced controls from Vaillant



ecoTEC plus open vent CH range chart



ecoTEC plus open vent boiler



Combination boilers

ecoTEC pro 24 & 28

The ecoTEC pro 24 and 28 combination boilers have the same high build quality as ecoTEC plus combi models but with a basic specification.

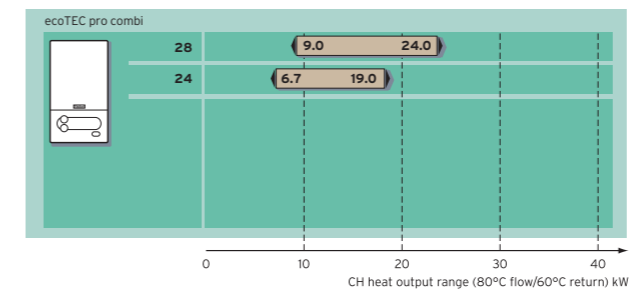
Vaillant's ecoTEC pro range of combination boilers feature comprehensive status and diagnostic information with simple push button operation for easy commissioning and servicing.

Both models feature Vaillant's 'Aquacomfort' system that provides instantaneous hot water at a constant temperature and are compatible with the ecoLEVEL condensate pump.

The ecoTEC pro range has the benefit of a 1 year warranty.



ecoTEC pro combi CH range chart

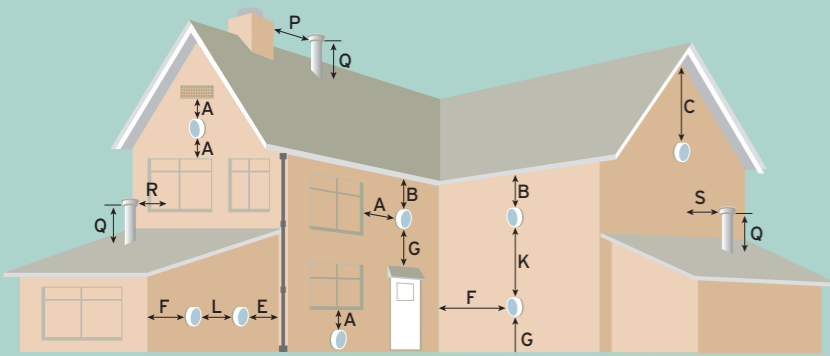


ecoTEC pro 24 & 28

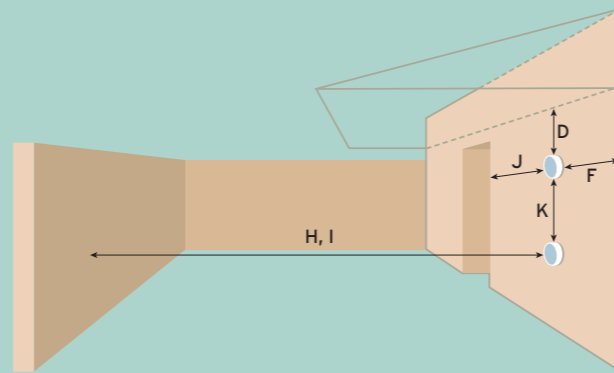


Regulations and standards to be observed

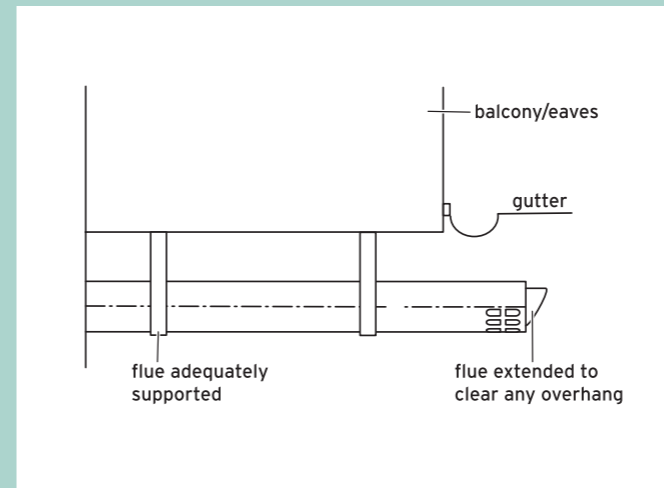
Flue location and ventilation



Note
Vertical flues must not terminate within 600mm of an openable window, air vent or any other ventilation opening.



Note
In addition, the terminal should not be nearer than 150mm to an opening in the building fabric formed for the purpose of accommodating a built-in element such as a window.



1) Flue termination under balcony/eaves

Flue termination

The following details refer to both flue systems.

- a. The terminal must be located where the products of combustion can escape freely at all times.
- b. A plume of water vapour will sometimes be visible from the flue terminal. Positions where this could be a nuisance should be avoided.
- c. If the terminal is fitted less than 2m above a balcony, above ground or above a flat roof to which people have access then a suitable terminal guard must be provided and fitted (made by Tower Flue Components, Tonbridge, TN9 1TB, Model K3, plastic coated).

1) Dimensions B, C, and D:

These clearances may be reduced to 25mm without affecting the performance of the boiler. In order to ensure that the condensate plume does not affect adjacent surfaces the terminal should be extended as shown opposite.

2) Dimension F:

This clearance may be reduced to 25mm without affecting the performance of the boiler. However, in order to ensure that the condensate plume does not affect adjacent surfaces, a clearance of 300mm is preferred. For IE, recommendations are given in the current edition of IS 813.

Flexible solutions

As you would expect, Vaillant are at the forefront of technology that offers you flexible boiler siting solutions. Vaillant's Variable Termination Kit allows plume vapour to be redirected away from neighbouring properties, while our ecoLEVEL condensate pump has been designed to solve the problems encountered where a high efficiency boiler is installed remote from the waste drain system. For full details see pages 22 & 23.

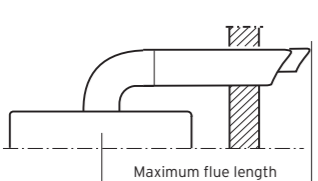
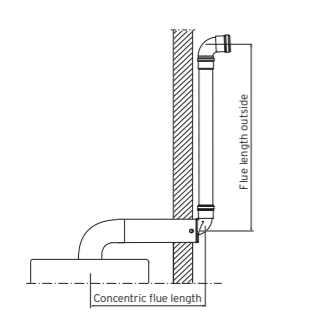
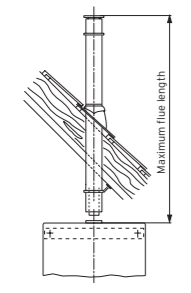
- Vaillant ecoTEC boilers are certified as heating boilers with corresponding flue systems according to EC Directive 90/396/EEC on gas-fired devices.
- The installation of the boiler and its flue must be carried out by a competent person who is registered with Gas Safe Installers (UK & Isle of Man) or CORGI (Northern Ireland).
- The installation of the boiler and flue must be in accordance with the Gas Safety (Installation and Use) Regulations 1998, the Building Regulations and BS 5440 Part 1.
- Two types of flue system are available for ecoTEC boilers. The standard concentric flue system (100mm outside diameter) and a larger diameter concentric system (125mm outside diameter) which allows longer air/flue duct lengths to be achieved.
- The air/flue duct operates at very low temperatures therefore no clearance is necessary between the air duct and adjacent services.

Terminal Position	mm
A Directly below an opening, above an opening or horizontal to an opening, air brick, opening windows etc.	300
B Below gutters, soil pipes or drain pipes	75
C Below eaves	200
D Below balconies	200
E From vertical drain pipes and soil pipes	25
F From internal or external corners	300
G Above ground, roof or balcony	300
H From a surface facing a terminal	600
I From a terminal facing a terminal	1200
J From an opening in the car port (e.g. door, window) into the dwelling	1200
K Vertically from a terminal on the same wall	1500
L Horizontally from a terminal on the same wall	300
Vertical Flues	
P From another terminal	600
Q Above roof level	300
R From adjacent opening window	600
S From adjacent wall to flue	500



ecoTEC range

Maximum flue lengths

Ø 60/100		ecoTEC range									
Accessories	Article No.	612 615	618	624 630	637	824	831	837 937	pro24	pro28	415 418 428 438
Horizontal flue systems	303 933	Max. permitted concentric flue length									
		22.0m incl 1 elbow 87°	12.0m incl 1 elbow 87°	8.0m incl 1 elbow 87°	5.5m incl 1 elbow 87°	12.0m incl 1 elbow 87°	8.0m incl 1 elbow 87°	5.5m incl 1 elbow 87°	12.0m incl 1 elbow 87°	8.0m incl 1 elbow 87°	10.0m incl 1 elbow 87°
		Maximum length of flue is reduced by 1.0m for each additional 87° elbow and by 0.5m for each additional 45° elbow									
Variable termination kit	303 942 303 946	The maximum permitted concentric flue length given above is reduced as follows:									
	only in combination with 303 933	<ul style="list-style-type: none"> - Reduced by 0.5m for the variable terminal - Reduced by 0.5m for every 1 m VTK pipe - Reduced by 0.5m for every 87° bend - Reduced by 0.5m for 2 x 45° bend 									
		The flue length outside shall not exceed 10m									
Vertical flue systems	0020065937	26.0m	16.0m	12.0m	8.0m	16.0m	12.0m	8.0m	16.0m	12.0m	10.0m
			Maximum length of flue is reduced by 1.0m for each additional 87° elbow Maximum length of flue is reduced by 0.5m for each additional 45° elbow								

Accessories

Planning the air/flue duct layout Ø 60/100

Alternative termination accessories available



0020065937 = Vertical air/flue duct (black)













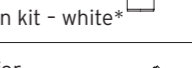


303 933 = Horizontal air/flue duct

303 936 = Horizontal telescopic air/flue duct

* Delivered with support clips

Optional connection accessories	Article No.	00200 65937	303 933	303 936
Air/flue duct extensions, concentric 470 mm - Ø 60/100	303 902	●	●	●
Air/flue duct extensions, concentric 970 mm - Ø 60/100	303 903	●	●	●
Air/flue duct extensions, concentric 1970 mm - Ø 60/100	303 905	●	●	●
Bends (PP), concentric (pack of 2) 45° - Ø 60/100	303 911	●	●	●
Elbow, concentric 87° - Ø 60/100	303 910	●	●	●
Flue support clips (pack of 5) - Ø 100	303 821	●	●	●
Adjustable flue support clips (pack of 3) - Ø 100	303 935	●	●	●
Sliding sleeve (PP) Ø 60/100	303 915	●	●	●
Adjustable roof tiles for pitched roof	009 076 black	●	●	●
Flexible pitched roof seal	303 980	●		

Optional connection accessories	Article No.	00200 65937	303 933	303 936
Flat roof penetration collar 	009 056	●		
Telescopic extension 440 mm - 690 mm Ø 60/100 	303 906	●	●	●
Telescopic offset section 	303 919	●	●	●
Black terminal kit for horizontal air/flue duct 	303 934		●	●
Variable termination kit - black* 	303 942		●	●
Extension pipe for variable termination kit VTK Ø 60 mm 1 m - black* 	303 943		●	●
87° elbow for variable termination kit - black* 	303 944		●	●
45° bend for variable termination kit - black (2 pieces) 	303 945		●	●
Variable termination kit - white* 	303 946		●	●
Extension pipe for variable termination kit VTK Ø 60 mm 1 m - white* 	303 947		●	●
87° elbow for variable termination kit - white* 	303 949		●	●
45° bend for variable termination kit - white (2 pieces) 	303 948		●	●
Ridge tile flue terminal 	303 982	●		



ecoTEC range

Maximum flue lengths

Ø 80/125		ecoTEC range									
Accessories	Article No.	612 615	618	624	630	637	824	831 pro 28	837 937	pro 24	415 418 428 438
Horizontal flue systems 	303 209	Maximum permitted concentric flue length									
		25.0m incl 1 elbow 87°	39.0m incl 1 elbow 87°	29.0m incl 1 elbow 87°	27.0m incl 1 elbow 87°	32.0m incl 1 elbow 87°	39.0m incl 1 elbow 87°	29.0m incl 1 elbow 87°	32.0m incl 1 elbow 87°	39.0m incl 1 elbow 87°	25.0m incl 1 elbow 87°
Maximum length of flue is reduced by 2.5m for each additional 87/90° elbow and by 1.0m for each additional 45° elbow											
Vertical flue systems 	303 200	27.0m	41.0m	31.0m	29.0m	34.0m	41.0m	31.0m	34.0m	41.0m	27.0m
		Maximum length of flue is reduced by 2.5m for each additional 90° elbow and by 1.0m for each additional 45° elbow									

Accessories

Planning the air/flue duct layout Ø 80/125

Alternative termination accessories available

303 200 = Vertical air/flue duct (black)

303 209 = Horizontal air/flue duct

Optional connection accessories	Article No.	303 200	303 209
Air/flue duct extensions (PPs), concentric 470 mm - Ø 80/125	303 202	●	●
Air/flue duct extensions (PPs), concentric 970 mm - Ø 80/125	303 203	●	●
Air/flue duct extensions (PPs), concentric 1970 mm - Ø 80/125	303 205	●	●
Bends (PPs), concentric (pack of 2) 45° - Ø 80/125	303 211	●	●
Elbow (PPs), concentric 87° - Ø 80/125	303 210	●	●

Optional connection accessories	Article No.	303 200	303 209
Flue support clips (pack of 5) Ø 125	303 616	●	●
Sliding sleeve (PPs) Ø 80/125	303 215	●	●
Adjustable roof tiles for pitched roof (not suitable for slate roofs)	009076 black	●	●
Flat roof penetration collar	009 056	●	●
Flexible pitched roof seal (suitable for slate roofs)	303 980	●	

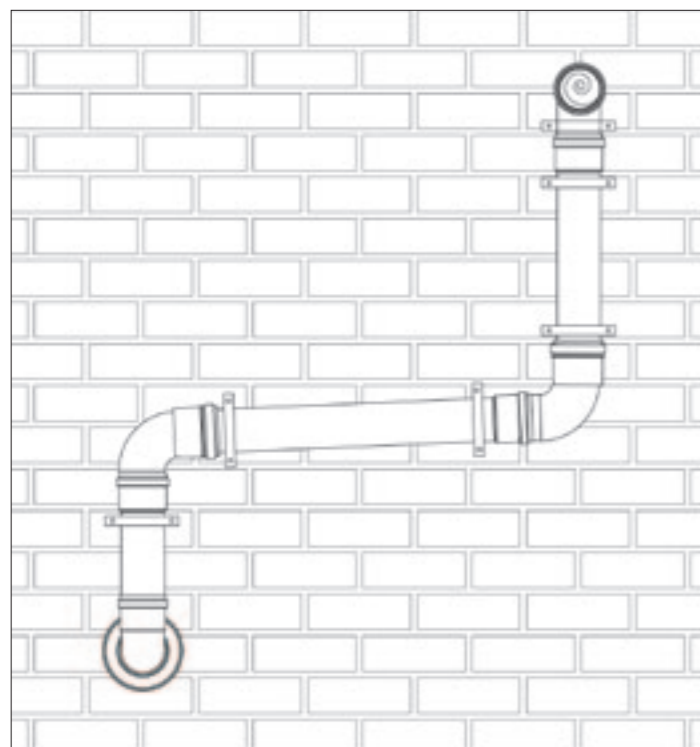
This accessory is required to allow connection of Ø 80/125 flue system to the boiler.

Connection accessories	Article No.
Appliance connection piece Ø 80/125	303 926



VTK

Variable termination kit



Vaillant's Variable Termination Kit (VTK) is the latest high efficiency accessory designed to overcome the visual and siting issues often associated by plume.

The VTK enables the flue outlet to be re-sited away from the boiler reducing the visual impact and nuisance plumbing causes. A unique design, push-fit connections and a choice of colour pipework all save the time and inconvenience of boiler relocation.

The VTK has been developed to satisfy the needs of installers, specifiers and service engineers. And what's more, the VTK comes with additional components offering solutions to all installations.

Variable termination kit	Article no:
Black	303 942
White	303 946



VTK

Condensate pump

ecoLEVEL



ecoLEVEL

ecoLEVEL condensate pump

The Vaillant ecoLEVEL condensate pump has been designed to solve the problems encountered where a high efficiency boiler is installed remote from the waste drain system. This removes the time and expense involved in relocating a boiler.

The ecoLEVEL condensate pump is compact and extremely quiet when running and will be unobtrusive when installed in almost all areas of the home, including in situations where the boiler is installed below ground level, such as in cellars.

Designed to be fixed to a wall close to the boiler, the pump is supplied with all necessary wall fixings and pipes ensuring that the pump is simple and quick to install.

ecoLEVEL technical features:

- Low operating noise <40 dB(A)
- Two status LED's indicating operation and fault
- Maximum vertical pump height 4 metres
- Maximum delivery 150 litres / hour condensate at 4 metres vertical height
- Alarm cable delivered with two plugs already fitted to enable direct connection to all ecoTEC boilers

Key technical data:	
Dimensions (mm)	160 x 180 x 100
Nominal capacity	0.5 litre
Voltage	230 V
Max power rating	1 W
Max pump height	4m
Weight (filled)	1.8 kgs
Delivery volume	150 litres / hour at 4m head



Comfortable living

Performance heating controls

Vaillant offer a comprehensive range of performance heating controls for the ecoTEC range, which help provide a comfortable living environment and minimise fuel costs.

Analogue room thermostat - VRT 30

- Straightforward, compact room thermostat to maintain constant room temperature

Digital room thermostat - VRT 50 *

- Maintains a constant room temperature and modulates the boiler output depending on the actual room temperature
- Easy to install - only requires a low voltage two-wire connection to the boiler
- In conjunction with the timeSWITCH 130 compatible with all ecoTEC combination boilers

Analogue central heating timer - timeSWITCH 130

- 24 hour analogue timer to control central heating
- Easy to operate
- Over-ride switch allows to keep the heating constantly on or switched off for longer periods
- Timer plugs into the boiler fascia - no wiring required
- Installation in conjunction with room thermostat VRT 30 or VRT 50 for room temperature control

Digital central heating and hot water timer - timeSWITCH 140

- Provides independent time control for both central heating and hot water
- Timer plugs into the boiler fascia - no wiring required
- Used with an ecoTEC combination boiler, the hot water programme controls the Aqua Comfort for instant hot water
- Used with an ecoTEC system or open vent boiler an additional VR 65 Control Centre is needed to control central heating as well as the hot water cylinder

- Installation in conjunction with VRT 30 room thermostat for room temperature control. Cannot be combined with VRT 50 room thermostat

Programmable room control - VRT 392 *

- Provides independent time and temperature control for both central heating and hot water
- Maintains a constant room temperature and modulates the boiler output depending on the actual room temperature
- Advanced functionality with 3 independent time programmes per day with individual temperatures for adaptation to individual schedules, automatic switch between day and night set-back temperature, over-ride function for temporary changes, holiday function and automatic summer/winter changeover
- Easy and clear understanding of information thanks to blue backlit and plain text display with numbered screens
- Only two 'click and turn' knobs are needed to select and change data and settings
- Used with an ecoTEC combination boiler, the hot water programme controls the Aqua Comfort for instant hot water
- Used with an ecoTEC system or open vent boiler an additional VR 65 Control Centre is needed to control central heating as well as the hot water cylinder

Wireless programmable room control - VRT 392f *

- Offers the same functionality of the programmable room control VRT 392 plus wireless communication between the room control and the boiler
- Additional installation comfort and flexibility
- Receiver plugs into the boiler fascia

* As enhanced load or weather compensators, Vaillant 'eBUS' controls qualify for additional efficiency points in SAP 2009 calculation.



Comfortable living

Performance heating controls

Weather compensator - VRC 430 *

- Permanent monitoring of the outside temperature to adapt the boiler output to maintain the desired room temperature
- Provides independent time and temperature control for both central heating and hot water
- Advanced functionality with 3 independent time programmes per day with individual temperatures for adaptation to individual schedules, automatic switch between day and night set-back temperature, over-ride function for temporary changes, holiday function and automatic summer/winter changeover
- Easy and clear understanding of information thanks to blue backlit and plain text display with numbered screens
- Only two 'click and turn' knobs are needed to select and change data and settings
- Plugs into boiler fascia or can be wall mounted
- Installed on the wall the VRC 430 also acts as a room thermostat
- Used with an ecoTEC system or open vent boiler an additional VR 65 Control Centre or a VR 61 Mixer module is needed to control central heating as well as the hot water cylinder

- Used with an ecoTEC combination boiler, the hot water programme controls the Aqua Comfort for instant hot water

Wireless weather compensator - VRC 430f *

- Offers the same functionality of the weather compensator VRC 430 plus wireless communication between the weather compensator, the boiler and the outside sensor
- Additional installation comfort and flexibility
- Receiver plugs into the boiler fascia
- PV powered outside sensor

Remote control unit for VRC 430 / VRC 430f - VR 81 *

- Remote control can be used as room thermostat while weather compensator remains in boiler fascia
- When installing a two-zone heating system a VR 61 Mixer Module will be needed. The VR 81 becomes the room thermostat for the second heating zone
- Can only used in conjunction with weather compensator VRC 430 or VRC 430f

* As enhanced load or weather compensators, Vaillant 'eBUS' controls qualify for additional efficiency points in SAP 2009 calculation.

Controls compatibility	ecoTEC range					
	ecoTEC exclusive	ecoTEC plus 937	ecoTEC plus combination	ecoTEC plus system	ecoTEC plus open vent	ecoTEC pro combination
VRT 30 *	✓	✓	✓	✓	✓	✓
VRT 50 **	✓	✓	✓	X	X	✓
timeSWITCH 130	✓	✓	✓	X	X	✓
timeSWITCH 140	✓	✓	✓	✓ VR65 required	✓ VR65 required	✓
VRT 392	✓	✓	✓	✓ VR65 required	✓ VR65 required	✓
VRT 392f	✓	✓	✓	✓ VR65 required	✓ VR65 required	✓
VRC 430	✓	✓	✓	✓ VR65 or VR61 required	✓ VR65 or VR61 required	✓
VRC 430f	✓	✓	✓	✓ VR65 or VR61 required	✓ VR65 or VR61 required	✓

* timeSWITCH 130 or timeSWITCH 140 required

** timeSWITCH 130 required; cannot be combined with timeSWITCH 140



VRC 430f



uniSTOR

Unvented cylinders

uniSTOR is a range of six high grade stainless steel unvented cylinders from Vaillant. Finished with a stylish casing they are available in a range of sizes from 125 litres to 310 litres. uniSTOR can be used with proprietary system boilers. However when installed with ecoTEC plus system or open vent boilers, a total heating and hot water solution is provided.

uniSTOR features a high recovery heating coil and insulation which exceeds CHeSS Best Practice. All seams are laser welded and the cylinder shell is backed up by a 25 year guarantee.

- uniSTOR cylinders operate using a mains water pressure supply and do not require a feed from a cold water storage tank
- All necessary cold and hot water controls and a 2-port valve for control of domestic hot water are supplied
- All uniSTOR cylinders are backed by a full 2 year guarantee as well as a 25 year guarantee on the cylinder shell

Typical applications	
Single bathroom property	uniSTOR 125
Single bathroom property with an en-suite shower room	uniSTOR 125 / 155
Two bathroom property	uniSTOR 155 / 180
Two bathroom property with an en-suite shower room	uniSTOR 180 / 210
Larger properties	uniSTOR 260 / 310



uniSTOR stainless steel unvented cylinder		125	155	180	210	260	310
External case height	mm	969	1179	1339	1499	1789	2109
External case width	mm	598	598	598	598	598	598
External case depth	mm	554	554	554	554	554	554
Weight approx. (empty)	kg	28	30	33	39	44	49





Intelligent heating

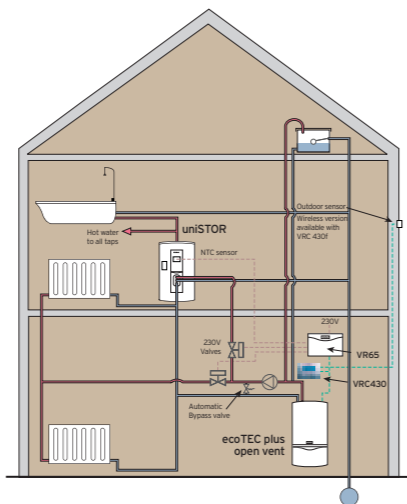
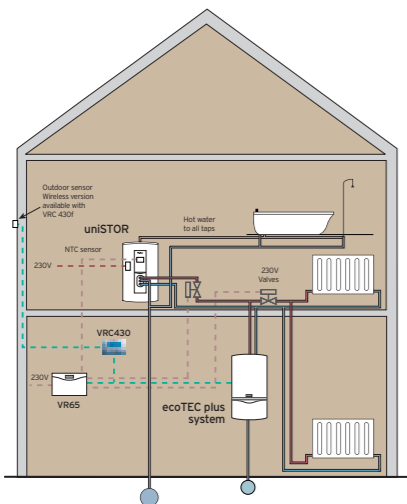
Total system solution



ecoTEC plus

Vaillant ecoTEC boiler can be modular extended to adapt and to meet comfort requirements. With Vaillant 'eBUS' controls a complete integrated system can be created. For the integration of a uniSTOR unvented stainless steel cylinder with an ecoTEC system or open

vent boiler a VR 65 Control Centre can be used. To control a second heating zone, all ecoTEC boilers can be combined with a VR 61 Mixer Module and a VR 81 Remote control unit as room thermostat in the second heating zone.



In case of solar integration a VR 68 Solar Module combines the solar collectors with an auroSTOR twin-coil unvented stainless steel cylinder and with an ecoTEC system or open vent boiler.

These total system concepts bring some unique features and benefits to the installer and the home-owner.

Benefits

- All components supplied from one manufacturer for peace of mind and complete compatibility
- Central heating and hot water temperature can be set at the boiler or at the control
- Cylinder re-charge with 'AquaCondens' system which re-charges cylinder at the most economical temperature to maintain efficiency
- Simple wiring with low voltage two-wire 'eBUS' connection
- Easy to upgrade existing systems

VR 65 Control Centre

The VR 65 Control Centre allows Vaillant low voltage 'eBUS' controls to be integrated within traditional 230V S-plan or Y-plan type installations to provide a total system solution comprising of an ecoTEC system or open vent boiler, uniSTOR unvented stainless steel cylinder and Vaillant 'eBUS' control.

VR 61 Mixer Module

The VR 61 Mixer Module in conjunction with the Vaillant weather compensator VRC 430 or VRC 430f and an ecoTEC boiler deliver heat to two separate heating zones. The remote control unit VR 81 can be used as room thermostat in the second heating zone.

VR 68 Solar Module

The VR 68 Solar Module and the Vaillant weather compensator VRC 430 or VRC 430f allow the combination of Vaillant solar collectors with ecoTEC system or an open vent boiler and an auroSTOR twin-coil unvented stainless steel cylinder. The VR 68 Solar Module controls the ecoTEC boiler to maximise the solar gain.



uniSTOR



ecoTEC plus



VR 61, VR 65 & VR 68



Using the sun's energy to provide hot water

Total solar system solution



auroTHERM plus VFK 150 flat plate collector

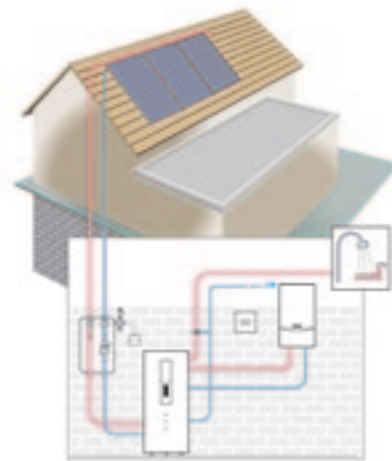
The Vaillant solar domestic hot water system is a sealed pressurised solar system with unique features built-in to every component. It's the most advanced complete solar heating system available and is totally consistent with our commitment to providing maximum efficiency, high performance and total reliability.

auroTHERM exclusive VTK 570/2

Vaillant's latest vacuum tube collector is manufactured using toughened glass and each tube is internally coated with a special high selective absorber coating. Each collector is delivered pre-assembled with 6 tubes per collector, and is compact and lightweight for ease of installation.

auroTHERM flat plate collectors

The auroTHERM plus VFK 150 (vertical or horizontal model) flat plate collectors have a toughened 3.2mm thick glass for improved durability, and special anti-reflex coated glass for excellent solar transmission. The collector consists of a laser welded serpentine



collector with highly absorbent Mirotherm selective coating, along with highly efficient insulation to minimise heat loss from the collector and provide maximum gain. The new low frame profile is a black anodized aluminium extrusion designed especially to allow direct and secure mounting onto our latest roof bracket system, which is common to all of our solar collectors.

The auroTHERM VFK 145 flat plate collector has the same high build quality as the auroTHERM plus VFK 150 but with a more basic specification. It has a toughened 3.2mm thick solar glass cover. An extensive range of accessories are available for the collectors, including pitched or flat roof installation, and the added option of in-roof installation for the flat plate collectors, means there is a solution for virtually any situation. All of the collectors also have the benefit of a 10 year warranty.

The sun's energy heats solar fluid in the solar collector, which is then pumped by the solar pump unit to a coil designed to heat water in a dedicated stainless steel storage cylinder, auroSTOR. A second coil in the cylinder is connected to a conventional heating source, such as a gas boiler, to provide additional heating when there is insufficient solar energy available. The boiler is also required to provide central heating. Managed by the solar control auroMATIC 560/2 the system is able to automatically switch between solar and the auxiliary heat source to ensure there is always hot water on demand.

Features and benefits

- Easy to install, flexible siting
- Uses indirect solar radiation, not just sunlight - for optimum efficiency
- Vaillant's solar DHW system can provide around 50-60% of annual domestic hot water requirements - helps reduce fuel bills and ensure hot water comfort
- Built-in intelligence - automatic switching from solar to conventional power when needed for consistent performance and hot water delivery
- Reduces CO₂ emissions - positive benefit to the environment
- Durable and stylish - adds value to your property
- Compatible for use with a new Vaillant boiler or an existing appliance - upgrade your whole system or use it with your existing boiler



auroTHERM exclusive VTK 570/2



auroSTOR



auroMATIC 570/2

Customer service support

Contact details

Working in partnership

The after sales service and support behind every Vaillant product is part of the quality package that has helped us build a unique reputation within the industry. It is an approach that is reflected in our support for our Total Solar System Solution. We are committed to working in partnership with our installers, offering the very best industry support and training to develop the solar heating market.

Vaillant support team

Our dedicated team is on-hand to offer technical support. We are here to help with product familiarisation and to tackle any other issues that arise in relation to our solar DHW heating products.

High quality training

Please contact our training team to register your interest in attending a Vaillant domestic hot water training course.

Contact details

Head Office

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E-mail technical@vaillant.co.uk
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Sat 9.00am - 4.00pm

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Service

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Sat 9.00am - 4.00pm
Sun 9.00am - 12.00pm

Website

www.vaillant.co.uk

Setting the standard for

customer training



State of the art Vaillant Training Centre in Bristol

As the industry's leading training provider, Vaillant offer comprehensive training courses which can add value to your business.

Every year we train thousands of professionals. We are continually developing and improving our training programmes and facilities to provide a service that matches your requirements.

Every one of Vaillant's training courses is based on practical and detailed hands-on experience, backed up by expert tuition.

The aim of each Vaillant Training Course is to help improve your skills, which in turn can help you to improve your profit. That's why so many choose Vaillant as their training provider.

Who are Vaillant training courses designed for?

- Gas Safe Registered Installers (UK & Isle of Man)
- CORGI Registered Installers (Northern Ireland)
- IPHE Registered Installers
- SNIPEF Registered Installers
- Local Authorities and Housing Associations
- Service Organisations
- Architects and Specifiers
- Merchants and Spare Part Stockists
- Solar DHW installers
- Commercial boiler heating installers

Current training courses

ecoTEC High efficiency domestic boiler range

A one-day course covering our latest range of condensing boilers, including installation, operation, servicing and repair.

Commercial boiler range

A one-day course covering commercial installation, operation, servicing and repair.

BPEC Unvented domestic hot water

Three courses are available to suit all candidates wanting to take this assessment.

- I. A one day BPEC certificated course comprising of a theory training session in the morning followed by assessment in the afternoon.
- II. A half day course comprising of a brief update tutorial followed by the BPEC re-assessment examination paper. Please note to be eligible for this assessment all candidates must already hold a certificate of competence for unvented domestic hot water (expired or current), and will be required to present it prior to the assessment.
- III. A one day defined scope BPEC certificated course for those wanting a better understanding of unvented domestic hot water systems, but not intending to install them. Please note this course does not qualify you to install unvented domestic hot water systems in accordance with part G3 of the Building Regulations.

Solar product course

A one-day course for heating professionals wanting to get a basic understanding of solar domestic heating systems.

BPEC Solar DHW course

A two day course for heating professionals looking to gain solar heating BPEC certification.

BPEC Solar DHW course

A two day defined scope BPEC certificated course for those wanting a better understanding of solar domestic hot water systems, but not intending to install them.

Air to air appreciation course

A one-day course designed for installers who wish to expand their knowledge of air to air heat pumps.

Ground Source Heat Pump (GSHP) course

A one day product course looking at the geoTHERM range of ground source heat pumps. The day will cover installation, operation, service and repair.

BPEC Ground Source Heat Pump (GSHP) course

A two day BPEC certificated course for professionals seeking a GSHP qualification.

Mechanical Ventilation Heat Recovery (MVHR)

A one day product course looking at the recoVAIR range of mechanical ventilation heat recovery units. The day will cover installation, operation, service and repair.

FGas Regulations course

Three day training course leading to the Construction Skills assessment on the FGas Regulations.

Domestic controls training

A one-day course designed to give you the best knowledge and expertise with our range of controls and accessories.

Certificate in Energy Efficiency for Domestic Heating

A one-day course to help you promote the benefits of high efficiency boilers to your customers.

BPEC CPA 1 Combustion Analyser Assessment

From 1st February 2010, CPA1 will be a pre-requisite for anyone wishing to take ACS elements CEN1 and HTR1. We offer a one day BPEC certificated course for those proficient in the use of a combustion analyser.

The day comprises of an update tutorial in the morning followed by assessment in the afternoon. If you would like to receive additional training on flue gas analysis or would just like the opportunity to practice with your own analyser, please contact us for further details.

Tailor-made courses

The Vaillant training department creates custom made programmes to suit your company's individual training needs.

For more information on any Vaillant training course please contact our Training Department on:

Telephone: 01634 292370

Fax: 01634 292354

Email: training@vaillant.co.uk

www.vaillant.co.uk/installers/training



ecoTEC range

Technical specification

	ecoTEC exclusive combi		ecoTEC plus storage combi	ecoTEC plus combi		
	832	838	937	824	831	837
Flue Type	RSF	RSF	RSF	RSF	RSF	RSF
Maximum DHW heat output	kW 31.4	37.2	37.0	23.0	31.0	37.0
	(Btu/h) 107,200	127,000	126,000	78,500	105,800	126,000
DHW flow rate @ 35°C	12.9	15.2	15.2	9.4	12.7	15.2
Mains water pressure required for max. flow rate	bar 0.5	0.5	1.3	0.5	0.75	0.75
CH heat output range (80°C flow/60°C return)	kW 10.2 - 27.0	11.2 - 30.0	12.0 - 28.0	6.7 - 19.0	8.7 - 24.0	12.0 - 28.0
Heating flow / return	mm 22	22	22	22	22	22
Cold water inlet	mm 15	15	15	15	15	15
DHW outlet	mm 15	15	15	15	15	15
Gas inlet	mm 15	15	22	15	15	22
Pressure relief valve discharge pipework	mm 15	15	15	15	15	15
Condensate drain (internal diameter min.)	mm 19	19	19	19	19	19
Electrical connection	V/Hz 230/50	230/50	230/50	230/50	230/50	230/50
External case height	mm 800	800	720	720	720	720
External case width	mm 480	480	440	440	440	440
External case depth	mm 450	450	597	335	335	403
Top clearance (100mm flue/125mm flue)	mm 165/246	165/246	165/275	165/275	165/275	165/275
Side clearance	mm 5	5	5	5	5	5
Bottom clearance	mm 145	145	180	180	180	180
Weight approx.	kg 44	46	55	36	38.3	42.6
LPG model available	Conversion kit	Conversion kit	Conversion kit	Conversion kit	Yes	Conversion kit
SEDBUK	Band A	A	A	A	A	A
NoX level	mg/kWhr 34.71	53.07	44.13	32.84	39.63	44.13
NoX Class	5	5	5	5	5	5

ecoTEC plus system						ecoTEC plus open vent				ecoTEC pro combi	
612	615	618	624	630	637	415	418	428	438	24	28
RSF	RSF	RSF	RSF	RSF	RSF	RSF	RSF	RSF	RSF	RSF	RSF
-	-	-	-	-	-	-	-	-	-	23.0	28.0
-	-	-	-	-	-	-	-	-	-	78,500	95,500
-	-	-	-	-	-	-	-	-	-	9.4	11.5
-	-	-	-	-	-	-	-	-	-	0.5	0.5
4.9 - 12.0	4.9 - 15.0	6.7 - 18.0	8.7 - 24.0	10.0 - 30.0	12.0 - 37.0	5.0 - 15.3	5.0 - 18.3	5.3 - 28.2	6.3 - 38.0	6.7 - 19.0	9.0 - 24.0
22	22	22	22	22	22	22	22	22	22	22	22
-	-	-	-	-	-	-	-	-	-	15	15
-	-	-	-	-	-	-	-	-	-	15	15
15	15	15	15	15	22	15	15	15	15	15	15
15	15	15	15	15	15	-	-	-	-	15	15
19	19	19	19	19	19	19	19	19	19	19	19
230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50	230/50
720	720	720	720	720	720	600	600	600	600	720	720
440	440	440	440	440	440	375	375	375	375	440	440
335	335	335	335	369	403	340	340	340	340	335	335
165/275	165/275	165/275	165/275	165/275	165/275	200/275	200/275	200/275	200/275	165/275	165/275
5	5	5	5	5	5	20	20	20	20	5	5
180	180	180	180	180	180	200	200	200	200	180	180
34.8	34.8	34.8	36.3	37.8	40.2	31	31	33	33	35	37.5
Conversion kit	Conversion kit	Yes	Conversion kit	Yes	Conversion kit	*	*	*	Yes	Conversion kit	Conversion kit
A	A	A	A	A	A	A	A	A	A	A	A
30.14	32.17	32.84	39.63	33.65	44.13	37.4	40.6	27.3	13.4	32.84	39.63
5	5	5	5	5	5	5	5	5	5	5	5

Expansion vessel capacity (L) 10 (combination and system boilers only)

Note capacity of expansion vessel is dependent on heating system water content. Refer to installation instructions.

*Conversion instructions supplied with boiler.

Vaillant Ltd.

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