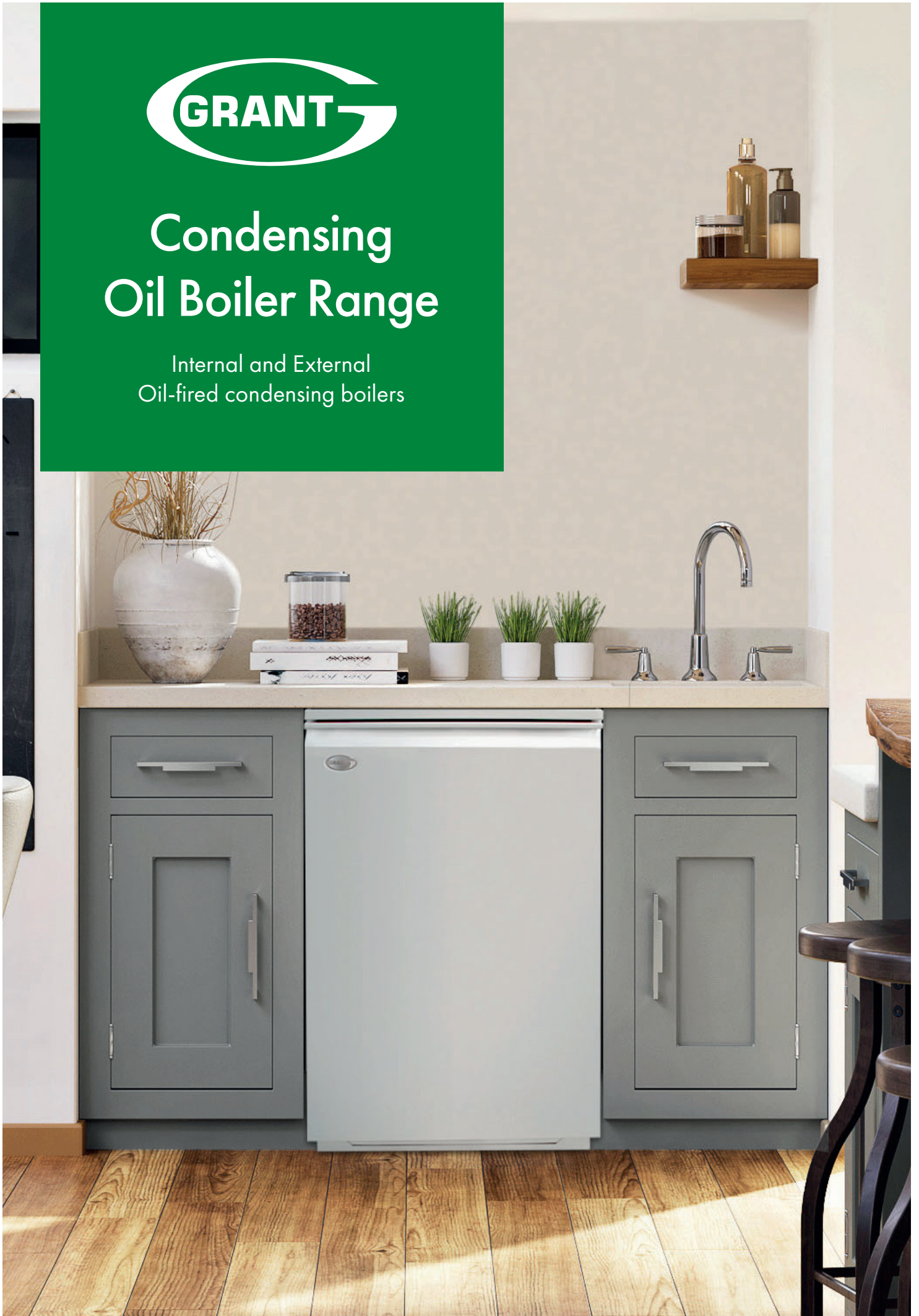




# Condensing Oil Boiler Range

Internal and External  
Oil-fired condensing boilers





GRANT

Grant Engineering has been designing and manufacturing reliable, efficient and innovative heating products since 1978. Specialising in condensing oil-fired boilers and an expanding range of renewable products including air source heat pumps, biomass boilers, solar thermal, heat emitters including underfloor heating and aluminium radiators, the Grant brand has established a reputation for quality that is second to none.

Here at Grant, we combine precision engineering, innovation, performance and value for money to produce sustainable heating solutions that are trusted by installers and homeowners alike. While the technology is sophisticated, Grant products are easy to install, straightforward to maintain and backed-up by excellent after-sales support. When customers choose Grant, they also get the added peace of mind that comes with the excellent reliability and superb efficiencies of our products.

At the heart of everything we do is continuous product development. Every Grant product incorporates the latest technologies and materials which enable them to exceed performance and environmental standards ensuring that they make the best use of our natural resources. Consequently, Grant products meet the heating needs of tomorrow, today.

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# What is a condensing boiler?

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Condensing boilers are designed to capture heat normally lost through the flue system during the combustion process. These boilers have a second heat exchanger where the flue gases are cooled to below their dew point by the water returning from the heating system. This has the effect of condensing the water vapour present in the flue gases and releasing the heat energy that would otherwise be lost to the outside through the flue system.

Unlike traditional oil-fired boilers, the Grant Vortex condensing boilers have a built in 316L grade stainless steel heat exchanger incorporating our unique turbulator baffle system which cools the gases to a point where the latent heat, normally lost to the atmosphere through the flue, can be usefully extracted. The additional energy recovered enables the boiler to operate continuously at much higher efficiency levels, resulting in lower heating and hot water running costs.

## Why upgrade to a condensing boiler?

The principal benefits of condensing boilers are their improved efficiencies and performance. While older oil-fired boilers operate with energy efficiency levels as low as 65%, modern boilers operate with much higher efficiency. Not only can switching to a new condensing boiler significantly lower fuel bills but it can also reduce greenhouse gas emissions, lessening the environmental impact of domestic hot water and heating systems.

## Plumbing

Condensing boilers operate at extremely high efficiency levels, producing cool flue gas temperatures which result in a 'plume' of vapour being visible at the flue terminal. This plume (steam) is a normal condition of condensing boiler operation and indicates that the appliance is working efficiently.

Prior to installation, the position of the flue needs to be considered to ensure that the plume does not cause any inconvenience. Grant's EZ-Fit flue systems are designed to ensure plumbing is kept well out of the way of any windows, air vents or doors, and out of sight. Low level balanced, high level, or vertical flue kits are available, which move the plume to a higher level. It is also possible to convert an existing low level balanced flue to an external high level or vertical arrangement using Grant's Plume Diverter. For more information about the Grant EZ-Fit flue range, please refer to the Grant EZ-Fit flue guide available to download at [www.grant.eu](http://www.grant.eu).



**Please scan the QR code below to view our range of flue systems.**



EZ Fit Flue Systems



# Improving system efficiency

---

Today, there are many different ways that householders can make their home heating system work as efficiently as possible, from choosing the right heat source through to effective controls and regular product maintenance.

## Upgrade the heat source and combine technologies

Replacing an old, inefficient boiler with a new condensing Vortex oil-fired boiler can instantly help reduce fuel consumption, as detailed on page 4. Householders can further improve their system's efficiency by opting to install a high-performance hot water cylinder alongside their new boiler. Models such as Grant's Wave cylinders are designed to deliver maximum heat transfer as well as low standing heat losses to reliably and effectively meet a property's hot water needs.

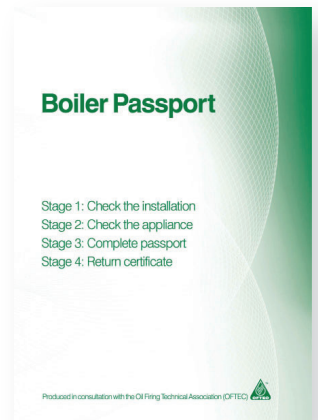
Householders can further reduce their fuel usage by installing solar thermal also. Grant Sahara Solar Thermal systems work all year round, utilising energy from the sun to sustainably heat water. Combining solar thermal technology with a highly efficient cylinder can help reduce the overall demand on the oil boiler, further reducing the amount of fuel used.

## Correct system design

It is essential that the right boiler size is selected by your installer to meet the heating requirements of a property. Installing too small a boiler will cause numerous problems for both the householder and their heating system. Meanwhile, oversizing a system and installing too large a boiler is highly inefficient because the boiler's output will be greater than what the property requires. This is why correct system design is so important and crucial for achieving maximum system efficiency throughout a home.

## Complete commissioning process

Alongside correct system design and installation, the commissioning process is also central to ensuring that a boiler works at its most efficient rate. Commissioning a boiler, carried out by your installer, involves adjusting the burner to match the heat requirements, balancing the radiators and setting up the pumps, two factors which can contribute to how well a boiler works. If a boiler is not correctly commissioned, this can prevent it from achieving the efficiencies it is capable of. The Boiler Passport will be completed by your installer which must be returned within 30 days of installation to Grant Engineering, to activate the warranty.



## Effective controls

Modern day control systems can help homeowners to precisely manage their home heating, achieving maximum comfort with improved efficiencies. Room thermostats and controls deliver heat when and where it is most needed, reducing the demand when not required which consequently reduces the demand on the boiler.

## Routine servicing

Regularly maintaining an oil boiler with routine servicing is beneficial in many ways. It is recommended that Grant oil boilers should be serviced every twelve months to help prolong the lifespan of the product. In addition, servicing involves checking the system as well, ensuring that both the boiler and system are operating safely and efficiently.



# Vortex Oil Boiler Range

The Vortex condensing oil boiler range has been developed by Grant to combine quality, reliability and exceptional performance. Each model within the range has been designed to be straightforward to install, user-friendly to operate and maintain, while also achieving excellent efficiencies to meet a home's heating requirements effectively. With so much choice, the Vortex range of floor standing and wall hung boilers offers homeowners a broad selection of models to suit a kitchen, utility, outdoor or boiler house environment.





fuel ready

# Vortex Utility Range

Grant's Vortex Utility boilers are incredibly efficient, achieving efficiencies of up to 97%. Designed for the kitchen or a utility room, the Utility models deliver choice and performance across the range. Included within the range is a boiler which is just 348mm wide, an ideal solution for direct boiler replacements of older oil-fired models.

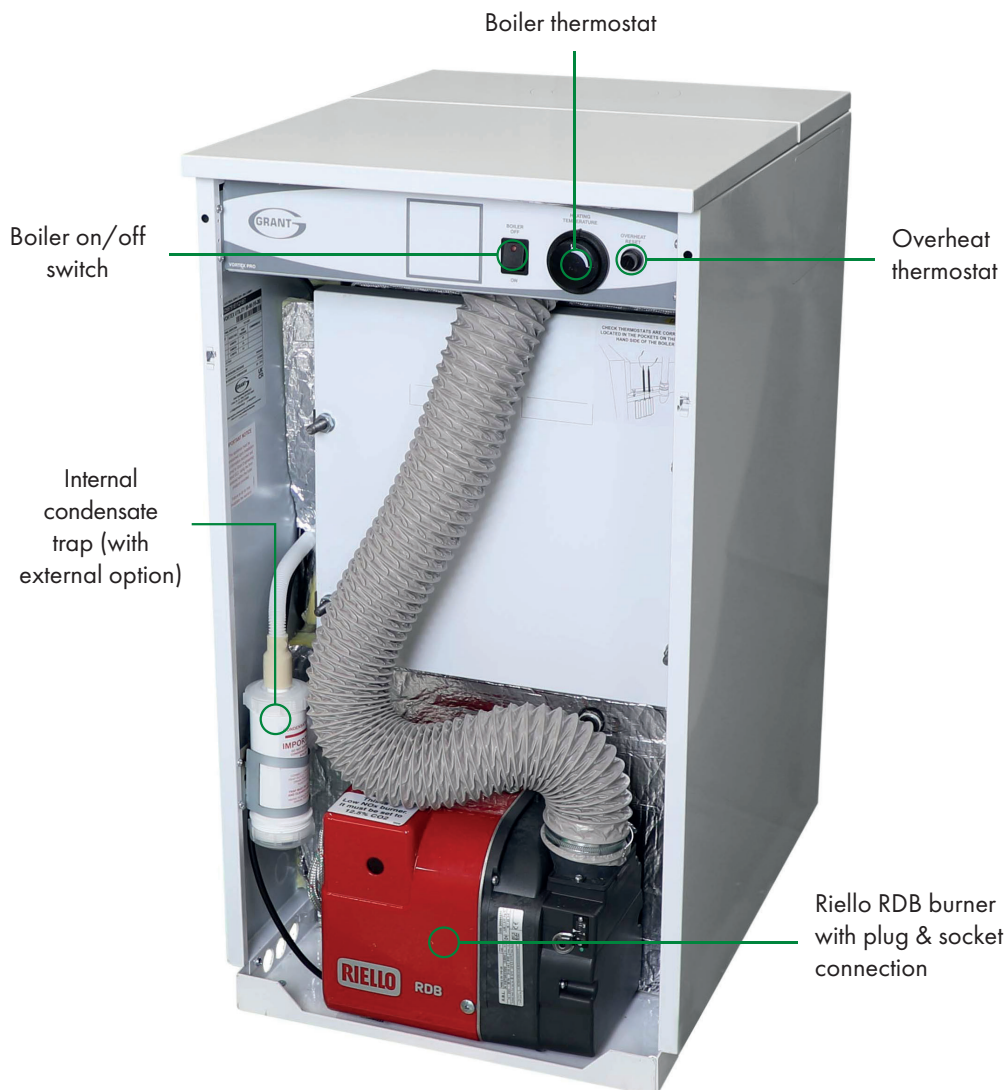
## Models

VORTUT15-26 Vortex Utility 15-26kW  
VORTUT26-36 Vortex Utility 26-36kW  
VORTUT36-46 Vortex Utility 36-46kW  
VORTUT46-70 Vortex Utility 46-70kW

- 15kW – 70kW outputs available
- Factory fitted condensate trap within the boiler case (can be positioned externally if preferred)
- Exceptionally quiet in operation when fitted with a balanced flue



5  
year  
guarantee\*



\*Subject to full T&C's.

Model shown: Vortex Utility 26-36kW



Vortex Utility



# Vortex External Range

The Vortex External boilers incorporate all the high quality components featured in the Utility Range. Like the Utility models, the External boilers are exceptionally efficient when heating outputs of up to 70kW are required and the preferred boiler location is outside, the Vortex External Range can deliver the solution.

## Models

VORTMOD1526P Vortex External 15-26kW

VORTMOD2636P Vortex External 26-36kW

VORTMOD3646P Vortex External 36-46kW

VORTMOD4670P Vortex External 46-70kW

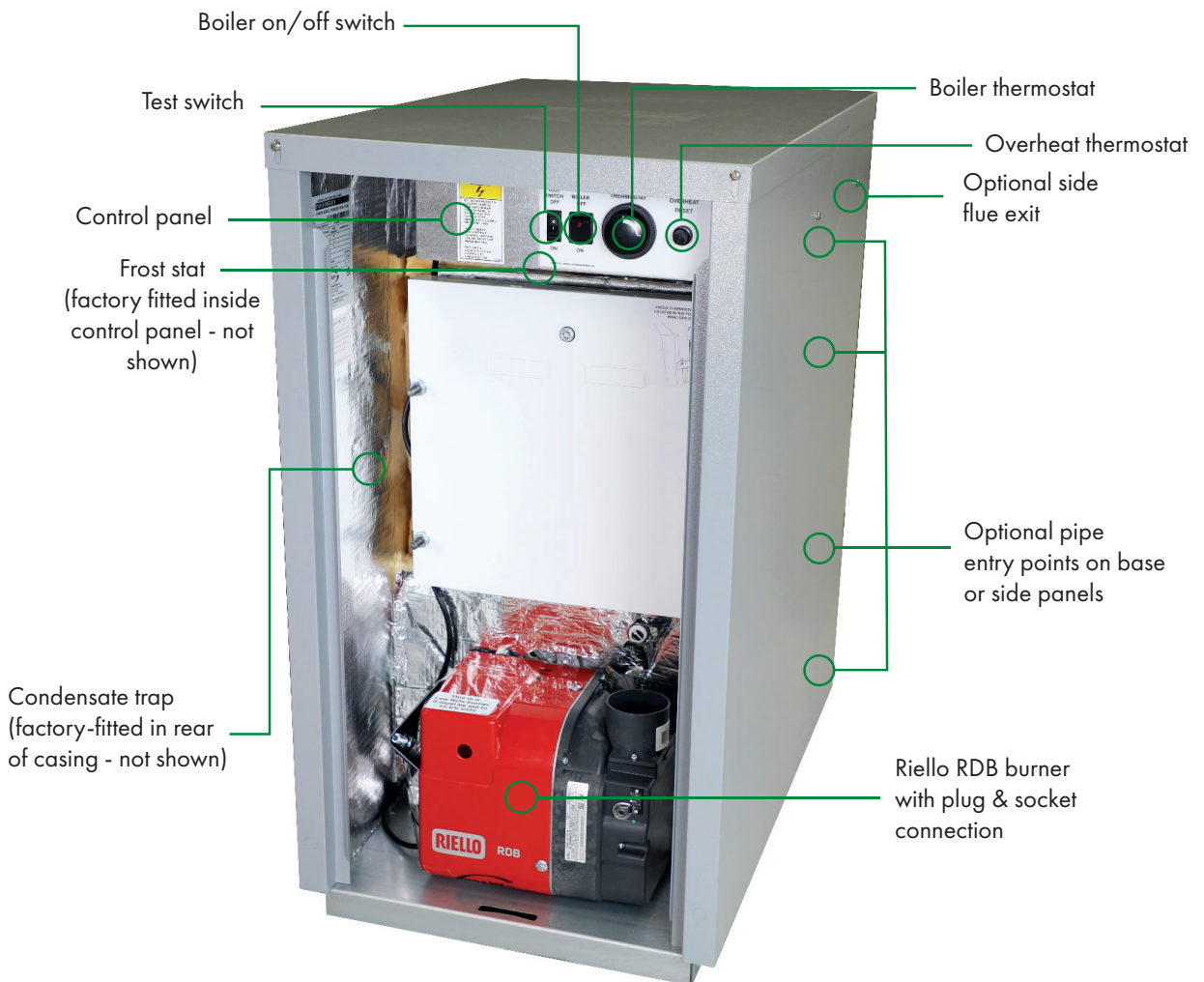
- 15kW – 70kW outputs available
- Factory fitted frost stat and condensate trap
- High quality external powder coated paint finish



5  
year  
guarantee\*



space heating efficiency  
up to  
**97%**



\*Subject to full T&C's.

Model shown: Vortex External 15-26kW



Vortex External

# Vortex Boiler House Range

Featuring an externally mounted Riello RDB burner and dual thermostat, the Vortex Boiler House models are ideal for locations which are difficult to access and where a white cased utility boiler is not always the best solution. The Vortex Boiler House range encompass the same unique heat exchangers and turbulator baffle system used in Grant's other oil boilers. Consequently, Grant's Boiler House models have ultra-high efficiencies and low running costs.

## Models

- VORTBH5090BSRED Vortex Boiler House 15-26kW
- VORTBH90120BSRED Vortex Boiler House 26-36kW
- VORTBH120155BSRED Vortex Boiler House 36-46kW
- VORTBH155240BSRED Vortex Boiler House 46-70kW

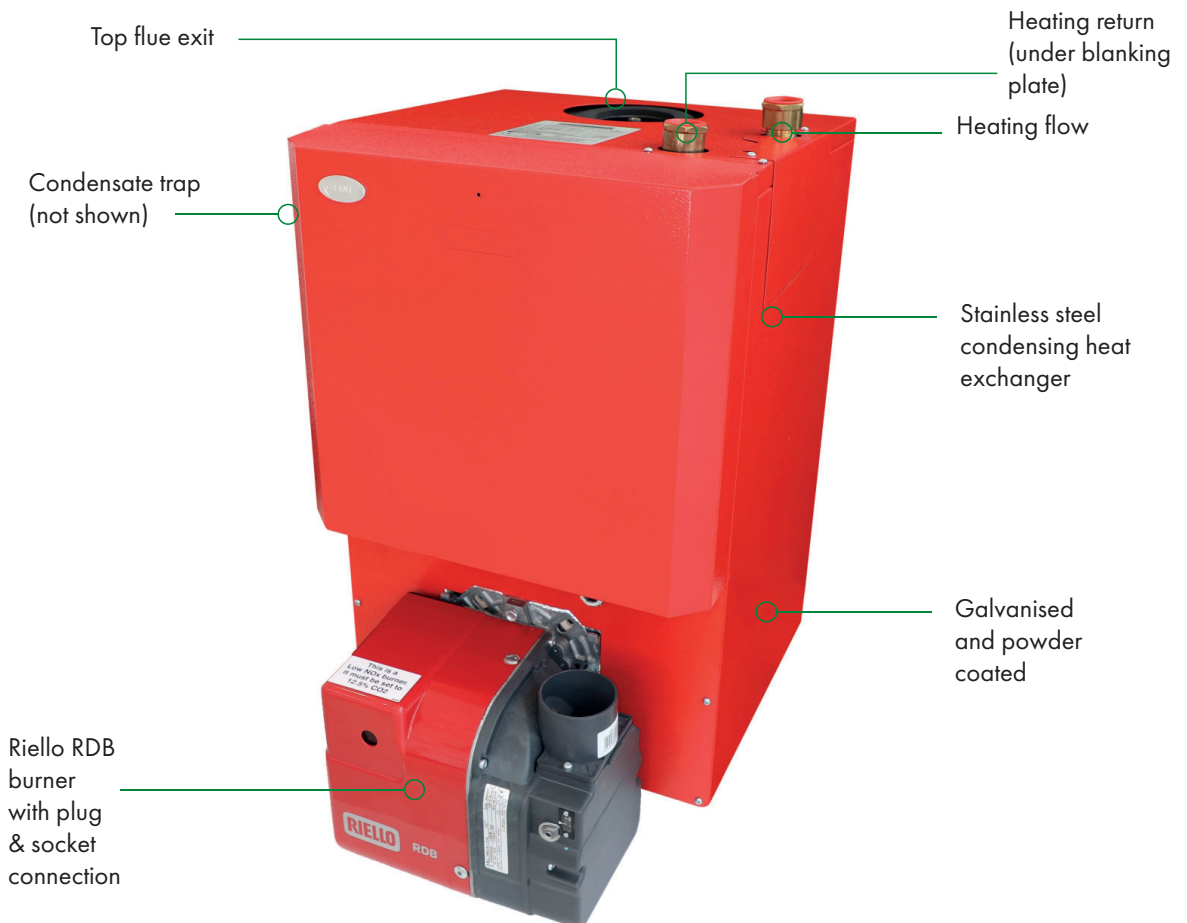
- 15kW – 70kW outputs available
- Distinctive red powder coated casing
- Compatible with all Grant EZ-Fit flue options and are flued in the same way as utility models



5  
year  
guarantee\*



space heating efficiency  
up to  
97%



\*Subject to full T&C's.

Model shown: Vortex Boiler House 15-26kW



Vortex Boiler  
House

# Grant Euroflame Utility Range

The Grant Euroflame Utility range of competitively priced condensing boilers have a simplified casing, control panel and pipework arrangement. The ideal choice for utility room installations, the Euroflame Utility models incorporate Grant's patented stainless steel heat exchanger, are quiet in operation and simple to service with the burner and combustion chambers positioned towards the front of each boiler.

## Models

EFCON5090IND Euroflame Utility 15-26kW

EFCON90120IND Euroflame Utility 26-36kW

- 15kW – 36kW outputs available
- Factory fitted condensate trap within the boiler case (can be positioned outside the boiler casing)
- Can be flued from the top, rear, left or right hand side of appliance



5 year guarantee\*



Boiler on/off switch

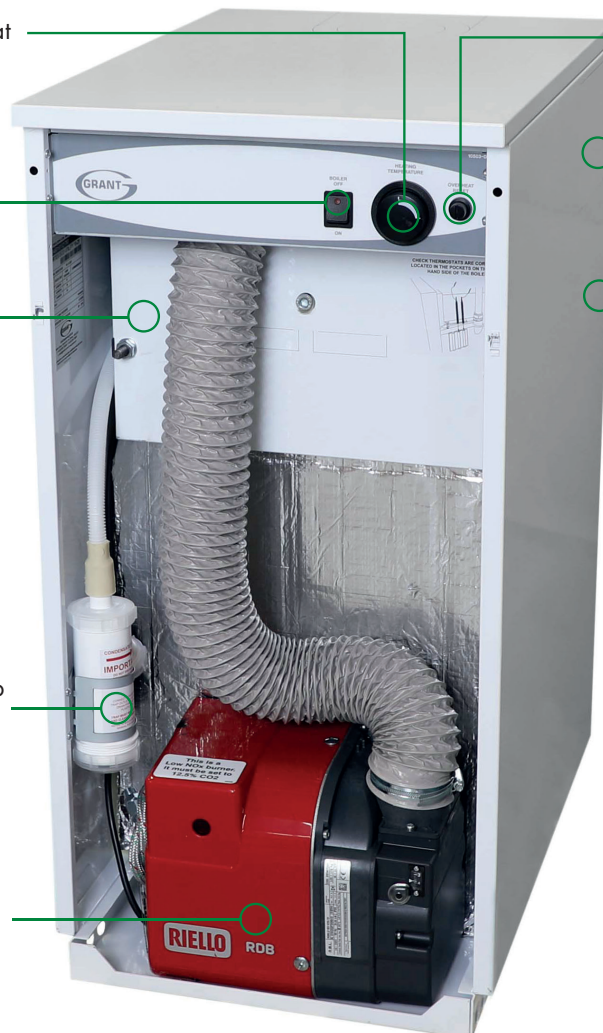


Front service access door



Internal condensate trap (with external option)

Riello RDB burner with plug & socket connection



Boiler thermostat

Overheat thermostat

Multi-directional heating flow (not shown)

Multi-directional heating flow & return (not shown)

\*Subject to full T&C's.

Model shown: Euroflame 50/90



Euroflame Utility Range

# Grant Euroflame External Range

When space is at a premium indoors, an external boiler can provide the solution. Grant's Euroflame External boilers are competitively priced, highly efficient and are designed and built to be sited outside of a property. All the Grant Euroflame External models have multi-directional flueing options providing flexibility when it comes to installation.

## Models

EFCON5090MOD Grant Euroflame External 15-26kW

EFCON90120MOD Grant Euroflame External 26-36kW

- 15kW – 36kW outputs available



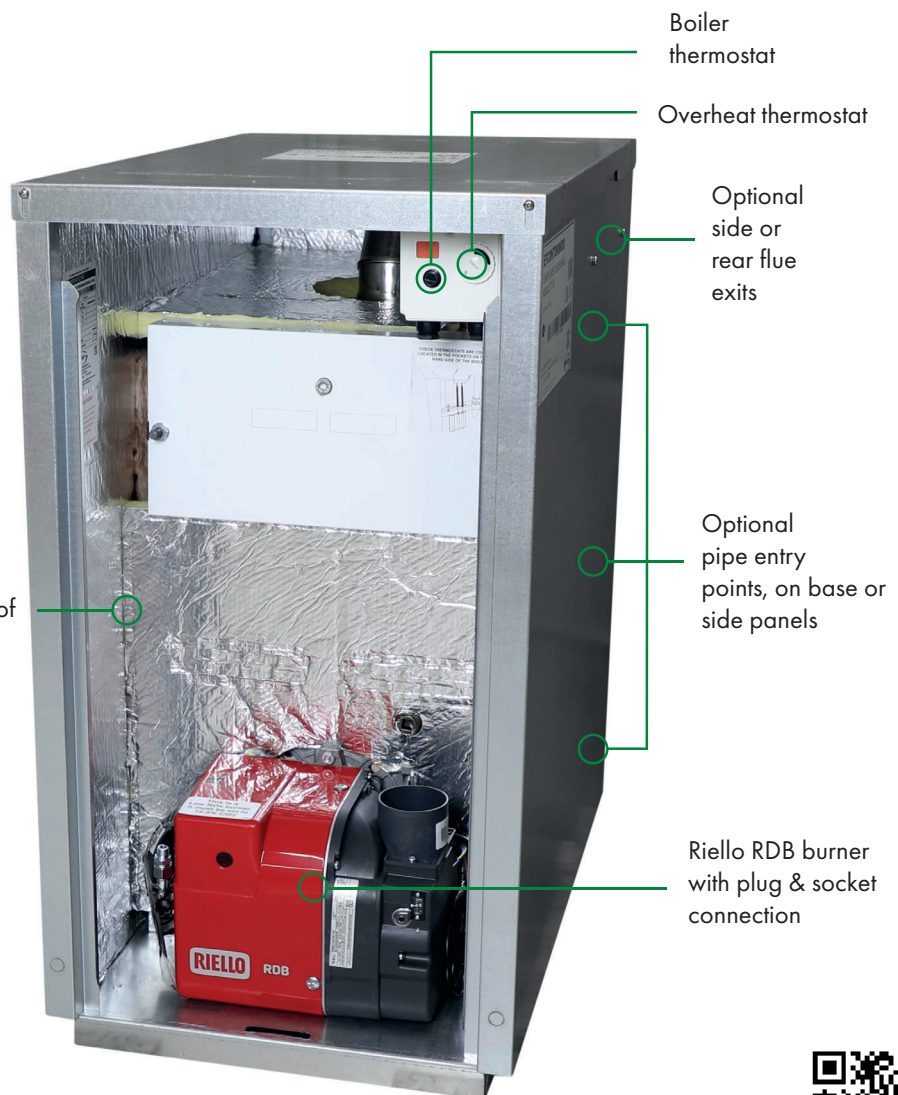
5  
year  
guarantee\*



space heating efficiency  
up to  
**92.7%**



Condensate trap  
(factory fitted in rear of  
casing - not shown)



Boiler  
thermostat

Overheat thermostat

Optional  
side or  
rear flue  
exits

Optional  
pipe entry  
points, on base or  
side panels

Riello RDB burner  
with plug & socket  
connection

\* Subject to full T&C's.

Model shown: Euroflame 50/90



Euroflame External  
Range

# Grant Euroflame Boiler House Range

Featuring an externally mounted Riello RDB burner and dual thermostat, the Euroflame Boiler House models are ideal for locations which are difficult to access and where a white cased utility boiler is not always the best solution. The Euroflame Boiler House range encompass the same unique heat exchangers and turbulator baffle system used in Grant's other oil boilers. Consequently, Grant's Boiler House models have ultra-high efficiencies and low running costs.

## Models

EFCON5090BHBSRED Euroflame Boiler House 15-26kW

EFCON90120BHBSRED Euroflame Boiler House 26-35kW

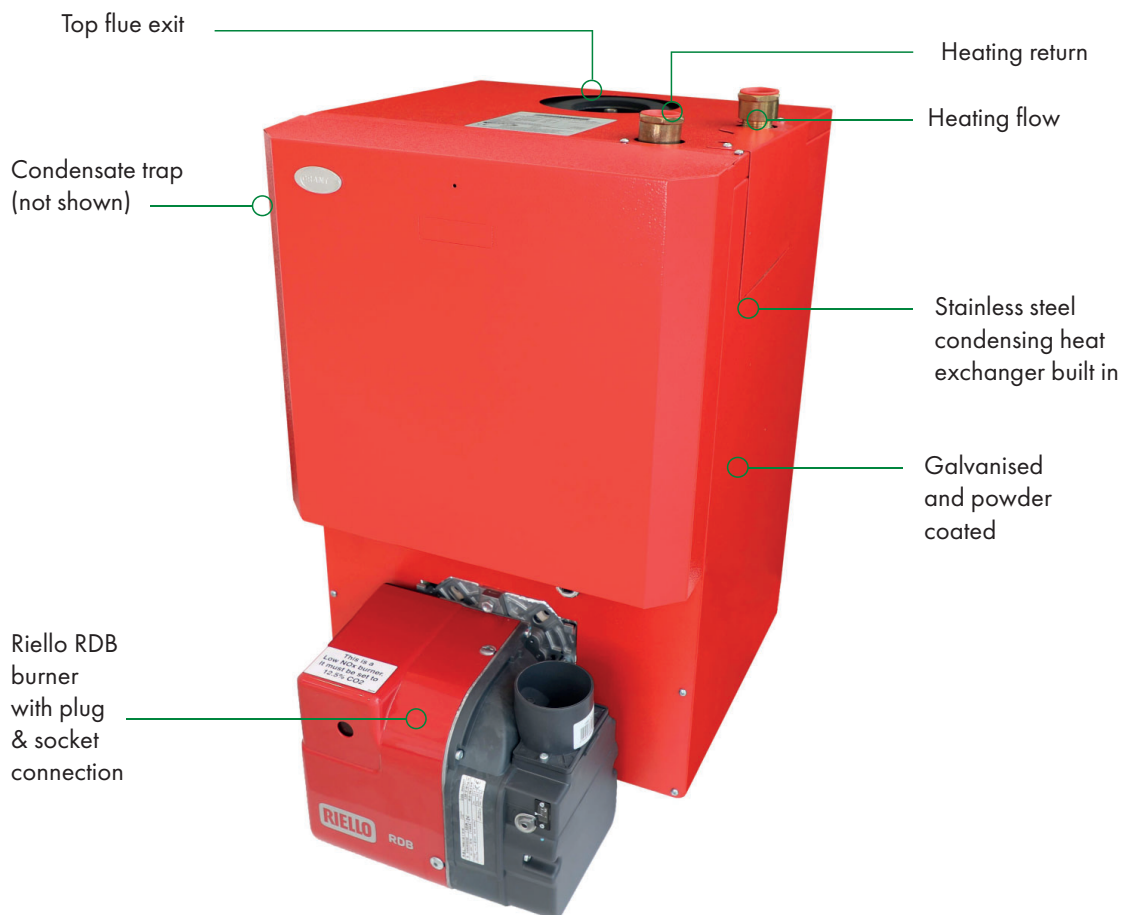
- 15kW – 35kW outputs available
- Distinctive red powder coated casing
- Compatible with all Grant EZ-Fit flue options and are flued in the same way as utility models



5  
year  
guarantee\*



space heating efficiency  
up to  
93%



\*Subject to full T&C's.

Model shown: Euroflame 50/90



Euroflame Boiler  
House Range

# Vortex Internal Combi Range

Grant's Vortex Combi boilers have been designed to increase hot water performance effectively and efficiently due to their large heat exchangers and accurate electronic temperature controls. Each internal Combi model can operate in condensing mode for central heating while also maintaining instant hot water production. Reliable in operation and easy to install and service, the Vortex Combi boilers are a popular choice for homeowners and their installers.

## Models

VORTCOMBI26 Vortex Internal Combi 26kW

VORTCOMBI36 Vortex Internal Combi 36kW

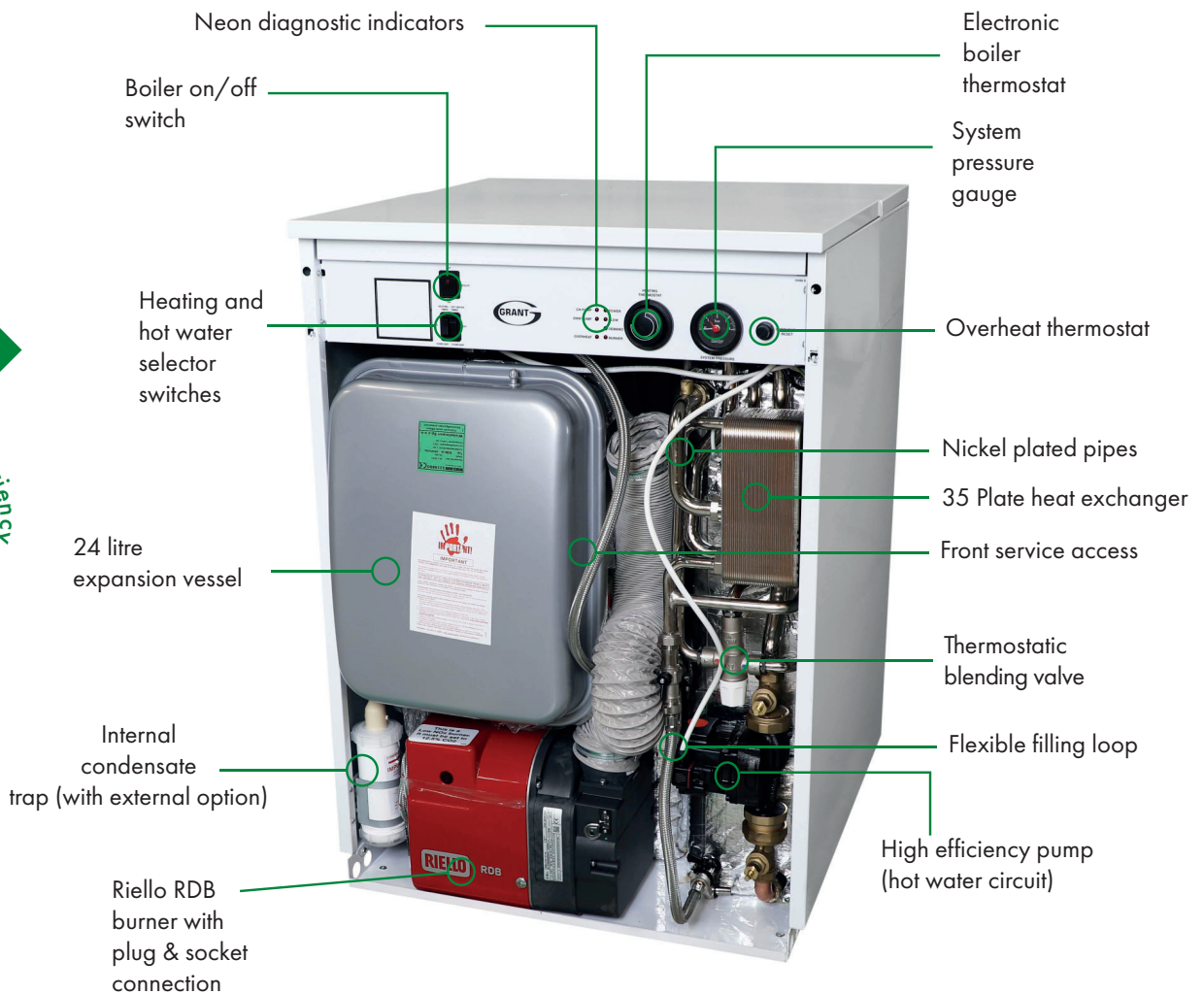
- 26kW and 36kW outputs available
- 24 litre expansion vessel supplied as standard



5  
year  
guarantee\*



space heating efficiency  
up to  
**94.5%**



\* Subject to full T&C's.

Model shown: Vortex Internal Combi 26kW



Internal Combi  
Range

# Vortex External Combi Range

The Vortex External Combi boiler range comprises of two models. Each external combination boiler from Grant is supplied with a 24ltr expansion vessel as well as neon diagnostic indicators to allow for easy operation. The External Combis, which have larger than normal heat exchangers, deliver excellent hot water performances and are highly efficient.

## Models

VORTCBMOD26P Vortex External Combi 26kW

VORTCBMOD36P Vortex External Combi 36kW

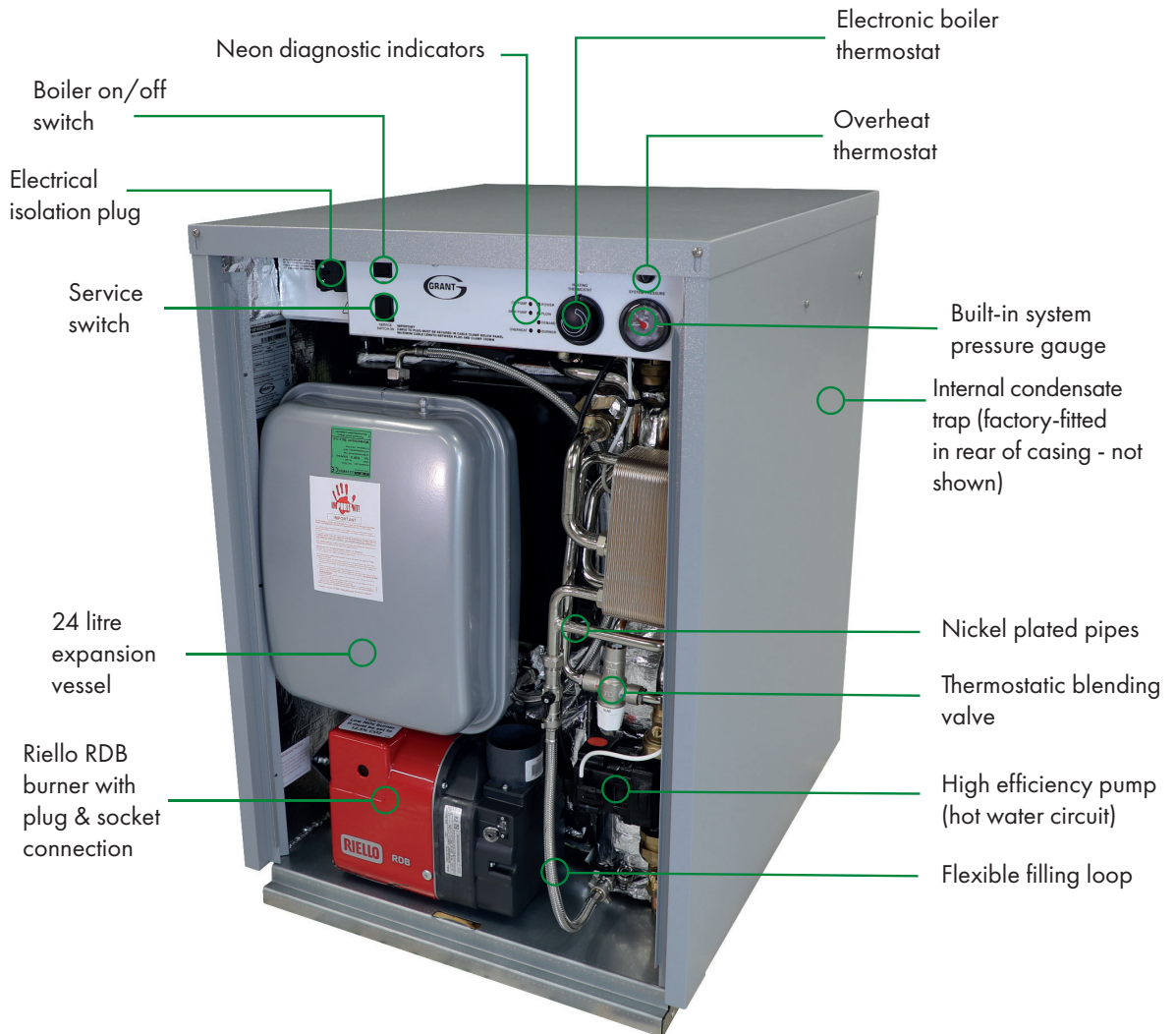
- 26kW and 36kW outputs available
- Features two accurate electronic temperature controls allowing for condensing mode operation for central heating while also maintaining instant hot water production
- High quality external powder coated paint finish



5 year guarantee\*



space heating efficiency  
up to  
**94.5%**



\*Subject to full T&C's.

Model shown: Vortex External Combi 26kW

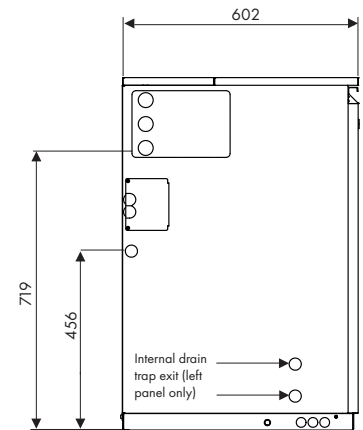
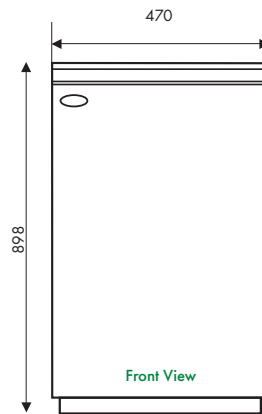
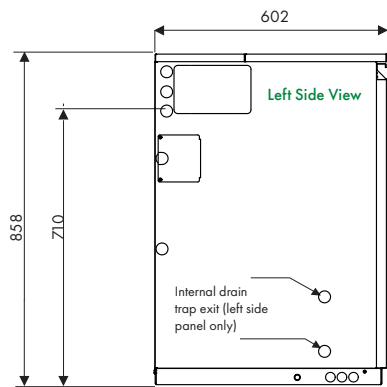
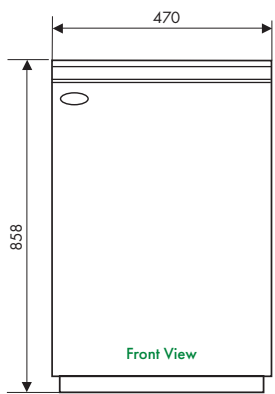


External Combi Range

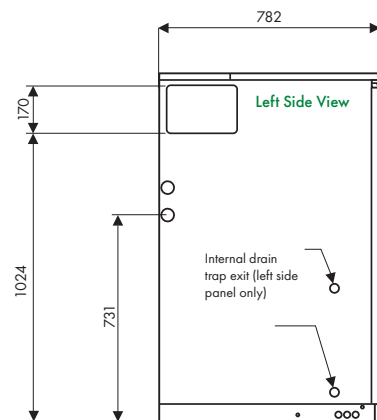
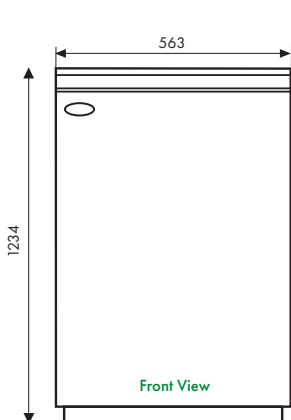
# Vortex Utility Range Technical Specifications

| Model       | Output  | Output        | Set Output | Flow Connection | Return Connection | Weight (dry) |
|-------------|---------|---------------|------------|-----------------|-------------------|--------------|
|             | kW      | Btu/h         | kW         | mm              | mm                | kg           |
| VORTUT15-26 | 15 - 26 | 50 - 90,000   | 21         | 22              | 22                | 130          |
| VORTUT26-36 | 26 - 36 | 90 - 123,000  | 31         | 28              | 28                | 144          |
| VORTUT36-46 | 36 - 46 | 123 - 157,000 | 41         | 28              | 28                | 144          |
| VORTUT46-70 | 46 - 70 | 157 - 240,000 | 58         | 1 1/4" BSP      | 1 1/4" BSP        | 282          |

## Dimensions (mm)



### Vortex 15-26kW Utility



### Vortex 26-46kW Utility

### Vortex 46-70kW Utility

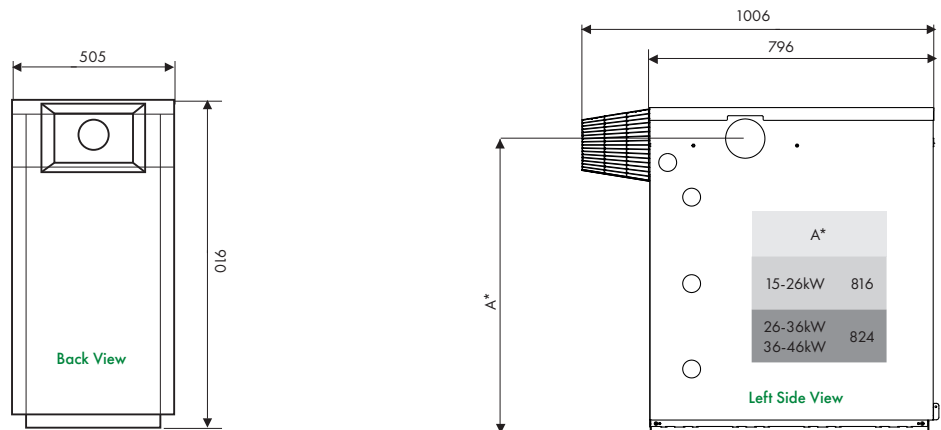


# Vortex External Range Technical Specifications

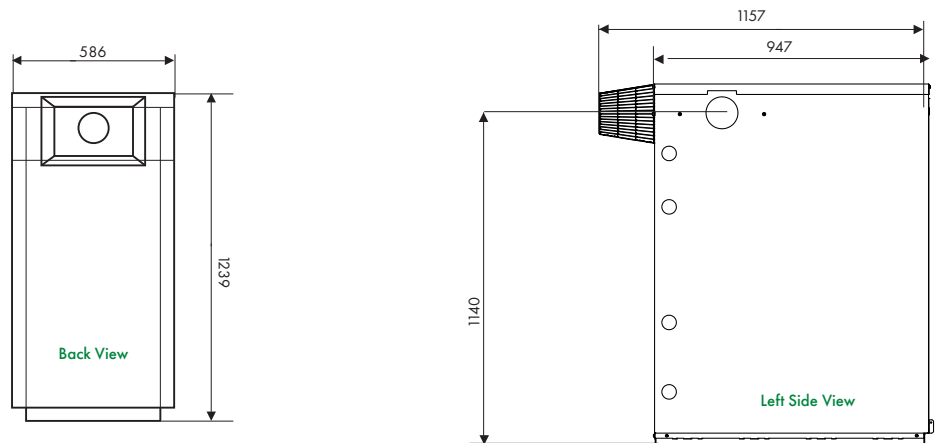
| Model        | Output | Output        | Set Output | Flow Connection | Return Connection | Weight (dry) |
|--------------|--------|---------------|------------|-----------------|-------------------|--------------|
|              | kW     | Btu/h         | kW         | mm              | mm                | kg           |
| VORTMOD1526P | 15-26  | 50 - 90,000   | 21         | 22              | 22                | 130          |
| VORTMOD2636P | 26-36  | 90 - 123,000  | 31         | 1" BSP          | 28                | 144          |
| VORTMOD3646P | 36-46  | 123 - 157,000 | 41         | 28mm            | 28                | 144          |
| VORTMOD4670P | 46-70  | 157 - 240,000 | 58         | 1 1/4" BSP      | 1 1/4" BSP        | 282          |

## Dimensions (mm)

Vortex External  
15-26, 26-36, 36-46kW



Vortex External  
46-70kW

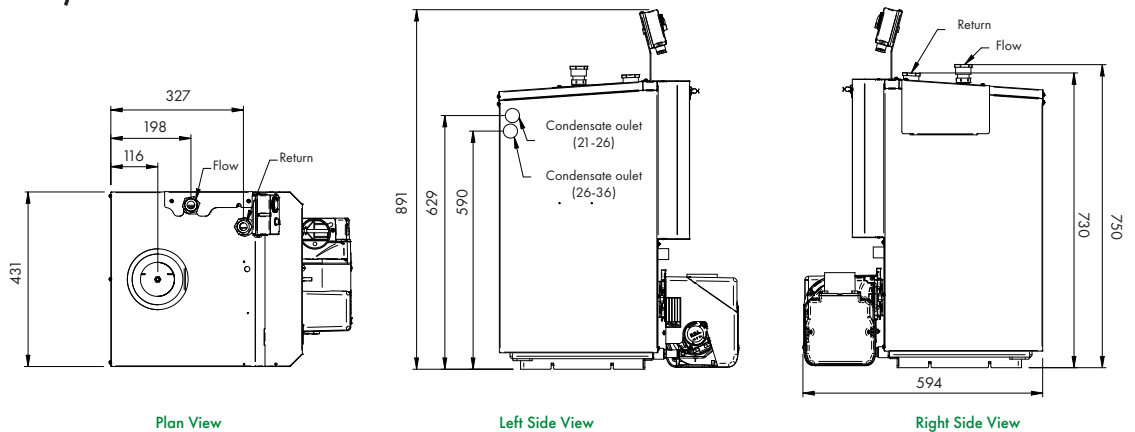


# Vortex Boiler House Range Technical Specifications

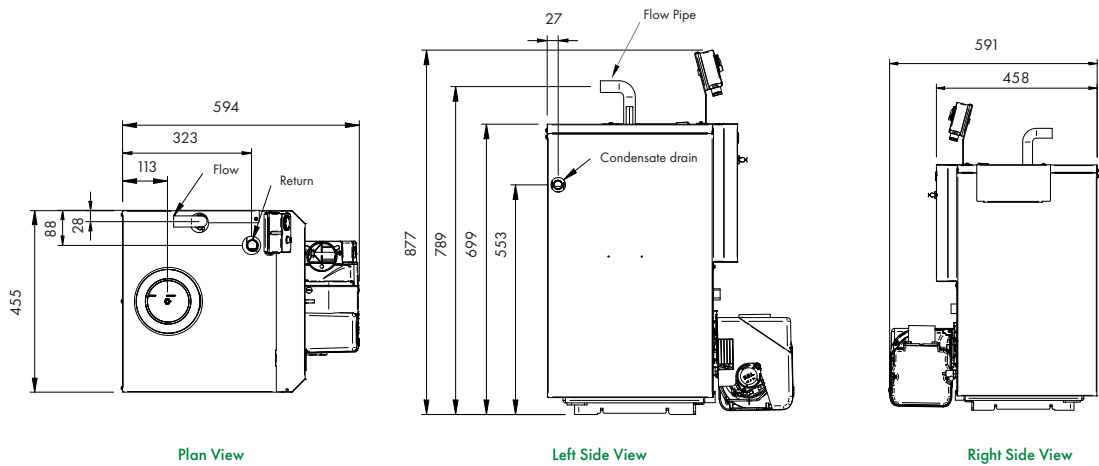
| Model             | Output<br>kW | Output<br>Btu/h | Set Output<br>kW | Flow Connection<br>mm | Return<br>Connection<br>mm | Weight (dry)<br>kg |
|-------------------|--------------|-----------------|------------------|-----------------------|----------------------------|--------------------|
| VORTBH5090BSRED   | 15-26        | 70 - 90,000     | 23.5             | 1" BSP                | 1" BSP                     | 125                |
| VORTBH90120BSRED  | 26-36        | 90 - 120,000    | 31               | 28mm                  | 1" BSP                     | 143                |
| VORTBH120155BSRED | 36-46        | 123 - 157,000   | 41               | 28mm                  | 1" BSP                     | 145                |
| VORTBH155240BSRED | 46-70        | 157 - 240,000   | 58               | 1 1/4" BSP            | 1 1/4" BSP                 | 301                |

## Dimensions (mm)

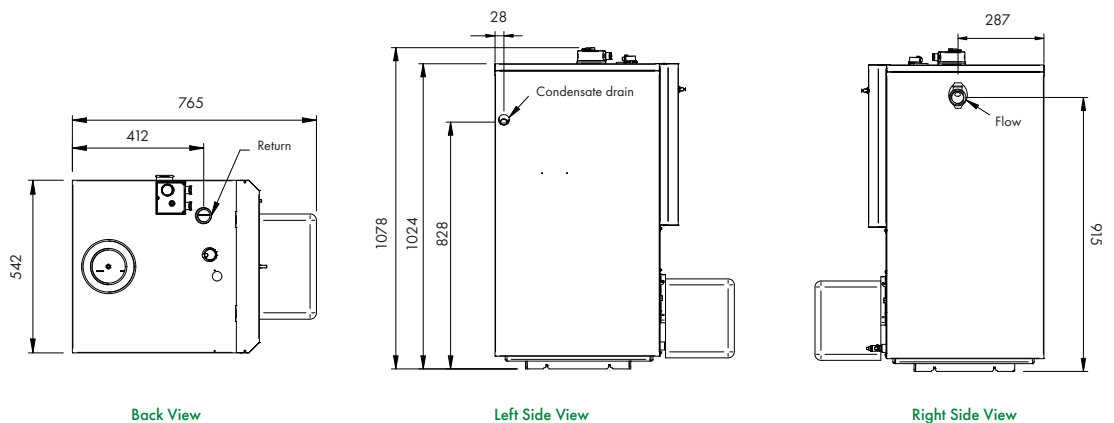
### Vortex Boiler House 15/26, 26/36



### Vortex Boiler House 36-46kW



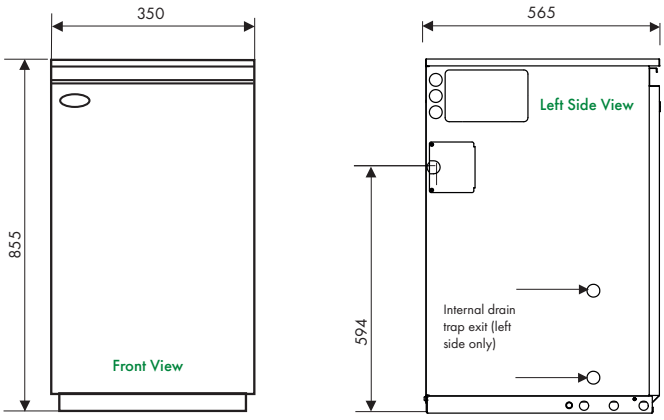
### Vortex Boiler House 46-70kW



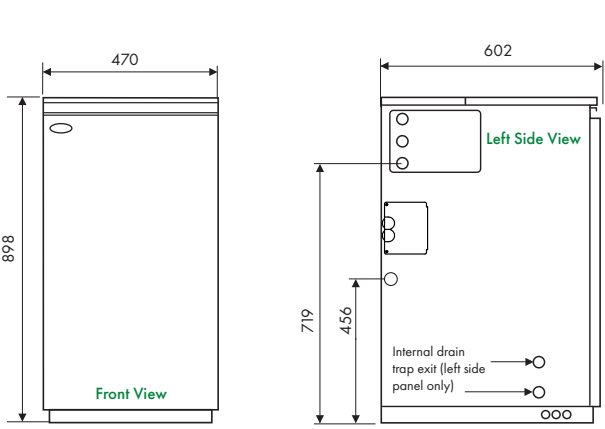
# Grant Euroflame Utility Range Technical Specifications

| Model         | Output kW | Output Btu/h | Set Output kW | Flow Connection mm | Return Connection mm | Weight (dry) kg |
|---------------|-----------|--------------|---------------|--------------------|----------------------|-----------------|
| EFCON5090IND  | 15 - 26   | 50 - 90,000  | 21            | 22                 | 22                   | 97              |
| EFCON90120IND | 26 - 36   | 90 - 120,000 | 31            | 22                 | 22                   | 127             |

## Dimensions (mm)



Grant Euroflame 15-26kW Utility

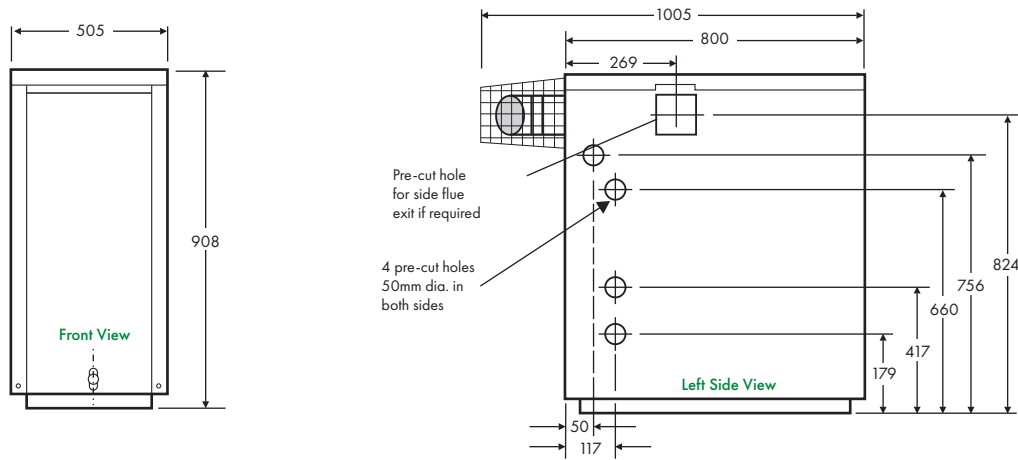


Grant Euroflame 26-36kW Utility

# Grant Euroflame External Range Technical Specifications

| Model        | Output<br>kW | Output<br>Btu/h | Set Output<br>kW | Flow Connection<br>mm | Return<br>Connection<br>mm | Weight (dry)<br>kg |
|--------------|--------------|-----------------|------------------|-----------------------|----------------------------|--------------------|
| EFCO5090MOD  | 15 - 26      | 50 - 90,000     | 21               | 22                    | 22                         | 113                |
| EFCO90120MOD | 26 - 36      | 90 - 120,000    | 31               | 22                    | 22                         | 142                |

## Dimensions (mm)



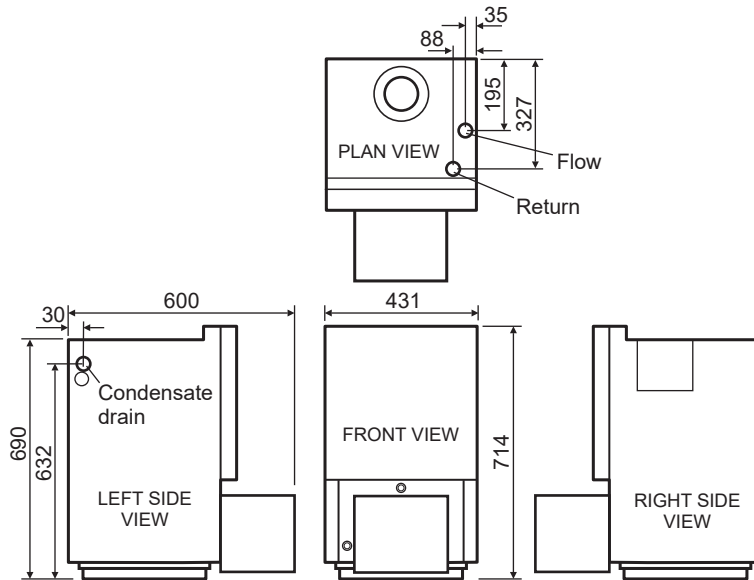
Grant Euroflame 15-26, 26-36kW External

# Euroflame Boiler House Range Technical Specifications

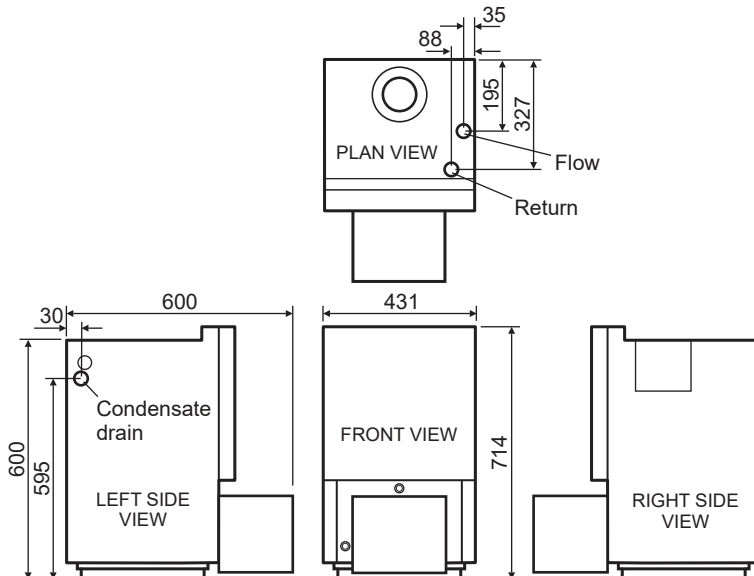
| Model             | Output<br>kW | Output<br>Btu/h | Set Output<br>kW | Flow Connection<br>mm | Return Connection<br>mm  | Weight (dry)<br>kg |
|-------------------|--------------|-----------------|------------------|-----------------------|--------------------------|--------------------|
| EFCON5090BHBSRED  | 15-26        | 50 - 90,000     | 21               | 1" BSP                | 1" BSP                   | 113                |
| EFCON90120BHBSRED | 26-35        | 90 - 120,000    | 31               | 1" BSP                | 1" BSP </td <td>142</td> | 142                |

## Dimensions (mm)

Euroflame Boiler House  
15-26



Euroflame Boiler House  
26-35kW



# Vortex Combi Range Technical Specifications

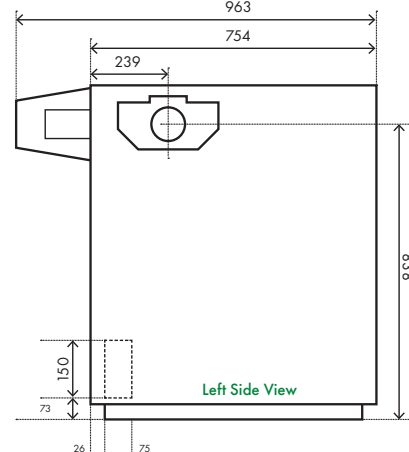
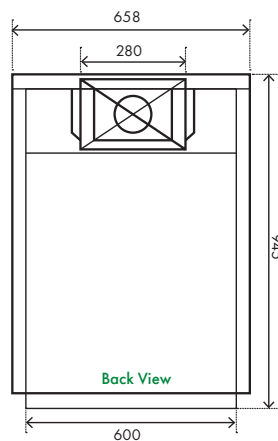
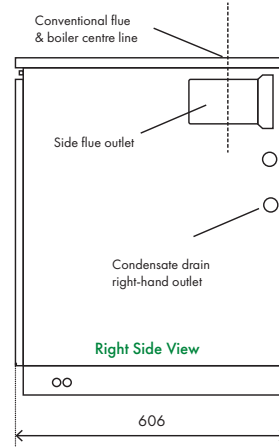
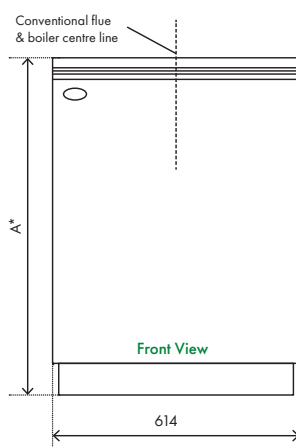
| Model        | Output<br>kW | Output<br>Btu/h | Set<br>Output<br>kW | Flow<br>Connection<br>mm | Return<br>Connection<br>mm | Cold<br>Water In<br>mm | Pressure<br>Relief<br>mm | Weight<br>(dry)<br>kg | Typical<br>Hot Water<br>Performance*<br>L/min | Approx<br>recovery<br>time**<br>min |
|--------------|--------------|-----------------|---------------------|--------------------------|----------------------------|------------------------|--------------------------|-----------------------|---|-------------------------------------|
| VORTCOMBI26  | 26           | 90,000          | 26                  | 22                       | 22                         | 15                     | 15                       | 177                   | 15  | 4                                   |
| VORTCOMBI36  | 36           | 123,000         | 36                  | 28                       | 28                         | 22                     | 15                       | 200                   | 20  | 3                                   |
| VORTCBMOD26P | 26           | 90,000          | 26                  | 22                       | 22                         | 15                     | 15                       | 206                   | 15  | 4                                   |
| VORTCBMOD36P | 36           | 123,000         | 36                  | 28                       | 28                         | 22                     | 15                       | 225                   | 20  | 3                                   |

\*Hot water flow rate is dependent on mains pressure available. Figures are based upon an incoming mains water temperature of 10°C \*\* Based upon 100 litre draw off.

## Dimensions (mm)

Vortex Combi  
26kW, 36kW

| A*   |     |
|------|-----|
| 26kW | 860 |
| 36kW | 900 |



Vortex Combi External  
26kW, 36kW

# HVO Biofuel

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Low carbon liquid fuels could play a significant role in helping off-gas properties operate cleaner, more sustainable home heating in the future. Extensive trials have been undertaken researching the potential of biofuels, exploring how they perform in operation in domestic heating systems compared to traditional fossil fuels. Biofuels can vary from blended fuels, such as B30K and 100% biofuels such as Hydrotreated Vegetable Oil (HVO). Low carbon liquid fuels such as HVO will help transition into low carbon heating systems.

HVO biofuel is a type of renewable energy made from organic matter and waste materials and, as it is a second-generation fuel, it eliminates up to 90% of net carbon dioxide emissions compared with traditional fossil fuels, as well as achieving lower NOx emissions. HVO can be used as a 'drop-in fuel' so it is a suitable replacement for existing fossil fuels like kerosene.

In preparation for the wider availability of biofuels, the new Grant Vortex HVO oil-fired boilers have evolved. Homeowners who choose a Grant boiler can therefore be assured that their boiler is operating at the highest efficiency.

Your local OFTEC registered technician will be able to advise on any cleaning, changes or adjustments required to your existing fuel storage and supply system, much of which will already be biofuel compatible. This, combined with a Grant Vortex HVO boiler, should make the switch from kerosene oil to biofuel seamless and straightforward for rural, hard to heat homes.

## Grant HVO Boiler Training

With so many developments in the heating trade, we understand the importance of offering comprehensive training and support for products from the latest HVO boilers through to heat pumps and other renewable technologies. The extensive facilities at our Training Academy demonstrates Grant's commitment to providing professional training for heating engineers.

The oil practical workshop has over 10 different operational oil fired boilers, from the Vortex and Euroflame boilers, combi boilers and wall hung boilers for hands on training, as well as HVO burner training also.

## HVO Biofuel

- 90% greener than kerosene.
- Higher calorific value than kerosene.
- Existing Vortex boilers easy to convert.
- Training program for service technicians.
- HVO is free of palm oil.
- Hydrotreated Vegetable Oil is manufactured from 100% renewable and sustainable waste derived raw materials certified via the international sustainability and Carbon Certification (ISCC) scheme.
- No need for expensive retrofits.
- Carbon savings if HVO replaced kerosene could be 3.2m tonne per year.



HVO Homeowner  
Guide





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