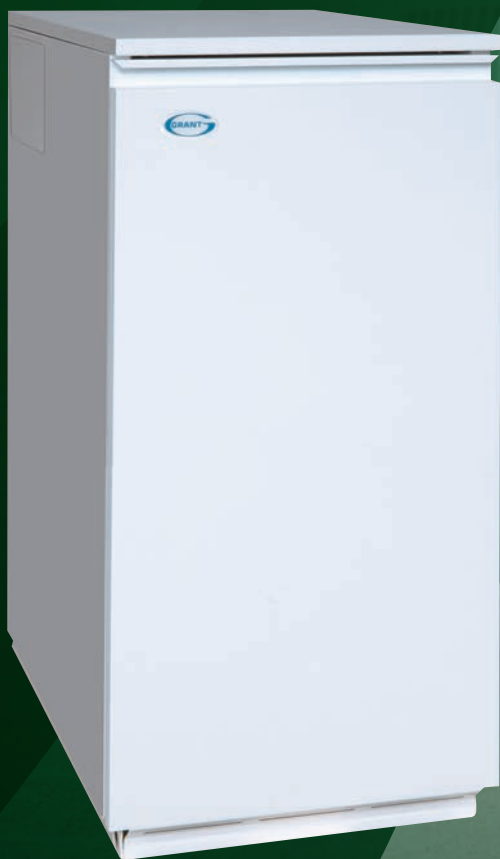


# GRANT VORTEXBLUE OIL RANGE

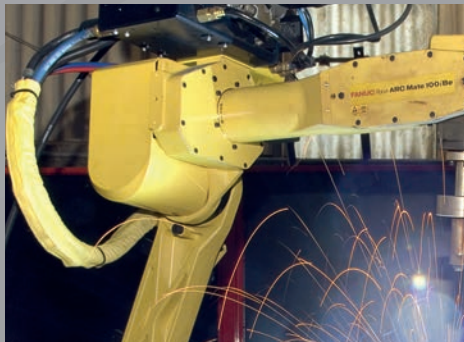
Internal and external blue flame  
oil-fired condensing boilers with  
outputs from 21kW to 36kW



## Grant Profile

At Grant we have been designing and manufacturing reliable and easy to install heating products for four decades. From award winning oil-fired condensing boilers to the latest renewable technologies, our heating systems have a reputation for quality that is second to none.

We combine precision engineering, innovation, performance and value for money to produce sustainable heating solutions that are trusted by both installers and householders.



### Quality Design

There is never a compromise on quality. We design all of our products so that you can be sure that the durability and efficiency are sector leading. We continually develop new technologies and use only the best materials to ensure our products exceed all performance and environmental standards.

Our belief in simple solutions ensures that, while our technology is sophisticated, our products are low maintenance and easy to install. For a high quality, reliable and sustainable heating system, trust in Grant.

### Heating Responsibly

Grant manufacture heating systems that respond to the challenges of rising fuel costs whilst protecting our environment. Environmental responsibility is central to all we do and we continue to develop and innovate to produce even more efficient products that make best use of our natural resources.

We are passionate about developing sustainable, high-performance and affordable alternatives for heating homes into the future.

### Our Guarantee

The Grant label is a guarantee of reliability, quality and value. We put our customers first and our independence ensures that we can monitor our standards and processes to deliver the very best quality and service.

That's why, when you order your system from a Grant stockist, you can be sure of a tailored service and excellent after sales support.

# Blue Flame Technology

## What is a Blue Flame boiler?

Grant VortexBlue Flame boilers incorporate the very latest oil burner technology. For over 2 years both Grant and Riello's R&D teams have been working on a joint initiative to develop a compact Blue Flame burner and match this to Grant's Vortex condensing oil boiler range.

The principle of combustion differs from that of a Yellow Flame burner in that the combustion gasses are re-circulated through a specially designed blast tube, allowing them to mix with atomised droplets of fuel and fresh air (oxygen) drawn in through the burner, to produce a clean blue flame with far lower NOx emissions.

## Why do we need to consider changing to Blue Flame technology?

In 2018, oil fired boilers installed in the UK have to meet lower NOx emission targets. Furthermore, it is likely that even more stringent emission levels will be set in future years, so Grant have taken the decision to try and future proof oil fired appliances by moving to very low NOx, Blue Flame technology today.

## Pluming

Grant VortexBlue condensing boilers operate at extremely high efficiency levels, producing cool flue gas temperatures, resulting 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. Low level, high level, or vertical flue kits are available, which moves 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 our Green System.

## BATNEEC

This is an acronym for Best Available Technology Not Entailing Excessive Costs. The concept of 'excessive costs' is the implementation of industrial pollution control in the UK. 'Excessive costs' is the relative importance of environmental cost-benefit analysis versus the ability of you, our customer, to 'afford' these environmental improvements. Grant Engineering takes this a step further by ensuring that appliances manufactured by us have been designed and built using this process and are as efficient and as low polluting in all aspects of manufacturing meaning that you get the maximum benefits with the best possible return in efficiency without paying excessive costs for technology that would only save you a fraction of this sum over the life of the product.

## VortexBlue Kitchen/Utility Range

As you would expect from any Grant boiler, the VortexBlue Kitchen/Utility range is exceptionally quiet in operation and features the latest Riello RDB BLU burner technology, combined with our award winning Vortex stainless steel heat exchanger.

Our Kitchen/Utility range is available in outputs of 21kW, 26kW and 36kW with SAP 2009 gross seasonal efficiencies of between 90.7 and 93.3%.

### Features

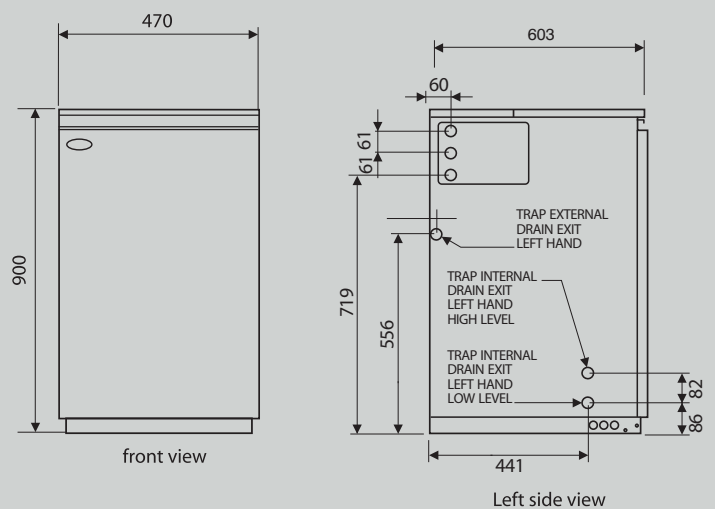
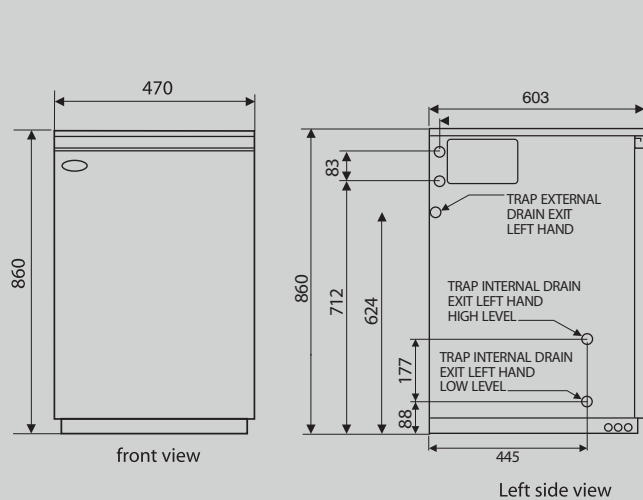
The boilers feature a sleek white casing, unique control panel with neon diagnostic indicators and simplified pipework arrangement, making them the ideal choice for utility room installations.

Sealed system versions are also available. These include a factory fitted expansion vessel, filling loop, pressure gauge, automatic air vent, pressure relief valve and high efficiency circulating pump, enabling boilers to be installed without the need for a feed and expansion tank in the loft.



## Dimensions

All dimensions in mm

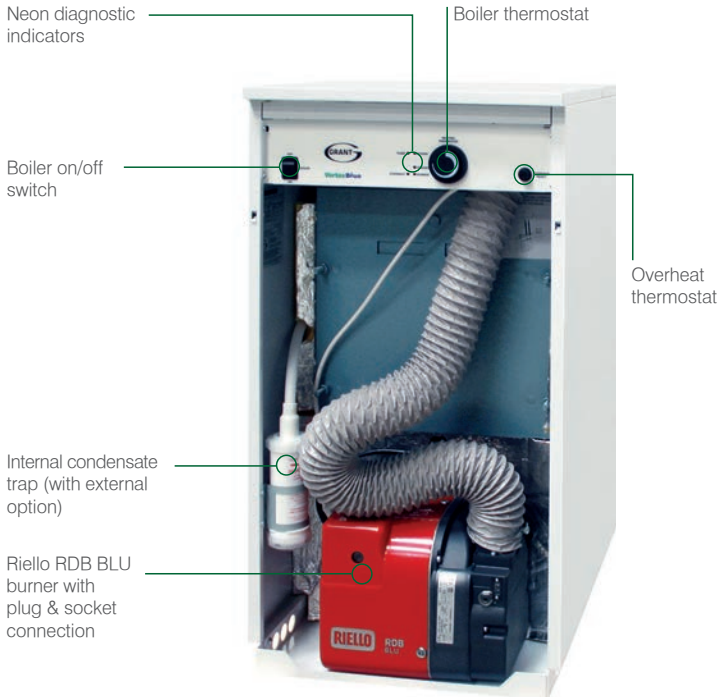


Grant VortexBlue 21 & 26 Kitchen/Utility and System

Grant VortexBlue 36 Kitchen/Utility and System

## Grant VortexBlue Kitchen/ Utility Models

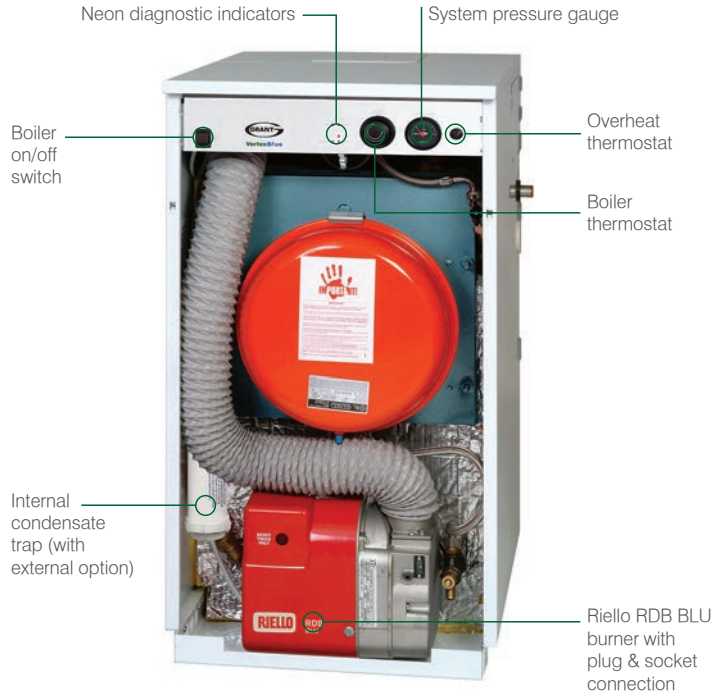
VTXBF21 / VTXBF26 / VTXBF36



**Model shown:**  
VTXBF26 (front view)

## Grant VortexBlue Kitchen/ Utility Sealed System Models

VTXSBF21 / VTXSBF26 / VTXSBF36



**Model shown:**  
VTXSBF26 (front view)



\*System models only

## Technical Specifications

Model	Kitchen/Utility Models			Kitchen/Utility System Models		
	21	26	36	21S	26S	36S
Output kW	21	26	36	21	26	36
Output Btu/h	70,000	90,000	123,000	70,000	90,000	123,000
Flow connection	22mm	22mm	28mm	22mm	28mm	28mm
Return connection	22mm	22mm	28mm	22mm	28mm	28mm
Cold water in (system kit)	n/a	n/a	n/a	15mm	15mm	15mm
Pressure relief (system kit)	n/a	n/a	n/a	15mm	15mm	15mm
Weight (dry)	97kg	130kg	144kg	138kg	167kg	168kg
Condensate pipe	21.5mm OD plastic overflow pipe					

**Note 1:** The boiler flow and return connections exit the casing on the left or right hand side.

**Note 2:** Grant VortexBlue Kitchen/Utility boilers are suitable for fully pumped systems only.

# Grant VortexBlue **Combi** Range

Just like our Kitchen/Utility range, the intelligent VortexBlue Combi incorporates the latest Riello RDB BLU burner technology teamed with our award winning Vortex stainless steel heat exchanger.

The Grant VortexBlue Combi models are available as internal or external models in three sizes - 21kW, 26kW and 36kW.

## Features

Featuring large heat exchangers in which, due to their low water content and larger surface area, hot water performance is vastly increased. With a low system pressure cut off switch, the combi protects itself in the unlikely event of system water loss. Additionally, there are two very accurate electronic temperature controls which allow the boiler to operate in condensing mode on central heating, whilst maintaining its instant hot water production.

Benefits include 24ltr expansion vessel, neon diagnostic indicators and a factory fitted internal condensate trap (this can be sited externally if preferred), all designed to make installation and servicing easier. External combi models also benefit from a factory fitted multi-directional flue, high quality external powder coated casing, built in frost protection, mains isolating switch and a test switch.

## Typical Hot Water Performance

**21kW Combi\*\*** 15 litres per minute at an average temperature of 50°C. Recovery time 4 minutes approx. Based upon 100 litre draw off.

**26kW Combi\*\*** 17 litres per minute at an average temperature of 50°C. Recovery time 4 minutes approx. Based upon 100 litre draw off.

**36kW Combi\*\*** 20 litres per minute at an average temperature of 50°C. Recovery time 3 minutes approx. Based upon 100 litre draw off.

### Mains Water Pressure

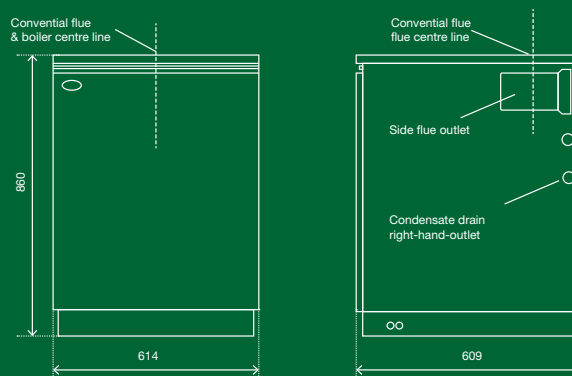
Minimum: 2.5bar (36psi). Maximum: 8bar (115psi).

\*\* Hot water flow rate is dependent on mains pressure available. Figures based upon an incoming mains water temperature of 10°C.

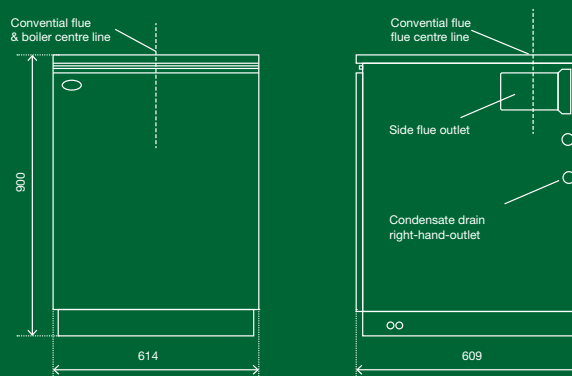
## Dimensions

All dimensions in mm

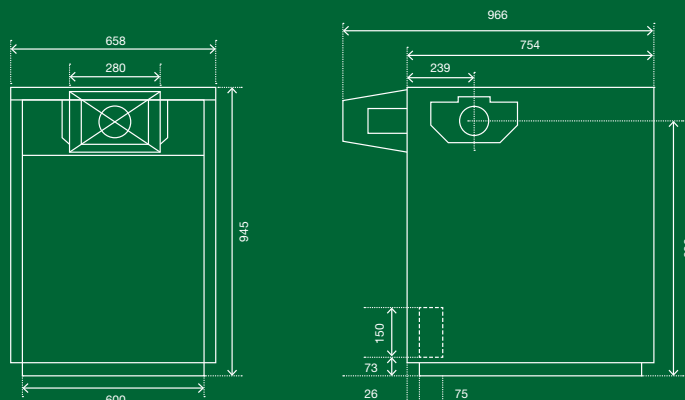
### Grant VortexBlue Combi Internal 21 and 26



### Grant VortexBlue Combi Internal 36

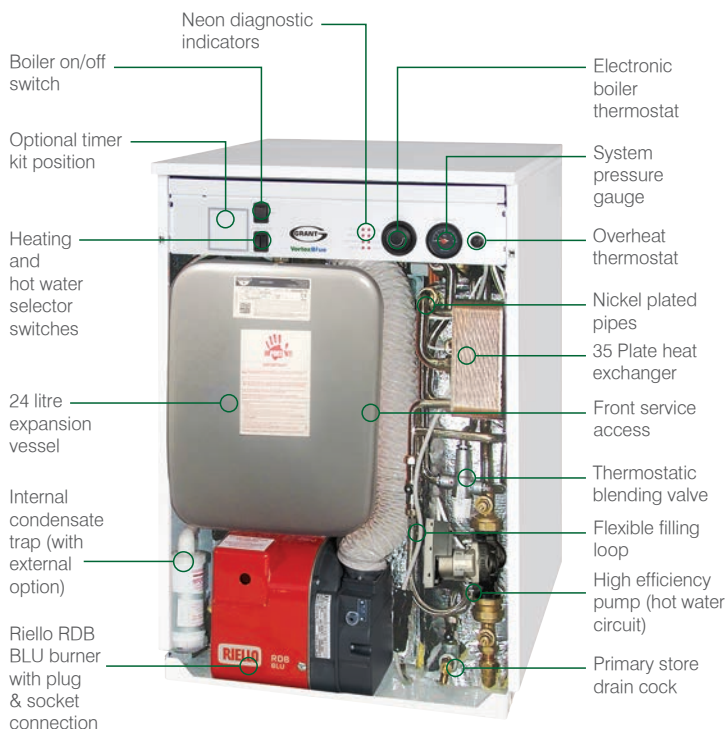


### Grant VortexBlue Combi External 21, 26 and 36



## Grant VortexBlue Combi Internal Models

VTXBFCOMBI21 / VTXBFCOMBI26 / VTXBFCOMBI36

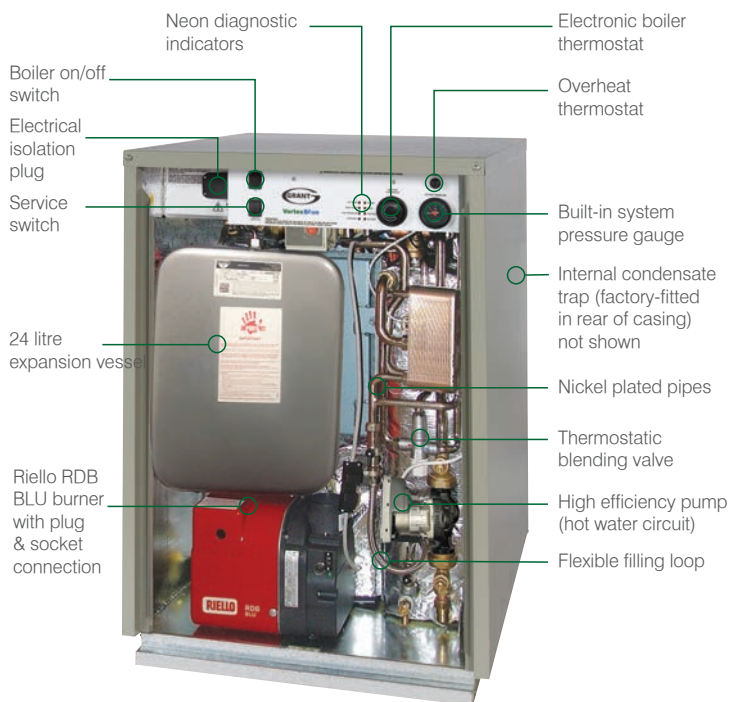


**Model shown:**  
VTXBFCOMBI26 (front view)



## Grant VortexBlue Combi External Modules

VTXBFCOMCOM21 / VTXBFCOMCOM26 / VTXBFCOMCOM36



**Model shown:**  
VTXBFCOMBI26 (front view)

## Technical Specifications - Boiler Connections

Model	Internal			External		
	21	26	36	21	26	36
Output kW	21	26	36	21	26	36
Output Btu/h	70,000	90,000	123,000	70,000	90,000	123,000
Flow connection	22mm	22mm	28mm	22mm	22mm	28mm
Return connection	22mm	22mm	28mm	22mm	22mm	28mm
Cold water in	15mm	15mm	22mm	15mm	15mm	22mm
Hot water out	15mm	15mm	22mm	15mm	15mm	22mm
Pressure relief	15mm	15mm	15mm	15mm	15mm	15mm
Weight (dry)	160kg	177kg	200kg	181kg	206kg	225kg

Condensate pipe 21.5mm OD plastic overflow pipe

**Note 1:** All boiler connections can be positioned to the left or right of the appliance.

**Note 2:** Grant VortexBlue internal and external combis are suitable for fully pumped sealed systems only.

## Grant VortexBlue **External** Range

The Grant VortexBlue external module has some of the highest oil-fired boiler efficiencies available today. These models are ideal for situations where a white cased kitchen/utility version is not always the best solution, possibly due to limited space within the home.

Our external range is available in outputs of 21kW, 26kW and 36kW with SAP 2009 gross seasonal efficiencies of between 90.7 and 93.3%.

### Features

All modules include a factory fitted multi-directional flue, high quality external powder coated casing, built in frost protection, mains isolating switch and a test switch. Just as other VortexBlue boilers, this range also incorporates Riello's RDB Blu burner technology teamed with our patented Vortex stainless steel heat exchanger.

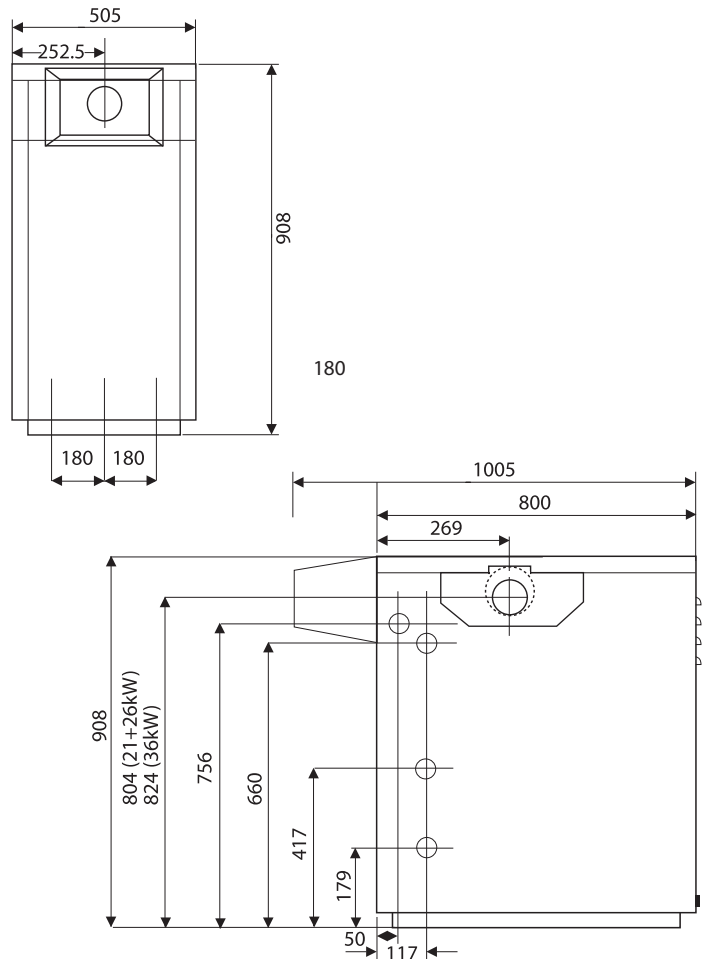
### Sealed System Kits

Grant VortexBlue external modules can be converted to sealed system operation by purchasing a pre-assembled kit from Grant UK. This includes an expansion vessel (size varies), automatic air vent, pressure relief valve and circulating pump. A filling loop and pressure gauge are also supplied as part of the kit. These can be fitted within the module casing, or ideally in a convenient site within the building, located between the cold main and central heating return.

### Dimensions

All dimensions in mm

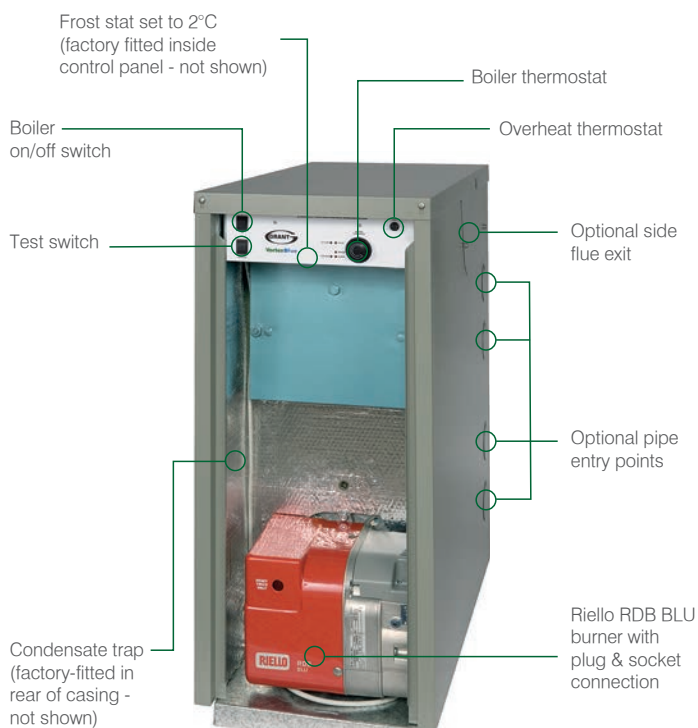
#### Grant VortexBlue External 21, 26 & 36





## Grant VortexBlue External Modules

VTXBFOM21 / VTXBFOM26 / VTXBFOM36



Model shown: VTXBFOM26 (front view)



## Technical Specifications - Boiler Connections

Model	Pro External Modules		
	21	26	36
Output kW	21	26	36
Output Btu/h	70,000	90,000	123,000
Flow connection	22mm	22mm	28mm
Return connection	22mm	22mm	28mm
Cold water in (system kit & combi)	15mm	15mm	15mm
Hot water out (combi)	n/a	n/a	n/a
Pressure relief (system kit & combi)	15mm	15mm	15mm
Weight (dry)	109kg	143kg	162kg

Condensate pipe 21.5mm OD plastic overflow pipe

**Note 1:** All boiler connections can be positioned to the left or right of the appliance.

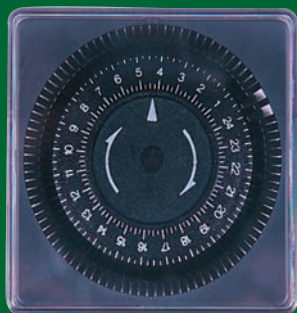
**Note 2:** Grant VortexBlue modules are suitable for fully pumped systems only.

## Timers and Programmers

Controls enable you to set your heating and hot water to turn on/switch off at times that suit you. We have a range of timers and programmers to compliment the Grant VortexBlue Range.

If you have a conventional boiler with a separate hot water cylinder, you will require a programmer, as this will allow you to control the times your heating or hot water will switch on independently (twin channel).

For combination boilers, a timer is usually fitted instead, as this controls both the heating and hot water together (single channel). There is, however, an exception to this rule. With the Grant VortexBlue Combi you can control the stored water within the boiler, useful for times when you go on holiday. In this instance, you may like to install a programmer such as the EPKIT.



**Model:** MTKIT

**Descriptions:**

24 hour single channel mechanical timer kit (plug-in)

**Compatible boilers:**

VortexBlue Combi Internal



**Model:** EPKIT

**Descriptions:**

7 day twin channel electronic timer kit (plug-in)

**Compatible boilers:**

VortexBlue Combi Internal



**Model:** RSKIT

**Descriptions:**

Programmable room thermostat (wall mounted)

**Compatible boilers:**

VortexBlue Kitchen/Utility & System  
VortexBlue External  
VortexBlue Combi External  
VortexBlue Combi Internal

## Grant Vortex MagOne Magnetic Filter

The MagOne (Part code: VM01) provides innovative protection for your Grant Vortex oil-fired boiler and central heating system up to 36kW. For larger systems you can fit two MagOne's in a parallel circuit.

Using a simple to install, triple action filtration design, the easy clean/easy drain MagOne filters magnetite and non-ferrous debris from central heating systems with a 12000 gauss neodymium magnet. The unit is also compatible with all system inhibitors and glycol solutions.

**Features**

- Manual air bleed
- 500ml dosing capacity
- 360° installation
- 6 bar max working pressure
- Installation/servicing date wheel
- 120°C max working temperature
- Full bore flat face 28mm isolation valves
- Complete with 28-22mm reducers
- Supplied with spare sealing washers & o-rings



# TRUST OIL. EMBRACE AIR. THINK **HYBRID.**

Unlock the benefits of renewable energy for your off-gas customers with the new Grant VortexAir. This unique hybrid combines the trusted attributes of a Grant VortexBlue blue flame oil boiler with the green advantage of an Aeronas<sup>3</sup> inverter driven heat pump. Offer your customers a sustainable alternative to boiler replacements with minimal disruption to the home. Install the VortexAir.

## VortexAir

HYBRID OIL-FIRED BOILER WITH HEAT PUMP

- Designed by Grant
- 16kW Oil boiler / 16kW ASHP
- Heat pump eligible for the RHI
- Boiler can be installed as a stand alone unit
- Heat pump can be fitted at a later date

Heat Pump



Oil Boiler



For further information visit: [www.grantuk.com](http://www.grantuk.com)  
or call our sales team: +44 (0)1380 736920

**Green Products  
Great Thinking  
Grant Engineering**

## Installation and Commissioning

Installation must comply with the current British Standards and The Building Regulations. Comprehensive technical information can be found in the installation manual, supplied with every boiler. As with all oil-fired appliances, Grant VortexBlue condensing boilers require commissioning at the time of installation. This simple process ensures that the boiler is working at peak efficiency which, in turn, will result in lower running costs and long term reliability.

## Guarantees

Grant Engineering (UK) Limited guarantees the manufacture of the boiler including all electrical and mechanical components for a period of **twelve months from the date of installation**, unless the installation was more than six months from the date of purchase, in which case the guarantee period will commence six months from the date of purchase, provided that the boiler has been installed in full accordance with the installation and servicing manual issued. This will be extended to a total period of **two years** if the boiler is registered with Grant Engineering (UK) Limited **within thirty days of installation** and serviced at twelve monthly intervals. To register your boiler visit: [www.grantuk.com](http://www.grantuk.com). The shell (heat exchanger) of the boiler is also covered by a **five year parts only** guarantee from the date of purchase. This is subject to the following:

- a) The boiler is operated correctly, in accordance with the installation and servicing manual.
- b) Proof is provided that the system has been flushed or chemically cleaned where appropriate (refer to BS 7593) and the required quantity of a suitable corrosion inhibitor added.
- c) Proof of annual servicing (including the checking of any expansion vessels and pressure relief valves) must be provided if and when requested by the Company.

**IMPORTANT** - Grant Engineering (UK) Limited **strongly recommends** that a MagOne in-line magnetic filter is fitted in the heating system pipe work. This should be installed and regularly serviced in accordance with the installation instructions.



### Grant Engineering (UK) Ltd

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e: [sales@grantuk.com](mailto:sales@grantuk.com) w: [www.grantuk.com](http://www.grantuk.com)

## Aftersales Service

For peace of mind, Grant VortexBlue boilers are backed by a national network of independent service engineers. In the unlikely event of a problem occurring, your installer should telephone our Customer Service Department on: **+44 (0)1380 736920**.

## Flue Systems

All Grant VortexBlue oil-fired boilers are supplied for connection to one of Grant's EZ-Fit flue options either conventional or balanced. The balanced flue systems are available as low level, high level or vertical kits, for internal and external applications, and even as unique EZ-Flexi packs, designed to enable condensing boilers to utilise an existing chimney. All EZ-Fit flues carry the CE mark of approval and are adaptable to any installation.

## Fuel

The Riello RDB BLU burner on a Grant VortexBlue boiler is supplied factory set at the stated output for use on standard grade kerosene - Class C2.

**IMPORTANT** - Grant VortexBlue condensing boilers must not be used with Class D gas oil or biokerosene.

This leaflet is accurate at the time of printing but as Grant UK has a policy of continual improvement it may be superseded. We reserve the right to amend specifications without prior notice. The statutory rights of the consumer are not affected. All products manufactured under I.S. EN ISO 9001. Grant UK additionally holds ISO 14001 accreditation. <sup>TM</sup>THE GRANT 'EZ-FIT FLUE' SYSTEM is a trade mark of Grant Engineering Limited.

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