

turboMAX plus



High performance
combination boiler range



The winning combination

High performance, simple installation and servicing are combined in the turboMAX plus combination boiler range.



Vaillant is a name that has long been at the forefront of boiler design and technology.

Fulfilling the needs of our customers has always been central to the development of our products. That's why you can be sure that when you choose Vaillant, you choose a boiler that's been designed to make life that much easier.

The turboMAX plus is a real achievement in engineering. You'll find that everything about it exceeds your expectations: performance, compact size, ease of installation, user comfort. And as for the build quality - it's second to none. What's more it's backed up with a full 2 year guarantee.[†]

Available in 24kW, 28kW and 37kW outputs, this compact, fuel-efficient combination boiler range offers everything you'd expect from Europe's leading manufacturer - and more.



The mark of quality for domestic heating

Vaillant is a member of the Benchmark initiative and fully supports the aims of the programme. Benchmark has been introduced to improve the standards of installation and commissioning of central heating systems in the UK and to encourage the regular servicing of all central heating systems to ensure safety and efficiency.

[†]The 2 year guarantee covers against manufacturing defects and provides for the replacement of defective parts with new parts and any related labour costs, providing that such works are carried out by a Vaillant Engineer or Vaillant appointed agent. For the guarantee to be valid an annual service must be carried out by a CORGI registered installer. The cost of this annual service is not included in the guarantee.



At home in any kitchen

The compact dimensions and styling of the turboMAX plus have been designed to blend in with any kitchen. The rear flue outlet option also means no elbow is visible above the boiler.

Easy installation

Installation couldn't be simpler, with clip distance pipework connections, a built-in filling loop and telescopic flue options.

High performance - 'AquaComfort'

turboMAX plus features an 'AquaComfort' system to provide superb hot water performance. This system incorporates both a warmstart facility to provide instantaneous hot water delivery and a special flow sensor which ensures constant hot water temperatures over a wide operating range.

Simple commissioning and servicing

turboMAX plus incorporates a comprehensive boiler display system showing status and diagnostic information for easy commissioning and subsequent service work.

Quality and reliability from the combi pioneer

For over 130 years, Vaillant has been developing and supplying products that have shaped the heating industry - setting the standards for performance, quality and reliability.



2 year
guarantee

5 year
anti-scale
guarantee

on all Vaillant
combination boilers

The 5 year anti-scale guarantee provides solely for the replacement of the Domestic Hot Water Heat Exchanger component in the event of lime scale blockage within 5 years from the installation date. The replacement must be carried out by a Vaillant Engineer or Vaillant appointed agent, and labour costs are not included in this guarantee.

Main heat exchanger

Designed to ensure maximum efficiency and durability



Fully modulating low NOx burner

Exactly matches heat output to central heating and hot water demand - automatically



Boiler display system

Provides status and diagnostic information for easy commissioning and servicing



Single electronic circuit board

For simplicity and reliability



'AquaComfort' system

Provides instantaneous hot water and constant temperatures, even at reduced flow rates



Push-fit flueing

Both top turret and rear outlets



Domestic heat exchanger

Stainless steel construction with large surface area to provide rapid hot water delivery and efficient operation



Motorised diverter valve



Built-in filling loop

For filling the central heating system



Making installation and servicing easier

The turboMAX plus is a compact combination boiler, and with a low lift weight and minimal clearances it fits neatly into almost any space.

Simple connections

All system isolating valves are built into the boiler, and the pre-formed copper tails supplied allow connection at pipe clip distance from the wall.



A built-in filling loop for the central heating system saves the additional cost and labour of installing a remote fill point.



A new push-fit flue system has self-sealing flue connections along with optional telescopic accessories, allowing for quicker and easier installation. The flues also have an attractive white finish.

An automatic system bypass is incorporated in the boiler, so there is no need to install and adjust a separate bypass.



Simple electrical connections have also been designed for even easier installation.

Frost protection

A built-in 2 stage frost thermostat automatically operates the pump, and, if needed the burner, providing frost protection and minimising gas consumption.

Automatic pump spin

If the boiler is not operated for 23 hours the pump and diverter valve will automatically function briefly to ensure correct performance.

Simple to operate and commission

All boilers are factory set and checked and require no adjustment.

turboMAX plus features a boiler display system which shows status and diagnostic information for easy commissioning and subsequent service work.

Normal mode
Displays boiler flow temperature

A close-up of the boiler's digital display showing the number "82.0" in a blue LED font.

Status mode
For a quick functional check during commissioning

A close-up of the boiler's digital display showing the number "5.4" in a blue LED font.

Fault mode
Highlights system problems at a glance (eg. F.28: no gas supply)

A close-up of the boiler's digital display showing the fault code "F.28" in a blue LED font.

Diagnostic mode
Displays key component operating information and allows easy set up

A close-up of the boiler's digital display showing the diagnostic code "d. 0" in a blue LED font.



The drop-down control box provides easy access to all components, facilitating service work.

Space is also provided in the control cover to store the instruction booklet and boiler log book.

Optional controls and accessories



Central heating timers

Two optional plug-in timers - 24 hour analogue and 7 day digital. These are simply plugged in to the Vaillant combination boiler control panel and provide easy to use control of central heating. The 7-day version includes a second channel to control the 'AquaComfort' system.



VRT 30 Room thermostat

This compact room thermostat keeps the room temperature at the desired comfort level. Proper control of heating can also reduce heating costs. For example, a 1°C reduction in room temperature can save up to 10% on heating costs. The VRT 30 is suitable for use in 230 V external control systems.

Programmable digital room thermostat - VRT 230

This room thermostat offers full digital time and temperature control of central heating and operates in either 24 or 7 day mode, with 3 independent time windows per day. Built-in functions include night setback and holiday programmes with a manual override facility.



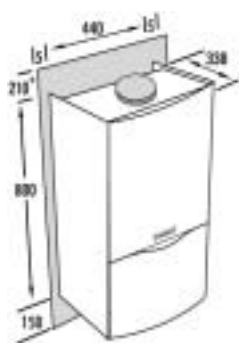
Wireless programmable digital room thermostat

The perfect solution for installations where running cable between boiler and thermostat is not practical. Designed for use with all current combination boilers, the VRT 340f is supplied with a plug-in receiver unit and communicated with the room thermostat via a radio link. Includes a second channel to control the 'AquaComfort' system.



At home anywhere

When it comes to boiler siting, turboMAX plus has been designed to allow maximum flexibility, which means you can fit it virtually anywhere.



*100mm with rear outlet flue option

The compact dimensions and specially shaped casing means that the boiler blends in with kitchen cupboards for a neat installation. It needs just 5mm side clearance and no compartment ventilation and so is ideal for confined spaces, cupboards or compartments. The rear outlet flue option also allows the top clearance to be reduced to just 100mm for when space above the boiler is at a premium.

turboMAX plus operates on low mains water pressure, achieving full flow rate at only 0.5 bar and so is the perfect solution for areas with low water supply pressures.

Whether it's in the kitchen, in a cupboard or a corner in the utility room, turboMAX plus is always at home.

Flues and flue accessories

Maximum flue lengths*	turboMAX plus 824E	turboMAX plus/pro 828E/837E/28E
Standard horizontal 100mm diameter ¹	4.5m	3.2m
Standard vertical 100mm diameter ¹	5.3m	4.3m
Optional horizontal 125mm diameter ²	12.9m	10.0m
Optional vertical 125mm diameter ²	15.4m	12.5m

Description	Standard flue system (100mm diameter)	Optional flue system (125mm diameter)
Horizontal air/flue duct with elbow and terminal (750mm)	303807	N/A
Horizontal air/flue duct with elbow and terminal (1m)	N/A	303609
Telescopic horizontal air/flue duct with elbow and terminal (450-650mm)	303806	N/A
Rear outlet flue and terminal	303817	N/A
Vertical air/flue duct and terminal	303800	303600
Boiler adaptor incl. condensate trap (100mm Ø to 125mm Ø)	N/A	303814
Flat roof penetration collar	009056	009056
Pitched roof adjustable roof tile	009076	009076
Pitched roof collar with lead flashing	2370115	2370115
Flexible roof tile	N/A	303980
90°/87° elbow	303808	303610
Two 45° bends	303809	303611
Air/flue duct (adjustable) offset (33-56mm)	303819	N/A
Air/flue duct extension (480mm)	303801	N/A
Air/flue duct extension (980mm)	303802	303603
Air/flue duct extension (1940mm)	303803	N/A
Air/flue duct extension (1980mm)	N/A	303605
Telescopic air/flue duct extension (480-770mm)		303804
Se-duct flue accessory	303810	N/A
Sliding sleeve	303816	303617
Flue support clips (box of 5)	303821	303616
Adjustable flue support clips	N/A	303935

Horizontal RSF flue



Horizontal air/flue duct with elbow and terminal

Vertical RSF flue

Vertical air/flue duct and terminal



Flexible pitched roof seal



Flat roof penetration collar



Horizontal & Vertical RSF flue



Telescopic air/flue duct extension



Flue support clips

There are two flue systems available for turboMAX plus boilers. The standard flue system has a diameter of 100mm and accessories are available to connect to either the top flue outlet on the boiler, or the rear outlet for direct through the wall installations.

Telescopic terminal and extension accessories are available to make installation easy. There is also an optional larger diameter 125mm system allowing longer flue lengths to be achieved.

All flues feature simple push-fit connections and a smart white finish.

*Measured to the end of the horizontal / vertical terminal

1. The maximum length must be decreased by 1 metre for each additional 90° elbow or pair of 45° bends
2. The maximum length must be decreased by 2.5 metres for additional 87° elbow and 2 metres for each pair of 45° bends

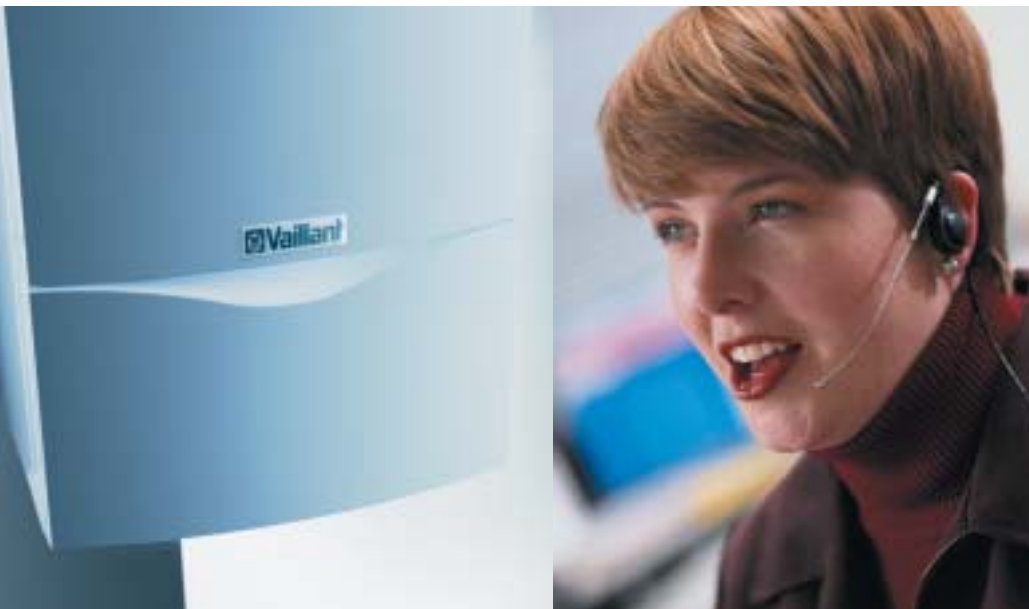
turboMAX pro

Sharing a number of the features and high build quality of the turboMAX plus, the turboMAX pro is a more basic model which offers an alternative combi solution.



Performance Checklist	turboMAX plus 824E/828E/837E	turboMAX pro 28E
Compact case	●	●
'AquaComfort' system	●	-
Built-in filling loop	●	-
Connections	Pipe clip distance copper tails	Rear facing compression connections
Status/Diagnostic system	Comprehensive boiler display system	Indicator lights
Guarantee period	2 years	1 year
User controls concealed	●	-
Bottom cover	●	-
System bypass	Automatic	Fixed

Customer support services



The after sales service and support behind every Vaillant boiler is part of the quality package that has helped Vaillant to build a unique reputation within the industry.

- engineers on call 364 days a year, 7 days a week
- next working day call out policy
- feedback to installer for installer booked in-warranty calls
- end user courtesy telephone call post engineer visit

Extended opening hours :
Mon - Fri 8am - 8pm
Sat - Sun 9am - 4pm

For more details just call Vaillant Service on **0870 6060 777**.

Vaillant offers an extensive range of training courses at five fully equipped training centres strategically located across the country. There are courses covering our entire product range and as well as tailor-made and specialist equipment training, we offer a course specially designed to improve sales skills. We are also an approved provider of ACS assessment and the Certificate in Energy Efficiency for Domestic Heating.

For full details of our current courses please contact our Training Department.

Contact details

Head Office, Southern & Western Region

Vaillant Ltd., Vaillant House, Trident Close, Rochester, Kent ME2 4EZ
Telephone 01634 292300
E-mail info@vaillant.co.uk

Northern Region

Vaillant Ltd., Unit D1, Lowfields Business Park, Elland, West Yorkshire HX5 9DG
Telephone 01422 376070
Fax 01422 311986
E-mail elland@vaillant.co.uk

Sales

Telephone 01634 292310
Fax 01634 712804
E-mail sales@vaillant.co.uk

Contracts, Partnering & Leasing

Telephone 01634 292322
Fax 01634 292379
E-mail contracts@vaillant.co.uk

Technical

Telephone 01634 292392
Fax 01634 294504
E-mail technical@vaillant.co.uk

Training

Telephone 01634 292370
Fax 01634 292354
E-mail training@vaillant.co.uk

Service

Telephone 0870 6060 777
Fax 01634 294506
E-mail service@vaillant.co.uk

Mon - Fri 8.00am - 8.00pm
Sat - Sun 9.00am - 4.00pm

Website **www.vaillant.co.uk**

Technical Specification

	turboMAX plus			turboMAX pro
	824E	828E	837E	28E
Flue type	RSF	RSF	RSF	RSF
Maximum DHW heat output kW (Btu/h)	24.0 (81,900)	28.0 (95,500)	36.9 (125,900)	28.0 (95,500)
DHW flow rate @ 35°C temperature rise 1/min	9.8	11.5	15.1	11.5
Mains water pressure required for max. flow rate bar	0.5	0.5	0.5	0.5
CH heat output range kW 80°C flow/60°C return (Btu/h)	8.9 - 24.0 (30,400 - 81,900)	10.4 - 28.0 (35,500 - 95,500)	10.9 - 28.0 (37,200 - 95,500)	10.4 - 28.0 (35,500 - 95,500)
Maximum CH heat input (net) kW (Btu/h)	26.7 (91,200)	31.1 (106,200)	31.1 (106,200)	31.1 (106,200)
Connections				
Heating flow/return mm	22 ¹⁾	22 ¹⁾	22 ¹⁾	22 ²⁾
Cold water inlet mm	15 ¹⁾	15 ¹⁾	15 ¹⁾	15 ²⁾
DHW outlet mm	15 ¹⁾	15 ¹⁾	15 ¹⁾	15 ¹⁾
Gas inlet mm	15 ¹⁾	15 ¹⁾	15 ¹⁾	15 ²⁾
Pressure relief valve discharge pipework mm	15 ²⁾	15 ²⁾	15 ²⁾	15 ²⁾
Electrical connection V/Hz	230/50	230/50	230/50	230/50
Dimensions				
External case height mm	800	800	800	800
External case width mm	440	440	440	440
External case depth mm	338	338	338	338
External case depth at sides mm	310	310	310	310
Weight approx. kg	43	45	48	45
LPG model available	●	●	-	-
SEDBUK Band	D	D	D	D

¹⁾ Copper tail pipe clip distance from wall

²⁾ Compression fitting

Vaillant Ltd.

Vaillant House ■ Medway City Estate ■ Trident Close ■ Rochester ■ Kent ME2 4EZ
Telephone 01634 292300 ■ Fax 01634 290166 ■ www.vaillant.co.uk ■ info@vaillant.co.uk