

TopTechnology

NEW Vitodens 200 series - control unit with 5-inch colour touchscreen, energy cockpit, 1:20 modulation range and minimum output 1.6 kW



Along with numerous technical improvements, Viessmann has created an all-inclusive package around its Vitodens gas condensing boilers in the 200 series. This package is equally advantageous to specialists and users alike.

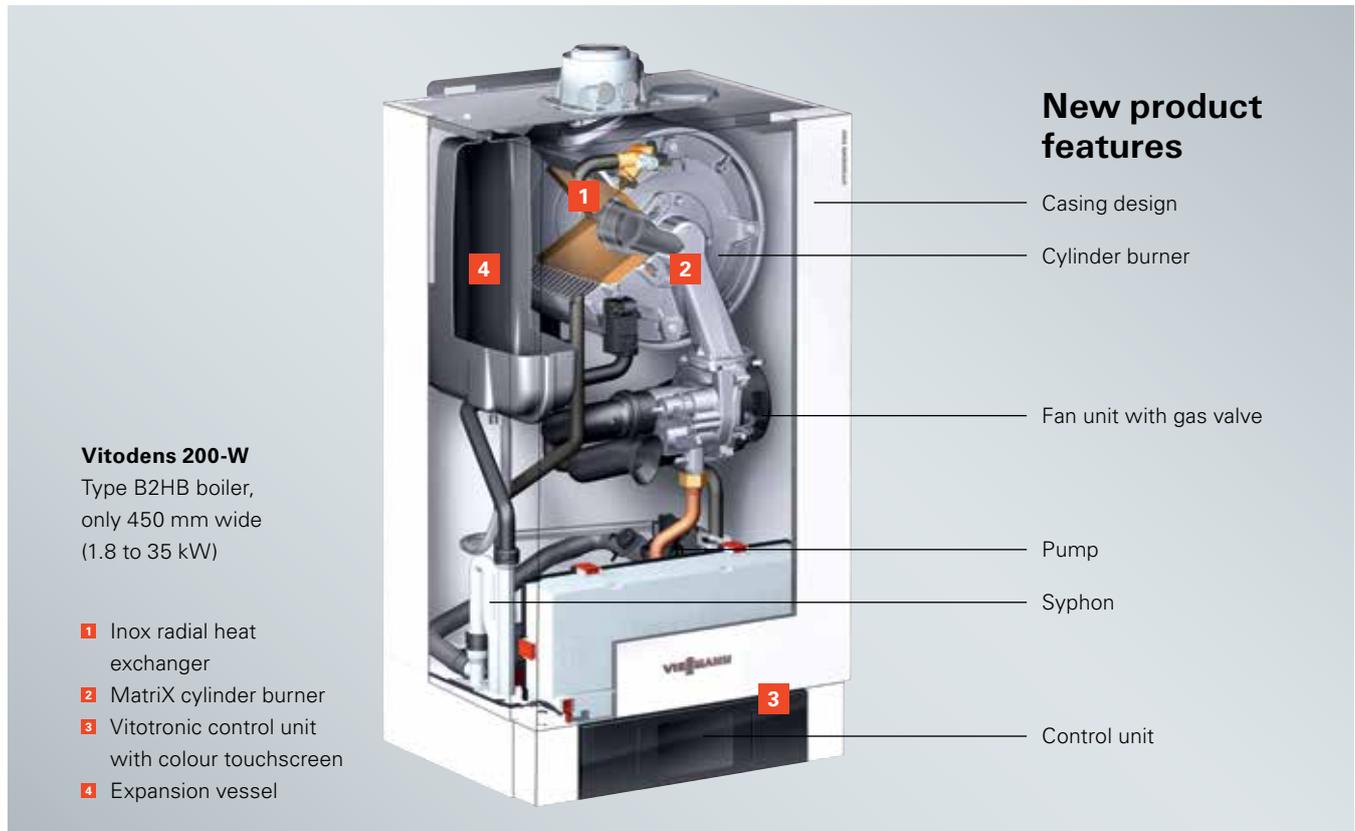
The Vitotronic control unit with 5-inch colour touchscreen, in particular, provides numerous options for convenient control, monitoring and maintenance. The current yields from a connected solar thermal system or the temperature stratification inside the heating water buffer cylinder can be checked on the energy cockpit. The integral assistant makes commissioning the wall mounted appliance much easier.

A new casing concept, and an innovative tool-free push-fit system that quickly connects all heating circuit and DHW pipes, has considerably simplified the installation of the Vitodens 200-W.

All appliances in the 200 series now feature automatic partial load adaptation, a controller suitable for all gas types (Lambda Pro Control Plus) without need for manual changeover and a flue adaptor to automatically compensate output losses.

NEW

- 1:20 modulation range
- Minimum output 1.6 kW
- Colour touchscreen control
- Push-fit assembly
- Constant heat output under all conditions
- Case design



Connection panel for DHW and heating water circuits with plug-in connectors. Only the gas connection (centre) has a threaded fitting.

The Vitodens 200 series of gas condensing boilers are amongst the most popular central heating boilers in their market segment. With new type designations, they now offer numerous technical improvements from which specialists and users will benefit, alike.

The Vitodens 200-W wall mounted gas boiler, in particular, is now even more quick and easy to install. For this purpose, Viessmann has developed the innovative push-fit system unique to the market. By installing the appliance on the bracket of the installation jig, all heating water and DHW pipes are already securely connected to the network – without the need for threaded fittings, clamps or soldering. No special tools are required.

Only the gas connection requires a threaded fitting, which is stipulated by relevant standards.

A short film provides information on the complete installation process (please scan the adjacent QR code).



1. Quick wall mounting

Install installation jig, create connections on the water side by means of valves and flush the heating system. Prepare electrical connections.

**2. Removing the front cover of appliance**

To remove the front of the Vitodens 200-W, undo the locks at the bottom of the sides by applying gentle pressure (no screwdriver required).

**3. Mounting the appliance onto its bracket**

After the factory-fitted O-rings have been lubricated, position the wall mounted appliance above the installation jig, lower it and hook it into the retainer hooks.

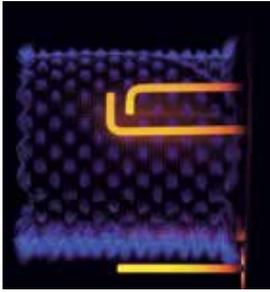
**4 Securing the gas connection**

Secure the wall mounted appliance to the bracket with the four screws supplied and insert the cable glands. Insert the gasket into the gas connection and secure with the union nut.

**5. Replacing the front cover of the appliance**

The front cover of the Vitodens 200-W automatically locks into place when inserted. With its unique push-fit system, the appliance is securely connected and ready for operation within just a few minutes.





An ionisation electrode monitors the combustion quality directly at the MatriX cylinder burner.

Over the next few years, the quality of gas in the European natural gas mains is set to fluctuate more frequently and more significantly than previously. Even in the UK where the majority of gas is now imported or supplemented by LNG gas. Fluctuations in gas quality can have a negative impact on the operational reliability, efficiency and emissions characteristics of appliances if the boiler is fitted without a combustion controller.

Viessmann appliances can easily handle this changeover to different types of natural gas

Viessmann is the only manufacturer to provide a complete range of wall mounted and floorstanding condensing boilers that deal with this challenge - using the self-calibrating Lambda Pro Control combustion controller.

For some time now, Viessmann condensing boilers have already employed this control unit to detect and automatically compensate for fluctuations in gas quality by adjusting the gas/air mixture. This creates continuously stable combustion and consistently high levels of efficiency. The combustion controller automatically adapts itself to the respective local gas quality. However, when changing over from natural gas to LPG, in most other available boilers the gas valve or gas injector has to be changed manually. It also enables the burner to modulate from 35 kW down to 1.6 kW (1:20).

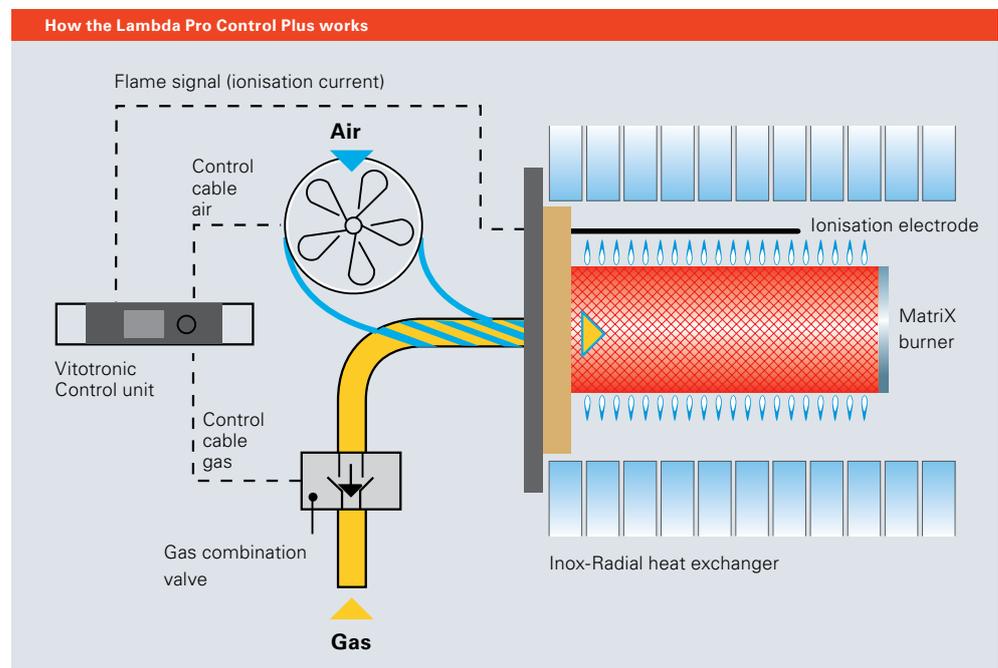
The Lambda Pro Control Plus is now suitable for all gas types

The Lambda Pro Control Plus is the next logical step in the development of this tried and tested technology. Alongside H, E and LPG, it also automatically adjusts itself to gases from unconventional sources.

Such sources include liquid natural gas (LNG), shale gas, hydrogen generated from wind energy and photovoltaic energy, synthetic methane and mains-compatible upgraded biogas.

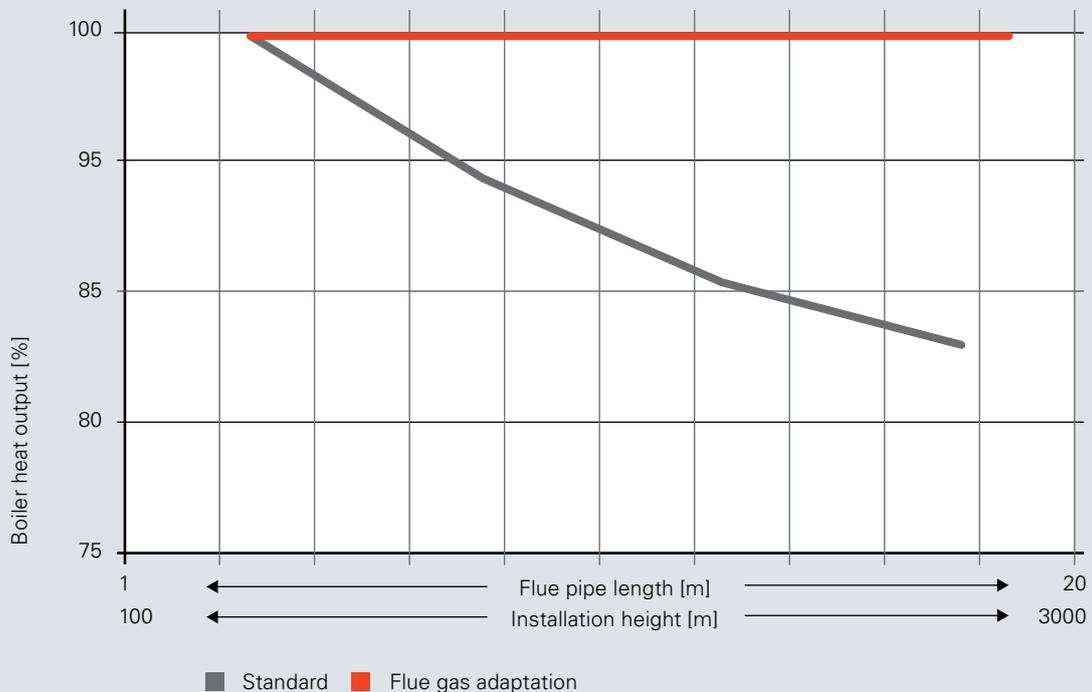
LNG, for example, has a particularly high energy content which, in conventional boilers, can result in overloading, damage to the appliance and high NO_x and CO₂ emissions. Bio natural gas, by contrast, has a higher proportion of CO₂ and a lower energy content. In gas boilers without combustion controller, this results in ignition difficulties and underload operation.

The new Lambda Pro Control combustion controller copes admirably with these differing gas qualities and automatically adjusts the condensing boiler for optimal combustion results. This means that the heating contractor no longer needs to change over valves in the appliance.



The Lambda Pro Control combustion controller detects fluctuations in the gas quality or a change of gas type and immediately adjusts its operation accordingly.

Automatic flue adaptor compensates for the pressure drop in the flue pipe and the installation height



The automatic flue adaptor always ensures 100 percent output regardless of ambient conditions.

Automatic flue adaptor

Automatic flue adaptor in the Vitodens 200 series of wall mounted gas condensing and storage combi boilers now automatically matches the appliances to the pressure drop of the relevant flue and the installation height. For this purpose, the actual combustion air quantity is determined via a mass flow sensor integrated into the burner. The intelligent controller then continuously changes the rotational speed of the burner fan.

As a result, the burner is automatically and optimally adapted to prevailing ambient conditions.

This makes manual adaptation by installing restrictors, or by individually setting controllers on site during installation and commissioning, a thing of the past.

Automatic partial load adjustment

The automatic partial load adjustment of current Vitodens gas condensing boilers provides dependable and higher operational reliability.

Previously, depending on the flue system, the burner could go out during partial load operation – especially under gusty and stormy wind conditions. Now, when the wind reaches a certain velocity, partial load is ramped up automatically for a while, to keep the flame alight.



Fan developed by Viessmann with mass flow sensor

Vitotronic 200 control unit with colour touchscreen and energy cockpit

Current operating state

- Display of outside temperature and set indoor temperature
- Energy saving operation by eco button
- Easy menu-guided control with help function


Temperature stratification in the cylinder

- Display of the charging level of the heating water buffer cylinder with temperature stratification
- Proportion of solar energy for charging


Histogram

- Display of gas consumption over a selected period (in this case seven days, daily or monthly displays can be selected)
- Documentation of energy consumption, differentiated by colour, for heating and DHW



Vitodens 200-W with colour touchscreen for convenient control

All-inclusive package for the Vitodens series

Alongside technical improvements, users particularly benefit from an all-inclusive package with intelligent control through which they retain an overview of the current operating state of the Vitodens boiler. Essentially this means, users can leave their heating system to manage itself.

Control unit with colour touchscreen and energy cockpit

The new Vitotronic 200 control unit in the Vitodens 200 series makes energy consumption transparent, as it provides the system user with continuous energy updates. It also informs users about boiler power and gas consumption.

Convenient operation at your fingertips

The 5-inch touchscreen clearly displays all important data in the form of colourful pictograms and text. The main control functions are immediately accessible via Favourites. Along with clear menu structures, this makes operating the heating system particularly easy and convenient.

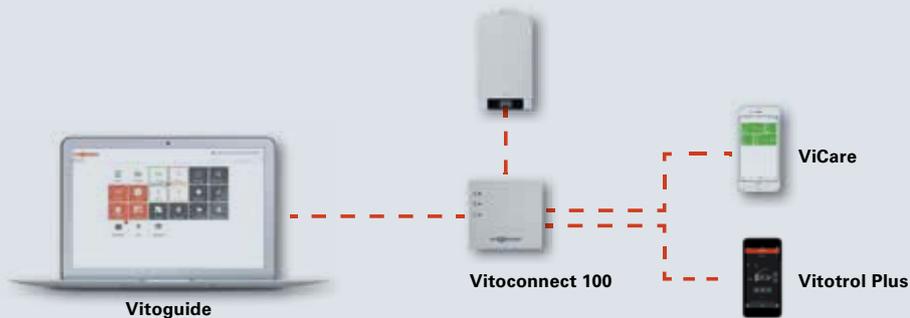
Energy cockpit for smart energy management

Along with the attractive design and the high level of operating convenience, the new display provides comprehensive control of the gas consumption for heating and domestic hot water heating in the form of an energy cockpit. If a solar thermal system is connected, solar yields are also captured and displayed. Colourful histograms also display all data optionally as daily, weekly, monthly or annual values. This enables users to comprehensively control and influence their consumption.

In conjunction with the Vitocell 200/300* dual mode system cylinder for DHW heating, the energy cockpit also provides detailed information on the cylinder loading status, temperature stratification and temperature curves. The system is also shown schematically. Furthermore, the extent to which a particular energy source (solar or gas) has contributed to DHW heating is also documented.

* Only if installed as a 4 pipe system.

Online access to every Vitodens boiler with Vitoconnect 100 WLAN adaptor



Benefits for trade partners

- Fast installation – under 15 minutes
- Better customer retention through online connection
- More professional approach
- Efficient planning of service visits

Benefits for users

- Straightforward control of a heating system via the internet
- Reduction of fuel costs at the touch of a button
- Reliable monitoring of the heating system (all-inclusive package)
- Automatic transmission of system data to the heating contractor

Operation via WLAN and apps

Communication with a Vitodens heating system via the internet using a smartphone, tablet, etc. has never been easier. For this, the Vitoconnect 100 type OPTO1 WiFi module only needs to be connected to the Vitotronic control unit. After scanning the enclosed QR code with a smartphone, the adaptor automatically connects to the domestic router.

The system can then be controlled from anywhere via the internet using the ViCare and Vitotrol Plus apps available free from the app store and Play Store. ViCare is designed for a single heating circuit. Vitotrol Plus controls up to three heating circuits.

In both apps, user contact details can be entered to which a notification is immediately sent on line in the case of a fault.

Improved online customer retention and range of services

The ViCare app is a useful tool for heating contractors to improve customer retention. Vitoguide is available to them for this purpose. This application allows them to centrally manage the energy systems they maintain, subject to having received appropriate authorisation from their customers. Only the email address must be recorded for this purpose.

Optimum scheduling of maintenance is an integral part of reliable system management. Vitoguide facilitates access to all heating systems which are connected to the internet via the Vitoconnect 100.

Heating contractors detect a fault before the system user, via the internet, and can immediately plan their service visit. Faults can also potentially be resolved remotely and costs for the system user avoided.



ViCare app for controlling a heating system

Model	Vitodens 200-W				Vitodens 222-F			Vitodens 242-F	
Rated heating output	System	Combi & System							
50/30°C (kW)	1.9 - 19	2.6 - 26	1.8 - 30	1.8 - 35	1.7 - 17.6	2.6 - 26	1.8 - 35	1.9 - 19	2.6 - 26
80/60°C (kW)	1.7 - 17.6	2.4 - 23.7	1.6 - 28	1.6 - 31.7	1.9 - 19.0	2.4 - 23.7	1.6 - 31.7	1.7 - 17.6	2.4 - 24.1
Dimensions									
Length (mm)	360	360	360	360	595	595	595	595	595
Width (mm)	450	450	450	450	600	600	600	600	600
Height (mm)	850	850	850	850	1425	1425	1625	1875	1875
Weight (kg)	36.6	39.2	41	41	129	132	141	161	165
Heat exchanger content (Litre)	1.8	2.4	2.8	2.8	1.8	2.4	2.8	1.8	2.4
Rated heating output range for DHW heating (kW)	1.7 - 17.2	2.4 - 29.3	2.4 - 30	1.6 - 33.5	1.7 - 17.2	2.4 - 29.3	1.6 - 33.5	1.7 - 17.2	2.4 - 29.3
Hot water volume	N/A	N/A	N/A	N/A	100	100	130	170	170
Energy efficiency Class	A	A	A	A	A	A	A	A	A



Vitodens 200 series
(242-F, 222-F, 200-W)

Product features

- NEW** ■ Quick, straightforward installation thanks to innovative push-fit system (Vitodens 200-W)
- NEW** ■ Lambda Pro Control combustion controller with automatic adaptation to different gas qualities
- Modulating stainless steel MatriX cylinder burner and Inox-Radial heat exchanger
- NEW** ■ Automatic flue adaptor
- NEW** ■ Automatic partial load adjustment
- NEW** ■ Reduction of standby losses and operating noise through new casing concept
- NEW** ■ 5-inch colour touchscreen with energy cockpit

Benefits for trade partners

- NEW** ■ Straightforward installation, no combustion-related settings during commissioning
- NEW** ■ Manual appliance changeover for different gas types no longer required
- NEW** ■ Better accessibility for maintenance and service work thanks to "open" appliance design
- Easier replacement of old appliances through enlarged wall clearances of 125 mm
- No special knowledge required for commissioning, service and maintenance
- NEW** ■ Assistant function for commissioning via colour touchscreen
- NEW** ■ System remote monitoring via internet (Vitoconnect 100, type OPTO1, WiFi module required)

Benefits for users

- NEW** ■ Futureproof, regardless of changes to the gas supply
- Reliable operation, irrespective of gas quality
- Consistently high level of efficiency reduces gas consumption
- Continually low emissions due to the highest level of combustion quality
- NEW** ■ Smart energy management via the energy cockpit with touchscreen
- NEW** ■ Control via app and internet (Vitoconnect 100, type OPTO1, WiFi module, option)