

# VITOROND

Cast iron low temperature oil fired boiler

Vitorond 100: 18 to 100 kW

Vitorond 111: 18 to 33 kW

**VIESSMANN**





Cast iron boiler  
Vitorond 100/111

# Genuine three-pass boiler in a cast iron design: Vitorond

## **JetFlow system for a long service life, even when operated at low temperatures**

The cast iron Vitorond boilers with their three passes are a force to be reckoned with, because three passes mean: Low emissions, efficient utilisation of condensing technology and therefore lower heating costs. However, the Vitorond offers even more: A sectional cast iron Eutectoplex heating surface for high operational reliability. And then there is the Jetflow system, protecting the Vitorond against condensate and therefore corrosion, even when operating in the low temperature range.

### **Long service life**

The old prejudices against cast iron boilers do not apply to the Vitorond. The Eutectoplex heating surfaces almost entirely exclude stress fractures by offering even heat distribution. Wide water galleries prevent sedimentation and boiling noises.

The JetFlow system guides the cool heating return water so that cold zones and condensation in the boiler are prevented. The boiler water temperature stays above the dew point temperature, even at critical points.

The even temperature distribution also prevents stress fractures in the cast iron sections.

### **Simple operation**

Digital Vitotronic control units bring all control functions together in one single integral control unit. This includes easy programming using separate keys for the heating circuit, automatic summer/winter changeover, the display of consumption and maintenance requirements and much more. With the Vitotronic 200, all data are clearly shown on a display of generous dimensions with plain text messages.

### **Low emissions for low heating bills**

The Vitorond combustion chamber is ideally matched to the flame geometry. Together with the three-pass design and the precisely matched Vitoflame 200 oil burner, this ensures clean combustion. It performs better than required for the "Blue Angel" certificate of environmental excellence.



Jetflow system prevents the formation of condensate and stress fractures

Information regarding Vitorond 200 cast iron boilers (125 to 1080 kW) can be found in a separate brochure.



Vitorond 100 –  
cast iron three pass  
boiler

Vitorond 100  
with Vitocell 300-V  
DHW cylinder  
(adjacent)

# The attractively priced three-pass boiler

Vitorond 100 is an advanced cast iron three-pass boiler at an attractive price.

The optimised thermal insulation of the Vitorond 100, together with the Vitotronic control unit fitted on top, further reduce the installation time.

The sectional cast iron Eutectoplex heating surface represents high operational reliability. By offering even heat distribution, stress fractures are practically a thing of the past. The wide water galleries prevent sediment and boiling noises no longer cause a nuisance. The JetFlow system specifically guides the cool heating return through the whole boiler. This prevents cold zones and condensate being created at the back of the boiler. In critical areas, too, the boiler water temperature remains above the dew point.

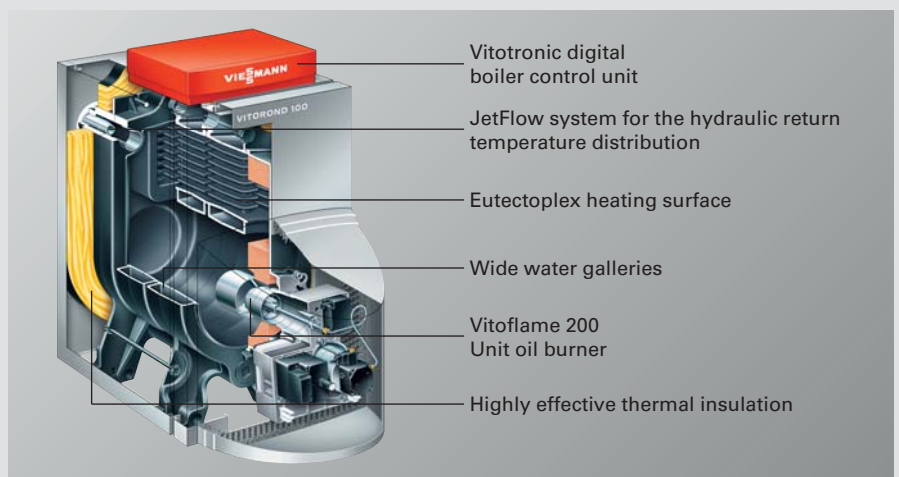


Eutectoplex heating surface

## Easy installation and maintenance

Resilient gaskets permanently seal the individual sections on the hot gas side. Also, the horizontal layout of the hot gas flues permits thorough and easy cleaning of the boiler.

- Cast iron low temperature oil fired boilers, 18 to 100 kW
- Standard efficiency: 89 % (H<sub>g</sub>) / 94.5 % (H<sub>i</sub>)
- Eutectoplex heating surface for high operational reliability and a long service life
- Economical and environmentally friendly through lowered boiler water temperature when the outside temperature rises
- Cast iron sections with a resilient seal for permanent hot gas soundness
- The JetFlow system specifically channels the cool heating return through the whole boiler, thereby preventing condensation and stress fractures
- Simple and complete boiler maintenance through horizontal hot gas flue layout and easily removable turbulators





Vitorond 111 –  
cast iron three pass  
boiler

Vitorond 111  
cast iron three pass  
boiler with integral  
DHW cylinder

# The affordable and compact "heating panel"

The Vitorond 111 is a compact, fully fitted combination comprising an oil fired cast iron low temperature boiler Vitorond 100 plus an integral DHW cylinder with either 130 or 160 litre capacity (subject to boiler output).

The three-pass boiler with Eutectoplex cast iron heating surfaces promises high operational reliability and a long service life.

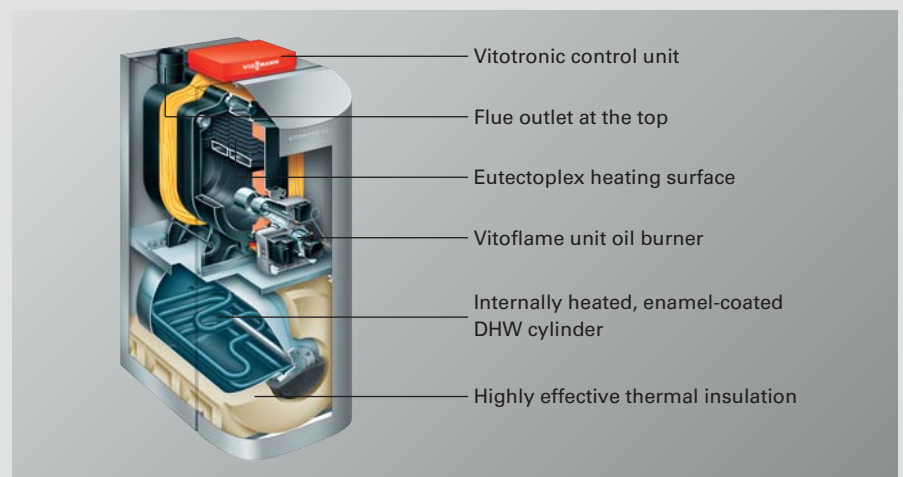
The JetFlow system deliberately guides the cool heating return through the whole boiler. This prevents cold zones and condensate being created at the back of the boiler. In critical areas, too, the boiler water temperature remains above the dew point.

The Vitorond requires no more than 0.6 m<sup>2</sup> installation area, and its height including control unit is kept below a modest 1.60 m.

Using the Vitoflame oil burner, Vitorond 111 can also be used for balanced flue operation. This also allows an installation without the air vents that are otherwise required. This prevents unnecessary heat loss. Together with the new method of removing the flue gases upwards, this opens new installation options in your home.

The new handling aid and delivery in assemblies makes an easy installation possible, even under difficult conditions.

- Cast iron, low temperature, oil fired boiler from 18 to 33 kW, including integral DHW cylinder (130 litre capacity at 18 kW; 160 litre capacity from 22 kW)
- Standard efficiency: 89 % (H<sub>g</sub>) / 94.5 % (H<sub>i</sub>)
- Compact dimensions  
22 kW: 1205 x 665 x 1590 mm (length x width x height, height incl. control unit)
- Economical and environmentally friendly through lowered boiler water temperature when the outside temperature rises
- Eutectoplex heating surface for high operational reliability and a long service life
- Quiet operation through large area burner hood in a new design
- Optional balanced flue operation
- JetFlow system prevents condensation and stress fractures
- Viessmann system accessory for an individual equipment level



# Vitotronic: Technology that thinks for you



Vitotronic control units provide you with every conceivable heating convenience. Once adjusted to suit your personal requirements, Vitotronic runs many functions automatically. The clear Vitotronic 200 user interface makes individual adjustments very easy: You will be assisted by illuminated keys and a large display with plain text messages.

### Automatic control

The Vitotronic automatically changes over between winter and summer time and responds, as a weather-compensated control unit, to external temperature fluctuations. All prepared convenience functions, such as party mode (should you be having a late night), economy or holiday programs, can be accessed at the press of a button. And that, not only on the boiler, but also on the mirror-image user interface of the remote control unit in your living room.

### Options for the future

The Vitotronic control unit is designed to accommodate future modifications. Should you wish to extend your home in the near future, or link solar collectors to your heating system, the Vitotronic will always keep up.



Vitotronic control unit mounted on top of the boiler



Vitotrol 300 – clarity is vital: Menu-guided programming unit with plain text display

Function	Vitotronic 100	Vitotronic 150	Vitotronic 200
Reacts to changes in room temperature	●	–	–
Reacts to changes in outside temperature	–	–	●
Adjustable for central heating and DHW heating	–	–	●
Adjustable for central heating only	● <sup>1)</sup>	–	●
Automatic summer/winter changeover	–	●	●
Party key (extends heating time)	● <sup>1)</sup>	● <sup>2)</sup>	●
Economy key (short-term setback)	● <sup>1)</sup>	● <sup>2)</sup>	●
Holiday program (long-term setback)	● <sup>1)</sup>	–	●
Small display with symbols	●	●	–
Large display with plain text messages	–	–	●

1) in conjunction with a separate clock thermostat Vitotrol 100 (in the living space)  
2) in conjunction with the Vitotrol 200

# Everything under control – even from afar

The Vitorond 100/111 is prepared for the integration of communication systems.

## Remote monitoring and control via GSM/mobile phone networks and Vitocom 100 ①

The attractively priced remote control unit for detached and two-family homes. With this control unit you can switch your system ON or OFF while you are away.

## Integration in home automation systems with Vitogate 200 ②

Vitogate 200 enables the data exchange with KNX/EIB systems.

## Service via the internet with Vitodata 300 ③

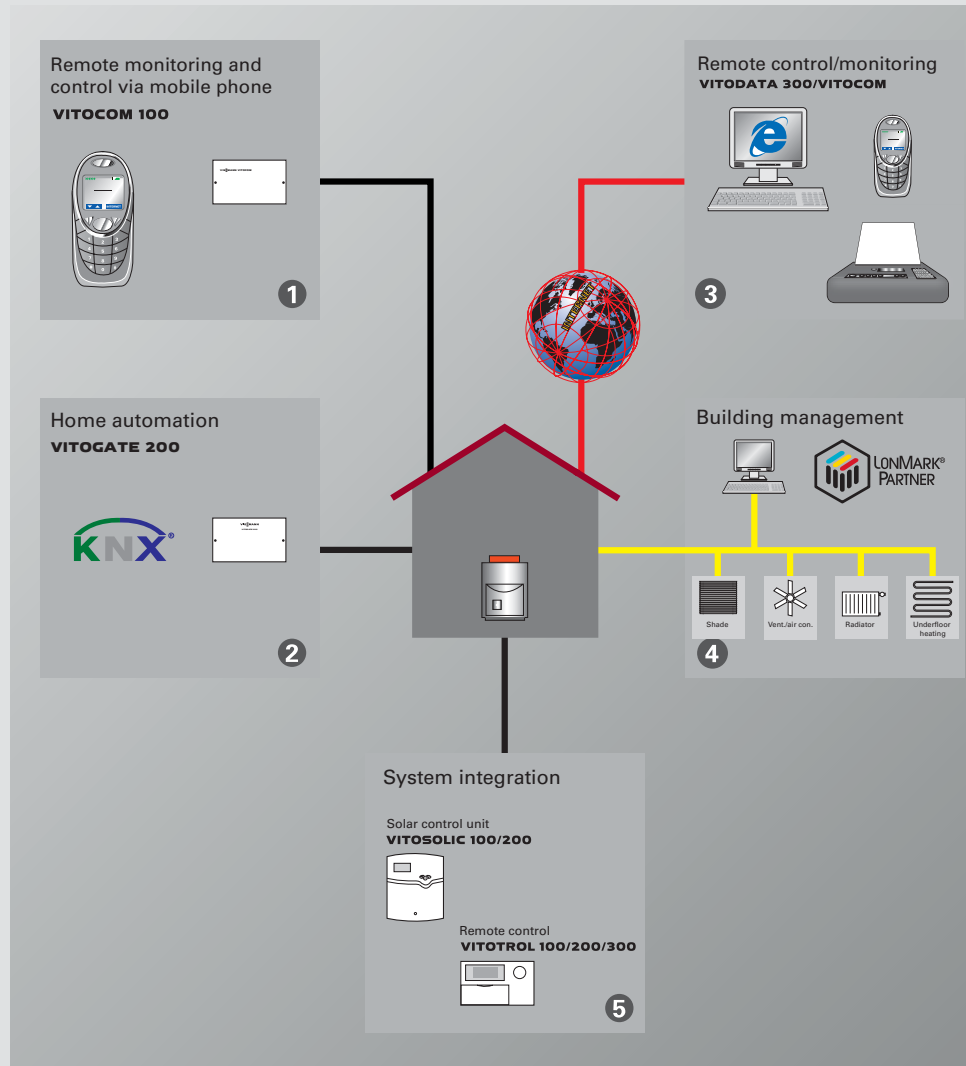
Vitodata 300 enables the remote monitoring and remote control of your heating system round the clock by your heating contractor. Access via the internet.

## Integration into building automation ④

The Vitorond 100/111 is prepared for the direct connection to LON and EIB building management systems.

## System integration ⑤

Information and data exchange between all Viessmann components. Vitosoft and laptop connections support your heating contractor during commissioning, maintenance and service.



# DHW convenience for every demand



The Vitocell cylinder range offers you the right DHW cylinder for your specific needs. Subject to DHW demand and installation options, select a wall mounted or freestanding DHW cylinder; alternatively a cylinder installed adjacent to or below the boiler. Using the matching system connections, boiler and DHW cylinder form one unit that is quickly installed.

### **Vitocell 100 with Ceraprotect enamel coating**

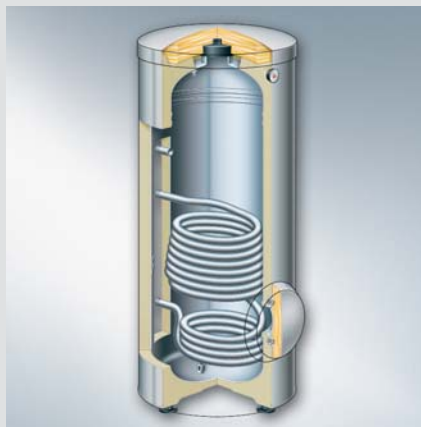
The Vitocell 100 with Ceraprotect enamel coating meet all requirements for convenient, economic heating of DHW and are amongst the leaders for enamelled DHW cylinders. The Ceraprotect enamel coating protects the DHW cylinders safely and durably against corrosion.

### **Vitocell 300 in corrosion-resistant stainless steel**

Vitocell 300 DHW cylinders, made from corrosion-resistant stainless steel, meet the most stringent hygiene standards. Stainless steel is used for good reason in kitchens, laboratories, hospitals and the food processing industry – because it offers excellent hygienic properties. Its homogeneous surface retains its hygienic properties even after many years of use.



Stainless steel  
DHW cylinder



DHW cylinder  
Vitocell 300-V

# Vitorond system design

## A perfect match

Every detail of each component used in our heating systems is designed to fit into the modular concept from Viessmann. This guarantees trouble-free operation of the complete heating system. All boilers, burners and controls are perfectly matched.

## Control unit

The Vitotronic control units (1) offer a tailor-made control program for every demand.

## Vitoflame 200 oil burner

Like all Viessmann burners, Vitoflame 200 (2) is factory tested at operating temperatures and matched to the respective boiler output.

## DHW cylinder

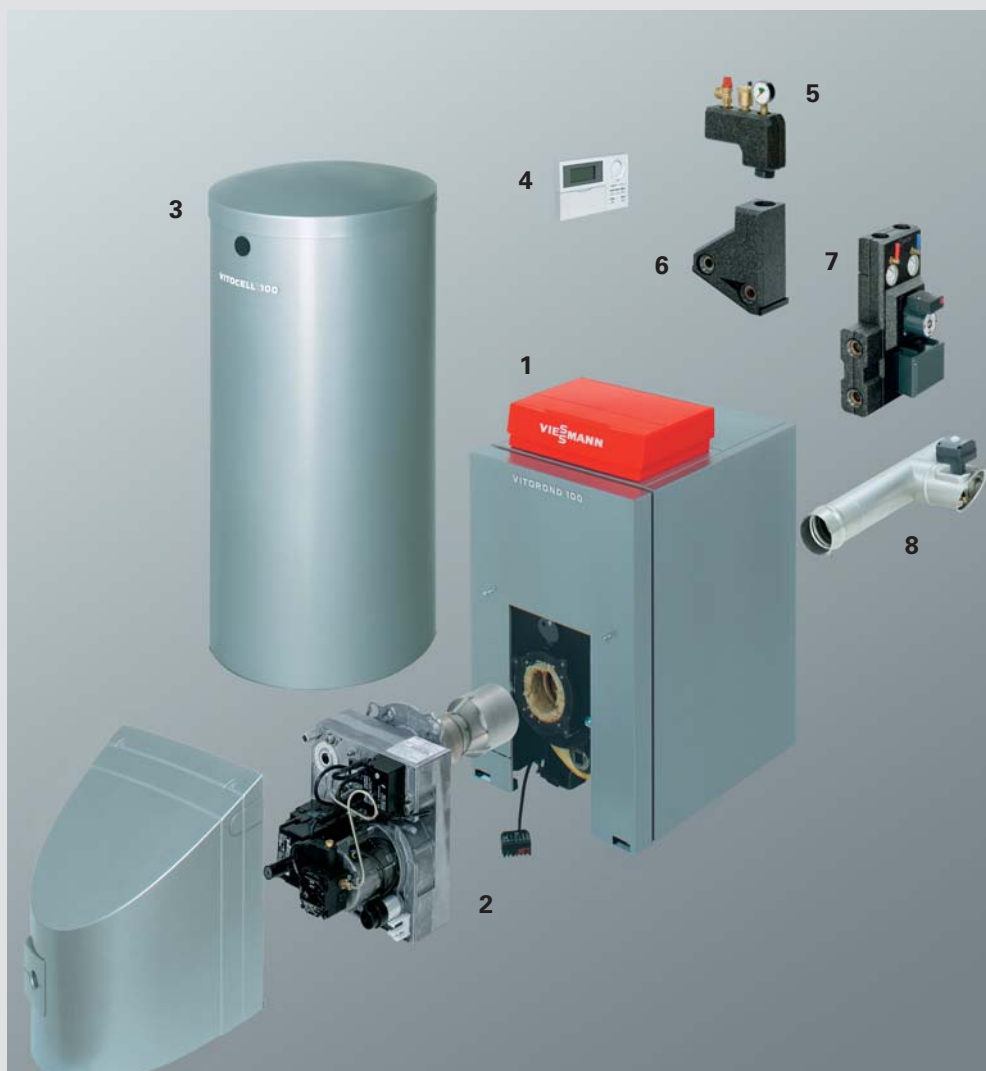
Vitocell range of DHW cylinders (3) for any demand and every aspiration.

## Remote control

Matching Vitotrol remote controls (4) are available for all Viessmann control units.

## Accessories

Complete safety equipment block (5) with safety assembly and moulded insulation shells. The Divicon heating circuit distributor (7) is fully assembled and quickly fitted using the Divicon adaptor (6). The Vitoair combined draught stabiliser (8) keeps your chimney dry and in many cases saves chimney renovation.

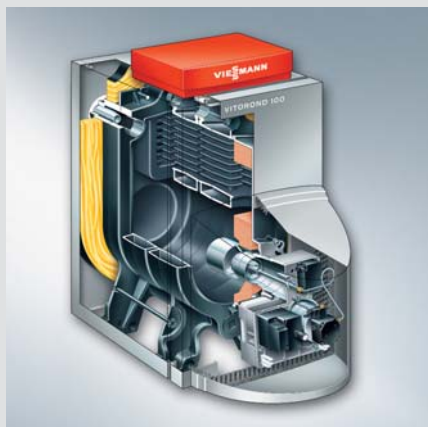


Modular-Divicon  
heating circuit distributor

## Modular-Divicon

The Modular-Divicon heating circuit distributor can be used universally for freestanding and wall mounted boilers. Pipe assemblies and manifolds enable up to three Modular-Divicon to be connected.

# Vitorond from 18 to 100 kW



## VITOROND 100

<b>Rated output</b>	kW	18	22	27	33
<b>Total dimensions</b>	Length mm	890	1025	1165	1165
	Width mm	500	500	500	500
	Height mm	940	940	940	940
<b>Total weight</b>	kg	128	165	202	202
<b>Boiler water content</b>	litres	27	35	44	44



## VITOROND 100

<b>Rated output</b>	kW	40	50	63	80	100
<b>Total dimensions</b>	Length mm	915	1040	1170	955*	1080*
	Width mm	565	565	565	565	565
	Height mm	1110	1110	1110	1110	1110
<b>Total weight</b>	kg	223	276	329	361	416
<b>Boiler water content</b>	litres	50	63	76	89	102

\*) Details excluding burner and hood



## VITOROND 111

<b>Rated output</b>	kW	18	22	27	33
<b>Capacity</b>	litres	130	160	160	160
<b>Total dimensions</b>	Length mm	1075	1205	1350	1350
	Width mm	665	665	665	665
	Height mm	1590	1590	1590	1590
<b>Total weight</b>	kg	252	298	332	332
<b>Boiler water content</b>	litres	27	35	44	44



# Our comprehensive product range sets new standards



Viessmann offers future-oriented heating systems for oil, gas, solar, wood and natural heat, qualifying them as an independent partner concerning all energy questions.



Our heating systems cover all output demands from 1.5 to 20000 kW – from apartments to large industrial plants.



Our product range, categorised in three steps according to price and technology, offers the right solution for every demand and every budget.



Viessmann matches up all products and consequently offers an optimum level of efficiency – from the initial design to system operation.

Wall mounted boilers for oil and gas, employing conventional and condensing technology



Heating system components, from fuel storage to radiators and underfloor heating systems



Mawera biomass systems up to 13 000 kW



Energy systems for the utilisation of environmental energy, solar energy and sustainable fuel supplies



Freestanding boilers for oil and gas, employing conventional and condensing technology

# The Viessmann Group

For three generations, the Viessmann family business has been committed to generating heat conveniently, economically, with environmental responsibility and in accordance with the prevailing demand. With a number of outstanding product developments and problem-solving solutions, Viessmann has created many milestones that have frequently made them the technical pacemaker and trendsetter for their entire industry.

Viessmann's orientation is decidedly international – it maintains 11 factories in Germany, Austria, France, Canada, Poland and China, sales organisations in Germany and 35 other countries, plus 112 sales offices around the world.

Responsibility for the environment and society at large, fairness in dealing with business partners and employees as well as striving for perfection and the highest efficiency in all business processes are core values for Viessmann. This applies to every individual employee and therefore to the whole company. It offers its customers, with the multitude of its products and associated services, the particular benefit and added value of a strong brand.



Production of wall mounted gas fired boilers

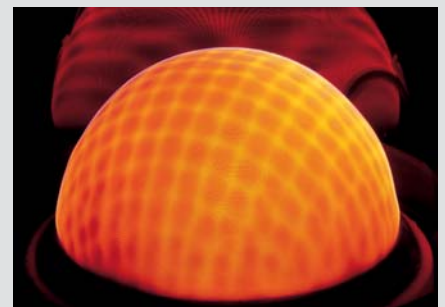
The new training and information centre at the Viessmann Academy – completion August 2007



Research and development



Inox-Radial heat exchanger made from stainless steel for reliable utilisation of condensing technology



MatriX gas burner for extremely low emissions

The Viessmann Group



climate of innovation

Viessmann Werke  
D-35107 Allendorf (Eder)  
Tel. +49 6452 70-0  
Fax +49 6452 70-2780  
[www.viessmann.com](http://www.viessmann.com)

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Subject to technical modifications

**Your local heating contractor:**