



TECHNOLOGY BROCHURE

Oil/gas boilers and low pressure hot water boilers up to 22 MW

Efficient systems

At Viessmann, all components for a high performance energy system come from a single source – and are perfectly and reliably matched.



Futureproof and efficient heating technology
for all requirements

In industrialised Western nations, heat generation in residential and commercial buildings accounts for the largest proportion of energy consumption – and at the same time offers the greatest savings potential. Cutting-edge and energy efficient heating systems from Viessmann are making a significant contribution to the sustainable preservation of energy reserves.

In such projects, Viessmann successfully rises to the most diverse challenges facing advanced heating technology by constantly offering innovative solutions – for historic listed buildings, highly productive industrial complexes and the residential and commercial arena.

Viessmann's comprehensive range of products for commercial applications includes efficient energy systems designed to economically supply heat, steam, refrigeration and electricity. Any fuel type can be utilised for these systems – gas, oil, biomass and solar energy, as well as heat from ground sources, outdoor air or waste heat generated by production processes.

Our comprehensive range likewise includes the most advanced control technology components, remote monitoring & operation, and extensive services ranging from engineering to commissioning and service.





6

**6 OIL/GAS BOILERS
UP TO 2000 KW**

The right solution for every need



20

**20 GAS CONDENSING
BOILERS UP TO 1400 KW**

Well engineered condensing technology makes the Vitocrossal a frugal condensing boiler



38

**38 LOW PRESSURE
HOT WATER BOILERS
UP TO 22 MW**

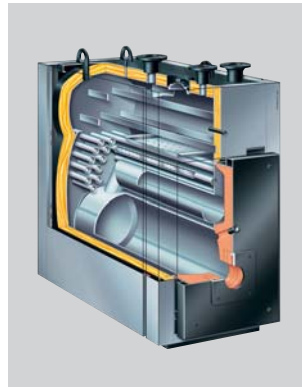
Energy efficient and clean burning: system solutions for economical hot water generation



46

**42 LOW PRESSURE
STEAM BOILERS
UP TO 2.2 T/H**

Viessmann Vitoplex LS oil/gas low pressure steam boiler



42

46 SYSTEM TECHNOLOGY

Perfectly matching system technology from Viessmann offers maximum reliability, flexibility and efficiency

**60 VIESSMANN –
THE COMPANY**



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**VITORADIAL 300-T**

Efficient heating operation with condensing technology and the proven Inox-Radial heat exchanger

Condensing technology with the proven Inox-Radial heat exchanger for efficient heating operation

The Vitoradial 300-T condensing boiler is particularly compact. It is supplied as a unit with a downstream flue gas/water heat exchanger and the Vitoflame 100 pressure-jet burner (up to 335 kW).

High efficiency with two-stage heat recovery

The Vitoradial 300-T is an innovative combination of the Vitoplex 300 low temperature boiler with an Inox-Radial heat exchanger directly attached to it for utilising condensing technology.

The proven multi layered convection heating surfaces combined with the corrosion-resistant Inox-Radial heat exchanger enable highly efficient two-stage heat recovery. The Vitoradial 300-T is suitable for operation with all commercially available types of extra light (EL) fuel oil or natural gas.

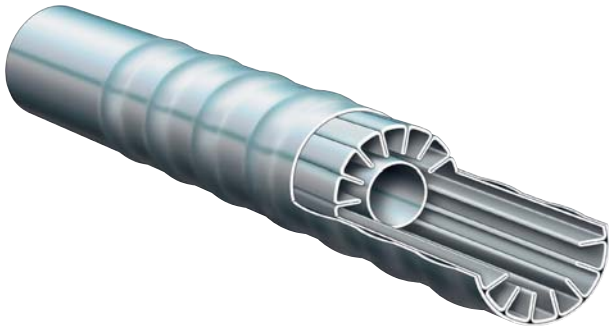


The Inox-Radial heat exchanger guarantees the highest levels of efficiency and a long service life.

TAKE ADVANTAGE OF THESE BENEFITS

- + Oil/gas condensing boilers: 101 to 545 kW
- + Standard seasonal efficiency [to DIN] (using fuel oil): 97 % (H_g) [gross cv]
- + Corrosion-resistant Inox-Radial heat exchanger
- + Complete with heat exchanger pipework and pump, matched to the respective heating output of the boiler
- + Environmentally responsible operation thanks to long burner runtimes and fewer switching intervals
- + Integral Therm-Control start-up system for easy hydraulic connection – no shunt pump or return temperature raising facility needed
- + No low water indicator required, reducing costs
- + Compact design for easy transportation and low build height – ideal for modernisation projects
- + Easy to operate Vitotronic control unit with colour touchscreen
- + Integral WiFi for service interface
- + Economical and safe operation of the heating system using the Vitotronic control system with communication capability which, in conjunction with the Vitogate 300 (accessories), enables integration into a building management system
- + Vitocontrol control panel available on request

For specification, see page 18



Multi layered convection heating surface

Its compact design and low build height make the Vitoradial 300-T the ideal choice for modernisation projects.

Triplex pipes for 2.5 times larger heating surface

The multi layered convection heating surfaces of the Vitoradial 300-T comprise telescopic steel pipes pressed together for heat transfer. The inner pipe, with its folded linear fins, creates a heating surface 2.5 times greater than that of smooth pipes. Heat is transferred through the different gaps between the press points in such a way that the back area of the triplex pipes transfers less heat to the boiler water, as the combustion gases circulating here are no longer quite as hot. This keeps the surface temperature above the dew point, counteracting the formation of condensate and preventing corrosion damage.



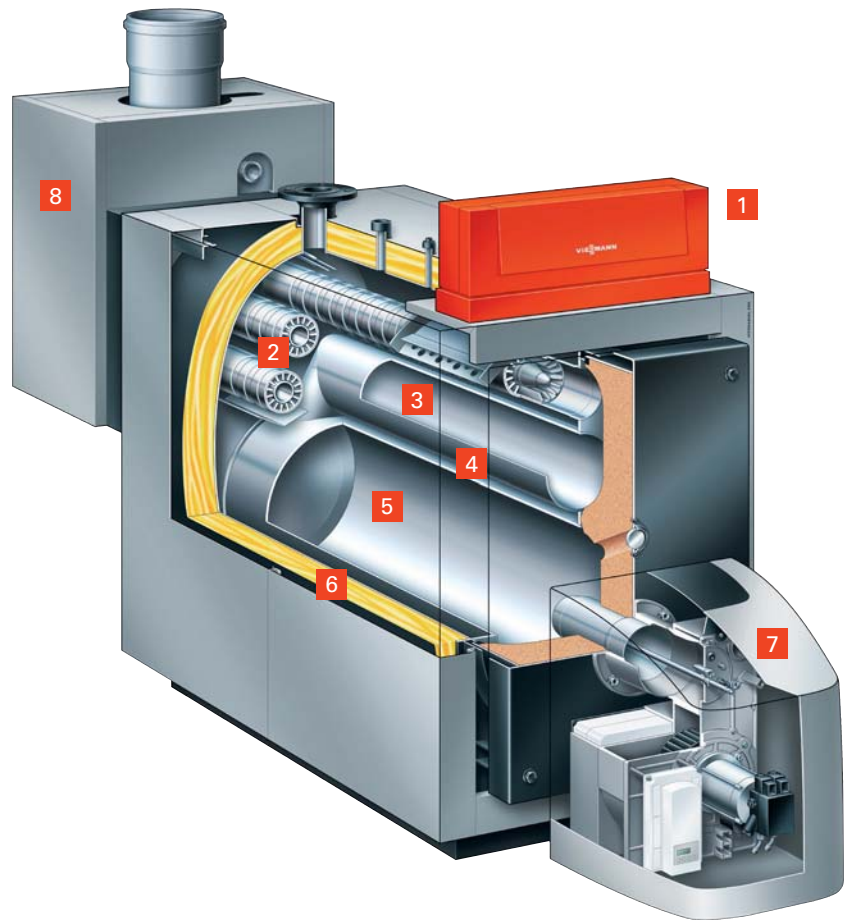
Vitoradial 300-T, 101 to 335 kW



Vitoradial 300-T, 425 to 545 kW

VITORADIAL 300-T

- 1 Vitotronic control unit with colour touchscreen
- 2 Hot gas flue (third pass; multi layered convection heating surface)
- 3 Hot gas flue (second pass)
- 4 Wide water galleries
- 5 Combustion chamber (first pass)
- 6 Highly effective thermal insulation
- 7 Vitoflame 100, unit pressure-jet oil burner
- 8 Inox-Radial heat exchanger



Condensing technology with the Inox-Radial heat exchanger

The downstream Inox-Radial heat exchanger delivers highly efficient condensing technology. It raises the efficiency level by eight percent to 97 percent (H_g) [gross cv].

This principle ensures that combustion and condensation occur in physically separate locations and the combustion gases condense without leaving any residues behind. In practice, this means standard service intervals for cleaning the combustion chamber and low maintenance costs.

The Vitoradial 300-T is available for an output range of up to 545 kW. The Inox-Radial heat exchanger is highly efficient and made from stainless steel – this eliminates the risk of corrosion caused by acidic condensate.

Convenient and highly capable Vitotronic control unit

The integral Vitotronic control unit, with its large colour touchscreen, is simple and intuitive to use. An assistant function helps with commissioning.

The boiler can be connected directly to Vitodata via a Vitocom interface. This option provides heating contractors with additional digital services to ensure fault-free system operation.

The Vitosoft 300 service tool communicates directly via WiFi. Energy consumption can be clearly visualised on the control unit's energy cockpit.



VITOPLEX 300/200
VITOROND 200

Proven Viessmann
quality up to 2000 kW
for oil and gas with
high standard seasonal
efficiency [to DIN]

Innovative heating technology – the right solution for every need

The comprehensive range from Viessmann covers every demand for innovative heating technology. Every user can find the right solution here: with regard to building services, convenience and budgetary constraints.

In terms of technology and price, the Vitoplex range is divided into the 300 and 200 categories. One thing that all products have in common is the top quality for which Viessmann is renowned.

The Vitorond 200 comes into its own where the boiler needs to be installed under demanding spatial conditions.



VITOPLEX 300

Low temperature oil/gas boiler, three-pass design, 405 to 2000 kW

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VITOPLEX 200

Low temperature oil/gas boiler, three-pass design, 440 to 1950 kW

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VITOROND 200

Low temperature oil/gas boiler, three-pass design, 440 to 1080 kW

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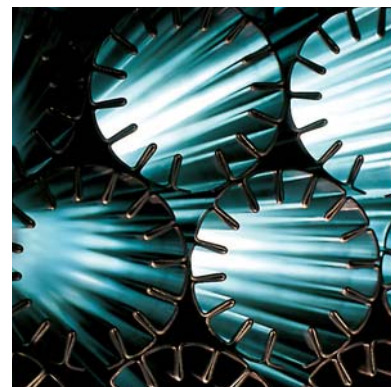


The Vitoplex 300 three-pass boiler, with its proven multi layered convection heating surfaces, offers particularly economical, clean and reliable operation.

Multi layered convection heating surfaces

The multi layered convection heating surfaces of the Vitoplex 300 comprise telescopic steel pipes pressed together for heat transfer. The inner pipe, with its folded linear fins, creates a heating surface 2.5 times greater than that of smooth pipes.

Heat is transferred through the different gaps between the press points in such a way that the back area of the triplex pipes transfers less heat to the boiler water, as the combustion gases circulating here are no longer quite as hot. This keeps the surface temperature above the dew point, counteracting the formation of condensate and preventing corrosion damage.



Triplex pipes have a heating surface that is 2.5 times larger than conventional pipes.

VITOPLEX 300

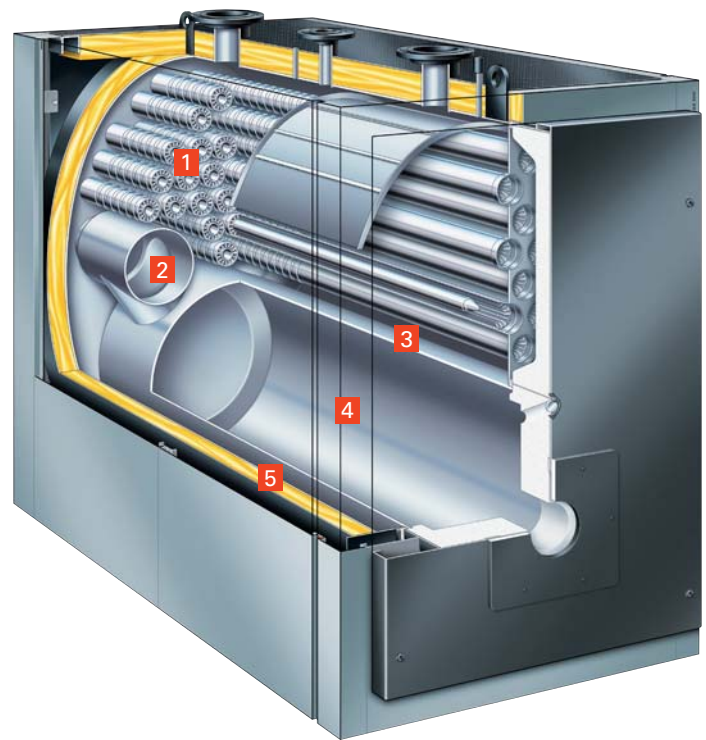
405 to 2000 kW

Convenient and highly capable Vitotronic control unit

The integral Vitotronic control unit, with its large colour touchscreen, is simple and intuitive to use. An assistant function helps with commissioning.

The boiler can be connected directly to Vitodata via a Vitocom interface. This option provides heating contractors with additional digital services to ensure fault-free system operation.

The Vitosoft 300 service tool communicates directly via WiFi. Energy consumption can be clearly visualised on the control unit's energy cockpit.



VITORADIAL 300-T

- 1 Hot gas flue (third pass; multi layered convection heating surface)
- 2 Hot gas flue (second pass)
- 3 Wide water galleries
- 4 Combustion chamber (first pass)
- 5 Highly effective thermal insulation



Vitotronic 200 (type CO1E) with colour touchscreen for weather-compensated mode

TAKE ADVANTAGE OF THESE BENEFITS

- + Oil/gas condensing boilers: 405 to 2000 kW
- + Standard seasonal efficiency [to DIN] (using fuel oil): 90 % (H_g) [gross cv]
- + Three-pass boiler with low combustion chamber loading, resulting in clean combustion with low emissions
- + Multi layered convection heating surfaces for high operational reliability and a long service life
- + Stainless steel flue gas/water heat exchanger for the utilisation of condensing technology (accessories)
- + Integrated Therm-Control start-up system replaces a shunt pump or constant return temperature raising facility saving installation time and costs
- + From 620 kW with a walk-on boiler cover for easier installation and maintenance
- + Easy to operate Vitotronic control unit with colour touchscreen
- + Integral WiFi for service interface
- + Economical and safe operation of the heating system using the Vitotronic control system with communication capability which, in conjunction with the Vitogate 300 (accessories), enables integration into a building management system
- + Vitocontrol control panel available on request

For specification, see page 18

The compact Vitoplex 200 steel boiler is available from 440 to 1950 kW. Over its entire output range, this three-pass boiler offers the right conditions for environmentally responsible and clean combustion. A wide range of burners can be adapted for use with this boiler. The low combustion chamber loading produces especially low nitrogen oxide emissions.

A neat fit even when space is tight

The Vitoplex 200 is easy to manoeuvre. It saves space and the walk-on boiler cover (from 700 kW) facilitates installation and maintenance.

Finely adjusted pressure-jet oil/gas burners

Pressure-jet oil/gas burners from ELCO and Weishaupt are already fully adjusted and wired for the full output range.

Therm-Control saves installation time and costs

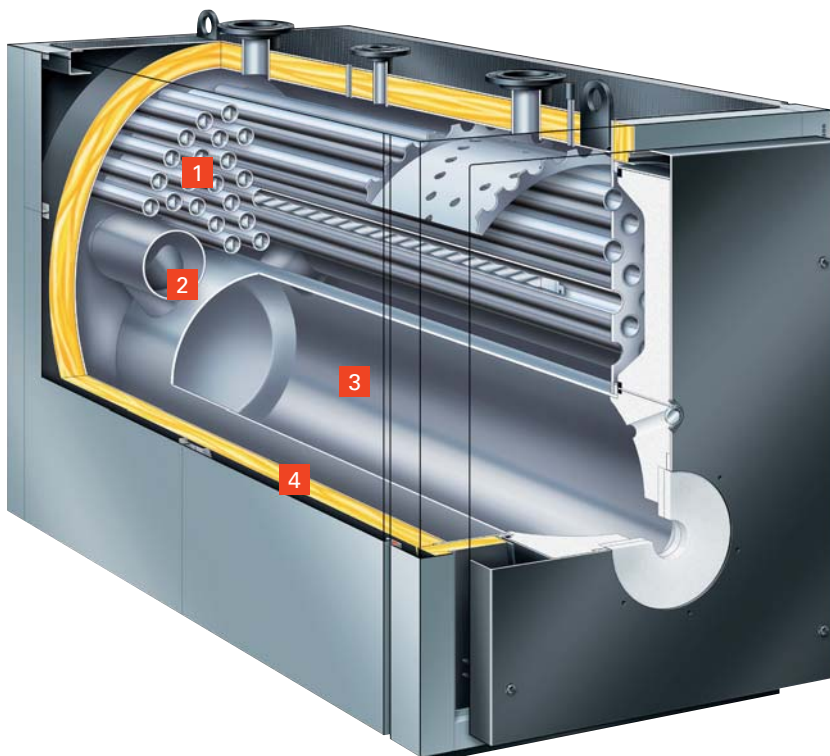
No minimum heating water flow rate is required because of the wide water galleries. This simplifies the hydraulic connection. Therm-Control in the output range from 440 to 560 kW also makes return temperature raising facilities superfluous. This saves installation time and additional outlay.

Convenient and highly capable Vitotronic control unit

The integral Vitotronic control unit, with its large colour touchscreen, is simple and intuitive to use. An assistant function helps with commissioning.

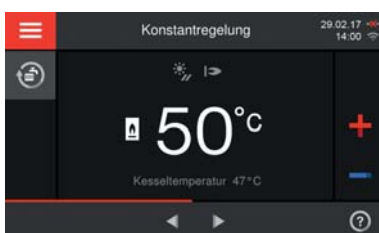
The boiler can be connected directly to Vitodata via a Vitocom interface. This option provides heating contractors with additional digital services to ensure fault-free system operation.

The Vitosoft 300 service tool communicates directly via WiFi. Energy consumption can be clearly visualised on the control unit's energy cockpit.



VITOPLEX 200

- 1** Hot gas flue (third pass)
- 2** Hot gas flue (second pass; both sides)
- 3** Combustion chamber (first pass)
- 4** Highly effective thermal insulation



Display screen of the Vitotronic 100 boiler control unit (type CC1E) with colour touchscreen for constant temperature mode

TAKE ADVANTAGE OF THESE BENEFITS

- + Low temperature oil/gas boilers: 440 to 1950 kW
- + Standard seasonal efficiency [to DIN] (using fuel oil): 89 % (H_g) [gross cv]
- + Economical and environmentally responsible through modulating boiler water temperature
- + Stainless steel flue gas/water heat exchanger for the utilisation of condensing technology (accessories)
- + Three-pass boiler with low combustion chamber loading, resulting in clean combustion with low emissions
- + Wide water galleries and large water content provide good natural circulation and reliable heat transfer
- + Long burner runtimes and fewer switching intervals due to large water content protect the environment
- + Compact design for easy transportation to the boiler room – ideal for modernisation projects
- + Easy to operate Vitotronic control unit with colour touchscreen
- + Integral WiFi for service interface
- + Economical and safe operation of the heating system using the Vitotronic control system with communication capability which, in conjunction with the Vitogate 300 (accessories), enables integration into a building management system
- + Vitocontrol control panel available on request

For specification, see page 19



Cast section of the Vitorond 200, 440 to 1080 kW



Individual sections make handling easier

Older buildings in particular often have narrow entrances which can make it difficult to transport a new boiler. With the Vitorond 200 sectional cast iron boiler, sections can be brought to the installation location individually and assembled there with a compression tool.

Eutectoplex heating surface for high operational reliability

The Vitorond 200 sections are made from special eutectic cast iron with a homogeneous structure. The fine design of the graphite fins and the high level of material purity of the low phosphorous cast iron increase its elasticity.

The material, shape and geometry of the cast sections provide even cooling inside the mould during manufacture. This prevents structural stresses right from the start, resulting in high operational reliability and a long service life.

Three-pass boiler with low emissions

At the end of the combustion chamber, the hot gases flow onwards through four hot gas flues arranged symmetrically around the combustion chamber. They then enter the four collectors of the third hot gas pass via the front section.

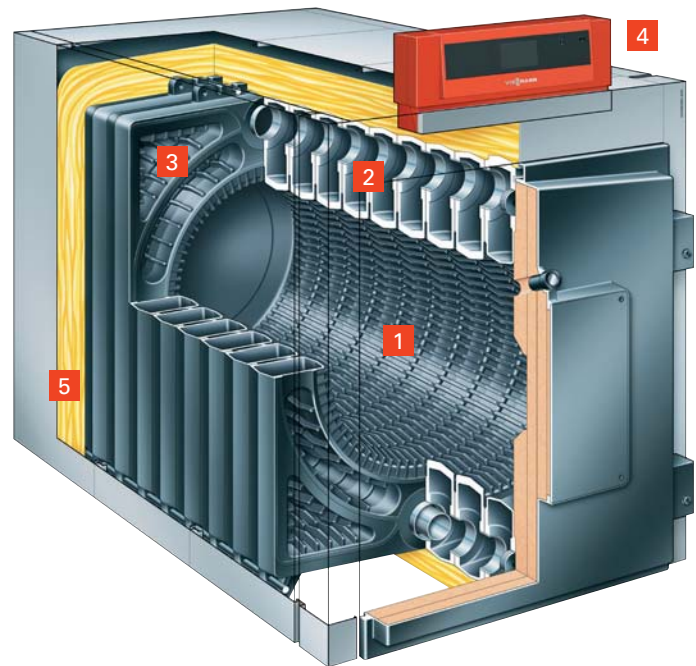
At the back of the boiler, the four cooled hot gas streams are channelled to the chimney via the flue gas connection. The three-pass design reduces the dwell time of the hot gases in the high reaction temperature zone. This results in reduced nitrogen oxide emissions.

Convenient and highly capable Vitotronic control unit

The integral Vitotronic control unit, with its large colour touchscreen, is simple and intuitive to use. An assistant function helps with commissioning.

The boiler can be connected directly to Vitodata via a Vitocom interface. This option provides heating contractors with additional digital services to ensure fault-free system operation.

The Vitosoft 300 service tool communicates directly via WiFi. Energy consumption can be clearly visualised on the control unit's energy cockpit.



VITOROND 200

- 1 Combustion chamber (first pass)
- 2 Hot gas flue (second pass)
- 3 Hot gas flue (third pass)
- 4 Vitotronic 200 boiler and heating circuit control unit with colour touchscreen
- 5 Highly effective thermal insulation

TAKE ADVANTAGE OF THESE BENEFITS

- + Low temperature oil/gas boilers: 440 to 1080 kW
- + Standard seasonal efficiency [to DIN] (using fuel oil): 88 % (H_g) [gross cv]
- + Standard seasonal efficiency [to DIN] improved by up to 12 % due to condensing technology with Vitotrans 300 stainless steel flue gas/water heat exchanger (accessories)
- + Economical and environmentally responsible through modulating boiler water temperature
- + Three-pass boiler – for clean combustion with low emissions
- + Eutectoplex heating surface for high operational reliability and a long service life
- + Special homogeneous cast iron ensures an even heat flux and prevents stress fractures
- + Fast and straightforward assembly of individual cast sections due to a double groove system with flexible packing cord for a permanent seal on the hot gas side
- + Sectional design and low transport weight of the individual sections make the boiler easy to transport to its destination
- + Easy to operate Vitotronic control unit with colour touchscreen
- + Integral WiFi for service interface
- + Economical and safe operation of the heating system using the Vitotronic control system with communication capability which, in conjunction with the Vitogate 300 (accessories), enables integration into a building management system
- + Vitocontrol control panel available on request



VITORADIAL 300-T (type VR3) OIL CONDENSING BOILER

Rated heating output 50/30 °C	kW	101	129	157	201	263	335
Rated heating output 80/60 °C	kW	94	120	146	188	245	313
Dimensions (overall)							
Length	mm	2145	2345	2335	2680	2900	2900
Width	mm	755	755	825	825	905	905
Height	mm	1315	1315	1350	1350	1460	1460
Weight	kg	510	545	610	680	870	970
Boiler water capacity	litres	185	225	265	310	490	450



Rated heating output 50/30 °C	kW	425	545
Rated heating output 80/60 °C	kW	407	522
Dimensions (overall)*			
Length	mm	2509	2654
Width	mm	1040	1040
Height	mm	1689	1689
Weight	kg	1190	1305
Boiler water capacity	litres	600	650

* Details excluding burner and hood



VITOPLEX 300 (type TX3A) LOW TEMPERATURE OIL/GAS BOILER

Rated heating output	kW	405	500	620	780
Dimensions (overall)*					
Length	mm	1935	2080	2350	2350
Width (incl. control unit)	mm	1040	1040	1460	1460
Height	mm	1625	1625	1690	1690
Weight					
(boiler incl. thermal insulation and boiler control unit)	kg	1075	1295	1750	1990
Boiler water capacity	litres	600	630	965	900

Rated heating output	kW	1000	1250	1600	2000
Dimensions (overall)*					
Length	mm	2600	2600	3245	3245
Width (incl. control unit)	mm	1555	1555	1660	1660
Height	mm	1920	1920	2140	2140
Weight					
(boiler incl. thermal insulation and boiler control unit)	kg	2705	2860	3725	4205
Boiler water capacity	litres	1510	1440	2475	2315

* Details excluding burner and hood



VITOPLEX 200 (type SX2A)
LOW TEMPERATURE OIL/GAS BOILER

Rated heating output	kW	440	560	700	900
Dimensions (overall)*					
Length	mm	1885	2030	2280	2580
Width (incl. control unit)	mm	1040	1040	1460	1460
Height	mm	1625	1625	1690	1690

Weight					
(boiler incl. thermal insulation and boiler control unit)					
	kg	960	1170	1725	1985
Boiler water capacity	litres	600	635	935	1325

Rated heating output	kW	1100	1300	1600	1950
Dimensions (overall)*					
Length	mm	2530	2750	3175	3175
Width (incl. control unit)	mm	1555	1555	1660	1660
Height	mm	1920	1920	2140	2140

Weight					
(boiler incl. thermal insulation and boiler control unit)					
	kg	2255	2485	3180	3760
Boiler water capacity	litres	1525	1690	2510	2420

* Details excluding burner and hood



VITOROND 200 (type VD2A)
LOW TEMPERATURE OIL/GAS BOILER

Rated heating output	kW	440	500	560	630
Dimensions (overall)*					
Length	mm	1750	1880	2010	2140
Width (incl. control unit)	mm	1090	1090	1090	1090
Height	mm	1480	1480	1480	1480

Weight					
(boiler incl. thermal insulation and boiler control unit)					
	kg	2110	2260	2430	2580
Boiler water capacity	litres	303	331	359	387

Rated heating output	kW	700	780	860	950	1080
Dimensions (overall)*						
Length	mm	2270	2400	2530	2660	2790
Width (incl. control unit)	mm	1090	1090	1090	1090	1090
Height	mm	1480	1480	1480	1480	1480

Weight						
(boiler incl. thermal insulation and boiler control unit)						
	kg	2740	2910	3070	3220	3380
Boiler water capacity	litres	415	443	471	499	527

* Details excluding burner and hood



VITOCROSSAL 300
VITOCROSSAL 200

With outputs up to 1400 kW, these gas condensing boilers are equally suitable for apartment buildings and local heating networks.

Advanced condensing technology makes the Vitocrossal a frugal condensing boiler that is suitable for many different applications

The Vitocrossal range, from 80 to 1400 kW, offers a perfect solution for every application – from heating apartment buildings and public or commercial premises, through to generating heat in local heating networks.

Stainless steel heat exchanger surface

The stainless steel Inox-Crossal heat exchanger provides ideal conditions for utilising condensing technology. Its smooth surfaces allow the condensate that arises during the condensing process to simply run off. This permanent self-cleaning effect ensures that the condensing technology is utilised at a consistently high level and reduces maintenance requirements.

Vitocrossal gas condensing boilers (excluding types CT3B and CR3B) can be equipped at the factory with a MatriX radiant burner or MatriX cylinder burner, and the Vitocrossal 300 (type CRU) with a MatriX-Disk burner.

The highly effective heat transfer and high condensation rate enable standard seasonal efficiency [to DIN] up to 98 percent (H_g) [gross cv] to be achieved. These values are the result of the countercurrent principle related to hot gas and boiler water, along with intensive turbulence of the hot gases as they pass through the heat exchanger.



VITOCROSSAL 300

Type CM3C
Gas condensing boiler with MatriX radiant burner (up to 142 kW) and MatriX cylinder burner (from 186 kW) 87 to 311 kW



VITOCROSSAL 300

Type CT3U
Gas condensing boiler with MatriX cylinder burner 400 to 630 kW



VITOCROSSAL 300

Type CT3B
Gas condensing boiler, alternatively with ELCO or Weishaupt pressure-jet gas burner 187 to 635 kW



VITOCROSSAL 300

Type CRU
Gas condensing unit with MatriX-Disk burner 800 and 1000 kW



VITOCROSSAL 300

Type CR3B
Gas condensing boiler, alternatively with ELCO or Weishaupt pressure-jet gas burner 787 to 1400 kW



VITOCROSSAL 200

Type CIB
Gas condensing boiler with MatriX cylinder burner 80 to 318 kW, as a twin boiler up to 636 kW



VITOCROSSAL 200

Type CM2
Gas condensing boiler with MatriX cylinder burner 400 to 620 kW

The Vitocrossal 300 (type CM3C) gas condensing boiler, with an output of 87 to 311 kW, sets benchmarks in maintenance and service. The proven MatriX radiant burners (up to 142 kW) and MatriX cylinder burners (from 186 kW) enable operation with gas types E, L, LL, and from 186 kW with LPG, as well as modulation down to 20 percent.

Extremely convenient to service

The Vitocrossal 300 also impresses with its extremely convenient servicing: the front boiler cover can be raised easily with the help of a gas spring. The side panels can be pushed back, allowing unobstructed access to the MatriX burner.

Integral cascade function for up to eight units

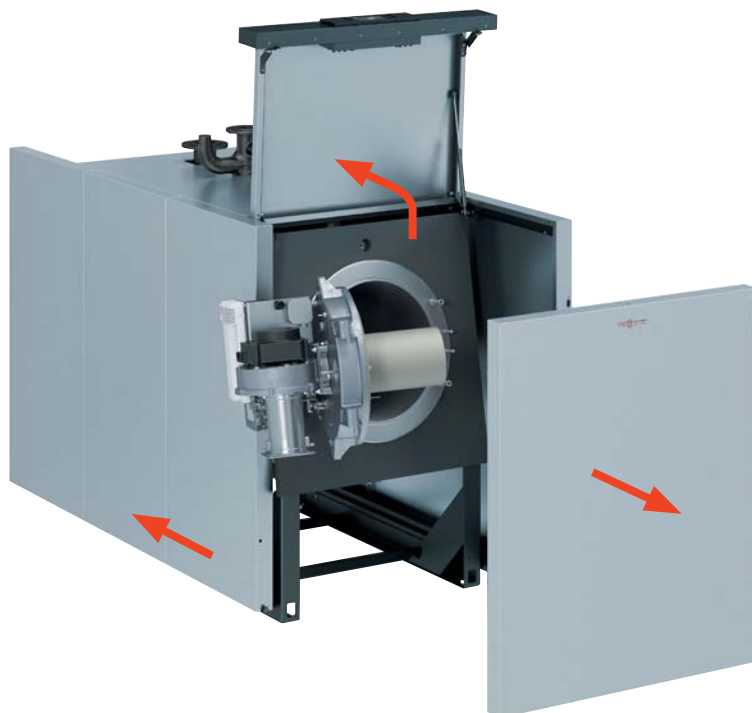
The Vitocrossal 300 is ideal for apartment buildings and commercial enterprises. The integral cascade function enables multi boiler systems with up to eight boilers.

For systems with two units, Viessmann supplies prefabricated system pipework and flue gas headers made from stainless steel. The heating centre uses tried and tested condensing technology components from Viessmann, such as the Inox-Crossal heat exchanger and the MatriX radiant or MatriX cylinder burner. The boiler can be operated in either open flue or room sealed mode.

Convenient and highly capable Vitotronic control unit

The Vitotronic control unit with colour touchscreen enables quick commissioning using the assistant function; operation is straightforward as well. The functions available include:

- Service interface (WiFi) for Vitosoft 300 for commissioning and service
- Assistant function to aid commissioning
- Remote reset of boiler control unit using programming unit
- Energy cockpit shows energy consumption rates and histograms
- Two return connectors for hydraulic connection optimised for condensing technology
- New design concept for ease of maintenance and service
- Vitogate 300 as an interface for integration into building management systems (optional)



Extremely easy to service and maintain thanks to sliding side panels and hinged boiler cover

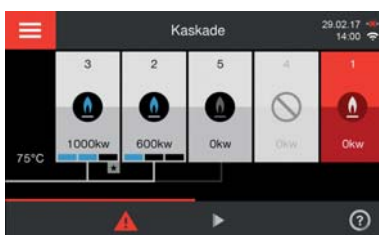
VITOCROSSAL 300

Type CM3C

- 1** Vitotronic control unit with colour touchscreen and commissioning assistant
- 2** MatriX cylinder burner
- 3** Inox-Crossal heat exchanger
- 4** Highly effective thermal insulation
- 5** Two return connectors



Vitotronic 200 –
integral control unit for boiler units



Vitotronic 300 –
integral cascade control

TAKE ADVANTAGE OF THESE BENEFITS

- + Gas condensing boilers: 87 to 311 kW
- + Standard seasonal efficiency [to DIN]: up to 98 % (H₂) [gross cv]
- + MatriX cylinder burner for particularly quiet and environmentally responsible operation with a modulation range down to 1:5
- + Stainless steel, corrosion-resistant Inox-Crossal heat exchanger ensures high operational reliability and a long service life – for highly effective heat transfer and a high condensation rate
- + Self-cleaning effect due to smooth stainless steel surface
- + Low combustion chamber loading and straight-through design for clean combustion
- + Either open flue or room sealed operation
- + All hydraulic connections can be made from above
- + Two return connectors for hydraulic connection optimised for condensing technology
- + Easy to operate Vitotronic control unit with colour touchscreen
- + Integral WiFi for service interface
- + Economical and safe operation of the heating system using the Vitotronic control system with communication capability which, in conjunction with the Vitogate 300 (accessories), enables integration into building management systems
- + Vitocontrol control panel available on request

The Vitocrossal 300 (type CT3U) is a high grade condensing boiler with 400 to 630 kW and an outstanding price/performance ratio.

It is built from proven components, such as the Inox-Crossal heat exchanger surface and the MatriX cylinder burner.

Room sealed for flexible installation

Across its entire output range, the Vitocrossal 300 can be operated in open flue or room sealed mode, enabling a wide variety of installation options.

Robust burner with a long service life

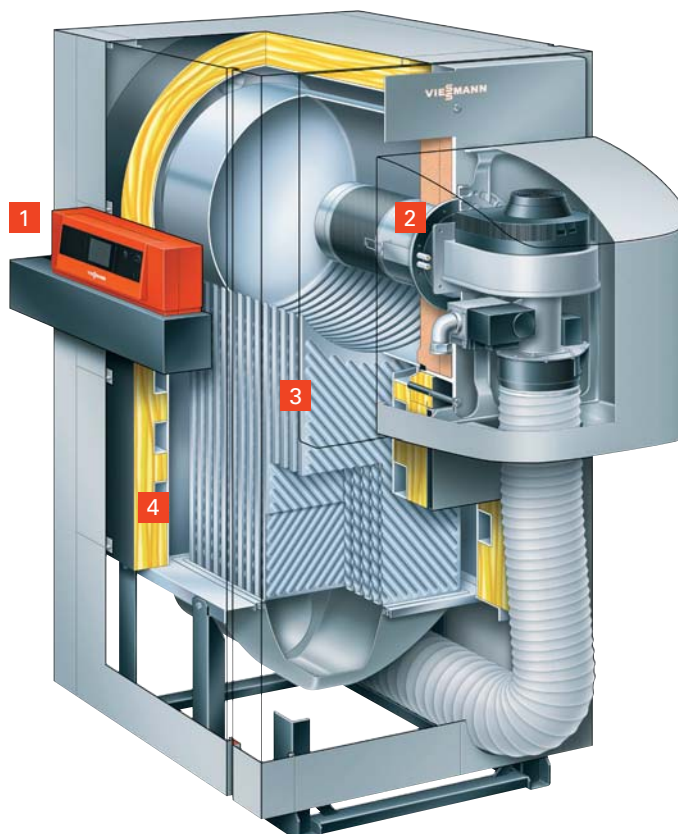
The MatriX cylinder burner, developed and manufactured by Viessmann, is characterised by a long service life thanks to its stainless steel MatriX gauze.

Convenient and highly capable Vitotronic control unit

The integral Vitotronic control unit, with its large colour touchscreen, is simple and intuitive to use. An assistant function helps with commissioning.

The boiler can be connected directly to Vitodata via a Vitocom interface. This option provides heating contractors with additional digital services to ensure fault-free system operation.

The Vitosoft 300 service tool communicates directly via WiFi. Energy consumption can be clearly visualised on the control unit's energy cockpit.



VITOCROSSAL 300

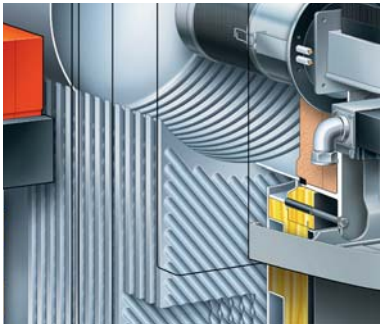
Type CT3U

- 1** Vitotronic control unit with colour touchscreen and commissioning assistant
- 2** MatriX cylinder burner
- 3** Inox-Crossal heat exchanger
- 4** Highly effective thermal insulation

VITOCROSSAL 300

400 to 630 kW

Two-boiler system up to 1260 kW



Inox-Crossal heat exchanger for highly effective heat transfer and condensation rate



Vitocrossal 300 with a rated heating output from 400 to 630 kW

TAKE ADVANTAGE OF THESE BENEFITS

- + Gas condensing boilers: 400 to 630 kW (as a two-boiler system up to 1260 kW)
- + Standard seasonal efficiency [to DIN]: up to 98 % (H_g) [gross cv]
- + MatriX cylinder burner for particularly quiet, economical and environmentally responsible operation, with a modulation range of 33 to 100 %
- + Stainless steel, corrosion-resistant Inox-Crossal heat exchanger ensures high operational reliability and a long service life
- + Highly effective heat transfer and high condensation rate
- + Self-cleaning effect due to smooth stainless steel surface
- + Either open flue or room sealed operation (accessories)
- + Condensing unit with MatriX cylinder burner as a two-boiler system up to 1260 kW with pre-assembled hydraulic and flue system accessories
- + Easy to operate Vitotronic control unit with colour touchscreen
- + Integral WiFi for service interface
- + Economical and safe operation of the heating system using the Vitotronic control system with communication capability which, in conjunction with the Vitogate 300 (accessories), enables integration into building management systems
- + Vitocontrol control panel available on request

For specification, see page 36



Vitocrossal 300, 187 to 635 kW including boiler door



Vitotronic control unit

The Vitocrossal 300 (type CT3B) is a floorstanding gas condensing boiler with Inox-Crossal heat exchanger. It is available factory-fitted with a Weishaupt or ELCO pressure-jet gas burner.

Sectional components for easy handling

The design of the Inox-Crossal heat exchanger enables high output levels, despite its modest dimensions and low weight. In addition, the Vitocrossal 300 can be disassembled to make handling easier.

The highly effective heat transfer and the high condensation rate enable standard seasonal efficiency [to DIN] of up to 98 % (H_g) [gross cv] to be achieved. These values are the result of the countercurrent principle related to hot gas and boiler water, along with intensive turbulence of the hot gases as they pass through the heat exchanger.

The second return connector of the Vitocrossal 300 enables a hydraulic connection particularly suited to the utilisation of condensing technology.

Convenient and highly capable Vitotronic control unit

The integral Vitotronic control unit, with its large colour touchscreen, is simple and intuitive to use. An assistant function helps with commissioning.

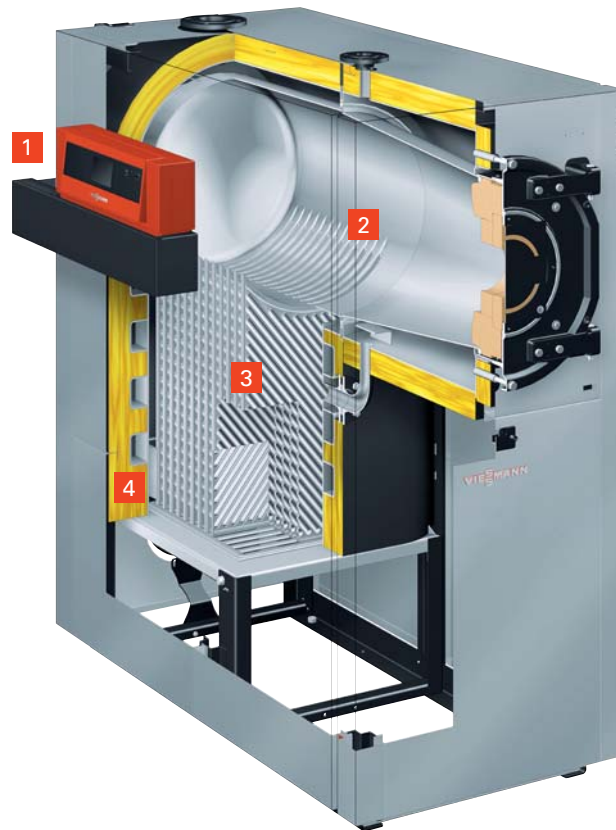
The boiler can be connected directly to Vitodata via a Vitocom interface. This option provides heating contractors with additional digital services to ensure fault-free system operation.

The Vitosoft 300 service tool communicates directly via WiFi. Energy consumption can be clearly visualised on the control unit's energy cockpit.

VITOCROSSAL 300

Type CT3B

- 1 Vitotronic control unit with colour touchscreen and commissioning assistant
- 2 Stainless steel combustion chamber
- 3 Inox-Crossal heat exchanger
- 4 Highly effective thermal insulation



TAKE ADVANTAGE OF THESE BENEFITS

- + Gas condensing boilers: 187 to 635 kW
- + Standard seasonal efficiency [to DIN]: up to 98 % (H₂) [gross cv]
- + Available with ELCO or Weishaupt pressure-jet gas burner
- + Stainless steel, corrosion-resistant Inox-Crossal heat exchanger ensures high operational reliability and a long service life
- + Self-cleaning effect due to smooth stainless steel surface
- + Clean combustion through low combustion chamber loading and straight-through design
- + Two return connectors for hydraulic connection optimised for condensing technology
- + Easy to operate Vitotronic control unit with colour touchscreen
- + Integral WiFi for service interface
- + Economical and safe operation of the heating system using the Vitotronic control system with communication capability which, in conjunction with the Vitogate 300 (accessories), enables integration into building management systems

For specification, see page 36



Vitotronic 200 – intuitive operation via large colour touchscreen

The Vitocrossal 300 gas condensing unit (type CRU) with outputs of 800 and 1000 kW has a modulation range of down to 1:6. Its small dimensions simplify handling – particularly in modernisation projects, where the replacement of heavy duty boilers is often hampered by a lack of space.

Compact dimensions thanks to MatriX-Disk burner

The MatriX-Disk burner helps keep the boiler dimensions to a minimum. It is designed to use gas type E or LPG, and can be operated in open flue or room sealed mode.

The proven Inox-Crossal heat exchanger is used in the Vitocrossal 300 (type CRU). Despite its compact dimensions, the gas condensing boiler can be delivered to the customer in sections to facilitate handling on site.

Convenient and highly capable Vitotronic control unit

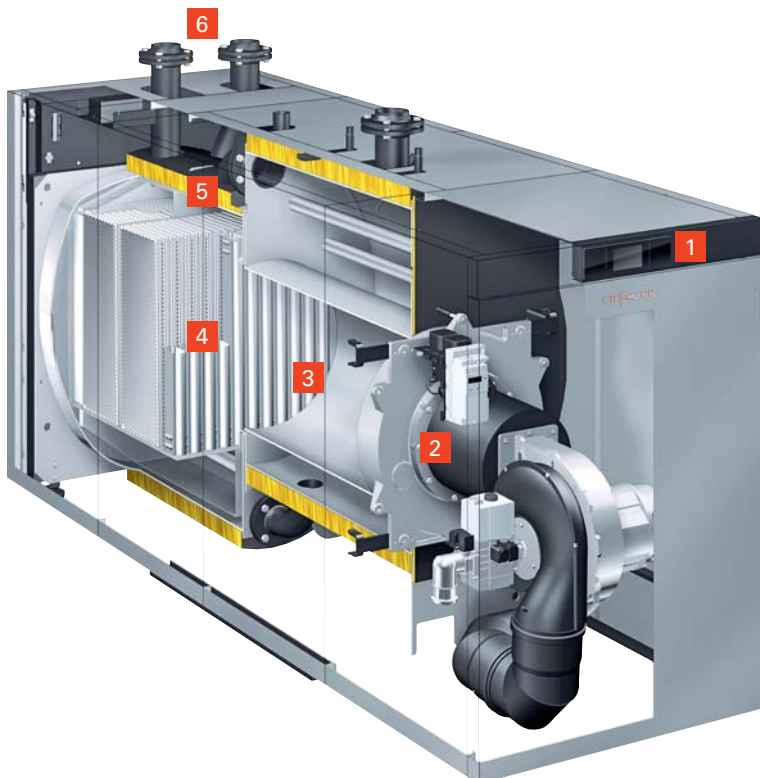
The integral Vitotronic control unit with its large colour touchscreen is easy and intuitive to use. An assistant function helps with commissioning. A cascade function for up to eight boilers with a total output of 8000 kW is already integrated into the control unit.

The boiler can be connected directly to Vitodata via a Vitocom interface. This option provides heating contractors with additional digital services to ensure fault-free system operation.

Energy consumption can be clearly visualised via Vitocom and the energy cockpit.

Hinged burner makes service simple

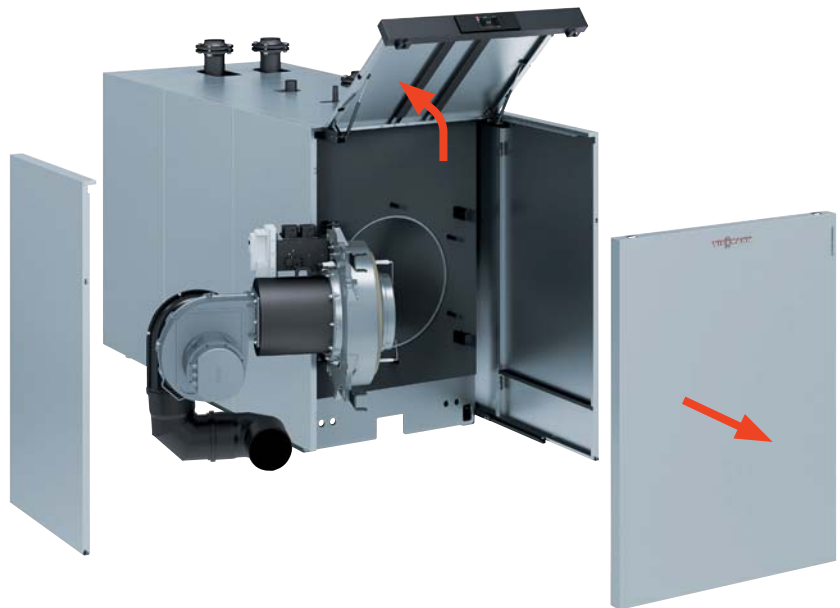
The Vitocrossal 300 also impresses with its extremely convenient servicing. The front part of the boiler cover can be slightly raised by means of a gas spring. The side panels can be removed, providing unhindered access to the MatriX-Disk burner, which can be simply pivoted out to the side. No additional tools are needed for service and maintenance.



VITOCROSSAL 300

Type CRU

- 1 Vitotronic control unit with colour touchscreen and commissioning assistant
- 2 MatriX-Disk burner
- 3 Stainless steel combustion chamber
- 4 Inox-Crossal heat exchanger
- 5 Highly effective thermal insulation
- 6 Two return connectors



Extremely easy to service and maintain thanks to removable side panels and hinged boiler cover.



Compact MatriX-Disk burner



MatriX-Disk burner

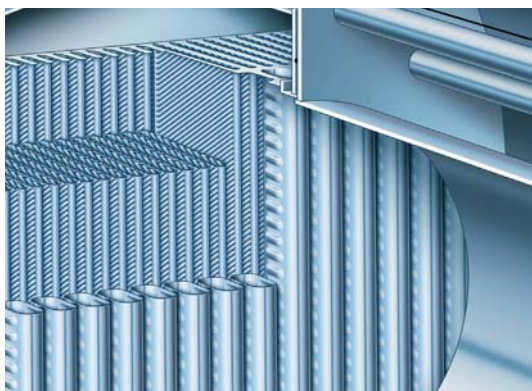
TAKE ADVANTAGE OF THESE BENEFITS

- + Gas condensing unit: 800 and 1000 kW
- + Standard seasonal efficiency [to DIN]: up to 98 % (H_2) [gross cv]
- + MatriX-Disk burner for particularly quiet and environmentally responsible operation with a modulation range down to 1:6
- + Suitable for gas type E and LPG
- + Stainless steel, corrosion-resistant Inox-Crossal heat exchanger ensures high operational reliability and a long service life
- + Highly effective heat transfer and high condensation rate
- + Self-cleaning effect due to smooth stainless steel surface
- + Long burner runtimes due to wide modulation range and large water content
- + Quiet open flue or room sealed operation
- + Low space requirement due to shortened combustion chamber and compact heat exchanger module
- + Straightforward maintenance and service thanks to hinged burner and burner door
- + Low power consumption (no minimum flow rate and no boiler circuit pump due to large water content)
- + Vitotronic control unit with colour touchscreen and energy cockpit as standard
- + Integral WiFi for service interface
- + Economical and safe operation of the heating system using the Vitotronic control system with communication capability which, in conjunction with the Vitogate 300 (accessories), enables integration into building management systems
- + Vitocontrol control panel available on request

For specification, see page 36



Vitocrossal 300, 787 to 1400 kW



Inox-Crossal heat exchanger for highly effective heat transfer and condensation rate

The Vitocrossal 300 (type CR3B) is a top of the range product amongst floorstanding gas condensing boilers. As a single boiler system with an output range from 787 to 1400 kW, it is the most powerful condensing boiler available. This makes it equally suitable for residential complexes, local heating networks, larger public and commercial buildings, and industrial plants.

Sectional design to facilitate handling

The design of the Inox-Crossal heat exchanger enables the Vitocrossal 300 to produce a higher output of up to 1400 kW, whilst retaining its modest dimensions and low weight. The sectional design of the heat exchanger module and combustion chamber module makes handling easier.

The highly effective heat transfer and the high condensation rate enable standard seasonal efficiency [to DIN] of up to 98 % (H_g) [gross cv] to be achieved. These values are the result of the countercurrent principle related to hot gas and boiler water, along with intensive turbulence of the hot gases as they pass through the heat exchanger.

The second return connector of the Vitocrossal 300 enables a hydraulic connection particularly suited to the utilisation of condensing technology. Vitocrossal 300 gas condensing boilers are available factory-fitted with Weishaupt or ELCO pressure-jet gas burners.

Convenient and highly capable Vitotronic control unit

The integral Vitotronic control unit, with its large colour touchscreen, is simple and intuitive to use. An assistant function helps with commissioning.

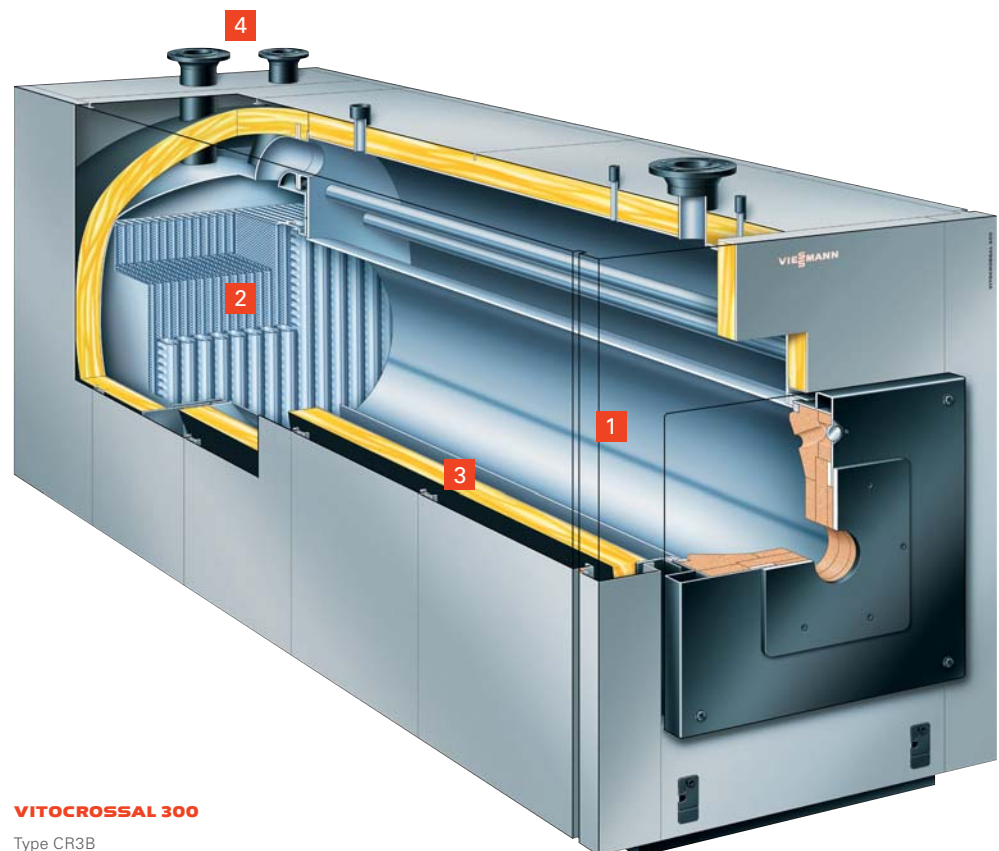
The boiler can be connected directly to Vitodata via a Vitocom interface. This option provides heating contractors with additional digital services to ensure fault-free system operation.

The Vitosoft 300 service tool communicates directly via WiFi. Energy consumption can be clearly visualised on the control unit's energy cockpit.

TAKE ADVANTAGE OF THESE BENEFITS

- + Gas condensing boilers: 787 to 1400 kW
- + Standard seasonal efficiency [to DIN]: up to 98 % (H_g) [gross cv]
- + Available with ELCO or Weishaupt pressure-jet gas burner
- + Stainless steel, corrosion-resistant Inox-Crossal heat exchanger ensures high operational reliability and a long service life
- + Self-cleaning effect due to smooth stainless steel surface
- + Clean combustion through low combustion chamber loading and straight-through design
- + Split design for easy handling
- + Two return connectors for hydraulic connection optimised for condensing technology
- + Easy to operate Vitotronic control unit with colour touchscreen
- + Integral WiFi for service interface
- + Economical and safe operation of the heating system using the Vitotronic control system with communication capability which, in conjunction with the Vitogate 300 (accessories), enables integration into building management systems
- + Vitocontrol control panel available on request

For specification, see page 37



VITOCROSSAL 300

Type CR3B

- 1 Stainless steel combustion chamber
- 2 Inox-Crossal heat exchanger
- 3 Highly effective thermal insulation
- 4 Two return connectors

The Vitocrossal 200 (type CIB) is a gas condensing unit for universal application with an output of 80 to 318 kW. Its very good price/performance ratio makes this heating centre a particularly economical solution for both residential buildings and commercial enterprises.

It features the Inox-Crossal heat exchanger with a robust Matrix cylinder burner. The large water content enables long burner runtimes and economical energy consumption. This in turn allows it to achieve a modulation range down to 1:5.

Complete and compact

The Vitocrossal 200, excluding casing, measures just 680 millimetres wide, making it ideal for modernisation projects. When replacing older systems in particular, the space available for manoeuvring is often restricted.

The heat generator can be ordered as a complete unit or with individual components delivered separately. As a complete unit, it is pre-wired and pre-installed at the factory. This significantly reduces installation time and effort at the installation location.

Lambda Pro Control combustion controller reduces costs

The integral Lambda Pro Control combustion controller automatically matches the burner to the natural gas type (E, LL) and ensures consistently high and efficient combustion quality with low emissions. The Vitocrossal 200 is suitable for open flue or room sealed operation.

Vitotronic control unit for app control

The integral Vitotronic control unit enables quick commissioning and straightforward operation. Using Vitocom, the boiler can be conveniently controlled via the internet with an app.

Self-cleaning effect ensures high efficiency

The heat exchangers have been designed to combine minimal dimensions with a low weight. The stainless steel heat exchanger provides ideal conditions for utilising condensing technology. The smooth surface allows any condensate that accumulates to simply run off, creating a permanent self-cleaning effect. This ensures consistently high efficiency and reduces the maintenance effort.



VITOCROSSAL 200

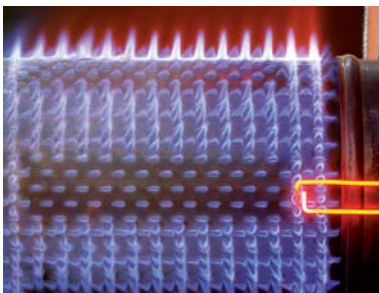
Type CIB

- 1 Vitotronic control unit
- 2 Matrix cylinder burner
- 3 Enhanced Inox-Crossal heat exchanger
- 4 Highly effective thermal insulation

VITOCROSSAL 200
80 to 318 kW,
as a twin boiler up to 636 kW



Straightforward cascade solution in a single casing from 400 to 636 kW



MatriX cylinder burner

TAKE ADVANTAGE OF THESE BENEFITS

- + Gas condensing unit: 80 to 318 kW
- + Straightforward twin boiler solution in a single casing, from 240 to 636 kW
- + Standard seasonal efficiency [to DIN]: up to 98 % (H₂) [gross cv]
- + Modulating MatriX cylinder burner (1:5) with a long service life thanks to stainless steel MatriX gauze – resistant to high temperature loads
- + For gas types: natural gas (E, LL)
- + Minimal dimensions for easy handling – only 680 mm wide
- + Quick and simple installation thanks to fully wired and pre-assembled components
- + Self-cleaning Inox-Crossal heat exchanger for constantly high efficiency
- + Consistently high efficiency even with fluctuating gas qualities thanks to Lambda Pro Control combustion controller
- + Good accessibility to all components for ease of service and maintenance
- + Quiet operation through integral MatriX cylinder burner
- + Proven Vitotronic control unit with user prompts and plain text display
- + Optional Vitocom interface for control via the internet
- + Space saving and compact; integral castors and well fitted packaging make it ideal where access to the boiler room is difficult
- + Vitocontrol control panel available on request

For specification, see page 37



Vitocrossal 200 (type CM2), 400 to 620 kW



MatriX cylinder burner

The Vitocrossal 200 (type CM2) is a floorstanding gas condensing boiler, available from 400 to 620 kW. As a single or multi boiler system, it is equally suitable for residential complexes, local heating networks, large public and commercial buildings, and industrial plants.

Advanced condensing technology

The stainless steel Inox-Crossal heat exchanger provides ideal conditions for utilising condensing technology. The smooth surface allows the condensate that accumulates in the condensing process to simply run off. This creates a permanent self-cleaning effect, ensuring that the condensing technology is utilised at a consistently high level, resulting in a longer service life and reducing maintenance requirements.

The highly effective heat transfer and high condensation rate enable standard seasonal efficiency [to DIN] up to 98 percent (H_s) [gross cv].

Vitocrossal 200 gas condensing boilers are available factory-fitted with a MatriX cylinder burner, with a modulation range from 20 to 100 percent.

Convenient and highly capable Vitotronic control unit

The integral Vitotronic control unit, with its large colour touchscreen, is simple and intuitive to use. An assistant function helps with commissioning.

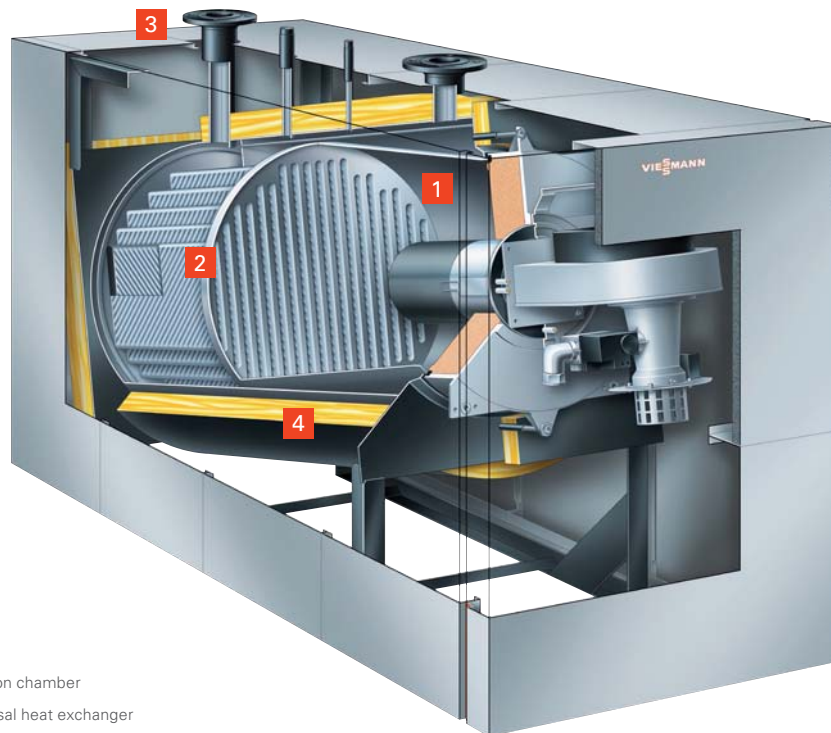
The boiler can be connected directly to Vitodata via a Vitocom interface. This option provides heating contractors with additional digital services to ensure fault-free system operation.

The Vitosoft 300 service tool communicates directly via WiFi. Energy consumption can be clearly visualised on the control unit's energy cockpit.

Room sealed operation

Room sealed operation is an option, and allows flexible installation of the condensing boiler inside the building.

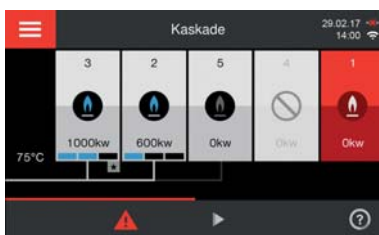
VITOCROSSAL 200
80 to 318 kW,
as a twin boiler up to 636 kW



VITOCROSSAL 200

Type CM2

- 1 Stainless steel combustion chamber
- 2 Stainless steel Inox-Crossal heat exchanger
- 3 Return connector
- 4 Highly effective thermal insulation



Display screen of the Vitotronic 300 (type CM1E) weather-compensated boiler and heating circuit control unit

TAKE ADVANTAGE OF THESE BENEFITS

- + Single boiler system utilising condensing technology: 400 to 620 kW
- + Standard seasonal efficiency [to DIN] up to 98 % (H_g) [gross cv]
- + Inox-Crossal heat exchanger for highly effective heat transfer and a high condensation rate
- + Smooth stainless steel surfaces create self-cleaning effect
- + Clean combustion through low combustion chamber loading and straight-through design
- + MatriX cylinder burner for particularly quiet and environmentally responsible operation with a modulation range of 20 to 100 %
- + Either open flue or room sealed operation
- + All hydraulic connections on the system side can be made from above
- + Easy to operate Vitotronic control unit with colour touchscreen
- + Integral WiFi for service interface
- + Economical and safe operation of the heating system using the Vitotronic control system with communication capability which, in conjunction with the Vitogate 300 (accessories), enables integration into building management systems

For specification, see page 37

**VITOCROSSAL 300 (type CM3C)**

Rated heating output 50/30 °C	kW	29 – 87	38 – 115	47 – 142	37 – 186	62 – 246	62 – 311
Rated heating output 80/60 °C	kW	26 – 80	35 – 105	43 – 130	34 – 170	56 – 225	57 – 285
Dimensions (overall)							
Length	mm	1774	1774	1774	1793	1793	1793
Width	mm	810	810	810	910	910	910
Height	mm	1178	1178	1178	1277	1277	1277
Weight	kg	381	387	389	433	448	461
Boiler water capacity	litres	225	225	221	306	292	279

**VITOCROSSAL 300 (type CT3U)**

Rated heating output 50/30 °C	kW	135 – 400	168 – 500	209 – 630
Rated heating output 80/60 °C	kW	123 – 370	153 – 460	192 – 575
Dimensions (overall)				
Length	mm	1725	1800	1960
Width	mm	1221	1221	1221
Height	mm	1987	1987	1987
Weight	kg	740	795	935
Boiler water capacity	litres	261	325	405

**VITOCROSSAL 300 (type CT3B)**

Rated heating output 50/30 °C	kW	187	248	314	408	508	635
Rated heating output 80/60 °C	kW	170	225	285	370	460	575
Dimensions (overall)							
Length	mm	1636	1714	1795	1871	1949	2105
Width	mm	988	988	988	1104	1104	1104
Height	mm	1959	2009	2032	2290	2290	2290
Weight	kg	608	660	683	937	982	1098
Boiler water capacity	litres	240	265	300	460	500	540

**VITOCROSSAL 300 (type CRU)**

Rated heating output 50/30 °C	kW	133 – 800	167 – 1000
Rated heating output 80/60 °C	kW	121 – 727	152 – 909
Dimensions (overall)			
Length	mm	3187	3389
Width	mm	1060	1060
Height	mm	1676	1676
Weight	kg	1435	1492
Boiler water capacity	litres	1150	1180



VITOCROSSAL 300 (type CR3B)

Rated heating output 50/30 °C	kW	787	978	1100	1400
Rated heating output 80/60 °C	kW	720	895	1006	1280
Dimensions					
Length	mm	3021	3221	3338	3688
Width incl. control unit	mm	1281	1281	1463	1463
Height	mm	1676	1676	1676	1676
Weight	kg	1553	1635	1980	2185
Boiler water capacity	litres	1407	1552	1558	1833



VITOCROSSAL 200 (type C1B)

Rated heating output 50/30 °C	kW	80	120	160	200	240	280	318
Rated heating output 80/60 °C	kW	74	110	146	184	220	258	291
Dimensions								
Length	mm	745	875	875	980	980	1090	1090
Width	mm	750	750	750	750	750	750	750
Height	mm	1500	1500	1500	1500	1500	1500	1500
Handling dimensions Ø	mm	660	680	680	680	680	680	680
Weight	kg	238	295	295	340	340	385	385
Flue gas connection Ø	mm	200	200	200	200	200	200	200



Rated heating output 50/30 °C	kW	240	320	400	480	560	636
Rated heating output 80/60 °C	kW	220	292	368	440	516	582
Dimensions							
Length	mm	875	875	980	980	1090	1090
Width	mm	1500	1500	1500	1500	1500	1500
Height	mm	1500	1500	1500	1500	1500	1500
Weight	kg	590	590	680	680	770	770
Flue gas connection Ø	mm	200	200	200	200	200	200



VITOCROSSAL 200 (type CM2)

Rated heating output 50/30 °C	kW	400	500	620
Rated heating output 80/60 °C	kW	370	460	575
Dimensions (overall)				
Length	mm	2230	2385	2525
Width	mm	1245	1245	1295
Height	mm	1480	1510	1580
Weight	kg	597	687	758
Boiler water capacity	litres	402	430	503

**VITOMAX LW**

Down to the last detail:
Viessmann hot water
boilers with outputs
up to 22 MW

System solutions for clean and economical hot water generation

The energy efficient and clean provision of hot water, as well as high operational reliability, are essential requirements for heating centres in large buildings and industrial plants. This requires competent consultation, a comprehensive range of services, and economical and futureproof heat generators.

Viessmann offers hot water boilers up to 22 MW

Vitomax industrial/commercial boilers up to 22 MW are best placed to meet individual customer requirements. The detailed design of Vitomax boilers and the company's vast experience in building industrial boilers ensure superior quality, high operational reliability and a long service life.

Viessmann industrial/commercial boiler technology means perfectly coordinated system design. This includes:

- Control and monitoring systems
- Instrumentation & control technology
- Pumps and valves
- Combustion systems with fuel supply
- Pressure maintaining systems
- Water treatment
- Pipework and flue systems



VITOMAX LW

Low pressure hot water boilers for oil and gas
 Output ranging from 0.65 to 22 MW
 Permissible flow temperatures up to 110 °C (120 °C subject to individual test certification)
 Permissible operating pressure: 6, 10, 16 bar
 Low NO_x version (gas < 70 mg/m³, oil < 150 mg/m³)



Vitomax LW hot water boiler (2300 kW)
and Vitoplex 200 low temperature boiler
(700 kW)

The Vitomax LW is a low pressure hot water boiler for flow temperatures of up to 120 °C, operating pressure of 6, 10 or 16 bar and a heating output ranging from 0.65 to 22 MW.

Hot water boilers also as low NO_x versions

The three-pass boiler features low combustion chamber loading with clean combustion and low nitrogen oxide emissions. In gas operation, the low NO_x series have NO_x emissions of less than 70 mg/Nm³; in oil operation they are less than 150 mg/Nm³.

Low stress, space saving design ensures good natural circulation and reliable heat transfer. No additional boiler pumps are required, making hydraulic connection significantly easier.

The pressure drop on the hot gas side is low, thanks to the optimum design of the heating surfaces and flue pipes.

All components matched to each other

Systems such as the Vitomax LW low pressure hot water boiler offer a high degree of engineering and calculation assurance for industrial/commercial boiler plants. This is particularly pertinent for industrial and commercial enterprises, where new heating centres often have to be operational as quickly as possible, so that heat for production can be supplied on time.

As well as guaranteeing the highest quality and flexibility, these systems also provide the assurance that all components are perfectly matched. For example, through pre-assembled safety equipment for maximum temperatures of 110 °C or 120 °C.

Available accessories include a flue gas/water heat exchanger that can raise the boiler efficiency to levels of up to 95 percent. Return

temperature raising facilities and flue gas components are further system options.

Easy to service with a high load bearing capacity

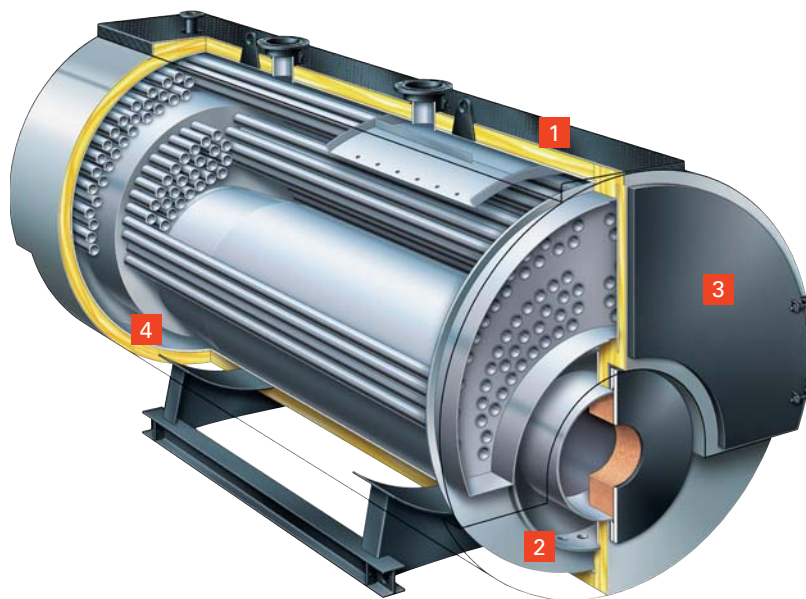
In continuous operation, Vitomax hot water boilers score highly because they are easy to service, thanks to their optional water-cooled burner entry point and rear reversing chamber without refractory linings. This dispenses with the need for a refractory lining drying process, significantly reducing commissioning and servicing times.

The load bearing boiler cover simplifies installation and maintenance, and protects the thermal insulation against damage.

VITOMAX LW

0.65 to 22 MW

- 1 Walk-on cover for secure positioning and good accessibility to inspection ports and fittings in conjunction with a boiler control platform
- 2 Water-cooled burner entry point for low nitrogen oxide emissions (optional)
- 3 Easy to open cleaning doors without the need to remove the burner and fuel supply
- 4 Low stress, space saving design for good natural circulation and reduced thermal loads



Vitomax LW hot water boiler (2300 kW) and
Vitoplex 200 low temperature boiler (700 kW)

TAKE ADVANTAGE OF THESE BENEFITS

- + Vitomax LW low pressure hot water boilers: 0.65 to 22 MW
- + Operating pressure: 6, 10, 16 bar
- + Low NO_x version for more stringent nitrogen oxide emission standards
- + Flexible deployment options for new build and modernisation on commercial, industrial and local authority sites
- + Certified under the Gas Appliances Directive for flow temperatures up to 110 °C and under the Pressure Equipment Directive for flow temperatures > 110 °C
- + Ability to use different fuels (gas, EL/S fuel oil) further increases flexibility
- + Excellent thermal insulation reduces radiation losses, increases the efficiency of the boiler and saves fuel
- + Condensing technology with a Vitotrans stainless steel flue gas/water heat exchanger
- + Optimum number of viewing and inspection ports for ease of servicing
- + Water-cooled burner entry point and walk-on boiler cover (accessories)
- + Vitocontrol for regulating all boiler-specific control equipment

**VITOPLEX LS**

The design of this low pressure steam boiler has proven itself thousands of times over.

Low pressure steam boiler for new build and modernisation in commercial premises and industrial facilities

The output range of Vitoplex LS low pressure steam boilers meets the requirements of commercial operations. Typical applications for this boiler are in laundries and bakeries, with their need for low steam pressures.

**Vitomax LS – recommended
in commercial and
trade settings**

The Vitoplex LS boiler is designed for a permissible operating pressure of 1 bar (high pressure), but this can be reduced to 0.5 bar (low pressure) subject to use.

The three-pass boiler stands out with its low combustion chamber loading and clean combustion.



VITOPLEX LS

Type SXD

Low pressure steam boiler
0.26 to 2.2 t/h
0.5 or 1 bar

The Vitoplex LS is a compact three-pass boiler for generating low pressure steam in the output range from 0.26 to 2.2 t/h. The design of this boiler has been tried and tested in thousands of applications.

This boiler is designed for a permissible operating pressure of 1 bar (high pressure). Subject to requirements, the operating pressure can be reduced to 0.5 bar (low pressure). The output range of the Vitoplex LS meets the requirements of businesses such as laundries or bakeries, where the need for low steam pressures prevails.

Good steam formation through large water content

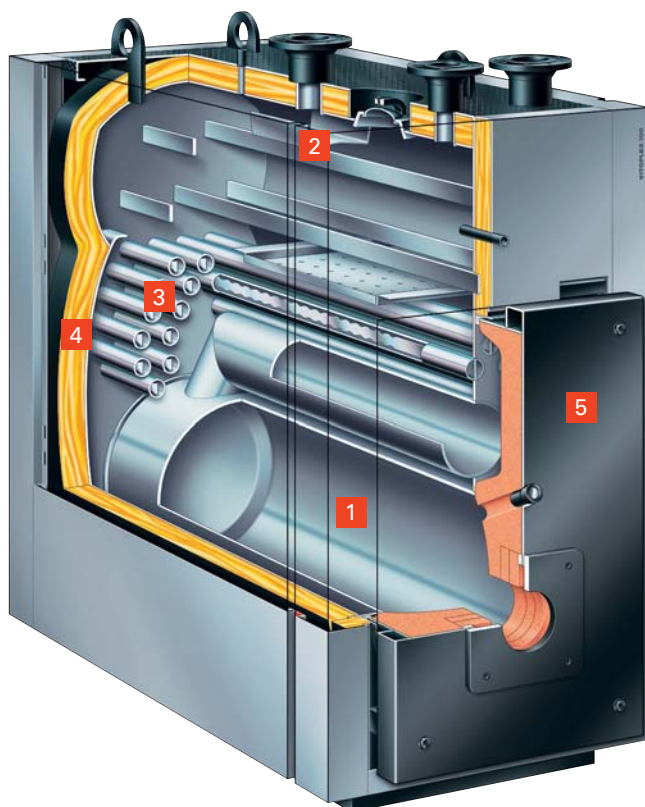
Good steam formation and draw-off are ensured by the large water content in conjunction with wide clearances between the individual flue pipes, as well as between inbuilt parts and the boiler jacket.

Low material loading through the completely water-cooled rear reversing chamber and the absence of refractory linings result in an extremely low stress boiler design.

Versatility and high steam quality

The versatility of the boiler in the event of load fluctuations is judged to be particularly positive and is due to the large water content. Thanks to the design, residual humidity in the steam is prevented, even in the event of sudden or high steam demand. High quality steam is made available continuously. The large steam chamber, with a correspondingly large evaporator and integral steam drier, supports this flexible functionality.

The very low combustion chamber volume loading in conjunction with the three-pass design enable this boiler to comply with even the strictest of emission limits.



VITOPLEX LS

Type SXD

- 1 Optimum flame tube for clean combustion
- 2 Integral steam drier for high steam quality
- 3 Optimum expansion clearances between the pipes themselves, and between the pipes and the boiler jacket, for a long service life and higher operational reliability
- 4 Highly effective thermal insulation to prevent radiation losses
- 5 Hinged boiler door facilitates boiler cleaning and maintenance



System with one Vitoplex LS low pressure steam boiler and two Vitoplex hot water boilers

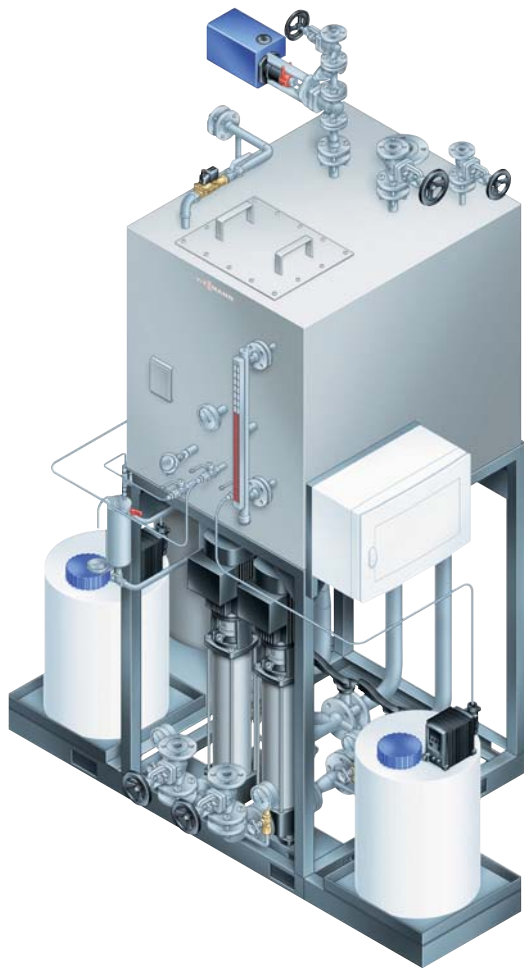


Safety equipment for the Vitoplex LS

TAKE ADVANTAGE OF THESE BENEFITS

- + Vitoplex LS low pressure steam boiler: 0.26 to 2.2 t/h
- + Boiler efficiency: 91%
- + Three-pass boiler with low combustion chamber loading, resulting in clean combustion with low emissions
- + High steam quality thanks to integral steam drier and large evaporator
- + Thermal insulation of the boiler shell reduces heat loss
- + Load bearing boiler cover – for easier installation and maintenance
- + A comprehensive range of accessories tailored to the boiler reduces the amount of engineering work – and can also be supplied pre-assembled, plumbed and fully wired from the factory
- + Vitocontrol control panel for all boiler-related control equipment
- + TWA-T thermal water treatment system available as an accessory

Thermal water treatment for fault-free operation of a steam boiler



TWA-T thermal water treatment module

Steam boilers are continuously supplied with chemically and thermally treated feedwater. To prevent the constituents of the water, such as calcium, magnesium, oxygen and carbon dioxide, from permanently damaging the steam boiler over time through pitting corrosion or limescale deposits, it must be supplied with the "right" kind of water, from which these substances have been removed.

Package solutions for water treatment

The TWA-V/TWA-T thermal water treatment module is a complete package solution for this application.

Alongside the standard components, additional modules are available which allow the boiler system to be set up for the specific set of circumstances.

TAKE ADVANTAGE OF THESE BENEFITS

- + Compact, modular arrangement of components
- + High flexibility due to modular extension options
- + Pre-assembled modules reduce installation effort
- + Reliable plant operation by safeguarding the required amount of feedwater and maintaining water parameters
- + Optimum deaeration thanks to ideal placement of the deaeration lutes
- + Highest energy efficiency due to heat recovery
- + High quality fittings from reputable manufacturers
- + Control of the TWA-V/TWA-T water treatment module via Vitocontrol

TWA-V thermal water treatment module

The module, composed of pre-assembled components, can be assembled according to specific requirements.



TWA-V

Thermal water treatment module

Standard

- 1** Stainless steel deaerator (50 mm insulation) including fittings (for full deaeration)
- 2** Electric hot steam valve
- 3** Top-up water control valve plus fittings
- 4** Base frame and tank feet
- 5** Magnetic level gauge
- 6** Transport lugs (tank and deaerator)
- 7** Vacuum breaker
- 8** Feedwater tank with 50 mm insulation layer
- 9** Safety valve
- 10** Terminal box – functions switched by Vitocontrol
- 11** Sample cooler

Optional

- 12** Dosing module
- 13** TDS expander including fittings and interconnecting pipework
- 14** Mixing cooler including fittings and interconnecting pipework
- 15** Pump module(s) including interconnecting pipework



**Efficient condensing
technology**

Downstream Vitotrans 300
flue gas/water heat
exchanger fitted to
a Vitomax boiler

Viessmann system technology ensures the highest operational reliability and efficiency

At Viessmann all components for a high performance energy system are supplied from a single source. Boilers must not only offer the most advanced technology, reliability, system-specific solutions, optimum setting options and environmental responsibility, but also many services relating to boiler operation itself.

Systems for low pressure hot water boilers offer a high degree of engineering and calculation assurance for industrial/commercial boiler plants.

Condensing technology for medium and industrial/commercial boilers

The Vitotrans 300 flue gas/water heat exchanger enables efficient use of the economic benefits of condensing technology, even with medium sized and industrial/commercial boilers.

Control technology for convenient remote maintenance

The Vitotronic control unit is the control centre of a Viessmann boiler. WiFi and Ethernet interfaces make access from anywhere possible. Trade partners also benefit from convenient remote maintenance via Vitocom.

Innovative communication systems

Innovative communication systems for data exchange between heating systems: including hardwired and wireless, as well as via IP networks.



System technology

High degree of engineering and calculation assurance for boiler systems, thanks to system technology.



Condensing technology

Flue gas/water heat exchangers enable efficient use of the economic benefits of condensing technology.



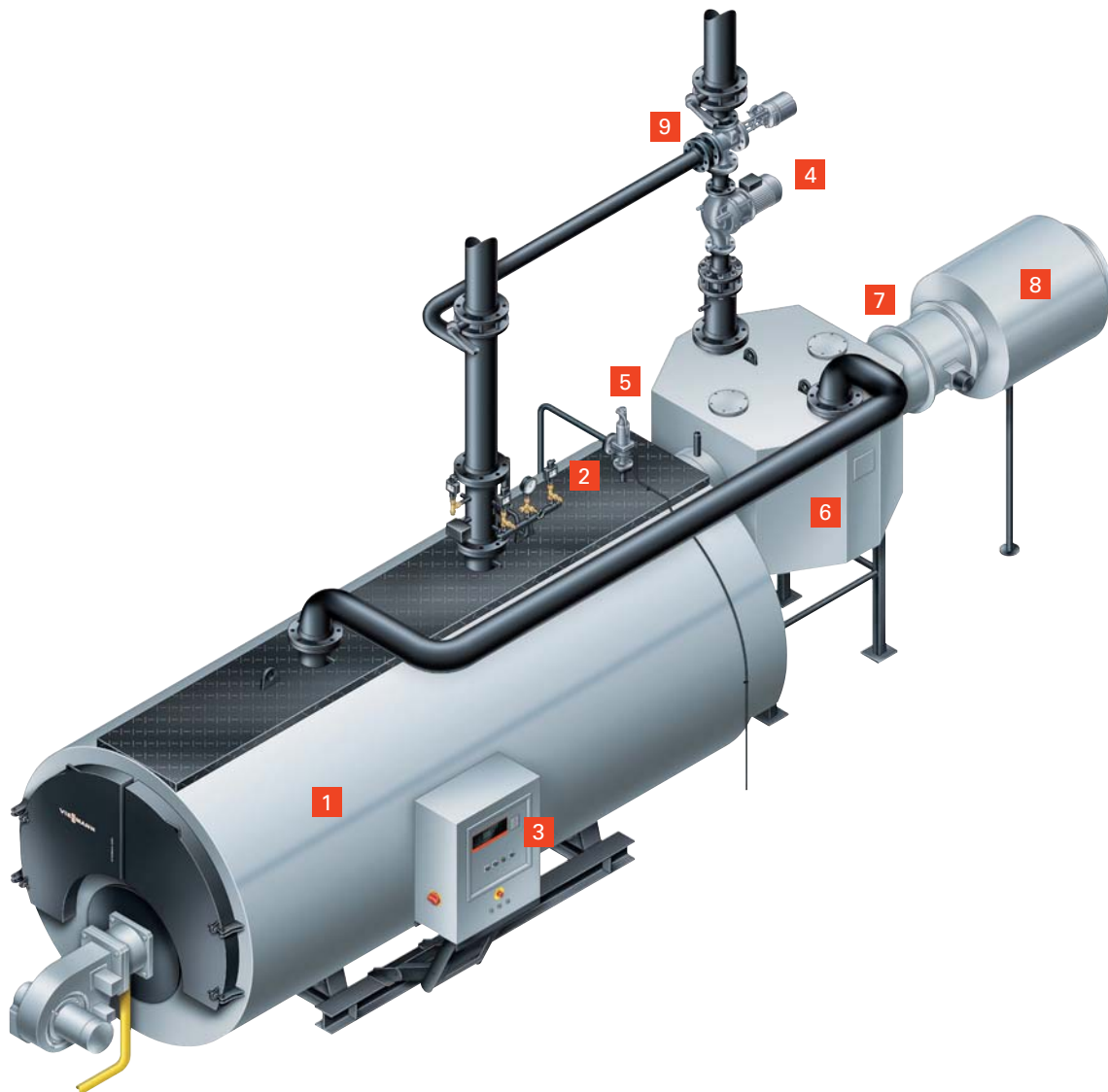
Control technology

Access is possible from anywhere via the Vitotronic control unit, thanks to WiFi and Ethernet interfaces.



Communication systems

Data exchange between heating systems in networks

**VITOMAX LW**

System technology (optional)

- 1** Boiler with burner
- 2** Intermediate flow piece with safety equipment
- 3** Control system and control panel
- 4** Boiler circuit pump
- 5** Safety valve
- 6** Flue gas/water heat exchanger
- 7** Flue gas damper
- 8** Flue gas silencer
- 9** 3-way mixing valve

(return temperature raising facility)

Matching system technology for low pressure hot water boilers

Systems for Vitomax LW low pressure hot water boilers offer a high degree of engineering and calculation assurance for industrial/commercial boiler plants. As well as guaranteeing the highest quality and flexibility, these systems also provide the assurance that all components are perfectly matched. These components can be pre-assembled and pre-wired at the factory before delivery to the customer. This saves time and reduces errors on site.

Flue gas/water heat exchangers improve efficiency

Vitotrans 100/200-LW flue gas/water heat exchangers, which can increase boiler efficiency to levels as high as 96 percent, are available as accessories. They can be combined with oil and gas burners.

Container solutions

New heating centres for industrial and commercial enterprises frequently need to be operational in the shortest possible time. For speedy installation and commissioning, Viessmann is now able, on request, to offer complete Vitomax industrial/commercial boiler systems and Vitoplex boilers as pre-assembled containerised solutions, which are compact and easy to ship.

TAKE ADVANTAGE OF THESE BENEFITS

- + Matching system solutions for the highest operational reliability
- + Efficiency levels of up to 96 % help to save fuel and therefore increase the viability of the system
- + Standard appearance in the Viessmann design
- + Reduced time and effort for engineering
- + Straightforward extension with matching components is possible
- + Optional pre-assembled container systems



Vitotrans 200-LW
flue gas/water heat exchanger



The Vitotrans 300 flue gas/water heat exchanger draws heat from the Vitomax boiler's hot flue gases and so improves efficiency.

Condensing technology for medium sized and industrial/commercial boilers: Vitotrans heat exchangers improve efficiency

Rising fuel costs are of particular concern to users of medium sized and industrial/commercial boiler systems. The utilisation of condensing technology therefore has a particularly high impact on the operating costs.

Separate flue gas/water heat exchangers are used for larger systems or when retrofitting existing energy systems. They cool flue gases further so that the water vapour condenses. The latent condensation heat yielded and the low flue gas temperatures provide a significant boost to efficiency.

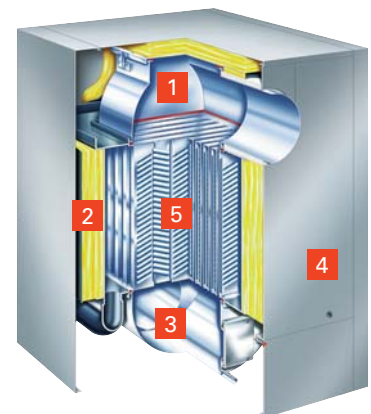
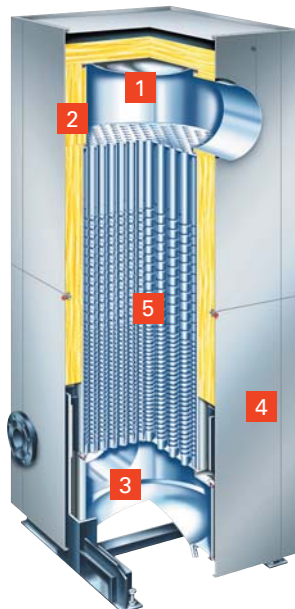
Efficiency of up to 96 percent with condensing technology

Vitotrans 100/200-LW flue gas/water heat exchangers improve boiler efficiency to levels of up to 96 percent. They can be combined with oil and gas burners.

The Vitotrans 300 is a flue gas/water heat exchanger for utilising condensing technology with boilers in the output range from 405 to 6750 kW. This allows the standard seasonal efficiency [to DIN] of the boiler to be increased by up to eleven percent.

TAKE ADVANTAGE OF THESE BENEFITS

- + Vitotrans flue gas/water heat exchangers with
 - Inox-Crossal heat exchanger for boilers from 405 to 2000 kW
 - Inox-Tubal heat exchanger for boilers from 1860 to 6750 kW
- + High efficiency of up to 96 % saves fuel and increases cost-effectiveness
- + Corrosion-resistant stainless steel for high operational reliability and a long service life
- + Compact design – space saving installation immediately behind the boiler
- + Straightforward hydraulic connection (entire or partial water volume)
- + Self-cleaning effect due to smooth stainless steel surface
- + Matching neutralising systems



VITOTRANS

- 1 Large flue gas inlet
- 2 High grade thermal insulation
- 3 Flue gas outlet
- 4 Sheet steel casing in Vitosilver
- 5 Inox-Crossal heat exchanger



With their well designed electronic management system, Vitotronic control units ensure your heating system operates economically.



Vitotronic 200-M multi mode system controller

Economic energy management for systems of every size

The Vitotronic control system with communication capability is the electronic centrepiece for the economical and reliable operation of the heating system. The colour touchscreen at the front of the boiler immediately catches the eye.

Wide range of control units for medium sized boilers

A wide range of control units is available for medium sized boilers. In addition to integral control units, such as those in the Vitocrossal 300 (CM3C) gas condensing boiler for example, there are also traditional versions that can be mounted on top of the boiler:

- Vitotronic 100 as a constant boiler control unit
- Vitotronic 200 as a weather-compensated single boiler control unit
- Vitotronic 300 as a weather-compensated boiler control unit with integral cascade function

All versions have an integral WiFi interface (except for the Vitocrossal 200, type CIB) for servicing and remote control. A mixer extension for two heating circuits with mixer is part of the standard delivery for the Vitotronic 300, and is available as an accessory for the Vitotronic 200.

Integral cascade control

The integral cascade control function in the Vitotronic 300 for up to eight heat generators makes it easier to set up and operate multi boiler systems. The clear colour display screen shows the operating status of each individual boiler.

Convenient heating circuit control

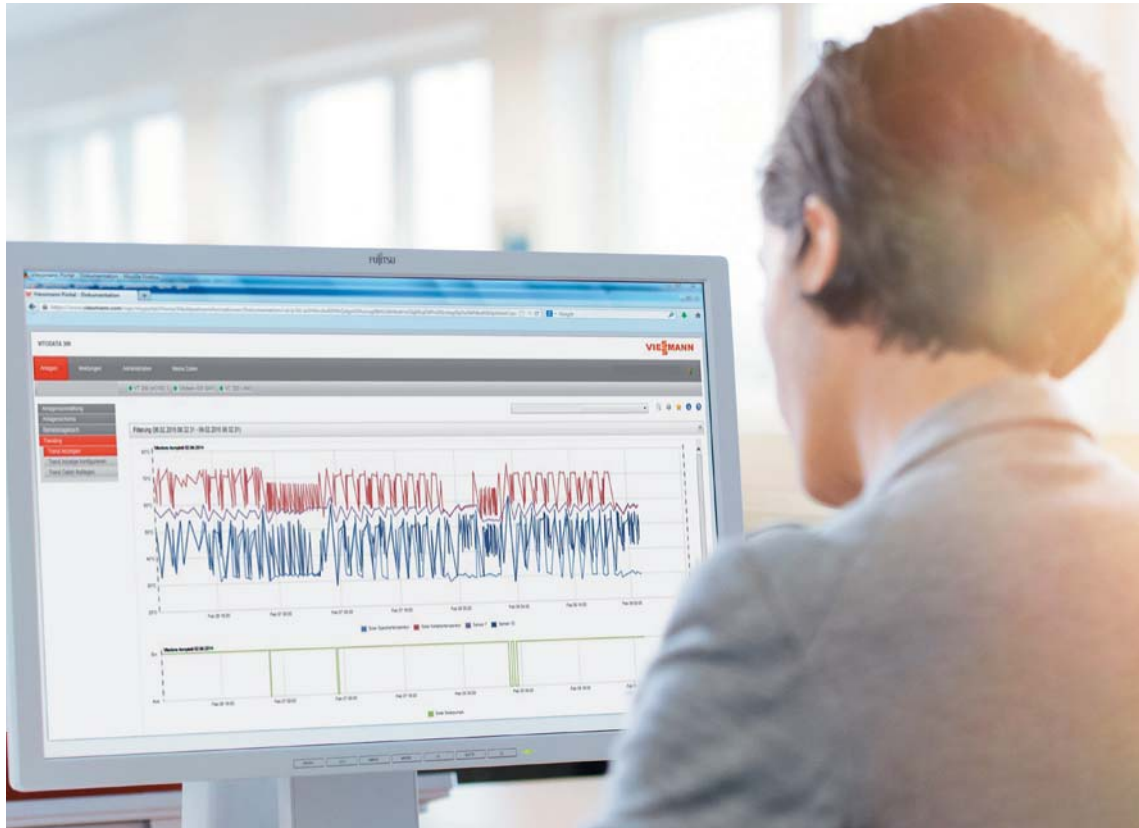
The Vitotronic 200-H is a weather-compensated heating circuit control unit for three heating circuits with mixer. If there are more than this, up to 32 Vitotronic 200-H can be connected via LON. This means that systems with up to 96 heating circuits can easily be controlled.

Vitocontrol multi mode system controller

The Vitocontrol is a powerful system controller with graphic user interface. It can display all output and consumption details of an energy system and can be individually adapted. The Vitocontrol 200-M is suitable for operating dual mode and triple mode heating systems with up to four heat generators with various combinations of oil/gas boilers, CHP units and solid fuel boilers.

TAKE ADVANTAGE OF THESE BENEFITS

- + Less time and effort required for installation thanks to commissioning assistant
- + Straightforward system operation via intuitive programming unit with colour touchscreen
- + Burner reset via programming unit
- + WiFi interface for communication with Vitosoft 300 (SID1) service tool
- + Integral cascade control for up to 8 single boilers
- + Energy cockpit for displaying energy consumption
- + Vitogate 300 interface for higher ranking BMS



Internet data communication enables an energy centre to be monitored at any time, and parameters to be adjusted for efficient operation.

From large residential complexes to utility buildings, Viessmann communication systems offer intelligent solutions for data communication with heating systems and building services that are a perfect match to the differing requirements of heating system operators, contractors and heat supply utilities.

Intelligent solutions for communication with medium sized and industrial/commercial boilers

Vitodata 300

The Vitocom 300 with Vitodata 300 is ideal for professional monitoring of larger residential properties or utility buildings. It is designed with heat supply utilities, contractors and municipal services in mind, as such customers value quick and reliable inspection, maintenance and optimisation of their heating systems.

Amongst the many control functions are options for setting switching times, operating programs, holiday programs and set values (level/slope), checking operating states and temperatures, and adjusting parameters. In addition, the system can display energy consumption and can be used for billing.

Faults can be reported to the service engineer responsible by SMS, fax or email using the integral service schedule.

Vitocom 300 LAN

The LAN version of the Vitocom 300 enables data transfer over DSL/Ethernet networks. The type of data encryption used here guarantees an optimum level of data security.

Vitogate 300 interface for building automation

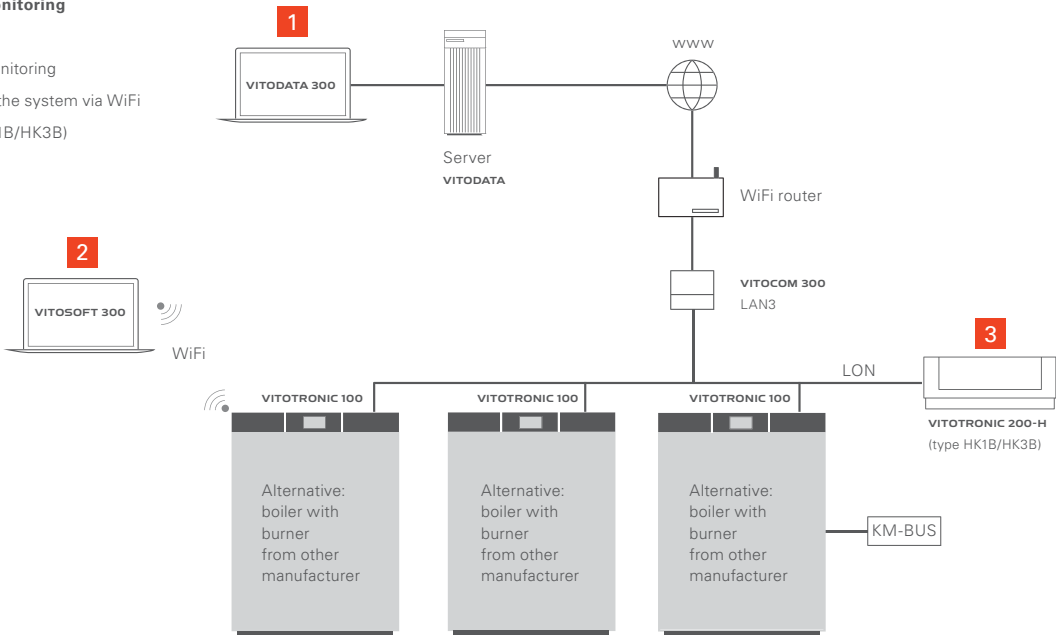
Vitogate 300 is a solution for connecting boilers and heat pumps to a higher ranking building management system (BMS) via a standardised BACnet or Modbus protocol. Via the gateway, the heating system, with all its relevant components and operating parameters,

can be visualised and operated from the control centre.

This gives system users the option to be kept up to date on the current status of their heating system and to make settings such as programming set room temperatures.

Multi boiler system – standard functions for connectivity and remote monitoring

- 1 Vitodata 300 for online monitoring
- 2 Vitosoft 300 for servicing the system via WiFi
- 3 Vitotronic 200-H (type HK1B/HK3B)





The energy centre and the
Viessmann Academy in Allendorf

Partnership with excellent prospects – Attractive services for our trade partners

The complete range of innovative and advanced heating equipment, of reliable and high quality, forms the basis for Viessmann's close partnership with the heating trade and its various bodies, ensuring lasting success in the market.

Trade and industry must cooperate to best utilise the opportunities the market offers. Attractive product services gain ever greater importance for manufacturer and trade alike.

Viessmann offers a comprehensive range that benefits the trade.

However, it is not all about technology. Many years of after-care and a guaranteed supply of spare parts are extremely important. These are provided by the Viessmann customer service department. Maintenance agreements are also available if required.

The services offered by Viessmann in support of trade partners go back a long way.

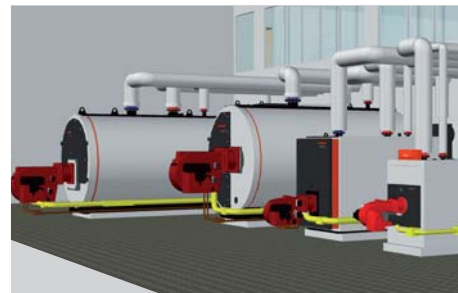
Everything from a single source

Viessmann offers everything for solution-focused cooperation:

- Consultation – comprehensive and competent
- Vitodesk engineering software – a complete software package for engineering and sizing heating systems, with 3D boiler room design including presentation and visualisation functions
- Manufacture according to country-specific requirements with short delivery times
- Equipment – safety accessories, burners, control panels, boiler platforms, flue gas/water heat exchangers, water treatment systems
- Training and instruction at the information centre in Berlin
- Delivery and handling with our own vehicle equipped with a hoist, and a specialist team
- Commissioning anywhere in the world by expert engineers
- Service by qualified technical personnel
- Responsibility for the environment – Viessmann is certified according to the Eco Audit EN ISO 14 001 and EMAS. This covers the entire process, from manufacturing right through to disposal



Delivery of a Vitomax boiler to site



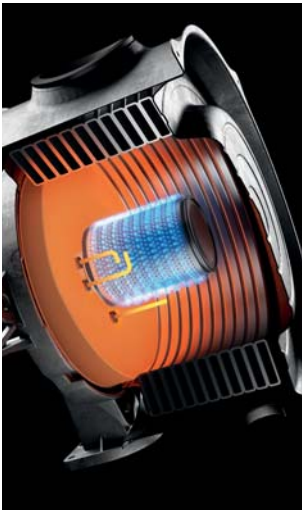
3D boiler room planning



All Viessmann products meet demanding environmental standards and are EMAS certified.



Viessmann information centre, Berlin



Matrix-Plus burner

Viessmann comprehensive range

- Boilers for oil or gas
- Combined heat and power generation
- Hybrid appliances
- Heat pumps
- Wood combustion technology
- Biogas production plants
- Biogas upgrading plants
- Solar thermal
- Photovoltaic
- Electric heating/DHW systems
- Refrigeration systems
- Accessories

Milestones of heating technology

As an environmental pioneer and technological trailblazer for the heating sector, Viessmann has been supplying exceptionally clean and efficient systems for heating, refrigeration and decentralised power generation for decades. Many of the company's developments are recognised as heating equipment milestones.

Sustainability in action

As a family business Viessmann takes the long view and places great value on acting responsibly; sustainability is firmly enshrined in the company's principles. For Viessmann, sustainability in action means striking a balance between economy, ecology and social responsibility throughout the company; meeting current needs without compromising the quality of life of future generations.

With its strategic sustainability project, Viessmann demonstrates at its own head office in Allendorf (Eder) that the energy and climate policy goals set by the German government for 2050 can in fact be achieved today with the help of commercially available technology.



We create living spaces
for generations to come.



Number 1 Trade Partner for the 15th consecutive time

Practical partnership

As part of its comprehensive range, Viessmann also offers a wide selection of complementary services. These services include a comprehensive training and further development programme for trade partners at the well equipped training facilities of the Viessmann Academy.

With its new digital services, Viessmann offers innovative solutions such as the operation and monitoring of heating systems by smartphone. Users benefit from greater reassurance and convenience, whilst contractors can keep a constant eye on the systems for which they are responsible.



Viessmann is a leading international manufacturer of efficient energy systems.

VISSMANN GROUP IN FIGURES

1917

— Viessmann was founded

12,000

— employees

2.5

— Group turnover in billions of euros

54

— export share in percent

23

— production companies in

12

— countries

120

— sales offices worldwide

74

— countries with agents and sales companies



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Your trade partner

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