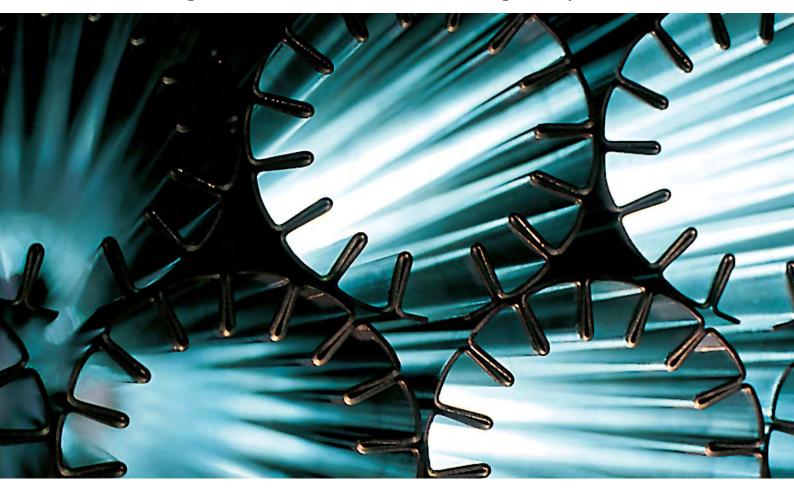


Oil/gas boilers for medium and high output





MES MAN



# Futureproof and efficient heating technology for all requirements

In Western industrial nations, heat generation for residential and commercial buildings accounts for the largest proportion of energy consumption – at the same time this sector offers the greatest savings potential. Advanced and energy efficient heating systems from Viessmann are in use around the world, not only in many private households, but also in numerous major projects. There, they make an important contribution to the sustainable protection of finite energy reserves.

Advanced heating technology has certainly been put to the test in these projects, which involved working with historical buildings, impressive industrial complexes and large scale industrial and commercial buildings. Viessmann's innovative solutions always successfully rose to the challenge, however.

The comprehensive range of medium and industrial/commercial boilers does not only include Viessmann products, but also heat generators and air conditioning units produced by the extended branches of the Viessmann Group, that is Köb, Mawera, KWT, ESS, BIOFerm and Schmack. Strong brands that meet all requirements made of powerful and reliable heating technology in the sector using sustainable fuels.



### Overview

Viessmann offers innovative heating solutions for residential complexes, municipal buildings, and industrial/commercial buildings. Take a closer look at the many options available.



#### Introduction

from page 6

**Saving energy and protecting the climate.** Innovative solutions from Viessmann help you to do this, because using highly efficient heating technology not only reduces energy costs, but it is also an active form of environmental protection.



#### **Products**

from page 8

**Highly efficient and futureproof.** Here, you can find detailed information regarding powerful and futureproof heating systems with output up to 20,000 kW.



#### System technology

from page 42

**Everything from one source.** Perfectly matching system technology from Viessmann offers maximum reliability, flexibility and efficiency.



#### Impressive offers for our trade partners

from page 56

from page 62

**Find out more** about engineering aids and training offers, our customer service and online systems.



Comprehensive product range – individual solutions

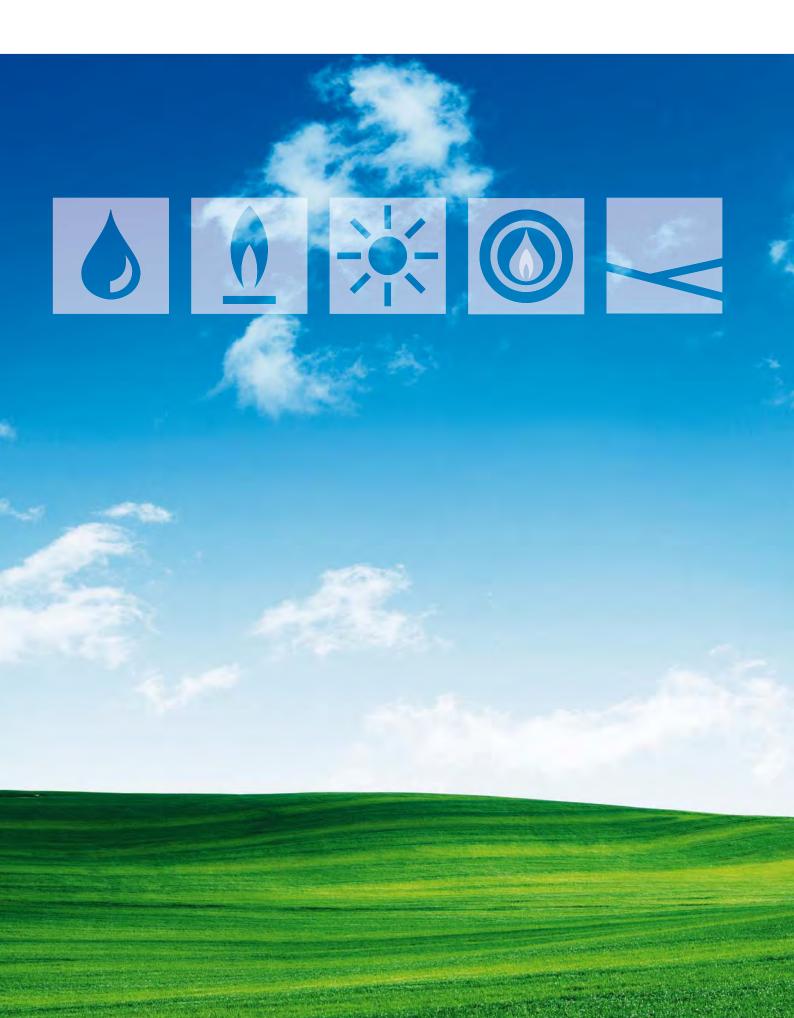
The complete range at a glance. Future proof heating system

**The complete range at a glance.** Futureproof heating systems for oil, gas, biomass and natural heat, as well as solar thermal systems for DHW heating and central heating backup – all from a single source.

The company from page 66



**The power of innovation.** Viessmann has been a family business for three generations and it continues to develop leading technology with responsibility.









## Saving energy and protecting the climate

Viessmann is aware of its responsibility for the sustained protection of the environment. Its company philosophy and products focus on this.











"Nothing is so good that it cannot be improved". This maxim is at the heart of the Viessmann company's principles. In this industry, Viessmann can rightfully claim to be the leader in quality and technology, and as such, aims to continually set new standards.

Of course, this applies in particular to the company's product range, which is consistently geared towards significantly lowering the consumption of fossil fuels, and gradually replacing them with renewable sources of energy.

At around 40 %, the heating market actually accounts for the largest proportion of energy consumption. The rest is shared by goods transport, personal transport and power, at 20 % each. These are values that can also be applied, to some extent, to other industrial countries. Rising energy costs mean the emphasis is on reducing the consumption of fossil fuels as quickly as possible.

#### Condensing technology offers the greatest energy efficiency

Taking the overall investment and current energy prices into consideration, condensing technology is the most economical alternative. Viessmann condensing boilers convert up to 98 % of the energy used into heat. At the same time, condensing technology is also future proof, as biofuels can already be mixed with conventional fuels.

An investment in advanced condensing technology enables substantial savings to be achieved that have a positive effect particularly on tight commercial and municipal budgets.

Users will also make an effective contribution towards the sustained protection of the environment by preventing unnecessary CO<sub>2</sub> emissions.

Viessmann always offers the right solution with its comprehensive range of medium and industrial/commercial boilers as well as its powerful heating systems for sustainable fuels, particularly biomass.

Viessmann offers efficient and energy-saving heating systems for oil and gas in the medium and industrial/commercial segment. Systems for renewables like solar, biomass and natural heat complete the comprehensive product range.



#### **VITORADIAL 300-T**

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

#### Compact oil/gas condensing boiler Vitoradial 300-T

The Vitoradial 300-T oil condensing boiler is extremely compact and is supplied as a Unit with a downstream flue gas/water heat exchanger and the new Vitoflame 100 pressure-jet burner.

## High efficiency with two-stage heat generation

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

The proven multi-layered convection heating surfaces combined with the corrosion-resistant Inox-Radial heat exchanger, fitted downstream of the boiler, enable highly efficient two-stage heat generation and recovery. The Vitoradial 300-T is suitable for operation with all commercially available EL fuel oils or natural gas.



#### Vitoradial 300-T Compact design for easy handling and low build height – an important pre-requisite for modernisation projects.

The Inox-Radial guarantees the highest efficiency and a long service life.





Multi-layered convection heating surface

#### Compact yet powerful

The compact design with low build height makes the Vitoradial 300-T an ideal choice when modernising heating centres. It is supplied as a unit with the downstream flue gas/water heat exchanger and the Vitoflame 100 pressure-jet burner.

### Triplex pipes for 2.5-times larger heating surface

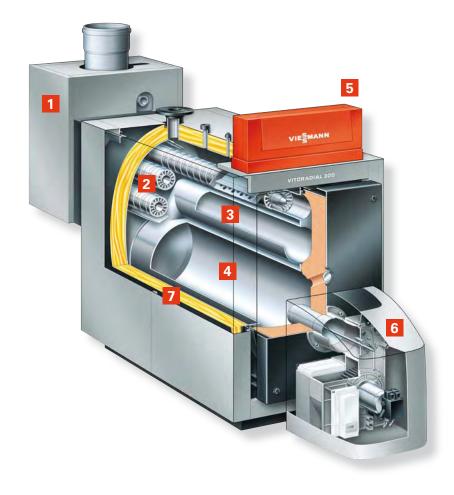
The multi-layered convection heating surfaces of the Vitoradial 300-T are comprised of telescopically arranged steel pipes pressed into each other for ideal heat transfer. The internal tube with its folded linear ribs provides a heating surface 2.5-times larger than that of smooth pipes. The heat throughput is metered by the different intervals between the press points so that the back area of the triplex tubes, through which slightly less hot combustion gases circulate, transfers less heat to the boiler water. This way, the surface temperature remains above the dew point, the formation of condensate is counteracted and corrosion damage is prevented.

#### Utilising condensing technology with the Inox-Radial heat exchanger

The downstream Inox-Radial heat exchanger makes it feasible to utilise highly efficient condensing technology, even with medium-sized boiler system, such as the Vitoradial 300-T. The seasonal efficiency [to DIN] is raised by 8 % to 97 %  $(H_s)$ .

This principle ensures that combustion and condensation occur in physically separate locations, so the combustion gases condense in a location which is free of deposits. In practice, this means standard service intervals for cleaning the combustion chamber and low maintenance costs.

The new Vitoradial 300-T is available up to 335 kW output. The stainless steel Inox-Radial heat exchanger is highly efficient. This prevents the danger of corrosion through acidic condensate.



#### Vitoradial 300-T

- 1 Inox-Radial heat exchanger
- Multi-layered convection heating surface
- 3 Second hot gas flue
- Combustion chamber (first pass)
- 5 Vitotronic control unit
- 6 Vitoflame 100 Unit pressure-jet burner
- Highly effective thermal insulation

Vitoradial 300-T, 101 to 335 kW



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 335 kW
- Standard efficiency for operation with fuel oil: 97 % (H<sub>s</sub>) / 103 % (H<sub>i</sub>)
- Inox-Radial heat exchanger for condensing hot gases, matched to the compact oil/gas boiler
- Complete with heat exchanger pipework and pump, matched to the respective boiler output
- New pressure-jet oil burner, Vitoflame 100
- Long burner runtimes and fewer switching intervals, due to large water content, protect the environment
- Economical and safe operation of heating systems through the digital Vitotronic control system with communication capability
- Integral Therm-Control start-up system for easy hydraulic connection no shunt pump or return temperature raising facility are required
- No low water indicator required, you save even more
- Compact design for easy handling and low build height important for modernisation

For specification see page 20

90 to 2000 kW 110 to 2000 kW 125 to 1080 kW











### **VITOPLEX VITOROND**

Proven Viessmann quality up to 2000 kW for oil and gas and high seasonal efficiency.

The comprehensive range from Viessmann covers every demand for innovative heating technology. Here you can find the exact solution for your needs in terms of building services, convenience and budgetary constraints.

The versatility of the Vitoplex range, which is technically and in terms of price categorised into stages 300 and 200, ensures that the perfect solution is available for every demand and any budget. All have in common the top quality for which Viessmann is renowned.

The Vitorond 200 comes into its own, where difficult local conditions dictate that the boiler needs to be brought to the installation location in sections.



#### Vitoplex 300

Top three-pass boiler for particularly economical, clean and reliable operation.



#### Vitoplex 200

Vitoplex 200 up to 350 kW fit through standard doorways with 80 cm openings.



#### Vitorond 200

Where space is tight, the Vitorond 200 is the right choice - sections can be brought into the boiler room individually.

### Three-pass boiler with integral start-up control

The three-pass Vitoplex 300 boiler, with its proven multi-layered convection heating surfaces, offers a particularly economical, clean and reliable operation. The integral start-up system, Therm-Control, makes a separate return temperature raising facility unnecessary.

## Multi-layered convection heating surfaces made from Triplex tubes

The multi-layered convection heating surfaces of the Vitoplex 300 are comprised of telescopically arranged steel pipes pressed into each other for ideal heat transfer. The internal tube with its folded linear ribs provides a heating surface 2.5-times larger than that of smooth pipes.

The heat throughput is metered by the different intervals between the press points

so that the back area of the triplex tubes, through which slightly less hot combustion gases circulate, transfers less heat to the boiler water. This way, the surface temperature remains above the dew point, the formation of condensate is counteracted and corrosion damage is prevented.

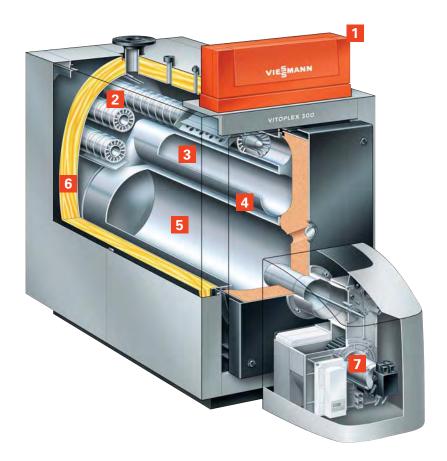
#### Convenient and powerful control units

An economical and safe operation of your heating system is ensured by the digital Vitotronic control system with communication capability.

The Vitotronic 300-K is a particularly powerful version for operating multi-boiler systems comprising up to four individual boilers with modulating boiler water temperature. Heating systems with one and two heating circuits and optional mixer can be controlled.

The integral diagnostic system and the programming unit with plain text user prompts and backlit display make for an exceptionally convenient operation. External appliances and devices are connected easily via system plugs.

Standardised LON for complete integration into building management systems. Remote monitoring anytime via Internet TeleControl with Vitocom and Vitodata as option.

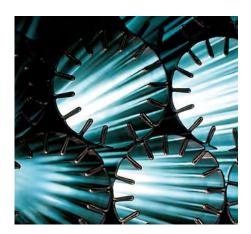


#### Vitoplex 300, 90 to 500 kW

- Boiler and heating circuit control
- Third hot gas pass (as multi-layered convection heating surface)
- Second hot gas flue
- Wide water galleries
- 5 Combustion chamber (first pass)
- 6 Highly effective thermal insulation
- Vitoflame 100 Unit pressure-jet oil burner



The Vitoplex 300 low temperature boilers are persuasive in design and quality.



The triplex pipes offer a heating surface that is 2.5-times that of standard pipes.

#### Take advantage of these benefits

- Multi-layered convection heating surfaces for high operational reliability and a long service life
- $\blacksquare$  Seasonal efficiency [to DIN] using fuel oil: 90 % (H $_{\! \rm s})$  / 96 % (H $_{\! \rm i})$
- No low water indicator required up to 300 kW
- Optimum and clean combustion through matching pressure-jet oil/gas burners up to 2000 kW
- Simple and rapid installation with Divicon heating circuit distributor up to 300 kW and safety equipment block up to 180 kW
- Compact design for easy handling and low build height important for modernisation
- Long burner runtimes and fewer switching intervals, due to large water content, protect the environment
- From 620 kW with walk-on boiler covers for easier installation and maintenance

For specification see page 20

### Versatile – suitable for many different burners

The compact Vitoplex 200 steel boiler is now also available from 90 to 1950 kW. Over the entire output range, this three-pass boiler offers the right conditions for an environmentally responsible and clean combustion. A wide range of burners can be easily adapted to be used with this boiler. The Vitoplex 200 is a genuine three-pass boiler with low combustion chamber loading and, therefore, clean combustion with particularly low nitrogen oxide emissions.

#### Optimum combustion and low emissions

Factory-fitted with the two-stage Vitoflame 100 pressure-jet oil burner up to 270 kW and the two stage Vitoflame 100 pressure-jet gas burner up to 200 kW, adjusted to the boiler output and tested at operating temperature. This ensures optimum combustion with low emissions. For the output range 270 to 1950 kW, pressure-jet oil/gas burners by Elco and Weishaupt are already fully adjusted and wired.

### Therm-Control saves installation time and costs

No minimum heating water flow rate required because of wide water galleries. This simplifies the hydraulic connections.

Therm-Control in the output range 90 to 560 kW even makes a return temperature raising facility superfluous. That saves installation time and additional costs.

#### Convenient and powerful control units

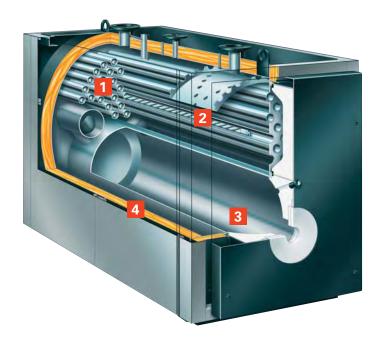
An economical and safe operation of your heating system is ensured by the digital Vitotronic control system with communication capability. The Vitotronic 300-K is a particularly powerful version for operating multi-boiler systems comprising up to four individual boilers with modulating boiler water temperature. Heating systems with one and two heating circuits and optional mixer can be controlled.

The integral diagnostic system and the programming unit with plain text user prompts and backlit display make for an exceptionally convenient operation. External appliances and devices are connected easily via system plugs.

Standardised LON for complete integration into building management systems. Remote monitoring anytime via Internet TeleControl with Vitocom and Vitodata as option.

#### Can cope even when space is tight

The Vitoplex 200 three-pass boiler is easy to handle, saves space, and the walk-on boiler cover (from 700 kW) ensures easier installation and maintenance. The compact three-pass boiler, up to 350 kW, fits through any standard doorway (80 cm), making handling much easier.



#### Vitoplex 200

- Third hot gas flue
- 2 Second hot gas flue (both sides)
- Combustion chamber (first pass)
- 4 Highly effective thermal insulation



Heating centre with two Vitoplex 200 for output up to 1950 kW



Vitoplex 200: 90 to 1950 kW

#### Take advantage of these benefits

- Economical and environmentally friendly through modulating boiler water temperature
- Seasonal efficiency [to DIN] using fuel oil: 88 % (H<sub>s</sub>) / 94 % (H<sub>i</sub>)
- Optional stainless steel flue gas/water heat exchanger for higher seasonal efficiency [to DIN] through condensing technology
- Three-pass boiler with low combustion chamber loading, therefore, clean combustion with low emissions
- Wide water galleries and large water content provide excellent natural circulation and safe heat transfer
- Time-saving during the installation of the boiler casing and control unit through the Fastfix system for medium and industrial/commercial boilers
- From 700 kW with walk-on boiler covers for easier installation and maintenance
- Long burner runtimes and fewer switching intervals, due to large water content, protect the environment

For specification see page 21

#### Fits through most doors: Vitorond 200

Older buildings, in particular, can give rise to difficulties when introducing new boilers because they suffer from tight spaces. With the Vitorond 200 sectional cast iron boiler, sections can be brought into the boiler room individually, where they can be easily assembled in situ with a compression tool.

## Eutectoplex heating surfaces for high operational reliability and a long service life

The cast sections of Vitorond 200 boilers are made from special eutectic cast iron with homogeneous structure. The fine design of the graphite fins and the high level of material purity of the low phosphorous special cast iron increase its elasticity. Material, shape and geometry of the cast sections provide even cooling during production. This prevents structural stresses right from the start. Result: 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 forward through four hot gas flues arranged symmetrically around the combustion chamber and enter the four collectors of the third hot gas flue via the front section. At the back of the boiler, the four cooled hot gas flues are channelled via the flue gas connection to the chimney. The three-pass design reduces the dwell time of

the hot gases in the high reaction temperature range. Resulting in reduced nitrogen oxide emissions.

### Therm-Control saves installation time and costs

Therm-Control in the output range 125 to 270 kW makes a return temperature raising facility superfluous. This simplifies the hydraulic connections, saving installation time and costs.

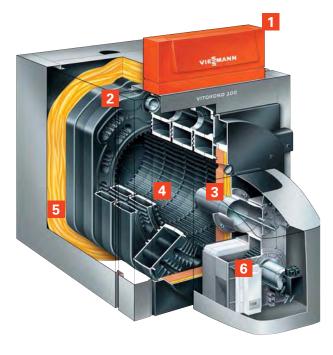
#### Convenient and powerful control units

An economical and safe operation of your heating system is ensured by the digital Vitotronic control system with communication capability.

The Vitotronic 300-K is a particularly powerful version for operating multi-boiler systems comprising up to four individual boilers with modulating boiler water temperature. Heating systems with one and two heating circuits and optional mixer can be controlled.

The integral diagnostic system and the programming unit with plain text user prompts and backlit display make for an exceptionally convenient operation. External appliances and devices are connected easily via system plugs.

Standardised LON for complete integration into building management systems. Remote monitoring anytime via Internet TeleControl with Vitocom and Vitodata as option.



#### Vitorond 200, 125 to 270 kW

- Boiler and heating circuit control
- Third hot gas flue
- 3 Second hot gas flue
- Combustion chamber (first pass)
- 5 Highly effective thermal insulation
- Vitoflame 100 Unit pressure-jet oil burner



Vitorond 200, 125 to 270 kW



Cast iron section of the Vitorond 200, 320 to 1080 kW

#### Take advantage of these benefits

- Economical and environmentally friendly through modulating boiler water temperature
- Seasonal efficiency [to DIN] using fuel oil: 88 % (H₂) / 94 % (H₁)
- Seasonal efficiency [to DIN] improved by up to 12 % due to condensing technology with stainless steel Vitotrans 300 flue gas/water heat exchanger
- Therm-Control in the output range 125 to 270 kW
- Fast and straightforward assembly of individual cast iron sections through double groove system and resilient packing cord for permanent hot gas tightness
- For cleaning, pivoting the burner door makes the combustion chamber and hot gas flues easily accessible from the front
- Standardised LON BUS for optional complete integration into building management systems
- Remote monitoring via the internet with Vitocom and Vitodata

For specification see page 21



### Oil/gas condensing boiler VITORADIAL 300-T

Pages 10/11

Rated output at 50/30 °C		kW	101	129	157	201	263	335
Rated output at 80/60 °C		kW	94	120	146	188	245	313
Dimensions (total)	Length Width Height	mm mm mm	2145 755 1315	2345 755 1315	2335 825 1350	2680 825 1350		905
Weight (incl. thermal insulation, burner and boiler control unit)		kg	510	545	610	680	870	970
Boiler water content		I	185	225	265	310	490	450



### Oil/gas boiler **VITOPLEX 300**

Pages 14/15

Rated output		kW	90	115	140	180	235	300	390	500
Dimensions* (total)	Length Width Height	mm mm mm	1700 755 1315	1905 755 1315	1910 825 1350	2110 825 1350	1905 905 1460	2330 905 1460		2070 1040 1625
<b>Weight</b> (incl. thermal insulation, burner and boiler control unit)		kg	440	475	540	600	790	890	1085	1200
Boiler water content		1	170	210	250	290	470	430	600	650

<sup>\*)</sup> Details excluding burner and hood for 390 and 500 kW



### Oil/gas boiler **VITOPLEX 300**

Pages 14/15

Rated output		kW	620	780	1000	1250	1600	2000
Dimensions* (total)	Length Width Height	mm mm (incl. control unit) mm	2320 1460 1695	2320 1460 1695	1555	1555	3220 1660 2145	1660
Weight (incl. thermal insulation and boiler control unit)		kg	1800	1900	2645	2815	3780	4080
Boiler water content		1	965	900	1510	1440	2475	2315

<sup>\*)</sup> Details excluding burner and hood





### Oil/gas boiler VITOPLEX 200

Pages 16/17

Rated output		kW	90	120	150	200	270	310	440	560
Dimensions* (total)	Length Width Height	mm mm mm	1660 755 1315	1860 755 1315	1865 825 1350	2060 825 1350	2085 905 1460	1875 905 1460		2040 1040 1625
Weight** (incl. thermal insulation, burner and boiler control unit)		kg	375	420	485	535	710	760	990	1095
Boiler water content		I	180	210	255	300	400	445	600	635

<sup>\*)</sup> Details for 310 to 560 kW excl. burner \*\*) Details for 310 to 560 kW excl. burner and hood



### Oil/gas boiler VITOPLEX 200

Pages 16/17

Rated output		kW	700	900	1100	1300	1600	1950
Dimensions* (total)	Length Width Height	mm mm mm		2610 1460 1690	1555			1660
<b>Weight</b> (incl. thermal insulation, burner and boiler control unit)		kg	1640	1780	2285	2475	3065	3410
Boiler water content		I	935	1325	1525	1690	3210	3370

<sup>\*)</sup> Details excluding burner and hood



### Cast iron oil/gas boiler VITOROND 200

Pages 18/19

Rated output		kW	125	160	195	230	270
Dimensions* (total)	Length Width Height	mm mm mm	1325 860 1210	1475 860 1210	1660 860 1210	860	1900 860 1210
Weight (incl. thermal insulation, burner and boiler control unit)		kg	575	685	790	880	995
Boiler water content			122	154	186	217	249

Rated output		kW	320	380	440	500	560	630
Dimensions* (total)	Length Width Height	mm mm mm		1620 1090 1480	1090	1880 1090 1480	1090	1090
Weight (incl. thermal insulation, burner and boiler control unit)		kg	1780	1950	2110	2260	2430	2580
Boiler water content			247	275	303	331	359	387

Rated output	kW	700	780	860	950	1080
Dimensions* (total)	Length mm Width mm Height mm	2270 1090 1480	2400 1090 1480	1090		1090
Weight (incl. thermal insulation, burner and boiler control unit)	kg	2740	2910	3070	3220	3380
Boiler water content	litres	415	443	471	499	527

<sup>\*)</sup> Details for 350 to 560 kW excluding burner and hood











#### VITOCROSSAL

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

The Vitocrossal product range, from 87 to 978 kW, offers a perfect solution for every application - from heating apartment blocks, public or commercial buildings and also for generating heat in a local heating network.

#### Advanced condensing technology

Its stainless steel Inox-Crossal heating surface offers the ideal pre-requisite for utilising condensing technology. The smooth stainless steel heating surface allows the condensate created by the condensing process to simply run off downwards. Combined with the smooth stainless steel surface, this creates a permanent self-cleaning effect, thus ensuring a permanently high utilisation of condensing technology, resulting in a longer service life whilst reducing maintenance effort.

The Vitocrossal 300 boiler is available with a factory-fitted MatriX radiant burner or prepared for fitting Elco or Weishaupt pressure-jet gas burners.

The highly effective heat transfer and the high condensation rate enable seasonal efficiencies [to DIN] up to 98 % (H<sub>s</sub>)/ 109 % (H<sub>i</sub>) to be achieved. These high levels of standard efficiency are the result of the countercurrent principle of hot gases and boiler water, along with intensive turbulence of the hot gases as they pass over the heating surface.



#### Vitocrossal 300

The top model amongst floorstanding condensing boilers with 87 to 142 kW.



#### Vitocrossal 300

Top condensing technology up to 635 kW, up to 314 kW with Inox-Crossal heating surfaces and MatriX burner.



#### Vitocrossal 300

Condensing boiler with 787 and 978 kW for Elco or Weishaupt pressure-jet gas burners.



#### Vitocrossal 200

High grade condensing technology from 87 to 311 kW, as two-boiler system up to 622 kW.



#### Vitocrossal 200

Condensing boiler from 404 to 628 kW, with MatriX cylinder burner, as two-boiler system up to 1256 kW.

#### Vitocrossal 300 - the flag ship

The Vitocrossal 300 is a leading product amongst floorstanding gas condensing boilers in the output range 87 to 978 kW. It's design allows it to utilise the condensing energy in the hot gases with exceptional intensity.

The Inox-Crossal heating surface in the Vitocrossal 300 was combined with another milestone of Viessmann heating technology: the MatriX radiant burner. That saves heating costs and ensures clean combustion without compromise.

The proven Vitocrossal 300 range (type CT3) has been extended by two additional sizes (187 and 314 kW). Up to 314 kW, the Vitocrossal 300 is available as a Unit boiler with a MatriX radiant burner. Finally, there is the type CR3 with output of 787 and 978 kW.

This enables Viessmann to offer the perfect solution for every demand – for apartment blocks, local heating networks and public or commercial buildings alike.

#### Highly effective heat transfer through the Inox-Crossal heating surfaces

The design of the Inox-Crossal heating surfaces allows the Vitocrossal condensing boilers to utilise the condensation energy in their hot gases with particular intensity. The second return connector of the Vitocrossal 300 enables a union that is particularly beneficial to the utilisation of condensing technology.

#### Convenient and powerful control units

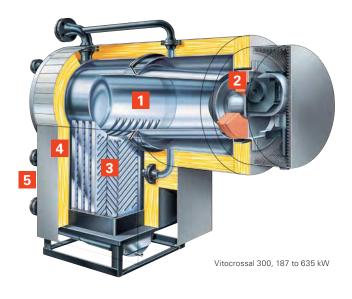
An economical and safe operation of your heating system is ensured by the digital Vitotronic control system with communication capability.

The Vitotronic 300-K is a particularly powerful control unit for operating multi-boiler systems comprising up to four individual boilers with modulating boiler water temperature. Heating systems with one and two heating circuits and optional mixer can be controlled.

The integral diagnostic system and the programming unit with plain text user prompts and backlit display make for an exceptionally convenient operation. External appliances and devices are connected easily via system plugs.

Standardised LON for complete integration into building management systems. Remote monitoring anytime via Internet TeleControl with Vitocom and Vitodata as option.



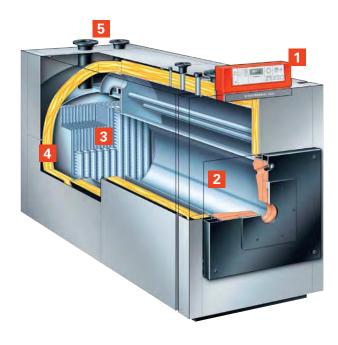


#### Vitocrossal 300, 87 to 142 kW Vitocrossal 300, 187 to 635 kW

- 1 Stainless steel combustion chamber
- 2 MatriX radiant burner (up to 314 kW)
- Inox-Crossal heating surface
- 4 Highly effective thermal insulation
- 5 Two return connectors



Vitocrossal 300, 787 and 978 kW



#### Take advantage of these benefits

- Compact boiler body with large water content and lnox-Crossal heating surfaces made from stainless steel for the efficient utilisation of condensing technology
- Self-cleaning effect through smooth stainless steel surfaces
- MatriX radiant burner for particularly quiet and environmentally responsible operation with a wide modulation range (up to 314 kW)
- Seasonal efficiency [to DIN]: up to 98 % (H<sub>s</sub>) / 109 % (H<sub>i</sub>)
- Second return connector for low return temperature resulting in an especially intensive utilisation of condensing technology

For specification see page 30

#### Vitocrossal 300, 787 and 978 kW

- Vitotronic control unit
- 2 Stainless steel combustion chamber
- Inox-Crossal heating surface
- 4 Highly effective thermal insulation
- 5 Two return connectors

#### Very attractively priced - Vitocrossal 200

With the Vitocrossal 200, Viessmann offers high-grade condensing technology from 87 to 628 kW with an outstanding price/performance ratio.

The Vitocrossal 200 is comprised of proven Viessmann condensing technology components and, like the Vitocrossal 300, also features the Inox-Crossal heating surface with the MatriX radiant burner.

The Vitocrossal 200 is suitable for open and balanced flue operation across its entire output spectrum.



Twin-boiler system with Vitocrossal 200 up to 622 kW

#### Twin-boiler system up to 1256 kW

For output from 87 kW, two Vitocrossal 200 can also be operated as a cascade with the same control unit and a single flue. For twin-boiler systems, Viessmann supplies specifically designed flue gas headers made from stainless steel, as well as the hydraulic system pipework.

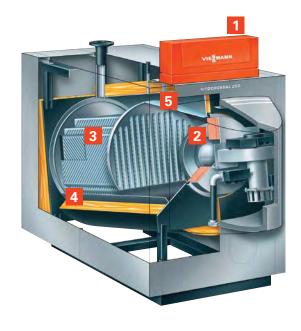
#### Convenient and powerful control units

An economical and safe operation of your heating system is ensured by the digital Vitotronic control system with communication capability.

The Vitotronic 300-K is a particularly powerful version for operating multi-boiler systems comprising up to four individual boilers with modulating boiler water temperature. Heating systems with one and two heating circuits and optional mixer can be controlled.

The integral diagnostic system and the programming unit with plain text user prompts and backlit display make for an exceptionally convenient operation. External appliances and devices are connected easily via system plugs.

Standardised LON for complete integration into building management systems. Remote monitoring anytime via Internet TeleControl with Vitocom and Vitodata as option.

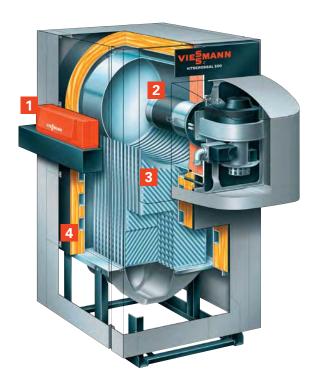


#### Vitocrossal 200, type CM2

- Vitotronic control unit
- MatriX radiant burner
- Inox-Crossal heating surface
- 4 Highly effective thermal insulation
- Wide water galleries for good natural circulation



Vitocrossal 200 404 to 628 kW



#### Take advantage of these benefits

- Compact boiler body with large water content and Inox-Crossal heating surfaces made from stainless steel for the efficient utilisation of condensing technology
- Self-cleaning effect through smooth stainless steel surfaces
- MatriX radiant burner or MatriX cylinder burner for particularly quiet and environmentally responsible operation with a wide modulation range
- Seasonal efficiency [to DIN], type CM2: up to 97 % (H<sub>s</sub>) / 108 % (H<sub>i</sub>) Seasonal efficiency [to DIN], type CT2: up to 98 % (H<sub>s</sub>) / 109 % (H<sub>i</sub>)
- Optional open flue or balanced flue operation
- All hydraulic connections can be fitted from above

For specification see page 31

#### Vitocrossal 200, type CT2

- Vitotronic control unit
- MatriX cylinder burner
- Inox-Crossal heating surface
- 4 Highly effective thermal insulation

#### Higher output, lower emissions

The Vitogas 200-F is not only miserly in its space requirements, but also where outlay and energy consumption are concerned.

This boiler is characterised by clean combustion and low energy consumption. Subject to the outside temperature, the boiler water temperature modulates to match the actual heat demand. A definite plus, where budget and the environment are concerned.

#### Bank on Viessmann quality

The heating surfaces of this boiler are made from proven special cast iron and the dimensions have been chosen to provide the lowest possible load on the heating surfaces, even when temperatures fluctuate, so you can enjoy your new gas boiler for longer. This way,

you benefit from high operational reliability and a long service life.

#### Supplied assembled or in sections

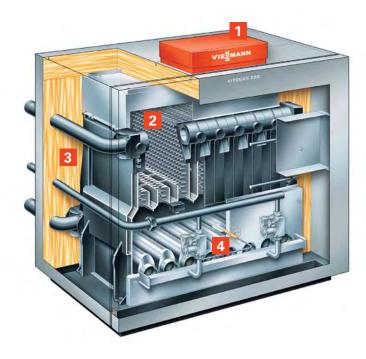
Subject to the available space, the Vitogas 200-F for sizes 72 to 144 kW can be supplied either with a fully assembled body or in individual sections. This option is particularly valuable when modernising existing systems in older buildings, where a new heating centre needs to be transported through narrow stairwells and narrow passages.

#### Convenient and powerful control units

An economical and safe operation of your heating system is ensured by the digital Vitotronic control system with communication capability.

The integral diagnostic system and the programming unit with plain text user prompts and backlit display make for an exceptionally convenient operation. External appliances and devices are connected easily via system plugs.

Standardised LON for complete integration into building management systems. Remote monitoring anytime via Internet TeleControl with Vitocom and Vitodata as option.

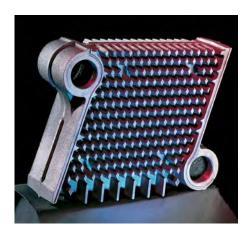


#### Vitogas 200-F

- Vitotronic control unit
- Heating surface made from special cast iron with lamellar graphite
- 3 Highly effective thermal insulation
- 4 Atmospheric premix burner



Vitogas 200-F, 72 to 144 kW



Heating surface made from special cast iron with lamellar graphite

#### Take advantage of these benefits

- High operational reliability and a long service life because of heating surfaces made from special cast iron with lamellar graphite and low heating surface load
- Clean combustion through atmospheric premix burner
- Seasonal efficiency [to DIN] up to 84 % (H<sub>s</sub>) / 93 % (H<sub>i</sub>)
- Highly reliable and gentle low-noise ignition through intermittent ignition system
- Boiler body available fully assembled as block or in separate cast sections

For specification see page 31

# Gas condensing and low temperature boilers

### Specification



### Gas condensing boiler ${\bf VITOCROSSAL~300}$ , type CM3

Page 24

				_	
Rated output at 50/30 °C		kW	29-87	38–115	47–142
Rated output at 80/60 °C		kW	27-80	35–105	43-130
Dimensions (total)	Length Width Height	mm mm mm	1025 690 1865	1025 690 1865	1025 690 1865
<b>Weight</b> (incl. thermal insulation, burner and boiler control unit)		kg	253	258	26
Boiler water content		I	116	113	110



### Gas condensing boiler **VITOCROSSAL 300**, type CT3

Page 24

Rated output at 50/30 °C		kW	187	248	314	408	508	635
Boiler water content		1				270	296	330
<b>Weight</b> (incl. thermal insulation, burner and boiler control unit)		kg				601	658	705
	Height	mm				1959	2009	2032
Dimensions (total)	Width	mm				1012	1012	1012
	Length	mm				1840	1915	1995
Rated output at 80/60 °C		kW				170	225	285
Rated output at 50/30 °C		kW				187	248	314

Boiler water content		I	270	296	330	490	533	570
<b>Weight</b> (incl. thermal insulation and boiler control unit)		kg	557	613	660	890	936	1053
	Height	mm	1959	2009	2032	2290	2290	2290
Dimensions*	Width	mm	1012	1012	1012			1128
	Length	mm	1636	1714	1795	1871	1949	2105
Rated output at 80/60 °C		kW	170	225	285	370	460	575

<sup>\*)</sup> Details excluding burner and hood



### Gas condensing boiler **VITOCROSSAL 300**, type CR3

Page 25

Boiler water content		I	1050	1190
<b>Weight</b> (incl. thermal insulation, burner and boiler control unit)		kg	1367	1467
Dimensions (total)	Length Width Height	mm mm	2653 1160 1792	
Rated output at 80/60 °C	Lanada	kW	720	895
Rated output at 50/30 °C		kW	787	978











### Gas condensing boiler $VITOCROSSAL\ 200$ , type CM2

Page 26

Rated output at 50/30 °C		kW	87	115	142	186	246	311
Rated output at 80/60 °C		kW	80	105	130	170	225	285
Dimensions (total)	Length Width Height	mm mm mm	1760 815 1350	1760 815 1350	1760 815 1350	1790 915 1450	1790 915 1450	1790 915 1450
Weight (incl. thermal insulation, burner and boiler control unit)		kg	270	280	285	330	345	360
Boiler water content			229	225	221	306	292	279



### Gas condensing boiler **VITOCROSSAL 200**, type CT2

Page 27

Rated output at 50/30 °C		kW	135-404	168-503	209-628
Rated output at 80/60 °C		kW	123-370	153-460	192-575
Dimensions (total)	Length Width Height	mm mm mm	1820 1200 1985	1900 1200 1985	2055 1200 1985
Weight (incl. thermal insulation, burner and boiler control unit)		kg	736	790	928
Boiler water content		I	260	324	405



### Low temperature gas boiler **VITOGAS 200-F**

Page 28

Rated output		kW	72	84	96	108	120	132	144
Dimensions (total)	Length Width Height	mm mm mm	1007 1010 1050	1007 1120 1050	1057 1220 1050	1057 1330 1050			1057 1640 1050
<b>Weight</b> (incl. thermal insulation, burner and boiler control unit)		kg	388	435	483	533	585	631	679
Boiler water content		1	37.6	43.0	48.3	53.6	59.0	64.3	69.6

Industrial/ commercial boilers Hot water boilers Large steel hot water boilers 0.5 to 20 MW











### VITOMAX

System solutions for economical hot water generation.

The energy-efficient and clean provision of heat, as well as high operational safety and reliability, are essential requirements for central heating systems in large buildings and industrial plants. This requires competent consultation, a comprehensive range of services and heat generators systems, the characteristics of which should permit economical and heat generation, now and in future.

The design and equipment of our large Vitomax boilers offer optimum pre-requisites to meet individual customer requirements in a broad range of applications. Many design details of the Vitomax boilers and the experience gained over many years of building industrial boilers ensure their superior quality and provide customers with high operational reliability and ensure a long service life. The comprehensive product range from Viessmann includes hot water boilers up to 20 MW.

Viessmann commercial and industrial boilers are the product of perfectly coordinated system technology, that includes:

- Control and monitoring systems
- Measuring and control equipment
- Pumps and valves
- Combustion systems with fuel supply
- Pressure maintaining systems
- Water treatment
- Pipeline systems and flue gas systems



#### Vitomax 300-LT

This boiler is characterised by high standard efficiency and low emissions as well as a high serviceability.



#### Vitomax 200-LW

A low pressure hot water oil/gas boiler for permissible flow temperatures up to 110/120 °C.



#### Vitomax 200-WS

This low pressure hot water oil/gas boiler was specifically developed for the demands of commercial nurseries.



#### Vitomax 200-HW

A typical boiler for use in district heating systems and industrial plants.



#### Vitomax 100-LW

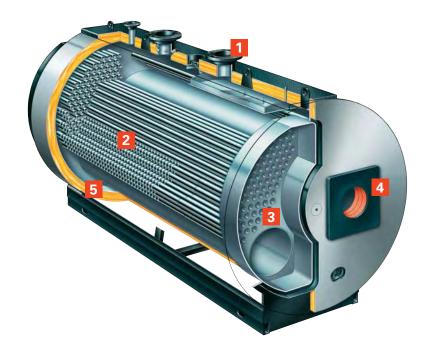
Low pressure hot water oil/gas boiler for permissible flow temperatures up to 110 °C with reversing three-pass combustion chamber.

#### Sets new standards: Vitomax 300-LT

The Vitomax 300-LT sets a new standard in this output range: as a low temperature three-pass boiler with multi-layered convection heating surfaces made from Duplex pipes; with low combustion chamber load. This boiler is characterised by high standard efficiency and low emissions, as well as high serviceability.

One typical application would be heating an apartment block where the system is operated in modulating mode, subject to outside temperature.

Duplex pipe with multi-layered convection heating surface for high operational reliability and a long service life



#### Finely honed technology

This boiler requires no minimum heating water flow rate – wide water galleries and large water content provide excellent natural circulation and a safe heat transfer. This simplifies the hydraulic boiler connections.

No additional intermediate flow piece is required. All necessary connections for a safety temperature of 110 °C are already fitted to the boiler.

Further characteristics of this finely honed boiler technology are the low pressure drop on the hot gas side as a result of convection heating surfaces with large hot gas pipes; low radiation losses through a 120 mm thick compound thermal insulation and the water-cooled front and rear reversing chambers.

#### Vitomax 300 LT

- Boiler with load-bearing cover
- Duplex pipe with multi-layer convection heating surface.
- 3 Water-cooled front hot gas reversing chamber
- 4 Large flame tube for clean combustion
- 5 Wide water galleries for good natural circulation and low thermal load



Vitomax 300-LT, low temperature hot water boiler

#### Take advantage of these benefits

- Seasonal efficiency [to DIN]: 96 % (H<sub>i</sub>)
- Standard efficiency improved by up to 10 % due to condensing technology with stainless steel flue gas/water heat exchanger Vitotrans 300
- Low energy consumption through modulating boiler water temperature
- Low minimum return temperature of 38 °C when using fuel oil and 45 °C when using gas
- High level of serviceability through large cleaning door
- Load-bearing cover on top of the boiler as part of the standard delivery this simplifies installation and maintenance and protects the thermal insulation against accidental damage
- Economical and safe operation of heating systems through the digital Vitotronic control system with communication capability

For specification see page 40

#### Vitomax 200-LW

The Vitomax 200-LW is a hot water boiler for permissible flow temperatures up to 120 °C, a permissible operating pressure of 6, 10 and 16 bar and a rated output from 2.3 to 20 MW.

### For commercial nurseries: Vitomax 200-WS

The Vitomax 200-WS as three-pass boiler with low combustion chamber load (< 1.0 MW/m³) was developed specifically for commercial nurseries. This hot water boiler operates in compliance with TRD 702 for a permissible flow temperature up to 110 °C and a maximum operating pressure of 3.0 bar. With a boiler efficiency of 94 %, this boiler is both economical and efficient.

The additional circulation line in the lower boiler section is designed for the internal circulation of the boiler water providing optimum heat distribution inside the boiler.

All connections required for facilitating a safety temperature of 110 °C are already provided on both boilers. No additional intermediate flow piece is required.

### Easy to service and with high load capacity

Exceptional operational reliability and a long service life mark out the Vitomax 200-WS. These are assured through wide water galleries and a large water content with excellent natural circulation for a reliable heat transfer. The additional circulation pipe in the

lower boiler area (shunt pipe) is designed for the internal circulation of the boiler water providing an optimum heat distribution inside the boiler.

In continuous operation in commercial nurseries, this hot water boiler scores highly through its easy serviceability on account of the water-cooled reversing chambers without lining.

Finally, the large cleaning door contributes to low maintenance costs. The load-bearing cover on top of the boiler is part of the standard delivery; it simplifies installation and maintenance and protects the thermal insulation against accidental damage.

#### Vitomax 200-HW

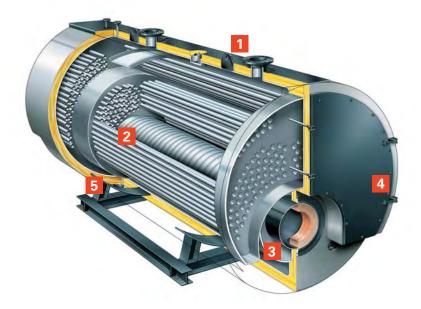
The Vitomax 200-HW is a high pressure oil/gas hot water boiler for permissible flow temperatures up to 205 °C and permissible operating pressures of 6 to 25 bar – a typical boiler for use in district heating networks and industrial operations.

#### Reliable technology

No minimum heating water flow rate is required for the Vitomax. Wide water galleries and large water content provide excellent natural circulation and reliable heat transfer – this makes the hydraulic connection easier. Finally, the Vitomax features a low pressure drop on the hot gas side through convection heating surfaces with large hot gas pipes.

### Quick commissioning through pre-assembled containerised systems

Time is money – particularly for industrial and commercial enterprises, where new central heating systems often have to be operational



#### Vitomax 200

- Boiler with load-bearing cover
- Duplex pipe with multi-layer convection heating surface
- Water-cooled burner entry for low nitrogen oxide emissions
- Large and light cleaning doors
- Wide water galleries for good natural circulation and low thermal load



Vitomax 200-HW

in the shortest possible time, so that heat for production can be supplied on time. For speedy installation and commissioning, Viessmann now also offers complete Vitomax hot water systems as pre-assembled container solutions that are compact and easy to transport.

# Saving time during installation

Alongside the Vitomax boilers, systems of similar magnitude are comprised of a range of further essential components, such as facilities to analyse and treat the boiler water, to distribute heat, pressure maintaining systems and a control centre. The various assemblies are each precisely tailored to the customer's specific requirements.

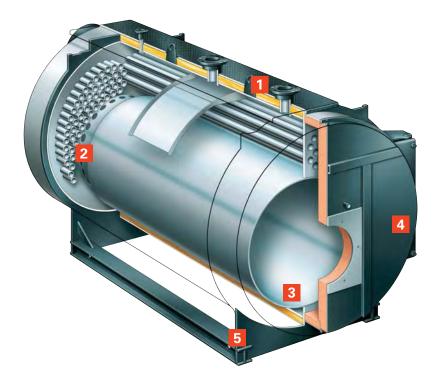
# Take advantage of these benefits

- Clean combustion with low nitrogen oxide emissions
- No minimum heating water flow rate required wide water galleries and large water content provide excellent natural circulation and a reliable heat transfer – simplified hydraulic connection
- No additional intermediate flow piece required. All necessary connections for a safety temperature of 110 °C are already fitted to the boiler
- Low pressure drop on the hot gas side through convection heating surfaces with large hot gas pipes
- Low radiation losses through thick composite thermal insulation
- The Vitocontrol control panel enables the regulation of all boiler-related control equipment
- Approval in accordance with the European Pressure Equipment Directive 97/23/EC or the Gas Appliances Directive 90/396/EEC

For the specification, see pages 40/41



Vitomax 100-LW, Low pressure hot water boiler



### Well insulated: Vitomax 100-LW

The Vitomax 100-LW is a hot water boiler for permissible flow temperatures up to 110 °C and for a constant temperature operation. The permissible operating pressure spans 6 to 10 bar; the rated output lies between 0.65 and 6 MW. This boiler stands out through its robust design.

### Benefits for installation and maintenance

The load-bearing cover at the top of the boiler is part of the standard delivery. It makes installation and maintenance easier and protects the thermal insulation against damage.

A large and light inspection door with hinge on the left or right makes cleaning the boiler easier.

### Vitomax 100-LW system pack

Any system is only as good as its components. That principle motivates Viessmann during the selection of the available system components. Apart from the demand for the highest quality and flexibility, ensuring a perfect match amongst individual components is of vital importance.

The system pack Vitomax 100-LW (type M148) meets these requirements fully. It stands out through a uniform appearance in the Viessmann design.

Ordering the system with only one part number could not be easier and can be expanded easily with matching options. These include, for example, the heat exchanger, flue gas damper and flue silencer. Finally, the dimensions of this system pack are tailored to road transport requirements.

# Vitomax 100-LW

- Boiler with load-bearing cover
- Wide water galleries for good natural circulation and low thermal load
- 3 Large reversing combustion chamber
- 4 Light boiler door for hinging on the left or right
- 5 Solid base frame with longitudinal supports



Vitomax 100-LW, type M148



Burner in the Viessmann design (made by Elco) at the Vitomax 100-LW

# Take advantage of these benefits

- Economical fuel consumption boiler efficiency: 91.5 %
- Boiler with reversing combustion chamber and low combustion chamber loading (≤ 1.2 MW/m³) clean combustion with low nitrogen oxide emissions
- No minimum heating water flow rate required wide water galleries and large water content provide excellent natural circulation and a reliable heat transfer – simplified hydraulic connection
- No additional intermediate flow piece required. All necessary connections for a safety temperature of 110 °C are already fitted to the boiler
- Low pressure drop on the hot gas side through convection heating surfaces with large hot gas pipes
- High level of serviceability through water-cooled rear reversing chamber without lining plus large cleaning door
- The Vitocontrol control panel enables the regulation of all boiler-related control equipment
- Approval in accordance with the European Pressure Equipment Directive 97/23/
   EC or the Gas Appliances Directive 90/396/EEC

For specification see page 41



# Hot water boiler VITOMAX 300-LT

Page 34

Boiler type M343		Size	1	2	3	4	5	6	7
Rated output		MW	1.86	2.30	2.90	3.50	4.10	4.70	5.90
Dimensions (total)	Length Width Height	m m m	3.9 2.1 2.4	4.1 2.2 2.5	4.4 2.3 2.6	4.6 2.4 2.7	4.9 2.5 2.8	5.1 2.6 2.9	5.6 2.8 3.1
Weight incl. thermal insulation		t	5.3	6.3	7.3	8.2	9.6	10.6	13.3
Boiler water content		m³	5.0	5.5	6.4	8.2	9.3	10.5	13.0



# Hot water boiler VITOMAX 200-LW

Page 36

Boiler type M62		Size		1	2	3	4	5
Rated output		MW		2.3	2.8	3.5	4.5	6.0
Dimensions	Length	m		4.2	4.5	4.9	5.3	5.9
(total)	Width	m		4.2 4.5 4.9 5. 2.0 2.0 2.2 2. 2.3 2.3 2.5 2. 4.9 5.6 6.6 8. 5.6 6.4 7.6 9. 6.7 7.6 9.1 11.	2.3	2.4		
(total)	Height	m		2.3	2.3	2.2 2.3 2.5 2.5 6 6.6 8.0 7.6 9.2	2.8	
Weight incl. thermal insula	tion							
permissible operating press	sure: 6 bar	t		4.9	5.6	6.6	8.0	9.8
permissible operating press	sure: 10 bar	t		5.6	6.4	7.6	9.2	11.6
permissible operating press	sure: 16 bar	t		6.7	7.6	9.1	11.0	14.0
Boiler water content		m³		4.9	5.6	7.0	8.7	10.5
Poilor type M64		Cizo	1	2	2	1		6

Boiler type M64		Size	1	2	3	4	5	6
Rated output		MW	8.0	10.0	12.0	14.2	16.5	20.0
Dimensions (total)	Length Width Height	m m m	6.6 2.7 3.1	7.1 2.9 3.3	7.7 3.0 3.5	8.2 3.3 3.7	8.7 3.5 4.0	9.5 3.7 4.2
Weight incl. thermal insulatio permissible operating pressur permissible operating pressur permissible operating pressur	e: 6 bar e: 10 bar	t t t	15.1 17.7 20.5	19.2 22.7 26.0	22.8 24.8 30.2		39.8	40.1 48.0 56.3
Boiler water content		m³	15.3	18.7	22.2	26.6	33.8	39.8



# Hot water boiler VITOMAX 200-WS

Page 36

Boiler type M250		Size	1	2	3	4	5	6	7	8	9	А
Rated output		MW	1.75	2.33	2.91	3.49	4.65	5.82	6.98	8.14	9.30	11.63
Dimensions (total)	Length Width Height	m m m	4.6 2.0 2.4	4.6 2.2 2.6	4.6 2.4 2.8	5.4 2.5 2.9	5.6 2.7 3.1	6.1 2.9 3.3	6.3 3.1 3.5	7.1 3.2 3.6	7.2 3.3 3.7	7.3 3.7 4.1
Weight incl. thermal insulation		t	5.1	5.7	6.8	8.6	10.7	12.5	16.4	18.9	22.0	27.2
Boiler water content		m³	6.1	7.6	8.7	11.1	14.0	15.9	18.7	22.5	25.5	31.4













# Hot water boiler VITOMAX 200-HW

Page 36

Boiler type M236		Size	1	2	3	4	5	6	7	8
Combustion output		MW	0.52	0.67	0.85	1.04	1.30	1.70	2.16	2.84
Dimensions	Length	m	2.7	2.9	3.2	3.2	3.4	3.7	4.0	4.4
(total)	Width Height	m m	1.6 1.8	1.6 1.9	1.7 2.0	1.8 2.1	1.9 2.1	2.0	2.1 2.4	2.3
Weight incl. thermal insulation										
permissible operating pressure: 6 bar		t	2.1	2.3	2.6	3.0	3.5	4.3	5.3	6.9
permissible operating pressure: 8 bar		t	2.2	2.4	2.7	3.5	3.7	5.0	5.5	7.0
permissible operating pressure: 10 ba	ar	t	2.3	2.5	3.0	3.7	3.9	5.2	6.2	7.5
permissible operating pressure: 13 ba	ar	t	2.4	2.6	3.2	3.8	4.5	5.4	6.5	8.5
permissible operating pressure: 16 ba	ar	t	2.7	2.8	3.5	4.1	4.9	5.9	7.2	9.0
permissible operating pressure: 18 ba	ar	t	3.0	3.2	3.7	4.4	5.1	6.2	7.5	9.0
permissible operating pressure: 20 ba	ar	t	3.4	3.6	4.0	5.0	6.0	7.0	8.0	
permissible operating pressure: 22 ba	ar	t	3.8	4.0	4.4	5.5	6.5	7.5		
permissible operating pressure: 25 ba	ar	t	4.2	4.5	5.0	6.0	7.0			
Boiler water content		m³	1.7	2.0	2.5	2.9	3.4	4.6	5.5	7.3

Boiler type M238		Size	1	2	3	4	5	6	7	8
Combustion output										
with natural gas		MW	4.00	5.10	6.80	9.05	11.30	13.55	15.75	18.20
for fuel oil EL		MW	4.00	5.10	6.80	8.90	9.80	11.00	12.80	14.00
Dimensions	Length	m	5.2	5.7	6.4	7.2	7.7	8.3	8.8	9.3
	Width	m	2.6	2.7	2.8	3.1	3.3	3.4	3.6	3.8
(total)	Height	m	2.9	3.1	3.2	3.5	3.6	3.8	4.0	4.2
Weight incl. thermal insulation										
permissible operating pressure: 6 bar		t	9.1	11.1	14.0	19.1	22.8	28.1	32.0	38.0
permissible operating pressure: 8 bar		t	10.2	12.3	15.6	21.2	25.3	31.3	35.6	42.2
permissible operating pressure: 10 bar		t	11.2	13.5	17.1	23.3	27.9	34.4	39.2	46.4
permissible operating pressure: 13 ba	ar	t	12.2	14.8	18.7	25.4	30.4	37.5	42.7	50.6
permissible operating pressure: 16 ba	ar	t	13.2	16.0	20.2	27.5	32.9	40.6	46.3	54.9
permissible operating pressure: 18 ba	ar	t	14.2	17.2	21.8	29.7	35.5	43.8	49.8	59.1
permissible operating pressure: 20 ba	ar	t	15.2	18.5	23.4	31.8	38.0	46.9	53.4	
permissible operating pressure: 22 ba	ar	t	16.2	19.7	24.9	33.9	40.5	50.0		
permissible operating pressure: 25 ba	ar	t	17.3	20.9	26.5	36.0				
Boiler water content		m³	10.5	12.8	16.0	22.0	26.0	30.0	35.0	40.0



# Hot water boiler VITOMAX 100-LW

Page 38

Boiler type M148		Size	1	2	3	4	5
Rated output		MW	0.65	0.85	1.1	1.4	1.8
Dimensions (total)	Length Width Height	m m m	2.3 1.4 1.65	2.5 1.5 1.6	2.7 1.6 1.75	2.9 1.7 1.8	3.1 1.8 1.95
<b>Weight</b> incl. thermal insulation permissible operating pressur permissible operating pressur	e: 6 bar	t t	1.5 1.7	1.8 2.0	2.1 2.4	2.6 3.0	3.2 3.8
Boiler water content		m³	1.1	1.3	1.5	1.8	2.2

Boiler type M148		Size	6	7	8	9	А	В
Rated output		MW	2.3	2.9	3.5	4.2	5.0	6.0
Dimensions	Length	m	3.4	3.6	3.9	4.4	4.5	4.9
(total)	Width	m	1.9	2.0	2.1	2.3	2.4	2.5
(total)	Height m 2.1 2.2 2.3 2.4	2.5	2.6					
Weight incl. thermal insulation								
permissible operating pressure	: 6 bar	t	3.7	4.3	5.3	6.4	7.3	8.6
permissible operating pressure	: 10 bar	t	4.4	5.3	6.2	7.8	8.9	10.4
Boiler water content		m³	2.3	2.9	3.4	4.5	4.9	5.6



Downstream Vitotrans heat exchanger fitted to a Vitomax boiler

# Viessmann system technology ensures the highest operational reliability and efficiency

All components for a highly capable heating system are supplied from a single source – Viessmann. They are all perfectly matched to each other.

Today, medium as well as commercial and industrial boiler technology demands not only the most advanced technology, reliability, system-specific solutions, optimum adjustments and environmental responsibility, but also many services around the boiler operation.

Viessmann system design and accessories ensure that everything matches perfectly.

All of our heating technology components ensure the smooth operation of the entire heating system – from boiler, via burner, control unit and DHW cylinder, right down to the connections and radiators. Matching system solutions ensure the highest possible operational reliability with optimised efficiency for any heating system.







# **DHW** cylinders

The Vitocell range of DHW cylinders is perfectly matched to our heat sources. This is an advantage during installation, although benefits also extend to heating and DHW convenience. The wide range of DHW and buffer cylinders enables Viessmann to meet every demand and aspiration for convenience in DHW heating and central heating backup.

# Condensing technology for medium and industrial/commercial boilers

The Vitotrans 300 heat exchanger offers the option of being able to utilise the economic benefits of condensing technology, even with medium and industrial/commercial boilers.

# Control technology

All Viessmann boilers are regulated by a Vitotronic - a digital control system with communication capability. This means that the entire range of boilers utilises many standard components, identical installation steps and only a few common spare parts. This results in considerably easier installation, operation, maintenance and service.

# Data communication TeleControl, service, building automation

Whether holiday home or large residential complex - the Viessmann TeleControl range offers intelligent solutions for data communication with heating systems and building services. The Vitohome is a wirelessbased home automation system that offers greater convenience and also assists in saving energy.

# System-integrated accessories

Vitoset makes the entire performance potential offered by innovative heating technology accessible, resulting in the perfect synergy between all integrated system components.

### Solar thermal and photovoltaic collectors

Each boiler can be operated in conjunction with a solar thermal system, thereby saving valuable energy. For commercial applications, Viessmann offers suitable systems for harvesting the free heat and power from solar energy.



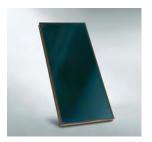
DHW cylinder



Vitotrans heat exchanger



Perfect control



Solar thermal systems



# **VITOTRANS 300**

Utilising condensing technology with medium and industrial/commercial boilers through downstream installation of heat exchangers promotes lower operating costs.

Rising fuel costs are of particular concern to users of medium and industrial boiler systems. The utilisation of condensing technology has a particularly high impact on the operating costs of medium and industrial boiler systems. Energy-conscious condensing technology has, therefore, increased in significance.

Separate flue gas/water heat exchangers are used for larger systems or when retrofitting existing systems. There, flue gases are further cooled so that water vapour condenses. The yielded latent condensation heat and the low flue gas temperatures provide a significant increase in efficiency.

# Vitotrans 300

The Vitotrans 300 is a flue gas/water heat exchanger for the utilisation of condensing technology with boilers from 80 to 6600 kW. With downstream installation this can raise the seasonal efficiency of the boiler by up to 12 % for natural gas and up to 7 % for fuel oil.

## Take advantage of these benefits

- High operational reliability and a long service life due to corrosion-resistant stainless steel. Stainless steel grade 1.4571 is suitable for gas operation and short-term use with fuel oil EL; stainless steel grade 1.4539 is suitable for continuous operation with fuel oil EL
- Compact design space-saving for installation immediately behind the boiler
- Easy hydraulic connection either the entire flow rate or, to optimise the utilisation of condensing technology, a part of the water volume may be routed through the Vitotrans 300
- Vitotrans 300 flue gas/water heat exchanger with
  - Inox-Crossal heating surface for boilers from 80 to 1750 kW
  - Inox-Tubal heating surface for boilers from 1860 to 6600 kW
- Vertical Inox-Crossal and Inox-Tubal heating surfaces for high operational reliability and a long service life
  - Vertically arranged hot gas flues let condensate drain easily downwards and out. This prevents condensate concentrations through re-evaporation
  - Improved self-cleaning effect through smooth stainless steel surface
  - Highly effective heat transfer and high condensation rate
- Neutralising systems matched to the Vitotrans 300 flue gas/water heat exchangers





# Vitotrans 300

- Large flue gas inlet
- High grade thermal insulation
- Flue outlet
- 4 Sheet steel casing in Vitosilver
- Inox-Crossal heating surface



Vacuum tube collectors can be installed anywhere, and in new build also make for an attractive architectural feature.

# Solar thermal – free solar energy

All medium and industrial/commercial boilers can be combined with suitable solar technology. In such cases, the free solar energy provides the DHW heating.

A new heating system and a solar thermal system simply go hand in hand. There are good reasons for this. In the summer, the majority of the energy demand for DHW heating can be covered by solar collectors. Subject to system sizing, the system can also provide central heating backup.

Calculated over the year, 60 % of energy can be saved on DHW heating alone. After all, solar energy is free, and daylight is converted into heat by the collector even when the sun is not shining directly onto the roof. Particularly on commercial buildings, the wide expanse of flat roofs offers an ideal base for the installation of collector arrays.

# The principle is quite simple

Of course, the utilisation of solar energy requires innovative technology and lots of experience: Solar thermal systems "harvest" solar energy in the flat-plate or tube collectors. In these, a heat transfer medium is heated by the insolation and routed into a DHW cylinder. There, the heat is transferred to the potable water to be heated via internal









indirect coils, alternatively to the heating circuit via heat exchangers. Thereafter, the cooled liquid is returned to the collector, and the cycle begins again. If the insolation is insufficient, e.g. in winter, the boiler provides reheating.

The Vitosol range offers solar collectors for every aspiration and every budget. Installation on the roof or wall opens up a variety of design options.

# Flat-plate and tube collectors

The Vitosol 200-F flat-plate collector stands out because of its high quality, lasting operational reliability and high efficiency. With its extremely translucent anti-reflex glass and highly selectively coated copper absorber, the high performance Vitosol 300-F flat-plate collector utilises the intensive solar radiation particularly efficiently.

The Vitosol 200-T vacuum tube collector is characterised by its particularly effective thermal insulation and high efficiency resulting from its Sol-titanium coating. It can be installed anywhere.

The Vitosol 300-T meets the highest demands. This top quality, high-performance collector is designed around the heat pipe principle.

# Generate your own power with Vitovolt

The Vitovolt 200 and Vitovolt 100 photovoltaic modules generate electrical energy right in the solar cell, which is fed straight into the public grid via an inverter.

# Benefit from public subsidies

Your Viessmann trade partner is well-informed about current subsidy programmes and will give you the most important contact details to obtain information and application forms.

Or simply take a look on the internet: www.viessmann.de/foerderprogramme



The Vitosol 200-F flat-plate collector features frost and hailproof safety glass as well as corrosion-proof components made from steel and aluminium. The frames are available on request in any RAL colour.



The Vitosol 200-T and Vitosol 300-T vacuum tube collectors are marked out by their superior reliability and long service



Vitovolt photovoltaic modules from Viessmann also provide a high yield of power generation in partially shaded areas.





Outstanding quality you can rely on. More information at www.test.de



The Vitocell range from Viessmann offers the right DHW cylinder for every demand.

# DHW convenience for every demand

With the Vitocell DHW cylinders, Viessmann offers the convenient solution for the supply of domestic hot water.

The demand for hot water is completely different in every household. One factor is the number of draw-off points, and another is the use of hot water. For example, in hotels or large residential complexes, particularly in the morning plenty of hot water for showers needs to be available.

After all, the DHW cylinder should also provide sufficient water if hot water is drawn from different points of the building simultaneously.

The Vitocell DHW cylinders fulfil these requirements in every respect and can also meet every aspiration where equipment levels are concerned. In all instances, the installation of a solar thermal system is recommended to save energy and heat the water without cost.











# The right DHW cylinder for every demand

The Vitocell range of cylinders meet all requirements for a suitable DHW cylinder. For commercial applications, floorstanding DHW cylinders are the first choice.

### Hygienic DHW provision

The quality of the inner surface of the DHW cylinder is crucial to providing DHW hygienically. For this reason, Viessmann relies on two high quality materials: Ceraprotect enamel coating for safe, lasting protection against corrosion for the Vitocell 100 range, and stainless steel for the Vitocell 300 range for the highest of hygiene standards.

The indirect coils inside Vitocell DHW cylinders reach right down to the cylinder floor. This enables them to heat the entire water content, making them very economical.

### Vitocell 300 made of stainless steel

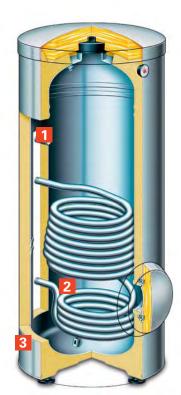
Vitocell 300 DHW cylinders made from corrosion-resistant stainless steel meet some of the most stringent hygiene standards. Stainless steel is used for good reason in kitchens, laboratories, hospitals and the food processing industry – because it offers excellent hygiene properties. Its homogeneous surface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

# Vitocell 100 with Ceraprotect enamel coating

Vitocell 100 with Ceraprotect enamel coating meets all requirements for convenient, economic heating of DHW and are amongst the top selling enamelled DHW cylinders. The Ceraprotect enamel coating provides the DHW cylinder with secure and lasting protection against corrosion.

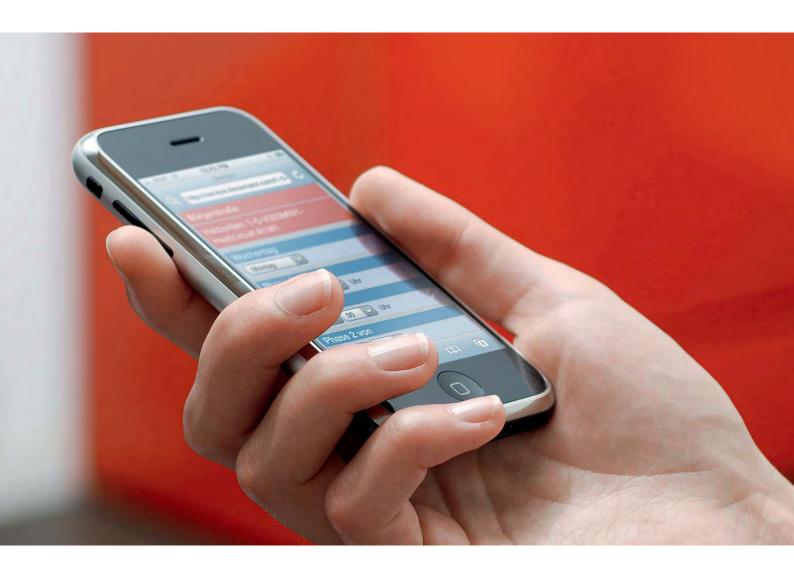
# Take advantage of these benefits

- Vitocell 300 made from stainless steel.
   Capacity: 130 to 500 litres
- Dual mode and multi-mode DHW cylinders for the integration of solar thermal systems for DHW heating and central heating backup
- Vitocell 100 with Ceraprotect enamel coating. Capacity: 80 to 1000 litres
- Internal indirect coils stretching right to the cylinder floor heat up the entire water content
- Low heat losses through highly effective thermal insulation



# Vitocell 300

- Vitocell 300 made from stainless steel. Capacity: 130 to 500 litres
- Indirect coils drawn right into the bottom of the cylinder
- 3 Highly effective thermal insulation



# Everything under control – from wherever you are

Viessmann TeleControl are innovative systems for the data connection between heating systems and all common communication systems – by cable, wireless and in IP networks.

From large residential complexes, utility buildings to holiday homes – the Viessmann TeleControl range offers intelligent solutions for data communication with heating systems and building services that are a perfect match to the different requirements of heating system operators, contractors or heat supply utilities. This applies to all available heating systems: oil or gas condensing boilers, medium and industrial/commercial oil/gas boilers, solar thermal systems as well as pellet boilers and heat pumps.

In addition, technical equipment such as pumps, ventilation systems, air conditioning systems or leak detectors can be checked via the data communication system.

The Viessmann TeleControl operates easily and affordably with Vitocom and Vitodata, utilising an infrastructure that is available practically everywhere, subject to operation via mobile phone, PC or smartphone. This kind of control can be exercised from anywhere in the world.





#### Vitocom 300 with Vitodata 300

The internet data communication Vitocom 300 with Vitodata 300 is ideal for the professional monitoring of larger residential projects or utility buildings. It is designed with heat supply utilities, contractors or municipal services in mind that value a guick and reliable inspection, maintenance and optimisation of the heating operation.

Amongst the many control functions available are the setting of switching times, operating and holiday programs, specifying set values (level/slope), scanning operating states and temperatures, as well as setting codes. In addition, the system can display energy consumption and can be used for billing.

Faults may be issued via SMS, fax or email to the responsible service engineer using the integral service schedule.

#### Vitocom 300 I AN

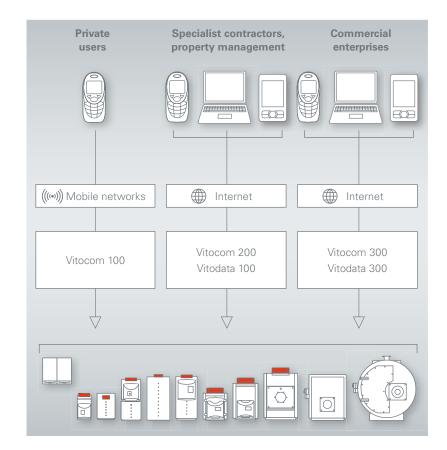
The LAN version of the Vitocom 300 enables data transfer via DSL/Ethernet networks at speeds of up to 100 MB/s. Access via a VPN connection ensures an optimum level of data security.

# Vitocom 200 with Vitodata 100

The Vitocom 200 is an attractively priced solution for private houses and smaller utility buildings, as well as public facilities, such as nurseries and schools. The Vitodata 100 with integral web-based user interface offers ideal conditions for convenient and userfriendly operation. Amongst the many control functions available are the setting of switching times, operating and holiday programs, specifying set values (level/slope), scanning operating states and temperatures.

Messages are sent directly to the responsible contractor by SMS or email. This enables maintenance and service to be carried out efficiently.

### Vitocom 100





TeleControl from Viessmann is the ideal choice for the remote monitoring and control of heating systems - regardless of whether for a detached house, holiday home or a large residential complex.

The Vitocom 100 provides remote monitoring for detached houses and two-family homes or of buildings that are not permanently occupied, such as holiday homes. Ideal for homeowners who want to combine convenience with security. On request, the heating system may also be monitored by a heating contractor.

Messages are sent to the system operator or contractor via SMS



Vitotronic control units, with their well thought-out electronic management system, ensure the economical operation of your heating system.

# Vitotronic – economic energy management for systems of every size

From single boiler to multi-boiler systems with central control panels, Viessmann supplies perfectly matching solutions.

The digital control system, Vitotronic, with communication capability is the electronic management system for the economical and safe operation of heating systems. Exemplary installation, operation and maintenance.

The modular design makes the essential functions of the Vitotronic control units for small boilers also suitable for medium and industrial/commercial boilers. The relevant components are all based on a platform strategy. Some of its common features include: standardised operation and simple

installation, commissioning and maintenance with our Rast-5 connection system, Plug & Work functionality and Optolink laptop interface.

The Vitotronic control unit for medium and industrial/commercial boilers offers sufficient space for clear and tidy wiring. All Vitotronic control units are VDE tested in conjunction with the Viessmann boiler. As an alternative to heating DHW by controlling the DHW cylinder temperature, a primary store system with a three-way valve can also be used.









# Integration into building management systems

Vitotronic 300 is a weather-compensated digital cascade control unit for operating up to four boilers with the Vitotronic 100, incl. the control of two mixer circuits.

Communication within the control system is achieved via a LON. This enables the easy integration into building management systems without an additional interface. Vitotronic 300 can be boiler or wall mounted or be integrated into the Vitocontrol control panel and enables the central operation of the whole system.

# Convenient heating circuit controls

Vitotronic 200 is designed as a weathercompensated digital boiler control unit for single boiler systems with system circuit and burners with stepped or modulating operation. For more than two heating circuits with mixer, a maximum of 32 Vitotronic 200 heating circuit control units can be connected up using the LON communication module.

The Vitotronic 100 is a digital boiler control unit for operating with a constant boiler water temperature in single boiler systems or for the first to fourth boiler in multi-boiler systems (in conjunction with the cascade control unit Vitotronic 300-K).

## Vitocontrol regulating and control system

The Vitocontrol control system is an essential part of the boiler system. The system is programmed and operated via control and display devices built into the control panel door. These are ready programmed for the use in the language of the country of destination.

The control panel is tested in accordance with country-specific standards and regulations and includes the issue of a test report that covers the extent of our supply.



Vitocontrol control panel

## Take advantage of these benefits

- Burner control for gas, oil or multi-fuel combustion
- Pump control: fault changeover, alternate control, cascade control
- Heating circuit control, control of regulating valves and pumps
- Safety functions in accordance with country-specific regulations
- Display of operating and fault messages
- Boiler protection functions
- Boiler control units
- Cascade function for multi-boiler systems
- Remote monitoring, programming of parameters and operation of control units via telephone/internet



# Vitoset – everything from one source

Vitoset is our extensive range of accessories. Yet more evidence of the system expertise offered by Viessmann.

With the Vitoset range, Viessmann offers its trade partners all the components required to equip a property with a heating system. Each Vitoset product meets the highest quality demands. The entire range works perfectly with all other Viessmann products. In brief, this means that with Viessmann, everything fits together and is safely, quickly and easily installed.

# Our system - your benefit

However, our trade partners not only benefit from our high quality standards. Vitoset also lightens the load and saves time and money when ordering or receiving deliveries and services. We offer complete sets, e.g. an oil boiler with matching system components, such as an oil filter, expansion vessel, or fill & drain valve under a single part number.











Everything can be ordered quickly by phone, fax or through the internet, and is always supplied from a single source. Thanks to our dense network of sales offices, merchandise is delivered speedily.

With Vitoset, Viessmann provides a comprehensive range of heating equipment. Everything included - by design. Every one of our trade partners benefits as a result.

# **Fuel storage**

- Fuel oil tanks, 620 to 1500 l
- Fuel oil tank accessories
- Oil filters
- Pellet silos

# Heat generation

- Diaphragm expansion vessel for sealed unvented heating systems, colour Vitosilver, from 25 to 140 litres, also available in pure white (RAL 9010)
- Shut-off valves, safety valves, air-vent
- Small water softening system
- Single and twin wall stainless steel flue gas system

# **DHW** heating

- Drinking water filters
- Diaphragm expansion vessels for DHW installations
- DHW circulation pumps
- Diaphragm safety valves for sealed DHW
- Freshwater module for DHW heating in accordance with the instantaneous water heater principle

### Heat distribution

- Shut-off valves, non-return valves
- Low loss headers
- Heating mixers
- Plate heat exchanger for heat pump systems
- Residential and local heating network transfer stations

### **Heat transfer**

- Universal, flat panel and bathroom radiators
- Radiator accessories
- Underfloor heating system, PE-RT 5-ply safety pipe



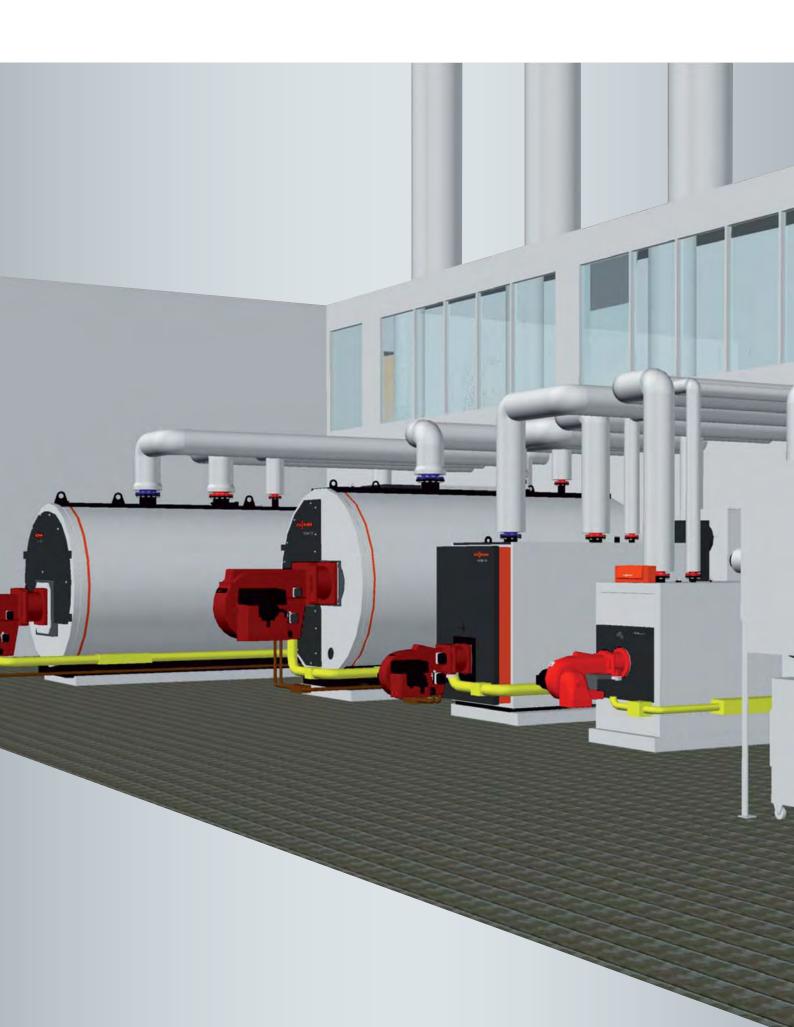
Safe and versatile - Vitoset fuel oil tanks. Tanks with 750 to 1500 litre capacity, available in many different versions to suit your specific requirements



Apartment and local heating network transfer stations.



Fitted connections from the comprehensive Vitoset range save installation time and costs.



# Vitodesk – software competence from one source

Vitodesk is the complete software support package for heating contractors, design engineers and architects. All programs support automatic data exchange.

#### Vitodesk 100

Vitodesk 100 is the free data service from Viessmann. It enables users to select Viessmann products for design/engineering and tendering.

### Vitodesk 200

Vitodesk 200 is tailored to the planning and sizing of smaller and medium-sized building projects. It is divided into three areas, i.e. RES (renewable energy systems), sanitary/heating and air conditioning.

The ESOP 4.0 module, which is part of this software package, is designed for calculations around solar thermal systems. This program is based on the computation module of T-SOL that is recognised by bodies offering subsidies. The weather data sets of numerous European countries are supplied as standard or can be added on at a later date.

### Vitodesk 300

Viessmann developed its own OEM version from the industry standard AutoCAD program. In addition to the main functions of the full version, this software offers many additional assistants that make engineering and presentation even more convenient and efficient.

Complex heating centres can be designed much more efficiently and precisely with this 3-D program than with conventional software tools. The 3-D boiler room engineering program can check in advance whether the system can fit into the existing boiler room with all required components. It means engineering errors can be eliminated during the design phase.

The program assistants not only support the creation of the pipework layout, but also offer tools for the true-to-scale design of distributors and containers. All required sectional depictions and views, plus designations, can be produced on the design and are updated automatically when changes are made.

The product management runs unobtrusively in the background. This enables a detailed output of the parts lists, even including a cutting list. The provision of rendered diagrams enables systems to be clearly and professionally presented, giving a clear advantage prior to orders being placed.

Clever software supports design engineers and trade experts alike in realising their projects.



our trade partners



The new energy centre and the Viessmann Academy in Allendorf

# Partnership with excellent prospects

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

The complete range of innovative and advanced heating equipment that is reliable and of 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 co-operate 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 maintenance 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.













# **Everything from one source**

Viessmann offers everything for solutionfocused cooperation:

- Consultation comprehensive and competent
- Vitoplan engineering software a complete software package for the planning and sizing of heating systems with 3-D boiler room sketching, including presentation and visualisation functions
- Manufacture according to countryspecific requirements with short delivery times
- Equipment safety accessories, burner, control panels, boiler walkways, flue gas/water heat exchangers and water treatment plant
- Training and instructions at the information centre in Berlin
- Delivery and handling with our own vehicle equipped with a hoist, and an expert team
- Commissioning anywhere in the world by technically competent engineers
- Service by qualified technical services
- Heat contracting additional business through attractive services
- Leasing uncomplicated and flexible businesses and local authorities can also lease their Viessmann heating systems
- Responsibility for the environment Viessmann is certified according to the Eco Audit EN ISO 14001 and EMAS. This includes the entire process, from manufacturing to recycling



Delivery to site of a Vitomax boiler



All Viessmann products meet demanding environmental standards and have been EMAS-certified.



Viessmann information centre, Berlin













# Individual solutions with efficient systems

The comprehensive Viessmann product range for all fuel types and application areas offers top technology and sets new standards.

Now that the Viessmann Group includes ESS, Köb, KWT and Mawera amongst its brands, the company covers the complete breadth of powerful heating systems. These include biomass boilers, heat pumps and combined heat and power units (CHP). All systems share the use of renewables that protect finite resources. The CHP can be operated with natural gas as well as with biogas.

For many commercial and industrial sectors, the operation of a biomass power station with heat generation is an obvious choice, for example, in the wood processing industry, in landscape gardening and in the forestry sector. Here, suitable boilers can predominantly cover the base load. In addition, oil or gas boilers can cover peak loads and thereby safeguard a continuously efficient provision as and when required.

ESS CHP units for operation with natural gas or biogas not only generate heat but also power that can be consumed on site or fed into the public grid.

Wood heating systems up to 1250 kW from Köb combust wood of any kind: pellets, sawdust, wood chips and mixed wood. These are particularly suitable for commercial and industrial applications.

Mawera supplies wood combustion systems up to 13,000 kW. Commercial energy suppliers increasingly bank on biomass as fuel. It is obtained from crisis-proof regions and makes a crucial contribution to preserving fossil fuels, not least through sustainability and  $\mathrm{CO}_2$ -neutrality.

Heat pumps from KWT are specifically adapted to each individual case. Subject to the challenges facing the operator, water/water, brine/water or air/water heat pumps can be supplied.



Vitobloc 200 – combined heat and power units from ESS

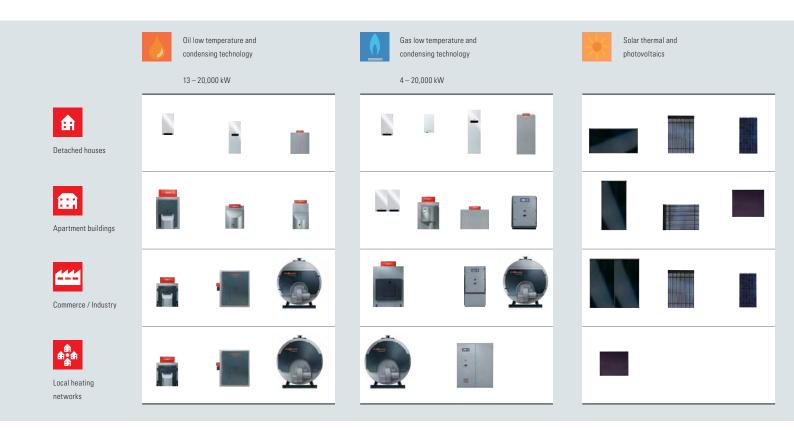


Biomass boiler from Mawera and Köb



Special heat pumps for commercial applications from KWT

# The comprehensive range of products and services from Viessmann



# Individual solutions with efficient systems

# The comprehensive range of products and services from Viessmann

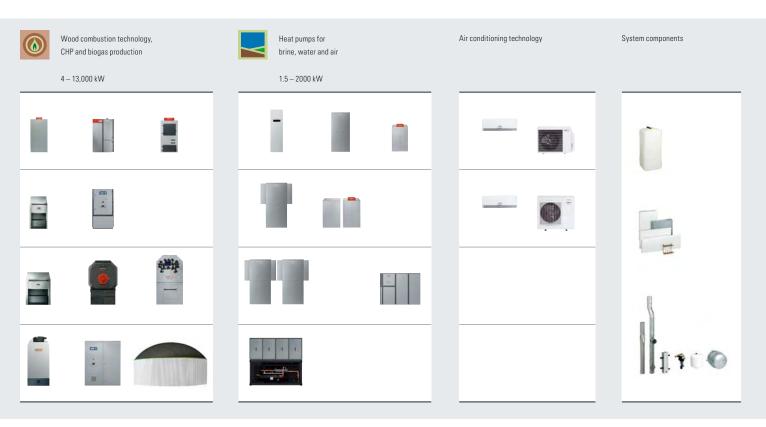
The comprehensive range of products and services from Viessmann offers individual solutions with efficient systems for all applications and all energy sources. As environmental pioneers, the company has, for decades, been supplying particularly efficient and clean heating systems for oil and gas, as well as solar thermal systems along with heat generators for sustainable fuels and heat pumps.

The comprehensive range of products and services from Viessmann offers top technology and sets new benchmarks. With its high energy efficiency, this range helps to save heating costs and is always the right choice where ecology is concerned.

# Individual and efficient

Viessmann offers the right heating system for any demand – wall mounted or floorstanding, in individual combinations – all are futureproof and economical. And whether for detached houses or two-family homes, large residential buildings, commercial/industrial use or for local heating networks; for modernising existing properties or new build – they are always the right choice.





The comprehensive range of products and services from Viessmann: Individual solutions with efficient systems for all energy sources and applications

# Key performers

The Viessmann Group sets the technological pace for the heating industry. This is what the Viessmann name represents, and also what the names of the subsidiaries in the Group represent, as they are founded on the same pioneering spirit and power of innovation.

The company offers the following:

- Condensing technology for oil and gas
- Solar thermal systems
- Heat pumps
- Wood combustion systems
- CHP modules
- Biogas plants
- Services

Viessmann is extremely highly specialised in all these market segments, yet at the same time the company has a crucial advantage over specialist suppliers: Viessmann understands heating technology as a systematic whole and offers unbiased advice on technology and fuel type. This guarantees the best solution for every application.

Viessmann Group



# The comprehensive range of products and services from Viessmann



Detached houses



Apartment buildings



Commerce / Industry



Local heating networks



Oil low temperature and condensing technology 13 – 20,000 kW



Architect's own home, Bad Füssing, Germany



Residential development Zi Wei Garden Xi'an, China



Ameco A380 Hangar Beijing, China



European Parliament, Strasbourg, France



Gas low temperature and condensing technology  $4-20,000 \ \text{kW}$ 



Detached house, Kevelaer, Germany



"Wohnoase" residential park in Regensburg, Germany



Porsche Leipzig, Germany



European Parliament, Brussels, Belgium



Solar thermal and photovoltaics



Heliotrop Freiburg, Germany



HafenCity Hamburg, Germany



City of Tomorrow, Malmö, Sweden



The Palm Jumeirah, Dubai



Wood combustion technology, CHP and biogas production 4 – 13,000 kW



Detached house, Wiesloch, Germany



Hotel Lagorai Cavalese, Italy



Congressional Centre, Brunstad, Norway



Monastery St. Ottilien, Germany



brine, water and air 1.5 – 2,000 kW



Loftcube Regional Garden Show, Neu-Ulm, Germany



Studio flats, Brandenburg, Germany



University library, Bamberg, Germany



Residential estate, Pfäffikon, Switzerland



# Futureproof heating technology for all requirements

Energy consumption worldwide has doubled since 1970 and will triple by 2030. The result: The fossil fuels, oil and gas, are dwindling, energy prices are on the rise and excessive CO<sub>2</sub> emissions continue to affect our environment. Energy efficiency is a must if we want our future to be secure.

In almost every industrial nation, supplying heat to residential and commercial buildings accounts for the largest share of energy consumption – consequently it also offers the greatest savings potential. Advanced efficient heating systems from Viessmann are in use around the world, not only in many private households, but also in numerous major international projects, where they make a sizeable contribution to the efficient use of energy resources.

In these projects, Viessmann again and again faces up to the most varied challenges to supply efficient heating technology by offering innovative solutions – in historical listed buildings as well as in modern industrial complexes or in the large-scale residential and industrial arena.



City of Tomorrow, Malmö, Sweden









# Viessmann – climate of innovation

The Viessmann brand promise concisely expresses all that we hope to achieve. It is our key brand message and, together with our brand label, is an identifying feature throughout the world. "Climate of innovation" is a promise on three levels: It is a commitment to a culture of innovation. It is a promise of high product utilisation and, at the same time, an obligation to protect the environment.

# Comprehensive range of products and services for all fuel types

Viessmann is one of the leading international manufacturers of heating systems and, with its comprehensive range of products and services, offers individual solutions in the shape of efficient systems for all applications and types of fuel. As an environmental pioneer, the company has been supplying particularly efficient and clean heating systems.

## Acting in a sustainable manner

For Viessmann, to take responsibility, means a commitment to act in a sustainable way. This means bringing ecology, economy and social responsibility into harmony with each other, ensuring that current needs are satisfied without limiting the basis for life for the generations to come.

### **Efficiency Plus**

With the sustainability project "Efficiency Plus" Viessmann shows at its Allendorf site, that the political goals set for 2020 with regard to climate and energy can already be achieved today with commercially available technology.

This project demonstrates:

- Environmental protection
- Efficiency with resources
- Securing manufacturing sites for the future

As a result, fossil fuels have been cut by 40 percent and CO<sub>2</sub> emissions reduced by a third.





Viessmann won the German Sustainability Award 2009 for its commitment to climate protection and efficient use of resources.



For the particularly efficient utilisation of energy through the innovative heat recovery centre at the company's main site in Allendorf/Eder, Viessmann was rewarded with the Energy Efficiency Award 2010.

# Viessmann Werke GmbH & Co. KG

# Company details

- Established in: 1917
- Employees: 9000
- Group turnover: €1.7 billion
- Export share: 50 percent
- 16 factories in Germany, France, Canada, Poland, Hungary, Austria, Switzerland
- Sales organisation in 37 countries
- 120 sales offices worldwide
- 3 service providers

# Performance spectrum

- Condensing technology for oil and gas
- Solar thermal systems
- Heat pumps
- Wood combustion systems
- CHP modules
- Biogas plants
- Services



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