Oil/gas boilers and low pressure hot water boilers up to 22 MW
Futureproof and efficient heating technology for all requirements

In industrialised Western nations, heat generation in residential and commercial buildings accounts for the largest proportion of energy consumption – and at the same time offers the greatest savings potential. 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 international projects. There, they make an important contribution to the sustainable protection of finite energy reserves.

In such projects, Viessmann successfully overcomes the most diverse challenges facing advanced heating technology by offering innovative solutions – in historical listed buildings, highly productive industrial complexes and the large scale residential and commercial arena.

Viessmann’s comprehensive product range for commercial applications comprises efficient energy systems for the economic provision of heat, steam, refrigeration and power. All fuel types can be utilised for such systems – gas, oil, biomass and solar energy, as well as heat from the ground, outdoor air or waste heat generated by production processes.

Control technology components, as well as remote monitoring and control, are similarly part of our comprehensive range, as are extensive services ranging from engineering to commissioning and service.
Oil/gas boilers up to 2000 kW

Here, you can find the exact solution to suit your needs in terms of building services, convenience and budgetary constraints.

Gas condensing boilers up to 1400 kW

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

Low pressure hot water boilers up to 22 MW

Energy efficient and clean burning: here, you’ll find system solutions for economical hot water generation.

Low pressure steam boilers up to 2.2 t/h

This section contains more information on Viessmann Vitoplex LS oil/gas low pressure steam boilers.

System technology

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

Attractive services for our trade partners

Find out more about engineering aids and training offers, as well as our customer service and online systems.
Oil/gas condensing boilers
101 to 545 kW
VITORADIAL 300-T

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

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

High efficiency with two-stage heat recovery
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 it 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 types of extra light (EL) fuel oil or natural gas.

Vitoradial 300-T condensing boiler, 101 to 545 kW

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

Triplex pipes for 2.5 times larger heating surface
The multi layered convection heating surfaces of the Vitoradial 300-T comprise telescopic steel pipes pressed together for heat transfer. The inner pipe, surrounded by folded linear fins, provides a heating surface 2.5 times greater than that of smooth pipes. Heat transfer occurs proportionately due to the different gaps between the press points, so the back area of the triplex pipes transfers less heat to the boiler water, as the combustion gases circulating here are no longer quite as hot. This 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 mid-segment boiler systems, such as the Vitoradial 300-T. The efficiency is raised by eight percent to 97 percent (H_J)_0 gross cvj.

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

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

Convenient and highly capable Vitotronic control unit
The Vitotronic control unit with a large colour touchscreen enables quick commissioning using the assistant function; operation is straightforward as well. The boiler can be connected directly to the internet for remote monitoring via the integral LAN interface. The Vitosoft 300 service tool communicates directly via WLAN. Energy consumption can be clearly visualised on the control unit’s energy cockpit.

Vitoradial 300-T
1 Vitotronic control unit with colour touchscreen
2 Third hot gas pass (as multi layered convection heating surface)
3 Hot gas flue (second pass)
4 Wide water galleries
5 Combustion chamber (first pass)
6 Highly effective thermal insulation
7 Vitoflame 100, unit pressure-jet oil burner
8 Inox-Radial heat exchanger
Take advantage of these benefits

- Oil/gas condensing boilers, 101 to 545 kW
- Standard seasonal efficiency [to DIN] for operation with fuel oil: 97% [H₂] [gross cv]
- Inox-Radial heat exchanger for condensing hot gases, matched to the compact boiler
- Complete with heat exchanger pipework and pump, matched to the respective heating output of the boiler
- Long burner runtimes and fewer switching intervals due to large water content protect the environment
- Economical and reliable operation of the heating system is ensured by the digital Vitotronic control unit with communication capability
- Integral Therm-Control start-up system for easy hydraulic connection – no shunt pump or return temperature raising facility required
- No low water indicator required – further cost savings
- Compact design for easy handling and low build height – important in modernisation projects
- Easy to operate Vitotronic control unit with colour touchscreen
- Integral LAN interface for internet communication and integral WLAN for service interface

For specification, see page 18
Low temperature oil/gas boilers
Vitoplex 300/200
Vitorond 200
405 to 2000 kW
The comprehensive range from Viessmann covers every demand for innovative heating technology. Here, you can find the exact solution to suit your needs with regard to building services, convenience and budgetary constraints.

The versatility of the Vitoplex range, which in terms of technology and price is divided into the 300 and 200 categories, ensures that the perfect solution is available for every demand and budget. One thing that all products share is the top quality for which Viessmann is renowned.

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

**Vitoplex 300**
Low temperature oil/gas boiler, three-pass design, 405 to 2000 kW

**Vitoplex 200**
Low temperature oil/gas boiler, three-pass design, 440 to 1950 kW

**Vitorond 200**
Low temperature oil/gas boiler, three-pass design, 440 to 1080 kW
Low temperature oil/gas boilers

Vitoplex 300
405 to 2000 kW

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

Multi-layered convection heating surfaces made from triplex pipes
The multi-layered convection heating surfaces of the Vitoplex 300 comprise telescopic steel pipes pressed into each other for heat transfer. The inner pipe, surrounded by folded linear fins, provides a heating surface 2.5 times greater than that of smooth pipes.

Heat transfer occurs proportionately due to the different gaps between the press points, so the back area of the triplex pipes transfers less heat to the boiler water, as the combustion gases circulating here are no longer quite as hot. This way, the surface temperature remains above the dew point, the formation of condensate is counteracted and corrosion damage is prevented.

Convenient and highly capable Vitotronic control unit
The Vitotronic control unit with a large colour touchscreen enables quick commissioning using the assistant function; operation is straightforward as well. The boiler can be connected directly to the internet for remote monitoring via the integral LAN interface. The Vitosoft 300 service tool communicates directly via WLAN. Energy consumption can be clearly visualised on the control unit’s energy cockpit.

Vitoplex 300
405 to 2000 kW

1. Third hot gas pass (as multi-layered convection heating surface)
2. Hot gas flue (second pass)
3. Wide water galleries
4. Combustion chamber (first pass)
5. Highly effective thermal insulation
Low temperature oil/gas boilers, 405 to 2000 kW
Multi layered convection heating surfaces for high operational reliability and a long service life
Standard seasonal efficiency [to DIN] with fuel oil: 90 % (H₂) [gross cv]
Optional stainless steel flue gas/water heat exchanger for higher standard seasonal efficiency [to DIN], utilising the condensing effect
Three-pass boiler with low combustion chamber loading, resulting in clean combustion with low emissions
The integral Therm-Control start-up system replaces the shunt pump or constant return temperature raising facility, saving installation time and costs
From 620 kW with a walk-on boiler cover for easier installation and maintenance
Easy to operate Vitotronic control unit with colour touchscreen
Integral LAN interface for internet communication and integral WLAN for service interface
Economical and reliable operation of the heating system through the Vitotronic control system with communication capability which, in conjunction with the Vitogate 300 (accessory), enables integration into building management systems

For specification, see page 18
Low temperature oil/gas boilers

Vitoplex 200
440 to 1950 kW

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

**Optimum combustion and low emissions**
Pressure-jet oil/gas burners from ELCO and Weishaupt are already fully adjusted and wired for the full output range. This ensures optimum combustion with low emissions.

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

**Convenient and highly capable Vitotronic control unit**
The Vitotronic control unit with a large colour touchscreen enables quick commissioning using the assistant function; operation is straightforward as well. The boiler can be connected directly to the internet for remote monitoring via the integral LAN interface. The Vitosoft 300 service tool communicates directly via WLAN. Energy consumption can be clearly visualised on the control unit’s energy cockpit.

**A neat fit even when space is tight**
The Vitoplex 200 three-pass boiler is easy to handle and saves space, while the walk-on boiler cover (from 700 kW) facilitates installation and maintenance.

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**Vitoplex 200**
440 to 1950 kW

1. Hot gas flue (third pass)
2. Hot gas flue (second pass – both sides)
3. Combustion chamber (first pass)
4. Highly effective thermal insulation
Low temperature oil/gas boilers, 440 to 1950 kW
Economical and environmentally responsible through modulating boiler water temperature
Standard seasonal efficiency [to DIN] with fuel oil: 89 % (H_s) [gross cv]
Optional stainless steel flue gas/water heat exchanger for higher standard seasonal efficiency [to DIN], utilising the condensing effect
Three-pass boiler with low combustion chamber loading, resulting in clean combustion with low emissions
Wide water galleries and large water content provide good natural circulation and reliable heat transfer
Long burner runtimes and fewer switching intervals due to large water content protect the environment
Compact design for easy transportation to the boiler room – important in modernisation projects
Easy to operate Vitotronic control unit with colour touchscreen
Integral LAN interface for internet communication and integral WLAN for service interface
Economical and reliable operation of the heating system through the Vitotronic control system with communication capability which, in conjunction with the Vitogate 300 (accessory), enables integration into building management systems

For specification, see page 19
Older buildings in particular often have narrow entrances which can make it difficult to transport a new boiler. With the Vitorond 200 sectional cast iron boiler, sections can be brought into the boiler room individually, where they can be easily assembled, in situ, with the aid of a compression tool.

**Eutectoplex heating surface for high operational reliability and a long service life**

The cast sections of the Vitorond 200 boilers are made from special eutectic cast iron with a homogeneous structure. The fine design of the graphite fins and the high level of material purity of the low phosphorous special cast iron increase its elasticity. The material, shape and geometry of the cast sections provide even cooling inside the mould during manufacture. This prevents structural stresses right from the start, resulting in high operational reliability and a long service life.

**Three-pass boiler with low emissions**

At the end of the combustion chamber, the hot gases flow onwards through four hot gas flues arranged symmetrically around the combustion chamber. They then enter the four collectors of the third hot gas flue via the front section. At the back of the boiler, the four cooled hot gas streams are channelled to the chimney via the flue gas connection. The three-pass design reduces the dwell time of the hot gases in the high reaction temperature range. This results in reduced nitrogen oxide emissions.

**Convenient and highly capable Vitotronic control unit**

The Vitotronic control unit with a large colour touchscreen enables quick commissioning using the assistant function; operation is straightforward as well. The boiler can be connected directly to the internet for remote monitoring via the integral LAN interface. The Vitosoft 300 service tool communicates directly via WLAN. Energy consumption can be clearly visualised on the control unit’s energy cockpit.
Take advantage of these benefits

- Low temperature oil/gas boilers, 440 to 1080 kW
- Economical and environmentally responsible through modulating boiler water temperature
- Standard seasonal efficiency [to DIN] with fuel oil: 88 % (H₆) [gross cv]
- Three-pass boiler – for clean combustion with low emissions
- Eutectoplex heating surface for high operational reliability and a long service life – the homogeneous structure of the special eutectic cast iron provides an even heat flux and prevents stress fractures
- Fast and straightforward assembly of individual cast sections due to double groove system and resilient packing cord for permanent hot gas tightness
- Straightforward handling thanks to sectional design and low transport weight of individual sections
- Standard seasonal efficiency [to DIN] improved by up to 12 % due to condensing technology with Vitotrans 300 stainless steel flue gas/water heat exchanger
- Easy to operate Vitotronic control unit with colour touchscreen
- Integral LAN interface for internet communication and integral WLAN for service interface
- Economical and reliable operation of the heating system through the Vitotronic control system with communication capability which, in conjunction with the Vitogate 300 (accessory), enables integration into building management systems

For specification, see page 19
### Vitoradial 300-T, type VR3 oil condensing boiler

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

* Details excluding burner and hood

### Vitoplex 300, type TX3A oil/gas low temperature boiler

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

* Details excluding burner and hood

### Vitoplex 300, type TX3A oil/gas low temperature boiler

| Rated heating output | kW | 405  | 500  | 620  | 780  |
| Dimensions (overall)* |     |      |      |      |      |
| Length                | mm  | 1835 | 2080 | 2350 | 2360 |
| Width (incl. control unit) | mm  | 1040 | 1040 | 1460 | 1460 |
| Height                | mm  | 1625 | 1625 | 1690 | 1690 |
| Weight                | kg  | 1075 | 1295 | 1750 | 1990 |
| Boiler water capacity | litres | 600 | 965 | 900 |

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

* Details excluding burner and hood
### Vitoplex 200, type SX2A oil/gas low temperature boiler

<table>
<thead>
<tr>
<th>Rated heating output (kW)</th>
<th>440</th>
<th>560</th>
<th>700</th>
<th>900</th>
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</thead>
<tbody>
<tr>
<td><strong>Dimensions (overall)</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Length (mm)</td>
<td>1885</td>
<td>2030</td>
<td>2280</td>
<td>2580</td>
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<td>Height (mm)</td>
<td>1625</td>
<td>1625</td>
<td>1690</td>
<td>1690</td>
</tr>
<tr>
<td><strong>Weight</strong> (kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(boiler incl. thermal insulation and boiler control unit)</td>
<td>960</td>
<td>1170</td>
<td>1725</td>
<td>1985</td>
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<tr>
<td><strong>Boiler water capacity</strong></td>
<td>litres</td>
<td>600</td>
<td>635</td>
<td>935</td>
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</table>

* Details excluding burner and hood

### Vitorond 200, type VD2A oil/gas low temperature boiler

<table>
<thead>
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<th>Rated heating output (kW)</th>
<th>1100</th>
<th>1300</th>
<th>1600</th>
<th>1950</th>
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<tbody>
<tr>
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<td></td>
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<td></td>
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<tr>
<td>Length (mm)</td>
<td>2530</td>
<td>2750</td>
<td>3175</td>
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<tr>
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<td>1555</td>
<td>1660</td>
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</tr>
<tr>
<td>Height (mm)</td>
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<td>1920</td>
<td>2140</td>
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<tr>
<td><strong>Weight</strong> (kg)</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>(boiler incl. thermal insulation and boiler control unit)</td>
<td>2255</td>
<td>2485</td>
<td>3180</td>
<td>3760</td>
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<tr>
<td><strong>Boiler water capacity</strong></td>
<td>litres</td>
<td>1525</td>
<td>1690</td>
<td>2510</td>
</tr>
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</table>

* Details excluding burner and hood

### Vitorond 200, type VD2A oil/gas low temperature boiler

<table>
<thead>
<tr>
<th>Rated heating output (kW)</th>
<th>700</th>
<th>780</th>
<th>860</th>
<th>950</th>
<th>1080</th>
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<td><strong>Dimensions (overall)</strong></td>
<td></td>
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<td></td>
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<td>Length (mm)</td>
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<td>2530</td>
<td>2660</td>
<td>2790</td>
</tr>
<tr>
<td>Width (mm)</td>
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<td>1090</td>
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<td>1090</td>
</tr>
<tr>
<td>Height (mm)</td>
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<tr>
<td><strong>Weight</strong> (kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(boiler incl. thermal insulation and boiler control unit)</td>
<td>2740</td>
<td>2910</td>
<td>3070</td>
<td>3220</td>
<td>3380</td>
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<tr>
<td><strong>Boiler water capacity</strong></td>
<td>litres</td>
<td>415</td>
<td>443</td>
<td>471</td>
<td>499</td>
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</tbody>
</table>

* Details excluding burner and hood
Gas condensing boilers

Vitocrossal 300
Vitocrossal 200
80 to 1400 kW
The Vitocrossal range, from 80 to 1400 kW, offers a perfect solution for every application – from heating apartment buildings and public or commercial premises, through to generating heat in local heating networks.

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

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

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

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**Vitocrossal 300**
- Type CM3C
  - Gas condensing boiler with MatriX radiant burner (up to 142 kW) and MatriX cylinder burner (from 186 kW), 87 to 311 kW

**Vitocrossal 300**
- Type CT3B
  - Gas condensing boiler with MatriX cylinder burner 400 to 630 kW, as a two-boiler system up to 1260 kW

**Vitocrossal 300**
- Type CT3U
  - Gas condensing boiler alternatively with ELCO or Weishaupt pressure-jet gas burner, 187 to 635 kW

**Vitocrossal 300**
- Type CRU
  - Gas condensing boiler with MatriX-Disk burner, 800 and 1000 kW

**Vitocrossal 300**
- Type CR3B
  - Gas condensing boiler alternatively with ELCO or Weishaupt pressure-jet gas burner, 787 to 1400 kW

**Vitocrossal 200**
- Type CI
  - Gas condensing boiler with MatriX cylinder burner, 80 to 318 kW
The Vitocrossal 300 (type CM3C) gas condensing boiler with an output of 87 to 311 kW sets benchmarks in maintenance and service. The proven MatriX radiant burners (up to 142 kW) and MatriX cylinder burners (from 186 kW) enable operation with gas types E, L, LL, and from 186 kW with LPG, as well as modulation down to 20 percent. The Vitotronic control unit integrated into the boiler has a large colour touchscreen and is easy and intuitive to use. An assistant function helps with commissioning.

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

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

**Integral cascade function for up to eight units**
The Vitocrossal 300 is the ideal boiler for apartment buildings and commercial enterprises. The cascade function integrated in the Vitotronic control unit enables multi boiler systems with up to eight boilers.

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

**Convenient Vitotronic control unit**
The Vitotronic control unit with a large colour touchscreen enables quick commissioning using the assistant function; operation is straightforward as well.

Functionality has been significantly improved. This includes:

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

**Vitocrossal 300**

1. Vitotronic control unit with colour touchscreen and commissioning assistant
2. MatriX cylinder burner
3. Inox-Crossal heat exchanger
4. Highly effective thermal insulation
5. Two return connectors
Extremely easy to service and maintain thanks to sliding side panels and hinged boiler cover.

**Take advantage of these benefits**

- Gas condensing boilers, 87 to 311 kW
- Standard seasonal efficiency [to DIN]: up to 98 % (H₂) [gross cv]
- The stainless steel, corrosion-resistant Inox-Crossal heat exchanger ensures high operational reliability and a long service life – for highly effective heat transfer and a high condensation rate
- Self-cleaning effect due to smooth stainless steel surface
- Low combustion chamber loading and straight-through design for clean combustion
- MatriX cylinder burner for particularly quiet and environmentally responsible operation with a modulation range down to 1:5
- Either open flue or room sealed operation
- All hydraulic connections can be made from above
- Two return connectors for hydraulic connection optimised for condensing technology
- Easy to operate Vitotronic control unit with colour touchscreen
- Integral LAN interface for internet communication and integral WLAN for service interface
- New design concept for ease of maintenance and service

For specification, see page 34

Vitotronic 200 – integral control unit for boiler units.
With the Vitocrossal 300 (type CT3U), Viessmann offers high grade condensing technology from 400 to 630 kW with an outstanding price/performance ratio.

The Vitocrossal 300 is built from proven components using Viessmann condensing technology and is equipped with an Inox-Crossal heat exchanger. In addition, it also features the MatriX cylinder burner.

**Room sealed operation**
Across its entire output range, the Vitocrossal 300 can be operated in open flue or room sealed mode, allowing this condensing boiler to be sited anywhere inside the building.

**Robust burner with a long service life**
The MatriX cylinder burner, developed and manufactured in-house, is characterised by a long service life thanks to its stainless steel MatriX gauze.

**Convenient Vitotronic control unit**
The Vitotronic control unit with a large colour touchscreen enables quick commissioning using the assistant function; operation is straightforward as well. The boiler can be connected directly to the internet for remote monitoring via the integral LAN interface. The Vitosoft 300 service tool communicates directly via WLAN. Energy consumption can be clearly visualised on the control unit’s energy cockpit.

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### Vitocrossal 300

1. **Vitotronic control unit with colour touchscreen and commissioning assistant**
2. **MatriX cylinder burner**
3. **Inox-Crossal heat exchanger**
4. **Highly effective thermal insulation**
Gas condensing boilers, 400 to 630 kW; as a two-boiler system up to 1260 kW

Standard seasonal efficiency [to DIN]: up to 98 % \( (H_s) \) [gross cv]

Stainless steel, corrosion-resistant Inox-Crossal heat exchanger ensures high operational reliability and a long service life

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

Self-cleaning effect due to smooth stainless steel surface

MatriX cylinder burner for particularly quiet, economical and environmentally responsible operation, with a modulation range of 33 to 100 %

Either open flue or room sealed operation

Cascade with prefitted accessories on the hydraulic and flue gas side

Easy to operate Vitotronic control unit with colour touchscreen

Integral LAN interface for internet communication and integral WLAN for service interface

For specification, see page 34
The Vitocrossal 300 (type CT3B) is a floorstanding gas condensing boiler with Inox-Crossal heat exchanger. Vitocrossal 300 gas condensing boilers are available factory-fitted with ELCO or Weishaupt pressure-jet gas burners.

**Advanced condensing technology**

The design of the Inox-Crossal heat exchanger enables the Vitocrossal 300 to generate high output levels, whilst retaining its modest dimensions and low weight. In addition, the Vitocrossal 300 can be split into two sections on site to make handling easier.

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

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

**Convenient Vitotronic control unit**

The Vitotronic control unit with a large colour touchscreen enables quick commissioning using the assistant function; operation is straightforward as well. The boiler can be connected directly to the internet for remote monitoring via the integral LAN interface. The Vitosoft 300 service tool communicates directly via WLAN. Energy consumption can be clearly visualised on the control unit’s energy cockpit.

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**Vitocrossal 300**

1. Stainless steel combustion chamber
2. Inox-Crossal heat exchanger
3. Highly effective thermal insulation
4. Vitotronic control unit with colour touchscreen and commissioning assistant
Gas condensing boilers, 187 to 635 kW

Standard seasonal efficiency [to DIN]: up to 98 % (H_J [gross cv])

Stainless steel, corrosion-resistant Inox-Crossal heat exchanger ensures high operational reliability and a long service life

Self-cleaning effect due to smooth stainless steel surface

Clean combustion through low combustion chamber loading and straight-through design

Available with ELCO or Weishaupt pressure-jet gas burner

Two return connectors for hydraulic connection optimised for condensing technology

Easy to operate Vitotronic control unit with colour touchscreen

Integral LAN interface for internet communication and integral WLAN for service interface

For specification, see page 34
The Vitocrossal 300 gas condensing unit (type CRU) with outputs of 800 and 1000 kW has numerous improvements compared to its predecessor. The extended modulation range of down to 1:6 and significantly smaller dimensions are particularly noteworthy. This makes installation considerably easier, for example in modernisation projects, where the replacement of powerful boilers is often only possible to a limited extent due to space restrictions.

**Compact dimensions thanks to MatriX-Disk burner**

The new MatriX-Disk burner is one of the key factors that enables the reduced dimensions. It can be operated with gas type E or LPG. The boiler can be operated in either open flue or room sealed mode.

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

**Intuitive operation via large colour touchscreen**

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

The condensing boiler can be connected directly to Vitodata using our proven Vitocom interfaces. This option opens up additional services to the contractor, to ensure trouble-free operation of the system.

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

**Extremely convenient to service**

The Vitocrossal 300 also impresses with its extremely convenient servicing. The front part of the boiler cover can be slightly raised by means of a gas spring. The side panels can be removed quickly and easily, providing unhindered access to the MatriX-Disk burner, which can be simply pivoted out to the side. This ability to pivot the burner is a unique feature; service and maintenance do not require any additional tools and are straightforward to carry out.

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**Vitocrossal 300**

1. MatriX-Disk burner
2. Stainless steel combustion chamber
3. Inox-Crossal heat exchanger
4. Highly effective thermal insulation
5. Two return connectors
Take advantage of these benefits

- Gas condensing units, 800 and 1000 kW
- Standard seasonal efficiency [to DIN]: up to 98 % (H₂) [gross cv]
- Suitable for gas type E and LPG
- The stainless steel, corrosion-resistant Inox-Crossal heat exchanger ensures high operational reliability and a long service life – for highly effective heat transfer and a high condensation rate
- Self-cleaning effect due to smooth stainless steel surface
- Matrix-Disk burner for particularly quiet and environmentally responsible operation with a modulation range down to 1:6
- Either open flue or room sealed operation
- Low space requirement due to shortened combustion chamber and compact heat exchanger module
- Straightforward maintenance and service thanks to pivoting burner and burner door
- Long burner runtimes due to wide modulation range and large water content
- Low power consumption (no minimum flow rate and no boiler circuit pump due to large water content)
- Vitotronic control unit with colour touchscreen and energy cockpit as standard
- Vitotronic 300 with integral cascade function for up to 8 boilers
- Quiet operation thanks to new Matrix-Disk burner and optional room sealed operation
- Functional design to Viessmann’s usual high standard of quality
- Integral LAN interface for internet communication and integral WLAN for service interface

For specification, see page 35
Gas condensing boilers

Vitocrossal 300
787 to 1400 kW

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

**Advanced condensing technology**

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

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

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

Vitocrossal 300 gas condensing boilers are available factory-fitted with ELCO or Weishaupt pressure-jet gas burners.

**Convenient and highly capable Vitotronic control unit**

The Vitotronic control unit with a large colour touchscreen enables quick commissioning using the assistant function; operation is straightforward as well. The boiler can be connected directly to the internet for remote monitoring via the integral LAN interface. The Vitosoft 300 service tool communicates directly via WLAN. Energy consumption can be clearly visualised on the control unit’s energy cockpit.
Vitocrossal 300, 787 to 1400 kW

Gas condensing boilers, 787 to 1400 kW
Standard seasonal efficiency (to DIN): up to 98 % (H_s) [gross cv]
Stainless steel, corrosion-resistant Inox-Crossal heat exchanger ensures high operational reliability and a long service life
Self-cleaning effect due to smooth stainless steel surface
Clean combustion through low combustion chamber loading and straight-through design
Available with ELCO or Weishaupt pressure-jet gas burner
Split design for easy handling
Two return connectors for hydraulic connection optimised for condensing technology
Easy to operate Vitotronic control unit with colour touchscreen
Integral LAN interface for internet communication and integral WLAN for service interface

For specification, see page 35

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

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

It features the enhanced Inox-Crossal heat exchanger with a robust MatriX cylinder burner. The modulation range down to 1:5 in conjunction with a large water content enable long burner runtimes and low energy consumption.

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

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

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

**Proven Vitotronic control unit**
The integral Vitotronic control unit enables quick commissioning and straightforward operation. With the Vitocom (optional), the boiler can be conveniently controlled via the internet with an app, as is the case with other Viessmann boilers.

**Advanced condensing technology**
The heat exchangers have been designed to combine minimal dimensions with a low weight. The stainless steel heat exchanger provides ideal conditions for utilising condensing technology. The smooth stainless steel heat exchanger 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, which ensures permanently high efficiency, increases the service life and reduces the maintenance effort.
Gas condensing units, 80 to 318 kW
- Extremely compact, easy to integrate into various heating centres
- Straightforward twin boiler solution in a single casing, from 240 to 636 kW
- Pre-installed unit: quick and simple installation thanks to fully wired and pre-assembled components
- Minimal dimensions for easy handling: boiler is 680 mm wide when dismantled
- Standard seasonal efficiency [to DIN]: up to 98 % (H\textsubscript{s}) [gross cv]
- For gas types: natural gas (E, L, LL)
- Self-cleaning Inox-Crossal heat exchanger for consistently high efficiency
- Modulating MatriX cylinder burner with a long service life thanks to stainless steel MatriX gauze – resistant to high temperature loads
- Robust operation and a long service life, modulation down to 1:5 and long burner runtimes with a low cycling frequency
- Consistently high efficiency in case of changing gas qualities thanks to Lambda Pro Control combustion controller
- Good accessibility to all components for ease of service and maintenance
- Proven Vitotronic control unit with user prompts and plain text display
- Low power consumption as boiler circuit pump and large water content are unnecessary
- Quiet operation through integral MatriX cylinder burner
- Optional Vitocom interface for control via the internet

For specification, see page 35
### Gas condensing boilers

#### Specification

**Vitocrossal 300, type CM3C gas condensing boiler**

<table>
<thead>
<tr>
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**Vitocrossal 300, type CT3U gas condensing boiler**

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<th>Rated heating output 50/30 °C</th>
<th>kW</th>
<th>135 – 400</th>
<th>168 – 500</th>
<th>209 – 630</th>
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<tr>
<td>Rated heating output 80/60 °C</td>
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<td>153 – 460</td>
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**Vitocrossal 300, type CT3B gas condensing boiler**

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<th>kW</th>
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<tr>
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<td>kW</td>
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<td>225</td>
<td>285</td>
<td>370</td>
<td>460</td>
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### Vitocrossal 300, type CR3B gas condensing boiler

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<td>kg</td>
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### Vitocrossal 300, type CRU gas condensing boiler

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<th>400</th>
<th>480</th>
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<tr>
<td>Rated heating output 80/60 °C</td>
<td>kW</td>
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<td>292</td>
<td>368</td>
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<td>516</td>
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<th>Boiler water capacity</th>
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<td>litres</td>
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Industrial/commercial boilers
Hot water boilers

Low pressure hot water boilers
0.65 to 22 MW
VITOMAX LW

System solutions for economical hot water generation

The energy efficient and clean provision of heat, as well as high operational reliability and plant availability, are essential requirements for heating centres in large buildings and industrial plants. This requires competent consultation, a comprehensive range of services and heat generators with design features that enable cost effective and futureproof heat generation.

Thanks to their design and configuration, Vitomax industrial/commercial boilers are best placed to meet individual customer requirements in a broad range of applications. The detailed design of Vitomax boilers and the company’s vast experience in building industrial boilers ensure superior quality, high operational reliability and a long service life. The comprehensive product range from Viessmann includes hot water boilers up to 22 MW.

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

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

Vitomax LW

Low pressure hot water boiler for oil or gas combustion

Output ranging from 0.65 to 22 MW

Permissible flow temperatures up to 110 °C (120 °C subject to individual test certification)

Permissible operating pressure
6, 10, 16 bar

Also in low NO_x version
(gas < 70 mg/m³, oil < 150 mg/m³)
The Vitomax LW is a low pressure hot water boiler for flow temperatures of up to 120 °C, operating pressure of 6, 10 or 16 bar and a heating output ranging from 0.65 to 22 MW.

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

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

The pressure drop on the hot gas side is low, thanks to the optimum design of the heating surface and smoke tube.

The low stress design ensures a long service life by reducing thermal loads.

**Proven and reliable technology**
This is particularly pertinent for industrial and commercial enterprises, where new heating centres often have to be operational as quickly as possible, so that heat for production can be supplied on time.

**All components matched to each other**
Systems such as the Vitomax LW low pressure hot water boiler offer a high degree of engineering and calculation assurance for industrial/commercial boiler plants. As well as guaranteeing the highest quality and flexibility, these systems also provide the assurance that all components are perfectly matched, for example through pre-assembled safety equipment for maximum temperatures of 110 °C or 120 °C.

Available accessories include a flue gas/water heat exchanger that can raise the boiler efficiency to levels of up to 95 percent. Return temperature raising facilities and flue gas components are further system options.

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

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

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**Vitomax LW**

1. Walk-on cover for secure positioning and good accessibility to inspection ports and fittings in conjunction with a boiler control platform
2. Water-cooled burner entry point for low nitrogen oxide emissions (optional)
3. Easy to open cleaning doors without the need to remove the burner and fuel supply
4. Low stress, space saving design for good natural circulation and reduced thermal loads
Vitomax LW hot water boiler (2300 kW) and Vitoplex 200 low temperature boiler (700 kW)

Vitomax LW low pressure hot water boilers are available with an output range of 0.65 to 22 MW, with a permissible operating pressure of 6, 10 or 16 bar. There is also a low NOx version for areas with more stringent nitrogen oxide emission standards.

Flexible deployment options for new build and modernisation on commercial, industrial and local authority sites.

Depending on customer requirements, certification under the Gas Appliances Directive is available for permissible flow temperatures of up to 110 °C, and under the Pressure Equipment Directive for permissible flow temperatures above 110 °C.

The ability to use different fuels including gas, EL fuel oil and heavy fuel oil further increases the flexibility of the Vitomax LW.

Straightforward hydraulic connection and reliable heat transfer ensure a high degree of operational reliability.

Low radiation losses due to optimum thermal insulation increase the efficiency of the boiler and thus contribute to fuel savings.

The efficiency of the system is raised by condensing technology using a Vitotrans stainless steel flue gas/water heat exchanger, which makes efficient use of latent heat in the flue gas.

Ease of servicing can be optimised by the number of sight and inspection ports, as well as options such as a water-cooled burner entry point and walk-on boiler cover.

The Vitocontrol control panel ensures the ability to regulate all boiler-specific control equipment.

Take advantage of these benefits.
VITOPLEX LS

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

The output range of Vitoplex LS low pressure steam boilers meets the requirements of steam technology in businesses such as laundries and bakeries.

The Vitoplex LS is a three-pass boiler with low combustion chamber loading. This means conditions are just right for clean combustion with low nitrogen oxide emissions.
The Vitoplex LS is a compact three-pass boiler for generating low pressure steam in the output range from 0.26 to 2.2 t/h. The design of this boiler has been tried and tested in thousands of applications.

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

Good natural circulation and reliable heat transfer are ensured by the large water content, in conjunction with wide clearances between the hot gas pipes, as well as between inbuilt parts and the boiler jacket. Combined, these features bring about high operational reliability and a long service life.

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

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

Clean combustion
The very low combustion chamber volume loading in conjunction with the three-pass design enable this boiler to comply with even the strictest of emission limits.
System with one Vitoplex LS low pressure steam boiler and two Vitoplex hot water boilers

Safety equipment for the Vitoplex LS

Take advantage of these benefits

- Low pressure steam boilers with steam output from 0.26 to 2.2 t/h
- Economical energy consumption – boiler efficiency: 91 %
- Three-pass boiler with low combustion chamber loading, resulting in clean combustion with low emissions
- Large steam chamber and large evaporator improve the steam quality
- Low heat losses due to thermal insulation of the entire boiler shell
- Connectors for mounting the necessary instrumentation, control and safety equipment
- Extensive range of matching accessories available
- With load bearing boiler cover – for easier installation and maintenance
- Vitocontrol control panel for all boiler-related control equipment
- TWA-T thermal water treatment system available as an accessory
- Thousands of boilers in long term use
System technology

TWA-V / TWA-T

Thermal water treatment module

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

Optional
- Dosing module
- TDS expander including fittings and interconnecting pipework
- Mixing cooler including fittings and interconnecting pipework
- Pump module(s) including interconnecting pipework
For fault-free operation of a steam boiler

The feedwater required by the steam boiler must be treated in order to comply with the specified parameters and so safeguard trouble-free operation.

Package solutions for every application
Viessmann offers a complete package solution for this with the TWA-V/TWA-T thermal water treatment modules. Alongside the standard components, additional modules are available as options, which allow the boiler system to be set up for the specific set of circumstances.

Take advantage of these benefits
- Compact, modular arrangement of components
- High flexibility due to modular extension options
- Easy despatch and handling
- Pre-assembled modules reduce installation effort and time on site
- Reliable plant operation by safeguarding the required amount of feedwater and maintaining water parameters
- Optimum deaeration thanks to ideal placement of the deaeration lutes
- Highest energy efficiency due to heat recovery
- High quality fittings from reputable manufacturers
- Complete control of the thermal water treatment process via the Viessmann Vitocontrol control panel

TWA-T – thermal water treatment module
Viessmann system technology ensures the highest operational reliability and efficiency

At Viessmann all components for a high performance heating system are supplied from a single source and are perfectly matched.

Today, medium sized and industrial/commercial boilers must not only offer the most advanced technology, reliability, system-specific solutions, optimum setting options and environmental responsibility, but also many services relating to boiler operation itself.

Viessmann system technology and accessories ensure that everything matches perfectly.

All our heating equipment components work together to guarantee the smooth operation of the entire heating system – from the boiler, burner, control unit and DHW cylinder, right down to the connections and radiators. Matching system solutions provide the highest possible level of operational reliability with optimised efficiency for every heating system.
Matching system technology for low pressure hot water boilers
Systems for low pressure hot water boilers offer a high degree of engineering and calculation assurance for industrial/commercial boiler plants.

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

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

Communication systems
Viessmann offers innovative communication systems for data exchange between heating systems for all common standards, including hardwired and wireless, as well as across IP networks.

DHW cylinders
The Vitocell range of DHW cylinders is perfectly matched to our boilers. This is not only an advantage during installation, but also in terms of heating and DHW convenience. The wide range of DHW cylinders and heating water buffer cylinders enables Viessmann to meet every demand and aspiration for convenience in DHW heating and central heating backup.

Solar thermal and photovoltaics
Every boiler can be operated in conjunction with a solar thermal system, thereby saving valuable energy. For commercial applications, Viessmann offers suitable systems for the free harvesting of heat and power from solar energy.
Vitomax LW
System technology (optional)

1. Boiler with burner
2. Intermediate flow piece with safety equipment
3. Control system and control panel
4. Boiler circuit pump
5. Safety valve
6. Flue gas/water heat exchanger
7. Flue gas damper
8. Flue gas silencer
9. 3-way mixing valve (return temperature raising facility)
Matching system technology for low pressure hot water boilers

As well as guaranteeing the highest quality and flexibility, these systems also provide the assurance that all components are perfectly matched.

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

Flue gas/water heat exchangers improve efficiency

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

Container solutions

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

Take advantage of these benefits

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

Vitotrans
Utilisation of condensing technology with flue gas/water heat exchangers

The Vitotrans 300 flue gas/water heat exchanger draws heat from the Vitomax boiler’s hot flue gases and so improves efficiency.
Condensing technology for medium sized and industrial/commercial boilers

The Vitotrans 300 stainless steel flue gas/water heat exchanger reduces operating costs by utilising the condensing effect

Rising fuel costs are of particular concern to users of medium sized and industrial/commercial boiler systems. The utilisation of condensing technology has a particularly high impact on the operating costs of these 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. They cool flue gases further so that the water vapour condenses. The latent condensation heat yielded and the low flue gas temperatures provide a significant boost to efficiency.

Vitotrans 300
The Vitotrans 300 is a flue gas/water heat exchanger for utilising condensing technology with boilers in the output range from 80 to 6750 kW. The downstream connection allows the standard seasonal efficiency [to DIN] of the boiler to be increased by up to 11 percent.

- Straightforward hydraulic connection – either the entire volume of water or, to optimise the utilisation of condensing technology, a proportion of it may be routed through the heat exchanger
- Vitotrans flue gas/water heat exchangers with
  - Inox-Crossal heat exchanger for boilers from 405 to 2000 kW
  - Inox-Tubal heat exchanger for boilers from 1860 to 6750 kW
- Vertical Inox-Crossal and Inox-Tubal heat exchangers for high operational reliability and a long service life
  - By positioning the hot gas flues vertically, the condensate that forms can drip straight down, unimpeded. This prevents condensate concentration through re-evaporation
  - Smooth stainless steel surfaces create improved self-cleaning effect
  - Highly effective heat transfer and high condensation rate
- Neutralising systems matched to the flue gas/water heat exchangers

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 EL fuel oil; stainless steel grade 1.4539 is suitable for continuous operation with EL fuel oil
- Compact design – space saving installation immediately behind the boiler
- Full flow, therefore maximum use of heat from flue gases without additional hydraulic effort

- Large flue gas inlet
- High grade thermal insulation
- Flue gas outlet
- Sheet steel casing in Vitosilver
- Inox-Crossal heat exchanger
Vitotronic
Economic energy management for systems of every size

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

Vitocontrol 200-M multi mode system controller
From single to multi boiler systems with central control panels, Viessmann supplies perfectly matching solutions

The Vitotronic control system with communication capability is an electronic management system for economical and reliable operation of the heating system. It is exemplary in its installation, operation and maintenance.

The proven and reliable Vitotronic control unit has been completely updated and aligned with the requirements of modern system communication. The colour touchscreen at the front of the boiler immediately catches the eye.

A wide range of control units is available for medium sized and industrial/commercial boilers. In addition to integral control units, such as those in the Vitocrossal 300 (CM3C) gas condensing boiler for example, there are also traditional versions that can be mounted on top of the boiler:
- Vitotronic 100 as a constant boiler control unit
- Vitotronic 200 as a weather-compensated single boiler control unit
- Vitotronic 300 as a weather-compensated boiler control unit with integral cascade function

All versions have an integral communication module with a LAN/WLAN interface for servicing and remote control. A mixer extension for two heating circuits with mixer is part of the standard delivery for the Vitotronic 300, and is available as an accessory for the Vitotronic 200.

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

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

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

Take advantage of these benefits
- Less time and effort required for installation thanks to commissioning assistant
- Straightforward system operation via intuitive programming unit with colour touchscreen
- Burner reset via programming unit
- WLAN interface for communication with Vitosoft 300 (SID1) service tool
- Integral LAN interface for internet communication with Vitoguide
- Integral cascade control for up to 8 single boilers
- Energy cockpit for displaying energy consumption
- Vitogate 300 interface for higher ranking BMS
Internet data communication enables an energy centre to be monitored at any time, and parameters to be adjusted for efficient operation.

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

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

Vitoguide for single boiler systems
Vitoguide from Viessmann is the digital service centre for every contractor. This innovative solution for online monitoring of heating systems offers system users greater reassurance during operation and enables contractors to keep a constant eye on the energy systems they are supporting.
Vitodata 300 for multi boiler systems

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

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

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

Vitocom 300 LAN

The LAN version of the Vitocom 300 enables data transfer via DSL/Ethernet networks at speeds of up to 100 MB/s. The type of data encryption used here guarantees an optimum level of data security.

Vitogate 300 interface for building automation

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

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

Multi boiler system – standard functions for connectivity and remote monitoring

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

Alternative:
- boiler with burner from other manufacturer

Alternative:
- boiler with burner from other manufacturer

Alternative:
- boiler with burner from other manufacturer

KM-Bus
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, of reliable and high quality, forms the basis for Viessmann’s close partnership with the heating trade and its various bodies, ensuring lasting success in the market.

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

Viessmann offers a comprehensive range that benefits the trade.

However, it is not all about technology. Many years of after-care and a guaranteed supply of spare parts are extremely important. These are provided by the Viessmann customer service department. Maintenance agreements are also available if required.
Everything from a single source
Viessmann offers everything for solution-focused cooperation:

- Consultation – comprehensive and competent
- Vitodesk engineering software – a complete software package for engineering and sizing heating systems, with 3D boiler room design including presentation and visualisation functions
- Manufacture according to country-specific requirements with short delivery times
- Equipment – safety accessories, burners, control panels, boiler platforms, flue gas/water heat exchangers, water treatment systems
- Training and instruction at the information centre in Berlin
- Delivery and handling with our own vehicle equipped with a hoist, and a specialist team
- Commissioning anywhere in the world by expert engineers
- Service by qualified technical personnel
- Leasing – uncomplicated and flexible – businesses and local authorities can also lease their heating systems from Viessmann
- Responsibility for the environment – Viessmann is certified according to the Eco Audit EN ISO 14001 and EMAS. This covers the entire process, from manufacturing right through to disposal

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

Viessmann information centre, Berlin
The company

Viessmann is one of the leading international manufacturers of efficient heating, industrial and refrigeration systems.

**Acting in a sustainable manner**

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

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

The Viessmann comprehensive range

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

**Practical partnership**

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

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

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**Viessmann Group**

**Company details**
- Established in: 1917
- Employees: 12,100
- Group turnover: 2.37 billion euros
- Export share: 55 percent
- 23 production companies in 12 countries
- 74 countries with sales companies and branches
- 120 sales offices worldwide

**Comprehensive range from the Viessmann Group**
- Boilers for oil or gas
- Combined heat and power generation
- Hybrid appliances
- Heat pumps
- Wood combustion technology
- Plants for producing and upgrading biogas
- Solar thermal
- Photovoltaics
- Electric heating and DHW systems
- Refrigeration systems
- Accessories