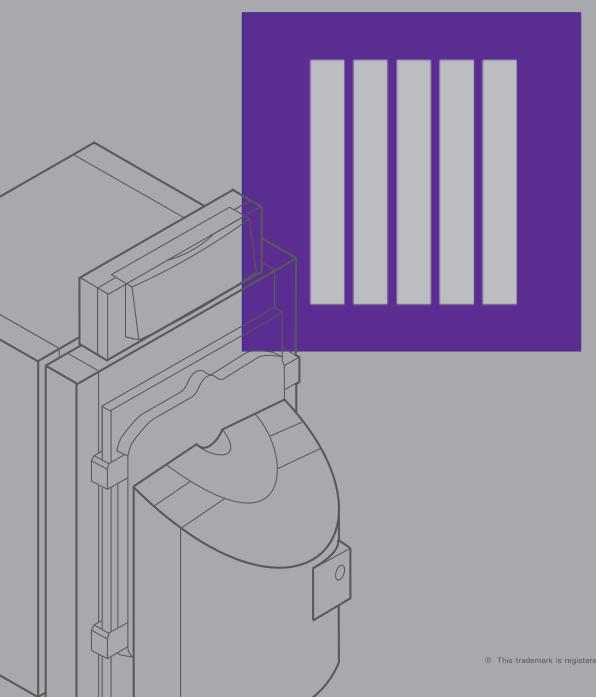
# VITOROND 200<sub>8</sub>



### **VD2/VD2A Series**

Oil-/Gas-fired sectional cast iron boiler for operation with modulating water temperatures

Rated input: 490 to 4387 MBH 144 to 1285 kW





# Efficient. Durable. Reliable. The **VITOROND 200**

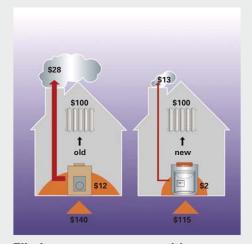
The Vitorond 200 boiler is a reliable, durable and efficient commercial heating solution. The boiler's sectional, triple-pass design, combined with a special Eutectoplex heat exchanger surface ensures easy installation, economical energy consumption, high operational reliability and a long service life. The bottom line: fast investment recovery through maximum savings in fuel and maintenance costs.

#### **Efficient**

Reduce operating expenditures by up to 50% by modernizing with a Viessmann Vitorond 200 boiler. Featuring efficiencies of up to 85.5% for gas and 88.1% for oil, this highmass, high-volume cast iron boiler stores thermal energy and eliminates inefficient system cycling.

The Vitorond 200 boiler's triple-pass design, combined with heat-resistant steel turbulators placed in each flue gas passageway, ensures maximum heat transfer throughout the cast iron block.

Superior insulation minimizes standby losses and maximizes energy and cost savings. Design-matched Viessmann system controls ensure that the entire heating system is consistently operating at maximum efficiency.



Eliminate energy waste with Viessmann heating technology



Vitorond 200 cast iron section

#### **Durable and reliable**

The cast iron sections of the Vitorond 200 consist of a homogeneous, special gray cast iron. The resulting uniform heat transfer eliminates stress fractures. The material, shape and geometry of the sections, combined with production methods at the factory, eliminate any inherent stresses.

These factors combine to achieve the utmost in product reliability and serve to minimize repair bills and overall lifecycle cost.

# Easy handling and simple installation

The Vitorond 200 boiler may be delivered in individual sections and assembled in the field using a draw tool provided by Viessmann. This allows easy transportation into the most difficult-to-access boiler rooms. Upon request, the Vitorond 200 boiler up to size VD2A-270 can be delivered fully assembled. In addition, the Vitorond 200 accommodates a left- or right-swing combustion chamber door to best suit any boiler room layout and multiple boiler installations.

#### Reduced emissions

The triple-pass design of the boiler's heat exchanger, ensures that the time the flue gases remain under a high reaction temperature is minimized. As a result,  $NO_X$  emissions are lowered, minimizing environmental impact.





Product may not look exactly as illustrated.



## No-compromise commercial heating

#### The benefits at a glance:

- Efficient and reliable operation.
  - Modulated boiler water temperatures help conserve energy by closely matching system output to actual demand.
  - Viessmann system controls ensure consistent, maximum system efficiency.
  - Combustion efficiency up to: 85.5% for gas and 88.1% for oil. Thermal efficiency up to: 85.4% for gas and 88% for oil.
- High operational reliability and a long service life are achieved by the special Eutectoplex gray cast iron heat exchanger. A uniform heat transfer and controlled water flow, together with inherent characteristics of the cast iron sections eliminate stress fractures and extend the lifecycle of the boiler.

- Problem-free transport into difficult-to-access boiler rooms thanks to sectional construction and low weight. The Fastfix system facilitates a quick and easy installation.
- Low environmental impact thanks to low-emission combustion achieved by the boiler's triple-pass design.
- Problem-free cleaning access
   facilitated by a hinged left- or right-swing combustion chamber door
   providing easy access to all three
   flue gas passageways from the
   front of the boiler, reducing side
   clearance.
- The VD2A Series features reduced investment cost with new Therm-Control integrated low-temperature protection logic and return water distribution system for a simplified design and system integration. Low temperature protection package no longer required.

- Comprehensive standard
   equipment saves valuable time in
   installation and sourcing of
   product. The supply and return
   header system is pre-built for left
   or right connections and positions
   components properly.
- Consistent and reliable DHW supply through integration with Viessmann indirect-fired stainless steel domestic hot water tanks.
- Boilers, controls, domestic hot water tanks, and heating system components are design-matched to work together. All components are compatible and are therefore quickly and easily installed.
- Standardized LON-BUS enables easy communication with building management systems.
- Maximum quality assurance.
   All components bearing the
   Viessmann name are designed and manufactured at company-owned production facilities.







Design, production, logistics - everything under one roof









# Progressive heating technology is system technology

Every single component of our heating technology follows the Vitotec building block principle. This guarantees a smooth and efficient functioning of the entire heating system. All boilers, burners and controls harmonize perfectly, while saving you energy and money.

#### Viessmann system controls

Viessmann-designed system controls ensure efficient and reliable operation of the entire heating system.

These controls are design-matched to work with other system componentry to maximize energy and cost savings. Modulating water temperatures help to further conserve energy by closely matching output to actual demand, while ensuring a comfortable living environment.

#### **Custom control panels**

Factory-designed and assembled Viessmann custom control panels manage the operation of multiple boilers, multiple heating circuits and domestic hot water production. Viessmann custom design guarantees a perfect fit with other heating system components and ensures that none of their energy-and cost-saving features are compromised.

#### **DHW** storage tanks

Save up to 50% of your operating cost compared to conventional direct-fired hot water production.

- Viessmann Vitocell 300 stainless steel domestic hot water tanks allow worry-free, extremely efficient, reliable and economical DHW production. The stainless steel interior ensures maximum corrosion protection, operational reliability and a long service life.
- Viessmann Vitocell 100 steel domestic hot water tanks with Ceraprotect enamel for reliable and economical DHW production. The Vitocell 100 DHW tank's special enamel, as well as a magnesium anode protect against corrosion, while its highly effective insulation minimizes standby losses. This translates into increased profits thanks to reduced energy and maintenance costs.

#### **Multiple DHW tanks**

For systems requiring larger amounts of domestic hot water, several Vitocell DHW tanks can be combined into tank batteries. A consistent and abundant supply of domestic hot water is thereby guaranteed all day long.

#### Did you know?

Viessmann offers:

- A commercial projects department offering technical advice.
- Ongoing post-sale customer support.
- Custom control solutions and full integration with building management systems.
- Remote system monitoring over the Internet.
- Free commercial project evaluation program to calculate fuel savings, R.O.I., pay-back analysis and emission reductions.
- Professional start-ups for all commercial installations.
- Educational seminars through our Viessmann Academy.



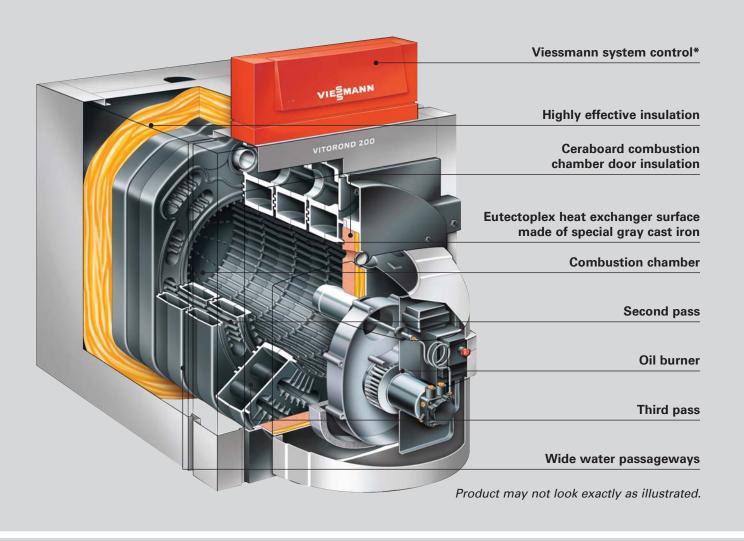
Professional advice is never far away

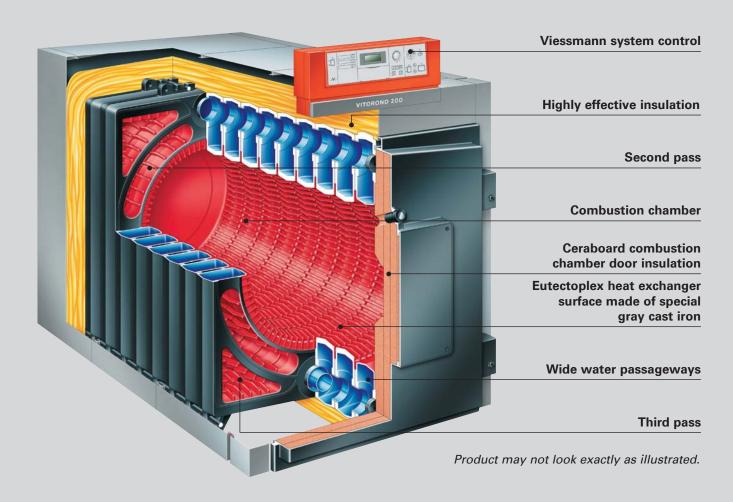


Hands-on training at our demonstration showrooms



Keeping up-to-date is easy with Viessmann Academy seminars





VITOROND 200	Model	VD2A		125	160	195	230	270
	Rated input (oil)	MBH		490	628	765	902	1059
		kW		144	184	224	264	310
	Rated input (gas)	MBH		508	650	792	934	1096
		kW		149	190	232	274	321
	Rated output (oil/gas)†	MBH		433	553	672	792	928
		kW		127	162	197	233	273
	Combustion efficiency			87.7	87.3	87.3	87.3	87.3
	Combustion efficiency	(gas) %		84.7	84.8	84.8	84.8	84.8
	Thermal efficiency (oil)			87.9	87.6	87.4	87.3	87.2
	Thermal efficiency (gas	) %		85.2	85.1	84.8	84.8	84.7
	Dimensions	Total Length	inches	35 ¾	42 1/4	49	55 ½	62 1/4
	(with insulation		mm	905	1075	1240	1410	1580
	jacket)	Total Width*	inches	40 1/2	40 1/2	40 1/2	40 1/2	40 1/2
			mm	1030	1030	1030	1030	1030
		Total Height*††	inches	58 1/2	58 1/2	58 1/2	58 ½	58 1/2
			mm	1485	1485	1485	1485	1485
	Weight (incl.	lbs		1201	1441	1675	1874	2127
	insulation,	kg		545	655	760	850	965
	and control)							
	Boiler water	USG		32	41	49	57	66
	content	ltrs		122	154	186	217	249

<sup>\*</sup>Not as illustrated. Boiler control mounted on right or left boiler side panel. †† With supply header.

V	ITO	R	O	N	D	2	O	O

Rated input (oil)   MBH
Rated input (gas)         MBH kW         1300         1544         1787         2031         2275         2559           Rated output (oil/gas)†         MBH kW         1110         1319         1526         1732         1941         2183           Combustion efficiency (oil) %         88.1         88.0         88.0         87.9         87.8         87.8           Combustion efficiency (gas) %         85.5         85.4         85.4         85.3         85.2         85.1           Thermal efficiency (gas) %         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0
Rated output (oil/gas)† MBH
Rated output (oil/gas)†         MBH kW         1110         1319         1526         1732         1941         2183           Combustion efficiency (oil) %         88.1         88.0         88.0         87.9         87.8         87.8           Combustion efficiency (gas) %         85.5         85.4         85.4         85.3         85.2         85.1           Thermal efficiency (oil) %         88.0         88.0         88.0         88.0         88.0         88.0         88.0         88.0         87.9           Thermal efficiency (gas) %         85.4         85.4         85.3         85.3         85.3           Total dimensions         Total Length         inches         58 ¾         63 ¾         68 ¾         73 ¾         78 ¾         83 ¾           (with insulation         mm         1490         1620         1750         1870         2000         2130           jacket)         Total Width*         inches         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾
kW         325         387         447         508         569         640           Combustion efficiency (oil) %         88.1         88.0         88.0         87.9         87.8         87.8           Combustion efficiency (gas) %         85.5         85.4         85.4         85.3         85.2         85.1           Thermal efficiency (oil) %         88.0         88.0         88.0         88.0         88.0         88.0         88.0         87.9           Thermal efficiency (gas) %         85.4         85.4         85.4         85.3         85.3         85.3           Total dimensions         Total Length         inches         58 ¾         63 ¾         68 ¾         73 ¾         78 ¾         83 ¾           (with insulation         mm         1490         1620         1750         1870         2000         2130           jacket)         Total Width*         inches         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾ <th< th=""></th<>
Combustion efficiency (oil) %       88.1       88.0       88.0       87.9       87.8       87.8         Combustion efficiency (gas) %       85.5       85.4       85.4       85.3       85.2       85.1         Thermal efficiency (oil) %       88.0       88.0       88.0       88.0       88.0       88.0       88.0       88.0       87.9         Thermal efficiency (gas) %       85.4       85.4       85.3       85.3       85.3       85.3         Total dimensions       Total Length       inches       58 ¾       63 ¾       68 ¾       73 ¾       78 ¾       83 ¾         (with insulation       mm       1490       1620       1750       1870       2000       2130         jacket)       Total Width*       inches       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42
Combustion efficiency (gas) %       85.5       85.4       85.4       85.3       85.2       85.1         Thermal efficiency (oil) %       88.0       88.0       88.0       88.0       88.0       88.0       88.0       87.9         Thermal efficiency (gas) %       85.4       85.4       85.4       85.3       85.3       85.3       85.3         Total dimensions       Total Length (with insulation)       inches       58 ¾       63 ¾       68 ¾       73 ¾       78 ¾       83 ¾         (with insulation jacket)       Total Width*       inches       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾
Thermal efficiency (oil) %       88.0       88.0       88.0       88.0       88.0       88.0       87.9         Thermal efficiency (gas) %       85.4       85.4       85.4       85.3       85.3       85.3         Total dimensions       Total Length       inches       58 ¾       63 ¾       68 ¾       73 ¾       78 ¾       83 ¾         (with insulation       mm       1490       1620       1750       1870       2000       2130         jacket)       Total Width*       inches       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       1090       1090       1090       1090       1090       1090
Thermal efficiency (gas)         85.4         85.4         85.4         85.3         85.3         85.3           Total dimensions         Total Length (with insulation jacket)         Inches inches inches mm         58 ¾ 1490         1620 1750 1870 1870 1750 1870 1870 1870 1870 1750 1870 1750 1870 1750 1750 1750 1750 1750 1750 1750 17
Total dimensions         Total Length         inches         58 ¾         63 ¾         68 ¾         73 ¾         78 ¾         83 ¾           (with insulation         mm         1490         1620         1750         1870         2000         2130           jacket)         Total Width*         inches         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         42 ¾         1090         1090         1090         1090         1090         1090
(with insulation       mm       1490       1620       1750       1870       2000       2130         jacket)       Total Width* inches       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       42 ¾       1090       1090       1090       1090       1090       1090       1090
jacket) Total Width* inches 42 ¾ 42 ¾ 42 ¾ 42 ¾ 42 ¾ 42 ¾ 42 ¾ 40 1090 1090 1090 1090 1090 1090 1090
mm 1090 1090 1090 1090 1090 1090
Total Haight*+ inches 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 50 1/, 5
mm 1480 1480 1480 1480 1480 1480 1480
Weight (incl. lbs 3924 4299 4652 4982 5335 5666
insulation, burner kg 1780 1950 2110 2260 2420 2570
and control)
<b>Boiler water</b> USG 65 73 80 87 95 102
<b>content</b> Itrs 247 275 303 331 359 387
Model VD2- 700 780 860 950 1080
Rated input (oil) MBH 2745 3059 3373 3727 4236
kW 804 896 988 1091 1241
Rated input (gas) MBH 2843 3168 3493 3860 4387
kW 833 928 1023 1130 1285
Rated output (oil/gas) <sup>†</sup> MBH 2425 2699 2976 3135 3738
kW 711 791 872 919 1095
Combustion efficiency (oil) % 87.7 87.6 87.5 87.4 87.3
Combustion efficiency (gas) % 85.1 85.0 84.9 84.8 84.6
Thermal efficiency (oil) % 87.9 87.9 87.8 87.8 87.8
Thermal efficiency (gas) % 85.3 85.2 85.2 85.2 85.2 85.2 85.2 85.2 85.2
Total dimensions         Total Length         inches         89.0         93 ¾         98 ¾         104         108 ¾           (a) 14 in a data was a constant.         2000         2000         2510         2010         2700
(with insulation mm 2260 2380 2510 2640 2760 jacket) Total Width* inches 42 ¾ 42 ¾ 42 ¾ 42 ¾ 42 ¾ 42 ¾
· · · · · · · · · · · · · · · · · · ·
mm         1480         1480         1480         1480         1480         1480         1480         1480         702         7070         7429
insulation, burner kg 2730 2880 3040 3210 3370 and control)
Boiler water USG 110 117 124 132 139
<b>content</b> Itrs 415 443 471 499 527

<sup>\*</sup>Dimensions with center-mounted NR2 control. See Technical Data Manual for dimensions with Dekamatik or KR control.

<sup>†</sup> Output ratings are based on the IBR BTS-2000 "method to determine efficiency of commercial space heating boilers".



### Vitotec:

## **Technology Function Design**

The new Vitotec program is the successful synthesis of advanced, state-of-the-art technology and future-oriented innovations. The Vitotec program combines technological progress with functionality and design. All innovations are consistently targeted to providing benefits for the user – both the heating contractor and the system operator.

#### Good design is functional design

The Vitotec design is the result of a strictly functional approach in which all elements are reduced to the essential. The new "Vitosilver" color finish – in combination with the accent color "Vitorange", symbolizing heat – unites Viessmann innovation with Viessmann tradition.

#### One name - all products

First unity of form, now unity of name. All product names contain the component "Vito", indicating not only their affiliation with the Vitotec program – but also system compatibility. The second part of the name signifies the product group. The different program levels are differentiated by numbers such as 100, 200 or 300.

#### Platform strategy

The new unity of Vitotec lies in its constructional design and follows a well-established technical principle. With the Vitotec program, Viessmann has implemented a modular technology strategy based on one common platform, whereby different functional modules are positioned on one base chassis to build different models. This permits the use of many identical parts, uniform and easy-to-follow installation steps, and a reduced number of universal spare parts. Maintenance, servicing and operation are considerably simplified through a uniform design and standardization.

#### Operation made easy

The new Vitotronic controls are also designed on the building block principle. Four modules, two base chassis with motherboards and safety controls, and two operating units (fixed or in drawer form) make up the complete control program.

# The heating contractor is a Viessmann expert

Vitotec is more than a product line. It contains a comprehensive training, service and maintenance package for the heating contractor. This ensures that the heating contractor will not only be familiar with the latest technology, but will also be trained extensively at our Viessmann Academy for the constantly changing demands of the heating industry. As a result, the heating contractor will be a Viessmann specialist.

The new Vitotec program offers you a diverse, yet uniform product range for every need – and once more confirms our philosophy: "Viessmann – more than heat".

























Viessmann meets all your heating needs with a diverse, yet completely harmonized product range.









#### Viessmann

With more than 8,000 employees around the world, the Viessmann Group is one of the leading manufacturers of heating technology worldwide. Viessmann represents competence and innovation and offers you a wide variety of high-tech heating products, each a design-matched component in the progressive Viessmann system technology. Despite their diversity, Viessmann products have one thing in common: a high standard of quality throughout the entire product line that translates into operational reliability, energy savings, environmental friendliness and operational comfort.

Viessmann innovations lead the industry not only in conventional heating technology, but also in the area of renewable energy sources such as solar and heat pump technology.

All of our products are developed in accordance with our philosophy to achieve the greatest value at all times – for our customers and our business partners.

Contact the Viessmann office in Canada or U.S.A. for the name of the Viessmann Sales Representative closest to you.

## North American and Canadian Head Office

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#### **Viessmann Sales Center**

Langley, BC Canada (604) 533-9445

#### **Viessmann Sales Offices**

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