# Oil/Gas Heating Technology

# VITOROND. 200, VD2A/VD2







Heating Systems ◀
Industrial Systems
Refrigeration Systems

# Vitorond 200, VD2A/VD2 - 490 to 1096 MBH/1255 to 4387 MBH Oil/gas technology for efficient, durable and reliable commercial heating



Vitorond 200 cast iron section

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**

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.

### **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 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.



Vitorond 200 VD2



Vitorond 200 VD2A



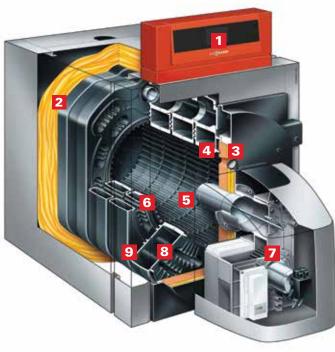








#### Vitorond 200 VD2A



Product may not look exactly as illustrated

### 1 Viessmann System Control

- 2 Highly effective insulation
- 3 Ceraboard combustion chamber door insulation
- 4 Eutectoplex heat exchanger surface made of special gray cast iron
- 5 Combustion chamber
- 6 Second pass
- 7 Oil burner
- 8 Third pass
- 9 Wide water passageways

### 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 rightswing combustion chamber door providing easy access to all three flue gas passageways from the front of the boiler, reducing side clearance.

### ■ VD2A 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.

### Vitorond 200 VD2



- 1 Viessmann System Control
- 2 Highly effective insulation
- 3 Second pass
- 4 Combustion chamber
- 5 Ceraboard combustion chamber door insulation
- 6 Eutectoplex heat exchanger surface made of special gray cast iron
- 7 Wide water passageways
- 8 Third pass

### **Technical Data**



### VITOROND 200 (oil-fired/gas-fired sectional cast iron boiler)

Model	VD2A		125	160	1	95	230	270
Rated input (oil)	MBH kW		490 144	628 184		65 24	902 264	1059 310
Rated input (gas)	MBH kW		508 149	650 190		92 32	934 274	1096 321
Rated output (oil/gas)↑	MBH kW		433 127	553 162		72 97	794 232	932 272
Combustion efficiency (oil) Combustion efficiency (gas) Thermal efficiency (oil) Thermal efficiency (gas)	% % %		87.7 84.7 87.9 85.2	87.3 84.8 87.6 85.1	84	7.3 4.8 7.4 4.8	87.3 84.8 87.3 84.8	87.3 84.8 87.2 84.7
Dimensions (with insulation jacket)	Total Length Total Width Total Height	inches mm inches mm inches mm	35 <sup>3/4</sup> 905 40 <sup>1/2</sup> 1030 58 <sup>1/2</sup> 1485	42 <sup>1/2</sup> 1075 40 <sup>1/2</sup> 1030 58 <sup>1/2</sup> 1485	12 40 10 58	19 240 ) <sup>1/2</sup> 030 3 <sup>1/2</sup> 185	55 <sup>1/2</sup> 1410 40 <sup>1/2</sup> 1030 58 <sup>1/2</sup> 1485	62 <sup>1/4</sup> 1580 40 <sup>1/2</sup> 1030 58 <sup>1/2</sup> 1485
Weight (including insulation control)	lbs kg		1201 545	1441 655		675 60	1874 850	2127 965
Boiler water content	USG Itrs		32 122	41 154		19 86	57 217	66 249
Madal	VD2		220	200	440	F00	500	620

Model	VD2		320	380	440	500	560	630
Rated input (oil)	MBH kW		1255 368	1490 436	1726 506	1961 574	2196 643	2471 724
Rated input (gas)	MBH kW		1300 381	1544 452	1787 523	2031 595	2275 666	2559 750
Rated output (oil/gas)†	MBH kW		1110 325	1319 387	1526 447	1732 508	1941 569	2183 640
Combustion efficiency (oil) Combustion efficiency (gas) Thermal efficiency (oil) Thermal efficiency (gas)	% % %		88.1 85.5 88.0 85.4	88.0 85.4 88.0 85.4	88.0 85.4 88.0 85.4	87.9 85.3 88.0 85.3	87.8 85.2 88.0 85.3	87.8 85.1 87.9 85.3
Dimensions (with insulation jacket)	Total Length Total Width Total Height	inches mm inches mm inches mm	58 <sup>3/4</sup> 1490 49 <sup>1/4</sup> 1250 50 <sup>3/4</sup> 1290	63 <sup>3/4</sup> 1620 49 <sup>1/4</sup> 1250 50 <sup>3/4</sup> 1290	68 <sup>3/4</sup> 1750 49 <sup>1/4</sup> 1250 50 <sup>3/4</sup> 1290	73 <sup>3/4</sup> 1870 49 <sup>1/4</sup> 1250 50 <sup>3/4</sup> 1290	78 <sup>3/4</sup> 2000 49 <sup>1/4</sup> 1250 50 <sup>3/4</sup> 1290	83 <sup>3/4</sup> 2130 49 <sup>1/4</sup> 1250 50 <sup>3/4</sup> 1290
Weight (including insulation control)	lbs kg		3924 1780	4299 1950	4652 2110	4982 2260	5335 2420	5666 2570
Boiler water content	USG Itrs		65 247	73 275	80 303	87 331	95 359	102 387

Model	VD2		700	780	860	950	1080
Rated input	MBH		2745	3059	3373	3727	4236
(oil)	kW		804	896	988	1091	1241
Rated input	MBH		2843	3168	3493	3860	4387
(gas)	kW		833	928	1023	1130	1285
Rated output	MBH		2425	2699	2976	3288	3738
(oil/gas)†	kW		711	791	872	963	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	87.9	87.8	87.8
Thermal efficiency (gas)	%		85.3	85.2	85.2	85.2	85.2
Dimensions (with insulation jacket)	Total Length Total Width* Total Height*	inches mm inches mm inches mm	89 2260 49 <sup>1/4</sup> 1250 50 <sup>3/4</sup> 1290	93 <sup>3/4</sup> 2380 49 <sup>1/4</sup> 1250 50 <sup>3/4</sup> 1290	98 <sup>3/4</sup> 25 10 49 <sup>1/4</sup> 1250 50 <sup>3/4</sup> 1290	104 2640 49 <sup>1/4</sup> 1250 50 <sup>3/4</sup> 1290	108 <sup>3/4</sup> 2760 49 <sup>1/4</sup> 1250 50 <sup>3/4</sup> 1290
Weight	lbs		6019	6349	6702	7070	7429
(including insulation control)	kg		2730	2880	3040	3210	3370
Boiler water content	USG Itrs		110 415	117 443	124 471	132 499	139 527









Technical information subject to change without notice.

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