

Gas Condensing Technology
VITODENS® 200-W

VIESSMANN



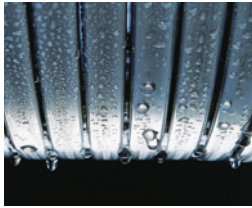
Gas Condensing Technology



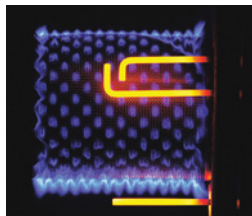
The Vitodens 200 models (sizes 18,68 to 80,285) are ENERGY STAR® qualified. By choosing the Vitodens 200, you are helping to promote cleaner air and a healthier environment.



Vitotronic 200 control with new Setup Wizard



Stainless steel Inox-Radial heat exchanger



Low-emission, Viessmann-made MatriX cylinder burner

Vitodens 200-W, 12 to 530 MBH

Multi-boiler installation – 32 to 4240 MBH (for models 160 to 530)

Gas-fired condensing technology for outstanding performance, reliability and comfort

Intelligent combustion control

The Vitodens 200 is optimized for maximum performance with the intelligent Lambda Pro combustion management system, which adapts combustion to changing gas qualities and operating conditions automatically. This unique function becomes increasingly important as gas supplies vary in quality and heating value.

Efficient by design

At the core of the Vitodens 200 are the Viessmann stainless steel Inox-Radial heat exchanger and MatriX cylinder burner. Together, they allow the greatest amount of heat extraction to be achieved with minimal loss (see diagram for more information).

Award winning control unit

The intuitive Viessmann-made Vitotronic 200, HO1B control manages the entire heating system and ensures economical performance

and maximum comfort at all times. The user-friendly, menu-driven control is capable of displaying multi-line text and graphics on a backlit display. The high-contrast, monochrome display offers excellent readability under poor lighting conditions.

The outdoor reset function automatically adapts the boiler operating temperature to the changing outdoor temperature. This reduces fuel consumption up to 15%, giving you excellent returns year after year on a modest initial investment. Plus, with system control for multiple zone space and DHW heating, the Vitotronic 200, HO1B can control 3 zone circuits, 2 mixed heating circuits and 1 unmixed heating circuit.

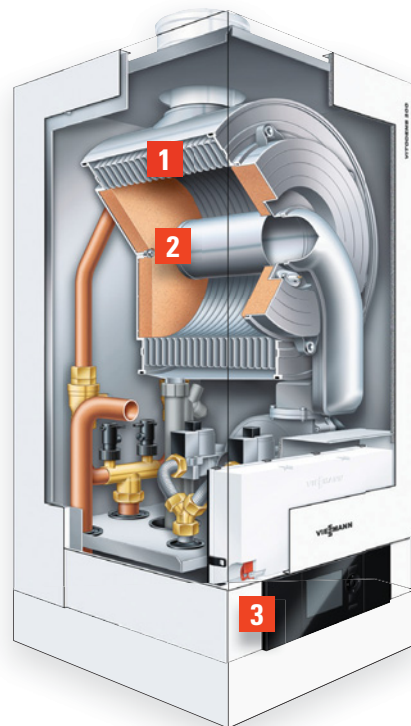
Your environmental choice

The Vitodens 200 is your efficient and environmentally-friendly choice for all applications. The low-emission MatriX cylinder burner guarantees clean, low-NOx combustion, while Lambda Pro ensures the highest efficiency at all times. With the Vitodens 200 you can actively contribute to protecting the environment – and your wallet – without compromising your comfort.

Strength in numbers

As many as eight Vitodens 200 gas-fired condensing boilers can be combined in a single prefabricated cascade system, with inputs up to 4240 MBH[†]. A cascade system fires boilers as required to meet fluctuating heating demands; it maintains maximum efficiency at all times by precisely matching the load.

A cascade system can also prevent interruption of heating plant operation, with multiple boilers available as back-up.



- 1** Inox-Radial heat exchanger
- 2** Modulating MatriX cylinder burner
- 3** Vitotronic 200 control

Product may not be exactly as shown.

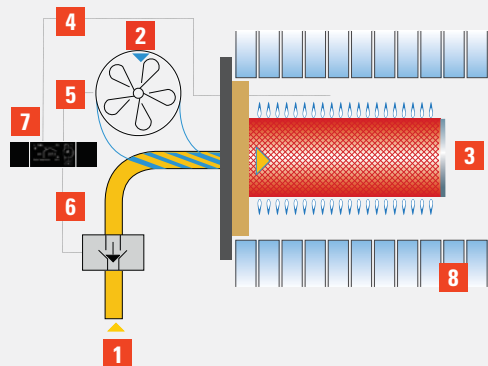
[†]only models 160 to 530 can be combined in a cascade system.



Product not exactly as illustrated.

What is Lambda Pro?

By continuously monitoring the flame quality of the MatriX cylinder burner, the Lambda Pro combustion management system automatically adjusts the gas and combustion air ratio. Without any manual adjustments or conversions, the Vitodens 200, B2HB always maintains optimal performance.



- | | |
|--------------------------|----------------------|
| 1 Gas supply | 5 Air signal |
| 2 Combustion air | 6 Gas signal |
| 3 MatriX cylinder burner | 7 Vitotronic control |
| 4 Flame signal | 8 Heat exchanger |

Specifications

- Viessmann-made stainless steel Inox-Radial heat exchanger constructed to CSA B51 and ASME Section IV
- Viessmann-made stainless steel MatriX cylinder burner
- 10 models from 12 to 530 MBH
- Efficiency up to 98% at full modulation and up to 95% AFUE
- Suitable for altitude levels up to 10,000 ft. / 3,000 m

For technical data, see back page.

Benefits at a glance

- Best value in its class with new industry-leading technology and the most standard features
- Low-emission combustion for environmentally-friendly operation
- Intelligent Lambda Pro gas management system automatically adjusts to different gas qualities for optimum efficiency and performance
- Vitotronic 200 HO1B control features large display with text and graphics for user-friendly operation
- Modulation ratio up to 6.5:1 ensures extremely high efficiency
- Multiple venting options and greater venting flexibility with vent length up to 180 ft.
- Multiple boiler installation for models 160 to 530 - 32 to 4240 MBH
- Common venting up to four boilers[†]

[†]In accordance with local codes and regulations of authorities having jurisdiction.

Technical Data



Vitodens 200-W gas-fired wall-mounted condensing boiler
Multi-boiler installation - 32 to 4240 MBH for models 45,160 to 150,530

Model		B2HB					B2HA				
Size		68	94	125	160	199	285	311	352	399	530
Rated Input*	MBH	12-68	19-94	19-125	32-160	32-199	71-285	71-311	71-352	113-399	113-530
Efficiency	% AFUE	95%	95%	95%	95%	95%	92%				
	Thermal Efficiency**							94.5%	94.5%	93.9%	93.5%
Dimension											
Width	in.	17.75	17.75	17.75	19	19	19	19	19	23.63	23.63
Height	in.	41	41	41	43.5	43.5	43.5	43.5	43.5	44.5	44.5
Depth	in.	15.7	15.7	15.7	21	21	21	21	21	27.1	27.1
Weight	lbs	110	110	110	210	210	194	194	194	298	298
Boiler water content	USG L	1.02 (3.88)	1.02 (3.88)	1.02 (3.88)	3.85 (14.6)	3.85 (14.6)	3.4 (12.8)	3.4 (12.8)	3.4 (12.8)	4 (15)	4 (15)
Boiler max. flow rate	GPM L/h	6.2 (1400)	6.2 (1400)	6.2 (1400)	14.3 (3250)	14.3 (3250)	25 (5700)	25 (5700)	25 (5700)	38 (8600)	38 (8600)
Max. operating pressure (max. allowable working pressure) at 210°F (99°C)	psig bar	45 (3)	45 (3)	45 (3)	60 (4)	60 (4)	60 (4)	60 (4)	60 (4)	80 (5.5)	80 (5.5)
Boiler water temperature											
- Adjustable high limit (AHL) range	°F	68 to 165	68 to 180	68 to 180	68 to 180	68 to 180	68 to 185	68 to 185	68 to 185	68 to 185	68 to 185
- space heating (steady state)	°C	(20 to 74)	(20 to 82)	(20 to 82)	(20 to 82)	(20 to 82)	(20 to 85)	(20 to 85)	(20 to 85)	(20 to 85)	(20 to 85)
- DHW production (set-point)	°F(°C)	165 (74)	180 (82)	180 (82)	180 (82)	180 (82)	185 (85)	185 (85)	185 (85)	185 (85)	185 (85)
- Fixed high limit (FHL)	°F(°C)	210 (99)	210 (99)	210 (99)	210 (99)	210 (99)	210 (99)	210 (99)	210 (99)	210 (99)	210 (99)
Boiler connections											
Boiler heating supply and return	NPTM"	3/4	3/4	3/4	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	2	2
Pressure relief valve	NPTF"	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Drain valve	(male thread)	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Boiler supply/return for indirect-fired DHW storage tank (field supplied)	NPT"	3/4	3/4	3/4	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	2	2
Gas valve connection	NPTF"	3/4	3/4	3/4	1	1	1	1	1	1	1

* Input based on Natural Gas

** ANSI Z21, 13/CSA 4.9

