

Gas Condensing Technology

**VITODENS®100-W**

**VIESSMANN®**



**Your Local Viessmann Experts:**



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CLIMATECARE®**

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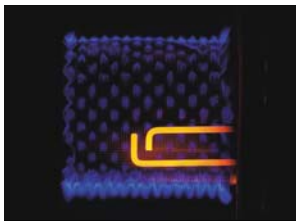
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## Gas Condensing Technology

## Vitodens 100-W –21 to 125 MBH Space Heating and On-Demand DHW with Combi boiler



Stainless steel, Viessmann-made Inox-Radial heat exchanger



Low-emission, Viessmann-made Matrix cylinder burner



Backlit LCD touchscreen

### Every home. Every budget.

With its outstanding design and price/performance ratio, the Vitodens 100-W is the perfect mix of performance and value. Its compact design, zero clearance to combustibles and extremely quiet operation make the Vitodens 100-W an ideal choice even in the smallest of spaces. Plus, with a limited residential lifetime warranty, you can be sure your investment will deliver long-lasting value year after year.

### Reliable and consistent performance

Stainless steel is the best choice for long-term reliability. That's why the Vitodens 100-W is equipped with a stainless steel Inox-Radial heat exchanger and Matrix cylinder burner. Developed and manufactured by Viessmann, these high-quality stainless steel components maximize performance and reliability. Plus, the "self-cleaning" heat exchanger contributes to the boiler's long service life and dependable performance.

### Outstanding versatility

The Vitodens 100-W offers the right solution for every demand – from multiple venting options to fuel flexibility (NG or LP) right out of the box. Plus, installation, service and maintenance are designed to be fast and easy with all pipe connections located at the bottom and serviceable components easily accessible from the front. You'll save time and money with fast service and maintenance calls.

### Helps you save

Select an easy-to-use room thermostat and utilize the boiler's on-board control, which automatically adjusts the boiler water to outdoor temperatures. This not only boosts fuel savings, but also keeps your home warm and comfortable at all times. New optimized outdoor reset capability provides more precise temperature calculations.

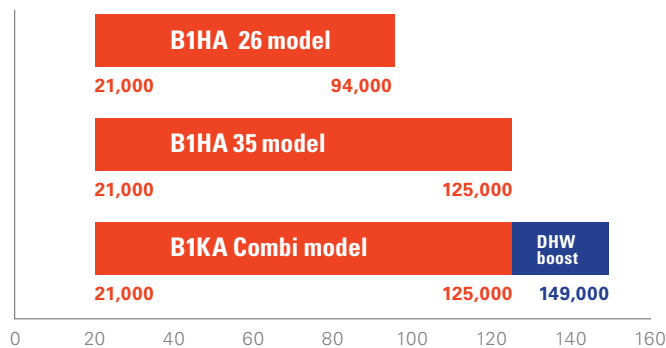
### User-friendly touchscreen control unit

The Vitodens 100-W gas condensing boilers are controlled by the new, one hand touchscreen control with enhanced programming. The backlit LCD touchscreen display offers excellent readability even under poor lighting conditions.

### On-demand DHW with Vitodens 100-W, B1KA Combi boiler

High-efficiency domestic hot water (DHW) and space heating are now combined in the new Vitodens 100-W, B1KA Combi boiler. Say goodbye to your DHW tank and experience reliable hot water all day long with an outstanding flow rate of up to 3.5 GPM†, plus added cost savings with the energy-saving on-demand indirect-fired design. The B1KA Combi boiler is ideal for apartment units or houses with small mechanical rooms and/or one DHW draw point. Installation is easy with the new Combi boiler as the stainless steel heat exchanger, pressure bypass valve, DHW temperature and flow sensors, 3-speed pump and 3-way diverting valve are built-in to form one compact, lightweight, space saving unit.

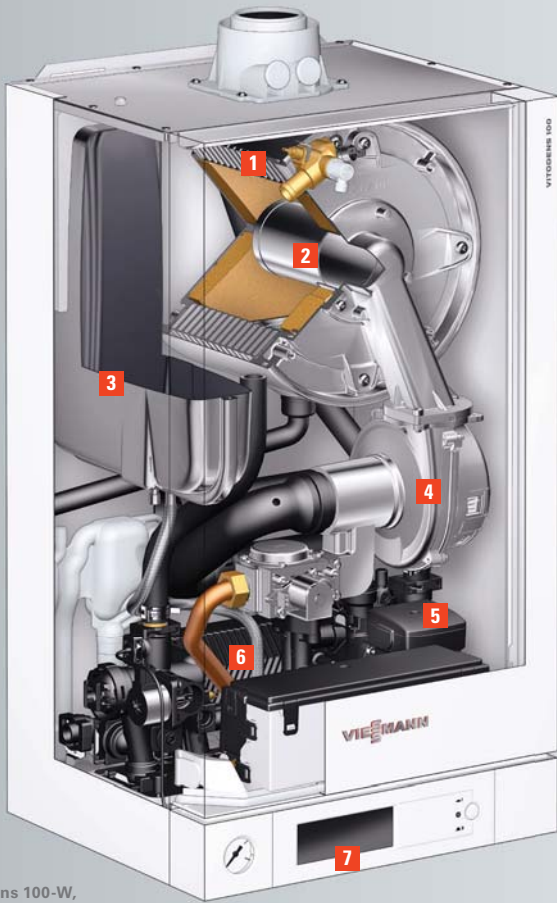
### Capacities (NG Inputs) Btu/h



Optimized load matching with up to 7:1 turndown ratio



† At a 77 °F maximum temperature rise with Vitodens 100-W, B1KA 35



Vitodens 100-W,  
B1KA Combi boiler

- 1 Stainless steel Inox-Radial heat exchanger
- 2 Modulating MaxtriX cylinder burner
- 3 Integral heating expansion tank (B1KA Combi boiler only)
- 4 Variable speed combustion fan for quiet and economical operation
- 5 Integrated pump
- 6 Plate heat exchanger for convenient DHW heating (B1KA Combi boiler only)
- 7 Backlit LCD touchscreen

#### Benefits at a glance – Vitodens 100-W, B1HA

- Fits any home and budget with high performance at an attractive price
- Outstanding efficiency of 95% A.F.U.E. on all models
- Fully-modulating input eliminates energy waste
- Lasting performance with proven Viessmann stainless steel Inox-Radial heat exchanger constructed to CSA B51 and ASME Section IV
- Low-emission combustion with fully-modulating Viessmann stainless steel Matrix cylinder burner for natural gas or propane; factory calibrated
- User-friendly backlit LCD touchscreen boiler control with vent length up to 200' and multiple venting options; rigid and flexible PP(s) vent options
- Suitable for altitude levels of up to 10,000 ft. / 3,000 m
- Simple to install and service with 4 pipe hydronic connection design with built-in primary pump and diverter valve
- Extremely quiet operation; quieter than most refrigerators
- Limited lifetime warranty in residential applications
- Ideal application for apartments, condos, cottages, single-family homes, or installs where space is at a premium

#### Benefits – Vitodens 100-W, B1KA Combi boiler

- All the benefits of a Vitodens 100-W boiler, plus built-in on-demand domestic hot water (DHW) – no need for an additional storage tank
- Ideal for apartment units or houses with small mechanical rooms and/or one DHW draw point.
- DHW at the snap of your fingers all day long! Up to 3.5 GPM<sup>†</sup>
- Optimized load matching with up to 7:1 turndown ratio
- Energy-saving and low-cost, on-demand indirect-fired DHW production
- Conforms to NSF/ANSI 372 for Low Lead Content
- Quality you can count on! Stainless steel heat exchanger, built-in pressure bypass and 150 psig working pressure rating
- Reliable and consistent DHW supply with built-in DHW temperature and flow sensors
- Complete space / DHW heating management by boiler control, powerful built-in 3-speed pump and diverting valve

<sup>†</sup> At a 77° F. maximum temperature rise with Vitodens 100-W, B1KA 35.

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Technical Data



**Vitodens 100-W** wall-mounted gas condensing boiler  
B1HA Boiler Series  
B1KA Combi Boiler

Model		B1HA 26,94	B1HA 35,125	B1KA 35,125
<b>Rated input (Heating)</b>	MBH	21-94	21-125	21 - 125
<b>Rated input (DHW)</b>	MBH	—	—	21-149
<b>Efficiency</b>	% AFUE	95%	95%	95%
<b>Max. boiler temperature (during DHW production)</b>	°F (°C)	—	—	176 (80)
<b>DHW Supply temperature</b>	°F (°C)	—	—	140 (60)
<b>Continuous draw rate (Max.)</b>	USG/min	—	—	3.7
<b>Altitude Levels</b>	ft.	up to 10,000 ft.	up to 10,000 ft.	up to 10,000 ft.
<b>Dimensions</b> (inches)	Depth	15.75	15.75	15.75
	Width	15.75	15.75	15.75
	Height	30.25	30.25	30.25
<b>Weight</b>	lbs	79.4	79.4	90
<b>Boiler water content</b>	USG	1.02	1.02	1.02
	L	3.88	3.88	3.88
<b>Boiler max. flow rate</b>	GPM	6.2	6.2	6.2
	L/h	1400	1400	1400
<b>Max. operating pressure</b> (max. allowable working pressure) at 210°F (99°C)	psig	45	45	45
	bar	3	3	3
<b>Boiler water temperature</b> - Adjustable high limit (AHL) range - Space heating (steady state) - DHW production (set-point)  - Fixed high limit (FHL)	°F (°C)	86 to 176 (30 to 80)		
	°F (°C)	176 (80)		
	°F (°C)	210 (99)		
	°F (°C)	210 (99)		
<b>Boiler connections</b>	Boiler heating supply and return	NPTM (male)	¾"	¾"
	Pressure relief valve	NPTF (female)	¾"	¾"
	DHW tank heating supply/return	NPTM (male)	¾"	¾"
	DHW heating	NPTM (male)	—	½"
	Drain valve	(male thread)	¾"	¾"

**Standard Equipment:**  
Installation fittings c/w  
30 psig PRV, pressure  
gauge, gas shut-off valve,  
two fill/drain valves, all  
mounting hardware,  
outdoor temperature  
sensor, LP conversion  
kit, tank temperature  
sensor (B1HA), DHW  
150 psig PRV (B1KA)

