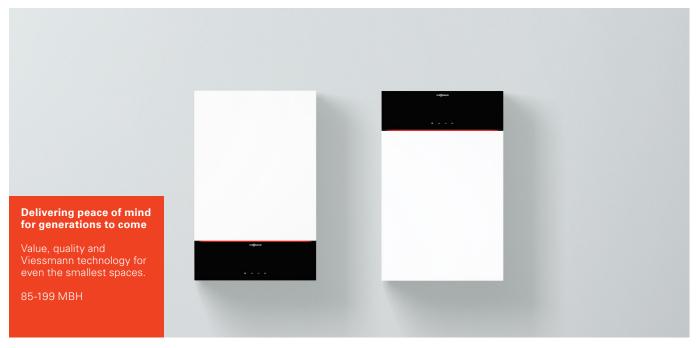




WALL MOUNTED GAS CONDENSING BOILER

Space Heating or Combi Boiler Ideal for Condominiums and Single-Family Homes

VITODENS 100-W, B1HE/B1KE



Equipped with a Viessmann stainless steel heat exchanger for lasting performance and reliability, plus a fully modulating MatriX Plus cylinder gas burner, the Vitodens 100-W wall-mounted condensing boiler is the perfect combination of value, quality and Viessmann technology.

Its compact design, zero clearance to combustibles and extremely quiet operation make the Vitodens 100-W an ideal choice for even the smallest spaces. Plus, with a limited residential lifetime warranty, you can be sure your investment will deliver long-lasting value.

Outstanding Versatility

The Vitodens 100-W offers the right solution for every demand, including space heating or all-in-one combi options; multiple venting options and boiler software adjusts automatically for vent length with no added coding; and flexible fuel options, with the ability to switch from natural gas to propane at the push of a button, no conversion kit required.

Installation, service and maintenance are designed to be fast and easy with all pipe connections, and serviceable components easily accessible. The adjustable user interface control panel can be moved easily to accommodate different height installations.

Domestic Hot Water To Fit Your Family's Needs

Available as a B1KE model combi, Vitodens 100 offers an outstanding continuous draw rate of up to 4.7 GPM[†] plus added cost savings with the energy-saving on-demand design, or as a B1HE model non-combi boiler. For more hot water on demand, the B1HE (non-combi) makes an excellent pairing with Vitocell DHW tanks, delivering highly efficient, dependable hot water and space heating for families.

Save, Learn and Have Peace of Mind From Anywhere

The Vitodens 100-W offers an integrated WiFi interface, allowing the system to connect directly to the internet for seamless integration with the ViCare App for smartphone or tablet. Once ViCare is connected, homeowners can remotely connect to their boiler and utilize on-demand DHW recirculation, DHW scheduling and temperature control, and visualize fuel usage and cost-savings.

Lambda Pro Plus Combustion Control: The Heart Of Your Heating

The proprietary Viessmann modulating Lambda Pro Plus combustion control offers clean combustion, 10:1 turn down ratio and quiet operation with either propane or natural gas, which can be changed at the push of a button.

- * On-demand domestic hot water available with Vitodens 100 B1KE models
- † B1KE-199 at Δ t= 77°F (43K). DCW and DHW temperature rise would be proportional. Maximum DHW supply temperature is 140°F (60°C).

Peace of mind through future-proof design.

BENEFITS AT A GLANCE

- + Long lasting, reliable performance and outstanding 95% AFUE efficiency with stainless steel Inox-Radial heat exchanger
- + Reduced emission (low-NOx) and 10:1 turn down ratio with fully-modulating stainless steel MatriX Plus cylinder burner
- + Field height adjustable controls for comfortable service operation in any space
- + Compact, lightweight wall-mount design with zero clearance to combustibles
- + Advanced software automatically adjusts boiler water temps
- + Easy installation, service and maintenance with easy access to all servicable components
- + Multiple venting options
- Easy piping due to two sets of tappings, built in pump and diverter
- + Suitable for high altitudes up to 10,000 ft (3000 m) with no power loss and automatic software vent length adjustment
- + Built-in automatic frost protection
- + Reliable on demand domestic hot water (B1KE)
- + Limited lifetime warranty for added peace of mind



The Vitodens 100-W, B1HE / B1KE integrates seamlessly with Viessmann One Base, Viessmann's complete digital solution platform featuring applications for homeowners and contractors alike.

VITODENS 100-W

B1HE/B1KE - 85-199 MBH



Actual product may vary from illustrated image

- 1 Inox-Radial stainless steel heat exchanger
- 2 Stainless steel MatriX Plus burner and Lambda Pro Plus combustion control
- 3 Burner blower
- 4 Gas and hydronic connections
- 5 Field adjustable lightguide and 3.5" LCD controls display
- 6 Integrated high efficiency boiler and DHW pump
- 7 DHW plate heat exchanger (combi models only)

Warranty information is available at viessmann-us.com/warranty

Viessmann Manufacturing Company, Inc. Warwick, RI, 02886 1-800-288-0667

viessmann-us.com





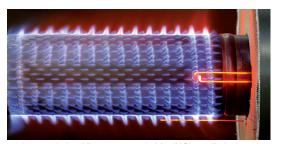






User-Friendly Control Unit

The black control panel offers a discrete design, height adjustment, and features intuitive homeowner dashboards for basic settings and operational insights, as well as advanced dashboards for service and trouble shooting, available in multiple languages. An easy-to-use thermostat can utilize the boilers on-board control which can automatically adjust the boiler water to outdoor temperatures for dual comfort and fuel savings.



Low-emission, Viessmann-made MatriX Plus cylinder burner

R1HF-85 R1HF-120 R1HF-150

R1HF-199

B1KF-120

R1KF-199

TECHNICAL INFORMATION

Model

| Model | | B1HE-85 | B1HE-120 | B1HE-150 | B1HE-199 | B1KE-120 | B1KE-199 | |
|---|------------------|----------------|--------------|--------------|--------------|--------------|--------------|--|
| CSA Input | MBH | 85 | 120 | 150 | 199 | 120 | 199 | |
| (NG and LPG) | kW | 24.9 | 35.2 | 44 | 58.3 | 35.2 | 58.3 | |
| CSA Output | MBH | 80 | 113 | 141 | 187 | 113 | 187 | |
| (NG and LPG) ¹ | kW | 23.4 | 33.1 | 41.3 | 54.8 | 33.1 | 54.8 | |
| Net AHRI Rating ² | MBH kW | 70 20.5 | 98 28.7 | 123 36 | 163 47.8 | 98 28.7 | 163 47.8 | |
| A.F.U.E. | % | 95 | 95 | 95 | 95 | 95 | 95 | |
| Overall Dimensions | | | | | | | | |
| Depth | inches mm | 19.75 500 | 19.75 500 | 21.75 550 | 21.75 550 | 19.75 500 | 21.75 550 | |
| Width | inches mm | 17.75 450 | 17.75 450 | 17.75 450 | 17.75 450 | 17.75 450 | 17.75 450 | |
| Height | inches mm | 33.75 859 | 33.75 859 | 39 989 | 39 989 | 33.75 859 | 39 989 | |
| Weight | lbs kg | 108 49 | 108 49 | 179 81 | 179 81 | 110 50 | 190 86 | |
| Boiler Water Content | USG L | 1.02 3.88 | 1.02 3.88 | 2.5 9.5 | 2.5 9.5 | 1.02 3.88 | 2.5 9.5 | |
| Heat Exchanger | ft ² | 12.96 | 12.96 | 27.44 | 27.44 | 12.96 | 27.44 | |
| Surface Area | m² | 1.2 | 1.2 | 2.55 | 2.55 | 1.2 | 2.55 | |
| Maximum Operating Pressure (max. allowable | psig bar | 45 3 | 45 3 | 60 4 | 60 4 | 45 3 | 60 4 | |
| working P.) at 210°F (99°C) | | | | | | | | |
| Min./Max. Gas Supply Pressure ³ | | | | | | | | |
| Natural Gas | "W.C. | "w.c. 4/14 | | | | | | |
| LPG | "W.C. | 10/14 | | | | | | |
| Boiler Water Temperature | | | | | | | | |
| Max. Flow Rate ⁴ | GPM L/H | 4.8 1090 | 6.2 1408 | 8.8 1999 | 10.6 2408 | 6.2 1408 | 10.6 2408 | |
| Space Heating (steady state) | °F (°C) | 68-180 (20-82) | | | | | | |
| DHW Tank Heating | °F (°C) | 194 (90) | | | | | | |
| DHW Heating | °F (°C) | 194 (90) | | | | | | |
| | 1 () | 1 () | | | | | | |
| Fixed High Limit (FHL) | °F (°C) | 210 (99) | | | | | | |
| Boiler Connections | | | | | | | | |
| Gas Supply Connection | NPTF (female) | | | 3/4 | inch | | | |
| Pressure Relief Valve | NPTF | ¾ inch | | | | | | |
| - B 11 11 11 | (female) | | | | | | | |
| Boiler Heating | NPTM | 3/4 inch | 3/4 inch | 1 inch | 1 inch | 3/4 inch | 1 inch | |
| Supply/Return | (male) | | | | | | | |
| DHW Tank Heating Supply/Return | NPT | ¾ inch | ¾ inch | 1 inch | 1 inch | - | - | |
| DHW Heating (combi) | NPTM (male) | - | - | - | - | ¾ inch | 1 inch | |
| Drain Valve | (male thread) | | ¾ inch | | | | | |
| Boiler Flue Gas Connection | Ø in Ø mm | | 3 80 | | | | | |
| | | | | | | | | |

- 1 Output based on 140°F (60°C), 120°F (49°C) system supply / return temperature.
- 2 Net AHRI rating based on piping and pick-up allowance of 1.15
- 2 Net Arm rating based on piping and pick-up allowance of 1.16.

 3 If the gas supply pressure exceeds the maximum gas supply pressure value, a separate gas pressure regulator must be installed upstream of the heating system.
- 4 See "System Flow Rates" on page 11 of product Technical Data Manual