

# VITODENS 200

**VIESSMANN**

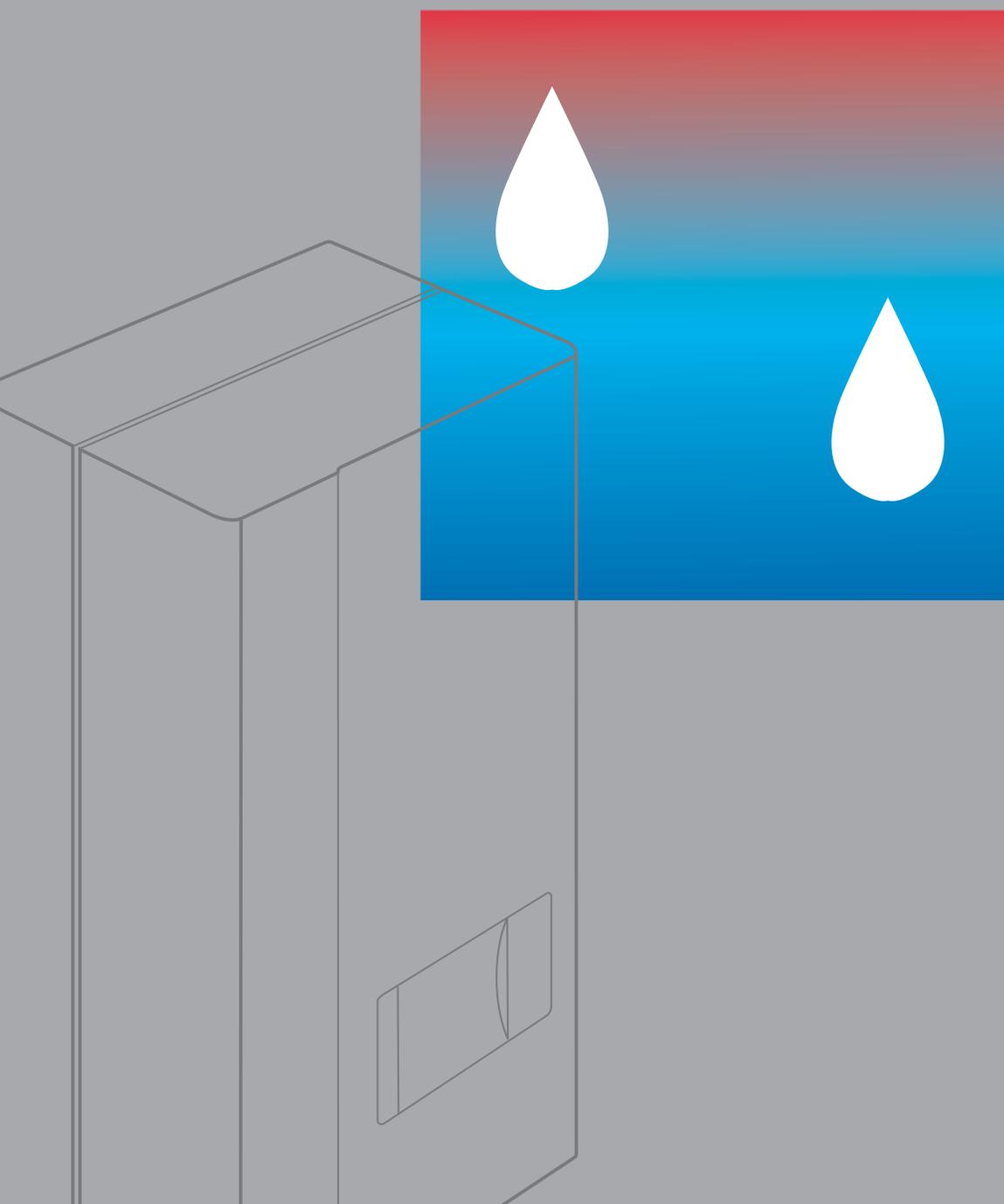
Gas-fired wall-mounted condensing boiler with

modulating Matrix-compact gas burner

Standard heating boiler 25 to 230 MBH

Combi heating boiler 25 to 91 MBH

Multi-boiler installation 344 to 920 MBH





## Efficient. Innovative. Compact.

### Wall-mounted condensing technology from Viessmann.

The Vitodens 200 gas-fired wall-mounted condensing boiler from Viessmann delivers superior performance, reliability and efficiency. This translates into increased savings in fuel and maintenance costs.

Compact and ultra-quiet, it integrates easily into any part of your living area, including closets, kitchens or bathrooms.

Its industry-leading technology makes this boiler the ultimate experience in heating comfort and reliability.

And like all Viessmann products, the Vitodens 200, with its low-emission MatriX-compact gas burner, meets the most stringent emission regulations worldwide.

#### Simply well thought out

A key component of the Vitodens 200 design is the aqua plate with the entire water flow system integrated into the rear panel. All parts are easily accessible and removable for service. The Quick Pipe Connection System with sliding couplings on all heating and domestic hot water connections makes maintenance and service considerably easier and less time-consuming.

For the heating contractor this means: Fast and easy installation, start-up and service - advantages that will pay off for the system user as well.

#### Simply versatile

The Vitodens 200 boiler is one of the most versatile wall-mounted condensing boilers on the market. Reliable domestic hot water production via the integrated Domestic Hot Water Quick System (Combi model only) guarantees domestic hot water instantly. For applications with a high demand for domestic hot water, a stand-alone DHW storage tank can be connected. Need to satisfy greater load requirements? No problem! Up to four Vitodens 200, WB2-44, -60 boilers can be combined in a multi-boiler installation to heat large homes, small apartment complexes and semi-commercial buildings.

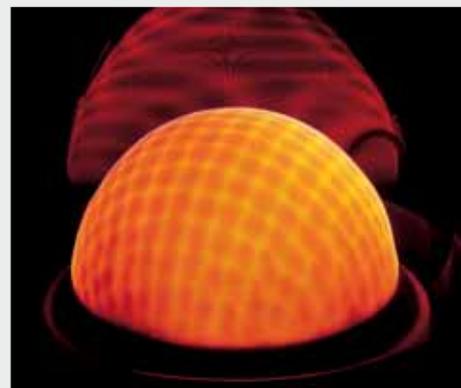


Compact and ultra-quiet

#### Find out more

The following pages illustrate how the Vitodens 200 operates, why you should choose the Vitodens 200, and much more.

For additional information, please contact the Viessmann offices in Canada or the U.S.A.

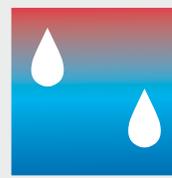


Low-emission gas burner



*Product may not look exactly as illustrated.*

# High-quality condensation: The VITODENS 200



## High efficiency

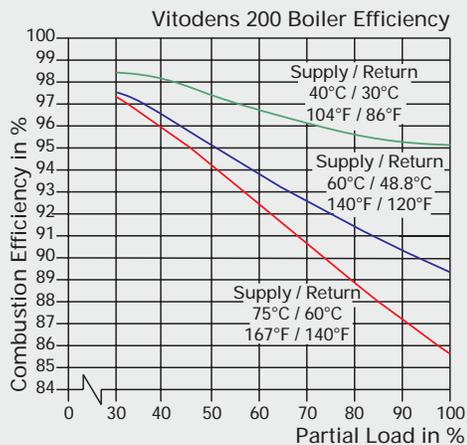
This state-of-the-art condensing boiler is rated with an exceptional Annual Fuel Utilization Efficiency (A.F.U.E.) of up to 94.2% and a combustion efficiency of up to 98%, making it the most efficient boiler in its class.

The radial design of the Inox-Radial stainless steel heat exchanger provides abundant surface area for maximum heat transfer.

And the vertical flow of the flue gas condensate keeps the heat exchanger clean and reliable.

The Vitodens 200 boiler is CSA certified for Canada and USA and is built in compliance with ASME code requirements.

The heat exchanger is marked with an ASME/NB rating plate.



## Clean combustion

The integrated full modulation MatriX-compact gas burner creates a flameless, radiant heat source with extremely low emissions that exceed the world's most stringent environmental emission regulations.

In order to maintain safe and efficient operation, the boiler features flue gas adaptation, which allows the burner to adjust automatically to varying conditions in the vent system, to vent blockages, sudden wind conditions, line voltage fluctuations and installation altitudes.

### The benefits at a glance:

- **Highest efficiency** with full modulation.  
Combustion efficiency: up to 98%.  
A.F.U.E.: up to 94.2%.
- **Maximum reliability**  
High-alloy stainless steel (SA240 316Ti) Inox-Radial heat exchanger constructed in compliance with CSA B51 and ASME Section IV.  
Max. pressure rating: 45 psig.
- **Protect the environment**  
Extremely low emissions with modulating MatriX-compact gas burner:  
NO<sub>x</sub>: 8.9 ppm (air-free)  
CO: 5.5 ppm (air-free)
- Compact, lightweight design.  
Zero clearance to combustibles.  
Limited space is not an issue.
- Clean, esthetically pleasing appearance for installation anywhere in your living area.

- Extremely quiet operation; quieter than most refrigerators.
- Smart burner technology  
Factory calibrated, self-adjusting burner. No adjusting in the field, reduced operating cost.
- Comfortrol – powerful and user-friendly outdoor reset control, built-in and prewired with diagnostic system.  
Controls multi-temperature space heating and DHW systems.
- Reliable DHW production in two ways:
  - Combi model features an integrated DHW Quick System. No DHW tank required.
  - Unlimited DHW supply with a stand-alone DHW tank with any other Vitodens 200.
- Three different venting options:
  - Horizontal or vertical sealed combustion vent system (factory supplied)
  - Vertical single-wall vent system (field supplied)
- Multi-boiler installation  
Models WB2-44, -60 can be combined to a maximum of 4.  
**Ideal for light commercial applications.**
- One version for all elevation levels (0 – 10 000 ft./0 – 3048 m).
- Fast, simple conversions to natural or propane gas.

# Strength in numbers: Up to 920 MBH with multi-Vitodens installations

Up to four Vitodens 200, WB2-44, -60 boilers, combined in a multiple-boiler system, are able to provide a rated input of up to 920 MBH. This allows multi-unit homes, semi-commercial or public buildings to be heated in a space-efficient manner, using condensing technology.

The core of the Vitodens 200, WB2-44, -60 is the proven Inox-Radial parallel-coil stainless steel heat exchanger.

Heating water flows through two separate coils of the heat exchanger arranged in parallel.

This design not only provides a large heat transfer surface, but also guarantees particularly low flow resistance, reducing flow noise and the energy consumption of the heating circuit pump.

## Modulating Vitocontrol-S, WB2 control unit for Vitodens 200

The Vitocontrol-S, WB2 control unit enables several Vitodens 200, WB2-44, -60 to be linked to form one single heating center. It controls the staging of the multi-boiler system by communicating with each Vitodens 200 boiler control, ensuring energy efficient operation. For maximum comfort, the control uses an outdoor reset function to determine a suitable common supply temperature with respect to current outdoor conditions.

### The benefits at a glance:

- **Rated input of up to 920 MBH** with Vitodens 200, WB2-44, -60 gas-fired condensing boilers in a multi-boiler system.
- Modulating boiler operation within the multi-boiler system maximizes efficiency and, most importantly, **energy and cost savings**.
- **Inox-Radial parallel-coil heat exchanger** features **ultra-quiet operation** with low flow resistance and minimum standby losses, **keeping operating cost to a minimum**.
- **Low power consumption** through variable speed fan and heating circuit pump.
- **Exceptionally space-efficient** since service clearances to the side are not necessary.
- **Matching system design** for up to four Vitodens 200, WB2 boilers:
  - Vitocontrol-S, WB2 master control
  - complete hydraulic separation between system loops and boiler loop using Viessmann low-loss header.
- **Extremely low emissions** – outperforms the limits set by numerous environmental standards.

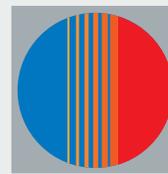


Vitocontrol-S, WB2 control unit for multi-boiler installations



Multi-Vitodens 200 installation

# Everything taken care of with reliable DHW production and Comfortrol control unit



The Vitodens 200 offers two different methods for reliable DHW production:

## **DHW Quick System**

(for use with Vitodens 200, Combi model WB2-24C):

An integrated stainless steel plate heat exchanger produces domestic hot water instantly, efficiently, and at even temperatures (see cutaway view on page 10).

## **Stand-alone Vitocell DHW tank**

(for use with Vitodens 200, models WB2-24 to -60): Domestic hot water is supplied via connected Vitocell stand-alone DHW storage tank.

## **DHW storage tank**

For applications with a large demand for domestic hot water, it is recommended that a stand-alone DHW storage tank be used in conjunction with the Vitodens 200 boiler.

Choose from a comprehensive program of DHW storage tanks:

### **Vitocell 100**

Indirect-fired DHW storage tank of steel construction, with Ceraprotect two-coat enamel finish.

### **Vitocell 300**

Indirect-fired domestic hot water storage tank of high-grade stainless steel for a long service life. Completely hygienic and lightweight.

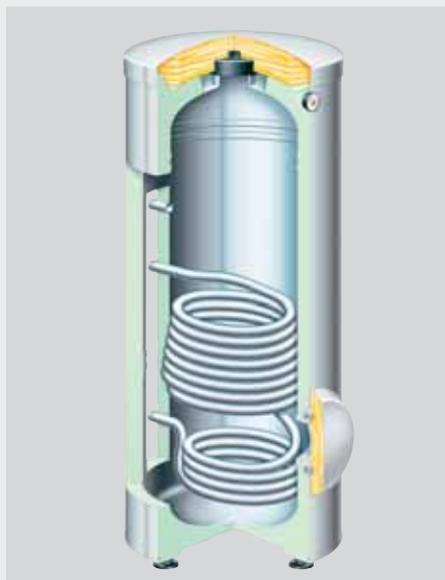
The Vitocell tanks from Viessmann offer extremely reliable domestic hot water supply assured through fast, uniform heating via generously sized heat exchanger surfaces.

Standby losses are minimized by highly effective, foamed-in-place, or wrap-around, HCFC-free insulation.

## **Comfortrol control unit – more functions, more comfort**

The integrated Comfortrol control unit of the Vitodens 200 boiler is not only easy to use, but also thinks along – be it long-term, when resetting to daylight savings time, or short-term, as outdoor reset control, when responding automatically to outdoor temperature fluctuations. With the Comfortrol control unit you've got everything under control – even from your living room, when using one of the remote control options available.

All settings can be adjusted directly on the boiler or remotely (when the Comfortrol is used as the remote control).



## **Designed with all needs in mind**

The Comfortrol control unit not only makes life easier for the system user, but for the heating contractor as well: the integrated diagnostic system facilitates quick start-up, maintenance and service.

The freeze-up protection function automatically activates the boiler at freezing outdoor temperatures, protecting the entire heating system and DHW storage tank (if installed). Most control functions are easily accessible through the main menu in plain text format.

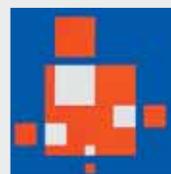


## **Comfortrol – menu-driven control unit**

**Vitocell-V 300 DHW storage tank,  
storage capacity:  
53 to 120 USG / 200 to 450 liters**



# Progressive heating technology is system technology



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

## Gas-fired wall-mounted condensing boiler (1)

Compact, reliable, energy efficient and environmentally friendly. Available as standard heating boiler or as Combi boiler with integrated DHW production in white finish.

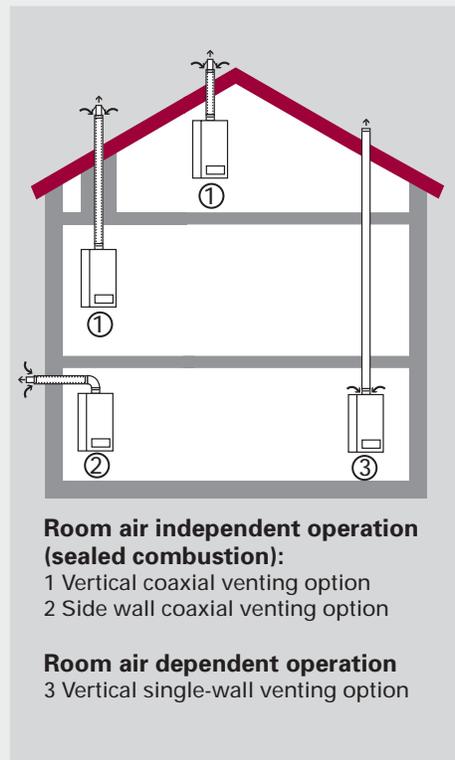
## Mounting bracket (2)

The mounting bracket facilitates quick and easy wall-mounting of the boiler. Adjustable union-type fittings and the Quick Pipe Connection System facilitate the connection of all installation fittings (applicable to boiler models WB2 6-24C, 6-24 and 8-32 only).

For boiler models WB2 6-24C, 6-24 and 8-32 you have the option of roughing in the boiler connections at time of construction. This way the boiler mounting bracket with all gas/water installation fittings is pre-installed. At time of completion, the boiler is quickly mounted. All installation fittings are covered by the boiler enclosure panel for an overall clean appearance.

## Venting system (3)

The Vitodens 200 is approved for three different venting options. A coaxial vent/air intake system for room air independent operation simultaneously discharges flue gases to – and draws combustion air from – the outdoors. **This coaxial vent system** may be used in vertical and side wall venting configurations. The **vertical single-wall venting** option draws combustion air from the boiler room. The Vitodens 200 and its venting options are approved together under ANSI Z21.13 CSA 4.9. - 2000 Standard and have been tested extensively for proper functioning to ensure operational reliability.



Venting options for the Vitodens 200

## DHW storage tank (see page 7)

The Combi version (WB2 6-24C) of the Vitodens 200 with integrated stainless steel plate heat exchanger provides quick and reliable DHW supply for apartments or small homes.

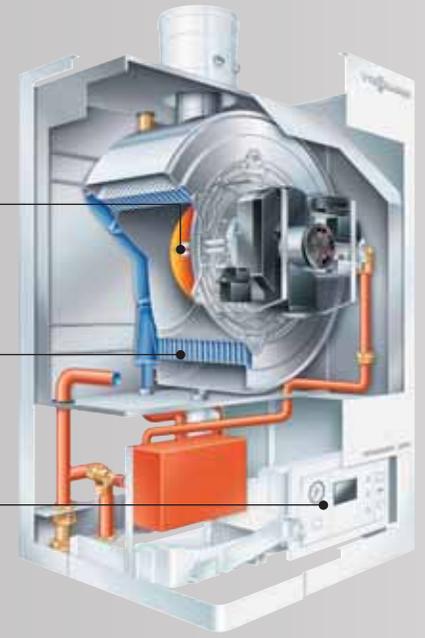
For mid-sized and larger buildings with a higher DHW draw rate, the comprehensive Vitocell DHW storage tank program offers maximum hot water comfort. Vitocell stand-alone tanks for connection to the Vitodens 200 are available in sizes from 42 to 120 USG / 160 to 450 liters in a Vitosilver finish.

## Remote controls (4)

Remote controls RS, with room temperature feedback, and WS, without room temperature feedback, are available for connection to the Vitodens 200. Another remote control option is the use of the Comfortrol programming unit as a remote control. Simply remove the programming unit from the control base on the boiler, insert a temperature indication unit in its place, and mount the Comfortrol programming unit on an inside wall of your living area. Operation of the heating system can then take place right from your living room or any other convenient location.



Vitodens 200, WB2-24/32



Vitodens 200, WB2-44/60

MatriX-compact  
gas burner

Inox-Radial heat  
exchanger surface

Comfortrol control unit  
with integrated  
diagnostic system

DHW plate  
heat exchanger

**VITODENS 200**

<b>Model No.</b>	WB2	6-24C	6-24	8-32	11-44	15-60
<b>Rated input range</b>						
Natural gas	MBH	25-91	25-91	37-124	55-172	80-230
	kW	7-27	7-27	11-36	16-50	23-67
Liquid propane	MBH	25-81	25-81	37-112	55-155	80-214
	kW	7-24	7-24	11-33	16-45	23-63
<b>Overall dimensions</b>						
Depth	inches	16	16	16	21¼	21¼
	mm	406	406	406	550	550
Width	inches	19¾	19¾	19¾	23½	23½
	mm	500	500	500	600	600
Height	inches	35½	35½	35½	35½	35½
	mm	900	900	900	900	900
<b>Weight (incl. insulation)</b>	lbs	159	143	165	198	198
	kg	72	65	75	90	90

# 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!"



