

Gas Condensing Technology
VITOCROSSAL® 200, CM2

VIESSMANN®



VITOCROSSAL 200

A practical approach to innovation

With its distinctive mix of proven Viessmann technology and innovative features, the Vitocrossal 200, CM2 takes a bold step forward while retaining the superior Viessmann quality you know and trust. The boiler combines unparalleled flexibility with maximum efficiency, making it your ideal choice for a new installation or economical retrofit in large residential or commercial applications.

Viessmann technology from top to bottom

A fully-modulating Viessmann pre-mix cylinder burner features a wide modulation turndown ratio of 5:1 to precisely match load and provide clean, quiet and environmentally friendly operation. The burner comes fully pre-assembled to simplify installation and commissioning.

The generous heat transfer surface area to heat input ratio of the SA240 316Ti stainless steel Inox-Crossal heat exchanger allows for maximum heat extraction while maintaining a compact size. Its smooth, corrosion-resistant surface allows condensate to simply run off – a “self-cleaning” process that ensures continuous condensing efficiency, reduced maintenance costs and longer boiler service life.

When combined with the new generation Viessmann boiler and system control technology, the fully-modulating burner and Inox-Crossal heat exchanger enable the Vitocrossal 200, CM2 to achieve outstanding thermal efficiencies up to 97%⁺ – delivering exceptional performance and reliability at an attractive price.

Progressive design features

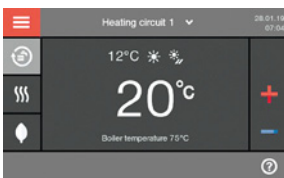
The Vitocrossal 200, CM2 can operate with low inlet gas pressure (NG) of only 4 inches of water column for compatibility with a greater range of supply pressures. Extremely low water pressure drop through the heat exchanger eliminates the need for a dedicated boiler pump and low-loss header*, while the boiler’s large water content extends burner run time and reduces cycling.

User-friendly touch screen interface

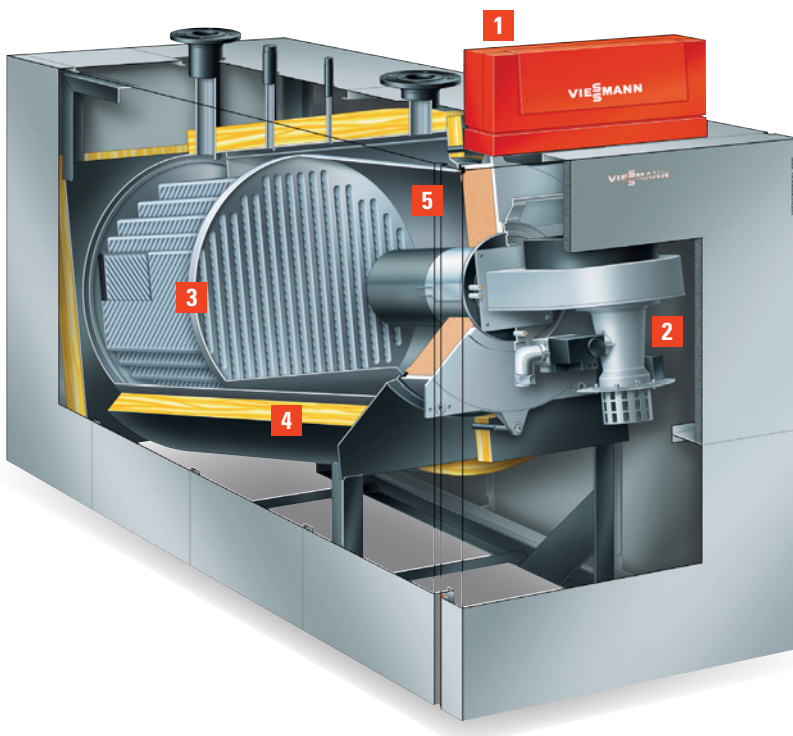
The Vitocrossal 200, CM2 offers integrated single and cascade boiler functionality.

A versatile solution

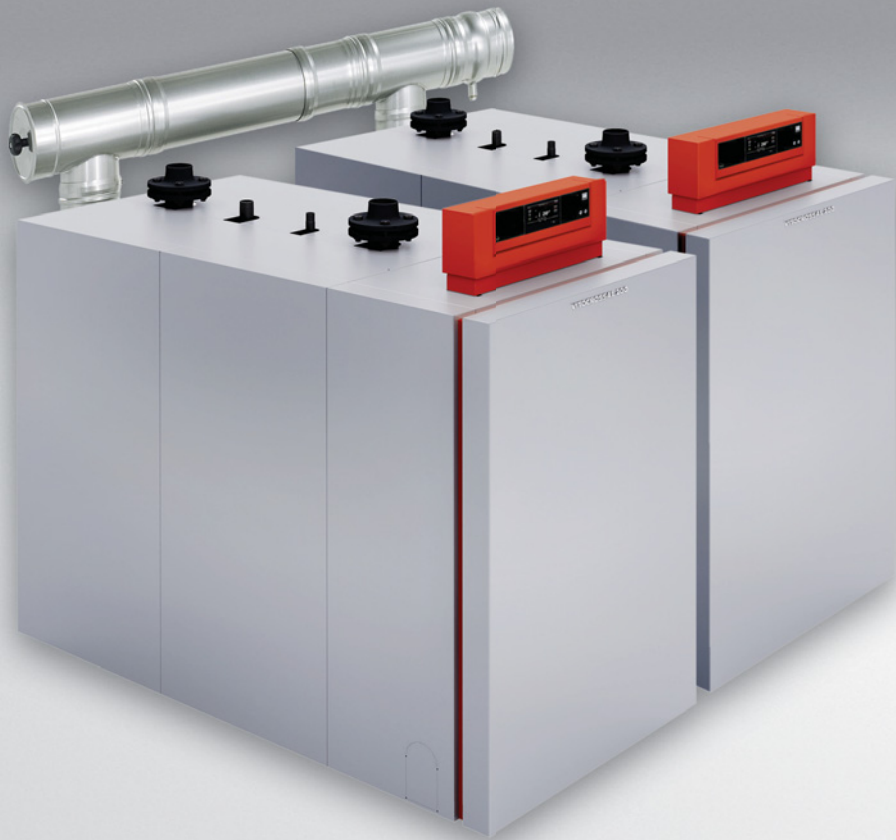
The Vitocrossal 200, CM2 offers a solution for almost every application. Multiple venting options (direct or chimney) with installed air intake kit, fuel flexibility (NG/LPG/LNG) with seamless integration into building control systems simplify retrofit projects and provide numerous possibilities for new installations. Available fully assembled (U.S. only) or unassembled for maximum shipping and installation flexibility, it is easy to install, even in older buildings with narrow entrances and small mechanical rooms. Suitable for high altitude operation up to 10,000 feet, the sky’s the limit for the Vitocrossal 200, CM2.



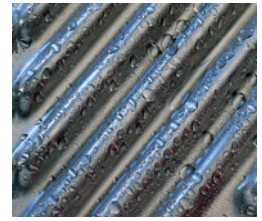
Vitotronic 300, GW6B Touch Screen
boiler control



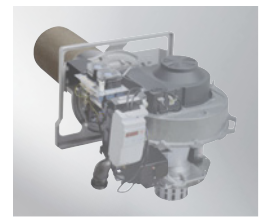
- 1 Vitotronic 300, GW6B Touch Screen control
- 2 Fully-modulating pre-mix cylinder burner
- 3 Inox-Crossal heat exchanger surfaces
- 4 Highly effective thermal insulation
- 5 Wide water passageways with low pressure drop



Product not exactly as shown.



Stainless steel Inox-Crossal heat exchanger



Low-emission fully-modulating cylinder burner

Multiple-boiler systems

Harness the full potential of a Vitocrossal 200, CM2 cascade installation with the Vitotronic 300, GW6B master control – an advanced digital boiler and system control with outdoor reset function to ensure reliable, efficient performance of the entire heating system. The Vitotronic 300 GW6B will modulate burners; stage and rotate boilers; and regulate boiler water temperature, common supply temperature and up to two heating circuits with mixing valves.

Up to eight Vitocrossal 200, CM2 boilers can operate in a cascade configuration to precisely match load (inputs of 131 to 17960 MBH), maximize boiler plant efficiency and provide security against heating plant service interruption.

In cascade systems Vitotronic 300 GW6B control can modulate boiler water temperature in conjunction with an external BMS control using an integrated LON module.

Specifications

- Thermal efficiencies of 97%[†]
- Inputs from 131 to 2245 MBH (single) / 17960 MBH (cascade)
- ASME CSD-1 compliant

Benefits at a glance

- Extremely low NO_x emissions and quiet operation from fully-modulating Viessmann pre-mix cylinder burner
- Wide modulation turndown ratio of 5:1 precisely matches load
- Pre-assembled burner simplifies installation and commissioning
- Venting flexibility with installed air intake kit for direct/chimney venting (PP or stainless steel) up to 200 ft.
- Common venting up to four boilers**
- Gas fuel flexibility (NG/LPG/LNG)
- Low inlet gas pressure capability (NG) as low as 4 in. of water column for compatibility with a range of supply pressures
- Large water content extends burner run time and reduces cycling
- No dedicated boiler pump required due to extremely low water pressure drop through heat exchanger*
- Generous heat transfer surface area/heat input ratio of stainless steel heat exchanger maximizes heat extraction in compact size
- Vitotronic 300 control features a large touch screen user-interface with text and graphics for user-friendly operation; used as a single boiler control or as a cascade primary/secondary control.
- Seamless integration possible with building management systems
- Optional Low NO_x certified by SCAQMD Natural Gas Models available

[†] Tested to AHRI Testing Standard Method to Determine Efficiency of Commercial Space Heating Boilers, BTS-2000. Technical information subject to change without notice.

* Contact your Viessmann Representative for boiler pump and low-loss header requirements in multiple-boiler installations.

** In accordance with local codes and regulations of authorities having jurisdiction.

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Technical Data



Vitocrossal 200, CM2 gas-fired condensing boiler

Model		CM2-186	CM2-246	CM2-311	CM2-400	CM2-500	CM2-620
Combustion Efficiency*	%	95	95	95	95.1	95.1	95.1
Thermal Efficiency*	%	97	97	97	95	95	95
Minimum Input (NG)	MBH	131	175	222	287	358	450
Maximum Input (NG)	MBH	663	878	1112	1445	1800	2245
Output†	MBH	643	851	1078	1372	1710	2132
Net AHRI Rating	MBH	559	740	937	1193	1487	1854
Overall Dimension†							
Width	Inches	36 ½	36 ½	36 ½	42 ¾	42 ¾	42 ¾
Height	Inches	66	66	66	65 ⅝	65 ⅝	68 ¾
Depth (Length)	Inches	73	73	73	89 ½	95 ⅝	100 ⅞
Weight (burner, control and insulation)	lbs	726	759	792	1495	1662	1929
Boiler Water Content	USG	81	77	74	104	112	131
Heat Exchanger Surface	ft.²	72.9	98.8	121.5	166.6	208.6	234
Maximum Operating Pressure	psig	75	75	75	75	75	75

* Tested to AHRI Testing Standard Method to Determine Efficiency of Commercial Space Heating Boilers, BTS-2000.

† Includes boiler with burner, boiler panels, thermal insulation, boiler control unit and electrical connection box. Note: For high altitude installations (5,000 to 10,000 ft.), the input will have an altitude de-rating of 15% for 5,000 ft. and 18% for 10,000 ft. Technical information subject to change without notice.

