Gas Condensing Technology

VITOCROSSAL 300, CA3

VIESMANN®

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Heating Systems ◄

Industrial Systems

Refrigeration Systems

Vitocrossal 300, CA3 – 2500 to 6000 MBH

Gas-fired condensing technology with fully-modulating pre-mix cylinder burner

Vitotronic 300, GW6C control system

A practical approach to innovation
With its unique synthesis of proven Viessmann technology and innovative features, the Vitocrossal 300, CA3 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 multi-family, commercial or light industrial applications.

Viessmann technology from top to bottom
Our fully-modulating pre-mix cylinder burners feature a wide modulation and combined burner turndown ratio of up to 15:1, precisely matching the load to provide clean, quiet and environmentally friendly operation. The burners come fully assembled and installed for ease of commissioning.

The SA240 316Ti stainless steel Inox-Lamellar heat exchanger surface provides maximum heat extraction while maintaining a compact size. Its smooth, corrosion-resistant surfaces allow condensate to simply run off – a "self-cleaning" process that ensures continuous condensing efficiency, reduced maintenance costs and longevity. The 160 psi pressure rating allows for this unit to be installed in almost any building.

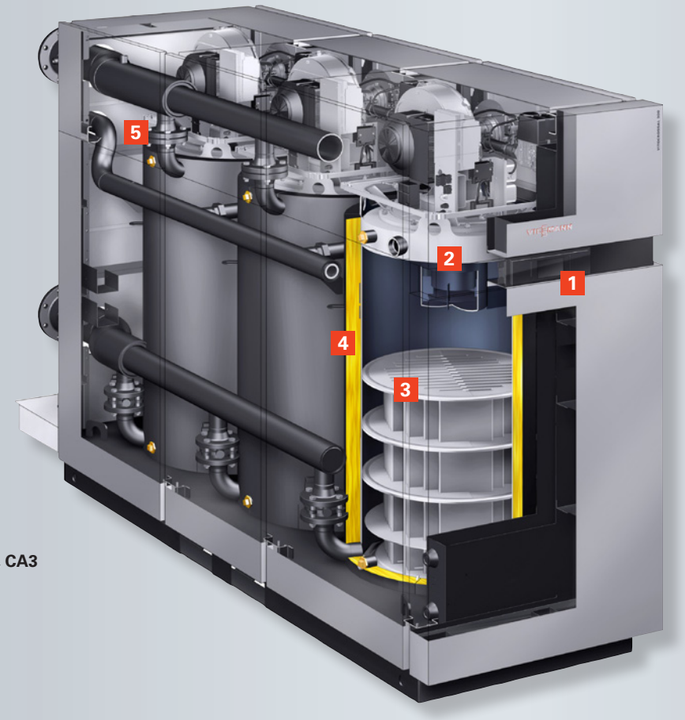
Viessmann combines these technologies in the Vitocrossal 300, CA3 to achieve outstanding thermal efficiencies over 96% and deliver exceptional performance and reliability at an attractive price.

Progressive design features
The Vitocrossal 300, CA3 can operate with a low inlet gas pressure of only 4 inches of water column (NG) eliminating the need for gas boosters. With extremely low water pressure drop, the heat exchangers are ideal for variable primary systems and eliminating the need for a dedicated boiler pump. The boiler's large water content reduces wasteful burner cycling which increases system efficiency and overall durability.

User-friendly control system
The Vitotronic 300, GW6C control system is an advanced digital boiler and system control with outdoor reset function that ensures reliable, efficient performance of the entire heating system. The Vitotronic 300 GW6C will modulate stages and rotate burners to meet the heating systems load. The control will regulate supply water temperature for one high temperature circuit, two mixing valve circuits and one DHW circuit with the standard control package.

A versatile solution
The Vitocrossal 300, CA3 offers a solution for almost every application, such as, multiple venting options and seamless integration into building management systems (BMS). The Vitocrossal 300, CA3 comes fully assembled and 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 is the limit for the Vitocrossal 300, CA3.

Multiple-boiler systems
The built-in Vitotronic 300 GW6C cascade control system is simple to control and automatically stages burners and rotates boilers to match the heating loads up to12,000 MBH. For larger systems, in addition to these features, Viessmann offers custom boiler controls for virtually unlimited capacities and additional options such as real time system loading, VFD pump outputs, BTU metering and efficiency trending.

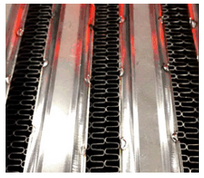


Vitocrossal 300, CA3

1. Vitotronic 300, GW6C control system
2. Fully-modulating pre-mix cylinder burner
3. Inox-Lamellar heat exchanger surfaces
4. Highly effective thermal insulation
5. Wide water passageways with low pressure drop

Specifications

- Certified BTS 2000 ≥96%
- Single inputs from 250 up to 6,000 MBH
- Cascade system inputs up to 90,000 MBH
- ASME CSD-1 compliant



SA240 316Ti Stainless Steel
Inox-Lamellar heat exchanger

Low-emission fully-modulating
pre-mix cylinder burner

Benefits at a glance

- Low emissions and quiet operation from fully-modulating Viessmann pre-mix cylinder burners (up to 3)
- Total burner modulation turndown ratio of up to 15:1 precisely matches load per boiler
- The fully assembled boiler simplifies installation and commissioning
- Flexibility for venting through the sidewall or chimney applications up to 100 ft. (equivalent length) and combustion air options of sealed combustion or room dependent
- Common venting up to four boilers*
- Gas fuel flexibility (NG/LPG/Dual Fuel**)
- Low inlet gas pressure capability as low as 4" W.C. (NG) 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
- Vitotronic 300 GW6C can be used as a single boiler control or as a cascade primary/secondary control system
- Seamless integration with building management systems

* Available April 2017 in accordance with local codes and regulations of authorities having jurisdiction
** dual fuel combination of NG/LPG coming April 2017

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Technical Data

Vitocrossal 300, CA3 gas-fired condensing boiler

Model	CA3	**CA3 2.5****	**CA3 3.0****	**CA3 3.5**	**CA3 4.0**	**CA3 5.0**	**CA3 6.0**
BTS 2000 efficiency	%	≥96	≥96	≥96	≥96	≥96	≥96
Minimum Input (NG)	MBTu	250	300	300	400	300	400
Maximum Input (NG)	MBTu	2500	3000	3500	4000	5000	6000
Output*	MBTu	2400	2880	3360	3840	4800	5760
Overall Dimension assembled+							
Width	Inches	34	34	39	39	39	39
Height	Inches	79	79	84	84	84	84
Depth (Length)	Inches	94	94	102	102	138	138
Overall Dimension disassembled++							
Width	Inches	32	32	37	37	37	37
Height	Inches	77	77	79	79	79	79
Depth (Length)	Inches	89	89	97	97	133	133
Weight (burner, control and insulation)	lbs	3580[1]	4284[1]	4982	5093	6592	7187
Boiler Water Content	USG	120[1]	130[1]	151	143	227	218
Heat Exchanger Surface	ft.[2]	116[1]	136[1]	170	193	244	288
Maximum Operating Pressure	psig	160	160	160	160	160	160
Flue Outlet Size	dia	10	10	12	12	16	16
Power Requirements		120V/1Ph	120V/1Ph	120V/1Ph	120V/1Ph	208V/3Ph	208V/3Ph

* Target efficiency rating
** Available in April 2017
[1] Estimated
+ Includes boiler with burner, boiler panels, thermal insulation, boiler control unit and electrical connection box
++ Disassembled top section and side panels

Technical information subject to change without notice.
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