



COMMERCIAL GAS CONDENSING BOILERS

Advanced condensing technology for
commercial applications

VITODENS 200-W, CASCADE

VITOCROSSAL 200, CI2

VITOCROSSAL 300, CA3B



You can rely on Viessmann for cost effective and energy efficient commercial heating systems with long service life and impressive reliability.

COMMERCIAL GAS CONDENSING TECHNOLOGY

VITODENS 200-W CASCADE

Prefabricated multiple boiler system with Vitodens 200-W gas-fired condensing boilers. **Rated input: up to 4,240 MBH**

The Vitodens 200-W cascade system is ideal for small or difficult-to-access boiler rooms or facilities with narrow halls and stairwells. These cascade systems offer flexible installation with multiple manifold configurations: wall-mounted, floor standing, corner or back-to-back. A right or left-mount low-loss header acts as hydraulic break and helps eliminate air and debris.



BENEFITS AT A GLANCE

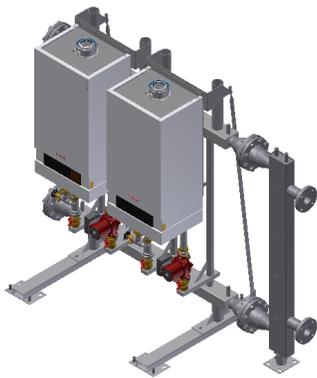
- + Low-emission combustion for environmentally-friendly operation
- + Intelligent Lambda Pro gas management system automatically adjusts to different gas qualities for optimum efficiency and performance
- + Common venting up to four boilers‡

‡ In accordance with local codes and regulations

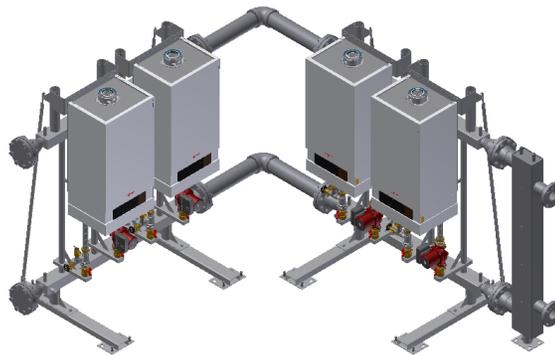
Technical Data

| | | B2HA | | | | | B2HE | |
|--|-----|------------|------------|------------|-------------|-------------|-----------|-----------|
| Model | | 285 | 311 | 352 | 399 | 530 | 150 | 199 |
| Min.- Max. Input (single boiler)* | MBH | 71 - 285 | 71 - 311 | 71 - 352 | 113 - 399 | 113 - 530 | 14 - 150 | 14 - 199 |
| Min.- Max. Input (multiple of 8)* | MBH | 71 - 2,280 | 71 - 2,488 | 71 - 2,816 | 113 - 3,192 | 113 - 4,240 | 14 - 1200 | 14 - 1592 |
| Weight (single boiler) | lbs | 194 | 194 | 194 | 298 | 298 | 179 | 179 |

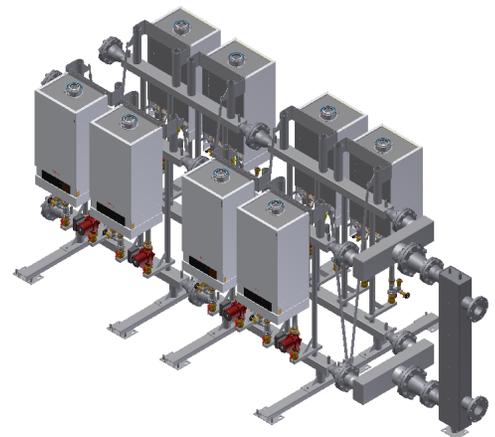
* Input based on natural gas



2-boiler cascade system



4-boiler cascade system in corner configuration



8-boiler cascade system in back-to-back configuration



VITOCROSSAL 200, CI2



At only 27 inches (68 cm) wide without jacket, the Vitocrossal 200, CI2 is well suited for tight commercial spaces. A stainless steel Inox-Crossal heat exchanger re-designed to stand up to the toughest of water conditions, maximizes performance and reliability while reducing overall size by 30%. Lambda PrO₂ with Self Calibrating Active O₂ Trim automatically adjusts to multiple vent options and lengths, gas type and quality right out of the box; no calibration required.

Rated input: 399 MBH - 2,000 MBH (single) / 32,000 MBH (cascade)

BENEFITS AT A GLANCE

- + Integrated Valve Proving System (VPS) for all sizes
- + Up to 98% thermal efficiency, the highest degree of utilization in its class with cleaner combustion and lower costs
- + Highest water volume in class; no primary boiler pump required
- + Up to 30:1 modulating Matrix cylinder burner ensures long, uninterrupted operation; meets Low NOx certification
- + Convenient servicing - all components are accessible from the front and back of unit
- + External wall mounted Gateway or DIN rail mounted Gateway for up to 8 boilers per gateway. Modbus ICP, Modbus RTU, Bacnet IP, and Bacnet MSTP
- + Utilizes CANbus communication between boilers and gateway system without complex wiring

Technical Data

| Model | CI2 | 399 | 500 | 750 | 1000 | 1500 | 2000 |
|---|-----------------|------|------|-------|-------|-------|-------|
| Combustion Efficiency* | % | 97 | 97 | 96.9 | 96.8 | 96.6 | 96.5 |
| Thermal Efficiency* | % | 98 | 97.9 | 97.8 | 97.7 | 97.3 | 97 |
| Min. Input (NG) | MBH | 50 | 50 | 75 | 100 | 50 | 100 |
| Max. Input (NG) | MBH | 399 | 500 | 750 | 1000 | 1500 | 2000 |
| Output (thermal efficiency) | MBH | 391 | 490 | 734 | 977 | 1460 | 1940 |
| Overall Dimensions | | | | | | | |
| Width | in. | 29½ | 29½ | 29½ | 29½ | 29½ | 29½ |
| Height | in. | 64½ | 64½ | 64½ | 64½ | 78¾ | 78¾ |
| Depth (Length) | in. | 39 | 39 | 47¼ | 47¼ | 56¼ | 56¼ |
| Weight (burner, control and insulation) | lbs. | 789 | 789 | 963 | 963 | 1812 | 1969 |
| Boiler Water Content | USG | 29 | 29 | 50 | 50 | 113 | 99 |
| Heat Exchanger Surface Area | ft ² | 65.2 | 65.2 | 129.4 | 129.4 | 196.2 | 258.8 |
| Max. Operating Pressure | psig | 80 | 80 | 80 | 80 | 80 | 80 |
| Max. Operating Temperature | °F | 210 | 210 | 210 | 210 | 210 | 210 |
| Flue Outlet Size | Ø in | 4 | 4 | 6 | 6 | 6 | 8 |

*Tested to ANSI/AHRI Standard 1500 Performance Rating of Commercial Space Heating Boilers / DOE Test Procedure 81 FR89276 / U.S. Standards ANSI Z21.13 / CSA 4.9

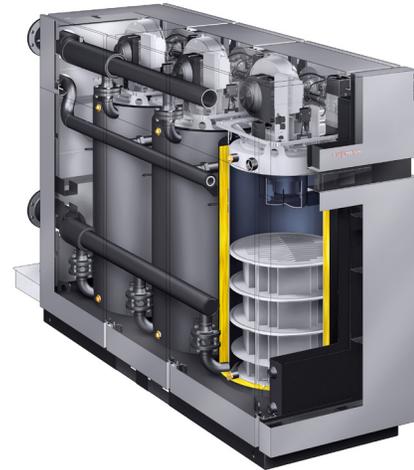


VITOCROSSAL 300, CA3B

CA3B Series high-efficiency, gas-fired condensing boilers with multiple burner design. The Inox-Lamellar fire-tube style heat exchangers of the CA3B boilers are made of 316Ti grade Stainless Steel. **Rated input: 2,500 to 6,000 MBH**

BENEFITS AT A GLANCE

- + Low inlet gas pressure capability as low as 4" w.c. (NG) provides compatibility with a range of supply pressures
- + Dual Fuel models offer easy changeover from NG to LP with a simple turn of a key
- + Low emissions and quiet operation from fully-modulating Viessmann pre-mix cylinder burners (up to 3)
- + Can be disassembled and reassembled* (Refer to Viessmann's technical CA3B Disassembly and Reassembly instructions)



Technical Data

| Model | CA3B | 2.5 | 3.0 | 3.5 | 4.0 | 5.0 | 6.0 |
|--|------------------|-------|-------|-------|-------|-------|-------|
| Maximum Input | MBH | 2,500 | 3,000 | 3,500 | 4,000 | 5,000 | 6,000 |
| Output (thermal efficiency) | MBH | 2402 | 2883 | 3363 | 3844 | 4805 | 5766 |
| Combustion Efficiency * | % | 94.1 | 94.1 | 94.1 | 94.1 | 94.1 | 94.1 |
| Thermal Efficiency * | % | 96.1 | 96.1 | 96.1 | 96.1 | 96.1 | 96.1 |
| Maximum Operating Pressure | psig | 160 | 160 | 160 | 160 | 160 | 160 |
| Power Requirements | Voltage | 120 | 120 | 120 | 120 | 208† | 208† |
| | Phase | 1 | 1 | 1 | 1 | 3 | 3 |
| | Hz | 60 | 60 | 60 | 60 | 60 | 60 |
| CA3B Single Fuel (SF) | | | | | | | |
| Minimum Input (NG) | MBH | 250 | 300 | 300 | 400 | 300 | 400 |
| Minimum Input (LPG) | MBH | 495 | 495 | 495 | 660 | 495 | 660 |
| Overall Dimensions Assembled | | | | | | | |
| Width | in. | 34 | 34 | 39 ½ | 39 ½ | 39 ½ | 39 ½ |
| Height | in. | 78 ¾ | 78 ¾ | 84 | 84 | 84 | 84 |
| Length | in. | 88 ¾ | 88 ¾ | 99 ½ | 99 ½ | 136 | 136 |
| Dry Weight (burner, control, insulation, and jacketing) | lbs | 4233 | 4233 | 4696 | 4806 | 6261 | 6894 |
| Boiler Water Content | USG | 108 | 108 | 151 | 143 | 227 | 218 |
| Heat Exchanger Surface ft.² | ft. ² | 142.7 | 142.7 | 170.2 | 192.5 | 244.1 | 288.8 |
| Flue Outlet Size | dia | 10 | 10 | 12 | 12 | 16 | 16 |
| CA3B Dual Fuel (DF) | | | | | | | |
| Minimum Input (NG/LPG) | MBH | 495 | 495 | 495 | 660 | 495 | 660 |
| Overall Dimensions Assembled | | | | | | | |
| Width | in. | 39 ¾ | 39 ¾ | 39 ¾ | 39 ¾ | 39 ¾ | 39 ¾ |
| Height | in. | 84 | 84 | 84 | 84 | 84 | 84 |
| Length | in. | 99 ½ | 99 ½ | 99 ½ | 99 ½ | 136 | 136 |
| Dry Weight (burner, control, insulation, and jacketing) | lbs | 4641 | 4641 | 4751 | 4861 | 6325 | 6958 |
| Boiler Water Content | USG | 158 | 158 | 151 | 143 | 227 | 218 |
| Heat Exchanger Surface ft.² | ft. ² | 147.9 | 147.9 | 170.2 | 192.5 | 244.1 | 288.8 |
| Flue Outlet Size | dia | 12 | 12 | 12 | 12 | 16 | 16 |

* Tested to ANSI/AHRI standard 1500 Performance Rating of Commercial Space Heating Boilers / DOE Test Procedure 81 FR 89276 / U.S. Standards ANSI Z21.13/CSA 4.9

† Requires 208Y/120VAC- 3 phase- 60 Hz- 4 wire (L1, L2, L3, N, G) power supply



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