

Gas Condensing Technology

VITOCROSSAL 300, CU3A

VIESMANN



5 Year Warranty
Limited Parts Warranty

Heating Systems ◀
Industrial Systems
Refrigeration Systems

Gas Condensing Technology

Vitocrossal 300, CU3A 19-199 MBH

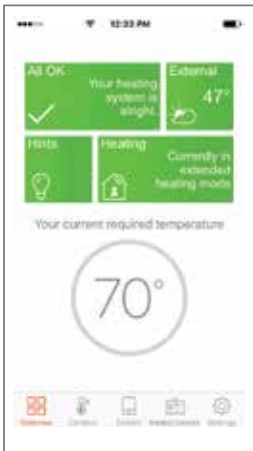
POWERFULLY SIMPLE. The Vitocrossal 300, CU3A gas-condensing, floor standing boiler is a testament to the power of a simple solution. With best-in-class, Viessmann-made components and no primary/secondary piping or low-loss headers required, the CU3A is the perfect choice for residential and light commercial applications – including high temperature heating, cast-iron boiler replacements and multi-zone systems.



Industry-leading Viessmann made SA240 316Ti stainless steel Inox-Crossal heat exchanger.



Featuring a folding Vitotronic 200 HO1B boiler and system control.



NEW ViCare App - Comfort at a glance. Program your boiler for ideal temperature and maximum cost savings.

Simply ideal for new construction and retrofits.

With its compact design, the Vitocrossal 300 CU3A is simple, fast and easy to install. To replace an old cast-iron sectional boiler, the CU3A is the ideal “drop-in” replacement with simple connection. All the existing system piping can remain intact. For new installations, the CU3A alleviates the need for costly piping arrangements. Flue venting is also simplified with the exhaust and intake air connections located at the bottom of the boiler, only 11.5” off the ground, allowing easy connection to existing chimneys.

Advanced condensing technology

Constructed with titanium stabilized SA 240-316Ti stainless steel, the Inox-Crossal heat exchanger provides the ideal conditions for the utilization of the condensate in the hidden heat of the flue gas. The smooth combustion chamber surface and the vertically arranged heat exchanger drains the accumulating condensate and creates a permanent self-cleaning effect which maintains efficiencies up to 98% (95% AFUE), ensures prolonged service life and reduces maintenance.

Wide water passageways

Large water content is contained within the pocket design of the heat exchanger. This allows for simplified system piping with full system flow, eliminating the need for a dedicated boiler pump or primary/secondary piping.

ViCare - the best connection between you and your Viessmann boiler

The ViCare App makes control of your boiler easy and intuitive. The heating schedule wizard quickly adapts the boiler operation to your lifestyle. You can immediately see your potential energy savings on a summary page. The ViCare App also alerts you about changes in heating status so you can quickly reprogram your boiler or contact your heating contractor for assistance.

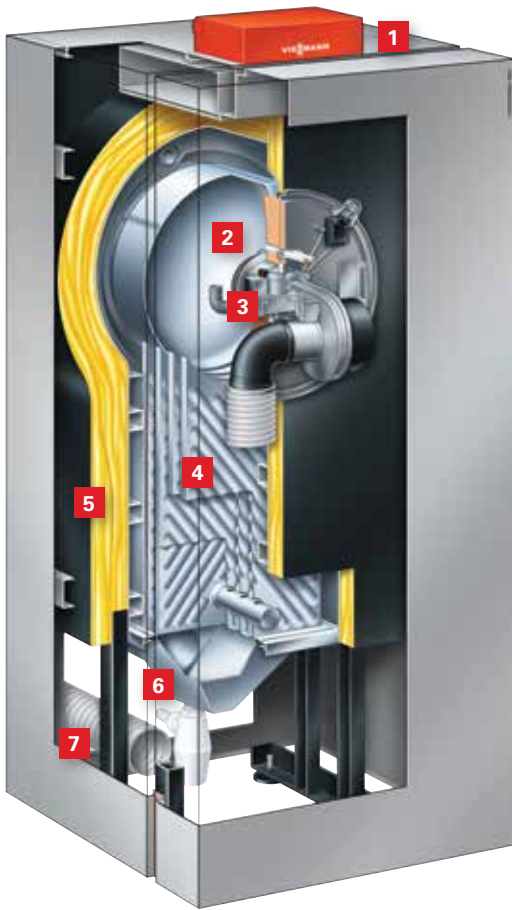
Intelligent combustion control

The proven Matrix dome burner with Lambda Pro combustion control automatically adjusts to fluctuating gas qualities and ensures a consistently high combustion efficiency for both natural gas and propane.

Simple and powerful Vitotronic control

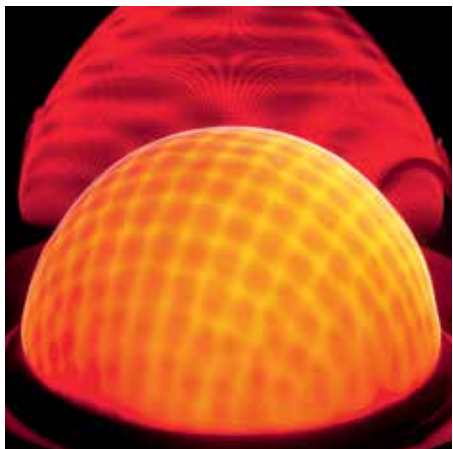
Installing contractors and end users benefit equally from the easy-to-use, flexible Vitotronic 200 KW6B boiler and system control that manages the entire heating system with maximum comfort, precise temperature settings and cost-effective fuel savings. The control menu is logical, intuitive and easy to set up. Features include control up to 3 heating circuits, intelligent DHW control, a variable speed pump output (0-10V), and multiple setback timers. The graphic user interface will display system parameters and solar yield if integrated with a Viessmann solar system.





Vitocrossal 300, CU3A

- 1 Vitotronic 200 HO1B boiler and system control
- 2 Water-cooled stainless steel combustion chamber
- 3 Modulating MatriX dome burner
- 4 Stainless steel Inox-Crossal heat exchanger
- 5 Highly effective thermal insulation
- 6 Flue gas collector with condensate drain pipe
- 7 Combustion air inlet connection



The MatriX dome burner for exceptionally low-emission combustion, making it a milestone in heating technology.

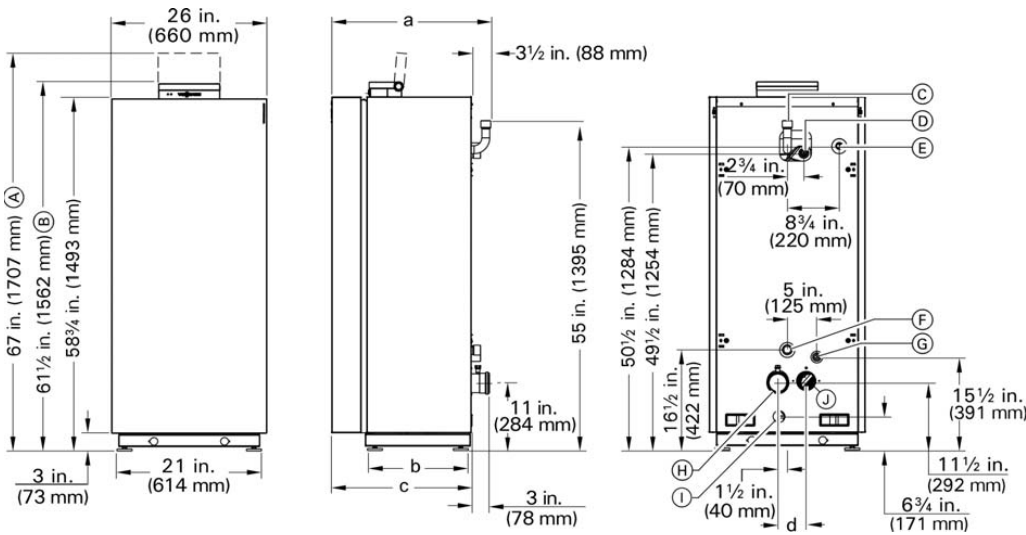
Features and benefits:

- Compact, floor-standing gas condensing boiler from 19 -199 MBH.
- Multi-boiler installation with 8 boilers up to 1592 MBH.
- High efficiency of 95% AFUE on all models.
- High temperature operation of up to 190°F.
- Inox-Crossal heat transfer surface – 316Ti stainless steel heat exchanger for efficient utilization of condensing technology – self-cleaning effect via smooth stainless steel surfaces.
- No dedicated boiler pump required and eliminates primary/secondary piping.
- MatriX dome burner with 5:1 turndown ratio to ensure high efficiency and extremely clean combustion.
- High water volume extends burner run time and reduces cycling.
- Simple commissioning with no field adjustments. A self-calibrating Lambda Pro combustion management system ensures optimal combustion efficiency at all times regardless of gas/air quality.
- Easy conversion from natural gas to liquid propane with no orifice change.
- Durable, reliable, and long service life with Inox-Crossal stainless steel heat exchanger and high mass design.
- Multiple venting options and configurations with vent lengths up to 198'.
- **5-year limited parts warranty for greater piece of mind.**
- **Wifi ready with Vitoconnect 100 and ViCare App provide comfort and control anywhere, anytime with internet access.**
- **ViCare App allows you to remotely program and control your boiler.**
- **ViCare App is free on all iOS and Android operating systems.**



Technical Data

Vitocrossal 300 CU3A gas-fired condensing boiler



Legend

- A** Overall boiler height (boiler control open)
- B** Overall boiler height (boiler control closed)
- C** Safety header connection
- D** Boiler supply
- E** Gas connection
- F** Boiler return
- G** Boiler drain
- H** Vent connection
- I** Condensate drain connection
- J** Combustion air connection

Included in the box

- Boiler drain
- Pressure relief valve 30 PSI
- Gas ball valve
- T&P gauge
- Air intake adapter 3"
- LPG ready
- Outdoor sensor
- DHW sensor
- Vitoconnect 100

Optional: 2 Pipe Venting

- Duravent adapter for CU3A model 45/160, 57/199: PPS-VSM-AD

Optional: Coaxial Venting

- Duravent adapter for CU3A 26/94, 35/125: 810013138
- Duravent adapter for CU3A 45/160, 57/199: 810013139

- CentroTherm adapter for CU3A 26/94, 35/125: ICTCV0335
- CentroTherm adapter for CU3A 45/160, 57/199: ICTCV030446

Model		26, 94	35, 125	45, 160	57, 199
a**	Inches	27	27	31.5	31.5
b**	Inches	17	17	21.5	21.5
c**	Inches	23.5	23.5	28	28
d**	Inches	4.75	4.75	5.5	5.5
Maximum input (NG)	MBH	94	125	160	199
Minimum input (NG)	MBH	19	25	43	43
Net AHRI Rating	MBH	76	101	129	161
AFUE	%	95	95	95	95
Weight	lbs	269	275	341	352
Boiler Water Content	USG	13.5	13	18.8	18.8
Heat Exchanger Surface	ft. ²	16.7	20.7	34.1	34.1
Maximum Operating Pressure	psig	30	30	30	30
Minimum Gas Supply Pressure					
Natural Gas	"w.c.	4	4	4	4
Liquid Propane	"w.c.	10	10	10	10
Boiler water temperature maximum					
Adjustable high limit (AHL) range space heating (steady state)		190° F	190° F	190° F	190° F
Boiler connections					
Gas valve Connection	NPTM	3/4	3/4	3/4	3/4
Boiler heating supply and return	NPTM	1 1/4	1 1/4	1 1/4	1 1/4
Boiler flue gas connection	Ø Inches	3*	3*	4**	4**
Combustion air supply connection	Ø Inches	3*	3*	3*	3*

** All height dimensions of the boiler have a tolerance of +.6 in. (+15 mm) due to the factory installed adjustable feet.

* Sized for CentroTherm and Duravent ** Sized for Duravent For latest technical data, visit viessmann-us.com

