GAS CONDENSING BOILER

Exceptional performance and flexibility

VITOCROSSAL 300, CU3A

**Floor standing,
gas condensing boiler**

The perfect choice for
residential and light
commercial applications.

19 - 199 MBH (single)
1592 MBH (cascade)

The power of a simple solution.

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.

Well suited for new construction and retrofits.

With its compact design, the Vitocrossal 300 CU3A provides a fast and simple installation. 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 alignment of the venting system to existing chimney connector.
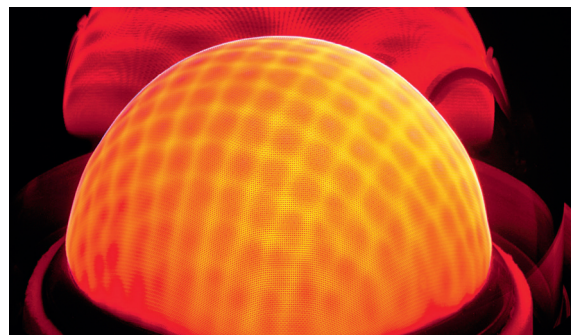
Advanced condensing technology

Constructed with titanium-stabilized 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.

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.
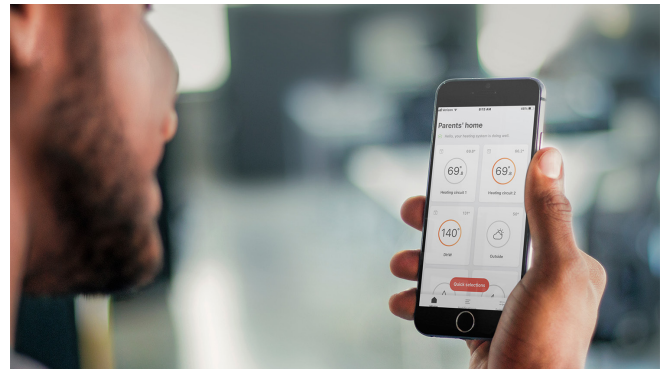

Viessmann-made MatriX gas burner ensures high efficiency and clean combustion.

Simple and powerful Vitotronic control

System owners and heating contractors alike benefit from the easy-to-use Vitotronic 200 KW6B controls that manage 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 intelligent DHW control, a variable speed pump output (0-10 V), multiple setback timers, and the ability to control up to 3 heating circuits.

Vitotronic 200 control unit with clear menu navigation
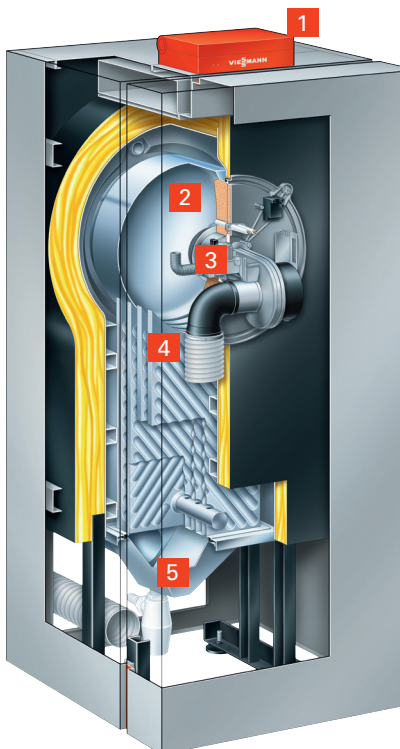
Vitoconnect and ViCare

When you connect your boiler to WiFi using the Vitoconnect module, you can easily monitor and operate your Viessmann boiler anytime, anywhere with the ViCare app. Easy and intuitive, ViCare lets you quickly set your heating schedule to adapt the boiler operation to your lifestyle while increasing efficiency and potential energy savings. The app will also alert you to changes in your heating status, so you can reprogram the boiler or contact your heating contractor as soon as a change occurs.

VITOCROSSAL 300, CU3A

1 Vitotronic 200 KW6B boiler and system control

2 Water-cooled stainless steel combustion chamber

3 Modulating MatriX gas burner with Lambda Pro Control combustion control

4 Stainless steel Inox-Crossal heat exchanger

5 Flue gas collector with condensate drain pipe

BENEFITS AT A GLANCE

+ Multi-boiler installation with 8 boilers up to 1592 MBH.
+ High efficiency of 95% AFUE on all models
+ No dedicated boiler pump required
+ Eliminates primary/secondary piping
+ MatriX dome burner with 5:1 turndown ratio ensures high efficiency and extremely clean combustion
+ High water volume extends burner run time and reduces cycling
+ Self-calibrating Lambda Pro combustion management system offers simple commissioning with no field adjustments
+ Easy conversion from natural gas to liquid propane with no orifice change
+ Inox-Crossal stainless steel heat exchanger and high mass design provide durability, reliability, and long service life
+ Multiple venting options and configurations with vent lengths up to 198 ft
+ 5-year limited parts warranty for greater piece of mind
+ Remote monitoring and control through the ViCare app (when you connect to WiFi using Vitoconnect).

Technical Information
VITOCROSSAL 300, CU3A

Model		94	125	160	199
Overall Dimensions					
Boiler height (control open)[*1]	in.	67	67	67	67
Boiler height (control closed)[*1]	in.	61.5	61.5	61.5	61.5
Depth	in.	27	27	31.5	31.5
Width	in.	26	26	26	26
Safety header connection	in.	55	55	55	55
Boiler supply	in.	49.5	49.5	49.5	49.5
Maximum Input (NG/LPG)	MBH	94	125	160	199
Minimum Input (NG/LPG)	MBH	19	25	43	43
CSA Output[*2]	MBH	17.7-87	23.3-116	40-149	40-185
Net AHRI Rating	MBH	76	101	129	161
AFUE	%	95	95	95	95
Weight	lbs.	269	275	352	352
Boiler Water Content	USG	13.5	13.0	18.8	18.8
Heat Exchanger Surface	ft.^{2}	16.7	20.7	34.1	34.1
	m^2	1.5	1.9	3.2	3.2
Maximum Operating Pressure	psig	30	30	30	30
Minimum Gas Supply Pressure					
Natural Gas (NG)	"w.c.	4	4	4	4
Liquid Propane Gas (LPG)	"w.c.	10	10	10	10
Maximum Gas Supply Pressure (NG/LPG)[*3]	"w.c.	14	14	14	14
Boiler Water Maximum Temperature					
Adjustable high limit (AHL) range space heating (steady state)	°F	68- 194	68- 194	68- 194	68- 194
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 in.	3	3	4	4
Combustion Air Supply Connection	Ø in.	3	3	3	3

*1 All height dimensions of the boiler have a tolerance of +0.6in. (+15mm) due to the factory installed adjustable feet.
*2 Output based on 140°F (60°C), 120°F (49°C) system supply/return temperature.
*3 If the gas supply pressure exceeds the maximum gas supply pressure value, a separate gas pressure regulator must be installed upstream of the heating system.