

Datasheet

For part no. and prices: see pricelist



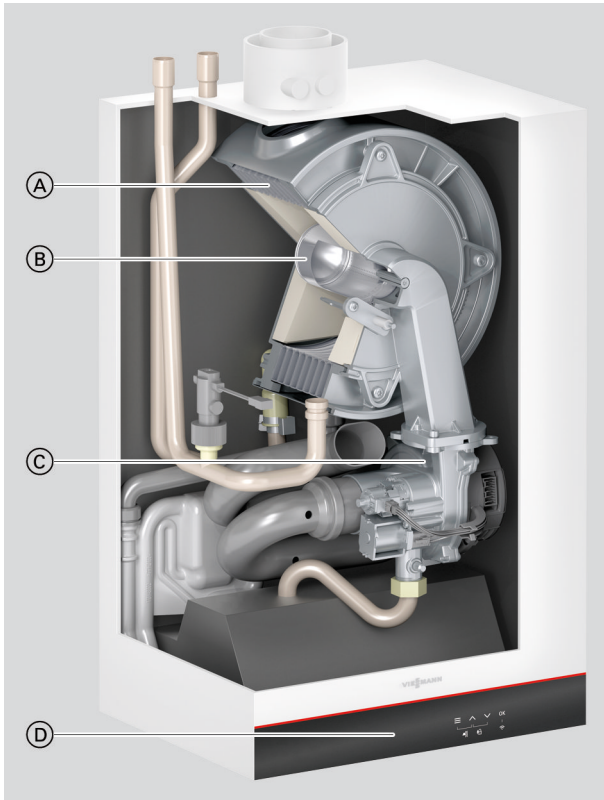
VITODENS 100-W Type B1GA

Wall mounted gas condensing boiler

3.2 to 32.0 kW

Natural gas and LPG version

Product description



- Ⓐ Inox-Radial heat exchanger made from stainless steel – for high operational reliability, a long service life and high heating output on a very small footprint
- Ⓑ Modulating MatriX-Plus burner with intelligent Lambda Pro combustion controller for extremely clean combustion and quiet operation
- Ⓒ Hydraulics with integral, variable speed high efficiency circulation pump
- Ⓓ Digital boiler control unit with 7-segment display

The Vitodens 100-W (heat only) offers stainless steel condensing technology on the smallest footprint and at an especially attractive price. Thanks to its compact dimensions, it is easy to install and fits anywhere. In a kitchen wall unit, in the bathroom, under the roof or in recesses and corners. Side clearances are not required, since all components can be accessed from the front. With its Inox-Radial heat exchanger made from high grade stainless steel, the Vitodens 100-W offers high reliability, a long service life, and permanently high utilisation of condensing technology. The MatriX-Plus burner of the Vitodens 100-W is also stainless steel. It is particularly economical, because it adapts to the heat demand through modulating operation.

Recommended applications

- Installation in detached and terraced houses
- Replacement of boilers in various types of systems, including those with several heating circuits and underfloor heating

Benefits at a glance

- Seasonal central heating energy efficiency η_s up to 92 % (label A).
- Low cycle frequency, even with low heat demand, due to optimised pauses and a wide modulation range down to 1:8
- Durable and efficient thanks to Inox-Radial stainless steel heat exchanger

- MatriX-Plus burner with Lambda Pro combustion controller for permanently high efficiency and clean combustion.
- Straightforward operation via control unit with LED display and touch buttons

Delivered condition

Gas condensing boiler with Inox-Radial heat exchanger and modulating MatriX-Plus burner for natural gas and LPG. Fully plumbed and wired.

Weather-compensated or constant temperature control unit.

Colour of the epoxy-coated casing: Vitopearlwhite.

Preset for operation with natural gas. Conversion within gas groups E/LL is not required. The conversion to LPG is made at the control unit (a conversion kit is not required). The gas condensing system boiler is suitable for operation with a hydrogen blend of up to 20 % by volume.

Tested quality

CE CE designation according to current EU Directives

Meets the requirements for the "Blue Angel" ecolabel to RAL UZ 61.

Specification

Gas condensing boiler

Gas boiler, type B and C, category I _{2N3P}		B1GA				
Type						
Rated heating output range (details to EN 15502)						
T _F /T _R = 50/30 °C						
Natural gas	kW	3.2 to 11	3.2 to 16	3.2 to 19	3.2 to 25	3.2 to 32
LPG	kW	3.2 to 11	3.2 to 16	3.2 to 19	3.2 to 25	3.2 to 32
T _F /T _R = 80/60 °C						
Natural gas	kW	2.9 to 9.9	2.9 to 14.4	2.9 to 17.0	2.9 to 22.5	2.9 to 28.7
LPG	kW	2.9 to 9.9	2.9 to 14.4	2.9 to 17.0	2.9 to 22.5	2.9 to 28.7
Rated heat input (Q_n)						
Natural gas	kW	3 to 10.4	3 to 15.1	3 to 18.0	3 to 23.6	3 to 30.2
LPG	kW	3 to 10.4	3 to 15.1	3 to 18.0	3 to 23.6	3 to 30.2
Product ID		CE-0063DL3422				
IP rating to EN 60529		IP X4 to EN 60529				
NO _x		6	6	6	6	6
Gas supply pressure						
Natural gas	mbar	20	20	20	20	20
	kPa	2	2	2	2	2
LPG	mbar	50	50	50	50	50
	kPa	5	5	5	5	5
Max. permiss. gas supply pressure*1						
Natural gas	mbar	25	25	25	25	25
	kPa	2.5	2.5	2.5	2.5	2.5
LPG	mbar	25 to 57.5	25 to 57.5	25 to 57.5	25 to 57.5	25 to 57.5
	kPa	2.5 to 5.75	2.5 to 5.75	2.5 to 5.75	2.5 to 5.75	2.5 to 5.75
Sound power level (to EN ISO 15036-1)						
– At partial load	dB(A)	33	33	33	33	33
– At rated heating output	dB(A)	41	44	46	49	52
Power consumption (in the delivered condition)		W	38	42	45	64
Rated voltage		V	230			
Rated frequency		Hz	50			
Appliance fuse protection		A	4.0			
Backup fuse (power supply)		A	16			
Electronic temperature limiter setting (TN)		°C	91			
Electronic temperature cut-out setting		°C	110			
Permissible ambient temperature						
– During operation	°C	+5 to +40				
– During storage and transport	°C	-5 to +60				
Weight						
– Excl. heating water and packaging	kg	23	23	23	23	26
– Incl. heating water	kg	25	25	25	25	28
Water capacity (excl. diaphragm expansion vessel)		l	3	3	3	3
Max. flow temperature		°C	82	82	82	82
Nominal circulating water volume		l/h	434	633	752	988
At T _F /T _R = 80/60 °C						
Permiss. operating pressure		bar	3	3	3	3
	MPa	0.3	0.3	0.3	0.3	0.3
Connections (with connection accessories)						
Boiler flow and return	R	¾	¾	¾	¾	¾
Dimensions						
– Length	mm	285	285	285	285	340
– Width	mm	375	375	375	375	375
– Height	mm	600	600	600	600	600
Gas connection		R	¾	¾	¾	¾
Supply values						
Relative to the max. load and 1013 mbar/15 °C						
– Natural gas E	m ³ /h	1.1	1.6	1.88	2.48	3.16
– Natural gas LL	m ³ /h	1.3	1.86	2.19	2.88	3.68
– LPG	kg/h	0.81	1.17	1.4	1.83	2.35
Flue gas parameters						

*1 If the gas supply pressure is higher than the maximum permissible value, install a separate gas pressure governor upstream of the system.

Specification (cont.)

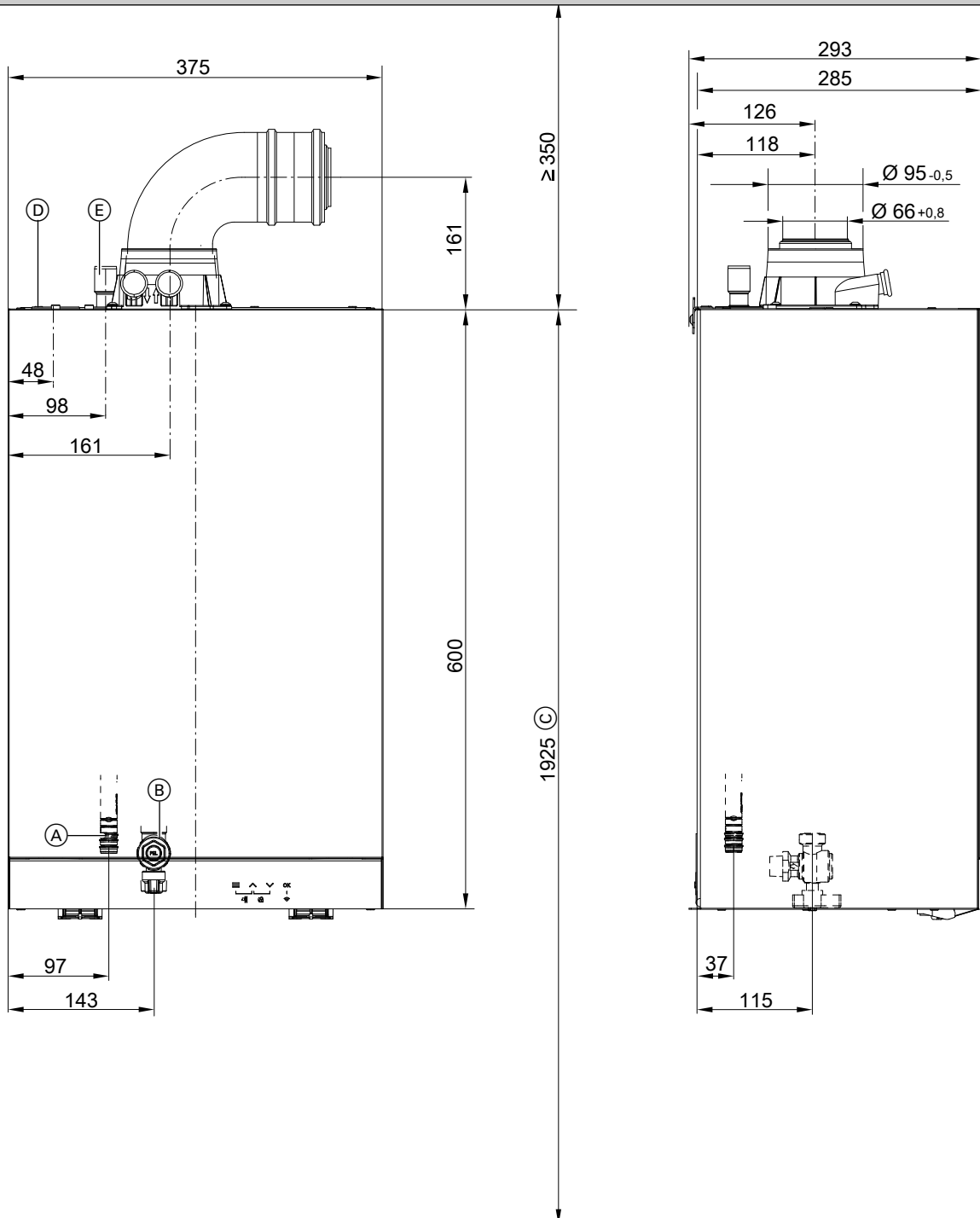
Gas boiler, type B and C, category I _{2N3P}		B1GA				
Type						
Rated heating output range (details to EN 15502)						
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T _F /T _R = 80/60 °C						
Natural gas	kW	2.9 to 9.9	2.9 to 14.4	2.9 to 17.0	2.9 to 22.5	2.9 to 28.7
LPG	kW	2.9 to 9.9	2.9 to 14.4	2.9 to 17.0	2.9 to 22.5	2.9 to 28.7
Temperature (at a return temperature of 30 °C)						
– At rated heating output	°C	39	40	41	46	59
– At partial load	°C	38	38	38	38	38
Temperature (at a return temperature of 60 °C, for DHW heating)						
	°C	64	64	65	67	72
Available draught						
	Pa	250	250	250	250	250
	mbar	2.5	2.5	2.5	2.5	2.5
Available draught for B23P						
	Pa	111	186	261	473	635
	mbar	1.11	1.86	2.61	4.73	6.35
Max. amount of condensate To DWA-A 251						
	l/h	2.5	2.5	2.5	3.3	4.2
Condensate connection (hose nozzle)						
	Ø mm	20 to 24	21 to 24	20 to 24	20 to 24	20 to 24
Flue gas connection						
	Ø mm	60	60	60	60	60
Ventilation air connection						
	Ø mm	100	100	100	100	100
Standard seasonal efficiency [to DIN] at T _F /T _R = 40/30 °C						
	%	Up to 98 (H _s) [gross cv]				
Energy efficiency class		A	A	A	A	A

Note

The supply values are only for reference (e.g. in the gas contract application) or for a supplementary, rough estimate to check the volumetric settings. Due to factory settings, the gas pressure must not be altered from these values. Reference: 15 °C, 1013 mbar (101.3 kPa).

Specification (cont.)

Vitodens 100-W, type B1GA 25 kW



- (A) Condensate drain
- (B) Gas connection
- (C) Dimension for siting with DHW cylinder below the boiler

- (D) Heating flow
- (E) Heating return

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Specification (cont.)

Note

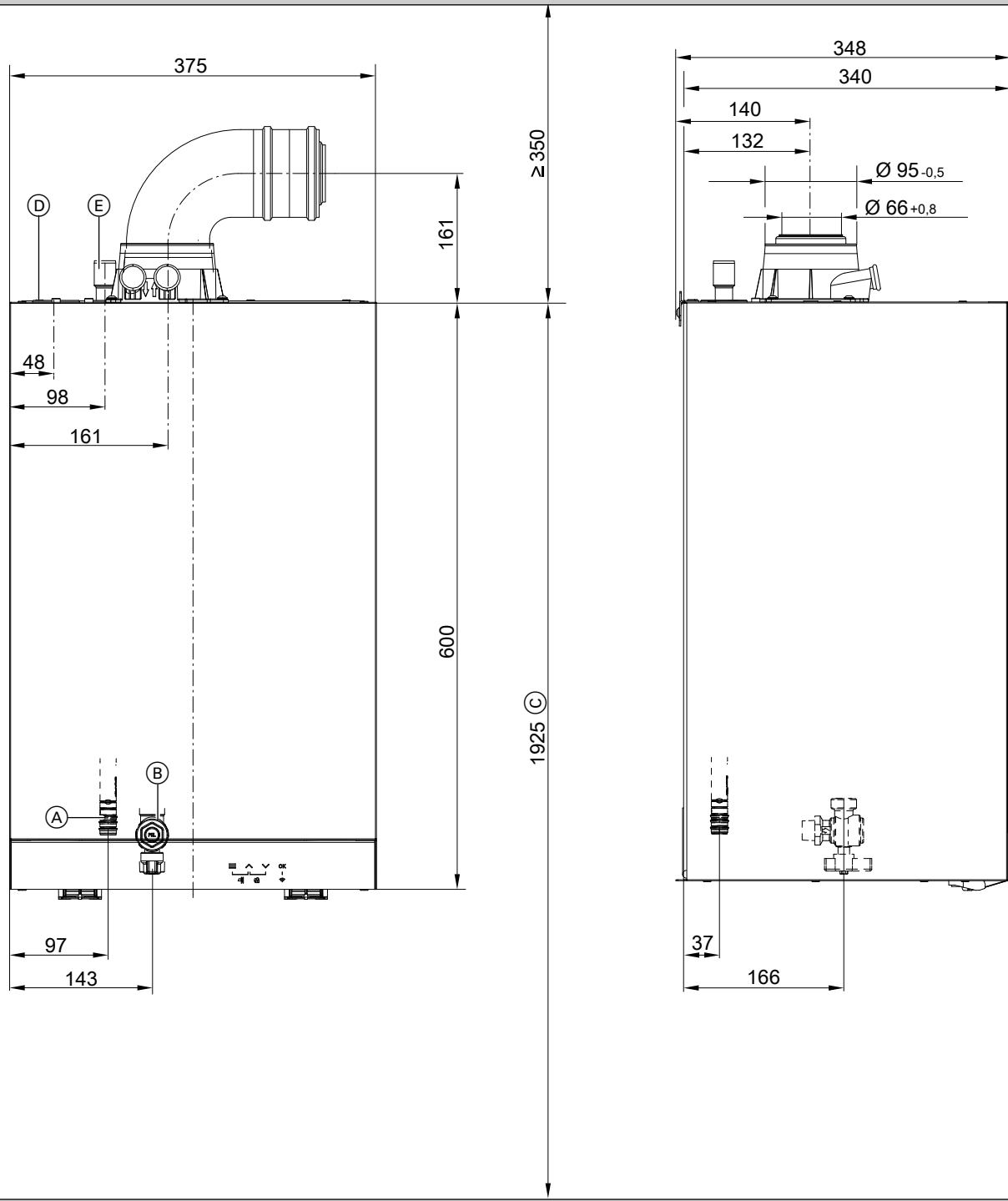
This boiler (IP rating: IP X4) is approved for installation in wet rooms inside safety zone 1, to DIN VDE 0100. Exposure to jets of water must be prevented.

For open flue operation, the boiler may only be operated with a splash cover.

Observe the requirements of DIN VDE 0100.

Specification (cont.)

Vitodens 100-W, type B1GA 32 kW



- (A) Condensate drain
- (B) Gas connection
- (C) Dimension for siting with DHW cylinder below the boiler
- (D) Heating flow
- (E) Heating return

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Specification (cont.)

Note

This boiler (IP rating: IP X4) is approved for installation in wet rooms inside safety zone 1, to DIN VDE 0100. Exposure to jets of water must be prevented.

For open flue operation, the boiler may only be operated with a splash cover.

Observe the requirements of DIN VDE 0100.

Minimum clearances

Maintain a clearance of 700 mm in front of the Vitodens for maintenance purposes.

No maintenance clearances are required to the left or right of the Vitodens.

Subject to technical modifications.

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