High Output Gas Condensing Boilers **VITODENS 200-W**







Heating systems
 Industrial systems
 Refrigeration systems

10 Year Warranty on all stainless steel heat exchangers for gas condensing boilers up to 150 kW Contents



About this brochure

The Vitodens 200-W is a wall hung gas condensing boiler for commercial applications, available in 49, 60, 80, 99, 120, 150 kW models. This brochure contains information about the individual boilers, cascade solutions, boiler controls and the accessories needed for a successful and efficient installation.



Vitodens 200-W 49 to 99 kW Cascade up to 594 kW



VITODENS 200-W 49-99 KW

The Vitodens 200-W high output gas condensing boiler is one of the most efficient and reliable boilers for commercial use. High efficiency pumps are now available as standard. Available in cascade solutions up to 594 kW with 6 units.

The 45 to 100 kW range of Vitodens 200-W gas condensing boilers feature easy installation, optional cascade, weather compensation and high efficiency pump as standard.

Take advantage of these benefits

- Gross efficiency up to 98%
- NOx credit rating 4 (<39mg/kWh) according to BREEAM
- Noise emission of less than 32dB (A)
- Cascade up to 594 kW with 6 units
- Additional fuel savings of up to 15% with optional weather compensation
- Up to 4Bar operating pressure
- High efficiency pumps available as standard

MatriX cylinder burner

- Modulation range of 1:5
- Patented technology manufactured by Viessmann
- Low NOx and CO emissions
- Stainless steel MatriX mesh ensures long term reliability

Inox-Radial heat exchanger

- Excellent corrosion resistance through high grade stainless steel (type SS 1.4571)
- Self-cleaning smooth stainless steel surface
- 10 year warranty against corrosion

Lambda Pro combustion controller

- No nozzle change when converting to LPG
- Consistently high efficiency even with fluctuating gas composition and air pressure
- Constantly clean combustion
- Low combustion noise through low fan speed
- Optimised efficiency throughout its life
- Simple and failsafe commissioning of the boiler

Output range

49, 60, 80, 99 kW

Controls

- Vitotronic 200
- Remote data communication and monitoring
- Solar / heat pump interface
- Safety monitor sensors
 - Automatic commissioning functions
- Optional weather compensation

High efficiency pump (accessory)

- Meets ErP directive for A rated energy pumps
- Save up to 50% of electrical consumption or up to £105 for a single boiler per year
- All connection sets include high efficiency pumps (A-rated)

10 Year Warranty

on all stainless steel heat exchangers for gas condensing boilers up to 150 kW



Vitotronic 200 HO1B heating curve

Vitodens 200-W 120 to 150 kW Cascade up to 900 kW



VITODENS 200-W 120 - 150 KW

The new Vitodens 200-W B2HA models, with output from 120 to 150 kW. A high performance range with output up to 900 kW with a 6 unit cascade. High efficiency pumps are now available as standard.

The Vitodens 200-W is loaded with features and functions to make installation, fault-finding and servicing easy.

Featuring compact design, quiet operation and easy installation, the 120 and 150 kW units offer a new level in performance for commercial applications.

Take Advantage of these benefits

- Gross efficiency up to 98%
- NOx credit rating 4 (<40mg/kWh) according to BREEAM
- Noise emission of less than 32dB (A)
- Cascade up to 900 kW with 6 units
- Additional fuel savings of up to 15% with optional weather compensation
- Up to 6Bar operating pressure
- High efficiency pumps available as standard
- Compact design 150 kW on 0.50m² footprint
- Suitable for buildings with up to 18 floors

MatriX cylinder burner

- Modulation range of 1:5
- Patented technology manufactured by Viessmann
- Low NOx and CO emissions
- Stainless steel MatriX mesh ensures long term reliability and service life
- Patented technology, manufactured by Viessmann
- Optimum matching of heat exchanger and burner

Inox-Radial heat exchanger

- Excellent corrosion resistance through high grade stainless steel (type SS 1.4571)
- Self-cleaning smooth stainless steel surface
- 10 year warranty against corrosion

Lambda Pro combustion controller

- No nozzle change when converting to LPGConsistently high efficiency even with
 - fluctuating gas composition and air pressure
- Constantly clean combustion
- Low combustion noise through low fan speed
- Optimised efficiency throughout its life
- Simple and failsafe commissioning of the boiler

Output range

120, 150 kW

Controls

- Vitotronic 200
- Remote data communication and monitoring
- Solar / heat pump interface
- Safety monitor sensors
- Automatic commissioning functions
- Optional weather compensation

High efficiency pump (accessory)

- Meets ErP directive for A rated energy pumps
- Save up to 50% of electrical consumption or up to £105 for a single boiler per year
- All connection sets include high efficiency pumps (A-rated)

10 Year Warranty

on all stainless steel heat exchangers for gas condensing boilers up to 150 kW

Vitodens 200-W Compact cascade system



Width: 1.72 m

VITODENS 200-W COMPACT CASCADE SYSTEM

Fitting Viessmann commercial boilers has never been easier, thanks to the new Vitodens 200-W compact cascade system. Available on the 49, 60, 80 and 99 kW Vitodens 200-W models, the compact cascade system saves significant space within the plant room and halves installation time.

Now 30% smaller than the previous cascade configuration, it is perfect for plant rooms with lower footprints or with a small headroom, as the boiler height can be adjusted on the frame. Suitable for row, block or even corner installations, the compact cascade can be wall mounted or simply fitted with a free-standing frame for 2,3,4,5 or 6 boiler units at a time. This can deliver a maximum output of 594 kW with a 6 boiler cascade.

The easy to assemble cascade will save up to 50% on the installation time thanks to a refined design and brand new fully preassembled heating circuit connection set. This integrates the flow and return cascade, 4 bar safety valve, ball cocks and draining all within a single connection set, which can be easily fitted to the frame or wall mount. Additional 120 and 150 kW Vitodens 200-W models are also available with a separate cascade system.

- 30% smaller than previous configurations
- Adjustable boiler height on cascade frame
- Save up to 50% on installation time
- New preassembled heating circuit connection set
- Available on 49 99 kW Vitodens 200-W models
- Cascade 2,3,4,5 or 6 boilers up to 594 kW







10 Year Warranty on all stainless steel heat exchangers for gas condensing boilers up to 150 kW

Cascade packages



♦ ♦ 🔆 🍥 📕 10/11

Cascade packages

The Vitodens 200-W can be cascaded with up to 6 units, offering outputs up to 594 kW. Viessmann's comprehensive cascade packages are designed for easy installation on all applications.



Vitodens 200-W compact cascade system

- 1 Flue gas cascade
- 2 Vitodens 200-W gas condensing boiler
- Heating circuit connection set
- 4 Cascade frame or wall bracket
- 5 Low loss header

Cascade Specifications

- Maximum Install Height
 With frame and gas header: 2 metres
 Without frame: 1.8 metres
- Minimum Install Height
 With frame and gas header 1.7 metres
 Without frame: 1.5 metres

Number of boilers			2	3	4	5	6
Heating circuit connection	ı						
- Low loss header		PN6/DN	80	80	80	80	80
- Cascade module adaptor		PN6/DN	100	100	100	100	100
Boiler connection		G	11/2	11/2	11/2	11/2	11/2
Max. flow rate	∆t						
- 49 kW	15 K	m³/h	5.6	8.4	11.2	14.0	16.8
- 60 kW	15 K	m³/h	6.9	10.3	13.8	17.2	20.6
- 69 kW	20 K	m³/h	5.9	8.9	11.8	14.8	17.5
- 80kW	20 K	m³/h	6.9	10.3	13.7	17.2	20.6
- 99kW	20 K	m³/h	8.5	12.8	17.0	21.3	25.5
Circulation pump		Туре			Vi Para 25/1-11		
Rated voltage		V~			230		
Max. power consumption		W			140		
Min. power consumption		W			8		

Cascade packages

High Output Gas Condensing Boilers



(A) Condensate header (accessories)

Number of boilers Rated heating output	kW	49 -60	2 69 - 99	49 - 60	3 69 - 99	49 - 60	4 69 - 99	49 - 60	5 69 - 99	49 - 60	6 69 - 99
а	mm	1190	1190	1770	1770	2350	2350	2930	2930	3510	3510
b	mm	1720	1720	2300	2300	2880	2880	3460	3460	4040	4040
С	mm	511	661	511	661	511	661	511	611	511	661

Note

The height dimensions can be reduced by max. 150 mm. In this case, the fixing profiles must be installed accordingly.



(A) Condensate header (accessories)

Number of boilers Rated heating output	kW	49 -60	2 69 - 99	49 - 60	3 69 - 99	49 - 60	4 69 - 99	49 - 60	5 69 - 99	49 - 60	6 69 - 99
а	mm	1190	1190	1770	1770	2350	2350	2930	2930	3510	3510
b	mm	1364	1364	1944	1944	2524	2524	3104	3104	3684	3684
С	mm	511	661	511	661	511	661	511	611	511	661

Note

The height dimensions can be reduced by max. 300 mm. In this case, the fixing profiles must be installed accordingly.



(A) Condensate header (accessories)

Number of boilers Rated heating output	kW	49 -60	2 69 - 99	49 - 60	3 69 - 99	49 - 60	4 69 - 99	49 - 60	5 69 - 99	49 - 60	6 69 - 99
а	mm	1190	1190	1770	1770	2350	2350	2930	2930	3510	3510
b	mm	1720	1720	2300	2300	2880	2880	3460	3460	4040	4040
C	mm	511	661	511	661	511	661	511	611	511	661

Note

The height dimensions can be reduced by 150 mm if using a mounting frame for installation. In this case, the fixing profiles must be installed accordingly.



(A) Condensate header (accessories)

Number of boilers Rated heating output	kW	2 x 2 49 - 60	2 x 2 69 - 99	2 x 3 49 - 60	2 x 3 69 - 99
а	mm	1190	1190	1770	1770
b	mm	1720	1720	2300	2300
С	mm	1350	1422	1350	1422

Note

The height dimensions can be reduced by 150 mm if using a mounting frame for installation. In this case, the fixing profiles must be installed accordingly.

Cascade packages

High Output Gas Condensing Boilers



(A) Condensate header (accessories)

Number of boilers Rated heating output	kW	49 -60	2 69 - 99	49 - 60	3 69 - 99	49 - 60	4 69 - 99	49 - 60	5 69 - 99	49 - 60	6 69 - 99
а	mm	1190	1190	1770	1770	2350	2350	2930	2930	3510	3510
b	mm	1364	1364	1944	1944	2524	2524	3104	3104	3684	3684
С	mm	511	661	511	661	511	661	511	611	511	661

Note

The height dimensions can be reduced by 150 or 300 mm if using a mounting frame for installation. In this case, the fixing profiles must be installed accordingly.

Installation in block formation with a cascade module adaptor (without low loss header)



(A) Condensate header (accessories)

Number of boilers Rated heating output	kW	2 x 2 49 - 60	2 x 2 69 - 99	2 x 3 49 - 60	2 x 3 69 - 99
а	mm	1190	1190	1770	1770
b	mm	1364	1364	1944	1944
С	mm	1350	1422	1350	1422

Note

The height dimensions can be reduced by 150 or 300 mm if using a mounting frame for installation. In this case, the fixing profiles must be installed accordingly.

Corner installation, multi boiler system



Number of boilers	kW	2	3	4	5	6
Rated heating output		49 - 99	49 - 99	49 - 99	49 - 99	49 - 99
а	mm	1160	1740	2320	2900	3480





Number of boilers	kW	2	3	4	5	6
Rated heating output		49 - 99	49 - 99	49 - 99	49 - 99	49 - 99
а	mm	1160	1740	2320	2900	3480



Cascade packages

High Output Gas Condensing Boilers



Shown without the thermal insulation supplied

- (A)Flue gas cascade
- B Vitodens

Mounting frame or pre-plumbing jig \bigcirc Ð Hydraulic cascade

 \bigcirc Vitotronic 300-K (can be fitted either to the left or the right)

Ceiling mounting for flue gas cascade Ð

Note

Secure the flue gas cascade with suitable means. Suspension from the ceiling is recommended. Observe the max. distance between fixing points F.

Number of boilers					3 x 80 kW 3 x 99 kW						
а	mm	2111	2136	2141	2166	2196	2196	2251	2251	2281	2281
b	mm	231	256	261	286	316	316	371	371	401	401
С	mm	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
d	mm	291	373	291	373	291	373	291	373	291	373

Note Height dimension "c" can be reduced by 150 mm in conjunction with a low loss header and by 300 mm in conjunction with a cascade module adaptor. In this case, the fixing profiles must be installed accordingly. For installation directly onto a wall, these dimensions should also be adhered to.





- B Vitodens
- © Vitotronic 300-K (can be fitted either to the left or the right)

Mounting frame or pre-plumbing jig

- Ð Hydraulic cascade
- Ceiling mounting for flue gas cascade

Note

Secure the flue gas cascade with suitable means. Suspension from the ceiling is recommended. Observe the max. distance between fixing points F.

Boiler		(2x2) 49 kW (2x2) 60 kW	(2x2) 80 kW (2x2) 99 kW	(2x3) 49 kW (2x3) 60 kW	(2x3) 80 kW (2x3) 99 kW
а	mm	2111	2136	2141	2166
b	mm	176	207	176	207
С	mm	1750	1750	1750	1750
d	mm	1350	1422	1350	1422
е	mm	680	843	680	843

Note

Height dimension "c" can be reduced by 150 mm in conjunction with a low loss header and by 300 mm in conjunction with a cascade module adaptor. In this case, the fixing profiles must be installed accordingly.

Boiler controls and accessories







Controls

Viessmann controls are easy to install, maintain and operate; and benefit from fault logging and diagnostic systems. They range from controlling a single boiler to a whole plant room and are available in constant temperature or weather compensated models. All Vitodens boilers will operate with Viessmann and third party external controls.

		Vitotronic 100 (constant temperature)	Vitotronic 200 (weather compensation)
Room Temperature control units			
 Vitotrol 100 (type UTA) Room thermostat with switching output Analogue time switch & day program. 		7170149	-
 Vitotrol 100 (type UTDB) Digital room temperature controller with switching output Individual day and seven-day programs Independant of main power supply 	10 to	Z007691	-
 Vitotrol 100 (type UTDB-RF) Room temperature controller with integral wireless transmitter and separate receiver With switching output (two point output) With battery operation 3 V, receiver with mains voltage 	1 0 10 10	Z007692	-
Remote control units			
 Vitotrol 200A KM BUS For setting one heating circuit Set room temperature and operating program Display to show outside temperature, room temperature and operating conditions Room temperature sensor for room temperature hook-up 	THE T IN PROVIDE IN THE INFORMATION OF THE INTERICATION OF THE INFORMATION OF THE INFORMATION OF THE INFORMA		Z008341
 Vitotrol 300A KM BUS For setting one, two or three heating circuits Set room temperature and reduced set room temperature, DHW temperature Time program for the heating circuits, DHW cylinder and DHW circulation pump 		-	Z008342
Wireless control units			
 Vitocom 100 Monitor and control your heating system from your mobile or tablet Easy set up - all it takes is one message No landline required Easy to retrofit 			Z011224
Vitotrol 200 RF Remote control with integral wireless transmitter. For setting one heating circuit Set room temperature and operating program Display to show outside temperature, room temperature and operating conditions	IN ALL T IN ART: IN		Z011219
Vitotrol 300 RF Remote control with integral wireless transmitter. For setting one, two or three heating circuits Set room temperature and reduced set room temperature, DHW temperature Time program for the heating circuits, DHW cylinder and DHW circulation pump Integral room temperature sensor		with table-top dock with wall mounting bracket	Z011410 Z011412
Wireless outdoor temperature sensor Wireless, light-activated outside temperature sensor with integral wireless transmitter for operation with the wireless base station and the control unit.			7455213
 Wireless base station Required with wireless units Vitotrol 200 RF and Vitotrol 300 RF Vitotrol 200 RF wireless remote control Vitotrol 300 RF wireless remote control Wireless outside temperature sensor 			Z011413
 Wireless repeater Mains operated repeater to increase the wireless range and for use in areas where wireless communication is difficult. For preventing over-diagonal angle of penetration of the radio signals through iron reinforced concrete ceilings and/or multiple walls For circumventing large metallic objects situated between the wireless components No more than 1 wireless repeater per Vitotronic. 			7456538

Boiler accessories Individual boilers

Heating circuit and DHW cylinder (only for single boiler 49 and 60 kW)		Part number
 Connection set for heating circuit without circulation pump - comprising: Tee with ball valve / Fill and drain valve / Safety valve Straight-through gas valve with integral thermally activated safety shut off valve Plug for circulation pump 		Z008912
 Connection set with variable speed high efficiency circulation pump - comprising: Tee with ball valve / Check valve / Fill and drain valve / Built-in non return valve Thermal insulation Straight-through gas valve with integral thermally activated safety shut off valve Safety valve Circulation pump (high efficiency) 		7501 311
 Connection set for DHW cylinder - comprising: Ball valve / Check valve / Built-in non return valve Cylinder primary pump Cylinder temperature sensor (3.75m long) H1 internal extension For integration into thermal insulation of connection set for heating circuit with circulation pump 		ZK00 657
Ball valve (G 1.25") Required if the heating circuit pump or the cylinder primary pump is to be changed without draining the	he heating system	7247 373
Heating circuit and DHW cylinder (only for single boiler 80 and 99 kW)		Part number
 Connection set with variable speed high efficiency circulation pump - comprising: Tee with ball valve / Check valve / BDF valve / Safety valve Straight-through gas valve with integral thermally activated safety shut off valve Ball valve (2 pce) Thermal insulation Circulation pump (high efficiency) 	C Sec. Sec. Sec. Sec. Sec. Sec. Sec. Sec.	7501 318
Connection set for DHW cylinder - comprising: Cylinder flow and return Fittings G 1.25" Cylinder temperature sensor H1 internal extension		7348 934
Low loss header Low loss header with integral sensor (50mm long) Thermal insulation Immersion temperature sensor Brackets for low loss header (order separately) For floor mounting For wall mounting		Z007 743 7346 787 7346 788
Heating circuit and DHW cylinder (only for single boiler 120 and 150 kW)		Part number
Heating circuit connection set with variable speed high efficiency circulation pump - comprise Circulation pump 2 ball valves with adaptors Ø 54 mm (locking ring fitting) Tee with ball valve Non-return valve Boiler drain & fill valve Safety valve Gas shut-off valve with integral thermally activated safety shut-off valve Thermal insulation Connection G1 for expansion vessel	sing:	7501 321
Connection G1 for expansion vesser Low loss header - comprising: Low loss header with integral sensor well Thermal insulation Immersion temperature sensor for low loss header Quick-action air vent valve Ball valve with hose nozzle for draining or blow-down 2 adaptors Ø 54 mm (locking ring fitting)		ZK00 658

Boiler accessories Cascade options



Heating circuit and DHW cylinder (only for single boiler 120 and 150 kW)		Part number
Connection set for DHW cylinder - comprising: Connecting lines for flow and return Fittings Cylinder temperature sensor		7501 325
Mounting frame For self-supporting boiler installation in a room. With adjustable feet for levelling and securing to the floor.		7502 558
 CO limiter - comprising: Casing with integral CO sensor, relay and operation and alarm indi-cators Fixing materials Power cable (2.0 m long) Relay connecting cable for burner shutdown (2.0 m long) 		7499 330
Accessories - Cascade options		Part number
Hydraulic Low loss header DN80	ę	ZK02627
Connection set heating circuit		Part number
Hydraulic adapter cascade module DN100	-	ZK02628
Transition flange DN80 to R2		7456326
Transition flange DN100 to R2	0	ZK02629
Pipe elbows set 90°	and a second	ZK02630
Condensate collector pipes		Part number
2 boiler cascade	Ad 1	ZK02631
3 boiler cascade	Malle .	ZK02632
4 boiler cascade	Ad sal	ZK02633
5 boiler cascade	the alla	ZK02634
6 boiler cascade	- III - III	ZK02635

Boiler accessories

Heating circulation pumps

Heating pumps are, due to their high annual operating hours, among the largest power-consuming appliances in buildings.

After the compressor, the circulation pump is the biggest consumer of electrical power and is therefore the major efficiency factor for the entire application. Automatic pump performance control helps drastically to reduce power consumption in heating pumps. Compared to standard pumps, high-efficiency pumps can even save up to 80% electricity costs.

From 2013 onwards, the European Eco-Design directive (EC ordinance 641/2009) for 'energy related products' will impose increasingly stricter requirements for the energy efficiency of pumps. Due to the ErP directive, only extremely power saving high efficiency pumps may be used. An energy class A pump requires on average only around 33% of the electrical energy consumed by a class D pump. Viessmann high efficiency pumps use the same highly efficient motor technology with energy efficiency class A.

These pumps are included in the Vitodens 200-W range, which not only produces environmentally friendly results, but provides lower electricity bills for the building owner. This can be up to £105 for a single boiler, per year.



Divicons

Heating circuit - Connection to heating circuit (nominal diameter)	DN20 - ³ /4"	DN25 - 1"	DN32 - 1³/4"
 Divicon heating circuit distributor with mixer Heating circuit pump (variable speed high efficiency circulation pump, compliant with Energy Label A), fully wired Check valve 2 ball valves with thermometer. Thermal insulation Extension kit for one heating circuit with mixer, including connecting cable (3.5 m long) 			
Fully fitted Divicon heating circuit distributor With mixer-3 and extension kit With mixer PCB and mixer motor With circulation pump Wilo Stratos Para 25/1-7	7521285	7521286	7369520
Cable kit (with plugs 40 and 145) To replace the connecting cable supplied in the standard delivery for linking the two mixer PCBs, in the case of 2 heating circuits with mixer.	7424960	7424960	7424960
 Divicon heating circuit distributor without mixer Heating circuit pump (variable speed high efficiency circulation pump, compliant with Energy Label A), fully wired Check valve 2 ball valves with thermometer Thermal insulation 			
Fully fitted Divicon heating circuit distributor Without mixer circulation pump Wilo Stratos Para 25/1-7	7521287	7521288	7369522

NOTE: Actuator for mixer to be ordered separately - see price guide

Divicons

Vitodens 200-W divicons are part of a local circuit pump assembly, with or without a mixer. One or more may be used to control parts of a larger system with weather compensated control.

Heating circuit - Modular-divicon	Part number
Manifold for 2 Modular-divicon - wall mounted with thermal insulation (black) (wall mounting to be ordered separately)	DN20 - ³ / ₄ " & DN25 - 1" - 7460 638 DN32 - 1 ¹ / ₄ " - 7466 337 (also order 7465 439)
Manifold for 3 Modular-divicon - wall mounted with thermal insulation (black) (wall mounting to be ordered separately)	DN20 - ³ / ₄ " & DN25 - 1" - 7460 643 DN32 - 1 ¹ / ₄ " - 7466 340 (also order 7465 439)
Low loss header Volume flow up to 4.5m ³ /h connection to the manifolds with thermal insulation (black) with integral sensor well 50mm long	7460 649
Volume flow up to 7.5 m3/h with thermal insulation with integral sensor with integrated deaerator	7460 648
Immersion temperature sensor for measuring the temperature in the low loss header for Vitodens 200-W with 45 and 60 kW (for multi boiler systems with Vitotronic 300-K and Vitodens 200-W with 80 and 100 kW in the heating circuit set connection set standard delivery)	7179 488

DHW heating (only for single boiler)	Part number
Cylinder temperature sensor part of the standard delivery with part no Z007620 and 7348934	7179 114
Sensor well (for cylinder temperature sensor) part of the standard delivery for Viessmann Vitocell 300 cylinders	7819 693

Technical specification

Gas boiler, type B and C, category II _{2N3P}	Gas condensing boiler						
Rated heating output range 49 and 60 kW: Details to EN 15502-1.							
80 to 150 kW: Details to EN 15417. T _F /T _B = 50/30 °C when operating with natural gas	kW	12.0-49.0	12.0-60.0	20.0-80.0	20.0-99.0	32.0-120.0	32.0 -150.0
$T_F/T_R = 80/60$ °C when operating with natural gas	kW	10.9-45.0	10.9 -55.2	18.2 -74.1	18.2 -90.9	29.1-110.9	29.0 -136.0
$T_F/T_R = 50/30$ °C when operating with LPG P $T_F/T_R = 80/60$ °C when operating with LPG P	kW kW	17.0-49.0 15.5-45.0	17.0-60.0 15.5-55.2	30.0-80.0 27.3-74.1	30.0-99.0 27.3-90.9	32.0-120.0 29.1-110.9	32.0-150.0 29.0-136.0
Rated heat input when operating with natural gas	kW	11.2-45.7	11.2-56.2	18.8-75.0	18.8-92.9	30.0-113.3	30.0-142.0
Rated heat input when operating with LPG P	kW	16.1-45.7	16.1-56.2	28.1-75.0	28.1-92.9	30.0-113.3	30.0-142.0
Туре		B2HA	B2HA	B2HA	B2HA	B2HA	B2HA
Product ID				E-0085CN005			
IP rating			IP	X4 to EN 605	29	1	
Gas supply pressure Natural gas	mbar	20 2	20 2	20 2	20 2	20 2	20
LPG	mbar kPa	50 5	50 5	50 50	50 5	50 50	50 50
Max. permissible gas supply pressure*1	Riu	5	0		0	<u> </u>	
Natural gas	mbar	25.0	25.0	25.0	25.0	25.0	25.
	kPa	2.5	2.5	2.5	2.5	2.5	2.
LPG	mbar kPa	57.5 5.75	57.5 5.75	57.5 5.75	57.5 5.75	57.5 5.75	57. 5.7
Sound power level	KI G	5.75	0.70	5.75	0.70	5.75	0.73
(Details to EN ISO 15036-1)							
At partial load	dB(A)	39	39	38	38	40	40
At rated heating output	dB(A) W	58	67 82	56 126	59 175	54	60 222
Power consumption (delivered condition) Weight	kg	56 65	82 65	126 83	175 83	146 130	130
Heat exchanger capacity	l Kg	7.0	7.0	12.8	12.8	15.0	15.0
Max. flow temperature	°C	76	76	76	76	82	82
Max. flow rate	l/h	3500	3500	5700	5700	7165	8600
Limit for the use of hydraulic separation							
Nominal circulation water volume at T _F /T _R = 80/60 °C	l/h	1748	2336	3118	3909	4900	5850
Permiss. operating pressure	bar MPa	4 0.4	4 0.4	4 0.4	4 0.4	6 0.6	6 0.6
Dimensions							
Length Width	mm	380	380	530	530 480	690	690
Height	mm mm	480 850	480 850	480 850	480 850	600 900	600 900
Gas connection	R	3/4	3/4	1	1	1	
Connection values							
Relative to max. load							
With gas Natural gas E	m³/h	4.47	5.95	7.94	9.93	12.49	15.03
Natural gas LL	m³/h	5.19	6.91	9.23	11.54	14.51	17.47
LPG	kg/h	3.30	4.39	5.86	7.33	9.23	11.10
Gas boiler, type B and C, category II _{2N3P}			Gas	condensing b	ooiler		
Rated heating output range 49 and 60 kW: Details to EN 15502-1.							
80 to 150 kW: Details to EN 15417.							
$T_F/T_R = 50/30$ °C when operating with natural gas	kW	12.0-49.0	12.0-60.0	20.0-80.0	20.0-99.0	32.0-120.0	32.0-150.0
T _F /T _R = 80/60 °C when operating with natural gas Flue gas parameters* ²	kW	10.9-45.0	10.9-55.2	18.2-74.1	18.2-90.9	29.1-110.9	29.0-136.0
Flue gas category to G 635/G 636		G ₅₂ /G ₅₁	G ₅₂ /G ₅				
Temperature (at a return temperature of 30 °C)		0.52/0.51	0.52/0.51	0.52/ 0.51	0.52/0.51	0.52/ 0.51	052/05
- At rated heating output	°C	62	66	46	57	51	60
– At partial load Temperature (at a return temperature of 60 °C)	°C °C7	39 58	39 06	37 87	37 27	39 07	39
Mass flow rate	07	50	00	0,	27	0,	
Natural gas							
- At rated heating output	kg/h7	8	104	139	174	210	253
– At partial load LPG	kg/h3	03	05	25	25	35	
– At rated heating output	kg/h7	49	9	132	165	231	278
At partial load	kg/h2	82	84	94	95	95	0.50
Available draught m	Pa bar	250 2.52	250 .5	250 2.52	250 .5	250 2.52	250 .E
Max. amount of condensate	Dal	2.02	.0	2.02	.0	2.02	
To DWA-A 251	l/h6	.3	8.41	1.2	14.0	17.5	21.0
Condensate connection (hose nozzle)	Ømm	20-24	20-24	20-24	20-24	20-24	20-24
Flue gas connection	Ømm	80	80	100	100	100	100
Ventilation air connection	Ømm	125	125	150	150	150	150
Standard seasonal efficiency [to DIN] at			/ n to 00 / ! !	\ [area] /	100 /11) [+	J	
$T_F/T_R = 40/30 \text{ °C}$ Energy efficiency class	٨		%U p to 98 (H	-	IUS (H;) [NET C)	/]	
Linergy eniciency class	A			A			

*1 If the gas supply pressure is higher than the maximum permissible value, install a separate gas pressure governor upstream of the system.
*2 Calculation values for sizing the flue system to EN 13384. Flue gas temperatures as actual gross values at 20 °C combustion air temperature. The flue gas temperature at a return temperature of 30 °C is significant for the sizing of the flue system.
The flue gas temperature at a return temperature of 60 °C is used to determine the application range of flue pipes with maximum permissi- ble operating temperatures.

Technical specification

Vitodens 200-W 49 to 60 kW models



- (A) Inox-Radial heat exchanger made from stainless steel – for high operational reliability and a long service life. High heating output on a very small footprint
- B Modulating MatriX cylinder burner for extremely clean combustion and quiet operation
- © Variable speed combustion fan for quiet and economical operation
- D Gas and water connections
- Digital boiler control unit

Vitodens 200-W, 49 to 60 kW



- (A) Expansion vessel connection G 1
- B Safety valve
- C Heating flow G 11/2
- D Cylinder flow G 11/2
- E Gas connection R 34
- Cylinder return G 11/2
- G Heating return G 1½
- (f) Cable entry area at the back
- Note

The heating circuit connection set must be ordered separately. Lay all required supply cables on site and route them into the boiler in the specified area.

Variable speed high efficiency circulation pump in the heating circuit connection set (accessories)

The highly efficient circulation pump uses significantly less power compared to conventional pumps. Matching the pump rate of the circulation pump to the individual system conditions reduces the power consumption of the heating system.

(K) Connection sets (accessories)

- Shown without thermal insulation (standard delivery)
- $\ensuremath{\mathbb{O}}$ $\ensuremath{\mathbb{W}}$ it hout connection sets
- M With connection sets
- ${\small (\! \! N \! \! \! \! \!)}$ Recommended dimension for a single boiler system
- O Recommended dimension for a multi boiler system
- D Condensate drain
- R Top edge finished floor

Circulation pump VI Para 25/1-11Rated voltageV ~230Power consumptionW Max.140W Min.8



24/25

÷- 🔊

Technical specification

Vitodens 200-W 80 to 99 kW models



- Inox-Radial heat exchanger made from (A)stainless steel - for high operational reliability and a long service life. High heating output on a very small footprint
- B Modulating MatriX cylinder burner for extremely clean combustion and quiet operation
- \bigcirc Variable speed combustion fan for quiet and economical operation
- \bigcirc Gas and water connections
- (E) Digital boiler control unit

Vitodens 200-W, 80 to 99 kW



- (A) Safety valve
- (B) Expansion vessel connection G 1
- © Boiler flow Ø 42 mm
- D Cylinder flow Ø 35 mm
- (E) Gas connection R 1
- Cylinder return Ø 35 mm
- G Boiler return Ø 42 mm
- \oplus Connection sets (accessories)

Shown without thermal insulation (standard delivery)

Note

R

Condensate drain

The heating circuit connection set must be ordered separately. Lay all required supply cables on site and route them into the boiler in the specified area.

 \mathbb{K}

 \mathbb{O}

 \mathbb{M}

 \mathbb{N}

 \bigcirc

Ð

Variable speed high efficiency circulation pump in the heating circuit connection set (accessories)

The highly efficient circulation pump uses significantly less power compared to conventional pumps. Matching the pump rate of the circulation pump to the individual system conditions reduces the power consumption of the heating system.

Top edge finished floor

Cable entry area at the back

Without connection set (accessories)

Recommended dimension (single boiler system)

Recommended dimension (multi boiler system)

With connection set (accessories)

Circulation pump VI Para 25/1-12 230 Rated voltage V ~ Power consumption 310 W Max. 16 W Min.

Technical specification

Vitodens 200-W 120 to 150 kW models





- A Inox-Radial heat exchanger made from stainless steel – for high operational reliability and a long service life. High heating output on a very small footprint
- B Modulating MatriX cylinder burner for extremely clean combustion and quiet operation
- C Variable speed combustion fan for quiet and economical operation
- D Gas and water connections
- Digital boiler control unit

Vitodens 200-W, 120 to 150 kW



A Safety valve

Note

- B Expansion vessel connection G 1
- © Boiler flow Ø 54 mm
- D Cylinder flow Ø 42
- E Gas connection R 1
- Cylinder return Ø 42 mm
- G Boiler return Ø 54 mm
- (H) Connection sets (accessories)

consumption of the heating system.

Shown without thermal insulation (standard delivery)

- \bigotimes Cable entry area at the back
- \bigcirc Without connection set (accessories)
- \bigcirc With heating circuit connection set (accessories)
- \mathbb{N} With DHW cylinder connection set (accessories)
- Recommended dimension (single boiler system without mounting frame)
 Recommended dimension (multi boiler system or single boiler system
- with mounting frame)
- R Condensate drain
- S Top edge finished floor

The heating circuit connection set must be ordered separately. Lay all required supply cables on site and route them into the boiler in the specified area.

Variable speed high efficiency circulation pump in the heating circuit connection set (accessories)

The highly efficient circulation pump uses significantly less power compared to conventional pumps. Matching the pump rate of the circulation pump to the individual system conditions reduces the power

Circulation pump VI Para 30/1-12 Rated voltage V ~ Power consumption W Max. W Min.

230

310

16



Viessmann Limited Hortonwood 30, Telford Shropshire, TF1 7YP Tel: 01952 675000 Fax: 01952 675040 www.viessmann.co.uk

Your trade partner:

9443 995 GB 08/2016 Copyright Viessmann Duplication and alternative use only with prior written consent. Subject to technical modifications.