High Output Gas Condensing Boilers

VITODENS 200-W

VIESMANN
climate of innovation

ErP READY 2015
APPLIES TO EUROPEAN DIRECTIVE FOR ENERGY RELATED PRODUCTS

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

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About this brochure

The Vitodens 200-W is a wall hung gas condensing boiler for commercial applications, available in 45, 60, 80, 100, 125, 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.

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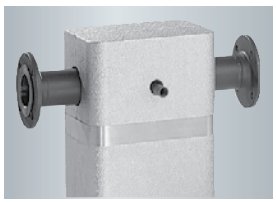

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High Output Gas
Condensing Boilers

Vitodens 200-W
45 to 100 kW
Cascade up to 800 kW

VITODENS 200-W 45-100 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 800 kW with 8 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 800 kW with 8 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 1:4
- 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

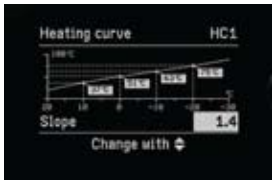
Lambda Pro combustion controller
- No nozzle change when converting to LPG
- Consistently high efficiency even with fluctuating gas composition and air pressure
- Constantly clean combustion
- Low combustion noise through low fan speed
- Optimised efficiency throughout its life
- Simple and failsafe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

Output range
- 45, 60, 80, 100 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

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



Vitotronic 200 HO1B heating curve

energy saving trust recommended

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DESIGN PLUS

High Output Gas
Condensing Boilers

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

VITODENS 200-W 125 - 150 KW

The new Vitodens 200-W B2HA models, with output from 125 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 125 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

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 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

- 125, 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

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

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Cascade packages

The Vitodens 200-W can be cascaded with up to 8 units, offering outputs up to 900 kW. Viessmann's comprehensive cascade packages are designed for easy installation on all applications.

Components of cascade unit packs

1. Vitodens 200-W
2. Cascade controller
3. Cascade units comprising: distributor/header low loss header insulation
4. Flue gas cascade and boiler coding card (higher speed fan)
5. Heating circuit connection set up with variable speed pumps
6. Insulated copper pipes

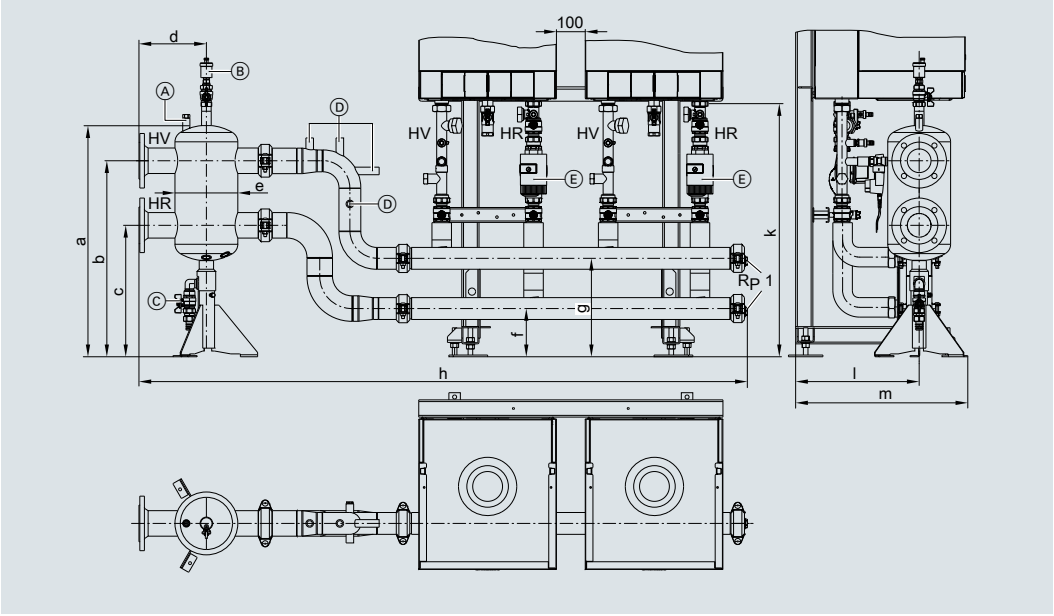
Vitodens 200 Cascade packages
Each package comprises of the boilers, pumps, Vitotronic controller, connection sets and a low loss header with cascade pipework. Cascade installation can be wall mounted or free standing on a purpose built framework. Flue items should be ordered as seperate accessories, as required.

Required output	Combination	45 kW	60 kW	80 kW	100 kW	125 kW	150 kW	Overall dimensions (mm) (HxWxD) inc frame	Overall dimensions (mm) Quad block (HxWxD)
160	2 x 80 kW			XX				1750 x 1160 x 595	
180	4 x 45 kW	XXXX							1750 X 1062 X 1350
	3 x 60 kW		XXX					1750 x 1740 x 595	
200	2 x 100 kW				XX			1750 x 1160 x 595	
250	2 x 125 kW					XX		1800 x 1400 x 710	
300	3 x 100 kW				XXX				1750 x 1593 x 1422
	2 x 150 kW						XX	1800 x 1400 x 710	
375	3 x 125 kW					X X X		1800 x 2100 x 710	
450	3 x 150 kW						XXX	1800 x 2100 x 710	
600	6 x 100 kW				XXXXXX			1750 x 3480 x 595	1750 X 2124 X 1422
	4 x 150 kW						XXXX	1800 x 2800 x 710	
800	8 x 100 kW				XXXXXXXX			1750 x 4640 x 595	1750 X 2655 X 1422
900	6 x 150 kW						XXXXXX	1800 x 4200 x 710	

Key: X Numbers of boilers per cascade

Hydraulic cascade for wall mounting and installation on self-supporting frames. Flow and return connectors with low loss header for multi-boiler systems of 2 to 8 Vitodens boilers in series or 4, 6 or 8 boilers arranged as a block (45-100 kW). Heating circuit connections either on the right or left.

Vitodens 200-W Cascaded System

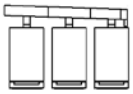
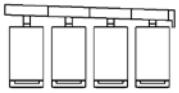
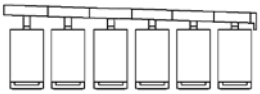
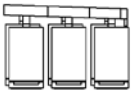
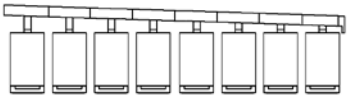
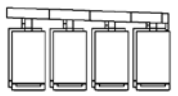


Ⓐ Sensor well for flow temperature sensor
Ⓑ Air vent valve
Ⓒ Drain
Ⓓ Connectors for safety equipment Rp ½
Ⓔ Connection accessories with circulation pump
HR Heating return
HV Heating flow

Boiler	Number		2 x 45 kW 2 x 60 kW	2 x 80 kW 2 x 100 kW	3 x 45 kW 3 x 60 kW	3 x 80 kW 3 x 100 kW	4 x 45 kW 4 x 60 kW 4 x 80 kW 4 x 100 kW	6 x 45 kW 6 x 60 kW	6x80 kW 6x100 kW	8x45 kW 8x60 kW	8x80 kW 8 x100 kW
Heating circuit connection	PN6/DN		80	80	80	80	100	100	100	100	100
Boiler connection	G		1.5"	1.5"	1.5"	1.5"	1.5"	1.5"	1.5"	1.5"	1.5"
Max. flow rate	m^3/h		6.9	12.1	10.3	18.1	24.1	20.6	36.2	27.6	48.2
Dimensions	a	mm	805	805	805	805	1044	1044	1044	1044	1044
	b	mm	688	688	688	688	860	860	860	860	860
	c	mm	460	460	460	460	520	520	520	520	520
	d	mm	235	235	235	235	250	250	250	250	250
	e	mm	219	219	219	219	300	300	300	300	300
	f	mm	168	168	168	168	168	168	168	168	168
	g	mm	343	343	343	343	343	343	343	343	343
	h	mm	2125	2125	2707	2707	3382	4544	4659	5706	5821
	k	mm	882	882	882	882	882	882	882	882	882
	l	mm	430	430	430	430	430	430	430	430	430
	m	mm	595	595	595	595	595	595	595	595	595

Boiler	Number	2 x 125 kW 2 x 150 kW	3 x 125 kW 3 x 150 kW	4 x 125 kW 4 x 150 kW	6 x 125 kW 6 x 150 kW	(2x2) x 45 kW (2x2) x 60 kW	(2x2) x 80 kW (2x2) x 100 kW	(2x3) x 80 kW (2x3) x 100 kW	(2x4) x 45 kW (2x4) x 60 kW	(2x4) x 80 kW (2x4) x 100 kW
Heating circuit connection	PN6/DN	100	100	150	150	80	100	100	100	100
Boiler connection	G	2"	2"	2"	2"	1.5"	1.5"	1.5"	1.5"	1.5"
Max. flow rate	m^3/h	17.2	25.8	34.4	51.6	13.8	24.1	36.2	27.6	48.2
Dimensions	a mm	1218	1218	1218	1218	805	1044	1044	1044	1044
	b mm	972	972	972	972	683	860	860	860	860
	c mm	520	520	520	520	458	520	520	520	520
	d mm	380	380	380	380	235	250	250	250	250
	e mm	219	219	219	219	219	300	300	300	300
	f mm	168	168	168	168	168	168	168	168	168
	g mm	343	343	343	343	343	343	343	343	343
	h mm	2461	3159	3974	5372	2220	2335	2917	3382	3497
	k mm	1025	1025	1025	1025	882	882	882	882	882
	l mm	520	520	520	520	-	-	-	-	-
	m mm	710	710	710	710	-	-	-	-	-

Conventional flue	Output	Flue diameter (mm)	Balanced flue diameter (mm)	Max. flue length (m) Duct open flue	Roof outlet	Ext. wall terminal	Routing over ext. wall	Duct balanced flue
	45 kW	80		25				
	60 kW	80		15				
	80 kW	100		20				
	100 kW	100		20				
	125 kW	100		20				
	150 kW	100		20				
Concentric	45 kW		80/125		10	10	12	20
	60 kW		80/125		6	6	12	15
	80 kW		100/150		15	15	20	20
	100 kW		100/150		15	15	20	20
	125 kW		100/150		8	8	18	8
	150 kW		100/150		5	5	15	5

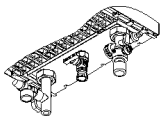
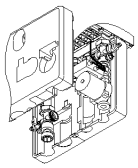
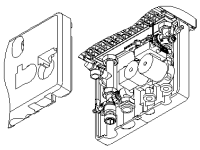
Flue gas cascade type each kit comprising: Flue gas non-return device, flue pipe, terminal with condensate drain and boiler coding card.	45 - 60 kW		80 - 100 kW		125 - 150 kW	
	Dia. (mm)	Max. flue length (m)	Dia. (mm)	Max. flue length (m)	Dia. (mm)	Max. flue length (m)
Flue gas cascade twin	80/160 80/200	30 30	110/200 110/250	30 30	110/150	30
Flue gas cascade triple 	80/160 80/200	30 30	110/200 110/250	30 30	110/250	30 30
Flue gas cascade quad 	80/200	30	110/200	30	110/250	16
Flue gas cascade quad block	80/200	30	110/200	30		
Flue gas cascade six 	80/110	30	110/250	30	110/250	9
Flue gas cascade six block 	80/110 110/250	30	110/250	30		
Flue gas cascade eight 	80/110 110/250	30	110/250	30		
Flue gas cascade eight block 	80/110 110/250	30	110/250	30		

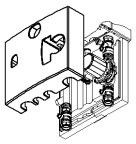
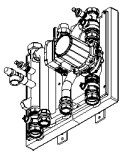
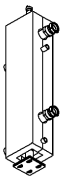
Boiler controls and accessories

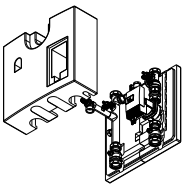
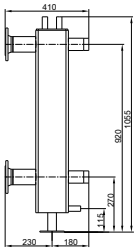
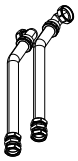
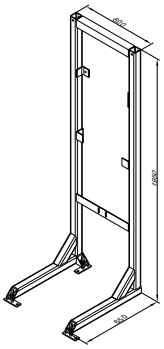
Controls

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		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		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		-	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			
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		-	Z011219
Vitotrol 300 RF with table-top dock 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		-	Z011410
Vitotrol 300 RF with wall mounting bracket 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 ■ Vitotrol 300 RF with wall mounting bracket		-	Z011415
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 Vitorol 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

Heating circuit and DHW cylinder (only for single boiler 45 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 	Z008 912
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 	Z007 620
Ball valve (G 1.25") Required if the heating circuit pump or the cylinder primary pump is to be changed without draining the heating system	7247 373

Heating circuit and DHW cylinder (only for single boiler 80 and 100 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) 	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 125 and 150 kW)		Part number
Heating circuit connection set with variable speed high efficiency circulation pump - comprising: ■ 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		7501 321
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
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

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 - 1$^3/_4$"**
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	7465469	7465470	7465479
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	7465776	7465778	7465777

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

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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 4.5m³/h connection to the manifolds with thermal insulation (black) with integral sensor well 50mm long Volume flow up to 7.5 m3/h with thermal insulation with integral sensor with integrated deaerator		7460 649 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

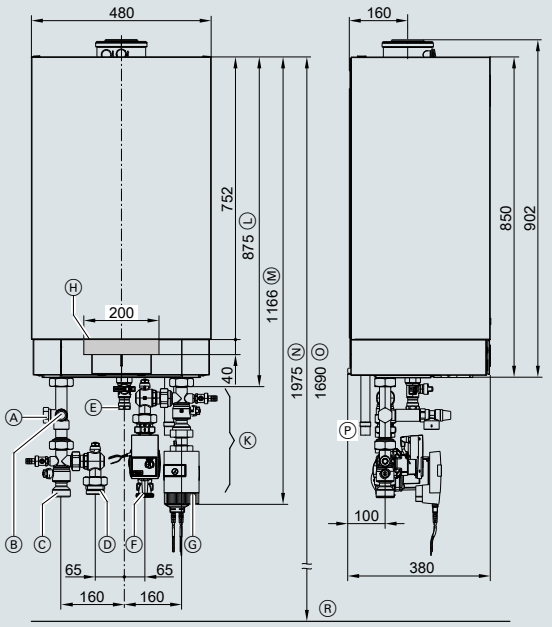
General specifications and performance data		Vitodens 200-W B2HA					
Appliance		**17-45 kW**	**17-60 kW**	**30-80 kW**	**30-100 kW**	**32-125 kW**	**32-150 kW**
Rated heating output range **45 and 60 kW: Specification to EN 677** **80 to 150 kW: Specification to EN 15417**							
T_V/T_R = 50/30 °C	**kW**	**17.0-45.0**	**17.0-60.0**	**30.0-80.0**	**30.0-100.0**	**32.0-125.0**	**32.0-150.0**
T_V/T_R = 80/60 °C	**kW**	**15.4-40.7**	**15.4-54.4**	**27.0-72.6**	**27.0-91.0**	**29.0-114.0**	**29.0-136.0**
Rated heat input	kW	16.1-42.2	16.1-56.2	28.1-75.0	28.1-93.8	30-118	30-142
Type		B2HA	B2HA	B2HA	B2HA	B2HA	B2HA
Product ID		CE-0085CN0050					
IP rating		IP X4D to EN 60529					
Gas supply pressure							
Natural gas	mbar	20	20	20	20	20	20
LPG	mbar	50	50	50	50	50	50
Max. permissible gas supply pressure *1							
Natural gas	mbar	25.0	25.0	25.0	25.0	25.0	25.0
LPG	mbar	57.5	57.5	57.5	57.5	57.5	57.5
Power consumption (delivered condition)	W	56	82	90	175	146	222
Weight	kg	65	65	83	83	130	130
Heat exchanger content	l	7.0	7.0	12.8	12.8	15.0	15.0
Max. flow rate Limit for the use of hydraulic separation	l/h	3500	3500	5700	5700	7165	8600
Rated circulation water volume at T_V/T_R = 80/60 °C	l/h	1748	2336	3118	3909	4900	5850
Permiss. operating pressure	bar	4	4	4	4	6	6
Dimensions							
Length	mm	380	380	530	530	690	690
Width	mm	480	480	480	480	600	600
Height	mm	850	850	850	850	900	900
Gas connection	R	¾	¾	1	1	1	1
Connection values in relation to the max. load with gas							
Natural gas E	m^3/h	4.47	5.95	7.94	9.93	12.49	15.03
Natural gas LL	m^3/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
Flue gas parameters *2							
Flue gas category to G 635/G 636		G_{52}/G_{51}	G_{52}/G_{51}	G_{52}/G_{51}	G_{52}/G_{51}	G_{52}/G_{51}	G_{52}/G_{51}
Temperature (at 30 °C return temperature)							
– at rated heating output	°C	62	66	46	57	51	60
– at partial load	°C	39	39	37	37	39	39
Temperature (at 60 °C return temperature)	°C	75	80	68	72	70	74
Mass flow rate Natural gas							
– at rated heating output	kg/h	78	104	139	174	210	253
– at partial load	kg/h	30	30	52	52	53	53
LPG							
– at rated heating output	kg/h	74	99	132	165	231	278
– at partial load	kg/h	28	28	49	49	59	59
Available draught	Pa	250	250	250	250	250	250
	mbar	2.5	2.5	2.5	2.5	2.5	2.5
Standard seasonal efficiency [to DIN] at T_V/T_R = 40/30 °C	%	up to 98 (H_s) [gross cv] / 109 (H_i) [net cv]					
Max. amount of condensate for natural gas and T_V/T_R = 50/30 °C	l/h	5.9	7.9	10.5	13.1	16.5	20.0
Internal pipe diameter to expansion vessel	DN	22	22	28	28	25	25
safety valve	DN	22	22	22	22	26	26
Condensate connection (hose nozzle)	Ø mm	20-24	20-24	20-24	20-24	20-24	20-24
Flue gas connection	Ø mm	80	80	100	100	100	100
Ventilation air connection	Ø mm	125	125	150	150	150	150

*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 captured as gross values at 20 °C combustion air temperature.

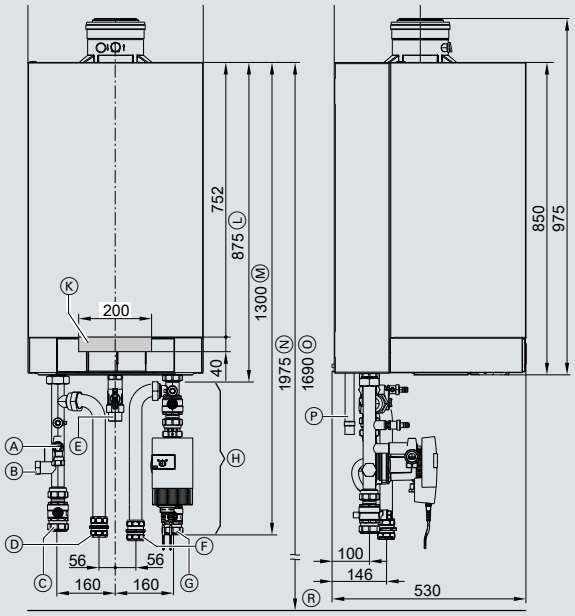
The flue gas temperature at a return temperature of 30 °C is significant for sizing the flue system.
The flue gas temperature at a return temperature of 60 °C is used to determine the application range of flue pipes with max. permissible operating temperatures.

45 kW & 60 kW dimensions



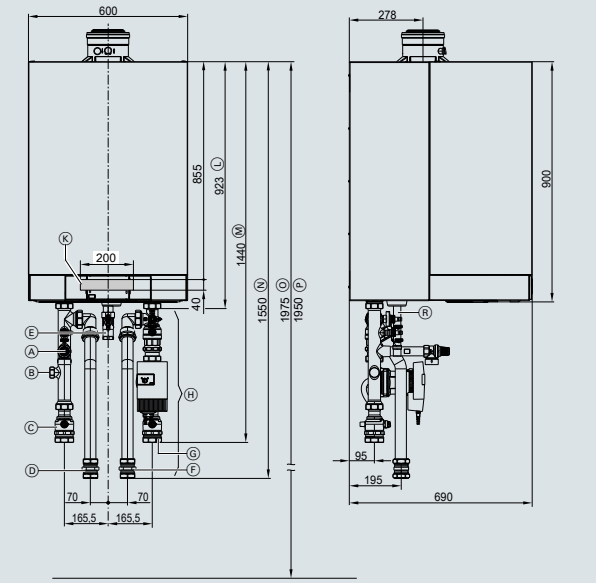
(A) Expansion vessel connection G 1
(B) Safety valve
(C) Heating flow G 1½
(D) Cylinder flow G 1½
(E) Gas connection R ¾
(F) Cylinder return G 1½
(G) Heating return G 1½
(H) Cable entry area at the back
(K) Connection sets (accessory)
Shown without thermal insulation (standard delivery)

80 kW & 100 kW dimensions



(A) Safety valve
(B) Expansion vessel connection G1
(C) Boiler flow ∅ 42 mm
(D) Cylinder flow ∅ 35 mm
(E) Gas connection R 1
(F) Cylinder return ∅ 35 mm
(G) Boiler return ∅ 42 mm
(H) Connection sets (accessory)
Shown without thermal insulation (standard delivery)
(K) Cable entry area at the back
(L) Without connection set (accessory)
(M) With connection set (accessory)
(N) Recommended dimension (single boiler system)
(O) Recommended dimension (multi boiler system)
(P) Condensate drain
(R) Top edge finished floor

125 kW & 150 kW dimensions



(A) Safety valve
(B) Expansion vessel connection G1
(C) Boiler flow ∅ 54 mm
(D) Cylinder flow ∅ 42 mm
(E) Gas connection R 1
(F) Cylinder return ∅ 42 mm
(G) Boiler return ∅ 54 mm
(H) Connection sets (accessory)
Shown without thermal insulation (standard delivery)
(K) Cable entry area at the back
(L) Without connection set (accessory)
(M) With heating circuit connection set (accessory)
(N) With DHW cylinder connection set (accessory)
(O) Recommended dimension (single boiler system without mounting frame)
(P) Recommended dimension (multi boiler system or single boiler system with mounting frame)
(R) Condensate drain

VIESMANN

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