

# Technical Data

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		Standard heating boiler	
Boiler Model	Model No.	WB1B 26	WB1B 35
<b>Natural gas and LPG</b>			
CSA input	MBH	37-91	37-118
	kW	10.8-26.7	10.8-34.6
CSA output/DOE <sup>*1</sup>	MBH	34-83	34-108
heating capacity	kW	9.9-24.3	9.9-31.6
Net I = B = R rating <sup>*2</sup>	MBH	72	94
Heat exchanger surface area	ft. <sup>2</sup>	10.23	10.23
	m <sup>2</sup>	0.86	0.86
<b>Min. gas supply pressure</b>			
Natural gas	"w.c.	4	4
LPG	"w.c.	10	10
<b>Max. gas supply pressure<sup>*3</sup></b>			
Natural gas and LPG	"w.c.	14	14
A.F.U.E.	%	94.0	94.0
Weight	lbs	78	78
	kg	34.1	34.1
Shipping weight	lbs	95	95
	kg	43	43
Boiler water content	USG	0.87	0.87
	ltr	3.3	3.3
Boiler max. flow rate <sup>*4</sup>	GPM	6.2	6.2
	ltr/h	1400	1400
Max. operating pressure at 210°F / 99°C	psig	45	45
	bar	3	3
<b>Boiler water temperature</b>			
– Adjustable high limit (AHL) range			
– space heating (steady state)	°F / °C	86 to 176 / 30 to 80	
– DHW production (set-point)	°F / °C	172 / 78	
– Fixed high limit (FHL)	°F / °C	210 / 99	
<b>Boiler connections</b>			
Boiler heating supply and return	NPTM (male) "	¾	¾
Pressure relief valve	NPTF (female) "	¾	¾
Drain valve	(male thread)	¾	¾
<b>Dimensions</b>			
Overall depth	inches	14 <sup>1</sup> / <sub>8</sub>	14 <sup>1</sup> / <sub>8</sub>
	mm	360	360
Overall width	inches	15 <sup>¾</sup>	15 <sup>¾</sup>
	mm	400	400
Overall height	inches	28 <sup>½</sup>	28 <sup>½</sup>
	mm	725	725

\*1 Output based on 140°F / 60°C, 120 °F / 49°C system supply/return temperature.

\*2 Net I = B = R rating based on piping and pick-up allowance of 1.15.

\*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.

\*4 See "Maximum Flow Rates" on pages 15 to 17 in this manual.

		Standard heating boiler	
Boiler Model	Model No.	WB1B 10-26	WB1B 10-35
Gas supply connection	NPTF "	¾	¾
<b>Flue gas <sup>*5</sup></b>			
Temperature (at boiler return temperature of 86°F / 30°C)			
- at rated full load	°F / °C	127 / 53	131 / 55
- at rated partial load	°F / °C	90 / 32	90 / 32
Temperature (at boiler return temperature of 140°F / 60°C)		167 / 75	172 / 78
<b>Flue gas value</b>			
Mass flow rate (of flue gas)			
- at rated full load	lbs/h	79.2	100.1
	kg/h	36.0	45.5
- at rated partial load	lbs/h	33.0	33.0
	kg/h	15.0	15.0
Available draught	Pa	100	100
	mbar	1.0	1.0
Flue gas temperature sensor limit	°F / °C	230 / 110	230 / 110
<b>Average condensate flow rate <sup>*6</sup></b>			
with natural gas			
- T <sub>S</sub> /T <sub>R</sub> = 122/86°F / 50/30 °C	USG/day	1.95-2.3	2.5-2.8
	ltr/day	8-9	9.4-10.5
Condensate connection <sup>*7</sup>	hose nozzle Ø in	1	1
Boiler flue gas connection <sup>*8</sup>	Ø in/mm	2 <sup>3</sup> / <sub>8</sub> /60	2 <sup>3</sup> / <sub>8</sub> /60
Combustion air supply connection <sup>*8</sup>	outer Ø in/mm	4/100	4/100
<b>Noise level (at 1 meter)</b>			
- at full load	(dB)	47	49
- at partial load	(dB)	40	42
High altitude (factory set) <sup>*9</sup>	ft. / m	0-5,000 / 0-1,500	0-5,000 / 0-1,500

<sup>\*5</sup> Measured flue gas temperature with a combustion air temperature of 68°F / 20°C.

<sup>\*6</sup> Based on typical boiler cycles, including partial load conditions.

<sup>\*7</sup> Requires 1" / 25 mm tubing. See Vitodens 100-W Installation Instructions for details.

<sup>\*8</sup> For an overview of venting options refer to the appendix starting on page 19. For detailed information refer to the Vitodens Venting System Installation Instructions.

<sup>\*9</sup> For 5,000 to 10,000 ft / 1,500 to 3,048 m operation, a coding address change is required. Refer to the Installation and Service Instructions for details.

► For information regarding other Viessmann System Technology componentry, please reference documentation of respective product.

# Vitodens 100-W

Vitodens 100-W, WB1B 26/35  
without piping connections

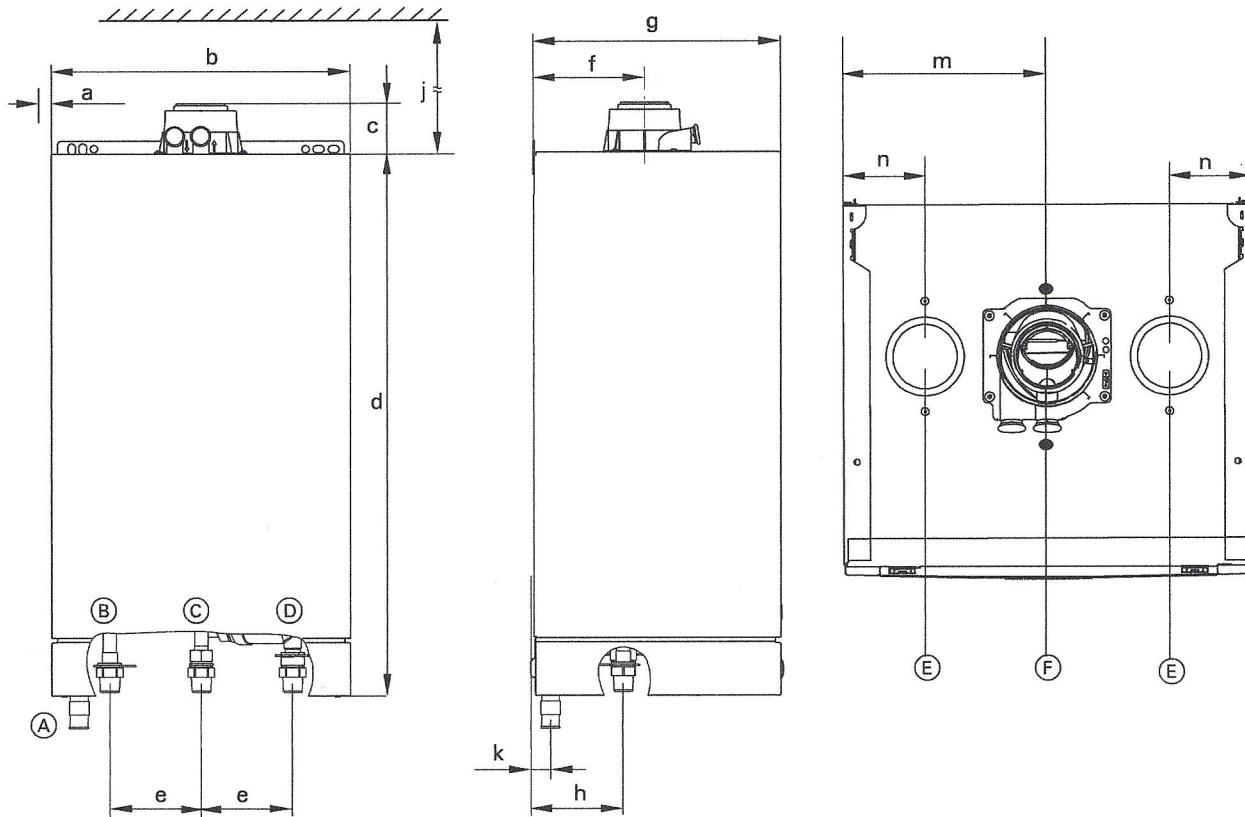


Fig. 1 Front view

Side view

Top view

Connections Vitodens 100-W,  
WB1B 10-26, 10-35

## Legend

### Connections

- Ⓐ Condensate drain, plastic hose  
Ø 1" / 25mm
- Ⓑ Boiler water supply, NPT 3/4" (male thread)
- Ⓒ Gas connection, NPT 3/4" (male thread)
- Ⓓ Boiler water return, NPT 3/4" (male thread)
- Ⓔ Combustion air opening for double pipe system
- Ⓕ Combustion air opening for co-axial system

### Dimensions

- a* See fig. 2 for dimensions
- b* 15 3/4" / 400 mm
- c* 2 5/8" / 68 mm
- d* 28 1/2" / 725 mm
- e* 4 7/8" / 123 mm
- f* 6 1/8" / 156 mm
- g* 14 1/8" / 360 mm
- h* 5" / 125 mm
- j* 9 7/8" / 250 mm
- k* 1 1/4" / 31 mm
- m* 7 7/8" / 200 mm
- n* 3 1/8" / 80 mm