

ecoTEC 80-120kW

Wall-hung condensing boiler

Technical specification



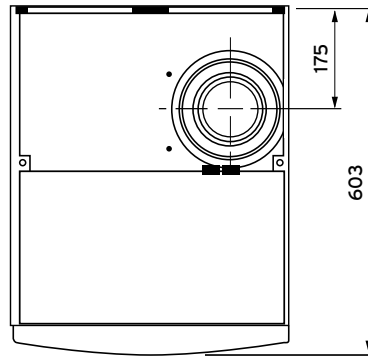
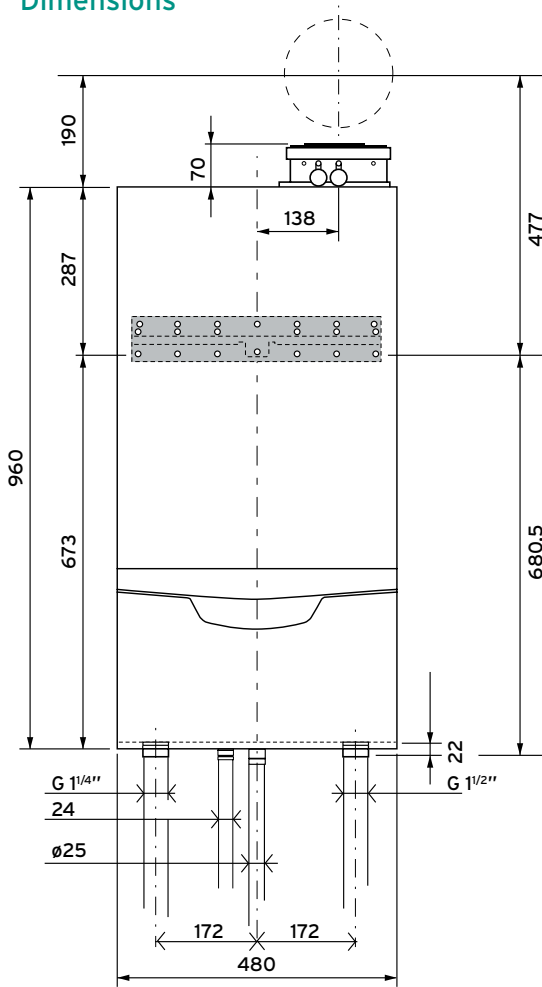
- High quality stainless steel heat exchanger offers more resistance to oxidation, seizing and corrosion
- Energy saving two-stage frost protection system and pressure sensor to monitor system pressure via diagnostics
- Full range of accessories available for a complete system solution
- ErP 'A' rated



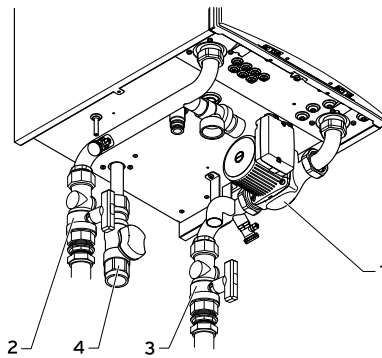
■ Heating ■ Hot water ■ Renewables

Because  **Vaillant** thinks ahead.

Dimensions

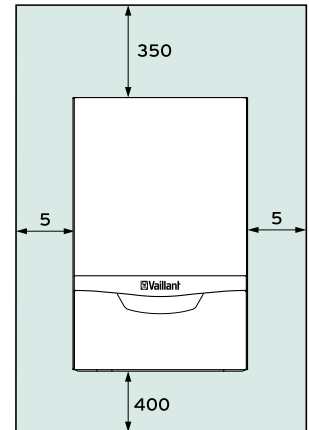


Connections



1. Pump group
2. Heating flow
3. Heating return
4. Gas valve

Clearances



A minimum of 500mm clearance in front of the boiler is required to enable easy access for servicing. This may be provided by an accessible door.

All measurements are in millimetres unless stated otherwise

ecoTEC technical specification			80kW	100kW	120kW
Article number		Unit	0010010767	0010010780	0010010791
Heat output range Natural gas G20 at 20mb	80/60	kW	14.9 - 74.7	18.7 - 93.3	22.4 - 112.0
	50/30	kW	16.5 - 82.3	20.7 - 102.8	24.7 - 123.4
Conversion to LPG G31 at 37mb (conversion by Vaillant Group Service)	80/60	kW	37.4 - 74.7	46.7 - 93.3	56.0 - 112.0
	50/30	kW	41.2 - 82.3	51.4 - 102.8	61.7 - 123.4
Maximum heat input (net)		kW	76.2	95.2	114.3
Modulation ratio - N : 1		%	5 : 1 (20%)	5 : 1 (20%)	5 : 1 (20%)
Energy-related Products		band	A	A	A
Seasonal efficiency*	NG	%	95.6	95.9	96.0
Net efficiency 100%	80/60	%	97.0	98.0	98.0
Net efficiency 30%	50/30	%	108.0	108.0	108.0
Gas working pressure	NG	mbar	20		
	LPG	mbar	37		
Nominal gas consumption at 15°C 1013mb	NG	m ³ /h	8.10	10.07	12.13
	LPG	kg/h	5.92	7.40	8.88
NOx class 5 - 0% oxygen - dry		mg/kWh	39	36	38
Minimum / maximum flow temperature		°C	35 / 85		
Nominal CH flow rate Δt = 20 K		l/hr	3440	4300	5160
Pump head without check valve		mbar	730	610	500

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Pump head with check valve		mbar	650	530	420
Condensate (PH range 3.5-4.0)		l/hr	12.8	16	19.2
Standby loss $\Delta T = 50 K$		%	< 2		
Maximum power consumption		W	345	355	355
Standby power consumption		W	< 2		
Supply voltage / frequency / current		V / Hz / A	230 / 50 / 3		
IP rating			IP X 4D		
Noise level - load EN 15036-1 dB(A) re1pW		Full	54.4	62.3	60.6
		Part	33.8	36.3	37.8
Dimensions - H x W x D		mm	960 x 480 x 603		
Dry weight		kg	68	86	90
Internal water capacity		l/hr	17	23.7	22.5
Acidity level		PH	6.5 - 8.5 (for systems that may contain aluminium)		
Flue - concentric		mm	110 / 160		
Connection size (B23p)		\varnothing mm	110		
Certification for GB			C13, C33, C43, C53, C93, B23, B23p, B53		
Maximum horizontal flue length		m	22	20	11
Maximum vertical flue length		m	24	18	9
Flue mass flow Qmax	NG	g/s	34.7	43.4	52.1
Flue gas temperature minimum / maximum		$^{\circ}C$	40 / 85		
Fan duty B23 in single		Pa	150	200	200
Fan duty B23p in cascade		Pa	50		
Flow and return connections		BSP female	1 $\frac{1}{4}$ "		
Gas connection		BSP female	1"		
Condensate connection pipe		\varnothing mm	19 ID / 24 OD		
Pressure relief valve size		BSP female	1"		
Minimum / maximum operating pressure		bar	0.8 / 5.0		
High efficiency pump (required) article number 0020175314		EEl \geq 0.23	Available as an accessory		

Water quality - To maintain boiler performance and life ensure all system water remains free of debris and is treated to manage hardness and corrosion by use of inhibitors throughout the boiler life. Omissions could lead to failures that are not covered by our guarantee. See website for full terms and conditions. We recommend fitting a plate heat exchanger as part of your system design and installation.

Accessories

Vaillant has a full range of accessories including pumps, expansion vessels, plate heat exchangers, cascade rigs, vertical and horizontal flues and controls, all of which are compatible with ecoTEC 80, 100 and 120kW boilers. Contact your local sales representative for more information.



Plate heat exchanger installation



Plate heat exchangers

Sales Support

Vaillant products are available to purchase from reputable heating merchants in the UK. To find contact details for your nearest Vaillant sales representative:

Telephone: 0345 602 0262

Website: www.vaillantcommercial.co.uk

Specifiers

We can provide you with bespoke solutions to accommodate a variety of different installations. To discuss your requirements or find contact details for your nearest sales representative:

Telephone: 0345 602 0262

Website: www.vaillantcommercial.co.uk

Technical Enquiries

For technical assistance:

Telephone: 0344 693 3133

Email: technical@vaillant.co.uk

Commercial Systems Service

For commercial systems servicing and commissioning:

Telephone: 0207 022 0927

Email: commercial@vaillant.co.uk

General Enquiries

If you have a general enquiry our friendly reception staff will happily point you in the right direction:

Telephone: 0345 602 2922

Training Enquiries

Vaillant provide many different training courses. For more information:

Telephone: 0345 601 8885

Email: training.enquiriesuk@vaillant-group.com

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