

EVOMAX

150kW





Available in outputs of 30, 40, 60, 80, 100, 120 and 150kW, the Evomax is designed to ensure all installation requirements can be achieved. There is also an LPG Evomax range from 30 - 80 kW for off mains installations.

FEATURES & BENEFITS

- Robust cast aluminium silicon alloy heat exchanger
- · In-built commissioning and fault diagnostics
- Volt free contacts and BMS operation standard
- Meets Building Regulations (Part L2)
- Compact size small footprint
- High 5:1 turndown

- Up to 107.5% net efficiency (fully condensing)
- Fits through standard doorways
- · Conventional or room sealed flue options
- Direct weather compensation option
- NOx <40mg/kWh (Class 5)

DIMENSIONS & CLEARANCES

BOILER	DIM A	DIM B	DIM C
150	610	233	120

The following minimum clearances must be maintained for operation and servicing:



TOP: DEPENDENT ON FLUE SIZE



SIDES: 25mm



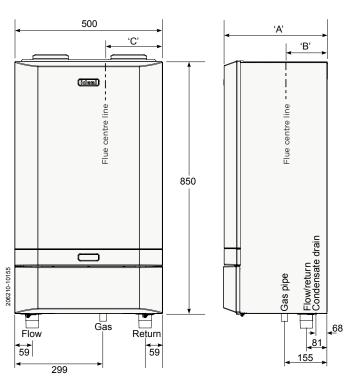
FRONT: 450mm



BOTTOM: 300mm

CLEARANCE BETWEEN MULTIPLE BOILER

INSTALLATIONS: 25mm



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TECHNICAL SPECIFICATIONS



GENERAL		FLUE/AIR INLET			
Dry Weight	KG	89.75	Flue Size	mm	100/150 Concentric or Open Flue
Boiler Dimensions	mm	850 (H) x 500 (W) x 610 (D)	Flue Gas Volume	m³/h	240.7
			Flue Gas Temperature 80/60	°C	70
Boiler Clearances	mm	Front: 450 Side: 25 Below: 300	O/F Max Counter Pressure Diff	Pa	430
			B/F Max Counter Pressure Diff	Pa	N/A
SEDBUK 2009	%	89.5			
Seasonal Efficiency	%	96.7	ELECTRICAL		
Min/Max Gas pressure (Nat Gas)	mbar	17.5-20.0	Electrical Supply		230/240V 50Hz 1 Pl
BURNER PRE MIX			Current (Max No Pump)	amp	1.9
BORNERTRETIIX			Power Consumption	watt	400
Fuel	(Type G20)	Natural Gas	Modulating Input	V/dc	0-10V or OpenTherr
Fuel Consumption (Nat Gas)	m³/h	16.2	Fuse Rating	amp	4
Flame Protection		Ionisation	Controls Voltage	V	230 or Low
Ignition		Spark	Insulation Class IP		IP20
Boiler Output (Mean 70°C)	kW	30-150	(
Boiler Output (Mean 40°C)	kW	32.5-158	CONTROL OPERATION		
Boiler Input (Gross cv)	kW	170.5	On/Off 0-10V DC		Yes
Gas Inlet Size		G3/4"	OpenTherm		Yes
Weighted Power Level	dB(A)	56	High Limit Protection		Yes
NOx Rating/emissions at 0% ${\rm O_2}$	mg/kWh	Class 5 (38.1)	Low Water Protection		Yes
HYDRAULICS			Volt Free Common Alarm		Yes
HIDRAULICS			Boiler Run Indication		Yes
Hydraulic Resistance (11°C ΔT)	mbar	N/A	OPTIONAL EXTRAS		
Hydraulic Resistance (20°C ΔT)	mbar	230	OF HOUSE EXTRAS		
Nominal Flow Rate (11°C ΔT)	I/s	N/A	Multi Boiler Frame & Header Kits		Yes
Nominal Flow Rate (20°C ΔT)	I/s	1.79	Modulating Sequencer Kit		Yes
Min Flow Rate (20°C ΔT) (MAX MOD)	I/s	0.35	Programmable Room Thermostat Kit		Yes
Min Flow Temperature	°C	30	Outside Sensor Kit		Yes
Max Flow Temperature	°C	82	Tank Sensor Kit		Yes
Min Working Pressure	bar	0.3	Room Sensor Kit		Yes
Max Working Pressure	bar	4	Safety Interlock Kit		Yes
Max Static Head Of Water	metres	40.7	Pump Kit		Yes
Condensate Connection	mm	25	Universal Sequencer Kit		Yes
High Limit Set Point	°C	105 flow, 95 return			
Flow & Return Size		G1¼"			
Water Content	litres	9.2			











^{*5} year warranty subject to Terms and Conditions. 5 years parts and labour warranty available subject to being commissioned by Ideal Boilers.

GET A QUOTE

W: IDEALCOMMERCIALBOILERS.COM E: commercial@idealboilers.com T: 0844 5436060

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SUGGESTED ENGINEERING SPECIFICATION



OVERVIEW

The boilers must be fully automatically controlled, wall mounted, fanned, super-efficient condensing appliances utilising an aluminium silicon alloy heat exchanger and be suitable for connection to fully pumped open vented or sealed water systems.

CONTROLS

The condensing boilers must have connectivity for all common types of BMS integration including 0-10v, volt free and OpenTherm connections. Additional modules may be used for BACnet, LONWorks and MODBus gateways. Where no BMS is present a modulating sequencer must be available.

The boiler must be fully modulating with a 5:1 turndown ratio and include control features enabling set point adjustment, heating circuit control of one constant temperature and one DHW circuit or 2 constant temperature circuits, and safety lock out parameters including fault diagnosis for both boiler and external components such as sensors or pumps.

Boiler capabilities must include, with the use of external components, frost protection, weather or room compensation and system pump control.

FLUE

The condensing boilers must be suitable for use with a room sealed flue or open flue applications including C13, C33 and B23 classifications. The combined flue outlet and air inlet must be situated on the top of the boiler.

HYDRAULIC

The condensing boiler must be and be suitable for connection to fully pumped open vented or sealed water systems. All hydraulic connections including flow return and condensate drain must be located on the bottom of the boiler. Hydraulic connections must be uniform across the outputs available in the range to ensure ease of installation and maintenance in mixed output cascades. The boiler must have a maximum operating pressure of 6 bar and be suitable for heating and indirect hot water systems.

DIMENSIONS

The condensing boiler range must have a universal compact width and height across the range to ensure mixed output cascades maintain the same universal configuration. Maximum permitted wall area of 0.43m².

MOUNTING

The condensing boilers can be installed either on the wall or into a prefabricated floor mounted frame. Wall brackets must be located at the top of the boiler and visible from the front to aid installation.

EFFICIENCY

The condensing boilers are capable of high seasonal efficiencies with a minimum requirement of 96.2% and low NOx emissions no greater than 39.8mg/kWH for natural gas and 80mg/kWH for LPG.

30, 40 and 60kW models must have a Seasonal Space Heating Energy Efficiency of A.

APPROVALS

The boiler must be tested and certified to; EN 483, EN 677, PREN 15420, BSEN 15417, BSEN 656, BSEN 60335-2-102, BSEN 55014-1 and BSEN 55014-2 for use with Natural Gas & LPG. Boilers are certified to meet the requirements of the EC Gas Appliance Directive, Boiler Efficiency Directive, EMC and Low Voltage Directive.

The manufacturer must be ISO 9001 accredited.

SPECIFICATION

- The 30, 40, 60 and 80kW boiler will be capable of flow rates for common systems using either 11°C, 15°C or 20°C temperature differentials.
- The 100kW boiler will be capable of flow rates for common systems using either 15°C or 20°C temperature differentials.
- The 120 and 150kW boiler will be capable of flow rates for common systems using 20°C temperature differentials.

SOURCING

The condensing boiler must be manufactured or finally assembled in the United Kingdom.

CASCADE

The boiler must be configurable up to 6 boilers (max 600kW) in cascade using a prefabricated frame and header kit.

WARRANTY

The boiler must be available with a 5 year warranty.

