# EVOMAX 30kW

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

500

• 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)

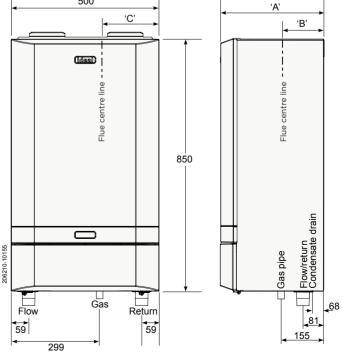
#### **DIMENSIONS & CLEARANCES**

BOILER	DIM A	DIM B	DIM C
30	360	130	118

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



CLEARANCE BETWEEN MULTIPLE BOILER INSTALLATIONS: 25mm









## EVOMAX 30kW TECHNICAL SPECIFICATIONS



GENERAL		
Dry Weight	KG	49
Boiler Dimensions	mm	850 (H) × 500 (W) × 360 (D)
Boiler Clearances	mm	Front: 450 Side: 25 Below: 300
Full Load	%	89.6
Part Load	%	98.4
Seasonal Efficiency	%	96.7
Min/Max Gas pressure (Nat Gas)	mbar	17.5-20.0

(Type G20)

m³/h

Natural Gas

Ionisation

3.2

Spark

FLUE/AIR INLET		
Flue Size	mm	80/125 Concentric or Open Flue
Flue Gas Volume	m³/h	47.6
Flue Gas Temperature 80/60	°C	70
O/F Max Counter Pressure Diff	Pa	140
B/F Max Counter Pressure Diff	Pa	140
ELECTRICAL		
Electrical Supply		230/240V 50Hz 1 Ph
Current (Max No Pump)	amp	0.6
Power Consumption	watt	126
Modulating Input	V/dc	0-10V or OpenTherm
Fuse Rating	amp	4
Controls Voltage	V	230 or Low
Insulation Class IP		IP20
CONTROL OPERATION		
On/Off 0-10V DC		Yes
OpenTherm		Yes
High Limit Protection		Yes
Low Water Protection		Yes
Volt Free Common Alarm		Yes
Boiler Run Indication		Yes
OPTIONAL EXTRAS		
Multi Boiler Frame & Header Kits		Yes
Modulating Sequencer Kit		Yes
Programmable Room Thermostat Kit		Yes

Yes

Yes

Yes

Yes

Yes

Yes

Boiler Output (Mean 70°C)	kW	6-30
Boiler Output (Mean 40°C)	kW	6.5-31.54
Boiler Input (Gross cv)	kW	33.7
Gas Inlet Size		G¾"
Weighted Power Level	dB(A)	53
NOx Rating/emissions at 0% $\rm O_2$	mg/kWh	Class 5 (31)

#### HYDRAULICS

BURNER PRE MIX

Flame Protection

Fuel Consumption (Nat Gas)

Fuel

Ignition

Hydraulic Resistance (11°C ∆T)	mbar	425
Hydraulic Resistance (20°C ΔT)	mbar	127
Nominal Flow Rate (11°C $\Delta$ T)	l/s	0.651
Nominal Flow Rate (20°C $\Delta$ T)	l/s	0.358
Min Flow Rate (20°C $\Delta$ T) (MAX MOD)	l/s	0.07
Min Flow Temperature	°C	30
Max Flow Temperature	°C	82
Min Working Pressure	bar	0.3
Max Working Pressure	bar	4
Max Static Head Of Water	metres	40.7
Condensate Connection	mm	25
High Limit Set Point	°C	105 flow, 95 return
Flow & Return Size		G1¼"
Water Content	litres	3



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C

Outside Sensor Kit

Tank Sensor Kit

Room Sensor Kit

Pump Kit

Safety Interlock Kit

Universal Sequencer Kit

\*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

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## EVOMAX 30kW 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 0.43m<sup>2</sup>.

#### 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.



Please note that the above information is correct at time of publication. Ideal Commercial Heating Limited has a policy of continuous development and therefore reserves the right to alter specifications without prior notification.