

# INDEPENDENT HEAT

100kW









options



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







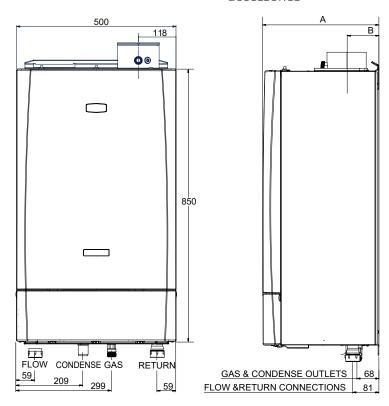




# Features & specification

- 5 year warranty\*
- · Robust cast aluminium silicon alloy heat exchanger
- · NOx <40mg/kWh (Class 6) for all natural gas models
- · High 5:1 turndown
- · Up to 99.6% full load efficiency
- · Up to 110% part load efficiency

- Exactly the same compact footprint as Evomax, allowing for easy like for like replacement
- · Dynamic control menu set up
- · Cascade controls option
- · Easy servicing; 3 sides removable
- · Built in, serviceable flue Non-Return Valve
- · Fully compatible with all Evomax 2 accessories



#### **DIMENSIONS & CLEARANCES**

BOILER	DIM A	DIM B
100	520	226

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** 













### **BOILER ASSEMBLY**

**INTERNAL VIEW** 

(40kW MODEL SHOWN)

## **KEY**

- 1. Auto Air Vent
- 2. Burner Fixings
- **3.** Fan
- 4. Gas Valve
- 5. Venturi
- 6. Flow Thermistor
- 7. Ignitor Unit
- 8. Electrode Detection
- 9. Ignition Electrode
- 10. Water Pressure Sensor

## INDEPENDENT HEAT 100kW

# **TECHNICAL SPECIFICATIONS**

#### **GENERAL**

Dry Weight	kg	73
Boiler Dimensions	mm	850 (H) × 500 (W) × 520 (D)
Boiler Clearances	mm	Front: 450 Side: 25 Below: 300
Full Load Efficiency	%	98.2
Part Load Efficiency	%	109.4
Seasonal Efficiency	%	96.7
SEDBUK 2009	%	N/A
Min/Max Gas pressure (Nat Gas)	mbar	17.5/20.0

#### **BURNER PRE MIX**

Fuel	(Type G20)	Natural Gas
Fuel Consumption (Nat Gas)	m³/h	10.8
Flame Protection		Ionisation
Ignition		Spark
Boiler Output (Mean 70°C)	kW	20 - 100
Boiler Output (Mean 40°C)	kW	21.6 - 103.9
Boiler Input (Gross cv)	kW	113.6
Gas Inlet Size		G <sup>3</sup> / <sub>4</sub> "
NOx Weighted (gross)	mg/kWh	34.8
NOx Class		Class 6

#### **HYDRAULICS**

Hydraulic Resistance (11°C ΔT)	mbar	N/A
Hydraulic Resistance (20°C ΔT)	mbar	134
Hydraulic Resistance (30°C ΔT)	mbar	60
Nominal Flow Rate (11°C ΔT)	l/min	N/A
Nominal Flow Rate (20°C ΔT)	l/min	71.7
Nominal Flow Rate (30°C ΔT)	l/min	47.8
Min Flow Rate (30°C ΔT) (MAX MOD)	l/min	48.7
Min Flow Temperature	°C	30
Max Flow Temperature	°C	85
Min Working Pressure	bar	0.3
Max Working Pressure	bar	6
Max Static Head Of Water	metres	61.0
Condensate Connection	mm	25
High Limit Set Point	°C	110 flow, 95 return
Flow & Return Size		G11/4"
Water Content	litres	7.0

#### FLUE/AIR INLET

Flue Size	mm	100/150 Concentric or Open Flue
Flue Gas Volume	m³/h	140.5
Flue Gas Temperature 80/60	°C	70
O/F Max Counter Pressure Diff	Pa	220
Balanced Flue Counter Pressure Diff	Pa	0

#### ELECTRICAL

Electrical Supply		230V - 50Hz
Current (Max No Pump)	amp	4A
Power Consumption	watt	187
Modulating Input	V/dc	0-10V or OpenTherm
Fuse Rating	amp	4.0
Controls Voltage	V	230V 50Hz volt free control or PELV =<24V DC
Insulation Class IP		IPX4D

#### 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	Ves

#### OPTIONAL EVOMAX 2 KITS FOR INDEPENDENT HEAT

Multi Boiler Frame & Header Kits	Yes	
Varican Module Master Kit	Yes	
Varican Module Slave Kit	Yes	
Extension Module Kit	Yes	
OPENTHERM Room Control Kit	Yes	
Room Sensor Kit	Yes	
Tank Sensor Kit	Yes	
Outside Sensor Kit	Yes	
Header Flow Tank Immersion Sensor Kit	Yes	
Header Flow Tank Strap On Sensor Kit	Yes	
Safety Interlock Kit	Yes	
— 0-10V Pump Control Kit	Yes	
Condensate Pump	Yes	

<sup>\*2</sup> year parts and labour warranty as standard, extended to 5 year warranty subject to being commissioned by Ideal Heating. Terms and conditions available at www.idealheating.com