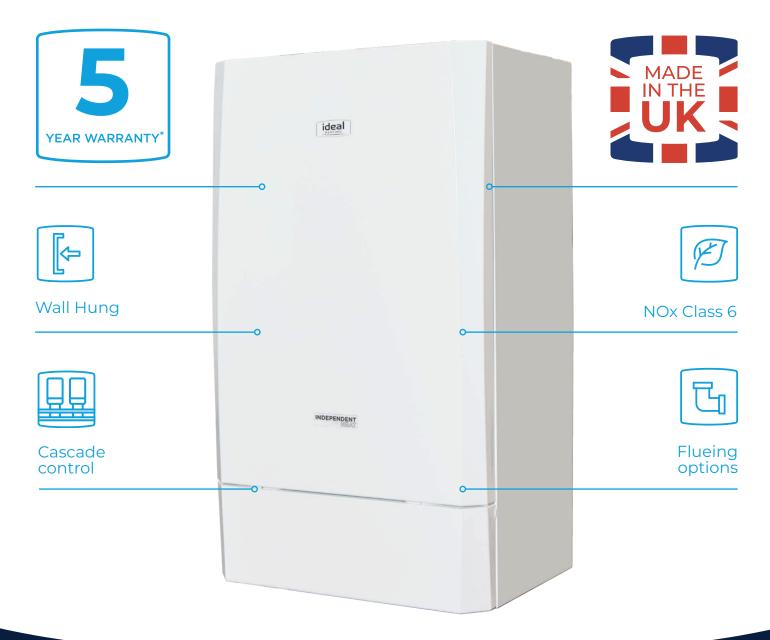


## INDEPENDENT HEAT 40kw



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 to 80 kW for off mains installations.

welcome to our ideology

## 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

500

- 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

A

· Fully compatible with all Evomax 2 accessories

mm

118 ¢⊚ 850 P ÷ Щ 俉 FLOW CONDENSE GAS RETURN GAS & CONDENSE OUTLETS 68 59 209 299 59 FLOW & RETURN CONNECTIONS 81

#### **DIMENSIONS & CLEARANCES**

| BOILER | DIM A | DIM B |
|--------|-------|-------|
| 40     | 360   | 130   |

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



**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 40kW TECHNICAL SPECIFICATIONS

#### GENERAL

| Dry Weight                            | kg   | 47.5                                 |
|---------------------------------------|------|--------------------------------------|
| Boiler Dimensions                     | mm   | 850 (H)<br>x 500 (W)<br>x 360 (D)    |
| Boiler Clearances                     | mm   | Front: 450<br>Side: 25<br>Below: 300 |
| Full Load Efficiency                  | %    | 99.4                                 |
| Part Load Efficiency                  | %    | 108.5                                |
| Seasonal Efficiency                   | %    | 96.2                                 |
| SEDBUK 2009                           | %    | 89.3                                 |
| Min/Max Gas pressure (Nat Gas or LPG) | mbar | 17.5/20.0                            |

#### **BURNER PRE MIX**

| Fuel                       | (Type G20) | Natural Gas |
|----------------------------|------------|-------------|
| Fuel Consumption (Nat Gas) | m³/h       | 4.3         |
| Flame Protection           |            | Ionisation  |
| Ignition                   |            | Spark       |
| Boiler Output (Mean 70°C)  | kW         | 8 - 40      |
| Boiler Output (Mean 40°C)  | kW         | 8.5 - 42    |
| Boiler Input (Gross cv)    | kW         | 44.9        |
| Gas Inlet Size             |            | G¾"         |
| NOx Weighted (gross)       | mg/kWh     | 33.2        |
| NOx Class                  |            | Class 6     |

#### FLUE/AIR INLET

| Flue Size                           | mm   | 80/125 Concentric<br>or Open Flue |
|-------------------------------------|------|-----------------------------------|
| Flue Gas Volume                     | m³/h | 54.05                             |
| Flue Gas Temperature 80/60          | °C   | 70                                |
| O/F Max Counter Pressure Diff       | Pa   | 277                               |
| Balanced Flue Counter Pressure Diff | Pa   | 0                                 |

#### ELECTRICAL

| Electrical Supply     |      | 230V - 50Hz                                     |
|-----------------------|------|---|
| Current (Max No Pump) | amp  | 4A  |
| Power Consumption     | watt | 138   |
| Modulating Input      | V/dc | 0-10V or OpenTherm                              |
| Fuse Rating           | amp  | 4.0   |
| Controls Voltage      | V    | 230V 50Hz volt free<br>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  | Yes |

#### HYDRAULICS

| Hydraulic Resistance (11°C ∆T)    | mbar   | 875                 |
|-----------------------------------|--------|---------------------|
| Hydraulic Resistance (20°C ΔT)    | mbar   | 225                 |
| Hydraulic Resistance (30°C ΔT)    | mbar   | 100                 |
| Nominal Flow Rate (11°C ΔT)       | I/min  | 52.1                |
| Nominal Flow Rate (20°C ΔT)       | l/min  | 28.7                |
| Nominal Flow Rate (30°C ΔT)       | l/min  | 19.1                |
| Min Flow Rate (30°C ΔT) (MAX MOD) | l/min  | 19.5                |
| 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                |        | G1¼"                |
| Water Content                     | litres | 3.0                 |

#### 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 |

\*5 year warranty subject to Terms and Conditions. 5 years parts and labour warranty available subject to being commissioned by Ideal Heating. Terms & conditions available at idealheating.com

# GET A QUOTE

#### W: idealheating.com

**E:** commercial@idealheating.com **T:** 0844 543 6060



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