

# IMAX XTRA 2 240kW









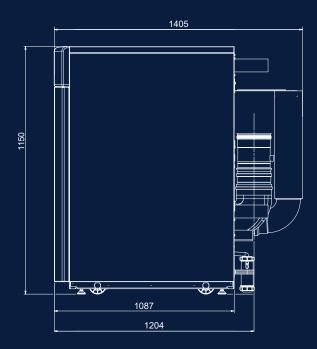


# Features & specification

The Imax Xtra 2 range of condensing boilers is offered in six models with outputs from 80 to 280 kW. These floor standing boilers can be installed on their own or in a cascade of up to 4 boilers.

- · Free Commissioning
- · 5 year heat exchanger warranty\*
- Robust cast aluminium silicon alloy heat exchanger
- · NOx <40mg/kWh (Class 6) when operating on natural gas
- · Full colour touchscreen control
- · High 5:1 turndown
- · Up to 97.7% full load efficiency

- · Up to 108.2% part load efficiency
- · Cascade header kits and controls
- Compact size small footprint and fits through standard doorways
- · Fitted with wheels for easy installation
- $\cdot$  Capable of operating at up to 30°C  $\Delta$ T





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



# **IMAX XTRA 2 240kW**

# **TECHNICAL SPECIFICATIONS**

#### **GENERAL**

Dry Weight	kg	240
Boiler Dimensions	mm	1150 (H) x 600 (W) x 1087 (D)
Boiler Clearances	mm	Front: 600 Side: 150 Rear: 700 Top: 500
Full Load Efficiency	%	97.7
Part Load Efficiency	%	108.2
Seasonal Efficiency	%	95.7
Min/Max Gas pressure (Nat Gas )	mbar	15-20
Weighted Sound Power Level	dBA	<53

#### **BURNER PRE MIX**

Fuel	(Type G20)	Natural Gas
Fuel Consumption (Nat Gas)	m³/h	24.2
Flame Protection		Ionisation
Ignition		Spark
Boiler Output (Mean 70°C)	kW	47.0-235.9
Boiler Output (Mean 40°C)	kW	56.1-249.4
Boiler Input (Gross cv)	kW	266.5
Gas Inlet Size		R1"
NOx Rating/emissions at 0% O <sub>2</sub>	mg/kWh	Class 6 (26)

#### **HYDRAULICS**

Hydraulic Resistance (11°C ∆T)	mbar	330
Hydraulic Resistance (20°C ΔT)	mbar	100
Hydraulic Resistance (30°C ΔT)	mbar	44
Nominal Flow Rate (11°C ΔT)	I/s	5.42
Nominal Flow Rate (20°C ΔT)	I/s	2.98
Nominal Flow Rate (30°C ΔT)	I/s	1.98
Min Flow Rate (30°C ΔT) (MAX MOD)	I/s	0.411
Min Flow Temperature	°C	20
Max Flow Temperature	°C	90
Min Working Pressure	bar	0.3
Max Working Pressure	bar	6
Max Static Head Of Water	metres	61.0
Condensate Connection	mm	21.5
High Limit Set Point	°C	99 flow, 95 return, 105 H/Ex, 120 Flue
Flow & Return Size		R2"
Water Content	litres	20.4

## FLUE/AIR INLET

Flue Size	mm	200
Flue Gas Volume	m³/h	363.0
Flue Gas Temperature 80/60	°C	80
Max Flue Resistance	Pa	150

#### ELECTRICAL

Electrical Supply		230/240V 50Hz 1 Ph
Current (Max No Pump)	А	1.95
Power Consumption	W	240
Modulating Input	V/dc	0-10V
Fuse Rating	А	13
Controls Voltage	V	230
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 Header Kits	Yes
Cascade Control Kit	Yes
Siemens QAA55 Room Unit Kit	Yes
Outside Sensor Kit	Yes
Flow Sensor Immersion Kit	Yes
Flow Sensor Strap On Kit	Yes
Single Heating Circuit Kit	Yes
Dual Heating Circuit Kit	Yes
PWN to 10V Pump Converter Kit	Yes
Condensate Pump Kit	Yes

<sup>\*5</sup> year heat exchanger warranty subject to terms and conditions. 2 year parts and labour warranty as standard.

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# SUGGESTED ENGINEERING SPECIFICATION

The Suggested Engineering Specification is wording designed for specifiers to copy and paste into their specifications to ensure inclusion of Ideal Heating commercial boilers.

#### **OVERVIEW**

The boilers must be fully automatically controlled, floor standing, 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 common types of BMS integration including 0-10V, switched live and OpenTherm connections. Where no BMS is present or where the BMS only provides a single control signal for multiple boilers, the boilers should provide cascade and sequencing functions through optional controls accessories.

The boiler must be fully modulating with a 5:1 turndown ratio and include control features enabling modulating boiler pump control, set point adjustment, heating circuit control of one constant temperature circuit, 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, up to two additional constant or variable temperature circuits, frost protection, weather or room compensation and modulating 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 flue outlet and air inlet must be situated at the rear of the boiler with the air inlet having a factory fitted filter element and the flue incorporating a condensate collector.

#### **HYDRAULIC**

The condensing boiler must 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 rear of the boiler. Hydraulic connections must be of uniform size 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.

#### **CASCADE**

The boiler must be configurable up to 4 boilers (max 1120kW) in cascade using a prefabricated header kit, to be hydraulically separated from systems using a range of Low Loss or Magnetic Low Headers or a range of Brazed Plate Heat Exchangers.

#### **DIMENSIONS**

The condensing boiler must fit within maximum permitted floor space of 0.63m<sup>2</sup>.

#### MOUNTING / POSITIONING

The condensing boilers will be floor standing and provide wheels or other integrated means to ease final positioning of the appliance.

#### **EFFICIENCY**

The condensing boilers are capable of high seasonal efficiencies with a minimum requirement of 95.7% and low NOx emissions no greater than 35mg/kWH.

#### **APPROVALS**

The boiler must be tested and certified to EN 483, EN 677, PREN 15420, BS EN 15502, BS EN 656, BS EN 55014-1 and BS EN 55014-2 for use with Natural Gas. 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 boiler will be capable of flow rates for common systems using 11°C to 30°C temperature differentials at maximum rate of fire.

#### **SOURCING**

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

#### WARRANTY

The boiler must be available with a 2-year warranty, with the possibility to extend coverage on the heat exchanger to 5 years (T&Cs apply).

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.