

# **IMAX XTRA**

## 160kW





The Imax Xtra range of condensing boilers is offered in six models with outputs from 80 to 280 kW suitable for floor standing application in either single or multiple applications.

#### **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) for maximum BREEAM points

#### **DIMENSIONS & CLEARANCES**

BOILER	DIM A	DIM B	DIM C
160	600	1150	796

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



TOP: 500mm

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FRONT: 600mm

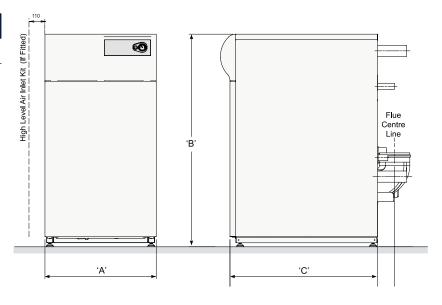


SIDES:

LH 450mm | RH 150mm



REAR: 700mm



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## **TECHNICAL SPECIFICATIONS**



GENERAL			FLUE/AIR INLET			
Dry Weight	KG	168	Flue Size	mm	150	
Boiler Dimensions	mm	1150 (H) x 600 (W) x 796 (D)	Flue Gas Volume	m³/h	242.0	
			Flue Gas Temperature 80/60	°C	80	
Boiler Clearances	mm	Front: 600	Max Flue Resistance	Pa	150	
Bollet Clearances		Left Side: 450 Right Side: 150 Rear: 700 Top: 500	ELECTRICAL Electrical Supply		230/240V 50Hz 1 Ph	
Seasonal Efficiency	%	95.7	Current (Max No Pump)	amp	1.95	
Min/Max Gas pressure (Nat Gas)	mbar	15-20	Power Consumption	watt	400	
			Modulating Input	V/dc	0-10 V	
BURNER PRE MIX			Fuse Rating	amp	5	
Fuel	(Type G20)	Natural Gas	Controls Voltage	V	24 or 240	
Fuel Consumption (Nat Gas)	m³/h	16.1	Insulation Class IP		IP20	
Flame Protection		Ionisation	CONTROL OPERATION			
Ignition		Spark				
Boiler Output (Mean 70°C)	kW	29.1-157.3	On/Off 0-10V DC	Yes		
Boiler Output (Mean 40°C)	kW	32.3-164.5	OpenTherm		No	
Boiler Input (Gross cv)	kW	177.7	High Limit Protection		Yes	
Gas Inlet Size		G1"	Low Water Protection		Yes	
NOx Rating/emissions at 0% O <sub>2</sub>	mg/kWh	Class 5 (35)	Volt Free Common Alarm		Yes	
HYDRAULICS			Boiler Run Indication		Yes	
			OPTIONAL EXTRAS			
Hydraulic Resistance (11°C ΔT)	mbar	297	Modulating Sequencer Control for controlling Yes		Yes	
Hydraulic Resistance (20°C ΔT)	mbar	90	multiple boiler installations			
Nominal Flow Rate (11°C ΔT)	I/s	3.57	Programmable Room Thermostat Yes		Yes	
Nominal Flow Rate (20°C ΔT)	I/s	1.96	Outside Sensor Kit		Yes	
Min Flow Rate (20°C ΔT) (MAX MOD)	I/s	0.392	Tank Sensor Kit		Yes	
Min Flow Temperature	°C	20	Room Sensor Kit		Yes	
Max Flow Temperature	°C	90	Sequencer DHW Sensor Kit		Yes	
Min Working Pressure	bar	0.3	Flow, Return and Gas Header Kit		N/A	
Max Working Pressure	bar	6	RS Air Duct Connector		N/A	
Max Static Head Of Water	metres	61	Horizontal Flue Connector		N/A	
Condensate Connection	mm	21.5	Vertical Flue Connector		N/A	
High Limit Set Point	°C	100 flow, 100 return 105 H/Ex				
Flow & Return Size		G2"				
Water Content	litres	17.5				











\*5 year heat exchanger warranty subject to terms and conditions. Terms & conditions available at www.idealcommercialboilers.com/downloads. 2 year parts and labour warranty as standard.



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#### **IMAX XTRA 160kW**

### SUGGESTED ENGINEERING SPECIFICATION



#### **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 & volt free connections. 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 flue outlet and air inlet must be situated at the rear of the boiler.

#### **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 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 must fit within maximum permitted floor space of 0.48m² (80 - 160kW models) or 0.63m² (200 - 280kW models).

#### **MOUNTING / POSITIONING**

The condensing boilers will be floor standing.

#### **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 boilers must be tested and certified by Gastec to EN483 and EN677 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 20°C temperature differentials.

#### 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.

