

# IMAX XTRA EL

470kW





The Imax Xtra EL range of condensing boilers is available in 10 models with outputs from 320 to 1240kW. Suitable for floor standing applications in either single or multiple installations.

# **FEATURES & BENEFITS**

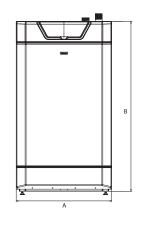
- Simple control interface with large backlit display
- Volt free contacts
- 0-10V BMS operation standard
- Robust aluminium silicon alloy heat exchanger
- Suitable for single or multiple installations
- Up to 109.8% part load at 30% output
- NOx <40mg/kWh
- Natural Gas
- Building Regulation Part L2 compliant

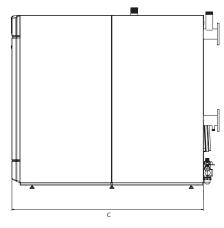
# **DIMENSIONS & CLEARANCES**

BOILER	DIM A	DIM B	DIM C
470	835	1485	1685

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







# **IMAX XTRA EL 470kW**

# **TECHNICAL SPECIFICATIONS**



GENERAL			FLUE/AIR INLET		
Dry Weight	KG	479	Flue Size	mm	250
Boiler Dimensions	mm	1485 (H) x 835 (W)	Flue Gas Volume	m³/h	694.0
			Min-Max Flue Gas Temperature 80/60	°C	50-63
Boiler Clearances	mm	x 1685 (D) Front: 700 Left Side: 150 Right Side: 700 Top: 700 Rear: 150**	Max Flue Resistance	Pa	100
			ELECTRICAL		
			Electrical Supply		230/240V 50Hz 1 Ph
Seasonal Efficiency (Building Regs L2)	%	96.9	Current (Max No Pump)	amp	2.91
Min/Max Gas pressure (Nat Gas)	mbar	15-20	Power Consumption	watt	670
			Modulating Input	V/dc	0-10 V
BURNER PRE MIX			Fuse Rating	amp	7
Fuel	(Type G20)	Natural Gas	Controls Voltage	V	24 or 240
Fuel Consumption (Nat Gas)	m³/h	47.4	Insulation Class IP		IP20
Flame Protection		Ionisation	CONTROL OPERATION		
Ignition		Spark			
Boiler Output (Mean 70°C)	kW	85.2-438.6	On/Off 0-10V DC		Yes
Boiler Output (Mean 40°C)	kW	95.6-475.8	OpenTherm		Yes
Boiler Input (Gross cv)	kW	496.8	High Limit Protection		Yes
Gas Inlet Size		G2"	Low Water Protection		Yes
NOx Rating/emissions at 0% O <sub>2</sub>	mg/kWh	Class 6 (35.8)	Volt Free Common Alarm		Yes
HYDRAULICS			Boiler Run Indication		Yes
			OPTIONAL EXTRAS		
Hydraulic Resistance (11°C ΔT)	mbar	320	Modulating Sequencer Kit, including DHW Tank Kit, Yes Plant Room Sensor Kit, 6 Zone Expansion Kit		Yes
Hydraulic Resistance (20°C ΔT)	mbar	94			103
Nominal Flow Rate (11°C ΔT)	l/s	10.2	Programmable Room Thermostat Kits		Yes
Nominal Flow Rate (20°C ΔT)	l/s	5.6	Outside Sensor Kit		Yes
Min Flow Rate (20°C ΔT) (MAX MOD)	l/s	1.12	DHW Tank Sensor Kit		Yes
Min Flow Temperature	°C	30	Safety Interlock Kit		Yes
Max Flow Temperature	°C	90	BACNet Gateway Kit		Yes
Min Working Pressure	bar	1	LONWorks Gateway Kit		Yes
Max Working Pressure	bar	6	MODBus Gateway Kit		Yes
Max Static Head Of Water	metres	61	Remote Access Kit		Yes
Condensate Connection	mm	21.5	Pump Kits Yes		Yes
High Limit Set Point	°C	100 flow, 100 return 105 H/Ex	Sealed System Services Flow Manifold Kit Yes		
Flow & Return Size		G3"	Inlet Air Filter Kit		Yes
Water Content	litres	59.3	Condensate Pump Kit		Yes
		55.5	Room Sealed Air Duct Kit		Yes











\*2 year warranty subject to Terms and Conditions. 2 years parts and labour warranty available subject to being commissioned by Ideal Boilers.

\*\* This clearance dimension applies independently of the installed flue system.



W: IDEALCOMMERCIALBOILERS.COM E: commercial@idealboilers.com

T: 0844 5436060

# **IMAX XTRA EL 470kW**

# 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 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 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.

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 1.41m<sup>2</sup> (320 – 620kW models) or 2.82m<sup>2</sup> (715 – 1240kW 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 96.8% and low NOx emissions no greater than 38.7mg/kWH.

#### **APPROVALS**

The boilers must be tested and certified by BSI to EN 15502 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.

