

# IMAX XTRA EL

470kW



Part L2  
Compliant



NOx Class 6



Floor Standing

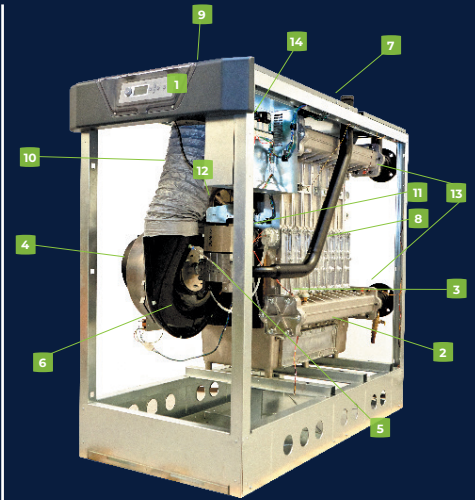


BIM

# Features & Specification

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.

- 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



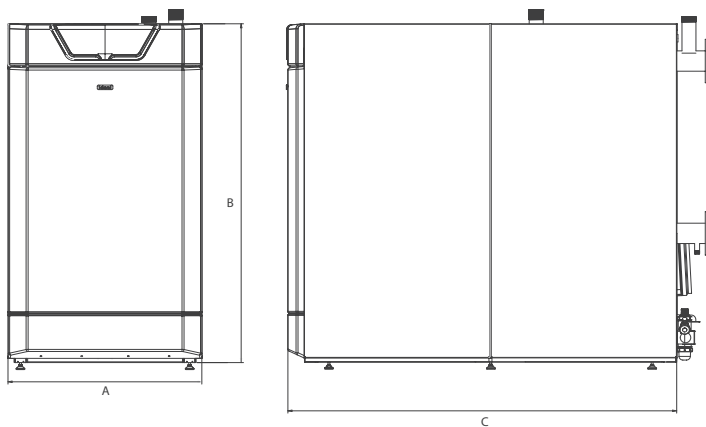
BOILER ASSEMBLY

EXPLODED VIEW

(620kW MODEL SHOWN)

## KEY

1. Control module
2. External condensate trap
3. Water pressure switch
4. Fan
5. Gas valve
6. Whirlwind
7. Gas inlet
8. Heat exchanger
9. Air inlet
10. Burner manifold
11. Air pressure switches
12. Ignition / detection electrode
13. Manifold - Flow - Return
14. PCB



BOILER	DIM A	DIM B	DIM C
470	835	1485	1685

## DIMENSIONS & CLEARANCES

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

- ↑ TOP: 700mm
  - ← LEFT SIDE: 150mm
  - RIGHT SIDE: 700mm
  - ↓ REAR: 150mm<sup>†</sup>
  - FRONT : 700mm
- <sup>†</sup>From rear of flue

# IMAX XTRA EL 470kW

## TECHNICAL SPECIFICATIONS

### GENERAL

Dry Weight	kg	479
Boiler Dimensions	mm	1485 (H) x 835 (W) x 1685 (D)
Boiler Clearances	mm	Front: 700 Left Side: 150 Right Side: 700 Top: 700 Rear: 150*
Seasonal Efficiency (Building Regs L2)	%	96.9
Min/Max Gas pressure (Nat Gas)	mbar	15-20
Noise	dBA	<60

### BURNER PRE MIX

Fuel	(Type G20)	Natural Gas
Fuel Consumption (Nat Gas)	m <sup>3</sup> /h	47.4
Flame Protection		Ionisation
Ignition		Spark
Boiler Output (Mean 70°C)	kW	85.2-438.6
Boiler Output (Mean 40°C)	kW	95.6-475.8
Boiler Input (Gross cv)	kW	496.8
Gas Inlet Size		G2"
NOx Rating/emissions at 0% O <sub>2</sub>	mg/kWh	Class 6 (35.8)

### HYDRAULICS

Hydraulic Resistance (11°C ΔT)	mbar	320
Hydraulic Resistance (20°C ΔT)	mbar	94
Nominal Flow Rate (11°C ΔT)	l/s	10.2
Nominal Flow Rate (20°C ΔT)	l/s	5.6
Min Flow Rate (20°C ΔT) (MAX MOD)	l/s	1.12
Min Flow Temperature	°C	30
Max Flow Temperature	°C	90
Min Working Pressure	bar	1
Max Working Pressure	bar	6
Max Static Head Of Water	metres	61
Condensate Connection	mm	21.5
High Limit Set Point	°C	100 flow, 100 return 105 H/Ex
Flow & Return Size		G3"
Water Content	litres	59.3

### FLUE/AIR INLET

Flue Size	mm	250
Flue Gas Volume	m <sup>3</sup> /h	694.0
Flue Gas Temperature 80/60	°C	50-63
Max Flue Resistance	Pa	100

### ELECTRICAL

Electrical Supply		230/240V 50Hz 1 Ph
Current (Max No Pump)	amp	2.91
Power Consumption	watt	670
Modulating Input	V/dc	0-10V
Fuse Rating	amp	7
Controls Voltage	V	24 or 240
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

Modulating Sequencer Kit, including DHW Tank Kit, Plant Room Sensor Kit, 6 Zone Expansion Kit	Yes
Programmable Room Thermostat Kits	Yes
Outside Sensor Kit	Yes
DHW Tank Sensor Kit	Yes
Safety Interlock Kit	Yes
BACNet Gateway Kit	Yes
LONWorks Gateway Kit	Yes
MODBus Gateway Kit	Yes
Remote Access Kit	Yes
Pump Kits	Yes
Sealed System Services Flow Manifold Kit	Yes
Inlet Air Filter Kit	Yes
Condensate Pump Kit	Yes
Room Sealed Air Duct Kit	Yes

\*5 year heat exchanger warranty subject to terms and conditions. Terms & conditions available at [idealheating.com](http://idealheating.com)  
2 year parts and labour warranty as standard.

GET A QUOTE     

[idealheating.com](http://idealheating.com) | 01482 492251 | [commercial@idealheating.com](mailto:commercial@idealheating.com)

EXPERTS IN  
HEATING

# IMAX XTRA EL 470kW

## SUGGESTED ENGINEERING SPECIFICATION

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

### MOUNTING

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 39.7mg/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.

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.

GET A QUOTE     

[idealheating.com](http://idealheating.com) | 01482 492251 | [commercial@idealheating.com](mailto:commercial@idealheating.com)

EXPERTS IN  
HEATING