

# VANGUARDL

420 - 630kW







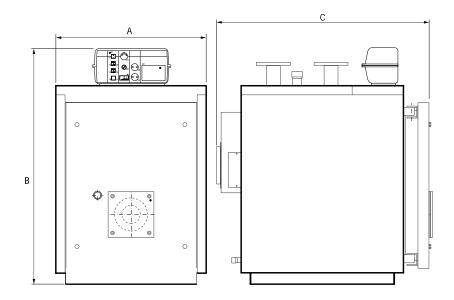


# Features & Specification

Vanguard L boilers are designed with a large combustion chamber positioned in the lower part of the heat exchanger. The Vanguard L range ensures maximum heat transfer efficiency (up to 92.5% nett) and is capable of an impressive output to size ratio.

- High efficiency (full and part load)
- Minimal emissions
- Reverse flame steel heat exchanger
- Compact size

- · Easy to install and service
- Minimum return temperature 50°C
- Building Regulations
  L2 Compliant
- Natural gas, oil fired or dual fuel
- Packaged boiler; can include Nuway or Riello as standard (options on request)
- 6 bar pressure as standard



BOILER	DIM A	DIM B	DIM C
420	890	1542	1606
510	890	1542	1801
630	890	1542	2113

#### **DIMENSIONS & CLEARANCES**

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





### VANGUARD L 420 - 630kW

## **TECHNICAL SPECIFICATIONS**

MODEL			420	510	630
Maximum Heat Output		kW	420	510	630
Minimum Heat Output		kW	315	385	480
Boiler Water Content		1	398	462	565
Hydraulic Resistance at 11K		mbar	31.1	45.8	69.5
Hydraulic Resistance at 20k		mbar	9.4	13.8	21.0
Combustion Chamber Resistance		mbar	29	43	55
Boiler DRY Weight Less Burner Unit		kg	796	919	1047
Flue Size		mm	250	250	300
Maximum Flow Temperature		°C	90	90	90
Maximum Burner Blast Tu	ube Dia (T6)	mm	220	220	220
GAS FIRING DATA					
Maximum Gas Rate		$m^3/h$	42.7	51.8	64.0
Maximum Flue Gas Volume		m³/sec	0.25	0.30	0.37
Maximum Flue Gas Temperature at 9% CO <sub>2</sub>		°C	195	195	195
Seasonal Efficiency		%	84.19	84.20	84.20
OIL FIRING DATA					
Maximum Oil Rate		l/h	47.1	57.2	70.8
Maximum Flue Gas Volume		m³/sec	0.25	0.30	0.37
Maximum Flue Gas Temperature at 9% CO <sub>2</sub>		°C	195	195	195
Seasonal Efficiency		%	84.19	84.20	84.20
MINIMUM FLOW RA	ATES				
Normal Water Flow Rate T Difference 11°C (20°F)	<sup>-</sup> emperature	I/s	9.12	11.07	13.68
Minimum Water Flow Rat Difference 35°C (63°F)	e Temperature	I/s	5.02	6.09	7.52
CONVERSIONS					
1kW = 3412 Btu/h	$1m^3 / h = 35.315 ft^3 / h$				
1 litre = 0.22 gallons	1m³/sec = 2120 ft³/min				
1 mbar = 0.4 in.w.g.	1l/h = 0.220 gal/h				
1 kg = 2.2 lb	1l/s = 13.198 gal/min				



<sup>\*1</sup> year warranty subject to Terms and Conditions.