

Technical submittal



Product: **Modumax mk4 147/441V**

Project:

Customer:

Date:

- > Stainless steel heat exchanger
- > 15:1 turndown ratio
- > Capable of 40°C differential temperature
- > Operates up to 90°C maximum flow temperature
- > 10 bar rated heat cell
- > 10-year heat exchanger warranty
- > 7" colour touch screen
- > 94.8% gross seasonal efficiency
- > 442.2kW output @ 50/30°C
- > Fits in a footprint of 680 x 1082mm
- > Passes through a standard doorway
- > 37.7 mg/kWh NOx emissions (natural gas)
- > Noise on minimum modulation of less than 47dba
- > Built-in controls platform with sequence control and capable of controlling up to 16 boiler modules and hot water circuits.
- > British manufactured



	Modumax mk4 boiler model	Units	147/441V
ENERGY	No. of modules		3
	Building regulations Part L seasonal efficiency	% gross	94.8
	BS EN 15502 seasonal efficiency	% gross	95.2
	Boiler output 80/60°C, NG & LPG	kW	428.4
	Boiler output 50/30°C, NG & LPG	kW	442.2
	Boiler input (gross) – maximum, NG	kW	489
	Boiler input (gross) – maximum, LPG	kW	478.6
	Boiler input (net) – maximum, NG & LPG	kW	440.3
	Boiler output – minimum 80/60°C, NG & LPG	kW	28.7
WATER	Water content	litres	66
	System design flow rate @ 40°C ΔT rise	l/s	2.7
	Water side pressure loss @ 40°C ΔT rise	mbar	36
	System design flow rate @ 30°C ΔT rise	l/s	3.6
	Water side pressure loss @ 30°C ΔT rise	mbar	60
	System design flow rate @ 20°C ΔT rise	l/s	5.4
	Water side pressure loss @ 20°C ΔT rise	mbar	145
	System design flow rate @ 11°C ΔT rise	l/s	9.9
	Water side pressure loss @ 11°C ΔT rise	mbar	500
	Minimum water pressure	barg	
	Maximum water pressure	barg	10
	Maximum flow temperature setting	°C	90
GAS	Gas flow rate, NG (G20) – maximum	m³/hr	46.5
	Gas flow rate, LPG (G31) – maximum	m³/hr	18
	Nominal inlet pressure, NG (LPG) - maximum	mbar	20 (37)
	Maximum gas inlet pressure NG (LPG)	mbar	25 (45)
FLUE	Approx. flue gas volume @ 15°C, 8.75-9.25% CO2	m³/hr	642
	Maximum flue gas temperature @ 80/60°C	°C	78
	Pressure at boiler flue connection	Pa mbar	150 1.5
	Dry NOx emission (0% excess oxygen, dry air free) – NG	mg/kWh	37.7
CONNECTION	Dry NOx emission (0% excess oxygen, dry air free) – LPG	mg/kWh	69.3
	Water flow/return connections	inches	G2½" male
	Gas inlet connection pipe thread size	inches	R1¼" male
	Nominal flue diameter (I/D)	mm	250
ELECTRICS	Condensate trap connection(s) (O/D)	mm	32
	Electrical supply		230V 1Ph 50Hz
	Power consumption – maximum boiler modulation	W	720
	Start current (per module)	Amp	1.3
	Run current (per module)	Amp	1.05
	Approx shipping weight	kg	678
	Noise emission @1m @maximum modulation	Max dB (A)	65
	Noise emission @1m @minimum modulation	Min dB (A)	47

*Dependent on ΔT – see full brochure

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Dimensions and Clearances

