

## Technical submittal



Products: Upton UF450-3

Project: Customer:

Date:

- Aluminium heat exchanger
- 15:1 turndown ratio
- 6 bar rated heat cell
- 5-year heat exchanger warranty
- 95.6% gross seasonal efficiency
- 403.5kW output @80/60°C
- Fits in a footprint of 700 x 940mm
- Passes through a standard door width
- 32mg/kWh NOx emissions gross (natural gas)
- O Noise at maximum modulation of 59.4dba
- Built-in controls platform with sequence control and capable of controlling up to 16 boiler modules and hot water circuits
- British manufactured



	Boiler model	Units	UF450-3
	No. of modules		3
Energy	Building Regulations Part L seasonal efficiency	% gross	95.6
	Building Regulations Part L seasonal efficiency	% nett	106.2
	Boiler output 80/60°C	kW	403.5
	Boiler output 50/30°C	kW	441.9
	Boiler input gross (maximum)	kW	463.8
	Boiler input nett (maximum)	kW	417.6
	Boiler output 80/60°C (minimum)	kW	26.9
	Boiler output 50/30°C (minimum)	kW	29.5
Water	Water content	litres	37.8
	System design flow rate @ 11°C ∆T rise	l/s	9.8
	Water side pressure loss @ 11°C ∆T rise	mbar	820
	System design flow rate @ 20°C $\Delta T$ rise	l/s	5.4
	Water side pressure loss @ 20°C △T rise	mbar	250
	Minimum operating water pressure	barg	0.5
	Maximum operating water pressure	barg	5.3
	Maximum water pressure	barg	6
	Maximum flow temperature setting	°C	85
	Minimum flow temperature setting	°C	30
Gas	Gas flow rate (maximum) (Nat gas)	m³/hr	44.2
	Nominal inlet pressure (Nat gas)	mbar	20
	Maximum inlet pressure (Nat gas)	mbar	25
Flue	Approx flue gas volume @ 72°C , 9.0% CO,	m³/hr	699
	Maximum flue gas temperature @ 80/60°C	°C	72
	Maximum flue gas temperature @ 50/30°C	°C	42
	Pressure available at flue connection	Pa (mbar)	150 (1.5)
	NO <sub>X pond Hs</sub> (gross) emission (0% excess oxygen, dry air) (Nat gas)	mg/kWh	32
	NO <sub>x,pond</sub> (nett) emission (0% excess oxygen, dry air) (Nat gas)	mg/kWh	36
	NO <sub>x</sub> Class		6
Connection	Water flow/return connections	inches	R2-11
	Gas inlet connection pipe thread size	inches	G1¼
	Flue connection diameter (I/D)	mm	200
	Condensate trap connections (O/D)	mm	34
Electrics	Electrical supply		230V ~ 50H;
	Power consumption - maximum boiler modulation	W	912
	Run current (per module)	Amp	1.3
	Approx shipping weight	kg	495
	Noise emission @1m @max modulation (per module)	Max dB (A)	59.4
	11000 Chianon & the Shak modulation (per module)	IVION OD (M)	JJ. <del>4</del>

\*Dependent on  $\Delta T$  - see full brochure



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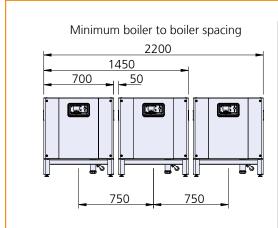


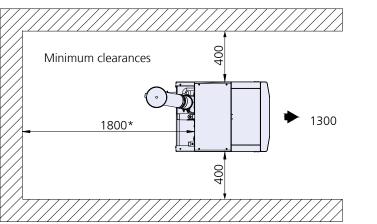
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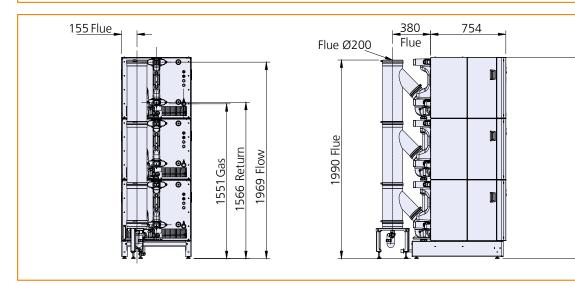
Products: Upton UF450-3

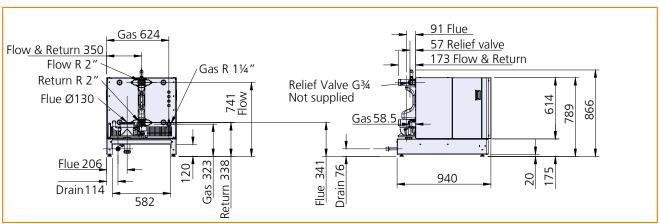
Project: Customer:

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\*Note: Rear clearance required when using Hamworthy pipe kits.

All dimensions in mm unless otherwise stated.

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