

# Technical Data

Milborne

Performance and General Data Information - Natural Gas

	Model No of Modules	MB381 1	MB382 2	MB501 1	MB502 2	
Energy	Building regulations seasonal efficiency (%) gross	96	96	96	96	
	Boiler output 80/60°C	kW	32.5	65.0	44.2	88.3
		Btu/h x 1000	111	222	151	301
	Boiler output 50/30°C	kW	36.5	73.0	48.5	96.8
		Btu/h x 1000	125	249	165	330
	Boiler input (gross) Maximum	kW	37.5	75	50	100
Btu/h x 1000		128	256	171	341	
Boiler input (nett) Maximum	kW	33.8	67.5	45.0	90	
	Btu/h x 1000	115	230	154	307	
Boiler output Minimum 80/60°C	kW	11		15		
	Btu/h x 1000	38		51		
Energy	Water content (not including headers) litres	3.5	7.0	4.9	9.8	
	System design flow rate @ 20°C ΔT rise l/s	0.42	0.84	0.55	1.1	
	Waterside pressure loss @ 20°C ΔT rise mbar	300	300	700	700	
	Maximum water pressure barg	6				
	Minimum water pressure barg	0.5				
	Maximum water flow temperature °C	80				
Gas	Gas flow rate natural gas (G20) - Maximum m³/h	3.55	7.11	4.74	9.48	
	Nominal gas inlet pressure natural gas (G20) mbar	20				
	Maximum gas inlet pressure natural gas (G20) mbar	25				
Flue	Approx. flue gas volume @ 15°C, 9%CO <sub>2</sub> , N.T.P. m³/h	56	113	75	150	
	Maximum operating flue gas temperature °C	65				
	NOx Emission (DAF) European Class 5 Nat Gas (G20)	29		38		
	NOx Emission (DAF) European Class 5 LPG (G31)	28		38		
	Pressure at flue outlet	Pa	410		560	
mbar		4.1		5.6		
Connections	Water flow connection	1 x G1"	2 x G1"	1 x G1"	2 x G1"	
	Water return connection	1 x G1"	2 x G1"	1 x G1"	2 x G1"	
	Gas inlet connection	1 x G <sup>3</sup> / <sub>4</sub> "	2 x G <sup>3</sup> / <sub>4</sub> "	1 x G <sup>3</sup> / <sub>4</sub> "	2 x G <sup>3</sup> / <sub>4</sub> "	
	Safety valve connection size (Copper tail)	1 x 22mm	2 x 22mm	1 x 22mm	2 x 22mm	
	Condensate connection size (Plastic tail)	1 x 18mm	2 x 18mm	1 x 18mm	2 x 18mm	
	Nominal flue diameter (O/D)	1 x 50mm	2 x 50mm	1 x 50mm	2 x 50mm	
Electrics	Power consumption W	170	340	170	340	
	Nominal supply voltage	230V 1PH 50Hz				
	Module start current	Start Amps	0.8	1.3	0.8	1.3
Run Amps		0.74	1.2	0.74	1.2	
Approx. shipping weight	kg	55	80	60	90	
	Noise emission @ 1m	Max dB (A)	58		60	
Min dB (A)		49		50		