

5

70-180

MODELS

kW  
OUTPUT

# Purewell Variheat mk2 technical data

All Models

Purewell Variheat mk2 boiler models		Units	PV70c	PV95c	PV110c	PV140c	PV180c
Energy	Building regulations - seasonal efficiency	(%) gross	95.3	95.6	95.8	95.7	94.6
	ErP efficiency rating (modules ≤ 70kW only)		A	N/A	N/A	N/A	N/A
	Boiler output (non-condensing) mean 70°C - maximum	kW	63.5	86.3	99.8	134.4	172.8
	Boiler output (non-condensing) mean 70°C - minimum	kW	21.2	28.8	33.3	44.8	50.3
	Boiler output (condensing) mean 40°C - maximum	kW	70	95	110	140	180
	Boiler output (condensing) mean 40°C - minimum	kW	23.3	31.67	36.37	46.67	53.0
	Gross boiler input - maximum	kW	72.2	98.4	115	151.3	194.6
	Gross boiler input - minimum	kW	24.1	26.7	38.3	50.4	56.6
	Net boiler input - maximum	kW	65	88.6	103.5	136.3	175.2
	Net boiler input - minimum	kW	21.7	29.6	34.5	45.4	51.0
Water	Water content	litres	8	8	8	11	11
	System design flow rate @ 20°C ΔT rise	l/s	0.8	1.1	1.3	1.7	2.1
	Water side pressure loss @ 20°C ΔT rise	mbar	32	52	72	134	221
	System design flow rate @ 11°C ΔT rise	l/s	1.5	2.1	2.4	3	3.9
	Water side pressure loss @ 11°C ΔT rise	mbar	96	176	244	442	731
	Maximum water pressure	bar g	6	6	6	6	6
Gas	Gas flow rate natural gas (G20) - maximum	m³/hr	6.9	9.4	10.9	14.4	18.5
	Nominal inlet pressure natural gas (G20) - maximum	mbar	20	20	20	20	20
	Maximum gas inlet pressure natural gas (G20)	mbar	25	25	25	25	25
Flue	Flue Gas Flow Rate@ 15°C, 9.5% CO <sub>2</sub>	m³/hr	86	117	137	180	232
	Approx. flue gas temperature @ 50/30°C	°C	40	40	45	50	50
	Approx. flue gas temperature @ 80/60°C	°C	60	60	65	70	75
	Pressure at boiler flue spigot @full load	Pa	100	100	100	100	100
	Dry NOx emission (0% excess oxygen, dry air free) European Class 6	mg/kWh	21.3	31.1	39.1	32	37.8
Connection	Water flow/return connections	inches	R2"	R2"	R2"	R2"	R2"
	Gas inlet connection pipe thread size	inches	R1"	R1"	R1"	R1"	R1"
	Nominal flue diameter (I/D)	mm	150	150	150	150	150
Electrics	Electrical supply		230 V 1Ph 50 Hz	230V 1Ph 50 Hz	230V 1Ph 50 Hz	230V 1Ph 50 Hz	230V 1Ph 50 Hz
	Power consumption @maximum	W	94	94	94	207	207
	IEC power outlet power consumption @ maximum	W	460	460	460	460	460
	Start current and run current	Amp	0.54	0.54	0.54	0.6	0.6
	Approx shipping weight	kg	195	195	195	250	250
Noise emission @1 m and @maximum boiler modulation	Max dB (A)	53	53	53	65	65	
CO <sub>2</sub> (±0.25%) - maximum	%	9.5	9.5	9.5	9.5	9.5	
CO <sub>2</sub> (±0.25%) - minimum	%	9.5	9.5	9.5	8.5	8.5	