

Technical Data he Models

Purewell VariHeat High Efficiency Non Condensing Boilers
Performance and General Data Information - Natural Gas

	Boiler Model	PV65he	PV85he	PV105he	PV125he
Energy	Building regulations - seasonal efficiency (%) gross	86.97	87.34	88.10	87.00
	Boiler output 82/71°C kW Btu/hr x 1000	65.0 222	85.0 290	105.0 358	125.0 426
	Boiler input - (gross) - maximum kW Btu/hr x 1000	80.1 273	107.5 367	128.0 437	154.3 526
	Boiler input (nett) - maximum kW Btu/hr x 1000	72.1 246	96.8 330	118.1 403	139.8 477
	Boiler output minimum 82/71°C kW Btu/hr x 1000	21.5 73	30.1 103	33.6 115	39.8 136
Water	Water content litres	6		9	
	System design flow rate @ 11°C Δt rise l/s	1.41	1.85	2.28	2.71
	Water side pressure loss @ 11°C Δt rise mbar	50	80	192	270
	Minimum flow rate @ 15°C Δt rise l/s	1.04	1.36	1.67	2.00
	Water side pressure loss @ 15°C Δt mbar	28	47	98	149
	Minimum return temperature °C	50			
	Maximum water pressure barg	7			
Gas	Gas flow rate natural gas (G20) m ³ /hr	7.63	10.24	12.49	14.79
	Nominal inlet pressure natural gas (G20) mbar	20			
	Maximum gas inlet pressure natural gas (G20) mbar	25			
Flue	Approx. flue gas volume @ 15°C - 9.3 - 9.8% CO ₂ @ N.T.P m ³ /hr	103.00	123.50	156.00	188.00
	Approx flue gas temperature @ 82/71°C °C	158	190	146	175
	Pressure at flue outlet Pa	100			
Connection	Water flow/return connections inches	R 2"			
	Gas inlet connection pipe thread size inches	R 1"			
	Nominal flue diameter (I/D) mm	100			
Electrics	Electrical supply	230V 50Hz 1Ph			
	Power consumption - maximum modulation W	94.3		207	
	Start current Amp	0.54		0.6	
	Approx shipping weight kg	205		277	
	Noise emission @ 1m - maximum modulation MAX dB (A)	53		65	



Technical Data c Models

Purewell VariHeat Condensing Boilers
Performance and General Data Information - Natural Gas

	Boiler Model	PV70c	PV95c	PV110c	PV140c	PV180c	
Energy	Building regulations - seasonal efficiency (%) gross	95.35	95.62	95.89	95.74	94.63	
	Boiler output 80/60°C	kW	63.5	86.3	98.8	134.4	172.8
		Btu/hr x 1000	217	294	340	448	590
	Boiler output 50/30°C	kW	70	95	110	140	180
		Btu/hr x 1000	239	324	375	478	614
	Boiler input - (gross) Maximum	kW	72.2	98.4	115.0	151.3	194.6
		Btu/hr x 1000	246	336	392	516	664
Boiler input (nett) - Maximum	kW	65.0	88.6	103.5	136.3	175.2	
	Btu/hr x 1000	222	302	353	465	598	
Boiler Output Minimum 80/60°C	kW	21.2	28.8	33.3	44.8	57.6	
	Btu/hr x 1000	72	98	113	153	197	
Boiler Output Minimum 50/30°C	kW	23.3	31.7	36.7	46.7	60.0	
	Btu/hr x 1000	80	108	125	159	205	
Water	Water Content litres	8			11		
	System design flow rate @ 20°C Δt rise l/s	0.836	1.135	1.314	1.672	2.15	
	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	3.0	3.9	
	Water side pressure loss @ 11°C Δt rise mbar	96	176	244	442	731	
	Maximum water pressure barg	7					
Gas	Gas flow rate natural gas (G20) - maximum m ³ /hr	6.88	9.375	10.956	14.42	18.541	
	Nominal inlet pressure natural gas (G20) - maximum mbar	20					
	Maximum gas inlet pressure natural gas (G20) mbar	25					
Flue	Approx. flue gas volume @ 15°C - 9.3 - 9.8% CO ₂ @ N.T.P m ³ /hr	86.13	117.37	137.16	180.53	232.12	
	Approx. flue gas temperature @ 50/30°C °C	40		45	50	50	
	Approx. flue gas temperature @ 80/60°C °C	60		65	70	75	
Connection	Pressure at flue outlet Pa	100					
	Water flow/return connections inches	R2"					
	Gas inlet connection pipe thread size inches	R1"					
Electrics	Nominal flue diameter (I/D) mm	150					
	Electrical supply	230V 1Ph 50Hz					
	Power consumption - maximum modulation W	94.3			207		
	Start current Amp	0.54			0.6		
	Approx shipping weight kg	170			230		
	Noise emission @ 1m - maximum modulation MAX dB (A)	53			65		