

Technical Data

Stratton mk2 Boiler Performance and General Data Information

Stratton mk2 boiler Model		S2-40	S2-60	S2-70	S2-80	S2-100	S2-120	
Energy	Building regulations Part L seasonal efficiency % gross	95.75	96.13	95.50	95.50	96.02	95.95	
	SAP 2009 Annual efficiency %	89.00	89.20	88.80	88.80	89.10	89.10	
	ErP efficiency rating (modules ≤ 70kW only)	A	A	A	N/A	N/A	N/A	
	Boiler output - maximum 80/60°C, NG & LPG. 120kW model Nat Gas only.	kW Btu/hr x 1000	40.0 136.5	56.4 192.4	69.9 238.5	79.8 272.3	95.7 326.5	119.5 407.7
	Boiler output - maximum 50/30°C, NG & LPG. 120kW model Nat Gas only.	kW Btu/hr x 1000	43.0 146.7	61.0 208.1	76.8 262.0	87.5 298.6	104.5 356.6	129.5 441.9
	Boiler output - minimum 80/60°C, Nat Gas.	kW Btu/hr x 1000	8.3 28.3	11.5 39.2	17.1 58.3	17.1 58.3	19.0 64.8	23.9 81.5
	Boiler output - minimum 80/60°C, LPG	kW Btu/hr x 1000	8.3 28.3	11.5 39.2	31.9 108.8	31.9 108.8	33.5 114.3	N/A N/A
	Boiler input (gross) - maximum, NG & LPG. 120kW model Nat Gas only.	kW Btu/hr x 1000	45.7 156.0	64.4 219.6	80.0 273.0	91.3 311.7	109.3 373.0	136.5 465.8
	Boiler input (net) - maximum, NG & LPG. 120kW model Nat Gas only.	kW Btu/hr x 1000	41.2 140.6	58.0 197.9	72.1 246.0	82.3 280.8	98.5 336.1	123.0 419.7
Water	Water content litres	3.6	5.0	9.0	9.0	10.2	12.8	
	System design flow rate @ 25°C ΔT rise	l/s	0.4	0.5	0.7	0.8	0.9	1.1
	Water side pressure loss @ 25°C ΔT rise	mbar	205	224	176	205	246	314
	System design flow rate @ 20°C ΔT rise	l/s	0.5	0.7	0.8	0.9	1.1	1.4
	Water side pressure loss @ 20°C ΔT rise	mbar	320	350	275	320	385	490
	System design flow rate @ 11°C ΔT rise	l/s	0.9	1.2	1.5	1.7	2.1	2.6
	Water side pressure loss @ 11°C ΔT rise	mbar	1058	1157	909	1058	1273	1620
	Minimum water pressure	barg	1.5	1.5	1.5	1.5	1.5	1.5
	Maximum water pressure	barg	4	4	4	4	4	4
	Maximum flow temperature setting	°C	85	85	85	85	85	85
Gas	Gas flow rate, NG (G20) - maximum	m³/hr	4.4	6.1	7.6	8.7	10.4	13.0
	Maximum gas inlet pressure, Nat Gas	mbar	25	25	25	25	25	25
	Nominal gas inlet pressure, Nat Gas	mbar	20	20	20	20	20	20
	Minimum gas inlet pressure, Nat Gas	mbar	17	17	17	17	17	17
	Gas flow rate, LPG (G31) - maximum	m³/hr	1.7	2.4	3.0	3.4	4.0	N/A
	Nominal gas inlet pressure, LPG	mbar	37.5	37.5	37.5	37.5	37.5	N/A
Flue	Approx. flue gas volume Nat Gas @ 15°C, 9.1–9.3% CO ₂ @ N.T.P	m³/hr	57	79	98	30	135	168
	Maximum flue gas temperature @ 80/60°C Nat Gas	°C	80	76	70	74	76	70
	Pressure at boiler flue spigot @ 80/60°C Nat Gas	Pa	156	200	123	179	187	200
	Approx. flue gas volume LPG @ 15°C, 10.3–10.5% CO ₂ @ N.T.P	m³/hr	55	77	96	109	128	N/A
	Maximum flue gas temperature @ 80/60°C LPG	°C	81	78	69	73	75	N/A
	Pressure at boiler flue spigot @ 80/60°C LPG	Pa	126	200	105	150	138	N/A
Electrics	Dry NOx emission (0% excess oxygen, mg/kWh dry air free); NG/(LPG)	mg/kWh	36	35	35	35	34	36
	Electrical supply		230 V 1 Ph 50 Hz	230 V 1 Ph 50 Hz	230 V 1 Ph 50 Hz	230 V 1 Ph 50 Hz	230 V 1 Ph 50 Hz	230 V 1 Ph 50 Hz
	Power consumption - maximum boiler modulation	W	68	138	96	141	160	206
	Start current (per module)	Amp	1.2	1.2	1.2	1.2	1.2	1.2
	Run current (per module)	Amp	0.30	0.60	0.42	0.61	0.70	0.90
	Approx shipping weight	kg	50	60	90	90	95	100
	Noise emission @1m: @max. modulation	dB (A)	57.4	59.7	57.3	57.3	58.5	61.6
	Noise emission @1m: @min. modulation	dB (A)	34.3	35.8	33.5	33.5	34.3	35.4