Langson Energy
Product Guidelines

Gas Pressure Reduction Generators

Model	Isentropic Efficiency	Max Inlet Pressure	Max Inlet Temp	Approximate Flow Required at Pressure Ratio with Max Inlet Pressure					Unit Dimensions			Weight
US Units												
	%	PSIG	ºF	SCFH with Inlet & Outlet Temps at 50ºF					Width	Length	Height	lb
				6:1	5:1	4:1	3:1	2:1	ft	ft	ft	
G250	75	435	482	229,400	257,700	303,600	370,600	635,400	7.5	16.5	8.2	17,650
G1000	75	435	482	956,600	1,076,600	1,334,300	1,627,300	2,700,400	7.5	18	9.8	17,650
G1500	75	435	482	1,376,700	1,560,200	1,860,300	2,372,100	3,554,700	7.5	19.7	11.5	44,100
G4500	75	175	482	4,356,000	4,776,100	5,612,700	7,134,100	11,716,100	11.5	29.5	16.4	88,200
SI Units												
	%	BARG	ºC	Nm3/hr with Inlet & Outlet Temps at 10ºC					Width	Length	Height	kg
				6:1	5:1	4:1	3:1	2:1	m	m	m	
G250	75	30	250	6,500	7,300	8,600	10,500	18,000	2.3	5	2.5	8,000
G1000	75	30	250	27,100	30,500	37,800	46,100	76,500	2.3	5.5	3.0	20,000
G1500	75	30	250	39,000	44,200	52,700	67,200	100,700	2.3	6.0	3.5	40,000
G4500	75	12	250	123,400	135,300	159,000	202,100	331,900	3.5	9.0	5.0	40,000

Steam Pressure Reduction Generators

Model	Isentropic Efficiency	Max Inlet Pressure	Max Inlet Temp	Approximate Flow Required at Pressure Ratio with Max Inlet Pressure					Unit Dimensions			Weight
US Units												
	%	PSIG	ºF	lb/hr with Saturated Steam Inlet & Outlet Temps					Width	Length	Height	lb
				6:1	5:1	4:1	3:1	2:1	ft	ft	ft	
S250	75	435	482	9,200	10,100	11,500	14,300	22,200	7.5	16.5	8.2	17,650
S300	75	435	482	11,000	12,100	13,850	17,150	26,650	7.5	16.5	8.2	17,650
S500	75	435	482	18,300	20,200	23,100	28,600	44,400	7.5	17.0	8.5	20,000
S1000	75	435	482	36,600	40,400	46,200	57,200	88,800	7.5	18.0	10.0	30,000
S1500	75	435	482	55,300	61,500	70,700	87,400	137,300	7.5	19.0	11.0	40,000
S1700	75	435	482	62,700	69,750	80,100	99,000	155,550	7.5	19.7	11.5	44,100
S5000	75	174	482	186,550	206,800	235,400	294,800	458,700	11.5	29.5	16.4	88,200
SI Units												
	%	BARG	ºC	kg/hr with Saturated Steam Inlet & Outlet Temps					Width	Length	Height	kg
				6:1	5:1	4:1	3:1	2:1	m	m	m	
S250	75	30	250	4,200	4,600	5,200	6,500	10,100	2.3	5.0	2.5	8,000
S300	75	30	250	5,000	5,500	6,300	7,800	12,100	2.3	5.0	2.5	8,000
S500	75	30	250	8,300	9,200	10,500	13,000	20,100	2.3	5.2	2.6	9,100
S1000	75	30	250	16,600	18,300	21,000	25,900	40,300	2.3	5.5	3.0	13,600
S1500	75	30	250	25,100	27,900	32,100	39,600	62,300	2.3	5.8	3.4	18,100
S1700	75	30	250	28,500	31,700	36,400	45,000	70,700	2.3	6.0	3.5	20,000
S5000	75	12	250	84,800	94,000	107,000	134,000	208,500	3.5	9.0	5.0	40,000

ORC Generators

Model	Isentropic Efficiency	Condensing Temp ↓	Approximate Flow Required at Inlet Temp with 68ºF/20ºC Condensing Temp										Unit Dimensions			Weight
US Units																
	%	ºF	Net Power Output (kW)	Flow (lb/hr)	Net Power Output (kW)	Flow (lb/hr)	Net Power Output (kW)	Flow (lb/hr)	Net Power Output (kW)	Flow (lb/hr)	Net Power Output (kW)	Flow (lb/hr)	Width	Length	Height	lb
Inlet Temp →			176ºF		194ºF		212ºF		230ºF		248ºF		ft	ft	ft	
137	85	68	35	72.6	42	57	50	55	64	66	75	48	7.5	19.7	32.8	44,000
192	85	68	110	220	130	176	160	176	200	187	230	143	7.5	39.5	32.8	99,000
297	85	68	255	506	305	418	370	400	465	440	535	330	39.5	42.7	32.8	308,000
407	85	68	560	1,122	680	902	815	880	1,030	968	1,185	726	52.5	65.6	39.5	484,000
SI Units																
	%	ºC	Net Power Output (kW)	Flow (kg/hr)	Net Power Output (kW)	Flow (kg/hr)	Net Power Output (kW)	Flow (kg/hr)	Net Power Output (kW)	Flow (kg/hr)	Net Power Output (kW)	Flow (kg/hr)	Width	Length	Height	kg
Inlet Temp →			80ºC		90ºC		100ºC		110ºC		120ºC		m	m	m	
137	85	20	35	33	42	26	50	25	64	30	75	22	2.3	6	10	20,000
192	85	20	110	100	130	80	160	80	200	85	230	65	2.3	12	10	45,000
297	85	20	255	230	305	190	370	182	465	200	535	150	12	13	10	140,000
407	85	20	560	510	680	410	815	400	1,030	440	1,185	330	16	20	12	220,000