

1200A - 1200 kWel; 10500 V, 50 Hz; Natural gas, MN = 84

Genset:		
Genset model	[-]	1200A
Engine	[-]	2020V12
Engine power	[kW]	1236
Rated speed	[1/min]	1500
Configuration / number of cylinders	[-]	V90° / 12
Bore / stroke / displacement	[mm]/[mm]/[dm³]	170 / 195 / 53.1
Compression ratio	[-]	13
Mean effective pressure	[MPa]	1.86
Mean piston speed	[m/s]	9.75
Mean lube oil consumption at full load	[g/kWh]	≤0.2
Engine control system	[-]	PAC control system
Generator efficiency	[%]	97.1
Voltage / voltage range / cos Phi	[V]/[%]/[-]	10500 / ±5 / 1.0
Frequency	[Hz]	50

Load	[%]	100	75	50
Output electric power (COP)	[kW]	1200	900	600
High-temperature coolant heat	[kW ±8%]	661	531	319
Low-temperature coolant heat	[kW ±8%]	116	91	72
Exhaust heat, cooled to 120°C	[kW ±8%]	579	474	354
Exhaust temperature	[°C]	410	422	450
Wet exhaust mass flow	[kg/h]	6568	5160	3528
Combustion air mass flow	[kg/h]	6345	4985	3408
Radiation heat engine / generator	[kW ±8%]	81 / 36	81 / 27	81 / 18
Fuel consumption	[kW ±5%]	2864	2250	1538
Electrical / thermal efficiency	[%]	41.9 / 43.3	40 / 44.7	39 / 43.8
Total efficiency	[%]	85.2	84.7	82.8

Ventilation air flow (combustion air incl.), $\Delta T=15$ K	[kg/h]	42649
Intake air temperature after intercooling	[°C]	50
Combustion air temperature minimum / design	[°C]	5 / 25
Maximum exhaust back pressure	[kPa]	5
Maximum pressure loss in front of air cleaner	[kPa]	0.5
Gas supply pressure range	[kPa]	18 - 35
Starting method & power supply	[-]	Electrical start & DC24V
Lube oil content	[dm³]	180
Dry weight engine / genset	[kg]	4200 / 13000
Unit dimensions L x W x H	[mm]	5700 x 1700 x 2650

Coolant volume engine jacket / intercooler	[dm ³]	111 / 28
Kvs value engine jacket / intercooler	[m ³ /h]	42 / 30
Jacket water coolant temperature in / out	[°C]	77.5 / 89
Intercooler coolant temperature in / out	[°C]	46 / 49
Engine jacket water flow rate min. / max.	[m ³ /h]	50 / 60
Water flow engine jacket / intercooler	[m ³ /h]	55 / 35
Pressure loss engine / intercooler	[bar]	1.71 / 1.36

Octave band	[Hz]	32	63	125	250	500	1000	2000	4000	8000
Exhaust noise	[dB(A)]	109	115	122	121	118	110	109	107	106
Unit noise	[dB(A)]	96	101	95	96	96	97	96	95	97

Notes: Engine power rating per ISO 3046/1. Exhaust emissions refer to dry exhaust gas at 5% O₂. Kvs is the flow rate at 1 bar pressure loss. Exhaust noise measured at 1 m: ±2.5 dB(A); unit noise at 1 m lateral distance: ±1 dB(A).
The data is for reference only. Actual values shall be calculated based on the project gas composition. Subject to technical changes.