

SIEMENS	GROUP	GAS	PRODUCT INFORMATION	INDEX
	IC		IC-G-B-18-033	E
	POWER RATING			DATE 17/11/16

GENSET:	SGE-18SL	SPEED:	1800
JACKET WATER TEMPERATURE(°C):	90	FUEL TYPE:	NATURAL GAS
INTERCOOLER WATER TEMP(°C):	55		

SERVICE:	CONTINUOUS	COMPRESSION RATIO:	11,6:1
COOLING SYSTEM:	TWO CIRCUITS	REGULATION:	Electronic
EXHAUST MANIFOLD TYPE:	WATER COOLED	IGNITION TIMING:	18°
EMISSIONS:		MAX. BACK PRESSURE:	450 mmH2O
	NO _x mg/Nm3(8)	AMBIENT CONDITIONS ISO 3046/1:	
	CO mg/Nm3(8)	Atmospheric pressure (kPa)= 100	
	NMHC mg/Nm3(8)	Ambient temperature (°C)= 25	
	CH ₄ mg/Nm3(8)	Relative humidity (%)= 30	
	CO ₂ kg/h (1)		

POWER RATING (4)		NOMINAL	PARTIAL LOADS		
LOAD	%	100%	80%	60%	40%
MECHANICAL POWER (3, 4, 5)	kWb	350	280	210	140
BMEP	bar	13.0	10.4	7.8	5.2
ELECTRICAL POWER (cosφ 1)	kWe	336	267	199	130
ELECTRICAL POWER (cosφ 0,8)	kWe	331	265	197	131
FUEL CONSUMPTION	kW	900	753	606	455
MECHANICAL EFFICIENCY	%	38.9	37.2	34.7	30.8
ELECTRICAL EFFICIENCY (cosφ 1)	%	37.3	35.5	32.8	28.6
HEAT IN MAIN WATER CIRCUIT	kW	207	188	168	149
HEAT IN SECONDARY WATER CIRCUIT	kW	103	81	62	42
HEAT IN CHARGE COOLER	kW	67	47	30	14
HEAT IN OIL COOLER	kW	36	34	32	28
HEAT IN EXHAUST GASES (25 °C)	kW	225	191	154	115
HEAT IN EXHAUST GASES (120°C)	kW	167	143	117	88
EXHAUST GAS TEMPERATURE	°C	397	407	417	425
HEAT TO RADIATION	kW	15	13	12	9

CARBURETION SETTINGS (2)		NOMINAL	80%	60%	40%
O ₂ TO EXHAUST(DRY)(ONLY A REFERENCE)	%	9.0	8.8	8.7	8.5

MASS FLOWS		NOMINAL	80%	60%	40%
INTAKE AIR FLOW	kg/h	1820	1500	1180	870
EXHAUST GAS FLOW (WET)	kg/h	1890	1560	1230	900

NOTES:
1. ALL VALUES ASUME LHV OF THE GAS. 100% LOAD TOLERANCES: FUEL CONSUMPTION +5%, COOLING CIRCUIT AND EXHAUST GASES ± 8%, RADIATION ±25% EXHAUST TEMPERATURE ±20°C, MASS FLOWS ± 10% (ALSO FOR CO2 FLOW IN EXHAUST).
2. THE ENGINE PERFORMANCE DATA, TIMING ADVANCE AND CARBURETION SETTINGS ARE VALID FOR A GAS THAT FULFILLS THE REQUIREMENTS DEFINED IN IC-G-D-30-001e AND IC-G-D-30-002e
3. NET POWER, MECHANICAL PUMPS NOT INCLUDED.
4. POWERS ARE VALID FOR AMBIENT TEMP.=25°C AND AN ALTITUDE OF =500 m. SEE OTHER CONDITIONS IN PI IC-G-B-00-001
5. OVERLOAD NOT ALLOWED. IT IS NOT RECOMMENDED TO OPERATE BELOW 40% LOAD DURING LONG TIME.
6. THE SPECIFICATIONS AND MATERIALS ARE SUBJECT TO CHANGE WITHOUT NOTIFICATION
7. A ENGINE WITH INLET OR OUTPUT RESTRICTION OVER PUBLISHED LIMITS, OR WITH INADEQUATE MAINTENANCE OR INSTALLATION CAN MODIFY POWER RATING DATA.
8. EMISSIONS ARE CORRECTED TO 5% OF O2. EMISSIONS ACCORDING TO D1 CYCLE IS 8178-4.
9. ALTERNATOR VOLTAGE 480 V

CODE3	5/27/2019	Cod.: C-A	Elab:	Prov34	Versión: 9.1/28/01/2019	1/1
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