

SIEMENS	GROUP	GAS	PRODUCT INFORMATION	INDEX
	IC		IC-G-B-56-071	F1
	POWER RATING			DATE
			29/06/15	
			DEP.	2

GENSET:	SGE-56SL	SPEED:	1500
JACKET WATER TEMPERATURE(°C):	90	FUEL TYPE:	SYNGAS
INTERCOOLER WATER TEMP(°C):	55		

APPLICATION:	CONTINUOUS	COMPRESSION RATIO:	9,2:1
COOLING SYSTEM:	TWO CIRCUITS	REGULATION:	Electronic
EXHAUST MANIFOLD TYPE:	TWO STAGE IC	IGNITION TIMING:	20°
EMISSIONS:	WATER COOLED	MAX. BACK PRESSURE:	450 mmH2O
	NO _x mg/Nm3(8) 1500	AMBIENT CONDITIONS ISO 3046/1:	
	CO mg/Nm3(8) <1500	Atmospheric pressure (kPa)=	100
	NMHC mg/Nm3(8) <300	Ambient temperature (°C)=	25
		Relative humidity (%)=	30

POWER RATING (4)			NOMINAL	PARTIAL LOADS		
LOAD		%	100%	80%	60%	40%
MECHANICAL POWER	(3, 4, 5)	kWb	827	662	496	331
BMEP		bar	11,8	9,5	7,1	4,7
ELECTRICAL POWER (cosφ 1)		kWe	801	640	479	316
ELECTRICAL POWER (cosφ 0,8)		kWe	791	633	474	313
FUEL CONSUMPTION	(1)	kW	2246	1838	1455	1048
MECHANICAL EFFICIENCY		%	36,8	36,0	34,1	31,6
ELECTRICAL EFFICIENCY (cosφ 1)		%	35,7	34,8	32,9	30,2
HEAT IN MAIN WATER CIRCUIT	(1)	kW	740	600	482	346
HEAT IN SECONDARY WATER CIRCUIT	(1)	kW	140	125	114	106
HEAT IN CHARGE COOLER	(1)	kW	40	30	25	21
HEAT IN OIL COOLER	(1)	kW	100	95	89	85
HEAT IN EXHAUST GASES (25 °C)	(1)	kW	494	410	327	235
HEAT IN EXHAUST GASES (120°C)	(1)	kW	370	309	248	179
EXHAUST GAS TEMPERATURE	(1)	°C	402	410	418	427
HEAT TO RADIATION	(1)	kW	45	41	36	30

CARBURETION SETTINGS (2)					
O ₂ TO EXHAUST(DRY)(ONLY A REFERENCE)		%	8,0	7,7	7,4
					7,1

MASS FLOWS					
INTAKE AIR FLOW	(1)	kg/h	3540	2870	2240
EXHAUST GAS FLOW (WET)	(1)	kg/h	4100	3330	2600
				1570	1830

NOTES:
1. 100% LOAD TOLERANCES: FUEL CONSUMPTION +5%, COOLING CIRCUIT AND EXHAUST GASES ± 8%, RADIATION ±25% EXHAUST TEMPERATURE ±30°C, MASS FLOWS ± 10%.
2. THE ENGINE PERFORMANCE DATA, TIMING ADVANCE AND CARBURETION SETTINGS ARE VALID FOR A SYNGAS (LHV 7 - 14 MJ/Nm3) THAT FULFILLS THE REQUIREMENTS DEFINED IN IC-G-D-30-001e AND IC-G-D-30-004e. THE LHV% OF H2 < 30%
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
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.. NOx EMISSIONS DUE TO NH3 POLUTANT IN GAS ARE NOT INCLUDED.
9. ALTERNATOR VOLTAGE 400 V

CODE3	22/09/2017	Cod.: C-A	Elab:	ccs	Versión: 37/30/08/2017	1/1
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