

GROUP	GAS	PRODUCT INFORMATION	INDEX
IC		IC-G-B-56-011	G
POWER RATING		DATE	
		17/11/2016	
		DEP.	2

<b>GENSET:</b>	<b>SGE-56SL</b>	<b>SPEED:</b>	<b>1500</b>
<b>JACKET WATER TEMPERATURE (°C):</b>	90	<b>FUEL TYPE:</b>	<b>NATURAL GAS</b>
<b>INTERCOOLER WATER TEMP (°C)</b>	55		
APPLICATION	<b>CONTINUOUS</b>	COMPRESSION RATIO:	<b>12,3:1</b>
COOLING SYSTEM:	<b>TWO CIRCUITS</b>	REGULATION:	<b>Electronic</b>
	<b>TWO STAGE IC</b>	IGNITION TIMING:	<b>13°</b>
EXHAUST MANIFOLD TYPE:	<b>WATER COOLED</b>	MAX. BACK PRESSURE:	<b>450 mmH2O</b>
EMISSIONS:		AMBIENT CONDITIONS ISO 3046/1:	
	NOX mg/Nm3(8) <b>1000</b>	Atmospheric pressure (kPa)=	<b>100</b>
	CO mg/Nm3(8) <b>&lt;800</b>	Ambient temperature (°C)=	<b>25</b>
	NMHC mg/Nm3(8) <b>&lt;300</b>	Relative humidity (%)=	<b>30</b>
	CH4 mg/Nm3(8) <b>&lt;1200</b>		
	CO2 kg/h (1) <b>493</b>		

POWER RATING (4)			NOMINAL	PARTIAL LOADS		
LOAD		%	100%	80%	60%	40%
MECHANICAL POWER (3,4,5)		kWb	985	788	591	394
BMEP		bar	14,1	11,3	8,4	5,6
ELECTRICAL POWER (cosφ 1)		kWe	954	763	571	377
ELECTRICAL POWER (cosφ 0,8)		kWe	943	755	566	375
FUEL CONSUMPTION (1)		kW	2430	1989	1567	1125
MECHANICAL EFFICIENCY		%	40,5	39,6	37,7	35,0
ELECTRICAL EFFICIENCY (COSφ 1)		%	39,3	38,4	36,4	33,5
HEAT IN MAIN WATER CIRCUIT (1)		kW	692	562	451	335
HEAT IN SECONDARY WATER CIRCUIT (1)		kW	146	136	119	98
HEAT IN CHARGE COOLER (1)		kW	47	41	31	15
HEAT IN OIL COOLER (1)		kW	99	95	88	83
HEAT IN EXHAUST GASES (25 °C) (1)		kW	571	470	377	274
HEAT IN EXHAUST GASES (120 °C) (1)		kW	422	352	285	209
EXHAUST GAS TEMPERATURE (1)		°C	390	403	415	425
HEAT TO RADIATION (1)		kW	36	33	29	24
<b>CARBURETION SETTINGS (2)</b>						
O2 TO EXHAUST(DRY)(ONLY A REFERENCE)		%	8,6	8,4	8,1	7,6
<b>MASS FLOWS</b>						
INTAKE AIR FLOW (1)		kg/h	4710	3740	2910	2060
EXHAUST GAS FLOW (WET) (1)		kg/h	4890	3880	3020	2140

**NOTES**

- 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).
- 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
- NET POWER, MECHANICAL PUMPS NOT INCLUDED.
- POWERS ARE VALID FOR AMBIENT TEMP.=25°C AND AN ALTITUDE OF =500 m. SEE OTHER CONDITIONS IN PI IC-G-B-00-001
- OVERLOAD NOT ALLOWED. IT IS NOT RECOMMENDED TO OPERATE BELOW 40% LOAD DURING LONG TIME.
- THE SPECIFICATIONS AND MATERIALS ARE SUBJECT TO CHANGE WITHOUT NOTIFICATION
- A ENGINE WITH INLET OR OUTPUT RESTRICTION OVER PUBLISHED LIMITS, OR WITH INADEQUATE MAINTENANCE OR INSTALLATION CAN MODIFY POWER RATING DATA.
- EMISSIONS ARE CORRECTED TO 5% OF O2. EMISSIONS ACCORDING TO D1 CYCLE IS 8178-4. (0°C and 1013 mbar)
- ALTERNATOR VOLTAGE 400 V