Guascor Energy	GROUP	GAS	PRODUCT INFORMATION	INDEX
	IC		IC-G-B-56-332	B
	POWER RATING		DATE 21/08/2020	DEP. 2

GENSET:	**SGE-56HM**	**SPEED:**	**1500**
JACKET WATER TEMPERATURE (°C):	90	**FUEL TYPE:**	**NATURAL GAS**
INTERCOOLER WATER TEMP (°C)	55		

APPLICATION	**CONTINUOUS**	COMPRESSION RATIO:	**11,9:1**
COOLING SYSTEM:	**TWO CIRCUITS**	REGULATION:	**Electronic**
	TWO STAGE IC	IGNITION TIMING:	**18º**
EXHAUST MANIFOLD TYPE:	**DRY**	MAX. BACK PRESSURE:	**450 mmH2O**
EMISSIONS:			
NOX mg/Nm3(8)	**1000**	AMBIENT CONDITIONS ISO 3046/1:	
CO mg/Nm3(8)	**<1000**	Atmospheric pressure (kPa)=	**100**
NMHC mg/Nm3(8)	**<450**	Ambient temperature (°C)=	**25**
CH4 mg/Nm3(8)	**<2200**	Relative humidity (%)=	**30**
CO2 kg/h (1)	**619**		

POWER RATING (4)			**NOMINAL**	**PARTIAL LOADS**		
LOAD		%	100%	80%	60%	40%
MECHANICAL POWER	(3,4,5)	kWb	1350	1080	810	540
BMEP		bar	19,3	15,4	11,6	7,7
ELECTRICAL POWER (cosϕ 1)		kWe	1315	1053	789	523
ELECTRICAL POWER (cosϕ 0,8)		kWe	1299	1042	782	519
FUEL CONSUMPTION	(1)	kW	3099	2517	1935	1346
MECHANICAL EFFICIENCY		%	43,6	42,9	41,9	40,1
ELECTRICAL EFFICIENCY (COSϕ 1)		%	42,4	41,8	40,8	38,9
HEAT IN MAIN WATER CIRCUIT	(1)	kW	578	433	303	172
HEAT IN SECONDARY WATER CIRCUIT	(1)	kW	232	199	176	150
HEAT IN CHARGE COOLER	(1)	kW	90	66	51	37
HEAT IN OIL COOLER	(1)	kW	142	133	125	113
HEAT IN EXHAUST GASES (25 ºC)	(1)	kW	838	713	564	414
HEAT IN EXHAUST GASES (120 °C)	(1)	kW	639	551	442	331
EXHAUST GAS TEMPERATURE	(1)	ºC	424	444	464	496
HEAT TO RADIATION	(1)	kW	101	92	82	70
CARBURETION SETTINGS (2)						
O2 TO EXHAUST(DRY)(ONLY A REFERENCE)		%	9,7	9,6	9,4	9,2
MASS FLOWS						
INTAKE AIR FLOW	(1)	kg/h	6340	5140	3870	2650
EXHAUST GAS FLOW (WET)	(1)	kg/h	6570	5320	4020	2750

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 FULFILS 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.=25ºC AND AN ALTITUDE OF =500 m. SEE OTHER CONDITIONS IN PI IC-G-B-00-005
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. EMSSIONS ACCORDING TO D1 CYCLE IS 8178-4. (0ºC and 1013 mbar)
9. ALTERNATOR VOLTAGE 400 V
10. OPERATING VALUES IN PARALLEL NETWORK APPLICATIONS. LOAD ACEPTANCE FOR ISLAND OPERATION ACORDING TO IC-G-B-00-012.