

GROUP	GAS	PRODUCT INFORMATION	INDEX
IC		IC-G-B-36-059	E1
POWER RATING		DATE	
		15/05/2017	
		DEP.	2

GENSET:	SGE-36SL	SPEED:	1500
JACKET WATER TEMPERATURE (°C):	90	FUEL TYPE:	NATURAL GAS
INTERCOOLER WATER TEMP (°C)	55		

APPLICATION	CONTINUOUS	COMPRESSION RATIO:	11,6:1
COOLING SYSTEM:	TWO CIRCUITS	REGULATION:	Electronic
	TWO STAGE IC	IGNITION TIMING:	15°
EXHAUST MANIFOLD TYPE:	WATER COOLED	MAX. BACK PRESSURE:	450 mmH2O
EMISSIONS:		AMBIENT CONDITIONS ISO 3046/1:	
	NOX mg/Nm3(8)	1000	Atmospheric pressure (kPa)= 100
	CO mg/Nm3(8)	<800	Ambient temperature (°C)= 25
	NMHC mg/Nm3(8)	<300	Relative humidity (%)= 30
	CH4 mg/Nm3(8)	<1200	
	CO2 kg/h (1)	315	

POWER RATING (4)			NOMINAL	PARTIAL LOADS		
LOAD		%	100%	80%	60%	40%
MECHANICAL POWER	(3,4,5)	kWb	630	504	378	252
BMEP		bar	14,0	11,2	8,4	5,6
ELECTRICAL POWER (cosφ 1)		kWe	610	487	364	240
ELECTRICAL POWER (cosφ 0,8)		kWe	603	482	361	238
FUEL CONSUMPTION	(1)	kW	1552	1271	999	723
MECHANICAL EFFICIENCY		%	40,6	39,7	37,8	34,9
ELECTRICAL EFFICIENCY (COSφ 1)		%	39,3	38,3	36,4	33,2
HEAT IN MAIN WATER CIRCUIT	(1)	kW	444	361	286	213
HEAT IN SECONDARY WATER CIRCUIT	(1)	kW	94	86	74	63
HEAT IN CHARGE COOLER	(1)	kW	23	19	12	4
HEAT IN OIL COOLER	(1)	kW	71	67	62	59
HEAT IN EXHAUST GASES (25 °C)	(1)	kW	355	294	238	174
HEAT IN EXHAUST GASES (120 °C)	(1)	kW	259	218	178	132
EXHAUST GAS TEMPERATURE	(1)	°C	378	393	404	414
HEAT TO RADIATION	(1)	kW	29	26	23	21

CARBURETION SETTINGS (2)						
O2 TO EXHAUST(DRY)(ONLY A REFERENCE)		%	9	8,4	8	7,6

MASS FLOWS						
INTAKE AIR FLOW	(1)	kg/h	3030	2400	1890	1350
EXHAUST GAS FLOW (WET)	(1)	kg/h	3140	2500	1960	1400

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. (0°C and 1013 mbar) 9. ALTERNATOR VOLTAGE 400 V						