



GROUP	GAS	PRODUCT INFORMATION	INDEX
IC		IC-G-B-56-087	B1
POWER RATING			DATE
			15/07/09
			DEP.
			2

ENGINE:	SFGLD 560	SPEED:	1500
JACKET WATER TEMPERATURE(°C):	90	FUEL TYPE:	BIOMASS GAS
INTERCOOLER WATER TEMP(°C):	55		

APPLICATION:	CONTINUOUS	COMPRESSION RATIO:	9.3:1
COOLING SYSTEM:	TWO STAGE IC	REGULATION:	Electronic
EXHAUST MANIFOLD TYPE:	WATER COOLED	IGNITION TIMING:	22°
EMISSIONS:		MAX. BACK PRESSURE:	450 mmH2O
	NOX mg/Nm3(8)	1500	
	CO mg/Nm3(8)	<1500	
	NMHC mg/Nm3	<300	
	AMBIENT CONDITIONS ISO 3046/1:		
	Atmospheric pressure (kPa)=		100
	Ambient temperature (°C)=		25
	Relative humidity (%)=		30

POWER RATING (4)		NOMINAL	PARTIAL LOADS			
LOAD	%	100%	80%	60%	40%	
MECHANICAL POWER	(3, 4, 5) kWb	735	588	441	294	
BMEP	bar	10,5	8,4	6,3	4,2	
FUEL CONSUMPTION	(1) kW	1983	1631	1316	990	
THERMAL EFFICIENCY	%	37,1	36,1	33,5	29,7	
HEAT IN MAIN WATER CIRCUIT	(1) kW	557	453	389	319	
HEAT IN SECONDARY WATER CIRCUIT	(1) kW	132	127	113	93	
HEAT IN CHARGE COOLER	(1) kW	35	35	27	9	
HEAT IN OIL COOLER	(1) kW	97	92	86	84	
HEAT IN EXHAUST GASES (25 °C)	(1) kW	516	427	343	260	
HEAT IN EXHAUST GASES (120°C)	(1) kW	402	334	269	206	
EXHAUST GAS TEMPERATURE	(1) °C	455	460	465	478	
HEAT TO RADIATION	(1) kW	43	36	30	24	
CARBURETION SETTINGS (2)						
O2 TO EXHAUST(DRY)(ONLY A REFERENCE)	%	4,3	4,1	3,8	3,2	
MASS FLOWS						
INTAKE AIR FLOW	(1) kg/h	2400	1950	1540	1120	
EXHAUST GAS FLOW (WET)	(1) kg/h	3750	3070	2440	1800	

NOTES:
1. 100% LOAD TOLERANCES: FUEL CONSUMPTION +5%, COOLING CIRCUIT AND EXHAUST GASES ± 15%, RADIATION ±25 EXHAUST TEMPERATURE ±20°C, MASS FLOWS ± 10%.
2. THE ENGINE PERFORMANCE DATA, TIMING ADVANCE AND CARBURETION SETTINGS ARE VALID FOR A SYNGAS (LHV 4.6 - 7 MJ/Nm3) THAT FULFILLS THE REQUIREMENTS DEFINED IN IC-G-D-30-001 AND IC-G-D-30-004
3. NET POWER, MECHANICAL PUMPS NOT INCLUDED.
4. POWERS ARE VALID FOR AMBIENT TEMP.=25°C AND AN ALTITUDE OF =500m. 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. NOx EMISSIONS DUE TO NH3 POLUTANT IN GAS ARE NOT INCLUDED
10. ONLY IN PARALLEL TO THE NET OPERATION

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