

 	GROUP	GAS	PRODUCT INFORMATION	INDEX
	IC		IC-G-B-18-011	F
	POWER RATING			DATE
			09-12-05	
			DEP.	2

GENSET:	FGLD 180	SPEED:	1500
JACKET WATER TEMPERATURE(°C):	90	FUEL TYPE:	NATURAL GAS
INTERCOOLER WATER TEMP(°C):	55		

APPLICATION:	CONTINUOUS	COMPRESSION RATIO:	11:1
COOLING SYSTEM:	TWO CIRCUITS	REGULATION:	Manual
EXHAUST MANIFOLD TYPE:	WATER COOLED	IGNITION TIMING:	15°
EMISSIONS:		MAX. BACK PRESSURE:	450 mmH2O
	NOX mg/Nm3(8)	AMBIENT CONDITIONS ISO 3046/1:	
	CO mg/Nm3(8)	Atmospheric pressure (kPa)=	100
	NMHC mg/Nm3	Ambient temperature (°C)=	25
		Relative humidity (%)=	30

POWER RATING (4)			NOMINAL	PARTIAL LOADS		
LOAD		%	100%	80%	60%	40%
MECHANICAL POWER	(3, 4, 5)	kWb	275	220	165	110
BMEP		bar	12,2	9,8	7,3	4,9
ELECTRICAL POWER (cosφ 1)		kWe	264,0	211,0	158,0	104,0
ELECTRICAL POWER (cosφ 0,8)		kWe	260,0	209,0	156,0	103,0
FUEL CONSUMPTION	(1)	kW	718	592	461	340
THERMAL EFFICIENCY		%	38,3	37,2	35,8	32,4
ELECTRICAL EFFICIENCY (cosφ 1)		%	36,8	35,6	34,3	30,6
HEAT IN MAIN WATER CIRCUIT	(1)	kW	192	161	128	103
HEAT IN SECONDARY WATER CIRCUIT	(1)	kW	61	50	39	29
HEAT IN CHARGE COOLER	(1)	kW	30	20	10	2
HEAT IN OIL COOLER	(1)	kW	31	30	29	27
HEAT IN EXHAUST GASES (25 °C)	(1)	kW	173	145	115	86
HEAT IN EXHAUST GASES (120°C)	(1)	kW	130	110	87	66
EXHAUST GAS TEMPERATURE	(1)	°C	407	411	417	424
HEAT TO RADIATION	(1)	kW	17	16	14	12
CARBURETION SETTINGS (2)						
O2 TO EXHAUST(DRY)(ONLY A REFERENCE)		%	9,0	8,8	8,6	8,4

MASS FLOWS						
INTAKE AIR FLOW	(1)	kg/h	1370	1130	880	650
EXHAUST GAS FLOW (WET)	(1)	kg/h	1420	1180	920	680

NOTES:
1. 100% LOAD TOLERANCES: FUEL CONSUMPTION +5%, COOLING CIRCUIT AND EXHAUST GASES ± 8%, RADIATION ±25% EXHAUST TEMPERATURE ±20°C, MASS FLOWS ± 10%.
2. THE ENGINE PERFORMANCE DATA, TIMING ADVANCE AND CARBURETION SETTINGS ARE VALID FOR A GAS THAT FULFILS THE REQUIREMENTS DEFINED IN IC-G-D-30-001 AND IC-G-D-30-002
3. NET POWER, MECHANICAL PUMPS NOT INCLUDED.
4. POWERS ARE VALID FOR AMBIENT TEMP. =35°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.
9. ALTERNATOR VOLTAGE 400 V