

 	GROUP	GAS	PRODUCT INFORMATION	INDEX
	IC		IC-G-B-18-099	B
POWER RATING			DATE	
			01-04-10	
			DEP.	2

<b>GENSET:</b>	<b>SFGM 180</b>	<b>SPEED:</b>	<b>1500</b>
JACKET WATER TEMPERATURE(°C):	90	<b>FUEL TYPE:</b>	<b>PROPANE</b>
INTERCOOLER WATER TEMP(°C):	55		

APPLICATION:	<b>CONTINUOUS</b>	COMPRESSION RATIO:	<b>9,2:1</b>
COOLING SYSTEM:	<b>TWO CIRCUITS</b>	REGULATION:	<b>Electronic</b>
EXHAUST MANIFOLD TYPE:	WATER COOLED	IGNITION TIMING:	<b>14°</b>
EMISSIONS:		MAX. BACK PRESSURE:	<b>450 mmH2O</b>
	NOX mg/Nm3(8)	AMBIENT CONDITIONS ISO 3046/1:	
	CO mg/Nm3(8)	Atmospheric pressure (kPa)=	<b>100</b>
	NMHC mg/Nm3	Ambient temperature (°C)=	<b>25</b>
		Relative humidity (%)=	<b>30</b>

POWER RATING (4)			NOMINAL	PARTIAL LOADS		
LOAD		%	100%	80%	60%	40%
MECHANICAL POWER	(3, 4, 5)	kWb	<b>315</b>	252	189	126
BMEP		bar	<b>14,0</b>	11,2	8,4	5,6
ELECTRICAL POWER (cosφ 1)		kWe	<b>303,0</b>	242,0	181,0	120,0
ELECTRICAL POWER (cosφ 0,8)		kWe	<b>298,0</b>	239,0	179,0	119,0
FUEL CONSUMPTION	(1)	kW	<b>791</b>	655	515	379
THERMAL EFFICIENCY		%	<b>39,8</b>	38,5	36,7	33,2
ELECTRICAL EFFICIENCY (cosφ 1)		%	<b>38,3</b>	36,9	35,1	31,7
HEAT IN MAIN WATER CIRCUIT	(1)	kW	<b>199</b>	170	146	123
HEAT IN SECONDARY WATER CIRCUIT	(1)	kW	<b>71</b>	59	42	29
HEAT IN CHARGE COOLER	(1)	kW	<b>36</b>	26	12	1
HEAT IN OIL COOLER	(1)	kW	<b>35</b>	33	30	28
HEAT IN EXHAUST GASES (25 °C)	(1)	kW	<b>190</b>	159	127	94
HEAT IN EXHAUST GASES (120°C)	(1)	kW	<b>148</b>	124	99	74
EXHAUST GAS TEMPERATURE	(1)	°C	<b>450</b>	458	466	475
HEAT TO RADIATION	(1)	kW	<b>16</b>	15	11	7
<b>CARBURETION SETTINGS (2)</b>						
O2 TO EXHAUST(DRY)(ONLY A REFERENCE)		%	<b>8,5</b>	8,3	8,0	7,6

MASS FLOWS					
INTAKE AIR FLOW	(1)	kg/h	<b>1340</b>	1100	860
EXHAUST GAS FLOW (WET)	(1)	kg/h	<b>1400</b>	1150	900

<b>NOTES:</b>
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 PROPANE (C3H8 >95%) THAT FULFILS THE REQUIREMENTS DEFINED IN IC-G-D-30-001 AND IC-G-D-30-018
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.
9. ALTERNATOR VOLTAGE 400 V

CODE3	25.07.2014	Cod.: C-A	Elab:	dis10	Versión: 27.1/09052014	1/1
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