

a group company of



GS16R2-PTK (Generator set 1.5 MW, 400V, 50Hz)

January 20, 2014

APPLICATION : GENERATOR

DATA SHEET

Item	Unit	Data
speed	rpm/min	1500
Cylinder No.	V type	16
Total displacement	liter	79.9
Bore	mm	170
Stroke	mm	220
Compression ratio		12:1
Engine brake output	kW	1563
Generator output	kVA	1875
Power factor (minimum)		0.8
Alternator efficiency	%	96.0%
Generator output (gross)	kW	1500
Auxiliary consumption (maximum : including ventilation and cooling)	kW	45
Net generator output (auxiliary deducted)	kW	1455
Power generation efficiency (gross)	%	42.1%
Fuel gas input	kW	3563
Fuel gas flow rate	Nm ³ /h	352
Heat rejection on jacket water (HT circuit) - for radiator design	kW	628
Heat rejection on lube oil and charge air (LT circuit) - radiator design	kW	539
Heat rejection on exhaust	kW	1016
Thermal radiation (engine block)	kW	82
Net electrical efficiency	%	40.8%
CW temperature at HT outlet (maximum)	°C	91 +/- 2
CW temperature at LT inlet (maximum)	°C	49
Air intake flow rate	m ³ /min	120
Exhaust gas flow rate	Nm ³ /h	6828
Exhaust gas temperature	°C	400
Lube oil consumption	g/kWh	0.34
Outside ambient temperature (maximum)	°C	40
Inside ambient temperature - container (maximum)	°C	50
Flow rate of HT cooling circuit	m ³ /h	75
Flow rate of LT cooling circuit	m ³ /h	30
NOx emission level (O2 5%) - Std - Other level as option.	mg/Nm³	500
CO emission level (O2 5%)	mg/Nm ³	N/A
Noise level at 10m (container)	dB(A)	70
Fuel gas methane number (minimum)		80
Fuel gas Lower Heating Value	kJ/Nm ³	36470

Tolerances :

Fuel input : 0/+5% (ISO 3046/1). Submitted to fuel gas specification confirmation.

Heat rejection data for radiator design : including 17% margin

Exhaust gas flow / temp : +/- 8% / +/- 6%

Non specified data : refer to ENGINE SPECIFICATION SHEET