2MW箱式发电机组技术参数及运行要求

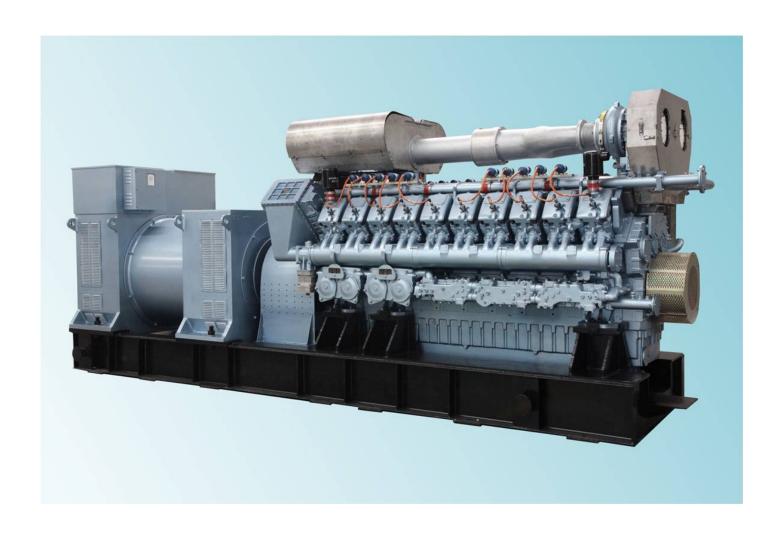
Technical data and operation requirement of 2MW container Gen-sets

河南柴油机重工有限责任公司
Henan Diesel Engine Industry Co., Ltd
新能源事业部

New Energy Business Department

二 0 二二年七月 July, 2022

CHG622V20燃气发电机组 CHG622V20 Gas Gen-sets



发电机组的技术参数

Technical parameters of gen-sets

	机组型号	P2000GF
	Gen-sets type	
	额定电流	3608A
	Rated current	
	额定频率	50Hz
	Rated frequency	
	额定电压	400V
	Rated voltage	
	功率因数	cosφ0.8(滞后/ Hysteresis)
	Power factor	
	防护等级	IP23
	Protection grade	
技术性能及参数	相数及接法	三相三线
	Phase number and	— ^{//□} — ⁵ ¾ Three-phase three-wire
	connection	Tillee-phase tillee-wile
	调压方式	自动调压
	Voltage regulating mode	Automatic voltage control
	励磁方式	无刷励磁
	excitation mode	Brushless excitation
	环境温度及规范	
	Ambient temperature and	45℃
	specification	
	运行方式	并网运行
	Operation mode	Grid-connected operation
	机组满载运行噪音	≤105dB(A) (距机组 1 米处测/ Measurement
	Operating noise of gen-sets	at 1 meter distance from gen-sets)

	at full load	
	箱式机组满载运行噪音	≤85dB(A) (距集装箱1米处测/
	Operating noise of container	Measurement at 1 meter distance from
	gen-sets at full load	gen-sets)
	机组年运行能力	
	Annual operating capacity of	≥7200h
	the gen-sets	
	第一次大修期	35000h
	First overhaul	3300011
	箱体外形Container shape	13×3.5×3.5m/48t (以提供图纸为准/ Drawings provided shall prevail)
	长宽高Length, width and	
	height(mm)/重量Weight(kg)	
	(不含消音器、波纹管/	
	Excluding silencer and	
	bellows)	
	整机使用寿命	
	Service life of complete	≥20 年/20 years
	machine	

注:运行中必须严格按照《CHG622 发动机使用维修说明书》中的相关规定使用符合要求的冷却液、润滑油;同时依据《CHG622 发动机维护保养记录册》中规定的维修项目按时完成设备维护保养工作并记录完整。

Note: during operation, the coolant and lubricating oil meeting the requirements must be used in strict accordance with the relevant provisions in the CHG622 engine operation and maintenance manual; at the same time, the equipment maintenance shall be completed on time and recorded completely according to the maintenance items specified in the CHG622 engine maintenance record book.

燃气机组运行环境要求

Requirements for operating environment of gas gen-sets

大气压力 100kPa

Atmospheric pressure 100kPa

环境空气温度 -5~+45℃

Ambient air temperature -5~+45°C

相对湿度 ≤90%

Relative humidity ≤90%

海拔高度 <1000m

Altitude <1000m

注: 当环境条件不满足上述条件时,应按工厂标准进行功率修正。

Note: when the environmental conditions do not meet the above conditions, the power shall be corrected according to the factory standard.

燃气机组运行天然气品质要求

Operating natural gas quality requirements for gas gen-sets

天然气中甲烷含量 ≥78%

Methane content in natural gas ≥78%

天然气中甲烷值 ≥80%

Methane value in natural gas ≥80%

天然气燃气量(CH₄纯量) ≥10m³/min

Natural gas volume (CH4 pure volume) ≥10m³/min

天然气进机压力 3~5kPa

Gas inlet pressure 3~5kPa

天然气中总硫含量 <200mg/Nm³

Total sulfur content in natural gas <200mg/Nm³

天然气温度 30±10℃

Natural gas temperature 30±10 ℃

天然气中水份 无饱和游离水

Water content of natural gas Free water without saturation

天然气水溶性 PH 值 6.8~7.2

Water soluble PH of natural gas 6.8~7.2

天然气中的固体颗粒不应大于 5µm, 含量应不大于 30mg/m³

Solid particles in natural gas shall not be greater than $5\mu m$. The content shall not be greater than $30mg/m^3$

燃气机组运行冷却水要求

Operating cooling water requirements for gas gen-sets

1、第一路循环水(低温水):

First circulating water (low temperature water):

进机/出机水温度: 42/46℃

Inlet / outlet water temperature: 42/46°C

流量: 100m³/h

Water flow: 100m³/h

扬程: 37m

Distance of travel: 37m

2、第二路循环水(高温水):

Second circulating water (high temperature water):

进机/出机水温度: 68/78℃

Inlet / outlet water temperature: 68/78°C

流量: 100m³/h

Water flow: 100m³/h

扬程: 37m

Distance of travel: 37m