# HONNY POWER

# Datasheet

## HGM900/6 Googol Diesel Power Generator

## 640kW-800kVA 720kW-900kVA 60Hz

Googol diesel generators are powered by Googol engines which are being manufactured by latest US based technology. Googol engines are known for cost effective reliable power solution.

### Features

Googol power generators are designed to operate under extreme conditions with low operational and maintenance cost.

Honny power manufacture and test it's products under strict QC rules to insure international manufacturing standard.



### Equipment

Engine and alternator mounted on same frame steel skid. Build in damper for anti-vibration. Compact design, easy to operate and maintain. Sino-US Googol brand engine Top brand AC alternator Full range protections, alarms with auto shutdown features. Comply with ISO8628 national standard and ISO9001 quality standard. Specially designed horizontal/vertical, engine driven/electrical radiator. Industrial, Residential silencers Catalytic converters Heat exchangers Special spark arrester silencers Standard set for "CE" certification Sound & Weatherproof canopy optional Spring, seismic anti-vibration mounts Advanced facility for FAT.

#### Diesel Generator Specification

Genset Model		HGM900/6
Genset Prime Output	kW/kVA	640/800
Genset Standby Output	kW/kVA	720/900
Rating Power Factor		0.8
Rating Speed	rpm	1800
Rating Frequency	Hz	60
Rating Voltage	V	480(240)
Engine Model		PTAA1340-G4
Displacement	1	21.9
Configuration		12V
Genset Size-Open Type (LxWxH)	mm	3700x1450x2100
Genset Weight	kg	4400

### Engine Data in General

Aspiration Type		Turbocharger, air-air aftercooler
Injection Type	/***	Direct Injection
Configuration	(	Vee
No. Of Cylinders		12
Displacement		21.9
Bore	mm	128
Stroke	mm	142
Compression Ratio		15:1
Piston Speed	m/s	8.52
Rotation Direction (from Flywheel)		Counter Clockwise
Number of Flywheel Teeth		204
Flywheel House Size		SAE0-18

### Engine Specification

Engine Model		PTAA1340-G4
Speed	rpm	1800
Engine Standby Output (LTP)	kW	845
Engine Prime Output (PRP)	kW	772
Engine Continuous Power (COP)	kW	620
Fan Reduction	kW	38
Engine Net Standby Output (LTP)	kW	807
Engine Net Prime Output (PRP)	kW	734
Engine Net Continuous Output (COP)	kW	582
BMEP for Standby Output	bar	25.40
BMEP for Prime Output	bar	23.15
BMEP for Continuous Output	bar	18.63
Typical Generation Standby Output	kW	720
Typical Generation Prime Output	kW	640
Typical Generation Continuous Output	kW	540
Typical Alternator Efficiency	14.4	94.0%
Power Factor	12/11	0.8
Speed Droop (Static) Elect. Gov.		0-5%
Governing Standards to ISO 8528	The T	G3
Max. Step Load Acceptance, 1st Step		40%

### Lubrication System

Lube Oil Specification		API-CF4
Oil Capacity	1	36
Max. Permissible Oil Temperature	°C	110
Oil Pressure Warning	kPa	200
Oil Pressure Shutdown	kPa	160
Oil Consumption (as % of Fuel Consumption )	%	≤0.5

### Electrical System

Charging Alternator Voltage	V	28
Charging Alternator Capacity	A	35
Starting Voltage	V	24
Starting Motor Capacity	kW	6.6
Minimum Battery Capacity (Ref. Varta Brand)	Ah	2*120

## Fuel System

Governor Type		Electrical
Engine Output at PRP	kW	772
Fuel Consumption at 25% of PRP	l/h	61
Fuel Consumption at 50% of PRP	l/h	101
Fuel Consumption at 75% of PRP	l/h	145
Fuel Consumption at 100% of PRP	l/h	191
Lowest Fuel Consumption Ratio	g/kW.hr	207

### Intake & Exhaust System

Combustion Air Consumption	m³/min	70
Max. Intake Restriction	KPa	5
Exhaust Temperature (Before Turbo)	°C	695
Exhaust Temperature (After Turbo)	°C	560
Max. Exhaust Back Pressure	Кра	5
Exhaust Gas Flow	m³/min	92
Turbo Bellows Diameter	mm	DN150
Exhaust Flange Diameter	mm	DN150

## Cooling System

Coolant Capacity for Engine	1	23
Max. Permissible Temperature	°C	90
Max. Coolant Warning Temperature	°C	95
Max. Coolant Shutdown Temperature	°C	105
Thermostat Open Temperature	°C	79
Radiator Cooling Flow	m³/min	928
Flow of Coolant Pump	m³/h	30
Heat Dissipation (Engine Radiator)	kW	406
Heat Dissipation (Convection)	kW	60

## Alternator Specification

	- Stadiore	
Generator Model	10	GP800-4P
Voltage of Genset	V	480(240)
Rating Speed	rpm	1800
Frequency	Hz	60
Capacity @ 0.8PF, H Rise Class	kW	700
Efficiency @ 0.8PF	%	94.0
Duty		S1
Bearing		Single
Insulation	The second	н
Rise Temperature		н
Enclosure		IP23
Over speed	rpm	2250
Excitation System		AVR
AVR Model		MX341
Poles		4

#### **Performance Parameter**

#### Frequency

Frequenc <mark>y Droop</mark>	%	≤5
Steady-state Frequency Band	%	≤0.5
Related Downward Range of Frequency Setting	%	≥2.5
Related Upward Range of Frequency Setting	%	≥+2.5
Change Rate of Frequency Setting	%	0.2 ~ 1

#### **Transient Frequency Deviation**

100% Sudden Power Decrease	%	≤10
Sudden Power Increase	%	≤7
100% Sudden Power Decrease	%	≤+10
Sudden Power Increase	%	≤-7
Frequency Recovery Time	sec	≤3
Related Frequency Tolerance Band	%	2

Guangdong Honny Power-tech Co., Ltd. Tel: 0086-769-2278 0359 Fax: 0086-769-2278 0357 Email: <u>sales@honnypower.com</u> Website: <u>www.honnypower.com</u> Address: No.2, Industry North Road, Songshan Lake, Dongguan, China

#### Voltage

Steady-state Voltage Deviation	%	≤±1
Voltage Unbalance	%	1
Range of Voltage Setting	%	±5
Change Rate of Voltage Setting	%	0.2 ~1

#### **Transient Voltage Deviation**

100% Sudden Power Decrease	%	≤+20
Sudden Power Increase	%	≤-15
Voltage Recovery Time	S	≤2

#### Voltage Waveform & EMC Compatibility

Sin. Distortion	%	4
Coefficient Variation	%	5
Individual Harmonic Content	%	2
Radio Interference THF	%	≤2



