

#### **Datasheet**

# **HGM345** Googol Diesel Power Generator

250kW-312.5kVA 276kW-345kVA 50Hz



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.

# POWER R

## Diesel Generator Specification

Genset Model		HGM345
Genset Prime Output	kW/kVA	250/312.5
Genset Standby Output	kW/kVA	276/345
Rating Power Factor		0.8
Rating Speed	rpm	1500
Rating Frequency	Hz	50
Rating Voltage	V	400
Engine Model		DTA700G1
Displacement	1 = 1	11.6
Configuration		6 in line
Genset Size-Open Type (LxWxH)	mm	2950 <mark>*1</mark> 150*1650
Genset Weight	kg	2600

# Engine Data in General

Aspiration Type		Turbocharge & aftercooler
Injection Type		Direct Injection
Configuration		In Line
No. of Cylinders		6
Displacement	I	11.6
Bore	mm	126
Stroke	mm	155
Compression Ratio		18:1
Rotation Direction (from Flywheel)		Counter Clockwise
Flywheel House Size		SAE1/14"

# **Engine Specification**

Engine Model		DTA700G1
Speed	rpm	1500
Engine Standby Output (LTP)	kW	317
Engine Prime Output (PRP)	kW	280
Speed Droop (static) Elect. Gov.	naconmum	0-5%
Governing Standards to ISO 8528		G3
Max. Step Load Acceptance, 1st Step (% PRP)		60%

# **Lubrication System**

Lube Oil Specification		API-CF4
Oil Capacity		24
Max. Permissible Oil Temperature	°C	110
Oil Pressure Warning	kPa	300
Oil Pressure Shutdown	kPa	200

# Cooling System

Coolant Capacity for Engine	I	25
Max. Coolant Warning Temperature	°C	98
Max. Coolant Shutdown Temperature	°C	103

# Fuel System

Governor Type		Electrical
Fuel Consumption at 75% of Genset Prime Output	g/kW.hr	210
Fuel Consumption at 100% of Genset Prime Output	g/kW.hr	202

## Intake & Exhaust System

Max. Intake Restriction	KPa	2
Exhaust Temperature	°C	610
Max. Exhaust Back Pressure	KPa	2
Exhaust Flange Diameter	mm	125

# Electrical System

Charging Alternator Capacity	А	35
Starting Voltage	V	24
Starting Motor Capacity	kW	8
Minimum Battery Capacity (Ref. Varta Brand)	Ah	2*100

## **Alternator Specification**

Generator Model		GP313-4P
Voltage of Genset	V	400
Rating Speed	rpm	1500
Capacity @ 0.8PF, H Rise Class	kW	250
Efficiency @ 0.8PF	%	92.5
Duty		S1
Bearing	- 1	Single
Insulation	1-1	Н
Rise Temperature		Н
Enclosure		IP23
Over Speed	rpm	2250
Excitation System		AVR
AVR Model		SX440
Poles	- 1 28	4

# POWER R

#### **Performance Parameter**

#### Frequency

Frequency Droop	%	≤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

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#### 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



