

Datasheet

HGM50 Googol Diesel Power Generator

**36kW-45kVA
40kW-50kVA
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.

Diesel Generator Specification

Genset Model		HGM50
Genset Prime Output	kW/kVA	36/45
Genset Standby Output	kW/kVA	40/50
Rating Power Factor		0.8
Rating Speed	rpm	1500
Rating Frequency	Hz	50
Rating Voltage	V	400
Engine Model		BTA170G1
Displacement	l	2.77
Configuration		4 in line
Genset Size-Open Type (LxWxH)	mm	1700*700*1200
Genset Weight	kg	800

Engine Data in General

Aspiration Type		Turbocharge & aftercooler
Injection Type		Direct Injection
Configuration		In Line
No. of Cylinders		4
Displacement	l	2.77
Bore	mm	93
Stroke	mm	102
Compression Ratio		17.5:1
Rotation Direction (from Flywheel)		Counter Clockwise
Flywheel House Size		SAE3/11.5"

Engine Specification

Engine Model		BTA170G1
Speed	rpm	1500
Engine Standby Output (LTP)	kW	48
Engine Prime Output (PRP)	kW	44
Speed Droop (static) Elect. Gov.		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	l	5.8
Max. Permissible Oil Temperature	°C	110
Oil Pressure Warning	kPa	200
Oil Pressure Shutdown	kPa	100

Cooling System

Coolant Capacity for Engine	l	10
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	220
Fuel Consumption at 100% of Genset Prime Output	g/kW.hr	208

Intake & Exhaust System

Max. Intake Restriction	KPa	2
Exhaust Temperature	°C	630
Max. Exhaust Back Pressure	KPa	2
Exhaust Flange Diameter	mm	45

Electrical System

Charging Alternator Capacity	A	50
Starting Voltage	V	12
Starting Motor Capacity	kW	2.8
Minimum Battery Capacity (Ref. Varta Brand)	Ah	1*60

Alternator Specification

Generator Model		GP50-4P
Voltage of Genset	V	400
Rating Speed	rpm	1500
Capacity @ 0.8PF, H Rise Class	kW	40
Efficiency @ 0.8PF	%	87.5
Duty		S1
Bearing		Single
Insulation		H
Rise Temperature		H
Enclosure		IP23
Over Speed	rpm	2250
Excitation System		AVR
AVR Model		SX440
Poles		4

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	%	$\geq +2.5$
Change Rate of Frequency Setting	%	0.2 ~ 1

Transient Frequency Deviation

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

Voltage

Steady-state Voltage Deviation	%	$\leq \pm 1$
Voltage Unbalance	%	1
Range of Voltage Setting	%	± 5
Change Rate of Voltage Setting	%	0.2 ~ 1

Transient Voltage Deviation

100% Sudden Power Decrease	%	$\leq +20$
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

Guangdong Honny Power-tech Co., Ltd.

Tel: 0086-769-2278 0359

Fax: 0086-769-2278 0357

Email: sales@honnypower.com

Website: www.honnypower.com

Address: No.2, Industry North Road, Songshan Lake, Dongguan, China

