HONNY POWER

Datasheet

HGM41 Googol Diesel Power Generator

30kW-37.5kVA 33kW-41.25kVA 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		HGM41
Genset Prime Output	kW/kVA	30/37.5
Genset Standby Output	kW/kVA	33/41.25
Rating Power Factor		0.8
Rating Speed	rpm	1500
Rating Frequency	Hz	50
Rating Voltage	V	400
Engine Model		BT170G3
Displacement	E.	2.77
Configuration	1	4 in line
Genset Size-Open Type (LxWxH)	mm	1600*700*1200
Genset Weight	kg	750

Engine Data in General

Aspiration Type		Turbocharger & aftercooler
Injection Type		Direct Injection
Configuration		In Line
No. of Cylinders		4
Displacement		2.77
Bore	mm	93
Stroke	mm	102
Compression Ratio		17.5:1
Rotation Direction (from Flywheel)		Counter Clockwise
Flywheel House Size		SAE4/7.5"

Engine Specification

Engine Model		BT170G3
Speed	rpm	1500
Engine Standby Output (LTP)	kW	40
Engine Prime Output (PRP)	kW	36
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	1	5.8
Max. Permissible Oil Temperature	°C	110
Oil Pressure Warning	kPa	200
Oil Pressure Shutdown	kPa	100

Cooling System

Coolant Capacity for Engine		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	228
Fuel Consumption at 100% of Genset Prime Output	g/kW.hr	218

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

Alternator Specification

Generator Model		GP38-4P
Voltage of Genset	V	400
Rating Speed	rpm	1500
Capacity @ 0.8PF, H Rise Class	kW	30
Efficiency @ 0.8PF	%	86.5
Duty		S1
Bearing		Single
Insulation		Н
Rise Temperature		Н
Enclosure		IP23
Over Speed	rpm	2250
Excitation System		AVR
AVR Model		SX440
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

%	≤10
%	≤7
%	≤+10
%	≤-7
sec	≤3
%	2
	% % % sec

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



