HGM3438EA TECHNICAL DATA SHEET

Genset Model	HGM3438EA
Standby power（50HZ）	2750kW/3437.5kVA
Prime power（50HZ）	2500kW/3125kVA

Standard configuration

General description：

- Engine（**Googol QTAA20V-EG3100**）
- Ambient temperature 40°C radiator, belt-driven cooling fan, with fan safety guard
- 24VDC charger
- Alternator：single bearing,IP23，H
- Damper
- Dry type Air filter,fuel filter&oil filter
- Standard control panel
- 2×12VDC start batteries and connecting wires
- Exhaust elbow pipe, flexible pipe,conical pipe,muffler
- Documents

Genset Power

Voltage（V）	Frequency（Hz）	Phase	Power factor	Standby Ampere（A）	Prime Ampere（A）	Standby（kW/kVA）	Prime（kW/kVA）
400/230	50	3	0.8	4961	4510	2750/3300	2500/3000
380/220	50	3	0.8	5222.3	4747.5	2750/3300	2500/3000

RATING DEFINITION AS PER ISO8528

Prime Power (PRP): Output available with varying load for an unlimited time. Average power output is 70% of the prime power rating. Typical peak demand is 100% of prime rated kWe with 10% overload capability for emergency use for a maximum of 1 hour in 12.

Standby Power Rating (ESP): Output available with varying load during a normal power supply failure. Average power output is 80% of the standby power rating. Typical annual operating time less than 500hours. No overload is available.

The relationship between engine power and altitude: above 1500 meters above sea level, the power decreases by 4% for every 300 meters above sea level.

Warranty

The products provided by HONNY Company are all brand-new products, and each unit has undergone strict factory inspection.

All products of HONNY Company provide warranty service. The warranty period is 12 months after delivery or 1000 hours of operation in total, whichever expires first.

Engine data

Engine data	
Manufacturer/Model	Googol /QTAA20V-EG3100
Air intake system	Turbocharged，air-to-air cooling
Fuel System	High pressure Common Rail

Cylinder/Alignment	V-type 20-cylinder, four-stroke	
Displacement Litre	107.5L	
Bore x stroke mm	185×200（mm）	
Compression ratio	15:1	
Rated Engine speed RPM	1500	
Engine Standby Power kW/HP	3100/4217.7	
Common engine power kW/HP	2810/3823.1	
Injection system	ECU Electronic injection system	
Exhaust system		
Exhaust flow m³/min	780	
Exhaust temperature ℃	≤550	
Maximum allowable exhaust back pressure kPa	5	
Air intake system		
Gas volume (rated power) m³/min	313	
Cooling Air Flow m³/min	4167	
Maximum allowable air intake resistance kPa	5	
Fuel consumption		
100% common power (L/h)	661.6	L/h
75% common power (L/h)	484.4	L/h
50% common power (L/h)	323.7	L/h
25% common power (L/h)	180.8	L/h
Fuel consumption rate		
100% common power (g/kW.h)	221.0	
75% common power (g/kW.h)	215.7	
50% common power (g/kW.h)	216.2	
25% common power (g/kW.h)	241.5	
Lubrication system		
Total oil capacity L	300	
Low oil pressure alarm kPa	200	
Low oil pressure parking kPa	160	
Cooling system		
Engine Coolant Capacity L	200	
Maximum coolant temperature °C	90	
Thermostat operating temperature °C	71	

Alternator data	
Alternator data	
Manufacturer/Model	Googol / GP3250-4P
Phase	400 V
Voltage	Three-phase four-wire, Y-wound
Number of Wires	1
Number of bearings	0.8
Power factor	IP23
Protection	≤1000m
Altitude requirements	PMG permanent magnet brushless self-excitation

Excitation method	H/H
Insulation class/temperature rise class	＜50
Telephone Influence Factor TIF	＜2%
Telephone Harmonic Factor THF	≤±1%
Steady State Voltage Regulation	3250kVA
Alternator capacity	96.2%
Genset Data	
Voltage setting range	≥±5%
Steady State Voltage Regulation	≤±0.2%
Transient voltage deviation (100% sudden drop power)	≤＋17%
Transient voltage deviation (50% sudden power)	≤－6.5%
Voltage stabilization time (100% sudden drop of power)	≤0.75S
Voltage stabilization time (50% sudden power)	≤0.69S
Frequency adjustment range	≥±5%
frequency volatility	≤±0.25%
Transient frequency deviation (100% sudden drop in power)	≤＋8%
Transient frequency deviation (50% sudden power)	≤－5%
Frequency recovery time (100% sudden drop in power)	≤1.48S
Frequency recovery time (50% surge power)	≤1.35S

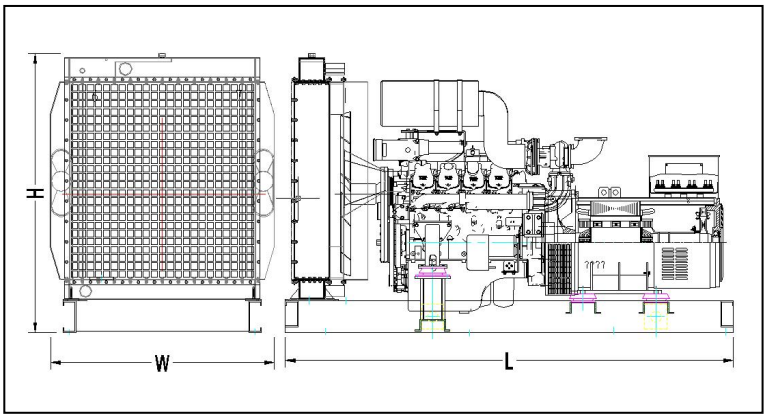
HONNY GENSET QUALITY STANDARD	
HONNY diesel generator sets are designed, produced and tested in strict accordance with the standards. They can be used in various environments and meet the following relevant standards:	
GB/T 2820.1~6-2009、ISO8528、ISO3046、YD/T502-2020	
Document	
Original document from Engine	Generator Set Maintenance Record Manual
Original document from Alternator	Generator Set Installation and Operation Manual
Original document from Control panel	Generator set installation and commissioning acceptance list
Generator set original test report	Certificate of origin of the generator set

Optional accessories		
Engine	**Alternator**	**Electric elements**
Water jacket heater	Anti-condensation heater	Remote control system
Oil preheater	Permanent magnet excitation system (PMG)	Control Panel with triple remote functions
Battery charger	Voltage droop (parallel use)	ATS
Air starter motor	Other temperature rise	Synchronized or parallel

	classes	panel
Heavy Duty Air Filter for Desert	RTD temperature sensor, 2 per phase	Anti-condensation heater
Heavy Duty Secondary Muffler		Voltage 3.3kV/6.3kV/10.5kV/11kV
Fuel system	**Others**	**Cooling system**
base fuel tank&Daily fuel tank	Waterproof type	External Cooling Towers
Water separator	Silent/Soundproof /container type	Remote Radiator
Automatic oil supply system	Trailer type	Heat exchanger
Buried fuel tank	Emergency Power Supply Vehicle	Marine cooling system

Some options may not be suitable for the whole series of generator sets, please consult HONNY application engineering department or the person in charge of this project of HONNY.

Measurement and Weight



Open type
Overall：L×W×H
Overall：7300×2900×3300
Weight：20500kg

Automated control screen with ATS/AMF function

The use of Deep Sea DSE7320, DSE7220 or DSE6120 controllers is the control screen of the automation unit and the most basic configuration of unattended automation. The control panel is capable of receiving remote on/off unit control signals (ATS control).

Functional features: The unit has automatic, manual, shutdown (emergency stop) and other control functions, circuit breaker opening and closing buttons, rich programmable outputs, input interfaces and humanized interfaces, multi-functional LCD display, the detected parameters are displayed through data, symbols at the same time, etc., which can meet the needs of various automation units.