



**Model: HG1650, 1500rpm / 50Hz**

**Prime Rating: 1200kW / 1500 kVA**

**Standby Rating: 1320kW / 1650 kVA**



### Standby or Prime Power Features

- Googol 4-stroke , air-cooled diesel engine
- Leroy Somer Brush-less synchronous alternators: four-pole construction.
- HT2000 AUTO START/STOP Control System
- 24V starting and control battery
- Full range of accessories and options available
- Operation&Maintenance, and Parts Manual
- Manufactured in an ISO-9001 certified facilities
- Heavy-duty & One year warranty

### General Design

HG1650 series genset contains two parts: genset with steel-fabricated base frame,and control panel.

- Emergency stop button equipped
- Anti-vibration mountings and base frame
- High Temperature,Low Oil pressure,Overspeed Overcurrent,Charge fail protections.
- Lockable maintenance and control panel doors.(Silent type)

### Gen Set Ratings

3 Phase, p.f.0.8

Rated Frequency	Hz		50
Rated Output	kW / kVA		1200/1500
Max. Output	kW / kVA		1320/1650
Max. Current	Amps		2165.1
Rated Voltage	V		400
Phase			3 Phase 4 Wires
Manufacturer			Fujian Huatai Power Supply Co.,Ltd.

**Notes:** Standby ratings do not have an overload capability but can be used for the duration of the utility failure per ISO3046, DIN6271,

Prime (unlimited running time) ratings are continuous per DIN6271, ISO3046 with 10%overload capability.

**Engine Technical Data**

General		Units	50HZ
	Rated speed	rpm	1500
Engine Basic Data	Engine Brand - Model		Googol Engine-Tech Co.,Ltd-QTA3240G5
	Engine Max.output	kW	1457
	Engine Base.output	kW	1331
	Number of cylinders		12
	Cylinder arrangement		V
	Type of air intake		Turbocharged,air-water aftercooled
	Type of cooling		Water cooled
	Total displacement	liters	53.1
	Bore*Stroke	mm	170*195
	Speed control		Electrical
	Speed droop(static) electr.gov		0-5%
Fuel system	Type of fuel		Diesel
	Fuel consumption @ 25% load	L/H	83.2
	Fuel consumption @ 50% load	L/H	152.79
	Fuel consumption @ 75% load	L/H	223.51
	Fuel consumption @ 100% load	L/H	294.99
Oil	Total quantity of oil	Liters	180
	Max.permmissible oil temperature	°C	110
	Oil pressure warning	kPa	300
	Oil pressure shutdown	kPa	200
Coolant	Type of coolant		Water
	Total quantity of coolant	Liters	100
	Max.permmissible coolant temperature	°C	88
	Max.coolant warning temperature	°C	90
	Max.coolant shutdown temperature	°C	95
Air system	Air filter type		Dry Element
	Max.intake restriction	kPa	2
Exhaust system	Max.exhaust temperature	°C	455
	Max.exhaust back pressure	kPa	2
Electrical system	Voltage of electric system	V	24
	Type of battery		Lead acid type

**AC Alternator Data**

Model	LSA50.2L8
Brand	Leroy Somer
Prime Power (kW)	1200kW
Excitation Type	Brushless self-excitation
Voltage Regulator Type	Automatic Voltage Regulator
Power Factor (Cos Phi)	0.8
Altitude	≤1000m
Number of Pole	4
Exciter type	Shunt
Insulation class	H
Drip proof	IP23
Voltage regulation	±0.5%
Total harmonics (TGH/THC)	at no load < 1.5% - on load < 2%
Wave form: NEMA=TIF	<50
Wave form: I.E.C = THF	<2%
Bearing	Single
Voltage Regulation	± 0.5%
Coupling	± 0.6%

## Control Panel

### HT2000 Control System

#### Automatic Start Control Panel

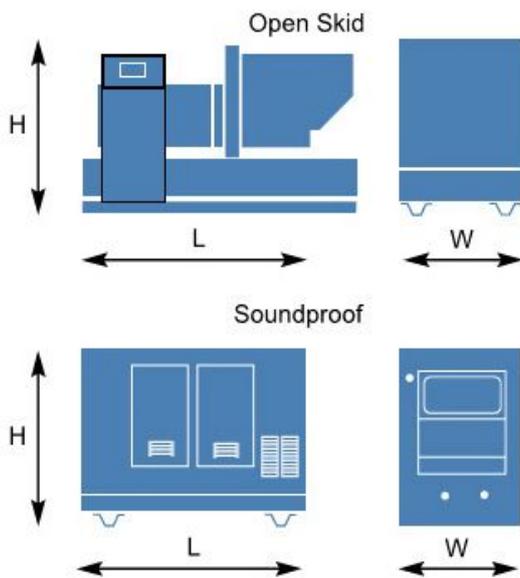
HT2000 control system integrating digital, intelligent and network techniques is used for automatic control of diesel generator set. It can carry out functions including automatic start/stop, data measure and alarming.

The controller uses LCD display, optional Chinese and English display interface with operation easy and reliable.

HT2000 control system uses micro-processing technique which can carry out precision measure, constant value adjustment timing and threshold setting and etc. of multi-parameters. It can be widely used in all types of generator automatic control for compact structure, advanced circuits, simple connections and high reliability.

- High Temperature, low oil pressure, overspeed, overcurrent, over/under voltage, over/under frequency protection.
- 3 phase generator voltage and current measurement
- 3 phase busbar voltage measurement
- 3 phase power measurement
- 3 analog inputs
- Event and performance log
- 2 languages (user changeable)

### Dimension & Weight



Open Type (Standard Configuration)  
Overall Size: 5400\*2190\*2740 mm(L\*W\*H)  
Weight:10500Kgs

Soundproof Type  
Overall Size: 12017x2342x2693 mm(L\*W\*H)  
Weight:13400Kgs

## Standard Equipments

### Engine

Air Cleaner(Dry-cartridge type)  
Fuel Pump  
Fuel Filter  
Thermostat and Housing  
Dry Exhaust Manifold  
Blower Fan & Fan Drive  
Radiator - Unit Mounted  
Electric Starting Motor  
Housing & Flywheel  
Charging Alternator  
Battery Rack & Cables  
First filling of oil and filters  
First filling of coolant

### Alternator

Self-ventilated and drip-proof construction  
Synchronous, Brush-less, Self Exciting, Self Regulating  
Direct Coupled With Flex Disk  
12 Leads winding  
Class H Insulation  
Drip-Proof Construction

### Exhaust

Built-in Industrial Muffler for Open generators  
Built-in Residential Muffler for Silent generators  
Rain Cap

### Handling

Fork lift facilities  
Lifting and holding down points

### Base Frame

Heavy duty quality steel fabricated welded base plate  
Heavy duty anti-vibration mountings  
Stub-up area

### Electrical System

Battery (for 50HZ is supplied as standard)  
Battery rack and cables  
Engine driven battery charger  
Battery disconnect switch  
32A/4P CHINT MCCB

### Canopy(for silent units)

Heavy duty lockable handles in each door  
Large doors for easy access for service and monitoring  
Coolant refilling specific hatch  
Sound foam  
Modular bolted assembly after painting.  
Powder coating paint for outdoor usage.  
Weatherproof sealed joints.  
Cut using high precision numeric control technology.  
Bent using high precision numeric control technology.  
Glazed acoustic sealed control panel door.  
Fuel filter outside enclosure.  
In base oil and coolant drains.

### Control Panel

HT2000 Control System  
Automatic Start Control Panel  
\* Compact gen-set controller for gensets operating for automatic start/stop, data measure and alarming.  
\* Battery Charger(to be supplied by mains into the 208-240V range)  
\* On/Off button  
\* Emergency stop button

### Packing

Plastic wrap protection package  
Alternator, Engine and Generating set operator's manual are supplied together with electrical drawings.

