## JIANGHAO GENERATOR



# Genset

Model	JHPE-50GF
Voltage	277/480V
Frequency&Speed	60HZ;1800RPM
Prime Power	NA/NA
Standby Power	57kW/71kVA

# ➢Engine: Perkins 1104D-44TG1

Alternator:Stamford/Leroy Somer

/Hengsheng

Controller:DeepSea/SmartGen

# /DEIF/ComAp

The Perkins<sup>®</sup> 1104D turbocharged ElectropaKs are the latest addition to the 1100 Series ElectropaK range. Perkins has developed this engine in line with our customer's needs by providing the options of either electronic common rail or mechanically controlled fuel systems.

These ultra clean engines are assembled on a new high technology production line. Frequent computerized checks during the production process ensure high build quality is maintained throughout.

Perkins has produced a world-class product for their customers, engineered to give even greater levels of reliability, yet with a lower cost of ownership.



#### Emissions

Certified against the requirements of U.S. EPA Tier 3 legislation for non-road mobile machinery, powered by constant speed engines (EPA 40 CFR Part 89 Tier 3).

Specification		
Number of cylinders	4 vertic	al in-line
Bore and stroke	105 x 127 mm	4.1 x 5.0 in
Displacement	4.41 litres	269 in <sup>3</sup>
Aspiration	Turbocharged	
Cycle	4 stroke	
Combustion system	Direct injection	
Compression ratio	18.2:1	
Rotation	Anti-clockwise, viewed on flywheel	
Total lubricating capacity	8.4 litres	2.2 US gal
Cooling system	Water-cooled	
Total coolant capacity	16.5 litres	4.4 US gal



Engine package weights and dimensions		
Length	1238 mm	48.7 in
Width	.967 mm	38.0 in
Height	637 mm	25.0 in
Weight (dry)	474 kg	1045 lb



		Typical generator output (Net)		Engine	e power		
Speed Type of rpm operation	Type of		Gro	SS	Ne	et	
	kVA	kWe	kWm	hp	kWm	hp	
1800	Standby power	70.9	56.7	64	86	63	85

The above ratings represent the engine performance capabilities to conditions specified in ISO 8528/1, ISO 3046/1:1986, BS 5514/1. Derating may be required for conditions outside these; consult Perkins Engines Company Limited.

Generator powers are typical and are based on typical alternator efficiencies and a power factor of 0.8. Fuel specification: BS 2869 Class 2 or ASTM D975 D2. Lubricating oil: API CH4/ACEA E5.

#### Rating definitions

Prime power: Power available at variable load in lieu of a main power network. Overload of 10% permitted for 1 hour in every 12 hours operation. Standby power: Power: available at variable load in the event of a main power network failure. Maximum use 500 hours per year. No overload is permitted.

Percent of prime power	Fuel consumption at 1800 rpm g/kWh	Fuel consumption at 1800 rpm I/hr
Standby power	243	18.7
Prime power	240	16.6
75%	248	12.8
50%	260	9
25%	300	5.2

#### Technical information

#### Air inlet

· Mounted air filter and turbocharger

#### Fuel system

- Rotary type pump
- Fuel filter

#### Lubrication system

- · Wet cast iron sump with filler and dipstick
- Oil filter

#### Cooling system

- Belt-driven pusher fan and guards
- Mounted radiator and piping
- Water pump

#### Electrical equipment

12 volt starter motor and 12 volt 65 amp alternator with DC output

#### Flywheel and housing

- High inertia flywheel to SAE J620 size 10/11
- SAE 3 flywheel housing

#### Starting aids

Glow plugs

#### Literature

User's Handbook

### Alternator

Pole No.	4-Pole
Exciter Type	Single bearing, Brushless,
	Self-excited
Power factor	0.8
Voltage adjust	$\leq 5\%$
range	
Insulation Grade	Н
Protection Grade	IP23/22

- NEMAMG1.JIANGHAO, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current of up to 300%
  of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling down stream circuit breakers to trip without collapsing the generator field.
- ♦ Self-ventilated and dripproof construction.
- Superior voltage waveform from two-thirds pitch windings and skewed stator.
- Digital solid-state.volts-per-hertz voltage regulator with +1% no-load to full-load regulation.



## **Control Panel**



The control module gives digital readouts of: Generator voltage; Output frequency; Engine speed; Battery voltage;

Engine hours run.



Dimension:1830\*780\*1250mm Weight:800kg



Dimension:3000\*1100\*1700mm Weight:1700kg Fuel Tank Capacity:280L The **control panel** is an Digital Control Module suitable for a wide variety of single, diesel or gas, gen-set applications.

Monitoring an extensive number of engine parameters, the module will display warnings, shutdown and engine status information on the back-lit LCD screen and illuminated LEDs.

# The control module has indicators for failure information:

Over speed/Low speed, Emergency stop Low oil pressure; High water temperature Failure to start Battery charger failure

#### Automatic shutdown occurs under:

Low engine oil pressure; High engine water temperature; Over speed/Low speed; Failure to start after three attempts.

#### **Electrical system**

- Maintenance-free and anti-explosion battery
- Standard breaker
- ABB breaker (optional)
- ATS (optional)
- Battery charger (optional)
- GMS monitoring (optional)

#### Packing

- Wrapping film packaging
- Tray packaging
- plywood box packaging

## Jiangsu Jianghao Generator Co.,Ltd

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