JIANGHAO GENERATOR



Genset

| Model | JHPE5-50GF |
|-----------------|--------------|
| Voltage | 230/400V |
| Frequency&Speed | 50HZ;1500RPM |
| Prime Power | 48kW/60kVA |
| Standby Power | 53kW/66kVA |

Engine: Perkins 1104D-44TG2

Alternator:Stamford/Leroy Somer

/Hengsheng

Controller:DeepSea/SmartGen

/DEIF/ComAp

The Perkins[®] 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 EU Stage IIIA legislation for non-road mobile machinery, powered by constant speed engines (EU 2011 97/68/EC Stage IIIA).

| Specification | | | |
|----------------------------|------------------------------------|---------------------|--|
| Number of cylinders | 4 vertical in-line | | |
| Bore and stroke | 105 x 127 mm | 4.1 x 5.0 in | |
| Displacement | 4.41 litres | 269 in ³ | |
| Aspiration | Turbocharged | | |
| Cycle | 4 stroke | | |
| Combustion system | Direct injection | | |
| Compression ratio | 18.2:1 | | |
| Rotation | Anti-clockwise, viewed on flywheel | | |
| Total lubricating capacity | 8 litres | 2.1 US gal | |
| Cooling system | Water-cooled | | |
| Total coolant capacity | 16.5 litres | 4.4 US gal | |



| | Engine package weights and dimension | S |
|--------------|--------------------------------------|---------|
| Length | 1239 mm | 49 in |
| Width | 615 mm | 24.2 in |
| Height | 951 mm | 37.4 in |
| Weight (dry) | 401 kg | 884 lb |



| | | Typical generator output (Net) | | Engine power | | | |
|-------|--------------------------------|-----------------------------------|-----|--------------|----|-----|----|
| Speed | Speed Type of rpm operation | | | Gross | | Net | |
| ipin | | kVA | kWe | kWm | hp | kWm | hp |
| 1500 | Prime power | 60 | 48 | 56.6 | 74 | 54 | 72 |
| | Standby power | 66 | 53 | 61.6 | 83 | 59 | 79 |

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 1500 rpm g/kWh | Fuel consumption at 1500 rpm I/hr |
|------------------------|---------------------------------------|--------------------------------------|
| Standby power | 235 | 18.2 |
| Prime power | 235 | 16.5 |
| 75% | 232 | 12.4 |
| 50% | 230 | 8.3 |
| 25% | 265 | 4.8 |

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 | ≦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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