



Genset

Model	JHP-600GF
Voltage	277/480V
Frequency&Speed	60HZ;1800RPM
Prime Power	600kW/750kVA
Standby Power	706kW/883kVA

Basic technical data

Number of cylinders 6
Cylinder arrangement Vertical inline
Cycle 4 stroke
Induction system Turbocharged, air-to-air charge cooling
Compression ratio 14:1
Bore 145 mm
Stroke 183 mm
Displacement 18.1 litres
Direction of rotation (when viewed from flywheel) Counter clockwise
Firing order (number 1 cylinder furthest from flywheel) 1, 5, 3, 6, 2, 4

Weight of Electropak

Dry (estimated) 2361 kg
Wet (estimated) 2477 kg

Overall dimensions, Electropak

Height 2126 mm
Length 2538 mm
Width 1691 mm

Centre of gravity, Electropak

Forward from rear of block (dry) 607 mm
Above crankshaft centre line (dry) 238 mm

Moments of inertia

Engine rotational components 1.67 kgm²
Flywheel 1.92 kgm²

Cyclic irregularity for engine standby power

At 110% 0.201

General installation

Designation	Units	1800 rpm	
		Prime power (60 Hz)	Standby power (60 Hz)
Gross engine power	kWb	716	785
Gross BMEP	kPa	2655	2921
Mean piston speed	m/s	11	
Electropak nett engine power	kV	685	754
Engine coolant flow against 95 kPa restriction	litres/min	485	
Combustion air flow	kg/h	4605	4717
Combustion air flow (air inlet)	m ³ /min	69	71
Exhaust gas flow (maximum) at atmospheric pressure	m ³ /min	152	159
Exhaust gas temperature (turbo out maximum)	°C	452	471
Overall thermal efficiency	%	36	37
Typical generator set electrical output (0.8 pf 25°C)	kVw	650	716
	kVA	813	895
Assumed alternator efficiency	%	95	

Energy balance

Designation	Units	1800 rpm	
		Prime power (60 Hz)	Standby power (60 Hz)
Energy in fuel	kWt	1955	2125
Energy in power output (gross)	kWb	716	785
Energy to cooling fan	kWm	31.5	
Energy in power output (nett)	kWm	685	754
Energy to aftercooler	kWt	252	274
Energy to coolant and oil	kWt	206	222
Energy to radiation	kWt	119	131
Energy to exhaust	kWt	665	713

➤ Engine: Perkins 2806C-E18TTAG6

➤ Alternator: Stamford/Leroy Somer
/Hengsheng

➤ Controller: DeepSea/SmartGen
/DEIF/ComAp

Ratings

Steady state speed capability at constant load <1.5%

Performance

Average sound pressure level for bare engine
Without inlet and exhaust at 1 metre 104.2 dB(A)

Note: All data based on operation to ISO 3046/1:2002 standard reference conditions.

Note: For engines operating in ambient conditions other than the standard reference conditions stated below, a suitable derate must be applied.

Note: Derate tables for increased ambient temperature and/or altitude are available, please contact Perkins Applications Department.

Test conditions

Air temperature 25°C
Barometric pressure 100 kPa
Relative humidity 30%
Air inlet restriction at maximum power (nominal) 5 kPa
Exhaust back pressure at maximum power (nominal) 8.5 kPa
Aftercooler restriction at maximum power (nominal) 12 kPa
Fuel temperature (inlet pump) 40°C
All ratings certified to within ±3%

Cooling system

Total coolant capacity

ElectropaK (with radiator)	109.5 Litres
ElectropaK (without radiator)	20.8 Litres
Maximum top tank temperature	97°C
Maximum static pressure head on pump	125 kPa
Temperature rise across engine	3°C
Maximum permissible external system resistance (60Hz)	95 kPa
Thermostat operation range	81°C to 92°C

Radiator

Radiator face area	1.496 m²
Material and number of rows	1 Row, Aluminium
Material and fins per inch	8.5
Width of matrix	1651 mm
Height of matrix	1610 mm
Pressure cap setting	103 kPa

Fan

Type	Pusher
Diameter	1142 mm
Number of blades	6
Material	Composite
Drive ratio (60 Hz)	0.8:1
Airflow at rated speed (60 Hz)	899 m³/min

Recommended coolant

Recommended coolant: 50% anti freeze/50% water.

For details of recommended coolant specifications, please refer to the Operation and Maintenance Manual (OMM) for this engine model.

Duct allowance

Maximum additional restriction to cooling airflow and resultant minimum airflow		
Ambient clearance 50% Glycol	Duct allowance (Pa)	m³/sec
60 (Hz)	60 (Hz)	60 (Hz)
54	125	15

- ✧ 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.

Fuel system

Type of injection	Unit injection
Fuel injection pump	Not applicable
Fuel injector	MEUI
Nozzle opening pressure	38 MPa
Maximum particle size	2 microns
Fuel lift pump type	Mechanical
Flow	420 litres/hour
Pressure	700 kPa
Maximum suction head	27 kPa
Maximum static pressure head	3.7 m
Maximum fuel temperature at lift pump inlet	79°C
Maximum fuel filter service interval	500 hours
Governor type	Electronic
Speed control conforms to	ISO 8528-5 class G3 steady state

Fuel specification

USAFed Off Highway	Low Sulfur Diesel ≤ 500 PPM Sulfur
Europe Off Highway	Low Sulfur Diesel ≤ 500 PPM Sulfur

Note: For further information on fuel specifications and restrictions, refer to the OMM fuels section for this engine model.

Fuel consumption

Power rating %	716 kWm @ 1800 rpm Prime	
	g/kWh	litres/hour
25	230	58
50	215	96
75	212	137
100	212	181
110	212	198

Cold start recommendations

Minimum battery cold cranking amps

Minimum starting temperature	Grade of engine lubrication oil	SAEJ537 Cold Cranking amps	Starting Aids
-0°C	15W-40	1400	None
-5°C	15W-40	1400	Jacket water heater to 45°C
-10°C	15W-40	1400	Jacket water heater to 45°C
-15°C	0W-30	1400	Jacket water heater to 45°C
-20°C	0W-30	1400	Jacket water heater to 45°C
-25°C	0W-30	1400	Jacket water heater to 45°C

Notes:

- for cable sizes see applications and installation manual
- jacket water heater needed below 0°C

Alternator

Pole No.	4-Pole
Exciter Type	Single bearing, Brushless, Self-excited
Power factor	0.8
Voltage adjust range	± 5%
Insulation Grade	H
Protection Grade	IP23/22
Phase / wire	3 phase 4 wires

Control Panel



The control module gives digital readouts of:

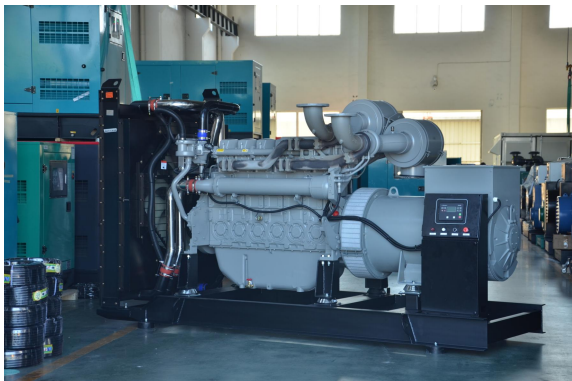
Generator voltage;
Output frequency;
Engine speed;
Battery voltage;
Engine hours run.

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



Dimension:4600*1800*2300mm
Weight:6200kg

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



Dimension:5800*2300*2500mm
Weight:10100kg
Fuel Tank Capacity:1200L

Jiangsu Jianghao Generator Co.,Ltd

Address: No.1 Xixu Road, Medical High-tech Zone,
Taizhou city, Jiangsu, China

Contact Person: Anthony Feng

Email: jhfsale@jhgenerator.com

WhatsApp: +86 18652649673

