



## Genset

Model	JHP5-1800GF
Voltage	230/400V
Frequency&Speed	50HZ;1500RPM
Prime Power	1800kW/2250kVA
Standby Power	2000kW/2500kVA

The Perkins® 4000 Series family of 6, 8, 12 and 16 cylinder diesel engines was designed in advance of today's uncompromising demands within the power generation industry and includes superior performance and reliability.

The 4016-61TRG3 is a turbocharged, air-to-water charge-cooled, 16 cylinder diesel engine.

Its premium design and specification features provide economic and durable operation as well as exceptional power to weight ratio, improved serviceability, low gaseous emissions, overall performance and reliability essential to the power generation market. The 4016-61TRG3 is specially tuned for improved load acceptance response in standby duty.



➤ **Engine: Perkins 4016-61TRG3**

➤ **Alternator: Stamford/Leroy Somer  
/Hengsheng**

➤ **Controller: DeepSea/SmartGen  
/DEIF/ComAp**

### Specification

Number of cylinders	16 60° Vee form			
Bore and stroke	160 x 190 mm		6.3 x 7.5 in	
Displacement	61.123 litres		3730 in³	
Aspiration	Quad turbocharged, air to water charge cooled			
Cycle	4 stroke			
Combustion system	Direct injection			
Compression ratio	13:1			
Rotation	Anti-clockwise, viewed from flywheel end			
Total lubricating capacity	237.2 litres		62.7 US gal	
Cooling system	Water-cooled			
	Temperate		Tropical	
Total coolant capacity	260 litres	68.7 US gal	270 litres	71.3 US gal

### Engine package weights and dimensions

	Temperate		Tropical	
Length	4542 mm	179 in	4562 mm	180 in
Width	2185 mm	86 in	2185 mm	86 in
Height	3175 mm	125 in	3736 mm	147 in
Weight (dry)	5570 kg	12280 lb	5570 kg	12280 lb

### Technical information

#### Air inlet

- Mounted air filter and turbocharger

#### Fuel system

- Direct fuel injection system with fuel lift pump
- Digital governing to ISO 8528-5 class G2 with isochronous capability
- Full-flow spin-on filters

Speed rpm	Type of operation	Typical generator output (Net)		Engine power			
				Gross		Net	
		kVA	kWe	kWm	hp	kWm	hp
1500	Baseload power	1800	1440	1600	2144	1500	2010
	Prime power	2250	1800	1975	2647	1875	2513
	Standby power	2500	2000	2183	2925	2083	2791

The above ratings represent the engine performance capabilities within plus or minus 3% at the reference conditions equivalent to those specified in ISO 8528/1, ISO 3046/1, BS 5514/1.

Ratings conditions: 25°C air inlet temperature, barometer pressure 100 kPa, relative humidity 30%. Please consult your distributor or the factory for ratings in ambient conditions. Note: For full ratings please refer to Perkins Engines Company Limited. All electrical ratings are based on an average alternator efficiency and a power factor of 0.8. Fuel specification: BS 2869 Class A1 + A2 or ASTM D975 No 2D.

#### Rating definitions

Continuous baseload: Power available for continuous full load operation. No overload is permitted. Prime power: power available for variable load with an average load factor not exceeding 80% of the prime power rating in any 24 hour period. Overload of 10% permitted for 1 hour in every 12 hours operation. Standby (maximum): Power available at variable load in the event of a main power network failure for a maximum of 500 hours per year. No overload is permitted.

Percent of prime power	Fuel consumption at 1500 rpm g/kWh	Fuel consumption at 1500 rpm l/hr
Standby power	209	529
Prime power	205	470
Baseload power	200	371
75%	200	344
50%	204	234
25%	220	126

#### Lubrication system

- Wet full aluminium sump with filler and dipstick
- Full flow spin-on oil filters

#### Cooling system

- Two twin thermostats
- System designed for ambient temperatures of up to 50°C
- Raw water pump

#### Electrical equipment

- 24V starter motor and 24V alternator with integral regulator and DC output
- Turbine inlet temperature protection
- Twin high coolant temperature protection switch
- Twin low oil pressure protection switch

#### Flywheel and housing

- Flywheel to SAE J620 Size 18
- SAE 0 flywheel housing

#### Optional equipment

- 4 metre wiring harness
- Secondary electric start
- Immersion heater
- Single exhaust outlet pipe
- Exhaust counter flanges
- Temperate radiator kit
- 21" flywheel
- Removal of raw water pump

## 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

- ✧ 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.

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:7000\*2720\*3000mm

Weight:14000kg

Fuel Tank Capacity:1000-3000L

No silent type

**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**

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

Contact Person: Anthony Feng

Email: [jhfsale@jhgenerator.com](mailto:jhfsale@jhgenerator.com)

WhatsApp: +86 18652649673

