

**MODEL: HC-1800GF** **400V | 1500rpm | 50Hz**



<b>ESP</b> Standby Power	<b>1812.5 kVA</b>	<b>PRP</b> Prime Power	<b>1650 kVA</b>
<b>ENGINE</b>	<b>Perkins</b> <b>4012-46TAG3A</b>	<b>ALTERNATOR</b>	<b>STAMFORD</b> <b>S7L1D-D4</b>

### GENERAL FEATURES

Engine: Perkins 4012-46TAG3A	Alternator: single bearing, IP23, insulation class H
40°C radiator, fans are driven by belt, with safety guard	Dry type air filter, fuel filter & oil filter
Vibration damper	Standard control panel
24V charging alternator	Exhaust bellows, elbows, flange & muffler
Lead-acid batteries, rack and cables	User manual

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Voltage	Hz	Phase	PF ( COSΦ )	Standby Amps	Standby Ratings (kW / kVA)	Prime Ratings (kW / kVA)
440/254	50	3	0.8	2378	1450kW/1812.5kVA	1320kW/1650kVA
415/240	50	3	0.8	2522	1450kW/1812.5kVA	1320kW/1650kVA
400/230	50	3	0.8	2616	1450kW/1812.5kVA	1320kW/1650kVA
380/220	50	3	0.8	2754	1450kW/1812.5kVA	1320kW/1650kVA

Prime Power (PRP): Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820 (eqv ISO 8528) ; A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

Standby Power Rating (ESP): The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

**SALES PROMISES**

HiChai Power provides a full line of brand new and high quality products. Each and every unit is strictly factory tested.

Warranty is according to our standard conditions: One year after installation or 1000 running hours (accumulated), whichever comes first.

Service and parts are available from HiChai Power or distributors in your location.

**MODEL: HC-1800GF****400V | 1500rpm | 50Hz****ENGINE SPECIFICATION**

Manufacturer / Model	Perkins 4012-46TAG3A
Air intake system	Turbocharged
Fuel system	Direct Injection
Cylinder arrangement	12 in V
Displacement	46L
Bore and stroke	160×190 mm
Compression ratio	13:1
Rated speed	1500rpm
Max. Standby power at rated speed	1643kW
Governor type	Electronic

**Exhaust System**

Exhaust gas flow	350 m <sup>3</sup> /min
Exhaust temperature	480°C
Max back pressure	5kPa

**Air Intake System**

Max intake restriction	4kPa
Combustion air flow	135 m <sup>3</sup> /min
Air flow required for radiator	2100 m <sup>3</sup> /min

**MODEL: HC-1800GF****400V | 1500rpm | 50Hz****Fuel System**

Fuel consumption @ 100% (Prime Power) Load	208 g/kWh	354L/h
Fuel consumption @ 75% (Prime Power) Load	206 g/kWh	265L/h
Fuel consumption @ 50% (Prime Power) Load	202 g/kWh	179L/h

**Oil System**

Total oil capacity	177L
Oil consumption	0.52g/kWh
Oil sump capacity	115-158L

**Cooling System**

Coolant capacity	240L
Max water temperature	98°C

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## ALTERNATOR SPECIFICATION

Industrial alternators meet the requirements of the relevant parts of the BS5000, VDE 0530, NEMA MG1-22, IEC34, CSA 22.2-100 and AS1359.

### Alternator Data

Number of Phase	3
Connecting Type	3 Phase and 4 Wires, Y type connecting
Number of Bearing	1
Power Factor	0.8
Protection Class	IP23
Altitude	≤1000m
Exciter Type	Brushless exciting
Insulation Class/Temperature Rise	H/H
Telephone Influence Factor (TIF)	<50
THF	<2%
Alternator Capacity	1650kVA
Alternator Efficiency	95.5%

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**GENERATING SET DATA**

Related range of voltage setting	$\geq \pm 5\%$
Steady-state voltage deviation	$\leq \pm 1\%$
Transient voltage deviation (100 % sudden power decrease)	$\leq +25\%$
Transient voltage deviation (sudden power increase)	$\leq -20\%$
Voltage recovery time (100 % sudden power decrease)	$\leq 6S$
Voltage recovery time (sudden power increase)	$\leq 6S$
Related range of frequency setting	0-5% adjustable
Steady-state frequency band	$\leq 1.5\%$
Transient frequency deviation (100 % sudden power decrease)	$\leq +12\%$
Transient frequency deviation (sudden power increase)	$\leq -10\%$
Frequency recovery time (100 % sudden power decrease)	$\leq 5S$
Frequency recovery time (sudden power increase)	$\leq 5S$

**STANDARD FEATURES**

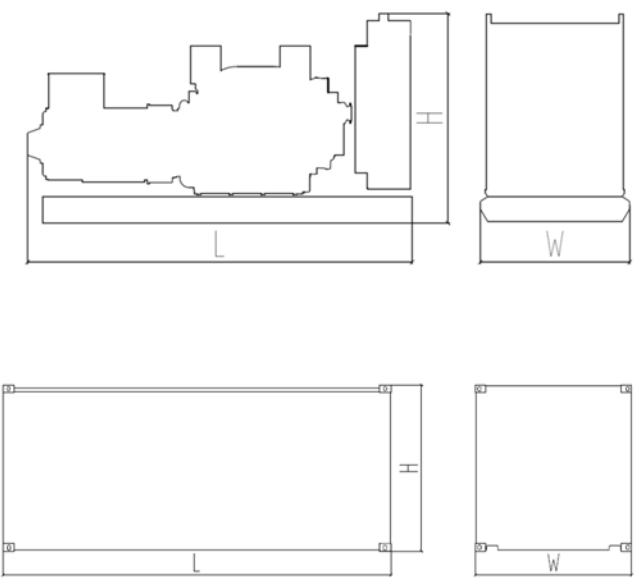
Standard auto control system	Exhaust system (including until muffler)	Documents
Oil drain valve	Starting batteries (maintenance-free & watering-free) with connective wires	

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**OPTIONS**

Daily fuel tank	Rainproof type	Remote control panel
Alternator heater	Soundproof type	Paralleling system
Spare parts	Trailer type	Switch box
Automatic transfer switch		

**DIMENSIONS & WEIGHT**



<b>Standard Configuration (open type)</b>
Overall Dimensions: 5040×2170×2850 mm
Weight: 12800 kg
<b>Soundproof Type (standard 20'ft HQ container)</b>
Overall Dimensions: 6058×2438×2896 mm
Weight: 17800 kg

Specifications are subject to change without notice.