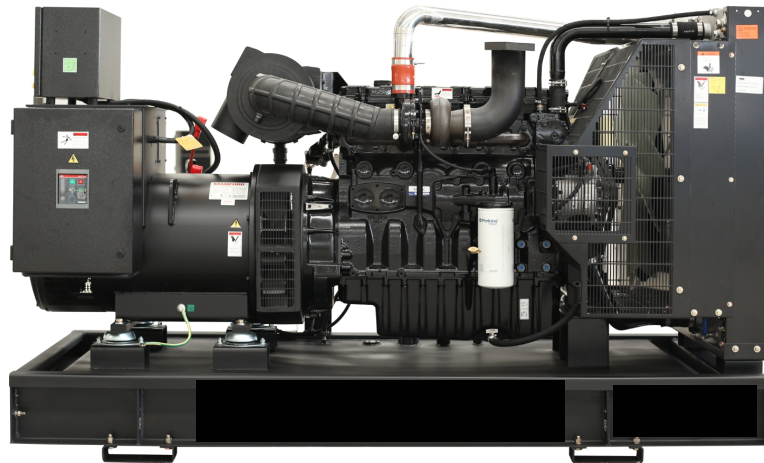


**MODEL: HC-450GF**

**400V | 1500rpm | 50Hz**



<b>ESP</b> Standby Power	<b>450 kVA</b>	<b>PRP</b> Prime Power	<b>400 kVA</b>
<b>ENGINE</b>	<b>Perkins</b>	<b>ALTERNATOR</b>	<b>STAMFORD</b>
	<b>2206C-E13TAG3</b>		<b>S4L1D-F41</b>

## GENERAL FEATURES

Engine: Perkins 2206C-E13TAG3

Alternator: single bearing, IP23, insulation class H

50°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

**MODEL: HC-450GF****400V | 1500rpm | 50Hz****GENERATOR RATINGS**

Voltage	Hz	Phase	PF ( COS $\Phi$ )	Standby Amps	Standby Ratings (kW / kVA)	Prime Ratings (kW / kVA)
440/254	50	3	0.8	590	360kW/450kVA	320kW/400kVA
415/240	50	3	0.8	626	360kW/450kVA	320kW/400kVA
400/230	50	3	0.8	650	360kW/450kVA	320kW/400kVA
380/220	50	3	0.8	684	360kW/450kVA	320kW/400kVA

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.

Comprehensive Solutions For

**POWER GENERATION**

**MODEL: HC-450GF****400V | 1500rpm | 50Hz****ENGINE SPECIFICATION**

Manufacturer / Model	Perkins 2206C-E13TAG3
Air intake system	Turbocharged, air to air charge cooling
Fuel system	MEUI
Cylinder arrangement	6 in line
Displacement	12.5L
Bore and stroke	130×157 mm
Compression ratio	16.3:1
Rated speed	1500rpm
Max. Standby power at rated speed	412.5KW
Governor type	Electronic

**Exhaust System**

Exhaust gas flow	75.8 m <sup>3</sup> /min
Exhaust temperature	630°C
Max back pressure	10kPa

**Air Intake System**

Max intake restriction	6.4kPa
Combustion air flow	27.4 m <sup>3</sup> /min
Air flow required for radiator	563 m <sup>3</sup> /min

Comprehensive Solutions For

**POWER GENERATION**

**MODEL: HC-450GF**

**400V | 1500rpm | 50Hz**

**Fuel System**

Fuel consumption @ 100% (Prime Power) Load	206 g/kWh	86.6 L/h
Fuel consumption @ 75% (Prime Power) Load	210 g/kWh	66.4 L/h
Fuel consumption @ 50% (Prime Power) Load	218 g/kWh	47.1 L/h

**Oil System**

Total oil capacity	40L
Oil consumption ratio based on fuel consumption data	0.1%(As a percentage of fuel consumption)
Oil sump capacity	32.5~38L

**Cooling System**

Coolant capacity	51.4L
Max water temperature	104°C

**MODEL: HC-450GF****400V | 1500rpm | 50Hz**

## 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	415kVA
Alternator Efficiency	93.2%

**MODEL: HC-450GF**

**400V | 1500rpm | 50Hz**

### 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)	$\leq +20\%$
Transient voltage deviation (sudden power increase)	$\leq -15\%$
Voltage recovery time (100 % sudden power decrease)	$\leq 4S$
Voltage recovery time (sudden power increase)	$\leq 4S$
Related range of frequency setting	0-5% adjustable
Steady-state frequency band	$\leq 0.5\%$
Transient frequency deviation (100 % sudden power decrease)	$\leq +10\%$
Transient frequency deviation (sudden power increase)	$\leq -7\%$
Frequency recovery time (100 % sudden power decrease)	$\leq 3S$
Frequency recovery time (sudden power increase)	$\leq 3S$

### STANDARD FEATURES

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

**MODEL: HC-450GF**

**400V | 1500rpm | 50Hz**

## 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



### Standard Configuration (open type)

Overall Dimensions: 3100×1120×1788 mm

Weight: 3200 kg



### Soundproof Type

Overall Dimensions: 4230×1460×2150 mm

Weight: 4550 kg

*Specifications are subject to change without notice.*