

**MODEL: HC-110GF**

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



<b>ESP</b> Standby Power	<b>110 kVA</b>	<b>PRP</b> Prime Power	<b>100 kVA</b>
<b>ENGINE</b>	<b>Perkins</b>	<b>ALTERNATOR</b>	<b>STAMFORD</b>
	<b>1104C-44TAG2</b>		<b>UCI274C1</b>

### GENERAL FEATURES

Engine: Perkins 1104C-44TAG2	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

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### GENERATOR RATINGS

Voltage	Hz	Phase	PF ( COSΦ )	Standby Amps	Standby Ratings (kW / kVA)	Prime Ratings (kW / kVA)
440/254	50	3	0.8	144	88kW/110kVA	80kW/100kVA
415/240	50	3	0.8	153	88kW/110kVA	80kW/100kVA
400/230	50	3	0.8	159	88kW/110kVA	80kW/100kVA
380/220	50	3	0.8	167	88kW/110kVA	80kW/100kVA

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-110GF****400V | 1500rpm | 50Hz****ENGINE SPECIFICATION**

Manufacturer / Model	Perkins 1104C-44TAG2
Air intake system	Turbocharged, air to air charge cooled
Fuel system	Direct Injection
Cylinder arrangement	4 in line
Displacement	4.4L
Bore and stroke	105×127 mm
Compression ratio	18.23:1
Rated speed	1500rpm
Max. Standby power at rated speed	103KW
Governor type	Electronic

**Exhaust System**

Exhaust gas flow	16.3 m <sup>3</sup> /min
Exhaust temperature	543°C
Max back pressure	18kPa

**Air Intake System**

Max intake restriction	8kPa
Combustion air flow	6.27 m <sup>3</sup> /min
Air flow required for radiator	165.6 m <sup>3</sup> /min

Comprehensive Solutions For

**POWER GENERATION**

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**Fuel System**

Fuel consumption @ 100% (Prime Power) Load 22.6L/h

Fuel consumption @ 75% (Prime Power) Load 17.1L/h

Fuel consumption @ 50% (Prime Power) Load 11.8L/h

**Oil System**

Total oil capacity 8L

Oil consumption as a percentage of full load fuel consumption less than 0.15% (As a percentage of fuel consumption)

Oil sump capacity 5.5~7L

**Cooling System**

Coolant capacity 12.6L

Max water temperature 110°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	100kVA
Alternator Efficiency	90.3%

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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

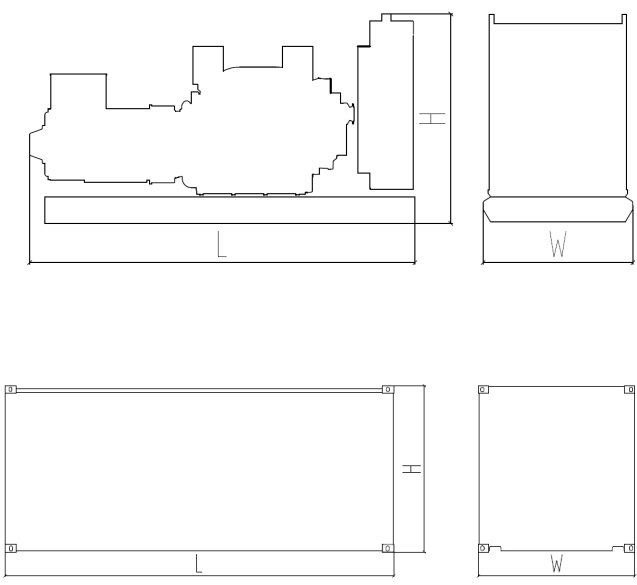
Standard auto control system	Exhaust system (including until muffler)	Documents
Oil drain valve	Starting batteries (maintenance-free & watering-free) with connective wires	MCCB
Base fuel tank		

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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: 2150 × 900 × 1550 mm
Weight: 1300 kg
<b>Soundproof Type</b>
Overall Dimensions: 2810 × 1140 × 1830 mm
Weight: 1800 kg

*Specifications are subject to change without notice.*