

MODEL: HC-165GF-60

440V | 1800rpm | 60Hz



ESP Standby Power	185kVA	PRP Prime Power	168kVA
ENGINE	Perkins	ALTERNATOR	STAMFORD
	1106A-70TAG2		UCI274F1

GENERAL FEATURES

Engine: Perkins 1106A-70TAG2

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)
480/277	60	3	0.8	223	148kW/185kVA	134kW/168kVA
460/266	60	3	0.8	232	148kW/185kVA	134kW/168kVA
440/254	60	3	0.8	243	148kW/185kVA	134kW/168kVA
416/240	60	3	0.8	257	148kW/185kVA	134kW/168kVA

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.

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Manufacturer / Model	Perkins 1106A-70TAG2
Air intake system	Turbocharged and Air Charge Cooled
Fuel system	Direct Injection
Cylinder arrangement	6 in line
Displacement	7.01L
Bore and stroke	105×135 mm
Compression ratio	18.2
Rated speed	1800rpm
Max. Standby power at rated speed	171.8kW
Governor type	Electronic

Exhaust System

Exhaust gas flow	32.3 m ³ /min
Exhaust temperature	407°C
Max back pressure	6kPa

Air Intake System

Max intake restriction	5kPa
Combustion air flow	15 m ³ /min
Air flow required for radiator	282 m ³ /min

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Fuel consumption @ 100% (Prime Power) Load	205.1 g/kWh	36.9 L/h
Fuel consumption @ 75% (Prime Power) Load	208.4 g/kWh	28.4 L/h
Fuel consumption @ 50% (Prime Power) Load	202.1 g/kWh	19.0 L/h

Oil System

Total oil capacity	18L
Oil sump capacity	12.5-16.1L
Oil consumption at full load as a % of fuel consumption	< 0.1%

Cooling System

Coolant capacity	21L
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	190kVA
Alternator Efficiency	92.4%

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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

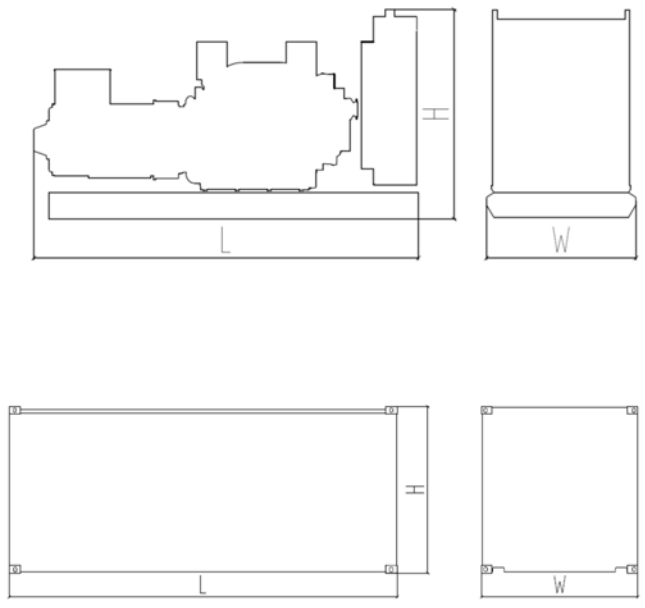
Standard auto control system	Exhaust system (including until muffler)	Documents
Oil drain valve	Starting batteries (maintenance-free & watering-free) with connective wires	MCCB
Base fuel tank		

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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



Standard Configuration (open type)
Overall Dimensions: 2410×930×1650 mm
Weight: 1600kg
Soundproof Type
Overall Dimensions: 3250×1170×1800 mm
Weight: 2400kg

Specifications are subject to change without notice.