

**MODEL: HC-450GF2**

**440V | 1800rpm | 60Hz**



<b>ESP</b> Standby Power	<b>500kVA</b>	<b>PRP</b> Prime Power	<b>455kVA</b>
<b>ENGINE</b>	<b>Volvo</b>	<b>ALTERNATOR</b>	<b>STAMFORD</b>
	<b>TAD1344GE</b>		<b>S4L1D-F41</b>

### GENERAL FEATURES

Engine: Volvo TAD1344GE

Alternator: single bearing, IP23, insulation class H

55°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 ( COS $\Phi$ )	Standby Amps	Standby Ratings (kW / kVA)	Prime Ratings (kW / kVA)
480/277	60	3	0.8	601	400kW/500kVA	364kW/455kVA
460/266	60	3	0.8	628	400kW/500kVA	364kW/455kVA
440/254	60	3	0.8	656	400kW/500kVA	364kW/455kVA
416/240	60	3	0.8	694	400kW/500kVA	364kW/455kVA

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**

Baifa 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: 15 months from the date BAIFA sold to the first buyer or one year after installation or 1000 running hours (accumulated), whichever comes first.

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

**MODEL: HC-450GF2****440V | 1800rpm | 60Hz****ENGINE SPECIFICATION**

Manufacturer / Model	Volvo TAD1344GE
Air intake system	Turbocharged, Air/Air inter cooling
Fuel system	Elec. Injection, Elec. Fuel System
Cylinder arrangement	6 in line
Displacement	12.78L
Bore and stroke	131×158 mm
Compression ratio	18.1
Rated speed	1800rpm
Max. Standby power at rated speed	431kW
Governor type	ECU EMS2

**Exhaust System**

Exhaust gas flow	82 m <sup>3</sup> /min
Exhaust temperature	490°C
Max back pressure	10kPa

**Air Intake System**

Max intake restriction	5kPa
Combustion air flow	33 m <sup>3</sup> /min
Air flow required for radiator	432 m <sup>3</sup> /min

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Fuel consumption @ 100% (Prime Power) Load	201g/kWh	96.6L/h
Fuel consumption @ 75% (Prime Power) Load	200g/kWh	72.4L/h
Fuel consumption @ 50% (Prime Power) Load	205g/kWh	50.8L/h

**Oil System**

Total oil capacity	36L
Oil consumption	0.05L/h
Oil sump capacity	19-30L

**Cooling System**

Coolant capacity	44L
Max water temperature	107°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	500kVA
Alternator Efficiency	93.2%

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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)	$\leq +20\%$
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

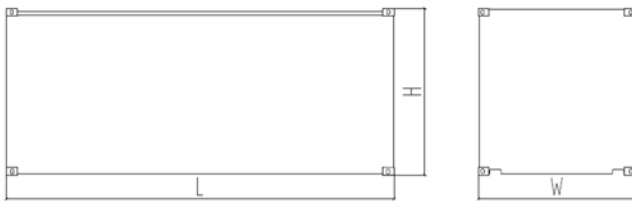
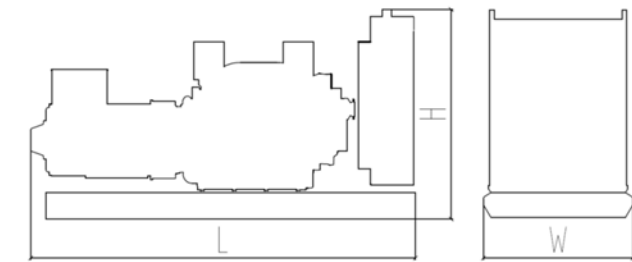
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**OPTIONS**

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: 3150×1200×1830 mm
Weight: 3000 kg
Soundproof Type
Overall Dimensions: 4090×1460×2150 mm
Weight: 4400 kg

*Specifications are subject to change without notice.*