

MODEL: BF-V109

400V | 1500rpm | 50Hz



ESP Standby Power	109 kVA	PRP Prime Power	100 kVA
ENGINE	VOLVO	ALTERNATOR	STAMFORD
	TAD531GE		UCI274C1

GENERAL FEATURES

Engine: VOLVO TAD531GE	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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GENERATOR RATINGS

Voltage	Hz	Phase	PF (COSΦ)	Standby Amps	Standby Ratings (kW / kVA)	Prime Ratings (kW / kVA)
440/254	50	3	0.8	143	87/109	80/100
415/240	50	3	0.8	151	87/109	80/100
400/230	50	3	0.8	157	87/109	80/100
380/220	50	3	0.8	165	87/109	80/100

Prime Power (PRP): Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820 (eqv ISO8528) ; 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.

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Manufacturer / Model	VOLVO/TAD531GE
Air intake system	Turbocharged, Air/Air inter cooling
Fuel system	Directly Injection Fuel System, Bosch Pump
Cylinder arrangement	4 in line
Displacement	4.76L
Bore and stroke	108*130 (mm)
Compression ratio	18
Rated speed	1500rpm
Max. Standby power at rated speed	98KW/133HP (with fan)
Governor type	Heinzman Mechanical Governor

Exhaust System

Exhaust gas flow	18.4 m ³ / min
Exhaust temperature	557°C
Max back pressure	5 kPa

Air Intake System

Max intake restriction	3.5 kPa
Combustion air flow	6.09 m ³ /min
Air flow required for radiator	96 m ³ /min



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Fuel System

Fuel consumption @ 100% (Prime Power) Load	218 g/kWh	22.7 L/h
Fuel consumption @ 75% (Prime Power) Load	218 g/kWh	16.8 L/h
Fuel consumption @ 50% (Prime Power) Load	225 g/kWh	11.5 L/h

Oil System

Total oil capacity	13L
Oil consumption	0.08L/h
Oil sump capacity	9~11L

Cooling System

Coolant capacity	20 L
Max water temperature	105°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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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	Special coolant
Base fuel tank	MCCB	

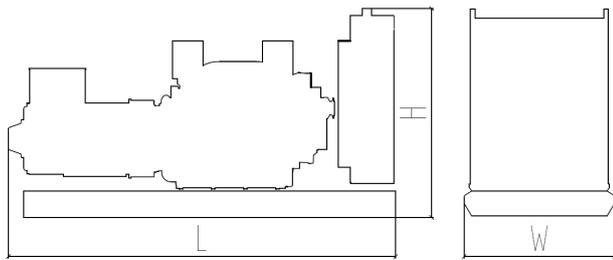
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OPTIONS

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

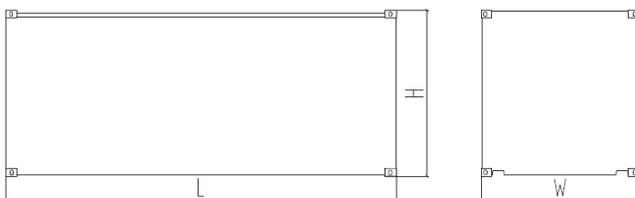
DIMENSIONS & WEIGHT



Standard Configuration (open type with base fuel tank)

Overall Dimensions: 2150×950×1550 mm

Weight: 1350 kg



Soundproof Type

Overall Dimensions: 2810×1140×1830 mm

Weight: 1900 kg

Specifications are subject to change without notice.

BAIFA POWER (WUXI) LTD.

WEBSITE: WWW.BAIFAPOWER.COM

EMAIL: MARKETING@BAIFAPOWER.COM

TEL: +86-510-85342633

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