

GENERATOR SET | TECHNICAL SHEETS



400V | 1500rpm | 50Hz

MODEL: BF-V500-III



ESP Standby Power	500 kVA	PRP Prime Power	450 kVA
ENGINE	VOLVO	ALTERNATOR	STAMFORD
ENGINE	TAD1650GE	ALIERNAIUN	S4L1D-G41

GENERAL FEATURES	
Engine: VOLVO TAD1650GE, certified for China Stage III emission standard	Alternator: single bearing, IP23, insulation class H
$55^\circ\!\mathbb{C}$ 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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MODEL: BF-V500-Ⅲ

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GENERATOR RATINGS

Voltage	Hz	Phase	ΡF (COSΦ)	Standby Amps	Standby Ratings (kW / kVA)	Prime Ratings (kW / kVA)
440/254	50	3	0.8	656	400/500	360/450
415/240	50	3	0.8	695	400/500	360/450
400/230	50	3	0.8	721	400/500	360/450
380/220	50	3	0.8	759	400/500	360/450

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.



ENGINE SPECIFICATION



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Manufacturer / Model	VOLVO TAD1650GE
Air intake system	Turbo, Air/Air Cooling
Fuel system	Common-rail fuel injection system
Cylinder arrangement	6 in line
Displacement	16.12L
Bore and stroke	144×165 (mm)
Compression ratio	16.5
Rated speed	1500rpm
Max. Standby power at rated speed	433KW/589HP (with fan)
Governor type	EMS2.2
Exhaust System	
Exhaust gas flow	78 m³/min
Exhaust temperature	511 ℃
Max back pressure	10kPa

Air Intake System	
Max intake restriction	5kPa
Combustion air flow	30 m ³ /min
Air flow required for radiator	480 m ³ /min

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Fuel System

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Fuel consumption @ 100% (Prime Power) Load	202 g/kWh	91.7 L/h
Fuel consumption @ 75% (Prime Power) Load	204 g/kWh	68.9 L/h
Fuel consumption @ 50% (Prime Power) Load	212 g/kWh	47.7 L/h
Oil System		
Total oil capacity	48L	
Oil consumption	0.1L/h	
Oil sump capacity	32~42L	
Cooling System		

Coolant capacity	60L
Max water temperature	107 ℃







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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	450kVA
Alternator Efficiency	93.3%

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GENERATING SET DATA

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GENERATING SET DATA	
Related range of voltage setting	≥±5%
Steady-state voltage deviation	≤±1%
Transient voltage deviation (100 % sudden power decrease)	≤+20%
Transient voltage deviation (sudden power increase)	≤-15%
Voltage recovery time (100 % sudden power decrease)	≤4S
Voltage recovery time (sudden power increase)	≤4S
Related range of frequency setting	0-5% adjustable
Steady-state frequency band	≤0.5%
Transient frequency deviation (100 % sudden power decrease)	≤+10%
Transient frequency deviation (sudden power increase)	≤-7%
Frequency recovery time (100 % sudden power decrease)	≤3S
Frequency recovery time (sudden power increase)	≤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	Special coolant

MCCB

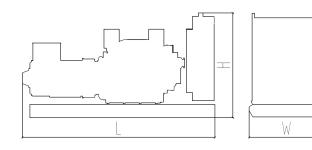




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OPTIONS		
Daily fuel tank	Rainproof type	Remote control panel
Alternator heater	Soundproof type	Paralleling system
Spare parts	Trailer type	Switch box
Automatic transfer switch		

DIMENSIONS & WEIGHT



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Standard Configuration (open type)

Overall Dimensions: 3300×1200×2100 mm

Weight: 3500 kg

Standard Configuration (with base fuel tank)

Overall Dimensions: 3300×1200×2100 mm Weight: 3700 kg

Soundproof Type

Overall Dimensions: 4630×1660×2250 mm

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Weight: 5200 kg

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Specifications are subject to change without notice.

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