

GENERATOR SET | TECHNICAL SHEETS

400V | 1500rpm | 50Hz

CE 💽

MODEL: BF-P50



ESP Standby Power	50 kVA	PRP Prime Power	45 kVA
ENGINE	Perkins	ALTERNATOR	STAMFORD
ENGINE	1103A-33TG1	ALIERNAIUN	S1L2-N1

GENERAL FEATURES

Engine: Perkins 1103A-33TG1	Alternator: single bearing, IP23, insulation class H
$50^\circ\!\!\mathrm{C}$ 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	Р F (СОЅФ)	Standby Amps	Standby Ratings (kW / kVA)	Prime Ratings (kW / kVA)
440/254	50	3	0.8	66	40kW/50kVA	36kW/45kVA
415/240	50	3	0.8	70	40kW/50kVA	36kW/45kVA
400/230	50	3	0.8	72	40kW/50kVA	36kW/45kVA
380/220	50	3	0.8	76	40kW/50kVA	36kW/45kVA

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.





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ENGINE SPECIFICATION

Manufacturer / Model	Perkins 1103A-33TG1
Air intake system	Turbocharged
Fuel system	Direct Injection
Cylinder arrangement	3 in line
Displacement	3.3L
Bore and stroke	105×127 mm
Compression ratio	17.25:1
Rated speed	1500rpm
Max. Standby power at rated speed	46.5KW
Governor type	Mechanical
Exhaust System	
Exhaust gas flow	7.7 m ³ /min
Exhaust temperature	537 °C

Exhauertemperature	
Max back pressure	

Air Intake System	
Max intake restriction	8kPa
Combustion air flow	3.1 m ³ /min
Air flow required for radiator	53 m³/min

10kPa

Comprehensive Solutions For **POWER GENERATION**



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Fuel System		
Fuel consumption @ 100% (Prime Power) Load	211 g/kWh	10.3 L/h
Fuel consumption @ 75% (Prime Power) Load	216 g/kWh	7.9 L/h
Fuel consumption @ 50% (Prime Power) Load	235.4 g/kWh	5.8 L/h
Oil System		
Total oil capacity	8.3L	
Oil consumption as a percentage of full load fuel consumption less than	0.15% (As a percentage of fuel consumption)	
Oil sump capacity	6.2-7.8L	
Cooling System		
Coolant capacity	10.2L	
Max water temperature	110 ℃	





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ALTERNATOR SPECIFICATION

Industrial alternators meet the requirements of the relevant parts of the BS5000, VDE 0530, NEMA MG1-22,

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	45kVA
Alternator Efficiency	88.7%





GENERATING SET DATA

Related range of voltage setting	≥±5%
Steady-state voltage deviation	≤±1%
Transient voltage deviation (100 % sudden power decrease)	≤+25%
Transient voltage deviation (sudden power increase)	≤-20%
Voltage recovery time (100 % sudden power decrease)	≤6S
Voltage recovery time (sudden power increase)	≤6S
Related range of frequency setting	0-5% adjustable
Steady-state frequency band	≤1.5%
Transient frequency deviation (100 % sudden power decrease)	≤+12%
Transient frequency deviation (sudden power increase)	≤-10%
Frequency recovery time (100 % sudden power decrease)	≤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





Specifications are subject to change without notice.

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Comprehensive Solutions For **POWER GENERATION**

Standard Configuration (open type)

Overall Dimensions: 1760×760×1380 mm

Weight: 900 kg

Soundproof Type

Overall Dimensions: 2440×1060×1680 mm

Weight: 1250 kg

