

**MODEL: BF-C90Q**

**400V | 1500rpm | 50Hz**



<b>ESP</b> Standby Power	<b>90 kVA</b>	<b>PRP</b> Prime Power	<b>80 kVA</b>
<b>ENGINE</b>	<b>DCEC Cummins</b>	<b>ALTERNATOR</b>	<b>STAMFORD</b>
	<b>QSB3.9-G3</b>		<b>UCI224G1</b>

**GENERAL FEATURES**

Engine: DCEC Cummins QSB3.9-G3

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)
440/254	50	3	0.8	118	72/90	64/80
415/240	50	3	0.8	125	72/90	64/80
400/230	50	3	0.8	130	72/90	64/80
380/220	50	3	0.8	137	72/90	64/80

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: BF-C90Q****400V | 1500rpm | 50Hz****ENGINE SPECIFICATION**

Manufacturer / Model	Cummins QSB3.9-G3
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Air intake system	Turbocharged
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Fuel system	Common rail
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Cylinder arrangement	4 in line
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Displacement	3.9L
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Bore and stroke	102×120 mm
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Compression ratio	17.3
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Rated speed	1500rpm
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Max. Standby power at rated speed	88kW/118hp
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Governor type	Electronic
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**Exhaust System**

Exhaust gas flow	10.98 m <sup>3</sup> /min
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Exhaust temperature	430 °C
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Max back pressure	10kPa
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**Air Intake System**

Max intake restriction	6.2kPa
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Combustion air flow	5.28 m <sup>3</sup> /min
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Air flow required for radiator	158 m <sup>3</sup> /min
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Comprehensive Solutions For

**POWER GENERATION**



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**Fuel System**

Fuel consumption @ 100% (Prime Power) Load	214 g/kWh	18.4 L/h
Fuel consumption @ 75% (Prime Power) Load	234 g/kWh	15.1 L/h
Fuel consumption @ 50% (Prime Power) Load	249 g/kWh	10.9 L/h

**Oil System**

Total oil capacity	11L
Oil consumption	≤4g/kwh
Oil sump capacity	10.9L

**Cooling System**

Coolant capacity	27L
Max water temperature	104°C



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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	85kVA
Alternator Efficiency	90.2%

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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)	$\leq +20\%$
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	Special tools
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		

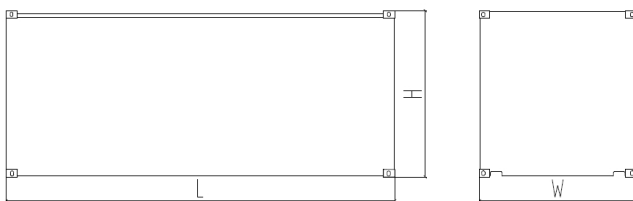
**DIMENSIONS & WEIGHT**



**Standard Configuration (open type with base fuel tank)**

Overall Dimensions: 2100×900×1500 mm

Weight: 1230 kg



**Soundproof Type**

Overall Dimensions: 2810×1140×1830 mm

Weight: 1700 kg

*Specifications are subject to change without notice.*

**BAIFA POWER (WUXI) LTD.**

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**POWER GENERATION**

