

MODEL: BF-C500DQ-60

440V | 1800rpm | 60Hz



ESP	500kVA	PRP	460kVA
ENGINE	DCEC Cummins	ALTERNATOR	STAMFORD
	QSZ13-G3		S4L1D-F41

GENERAL FEATURES

Engine: DCEC Cummins QSZ13-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)
480/277	60	3	0.8	601	400kW/500kVA	368kW/460kVA
460/266	60	3	0.8	628	400kW/500kVA	368kW/460kVA
440/254	60	3	0.8	656	400kW/500kVA	368kW/460kVA
416/240	60	3	0.8	694	400kW/500kVA	368kW/460kVA

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 DCEC Cummins QSZ13-G3

Air intake system Turbocharged, Air/Air Cooling

Fuel system High pressure common rail

Cylinder arrangement 6 in line

Displacement 13L

Bore and stroke 130×163 mm

Compression ratio 17

Rated speed 1800rpm

Max. Standby power at rated speed 500kW

Governor type Electronic

Exhaust System

Exhaust gas flow 95 m³/min

Exhaust temperature 506°C

Max back pressure 13kPa

Air Intake System

Max intake restriction 6.2kPa

Combustion air flow 38.3 m³/min

Air flow required for radiator 612 m³/min



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Fuel System

Fuel consumption @ 100% (Prime Power) Load	199g/kWh	97.8L/h
Fuel consumption @ 75% (Prime Power) Load	193g/kWh	71.7L/h
Fuel consumption @ 50% (Prime Power) Load	194g/kWh	49.7L/h

Oil System

Total oil capacity	45.4L
Oil sump capacity	N/A

Cooling System

Coolant capacity	73L
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	$\geq \pm 5\%$
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Steady-state voltage deviation	$\leq \pm 1\%$
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Transient voltage deviation (100 % sudden power decrease)	$\leq +25\%$
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Transient voltage deviation (sudden power increase)	$\leq -20\%$
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Voltage recovery time (100 % sudden power decrease)	$\leq 6S$
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Voltage recovery time (sudden power increase)	$\leq 6S$
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Related range of frequency setting	0-5% adjustable
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Steady-state frequency band	$\leq 1.5\%$
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Transient frequency deviation (100 % sudden power decrease)	$\leq +12\%$
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Transient frequency deviation (sudden power increase)	$\leq -10\%$
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Frequency recovery time (100 % sudden power decrease)	$\leq 5S$
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Frequency recovery time (sudden power increase)	$\leq 5S$
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STANDARD FEATURES

Standard auto control system	Exhaust system (including until muffler)	Documents
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Oil drain valve	Starting batteries (maintenance-free & watering-free) with connective wires	MCCB
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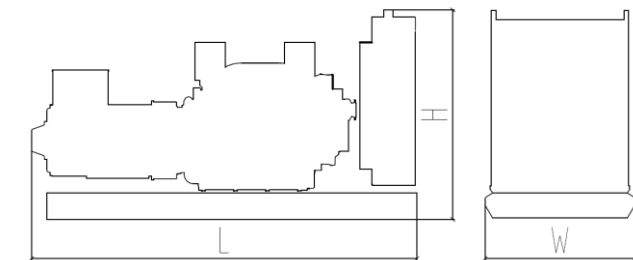
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OPTIONS

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

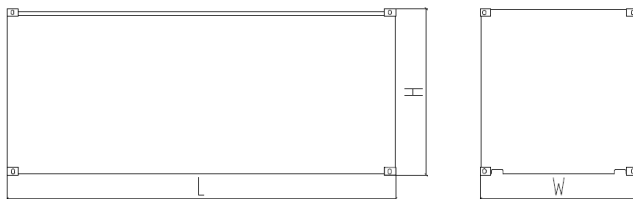
DIMENSIONS & WEIGHT



Standard Configuration (open type)

Overall Dimensions: 3200×1400×2100 mm

Weight: 3030 kg



Soundproof Type

Overall Dimensions: 4630×1660×2250 mm

Weight: 4450 kg

Specifications are subject to change without notice.

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