

MODEL	BF-C103
Standby Power (50Hz)	82KW / 102KVA
Prime Power (50Hz)	75KW / 94KVA

Standard Features

General Features:

Engine (DCEC Cummins 6BT5.9-G1)

Radiator 50°C max, fans are driven by belt, with safety guard

24V charge alternator

Alternator: single bearing alternator IP23, insulation

class H/H Absorber

Dry type air filter, fuel filter, oil filter

Main line circuit breaker

Standard control panel

Two12V batteries, rack and cable

Ripple flex exhaust pipe, exhaust siphon, flange,

muffler

User manual



PHOTO FOR REFERENCE ONLY

Generator Ratings

Voltage	HZ	Phase	P.F (COS¢)	Standby Amps	Standby Ratings (KW/KVA)	Prime Ratings (KW/KVA)
440/254	50	3	0.8	135	82/102	75/94
415/240	50	3	0.8	143	82/102	75/94
400/230	50	3	0.8	148	82/102	75/94
380/220	50	3	0.8	156	82/102	75/94

Prime Power (PRP): Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97 (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: a, 15 months, counted on the day BAIFA sold to the first buyer; b, One year after installation; c, 1000 running hours (accumulated); subject to the earlier one. Service and parts are available from Baifa Power or distributors in your location.



FNGINF DATA

Manufacturer / Model: DCEC Cummins 6BT5.9-G1, 4-cycle

Air Intake System: Turbo

Fuel System: A/AD type fuel pump

Cylinder Arrangement: 6 in line

Displacement: 5.9L

Bore and Stroke: 102*120 (mm)

Compression Ratio: 17.5:1

Rated RPM: 1500rpm

Max. Standby Power at Rated RPM: 92KW/125HP

Governor Type: RSV Mechanical

Exhaust System

Exhaust Gas Flow: 16.8m³/min

Exhaust Temperature: 565° C

Max Back Pressure: 10kPa

Air Intake System

Max Intake Restriction: 6.35kPa

Burning Capacity: 6.48m³/min

Air Flow: 158m³/min

Fuel System

100%(Prime Power) Load: 214 g/Kw.h

75%(Prime Power) Load: 216 g/Kw.h

50%(Prime Power) Load:: 217 g/Kw.h

100%(Prime Power) Load: 21 L/h

Oil System

Total Oil Capacity: 16.4L

Oil Consumption: ≤4g/kwh

Engine Oil Tank Capacity: 14.2L

Oil Pressure at Rated RPM: 345kPa

Cooling System

Total Coolant Capacity: 27L

Thermostat: 82-95℃

Max Water Temperature: 104° C



ALTERNATOR SPECIFICATION

GENERAL DATA

Compliance with GB755, BS5000, VDE0530, NEMAMG1-22, IED34-1, CSA22.2 and AS1359 standards.

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 Grade: IP23

Altitude: ≤1000m

Exciter Type: Brushless, self-exciting

Insulation Class, Temperature Rise: H/H

Telephone Influence Factor (TIF): <50

THF: <2%

Voltage Regulation, Steady State: ≤±1%

Alternator Capacity: 100KVA

Alternator Efficiencies: 91.4%

Air Cooling Flow: 0.514m³/s

GENERATING SET DATA

Voltage Regulation: ≥±5%

Voltage Regulation, Stead State: ≤±1%

Sudden Voltage Warp (100% Sudden Reduce): ≤+25%

Sudden Voltage Warp (Sudden Increase): ≤-20%

Voltage Stable Time (100% Sudden Reduce): ≤6S

Voltage Stable Time (Sudden Increase) ≤6S

Frequency Reduce: ≤5%

Frequency Waving: ≤1.5%

Sudden Frequency Warp (100% Sudden Reduce): ≤+12%

Sudden Frequency Warp (Sudden Increase): ≤-10%

Frequency Recovery Time (100% Sudden Reduce): ≤5S

Frequency Recovery Time (Sudden Increase): ≤5S



Standard Features

- ♦ Baifa Standard Auto Control System
- ♦ Base Fuel Tank
- ♦ Starting
 batteries(Maintenance-Free &
 Watering-Free) with connective
 wires
- ♦ MCCB
- ♦ Oil Drain Valve
- Exhaust System(including until muffler)
- ♦ Special tool for Cummins engine
- One set of fuel filter / oil filter / belt
- ♦ Documents

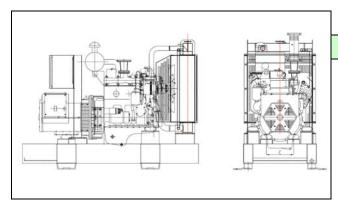
Options

- ♦ Daily Fuel Tank
- ♦ Battery Charger
- ♦ Engine Heater
- ♦ Alternator Heater
- ♦ Water Separator

- Permanent Magnet Generator(PMG)
- ♦ Rainproof Type
- ♦ Soundproof Type
- ♦ Trailer Type

- ♦ Remote Control Panel
- ♦ Automatic Transfer Switch
- ♦ Switch box
- ♦ Spare Parts

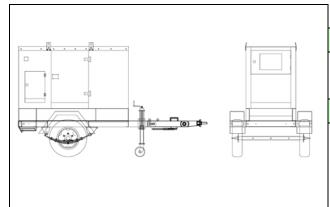
Dimension & Weight



Open Type with Base Fuel Tank

Overall Size: 2300 (mm) ×830 (mm) ×1700 (mm)

Weight: 1310 kg



Soundproof Type

Overall Size: 2810(mm)×1140(mm)×1830(mm)

Weight: 1800kg

Trailer Type

Overall Size: 3390(mm)×1720(mm)×2470(mm)

Weight: 2450kg



Standard Control Panel



Baifa Standard Control Panel uses micro processing technique integrating digital, intelligent and network techniques which can carry out functions including auto start/stop, data measure, alarming. The controller uses LCD display, optional Chinese and English display interface with operation easy and reliable. It can be widely used in all types of generator automatic control system for compact structure, advanced circuits, simple connections and high reliability

Auto Module Control Panel



Auto Module Control Panel is the configuration for nobody on duty controlling generators. This kind of panel adopts auto module control system, with large LCD display to show the menu.

Features: MRS10-can receive remote output signal from ATS and realize auto start and stop of generators.

MRS16-can realize all functions of MRS10, add RS232 interface which can communicate with PC to realize remote operation.

AMF25-Auto Mains Failure controller, can realize all functions of MRS16, furthermore can detect ATS and control directly.