

MODEL	BF-C500
Standby Power (50Hz)	400KW / 500KVA
Prime Power (50Hz)	360KW / 450KVA

### **Standard Features**

### General Features:

Engine (CCEC Cummins KTA19-G3)

Radiator 40°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, double fuel filter, oil filter, coolant 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	Prime
	HZ				Ratings	Ratings
					(KW/KVA)	(KW/KVA)
440/254	50	3	0.8	656	400/500	360/450
415/240	50	3	0.8	696	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/T2820-97 (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: CCEC Cummins KTA19-G3, 4-cycle

Air Intake System: Turbo, Water/Air cooling

Fuel System: PT type fuel pump, EFC

Cylinder Arrangement: 6 in line

Displacement: 18.9L

Bore and Stroke: 159\*159 (mm)

Compression Ratio: 14.5:1

Rated RPM: 1500rpm

Max. Standby Power at Rated RPM: 448KW/609HP

Governor Type: Electronic

**Exhaust System** 

Exhaust Gas Flow: 1489L/s

Exhaust Temperature: 532°C

Max Back Pressure: 10kPa

Air Intake System

Max Intake Restriction: 6.23kPa

Consumption: 533L/s

Intake Flow: 9800 L/s

Fuel System

100%( Prime Power) Load: 204.6 g/Kw.h

75%(Prime Power) Load: 205.4 g/Kw.h

50%(Prime Power) Load:: 215.7 g/Kw.h

100%( Prime Power) Load: 92.4L/h

Oil System

Total Oil Capacity: 50L

Oil Consumption: ≤4g/kwh

Engine Oil Tank Capacity: 38L

Oil Pressure at Rated RPM: 345-483kPa

Cooling System

Total Coolant Capacity: 106L

Thermostat: 82-93℃

Max Water Temperature:  $104^{\circ}$ 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: 500KVA

Alternator Efficiencies: 93.8%

Air Cooling Flow: 1.035m<sup>3</sup>/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 Regulation, Stead State: ≤5%

Frequency Waving: ≤0.5%

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
- ♦ Starting batteries( Maintenance-Free & Watering-Free) with connective
- wires

  ♦ Documents

- ♦ MCCB
- ♦ Oil Drain Valve
- ♦ Special tool for Cummins engine
- Exhaust System( including until muffler)

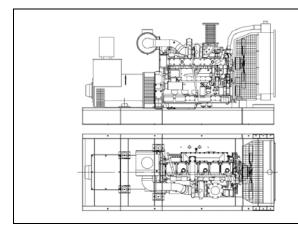
### **Options**

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

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

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

# **Dimension & Weight**



# Standard Configuration (Open Type)

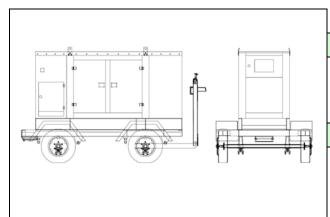
Overall Size: 3400(mm)×1380(mm)×1980(mm)

Weight: 4000kg

### With Base Fuel Tank

Overall Size: 3400(mm)×1380(mm)×2050(mm)

Weight: 4200kg



# Soundproof Type

Overall Size: 4630(mm) ×1660(mm) ×2250(mm)

Weight:5600kg

### **Trailer Type**

Overall Size: 5440(mm) ×2540(mm) ×3100(mm)

Weight: 7050kg



### **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.

# **Auto Parallel Control Panel**



Automatic Parallel Control Panel This new automatic parallel system adopts intelligent modules, inserted and folded installed, no need the peripheral relay and logic circuit. The main switch adopts electronic breaker or frame breaker, combined together with the generator, which is very reliable. One generator, one panel. The panel can be used both for singly and parallel. It is only need to parallel generator with such panel when the capability needs to be enlarged in the future.