

## **Diesel Generating Set**

#### **BF-C110**

MODEL	BF-C110
Standby Power (50Hz)	87KW / 109KVA
Prime Power (50Hz)	80KW / 100KVA

#### **Standard Features**

General Features:	]
Engine (DCEC Cummins 6BT5.9-G2)	
Radiator 50 <sup>o</sup> 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	142	87/109	80/100
415/240	50	3	0.8	151	87/109	80/100
400/230	50	3	0.8	157	87/109	80/100
380/220	50	3	0.8	165	87/109	80/100

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.



**BF-C110** 

Manufacturer / Model:	DCEC Cummins 6BT5.9-G2, 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:	Electronic					
Exhaust System						
Exhaust Gas Flow:	16.8m <sup>3</sup> /min					
Exhaust Temperature:	<b>565</b> °C					
Max Back Pressure:	10kPa					
Air Intake Sy	Air Intake System					
Max Intake Restriction:	6.35kPa					
Burning Capacity:	6.48m <sup>3</sup> /min					
Air Flow:	158m <sup>3</sup> /min					
Fuel Syste	em					
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:	22.3L/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:	<b>82-95</b> °C					
Max Water Temperature:	<b>104</b> °C					



## 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:	90.4%				
Air Cooling Flow:	0.514m <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 Reduce:	≤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



## **Diesel Generating Set**

## BF-C110

- Baifa Standard Auto Control System
- $\diamond$  Base Fuel Tank
- $\diamond$  Starting

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

### Options

- ◇ Daily Fuel Tank
- ♦ Battery Charger
- ♦ Engine Heater
- ◇ Alternator Heater
- $\diamond$  Water Separator

## Dimension & Weight

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

♦ Oil Drain Valve

until muffler)

♦ Exhaust System( including

♦ Spare Parts

♦ Special tool for Cummins

♦ One set of fuel filter / oil filter /

engine

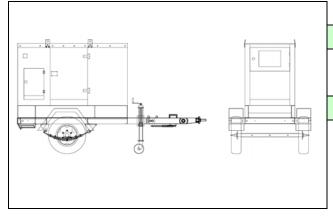
belt

 $\diamond$  Documents

- ♦ Remote Control Panel
- ◇ Automatic Transfer Switch
- $\diamond$  Switch box
- ◇ Paralleling System

## Open Type with Base Fuel Tank

Overall Size: 2300 (mm) ×830 (mm) ×1700 (mm) Weight: 1330 kg



Soundproof Type

Overall Size: 2810(mm)×1140(mm)×1830(mm) Weight: 1850kg

## Trailer Type

Overall Size: 3390(mm)×1720(mm)×2470(mm) Weight: 2500kg









**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.