



**Taizhou Fengde Mechanical&Electrical  
Manufacturing Co.,Ltd.**

*<http://www.foundgenerator.com>*

**Model:JGC100GF  
Technical Data Sheet**



NO:JGC2014

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ISO9001:2008  
Fengde Generating Sets

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## STANDARD SPECIFICATION

### General feature

- All qualified generator sets are subjected to a comprehensive performance test which includes 50% load, 75% load, 100% load, 110% load and to check, verify that all control systems, alarm and shut-down protection.
- Equipped with battery charger and 24V high performance maintenance-free lead-acid starting batteries and connecting cables.
- Equipped with industrial silencer and flexible exhaust hose.
- Equipped with 8-hours operation base fuel tank.
- Equipped with PEOPLE MCCB circuit breaker.
- Designed to Comply with ISO8528/GB2820.
- Powered by Cummins engine and coupled with Marathon alternator.



### Advantages

- Stability, reliability and easy-service
- Low operating and maintenance cost
- Widely used, location to meet customer needs
- Easy-installation, easy-operation and maintenance

### Genset Technical Data

Prime power	100 kW
Standby power	110 kW
Rated speed	1500 RPM
Output frequency	50 Hz
Phase	3
Rated voltage	400 V
Engine model	6BTA5.9-G2
Alternator model	MP-100-4

**Prime Power :** Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97; A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

**Standby Power Rating :** 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.

## Reliable Performance

### Voltage regulation

Voltage regulation maintained within  $\pm 0.5\%$  as follow:

- Power factor Between 0.8~1.0 lag
- From no load to full load, any steady load
- Speed droop variation under 4.5%

## Frequency/Speed undulation

- Change load from 0-100%, Frequency/Speed Droop Ratio within 5%
- Load from 25-100%, any steady load Frequency/Speed undulation within 0.25%

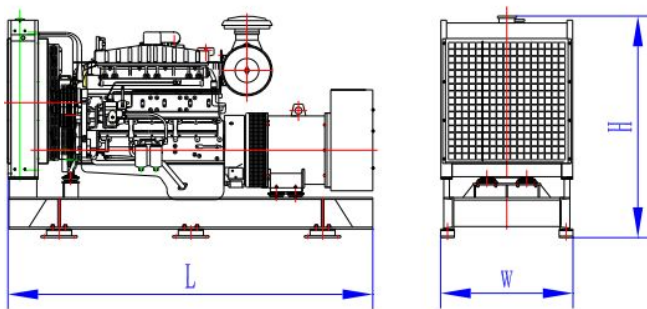
## Effect factor of telecom

- Telephone Influence Factor (TIF) : Less than 50  
THF : Less than 2%

## Criterion

- ISO8528, GB/T2820
- EN12601:2001, EN60034-22:1997, EN60204-1:2006
- ISO9001:2008 Quality Control System
- CE

## Dimension and Weight



### Open Type

Overall size (L\*W\*H)  
2255\*790\*1300 mm

**Weight: 1550kg**  
**For reference only**

## ENGINE SPECIFICATION

### Cummins Diesel Engine Technical Data

Engine Model	6BTA5.9-G2
Configuration	4 cycle , 6 cylinders in line
Aspiration	Turbocharged after water-cooled
Bore×Stroke	102 x120 mm
Rated speed	1500rpm
Displacement	5.9 L
Compression Ratio	17.5:1
Prime Power	100KW
Speed Governor	electrical
Cooling System	Water-cooled
Speed Stability (%)	≤5%
Fuel Consumption at 100% Load	211g/kw.h
Starter Motor	DC24V,

## ALTERNATOR SPECIFICATION

### Marathon Alternator Technical Data

Alternator model	MP-100-4
Alternator manufacturer	Marathon
Exciter type	Single bearing, Brushless, Self-excited
Rated output prime power	100 kW
Rated speed	1500 rpm
Rated frequency	50 Hz
Phase	3
Rated voltage	400 V
Power factor	0.8
Voltage adjust range	≥5%
Voltage regulation NL-FL	≤±1%
Insulation grade	H
Protection grade	IP22

## Control System

### Control System HGM6110

All FENGDE gensets have a control cubicle (the smart gen HGM6110 as standard) mounted on a isolated support, which has the following features.

- ◆ Electronic digital control module with monitoring/control facility and warning indicators
- ◆ Automatic shutdown protection
- ◆ Emergency stop button (lock-down type)
- ◆ AC output circuit breaker with over-current protection
- ◆ DC circuit control switch



HGM6110

### The control module display

- ◆ Generator voltage
- ◆ Output frequency
- ◆ Engine speed
- ◆ Battery voltage
- ◆ Engine run-time (Hours)
- ◆ Note:
  1. The engine coolant temperature displayed by water temperature gauge
  2. The engine oil pressure displayed by oil pressure meter
  3. Generator current displayed by current meter, to change switch for each phase displayed separately

### The control module display for failure information

- ◆ Overspeed / underspeed
- ◆ Emergency stop
- ◆ Low oil pressure
- ◆ High water temperature
- ◆ Failure to start
- ◆ Battery charger failure

### **Automatic shutdown**

- ◆ Low engine oil pressure
- ◆ High engine water temperature
- ◆ Overspeed/underspeed
- ◆ Failure to start after three attempts

### **The control modules option**



HGM6120



HGM6520



DSE7210



DSE7220

Remarks: For the specific and detailed features of the above types, please refer to "Control System Selection" file.

## **Warranty**

**All Fengde goods are warranted in accordance with our warranty terms for a period of 12 months from date of dispatch.**

## **Package**



## Generator set options and Accessories

### **Generator set**

- Open generator set
- Trailer generator set
- Single phase generator set
- ABB MCCB circuit breaker

### **Fuel system**

- 12 hour base tank(single wall)
- 24 hour base tank(single wall)
- Dual wall base fuel tank
- Outside fuel tank

### **Exhaust system**

- Residential exhaust silencer

### **Alternator**

- PMG excitation
- Space heater

### **Low environment temperature**

- Water heater
- Oil heater
- Battery heater

### **Control system**

- AMF function
- ATS control cabinet
- Multiple generator automatic synchronising

FENGDE reserves the right to change the specifications and designs without notice.

### **WARNING:**

Do not connect generator sets to any load and electrical equipments unless the circuit breaker in the disconnected condition.