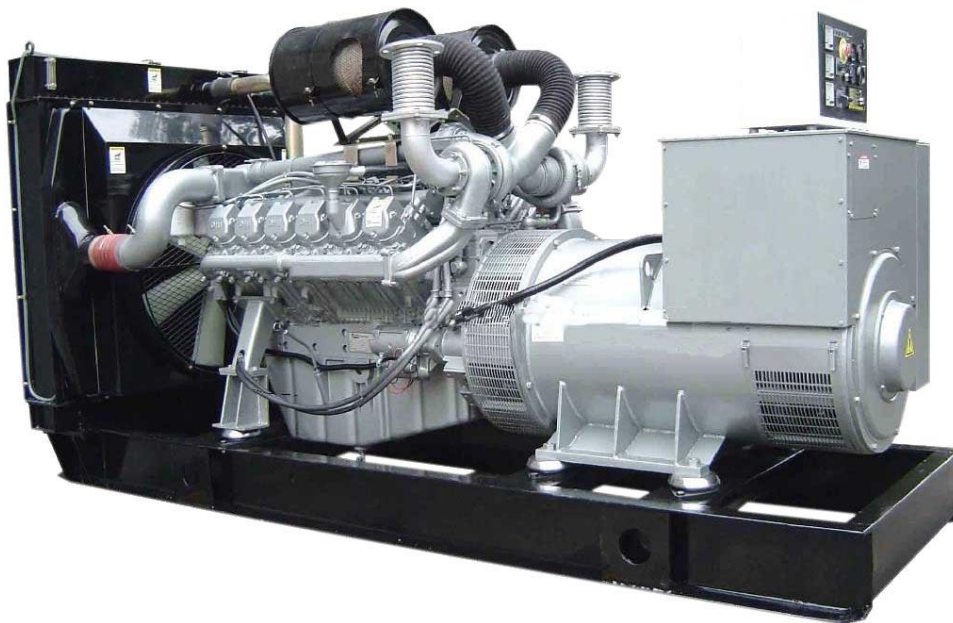


**Taizhou Fengde Mechanical&Electrical  
Manufacturing Co.,Ltd.**

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

**Model:JGD450GF  
Generating set Technical Data Sheet**



NO:JGC2013

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ISO9001:2008  
Fengde Generating Sets

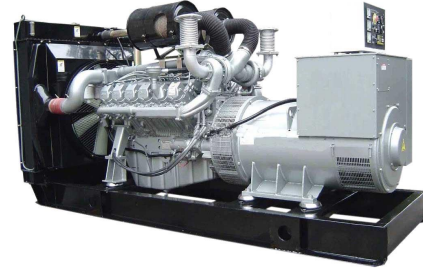
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## STANDARD SPECIFICATION

### 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 Deutz 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	480kW
Standby power	528 kW
Rated speed	1500 RPM
Output frequency	50 Hz
Phase	3
Rated voltage	400 V
Noise dB(A) @7m	100
Engine model	BF8M1015CP-LA G5
Alternator model	MP-480-4A/S

**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%

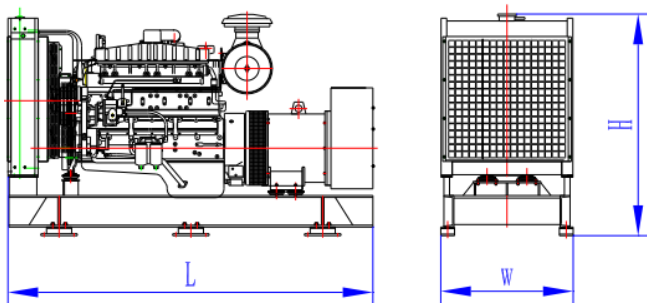
### Effect factor of telecom

- 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)

3500\*1550\*2250mm

**Weight: 3286kg**

**For reference only**

## ENGINE SPECIFICATION

### Deutz Diesel Engine Technical Data

Engine Model	BF8M1015CP-LA G5
Configuration	4 cycle , 8 cylinders in "V"
Aspiration	Turbocharged inter-cooled
BorexStroke	132x145 mm
Rated speed	1500rpm
Displacement	15.874 L
Prime Power	560KW

Speed Governor	Electronic
Cooling System	water-cooled
Speed Stability (%)	≤5%
Fuel Consumption at 100% Load	≤209g/kw.h
Starter Motor	DC24V,

## Alternator SPECIFICATION

### Marathon Alternator Technical Data

Alternator model	MP-480-4A/S
Alternator manufacturer	Marathon
Exciter type	Single bearing, Brushless, Self-excited
Rated output prime power	450 kW
Rated speed	1500 RPM
Rated frequency	50 Hz
Phase	3
Rated voltage	400 V(Available with customer requirements)
Power factor	0.8
Voltage adjust range	≥5%
Voltage regulation NL-FL	≤±1%
Insulation grade	H
Protection grade	IP23

## 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

### The control module display

- Generator voltage
- Generator voltage
- Output frequency
- Engine speed
- Battery voltage
- Engine run-time (Hours)
- Note:
  1. The engine coolant temperature displayed by water temperature gauge



HGM6110

- 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

1 year or 1000 working hours whichever comes first.

## 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

FENGDD 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.