



# Model:DB-400GF

Powered by Cummins



### Applicable Standards

- ISO9001
- ISO14001
- ISO45001
- CE

### Factory Inspection

- Complete design and quality inspection
- 0%, 25%, 50%, 75%, 100%, 110% load test
- Function test

| 400KW 500KVA Diesel Generator Set Specifications |  |
|--|--|
| Genset model                                     | DB-400GF                               |
| Prime power                                      | 400kW                                  |
|  | 500kVA                                 |
| Standby power                                    | 440kW                                  |
|  | 550kVA                                 |
| Rated voltage(V)                                 | 400/230 (customizable)                 |
| Rate current(A)                                  | 720                                    |
| Power factor                                     | 0.8                                    |
| Frequency(Hz)                                    | 50                                     |
| Speed(rpm)                                       | 1500                                   |
| Phase:   | 3 phase 4 wire                         |
| Noise level:                                     | 105dB at 7m ( open type diesel genset) |
|  | 75dB at 7m(silent type diesel genset)  |

### Environmental Conditions

- Ambient temperature: +5° C~+40° C
- Altitude: ≤1000m
- Remark: If your conditions are different from the above, please contact our sales.

| Type        | Dimensions(mm)<br>L*W*H | Weight(kg) | Base bottom fuel tank<br>(Liter) |
|-------------|-------------------------|------------|----------------------------------|
| Open Type   | 3250*1360*1900          | 3200       | Without                          |
| Silent Type | 4300*1800*2350          | 4400       | 8 hours                          |

- Remark: The dimensions and weight of the above diesel generator set are for reference only, and the specific dimensions and weight of the genset after production completion shall prevail.



## Engine Specifications

|  |  |
|--|--|
| <b>Manufacturer</b>                      | <b>Dongfeng Cummins Engine Co.,Ltd</b>                     |
| <b>Model</b>                             | <b>QSZ13-G3</b>  |
| Engine output-prime                      | 450kW  |
| Engine output-standby                    | 470kW  |
| Frequency:                               | 50Hz   |
| Speed:                                   | 1500rpm  |
| Cylinders no. & Type:                    | 6 cylinders, Inline, 4 stroke, diesel engine, water-cooled |
| <b>Aspiration:</b>                       | <b>Turbocharged and Charged Air Cooled</b>                 |
| Bore*stroke                              | 130*163mm  |
| Displacement                             | 13L  |
| Compression Ratio                        | 17:1   |
| Governor                                 | Electronic speed governor                                  |
| Starter motor voltage:                   | 24V DC   |
| Type Injection System:                   | Direct injection   |
| Maximum Oil Temperature                  | 121 °C   |
| Total Oil System Capacity                | 45.42L   |
| Cooling way                              | Water Radiator & fan                                       |
| Coolant Capacity-engine only             | 23.1L  |
| Standard Thermostat                      | 82-94 °C   |
| Fuel consumption- continuous power(100%) | 85L/h  |
| Fuel consumption-prime power (100%)      | 101L/h   |
| Fuel consumption-prime power (75%)       | 74L/h  |
| Fuel consumption-prime power (50%)       | 48.8L/h  |
| Fuel consumption-prime power (25%)       | 26L/h  |

- Heavy duty diesel engine
- Starter battery (with lead acid,free-maintenance)
- Anti-vibration mount
- Flexible fuel connection hoses
- Replaceable fuel filter, oil filter & air filter
- Exhaust silencer and bellows
- Cooling radiator and fan
- Operation manuals and circuit diagram documents

## Alternator Specifications

|                           |  |
|---------------------------|--|
| Alternator brand optional | Stamford/Leroy Somer/Marathon/ENGGA    |
| Rated Voltage(V)          | 400/230                                |
| Output way                | 3 phase 4 wire                         |
| Rated power factor        | 0.8                                    |
| Exciter                   | Brushless, Self-exciter                |
| Wire connecting method    | Y type, 3 phase 4 wire                 |
| Max voltage regulation    | ±1%                                    |
| Protection class          | IP23                                   |
| Insulation class          | H                                      |
| Rotor:                    | Single/double bearing                  |
| Efficiency:               | 95%                                    |
| Regulator:                | AVR                                    |
| Recovery time(Tr)         | 1s                                     |
| Waveform : TIF            | <50                                    |
| Waveform : THF            | <2%                                    |
| Overload                  | 110% rated load for 2 hour per 24 hour |



# Control System

**Model:SmartGen HGM6110(optional Deep Sea)**

**Origin: China**

**Automatic controller**



| Operating Environment  |                     |
|------------------------|---------------------|
| Operating temperature: | -25°C ~ 70°C        |
| Relative humidity:     | 95%                 |
| Operating voltage:     | DC24V(range: 8-35V) |

### Product Features:

HGM6110 series automatic controller, integrating digital, intelligent and network techniques, is used for automatic control and monitoring system of genset. It can carry out functions of automatic start/stop, data measurement, alarm protection and three “remote” (remote control, remote measure and remote communication). The controller uses LCD display, optional display interface including Chinese, English, Spanish, Russian, Portuguese, Turkey, Polish and French with easy and reliable operation.

### Below shut down causes are included:

- Low Coolant Level
- Low oil pressure
- High output frequency
- High output voltage
- Emergency stop
- High coolant temperature
- Low output frequency
- Low output voltage
- Low Fuel Level

### Other Options

|  |  |
|--|--|
| <input type="checkbox"/> Oil heater<br><input type="checkbox"/> Trailer genset<br><input type="checkbox"/> Coolant heater<br><input type="checkbox"/> Starting batteries<br><input type="checkbox"/> Automatic transfer switch (ATS)<br><input type="checkbox"/> Spare parts | <input type="checkbox"/> Soundproof canopy genset<br><input type="checkbox"/> Containerized type genset<br><input type="checkbox"/> Automatic Parallel cabinet<br><input type="checkbox"/> Fuel tank-Customizable capacity<br><input type="checkbox"/> Heat exchanger--Water-cooled tower system |
|--|--|

### Guangxi Dingbo Power Equipment Manufacturing Co.,Ltd

Add: No. 10, Kechuang Road, High-tech Zone, Nanning, Guangxi, China

Tel: +86 13481024441

Fax: +86 771 5805 259

Web: www.dbdieselgenerator.com

Email: dingbo@dieselgeneratortech.com