

# **Model:DB-50GF**

### Powered by Perkins





### **Applicable Standards**

- ISO9001
- ISO14001
- ISO45001
- CE

### **Factory Inspection**

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

50KW 63KVA Diesel Generator Set Datasheet		
Genset model	DB-50GF	
Prime power	50kW	
	63kVA	
Standby power	55kW	
	69kVA	
Rated voltage(V)	400/230 (customizable)	
Rate current(A)	90A	
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.

Туре	Dimensions(mm) L*W*H	Weight(kg)	Base bottom fuel tank (Liter)
Open Type	1950*750*1250	1050	Without
Silent Type	2400*1000*1600	1600	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**

Manufacturer	Perkins
Model	1104A-44TG1
Engine output-prime	58kW
Engine output-standby	64kW
Frequency:	50Hz
Speed:	1500rpm
Cylinders no. & Type:	4 cylinders, Inline, 4 stroke, diesel engine,
	water-cooled
Aspiration:	Turbocharged
Bore*stroke	105*127mm
Displacement	4.4L
Compression Ratio	17.25:1
Governor	Electronic speed governor
Starter motor voltage:	12V DC
Type Injection System:	direct injection
Total Lubrication System Capacity	8.0L
Cooling way	Water Radiator & fan
Total Coolant Capacity	13.0L
Fuel consumption-standby power (100%)	16.2L/h
Fuel consumption-prime power (100%)	14.8L/h
Fuel consumption-prime power (75%)	11.2L/h
Fuel consumption-prime power (50%)	8.0L/h

- Heavy duty diesel engine
- Anti-vibration mount
- Replaceable fuel filter, oil filter & air filter
- Cooling radiator and fan

- Starter battery (with lead acid, free-maintenance)
- Flexible fuel connection hoses
- Exhaust silencer and bellows
- 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	Н
Temperature rise grade:	Н
Rotor:	Single/double bearing
Efficiency:	95%
Regulator:	AVR
Recovery time(Tr)	1s
Waveform: TIF	<50
Waveform: THF	<2%
Type:	Synchronous alternator
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℃~70℃	
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	■ High coolant temperature			
Low oil pressure	Low output frequency			
■ High output frequency	■ Low output voltage			
■ High output voltage	Low Fuel Level			
■ Emergency stop				
Other Options				
☐ Oil heater	☐ Soundproof canopy genset			
☐ Trailer genset	☐ Containerized type genset			
☐ Coolant heater	☐ Automatic Parallel cabinet			
☐ Starting batteries	☐ Fuel tank-Customizable capacity			
☐ Automatic transfer switch (ATS)	☐ Heat exchangerWater-cooled tower system			
☐ Spare parts				

### 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