



# TECHNICAL DATA

DIESEL GENERATING SET

9KW,2P3W,1800Hz

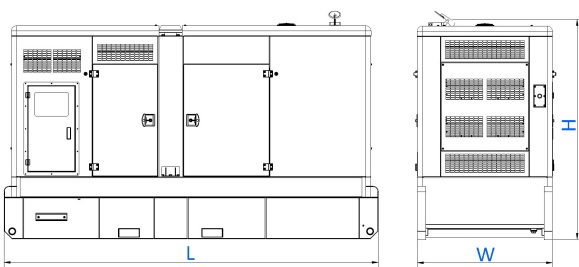
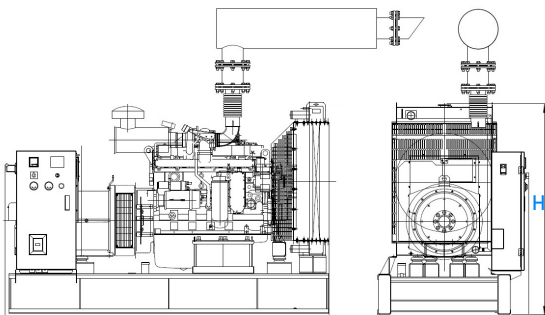
60HZ

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## Features

Photos are for reference only

- Compact structure & high-strength chassis
- Easy for operation and maintenance
- Good performance anti-vibration system
- Compliance with international electrical safety standards
- 12 hours double-wall base fuel tank
- High-performance free-maintenance batteries with isolation switch
- 50°C radiator
- Top lifting point, Fork lift holes, easy for transportation.
- Industrial type muffler
- Noise reduction structure, Low overall noise
- Convenient power output interface and ATS Interface
- IP56 (control system)
- The customized design



Dimension and Weight	
Generating set model	BC9KS-1
Length(L) (mm)	1950
Width(W) (mm)	893
Height(H) (mm)	1190
Dry weight (kg)	762
Tank capacity (L)	45

Genset Technical Data	
Output frequency	60 Hz
Rated speed	1800 rpm
Prime power	9KVA
Standby power	10KVA
Rated voltage	240 V
Phase	2
Engine model	D1105-E4BG1-SAE-2(Tier 4)
Alternator model	PI 044E
Fuel consumption of 100% load(standby)	3.6 Litres/h
Fuel consumption of 75% load (standby)	2.7 Litres/h
Voltage regulation rate	≤±1%
Random voltage variation	≤±1%
Frequency regulation rate	≤±5%
Random frequency variation	≤±0.5%

Engine Specifications	
Engine model	D1105-E4BG1-SAE-2(Tier 4)
Engine manufacturer	Kubota
Number of cylinders	3
Cylinder arrangement	Vertical
Cycle	Four stroke
Aspiration	Naturally Aspirated
Bore x Stroke	78mm x 78.4mm
Displacement	1.123Liter
Compression Ratio	24.0:1
Prime power/speed	10.1kW/1800rpm
Standby power/speed	11.5kW /1800rpm
Speed governor	Mechanical
Cooling system	Forced Water Cooling Cycle
Steady speed droop	≤5%
Total lubrication system capacity	5.1 Liter
Starter motor	DC12V
Alternator	AC12V
Alternator Specifications	
Rated frequency	60 Hz
Rated speed	1800 rpm
Alternator model	PI 044E
Rated output prime power	10kVA
Efficiency	74%
Phase	1(2P)
Rated voltage	240 V
Exciter type	Self excited, Brushless
Power factor	1.0
Voltage adjust range	≥5.0%
Voltage regulation NL-FL	≤±1.0%
Insulation grade	H
Protection grade	IP23
Xd DIR. AXIS SYNCHRONOUS	2.46
X'd DIR. AXIS TRANSIENT	0.25
X''d DIR. AXIS SUBTRANSIENT	0.17
Xq QUAD. AXIS REACTANCE	1.19
X''q QUAD. AXIS SUBTRANSIENT	0.26

## Control System

### DSE-7320MKII

DSE-7320 is an advanced control module based on micro-processor, It is an Auto Mains (Utility) Failure Control Module(AMF), have been designed to start and stop generating sets that include electronic And non-electronic engines. Include the additional capability of being able to monitor a mains (utility) supply. when main is not available, It can automatically start the engine and close generating sets breaker automatically, Accurately measure various operational parameters and display all values and alarms information on the LCD. In additional, it can automatically open breaker, and shutdown the engine after the main supply recovers.

### Main Features

- AMF and ATS and communication and expansion function
- Designed to work with electronic or non-electronic or gas engine simultaneously. (support many kinds of engines ECU).
- Manual, Automatic, Test and remote control mode selectable.
- Monitoring and measuring operational parameters of the mains supply and genset.
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections and multiple parameters display.
- Includes 12 inputs and 8 outputs. 8 inputs are configurable and 6 outputs are configurable.
- Can be programmed using the front panel or by using the PC software.
- Support twelve languages. The language was edited by customer.
- Graded protection: pre-alarm, shutdown and electrical trip, flexible setting.
- The module can be pre-set for four operating modes and protecting parameters.
- Add DSE890 module, internet network monitoring can be realized.
- The firmware can be updated automatically, so customer can have the latest version.



### The control module display

- Generator voltage
- Generator frequency
- Battery voltage
- Engine speed
- Load current
- Generator KVA, KW, PF
- Engine run-time Hours
- Engine oil pressure
- Engine coolant temperature
- Real time clock for time and date, overall runtime

## Optional

### Engine

- Water Jacket Preheater
- Fuel-water separator
- Oil pump
- Oil preheater
- Battery preheater

### Alternator

- PMG excitation
- Space heater
- Winding Temperature Measuring

### Generator Set

- Tools with the machine
- Coolant (-30°C)

### Control System

- AMF function
- ATS control cabinet
- Double-frequency and double voltage
- Single phase
- ABB MCCB

### Fuel System

- 12 / 24 hour base tank (single wall)
- Dual wall base fuel tank
- Outside fuel tank
- Automatic fuel feeding
- Fuel level indicate

### Canopy

- Hired type
- Economy Oil heater
- Trailer

### WARNING:

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