

# BOSS GENSETS 800KW /1000KVA Diesel Engine : BS-C1000



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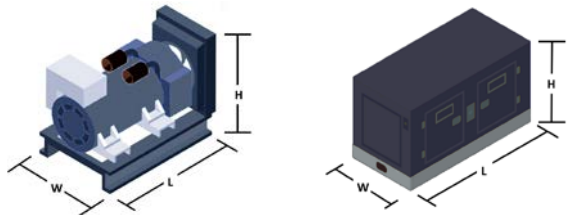
## FEATURE & BENEFITS

- Maximum Power 1000kVA designed prime power at 400/230V @ 50Hz 1500rpm P.F 0.8 lagging
- 12 Cylinder, 4 Cycle Turbocharged diesel Engine / Heavy duty type
- New Electronic speed control technology voltage regulation  $\pm 1\%$  at solid state
- H Specification Insulation and four way protection system include
- Base fuel tank 8Hr, @100% load
- Low noise Level  $\leq 85$  dBA @1m.  $\leq 75$  dBA @7m. with silencer canopy and outside lockable doors
- Wide of 4 Doors/(2 sides) easy service accessible
- N-PE type Non flammable proof material for sound attenuate / Harmless to health and living
- Base Rubber and Spring design to support and absorb vibration
- Automatic Transfer Switch (ATS) and Main Panel Microprocessor control
- Automatic battery Charger 5A & Dynamo Charger
- MCCB Circuit Breaker 1600AT,3P Icu 35kA at 400V, toggle type. Protection in circuit and load connection (std. IEC,UL)
- Exhaust with residential type and flexible tube , Heat protect by Aluminum shield
- Easy to use Digital Controller with Auto Manual start and reset alarms Easy
- Maintenance , Hand Pump and Motor Pump on same platform , Valve Drain pipe & Vent pipe.
- Energy saving by full microprocessor controller direct engine and alternator
- Generator set Standards ISO 9001,ISO14001 ,ISO45001, CE/ Manufacturer Certified
- The generator set consists of the Engine ,the Alternator unit directly Direct flexible Coupling with flange and Controller panel box are mounted on the same steel base in the H beam platform ,Flexible Mounting on to rubber /springs (vibration isolates designed)

## CANOPY (Option)

Ventilation parts are designed with more principles Weather resistant and lined with sound reducing foam All metal canopy parts are double painted by power paint Panel window , Lockable doors on each side Insulated engine exhaust system Exterior Emergency Switch stop push button

<b>GENSET MODEL</b>	<b>BS-C1000</b>
<b>Prime power</b>	<b>800kW / 1000kVA</b>
<b>Standby Power</b>	<b>880kW / 1100kVA</b>
<b>Phase</b>	<b>3P4W , 3P3W</b>
<b>Power Factor (cos Ø)</b>	<b>0.8</b>
<b>Rate Voltage (V)</b>	<b>50Hz./1500RPM</b>



DIMENSIONS AND WEIGHT:		
GEN-Set	Dimension (L*W*H)	Weight
Open Type	4400mm x2060mm x2620mm	9800
Silent Type	5000mm x2048mm x2522mm	11700

## CONTROL PANEL

Control & ATS Cabinet Steel plate 1.5 mm.  
Thickness (floor) standy type 2 layers polyester  
Electric powder paint with ground system

## 1000kVA DIESEL GENERATOR SET

Genset Model	BS-C1000		
Prime Power (kw/kva)	800/1000	Standby Power(kw/kva)	880/1100
Voltage (v)	400/230	Rated Speed (rpm)	1500
Frequency (Hz)	50	Rated Current (A)	1443
Connection:	3 phase 4 wire	Power Factor:	0.8
Engine Model:	KTA38-G5	Alternator	LVI634E
Net Weight (kgs)-Open	9800	Net Weight (kgs)-Silent	11700
Dimensions (mm)-Open	4400x2060x2620	Dimensions (mm)-Silent	5000x2048x2522

Voltage Available: 50Hz: 380-400-415V/220-230-240V; 60Hz: 220-380-416-440-480V/110-208-220-240V

Any special voltage is also available as client's request

Prime Power: comply with GB/T2820-97(eqv.ISO8528). Genset can run unlimitedly under certain power range. One hour 10% over load in every 12 running hours is allowed;

Standby Power: standby power is the limit value of maximum output for emergency use. It is off-oil power, overloading is prohibited

### Standard Configuration:

- ◆ **Engine: CCEC Cummins KTA38-G5**
- ◆ Radiator & Ventilation fan drive by Belt with metal grill safe guard protect.
- ◆ Cooling Fan with fan guard and front guard
- ◆ Alternator: Single bearing, IP23, H class
- ◆ Thermostat Valve Temperature Control
- ◆ Dry Air Filter. Dual Fuel Filter. Engine Oil Filter. Coolant Filter.
- ◆ Overload Protection
- ◆ Standard Control Panel; ATS for optional
- ◆ DC motor 24Vdc Start with Battery 200ah. 12Vdc (2block)
- ◆ Storage Battery and battery line, Exhaust pipe, Corrugated pipe for anti-vibration, Cone Tube, Flange, Muffler
- ◆ Electronic Voltage Regulation solid state ≤1%@ 0-100% load , Over load >250 %
- ◆ Soundproof Enclosure/Canopy for optional
- ◆ Key switch Start(manual cases controller fail)
- ◆ Automatic battery Charger 24Vdc and Dynamo 24V DC



### Quality Assurance:

- **Factory Inspection**, the test items before delivery are mainly as follows:
  - ✓ Each genset shall be put into commission more than 4 hours totally. They are tested on idle load, fully load and 10% overload;
  - ✓ The noise level is tested
  - ✓ All of the meters on the control panel shall be tested
  - ✓ The appearance of the genset and all of the label and nameplate shall be checked
- **Warranty**



12 months or 1000 running hours from shipment date. If the quality problem arise during the warranty period, and verified the problem is caused by our genset-body instead of external or natural reasons. (Refer to all kinds of natural disaster, shipping, loading, unloading, wrong-operation, etc), we will supply the relevant spare parts free of charge for maintenance; after the warranty period, we can supply the required spare parts for you under cost prices.

### G-Drive DIESEL Engine :

Manufacturer/Model:	<b>CCEC Cummins KTA38-G5</b>
Air Intake System:	Turbocharged, Air/-water Cooled
Fuel System:	PT Fuel Pump, EFC electronic governor
Injection:	Direct Injection
Cylinder numbers:	12 cylinders in "V", 4Stroke
Engine Speed:	1500 RPM.
Displacement:	37.8L
Bore x Stroke:	159 x 159 mm
Compression Ratio:	13.9 : 1
Prime Power:	881KW / 1180BHP
Governing System:	Electronic

### Engine Standard

ISO 9001, ISO14001, ISO-3046, BS-5514 and DIN-6271

### Exhaust System

Exhaust gas flow:	3306 L/s
Exhaust temperature:	513 °C
Max. Allowed Back Pressure:	10 KPa

### Intake System

Max. Allowed Pressure:	6.23 kPa
Consumption:	1213 L/s
Air Flow:	1140 L/s

### Fuel System

100% Load (Prime):	392L/h
75% Load (Prime):	302L/h
50% Load (Prime):	212L/h

### Lubrication System

Oil Capacity:	135 L
Oil Consumption:	≤4g/kw.h
Engine Oil Tank Capacity:	114L
Oil Pressure at rated speed:	310-448 kPa

### Cooling system

Coolant Capacity:	258 L
Thermostat:	82-93°C
Max. Water Temperature:	104°C



## Alternator Parameter: Basic Information

The alternators meet the standards of:

IEC60034, BS5000, VDE0530, NEMA MG1-32-33, IEC34-1, CSA22.2-100, AS1359, UL1446 and CE

## Technical Data:

Manufacturer:	<b>STAMFORD</b> LVI634E
Connection:	3phase 4 wire, Y type
Alternator Capacity(continuous):	800kW/1000kVA
Bearing numbers:	1
Power Factor:	0.8
Speed Operation:	50Hz./1500 RPM.
Voltage Phase:	400/230V
Protection Class:	IP23
Altitude Condition:	≤1000M
Excitation system:	Brush-less, P.M.G.
Insulation class:	Rotor H / Stator H
AVR Accepted Speed warp:	4% @ Load 0-100 %
Load Surge regulation AVR:	3% @ 0.6 sec.
Voltage Regulation(digital):	≤±1% Steady state PF.0.8-1 @0-100%load
Cooling:	Self turbine fan Build on rotor
Over Load:	>300 % 10sec. (Motor Inrush current sustained)

## Genset Technical Data:

Voltage Setting Range:	≥±5%
Voltage Regulation:	±1%
Transient Voltage Deviation:	
--100% sudden power cut:	≤+25%
--Sudden power on	≤-20%
Voltage Stabilization Time:	
--100% sudden power cut:	≤ 6 s
--Sudden power on	≤ 6 s
Frequency Regulation:	±5%
Frequency Fluctuation Rate:	≤0.5%
Transient Frequency Deviation:	
--100% sudden power cut:	≤+12%
--Sudden power on	≤-10%
Frequency Recovery Time:	
--100% sudden power cut:	≤ 5 s
--Sudden power on	≤ 5 s



EPA&amp;CARB



China



DEEPSEA DSE7320

## Microprocessor Controller

- 3 phase AMF function
- Electronic microprocessor
- Software Configurable Power mode
- LCD back light Text 132 \* 64 dot pixels display & LED Indicator
- Manual ,Stop,Auto, Test
- History Event log Record(250log)(C/F)
- 3 Phase Sensing
- Schedule runtime
- Silent LCD, LED Alarm
- ATS Control Command
- Battery backup memory
- RS232/485 Computer Communication port
- IP65 rating
- Setup & configuration ( computer program)
- Modbus , CAN Bus Protocol Support

## Warning & Alarm (Engine Auto Self stop And Reset able condition)

- Engine start Fail ,Running Fail
- Over / Under Oil pressure
- Over / Under Speed
- Engine Coolant over Temperature
- Over / Under voltage
- Silent LCD,LED Alarm
- Emergency Stop

## LCD/LED Displays Parameter

- Generator status Normal / Fail
- Status source selection supply load.
- 3Ph Main & Gen Voltage LL, LN, Current
- Diagnostics and alarm
- Gen Power Kw,Kwh ,Kva, Kvar, KVArh , PF
- Main & Gen Frequency (Hz)
- Engine/Lubricant Coolant Temperature(C/F)
- Engine Lubricant & Oil pressure (bar/Psi)
- Engine Speed operation Over/under (RPM.)
- Engine Hr. runtime & Real time clock
- Battery Voltage, current , charge & Charging Status
- Number of start
- Real time clock and timer
- Ambient Temperature C (F)
- Alternator exciter duty and governor duty

## Standard Configured

- Auto Main Fail: Enable
- Phase detect start : +/-10 % (1-20 sec. Adj.)
- Engine Delay Start : 0-20 sec (1-30 Adj.)
- Cool down time: 1-5 min.(1-30 Adj.)
- Attempts start: 3-5 Times/cycles (Timer duration 1-20sec. Adj)
- Exercise: 7 Day/1Times (1-5 min.) Adj.
- Recover Time 1-20 min. Adj.
- Transfer time 1-20 sec. Adj.