



SPARTAN Power
Solutions



Industrial Range

Model SS220

Generator set



General Performance Data

Prime Power	200KVA/160KW
Stand by Power	220KVA/176KW
Frequency/Speed	50Hz/1500rpm
Rated Power Factor(cosφ)	0.8
Standard Voltage	240V/415V
Phases	3

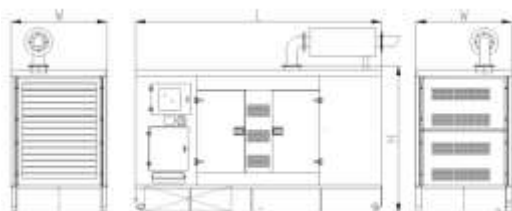
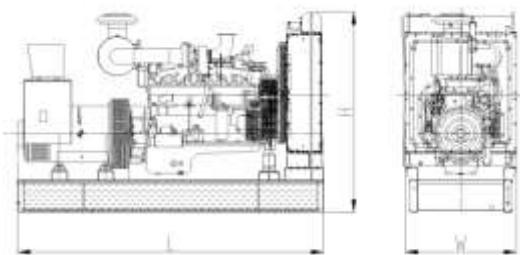
Engine	Brand	SDEC
	Model	6DTAA8.9-G21
Control module	Deepsea 6120	
Rated Current	278A	
Capacity of Breaker	315A	
Starting Voltage	DC24V	

Fuel consumption

Rated output	Fuel consumption rate
100%Standby	57.2 L/h
100%Prime	50.9 L/h
75%Prime	37.4 L/h
50%Prime	26.2 L/h
25%Prime	15.7 L/h

Standards followed

ISO9001	ISO14001
ISO8528	ISO12100
ISO13849	EN12601
GB12786	GB/T2820
IEC60034	IEC60204
CE	RETIE



Dimensions and Weights (Estimate)

Type	Open	Silent
Length(mm)		3606
Width(mm)		1156
Height(mm)		1973
Weight(kg)		2310
Base fuel tank volume (L)		400

Engine specification

Basic parameter

Manufacturer	SDEC
Model	6DTAA8.9-G21
No. of cylinder	6
Type	In-line
Prime Power	185KW
Standby Power	204KW
Induction system	Water-cooled, Turbo charged with aftercooler
Governor	Electric type
Bore x Stroke	114x144mm
Displacement	8.82L
Compression ratio	18:1
Oil Capacity(Total)	19L
Coolant Capacity(Engine only)	12L
Cranking Motor Voltage	DC24V

Fuel System

Injection pump	Longkou in-line "P" type
Opening pressure	250 kg/cm ²

Lubrication system

Lub. Method	Fully forced pressure feed type
Oil pump	Gear type driven by camshaft
Oil filter	Full flow, cartridge type
Lub. Oil	Refer to Operation Manual
Oil pan capacity	High level 19 liters Low level 15 liters

Air induction system

Maximum allowable intake air
restriction

---with clean filter element	3kPa
---with dirty filter element	6kPa
Exhaust gas temp.	600 °C

MECHANISM

Number of valve	Intake 2, exhaust 2 per cylinder
Valve lashes at cold	Intake 0.25mm Exhaust 0.50mm

Cooling system

Coolant capacity	
---Water capacity(engine only)	12 liters
Lid Min. pressure	70 kPa
Water pump	Centrifugal type driven by belt
Water pump Capacity	200L/min
Thermostat:Opening/Full open temp	82/95 °C
Cooling air flow	6.2m ³ /s

Electric system

Charging generator	24V×55A
Voltage regulator	Built-in type IC regulator
Starting motor	24V×7.5kW
Battery Voltage	24V
Battery Capacity	120 AH

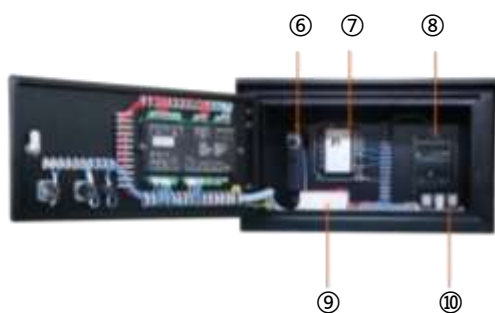
Alternator specification

Phases	3	Coating	Vacuum impregnation
Poles	4	Insulation class	H
Power factor(cosφ)	0.8	Protection	IP23
Winding connection	Star	Excitation system	Self-excited
Winding pitch	2/3	Bearing	Single Bearing
Voltage regulator type	AVR	Coupling	Flexible disc

Control system Introduction

Deepsea 6120 Auto start & auto mains failure control panel

Deepsea 6120 is an auto mains failure controller for single generator, it can monitor and protect the generator working all the time. it has a LCD display which clearly shows the status of the engine. this controller include seven inputs and six outputs. This controller can also be programmed using the front panel or by using DSE configuration Suite PC software



Key Features:

- Auto start/stop, load transfer and alarming of generator
- Remote start on or off load
- With hierarchical loading function
- Multiple start/stop cycles can be preset
- 3 phase generator and mains voltage monitoring.
- Generator/load power detection(kW, kVA, kVA_r PF)
- Overload protection (kW)
- Load current monitoring and protection
- Engine speed protection
- Engine pre-heat
- Engine start idle & stop idle
- Battery voltage monitoring
- Start under the low battery
- 4 active outputs
- 4 digital inputs and 3 analogue inputs.
- 6 Custom digital input
- 6 outputs(4 configurable on magnetic pick-up, 6 configurable on Canbus version)
- DSE2130,DSE2157,DSE2548 expansion module can be connected
- Support 0-10V or 4-20mA oil pressure sensor

Main features:

- Multi language display
- Mains failure self starting
- The running time of the engine can be recorded to facilitate the maintenance and repair of the unit
- User-friendly set-up and button layout
- LCD display can display multiple parameters at the same time
- Support EFI engine
- IP65 rating (with optional gasket)
- PC and front panel configuration
- 100 event records
- Data recording and trend analysis

Protection:

- Two sets of protection parameters can be preset
- Normal alarm, electrical trip and shutdown alarm can be set to effectively monitor the engine speed,oil pressure, water temperature and oil level, as well as the frequency, voltage, current and power of the alternator, for complete engine/alternator protection
- Low Oil Pressure
- High water Temperature
- High voltage and low voltage
- Overspeed
- Emergency stop
- Fail to start

Soundproof Canopy Introduction:

Standard Type :

- The arc angle structure makes the appearance beautiful and not easy to bump
- High quality coating powder, chemical surface treatment & 100-120um coating thickness greatly improving the anti-corrosion and anti rust level
- Stainless steel hinge & door lock are beautiful and anti-rust
- 2.0mm cold rolled plate used makes the body more solid
- The bottom forklift and loading port design enables easy loading and unloading
- The drainage outlets are all connected to the outside for easy operation
- The sufficient air in & out design ensure long-term and stable operation of the unit
- Isolation net is designed for air inlet, exhaust outlet and muffler outlet to prevent objects from entering the unit
- High density foam used inside effectively reduces noise
- Ceiling Lighting is equipped for easy operation
- The built-in base fuel tank with fuel filler set on the shell facilitates refueling
- Models above medium power range are designed with top hoisting mechanism to facilitate transportation of the unit.

Imitated container type :

- The shell is made of 3.0mm hot rolled steel plate so as to withstand the lifting capacity of 15-ton without deformation
- The switch cabinet and control panel are respectively set on both sides of the shell for easy maintenance & operation
- The shell looks similar to standard container, and can be loaded into 40HQ container for transportation, which is convenient for shipping
- The lifting eye holes are designed on the top same as the standard container for easy handling
- High density foam used inside effectively reduces noise
- The built-in base fuel tank with fuel filler set on the shell facilitates refueling
- Double emergency stop button set on different surfaces enables quick response to operation requirements
- The shell base is independent from the unit with 3mm thick checkered steel plate floor, which is beautiful & antiskid, and is convenient for overhaul & maintenance of the unit
- The door handle, lock and hinge are all made of stainless steel to avoid rusting
- The air out louver made of the mesh plate with powder coating and pasted with high-density glass fiber is beautiful and not easy to rust, and can further reduce the noise
- Isolation net is designed for air inlet, exhaust outlet and muffler outlet to prevent objects from entering the unit
- The sufficient air in & out design ensure long-term and stable operation of the unit
- The drainage outlets are all connected to the outside for easy operation
- Ceiling Lighting is equipped for easy operation

Classics Economic series :

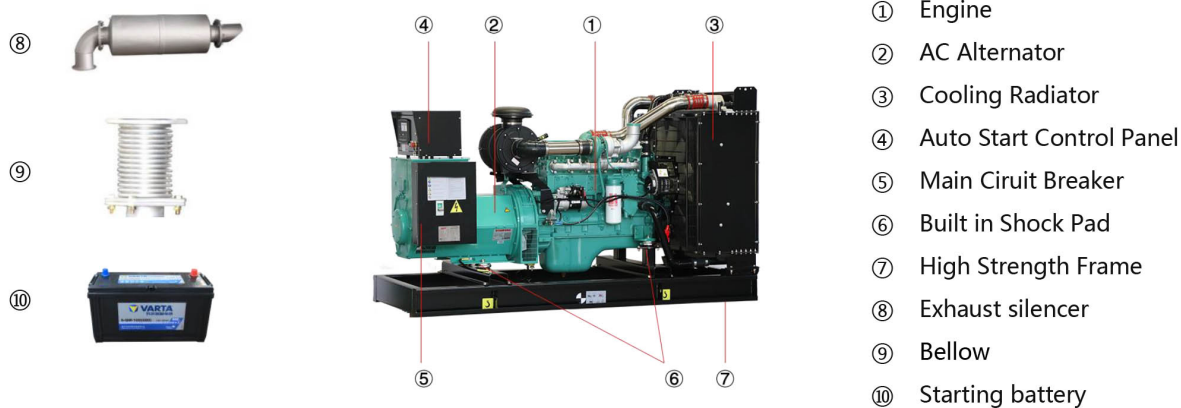
- Right angle around the canopy
- Carbon spray hinges and lock with rust proof
- The drainage & lubricating oil outlets are all connected to the outside for easy to maintain
- The air inlet and outlet are designed with grid structure of to prevent big objects from entering the canopy
- The lifting lug on the top for medium range genset makes easily and convenient transportation
- High-quality powder coated, chemical surface treatment & 80-120um coating thickness is highly durable against erosion and scratch
- The bottom forklift is built-in base frame for small range genset, with over stow capacity
- The fuel inlet on the canopy is for easy to fuel filling
- High-density sponge to effectively reduce noise



Classics Economic Canopy Sample Picture



Standard supply scope:



Optional supply scope:

Genset	Engine	Alternator	Control system
<ul style="list-style-type: none">• Tool box• Base fuel tank• External daily fuel tank• Trailer	<ul style="list-style-type: none">• Fuel heater• Fuel and water separator	<ul style="list-style-type: none">• Temp. detector for winding and bearing• PMG• Antirust, mildew and salt fog treatment• Anti condensation heater	<ul style="list-style-type: none">• ATS• Synchronization System• Adjustable earth relay
Breaker	Fuel system	Lub-oil system	Cooling system
<ul style="list-style-type: none">• ABB• Schneider	<ul style="list-style-type: none">• Low fuel level alarm• Auto Fuel Pump• T Valve	<ul style="list-style-type: none">• Lub oil heater• Temp.-sensor• Oil drain Pump	<ul style="list-style-type: none">• Elec.coolant Heater



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