STAUNCH MACHINERY SINCE 1979

136 KVA

POWERED BY: Cummins

STANDARD SPECIFICATIONS

1. ENGINE

Cummins four stroke heavy duty high performance industrial type diesel engine.

2. ENGINE FILTRATION SYSTEM

- Cartridge type dry air filters.
- Cartridge type fuel filters.
- Full flow lube oil filters.

All filters have replaceable elements.

3. COOLING RADIATOR

Radiator and cooling fan, complete with safety guards, designed to cool the engine at high ambient temperatures (consult your dealer for de-ration factors).

4. EXHAUST SYSTEM

Maximum allowable back pressure	10.25 (kPa)

5. CIRCUIT BREAKER TYPE

3 pole MCB / MCCB (supplied disconnected and without cables)

CONTROL PANEL

Make	Deep Sea
Model	DSE6110/20

The DSE6110 is an Auto Start Control Module and The DSE6120 is an auto mains(utility) Failure Control Module for single gen-set applications. Both modules have been designed to work with electronic engines providing advance engine monitoringand protection features.

- Transfer between mains(utility) and generator power(DSE6120 only)
- Generator frequency
- Underspeed, Overspeed
- Generator volts (L-L, L-N)
- Generator current
- Engine oil pressure
- Engine coolant temperature
- Fuel level (Warning or shutdown)
- Hours run counter
- Battery volts
- Fail to start/stop
- Emergency stop
- Failed to reach loading voltage/frequency
- Charge fail
- Loss of magnetic pick-up signal
- Low DC voltage
- CAN diagnostics and CAN fail/error

ENGINE / TECHNICAL DATA

Engine Make	Cummins	
Engine Model	6BTAA5.9-G6	
Governing class	ISO 8528	
Number of Cylinders	6	
Cylinder Arrangement	Vertical in line	
Bore and Strokemm	102 x 120	
Displacement / Cubic Capacity litres	5.9	
Induction System	Turbocharged and charge air cooled	
Cycle	4	
Combustion System	Direct Injection	
Compression Ratio	16.5:1	
Cooling System	charged air cooled	
Frequency and Engine Speed	50Hz & 1500rpm	60Hz & 1800rpm
	Prime	**Prime**
Gross Engine Power kW (hp)	135(180)	150(205)
Fuel Consumption @ 50% load L/hr	17.92	20.71
@ 75% load L/hr	26.58	31.47
@ 100% load L/hr	35.16	36.46
Total Lubrication System Capacity litres	16.4	16.4
Total Coolant Capacity (inc. radiator)litres	21.4	21.4
Exhaust Temperature:°C	519	485
Radiator Cooling Air Flow (Min): m^3/sec	2.7	3.7
Intake Air Flow: Litre/s	139	179
Exhaust Gas Flow: Litre/s	498	598
Fuel Tank Capacity:litres	275	275

DIMENSIONS AND WEIGHT*

Length mm	Width mm	Height mm	Weight* kg
1723	896	1380	718

* For skid mounted genset without enclosure

Output Ratings	Prime	Standby
380-415 V, 3 ph, 50 Hz, 1500 rpm	138.09 KVA	151.90 KVA
	110.47 KW	121.52 KW
480 V, 3 ph, 60 Hz, 1800 rpm	138.70 KVA	152.57 KVA
	110.96 KW	122.06 KW

ALTERNATOR DATA

Make	Stamford
Model	UCI 274 E
KVA	140
KW	112
No. of bearings	1
Insulation class	H
Total Harmonic Content	in linear load <5% , at no load < 1.5%
Winding Leads	12
Ingress Protection	IP23
Excitation System	SHUNT
Winding Pitch	2/3
AVR Model	SX460
Overspeed	2250 mn^{-1}
Voltage Regulation	± 1.0 %
Short Circuit Capacity	-

The image shown above might not be the final product

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STANDARD SPECIFICATIONS

6. FUEL SYSTEM

On Generating Sets up to 2000 KVA, the base frame design can be incorporated with an integral fuel tankwith a capacity of approx. 8 hours running at Full Load. The tank is supplied complete with fill cap breather fuel feed and return lines to the Engine and drain plug.

7. ALTERNATOR
7.1 INSULATION SYSTEM

• The insulation system is Class H.
• All windings are impregnated in either a triple dipthermosetting liquid, oil and acid resisting polyester varnish or vacuum pressure impregnated with a special polyester resin.

• Heavy coat of antitracking varnish additional protection against moisture.

7.2 AUTOMATIC VOLTAGE REGULATOR (AVR)
The fully sealed Automatic Voltage Regulator maintains the Voltage Regulation at ±0.5%. Nominal adjustment by means of a trim pot incorporated on the AVR.

7.3 MOTOR STARTING an overload capacity equivalent to 300% of the Full Load impedance at zero Power Factor can be sustained for 10 seconds.

8. MOUNTING ARRANGEMENT

8.1 BASE FRAME
The complete Generating Set is mounted as a whole on a heavy duty fabricated steel Baseframe.

8.2 COUPLINGThe Engine and Alternator are directly coupled by means of an SAE flange. The Engine flywheel is flexibly coupled to the Alternator rotor.

8.3 ANTI-VIBRATION MOUNTING PADS anti-Vibration pads are affixed between the Engine / Alternator feet and the Baseframe thus ensuring complete vibration isolation of the rotating assembly.The Fan & Fan Drive along with the Battery Charging

8.4 SAFETY GUARDS The Fan & Fan Drive along with the Battery Charging Alternator are Safety Guard protected for personal protection.

9. FACTORY TESTS

• The Generating set is load tested before dispatch
• All protective devices control functions and site load conditions are simulated. The generator and it's systems are checked before dispatch.

10.EQUIPMENT FINISHING all mild steel components are fully degreased and painted with powder coated paint to ensure maximum scuff resistance and durability.

RATINGS DEFINITION

Prime Power

These ratings are applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. 10% overload power is available for 1 hour in 12 hours continuous operation.

Standby Power

These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings.

STANDARD REFERENCE CONDITIONS

Output ratings are presented at 25°C air inlet temperature, barometric pressure 100 kPa, relative humidity 30%. This generating set is designed to operate at high ambient temperatures (up to 55°C), humidity (up to 99%) and altitudes. De-ration may apply,please consult your dealer for specific site ratings.

STAUNCH Generators are assembled Some of the specifications are not standard on all Genset models. in facilities certified to ISO 9001 All information in this document is substantially correct at time of printing and may be altered subsequently.

Generating Set pictured may include optional accessories.

11. DOCUMENTATIONS a set of Operation & Maintenance manual, Circuit wiring diagrams and Commissioning / Fault Finding instruction leaflets accompany the Generator.

12. QUALITY STANDARDS The equipment meets the following standards: BS4999, BS5000, BS5514 IEC 60034, VDE0530, NEMA MG 1.22 and ISO 8528.

13. WARRANTY All of the Generating Sets are covered under a warranty policy for a period of 12 months. Warranty of the equipment is in line with manufacturers warranty terms & conditions.

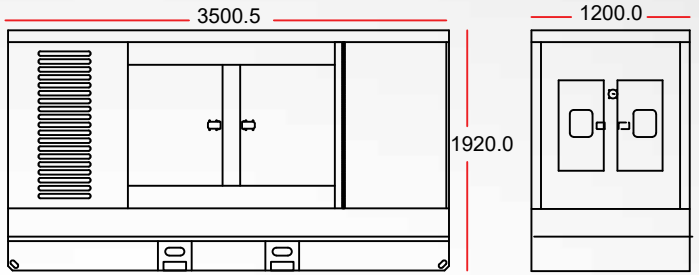
(check warranty statement for more details, as it may vary for different countries)In line with continuous product development, we reserve the right to change specifications without notice.

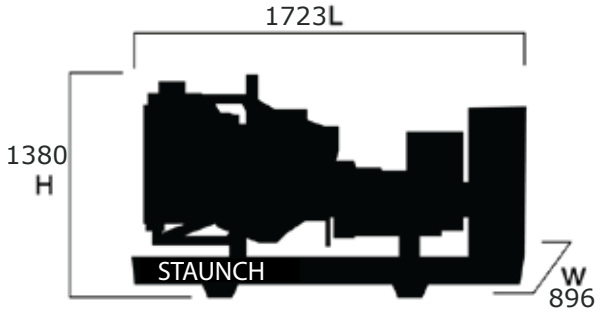
For further information on all of the standard and optional features accompanying this product please contact your local dealer or visit:

WWW.STAUNCHMACHINERY.COM

AVAILABLE OPTIONS & ACCESSORIES

We offer a range of optional features and accessories to tailor our generating sets to meet your power needs.





ACCESSORIES

• *switches*
• *Load banks*
• *Auxiliary fuel tanks*
• *Manual & automatic*
• *Genuine spare partstransfer*

OPTIONS

• *Water jacket heater*
• *A variety of generating set*
• *Additional protection alarms*
• *Water fuel seperator control and synchronizing and shutdowns*
• *panels*
• *Battery charger*