

MODEL: VG220CS



Genset Model	VG220CS
Prime Power	160KW / 200KVA
Standby Power	176KW / 220KVA
Frequency/Speed	50Hz/1500rpm
Standard Voltage	230V/400V
Phases	Three phases, four wires
Manufacturer	Vega Power International PTE.LTD

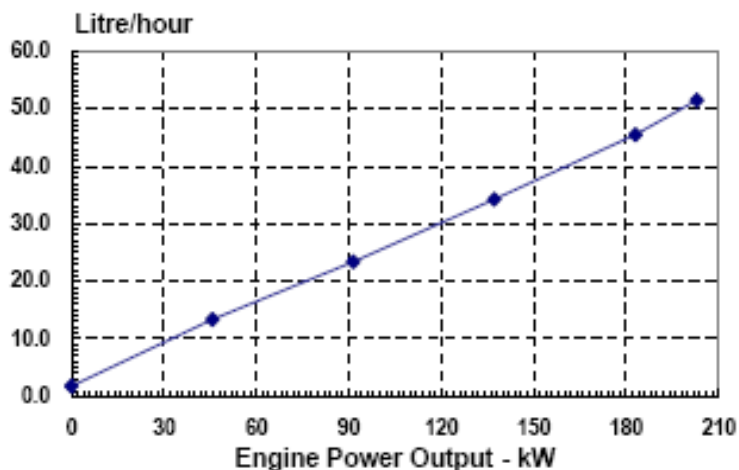
- ◆ Assembled by Cummins diesel engine and Stamford alternator.
- ◆ Three filters as standard, fuel and water separator as optional.
- ◆ Radiator and fan with safety guard.
- ◆ Single bearing alternator IP 23, Insulation Class H.
- ◆ Heavy duty steel as base frame and 8hrs operation base fuel tank.
- ◆ Automatic control panel and 3 poles circuit breaker, internal cable.
- ◆ 12V or 24V battery, battery wires.
- ◆ Battery charger and float battery charger as standard supply scope.
- ◆ Optional soundproof canopy, ATS, synchronization panel, movable trailers.

Engine Data:

Manufacturer	Dongfeng Cummins Engine Co., Ltd.
Model	6CTAA8.3-G2
Engine speed	1500rpm
Engine power	
-----Standby power	203kw / 272HP
-----Base output power	183kw / 245 HP
-----Continuous power	149kw /200HP
Air intake way	Turbocharged and Charge Air Cooled
Cylinder quantity	6
Bore * Stroke	114*135 mm
Displacement	8.3L
Fuel system	BYC P7100/GAC
Governor Regulation	≤3%
Low idle	700-900 rpm
Piston speed	6.8 m/s
Friction energy output	17 kw
Emission Certification	MEP STAGE I

Fuel Consumption:

output power			fuel consumption	
%	KW	HP	g/KW.h	L/h
standby power				
100	203	272	209	51
base output power				
100	183	245	205	45
75	137	184	206	34
50	92	123	211	23
25	46	61	241	13
continue power				
100%	149	241	205	37



Exhaust system:

Max. back pressure	10.1 kPa
Exhaust gas flow (prime power - standby power)	480-547 L/sec
Exhaust gas temperature (prime power - standby power)	510-580 °C

Air intake system:

Max. air intake resistance with Heavy Duty Air Cleaner	
Dirty Element	6.2 kPa
Clean Element	3.7 kPa
Air intake flow (prime power - standby power)	183-191 L/sec

Lubrication system:

Normal oil pressure range	
-----idle speed	103 kPa
-----governor speed	276-414 kPa
Max. oil temperature permitted in oil pan	121 °C
Minimum required lube system capacity-sump plus filters	23.8L

Fuel system:

Type Injection System	BYC P7100 direct injection
Maximum Restriction at Lift Pump	20.3 kPa
Maximum Fuel Flow on the Supply Side of the Fuel Pump	83 L/hr
Maximum Fuel Inlet Temperature	70 °C
Total Drain Flow (constant for all loads)	30 L/hr

Cooling system:

Coolant capacity – engine only	12.3L
Maximum Coolant Friction Head External to Engine	28 kPa
Maximum Static Head of Coolant Above Engine Crank Centerline	18.3m
Standard Thermostat (Modulating) Range	82-93 °C
Min. opening pressure of radiator cap	103 kPa
Maximum Top Tank Temperature for Standby/Prime Power	110/104 °C
Engine coolant flow (prime power - standby power)	3.3 L/s

Electric system:

Cranking Motor (Heavy Duty, Positive Engagement)	12V	24V
Battery Charging System, Negative Ground	63A	40A
Maximum Allowable Resistance of Cranking Circuit	0.00075 Ω	0.002 Ω

Emission:

Gaseous Emissions per GB 20891-2007	
Weight-Specific NOx	9.2 g/KW.h
Weight-Specific HC	1.3 g/KW.h
Weight-Specific CO	5.0 g/KW.h
Weight-Specific Particulates	0.5 g/KW.h

Alternator Specifications:

Manufacturer	Cummins Generator Technologies(China) Co. Ltd
Model	UCI274H
Output power	160KW
AVR model	AS440
Number of phase	3
Power factor (Cos Phi)	0,8
Altitude	≤ 1000 m
Overspeed	2250RPM
Number of Pole	4
Exciter type	Self Excited
Insulation class	H
Voltage regulation	±1%
protection	IP23
Waveform distortion	no load < 1.5% non-distorting balanced linear load < 5.0%
Telephone interference	THF< 2%
Bearing	single
Coupling	Direct

Alternator general data :

- ◆ Operate either 50Hz or 60Hz.
- ◆ Standard enclosure IP23, but IP44, IP55 for option
- ◆ Insulation class H.
- ◆ Shunt excitataion systems.
- ◆ PMG system for options.
- ◆ Automatic voltage regulator
- ◆ Single bearing alternator
- ◆ Stator grease insulation covered
- ◆ Rotator and excitation high polymer
- ◆ Resist the corruption oil and acid
- ◆ Rotator balance is in accordance with BS5625 standard 12.5
- ◆ High-quality lubrication sealed long-time bearing
- ◆ Rotator silicon steel close tight

Control system



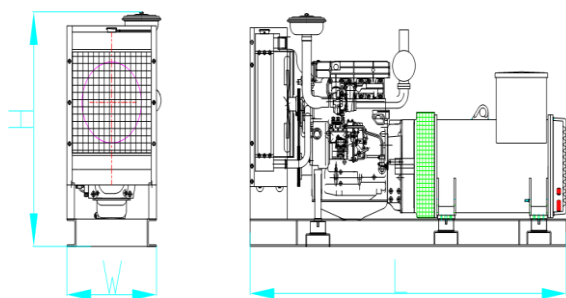
The **DSE6120** is made by DEESEA and is a new control module for single gen-set applications, and it is an Automatic Start Control Module and is simple to operate, and the module includes USB, RS232 and RS485 for expansion device connectivity.

Specifications: Frequency meter, Ammeter, Voltmeter Alarms and faults Oil pressure, water temperature, No start-up, Overspeed, Min/max alternator, Min/max battery voltage, Low fuel level, Emergency stop.

Engine parameters: Hours counter, Oil pressure, Water, temperature, Engine speed, Battery voltage, Fuel level.

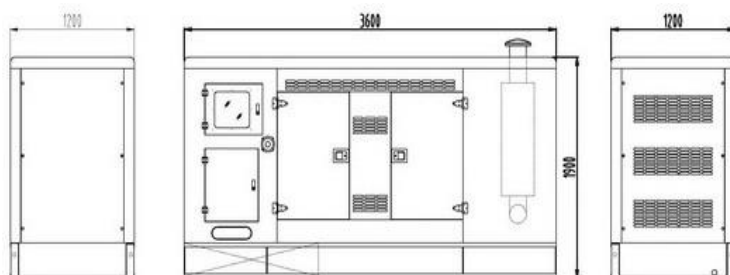
Weight and Dimensions

1.Open Version:



Open Type (Standard Configuration)
Overall Size: 2470×970 ×1650mm(L*W*H)
Weight: 1850kg

2. Soundproof Version:



Soundproof Type
Overall size: 3600× 1200×1980mm(L*W*H)
Weight: 2600kg