

## MODEL: VG62CS



Genset Model	VG62CS
Prime Power	45KW / 56KVA
Standby Power	50KW /63KVA
Frequency/Speed	50Hz/1500rpm
Standard Voltage	230V/400V
Phases	Three phases, four wires
Manufacturer	Vega Power International PTE.LTD

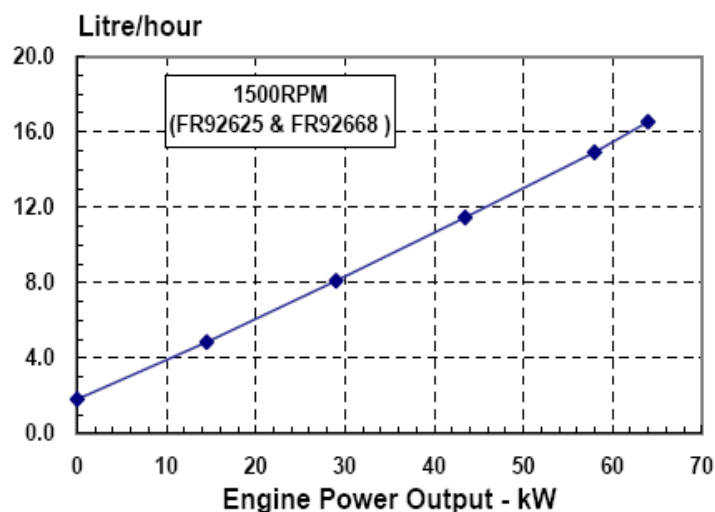
- ◆ Assembled by Cummins diesel engine and Stamford alternator.
- ◆ Three filters as standard, fuel and water separator as optional.
- ◆ Radiator and fan with safety guard.
- ◆ Single bearing alternator IP 23, Insulation Class H.
- ◆ Heavy duty steel as base frame and 8hrs operation base fuel tank.
- ◆ 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 Specification:

Manufacturer	Dongfeng Cummins Engine Co., Ltd.
Model	4BTA3.9-G2
Engine speed	1500rpm
Engine power	
Standby power	64kw/ 86HP
Base output power	58kw /78HP
Aspiration	Turbo-charged and aftercooler
Cylinder quantity	4
Bore * Stroke	102*120mm
Displacement	3.9L
Fuel system	BYC A/RSV Mechanical
Governor Regulation	≤3%
Low idle	950-1050 rpm
Piston speed	6.0 m/s
Emission Certification	MEP STAGE I
Friction energy output	8.2 kw

## Fuel Consumption:

output power			fuel consumption	
%	KW	HP	g/KWm.h	L/h
standby power				
100	64	86	213	17,0
base output power				
100	58	78	212	15
75	44	58	217	11
50	29	39	230	8
25	15	19	275	5
continuous power				
TBD	TBD	TBD	TBD	TBD



## Exhaust system:

Maximum Back Pressure	10kPa
Exhaust Pipe Size Normally Acceptable	75 mm
Maximum Static Supported Weight at the Turbocharger Outlet Flange	13.5 N.m
Exhaust temperature (prime power - standby power)	535-560 °C
Exhaust Gas Flow (prime power - standby power)	149-165 L/s

## Lubrication system:

Minimum Engine Oil Pressure for Engine Protection Devices:	
-----Low idle	207 kPa
-----Rated speed	345 kpa
Max. oil temperature permitted in oil pan	121 °C
Minimum Required Lube System Capacity - Sump plus Filters	10.9L

## Fuel system:

Type Injection System	BYC PB Direct Injection
Maximum Restriction at Lift Pump	102 mmHg
Maximum Allowable Head on Injector Return Line (Consisting of Friction Head and Static Head)	508 mmHg
Total Drain Flow (constant for all loads)	30 L/h

## 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
Minimum Recommended Battery Capacity • Cold Soak @ 10 °F (-12 °C) and Above	800 0°F CCA	400 0°F CCA

## Air intake system:

Maximum Intake Air Restriction with Heavy Duty Air Cleaner	
Dirty Element	6kPa
Clean Element	4kPa
Minimum Dirt Holding Capacity with Heavy Duty Air Cleaner	53g/cfm
Maximum Temperature Rise from Ambient to the Inlet of the Turbocharger	17 °C
Recommended intake piping size (inner diameter)	76mm
Air intake flow (prime power - standby power)	55-59 L/sec

### ***Cooling system:***

Coolant capacity – engine only	7.2L
Maximum Coolant Friction Head External to Engine	28 kPa
Maximum Static Head of Coolant Above Engine Crank Centerline	14m
Standard Thermostat (Modulating) Range	82-95 °C
Minimum Pressure Cap	69 kPa
Maximum Top Tank Temperature for Standby / Prime Power	104 / 100 °C
Engine coolant flow (prime power- standby power)	2.2L/sec
Heat Rejection to Coolant (prime power- standby power)	25.9kW-29 kW

## **Alternator Specifications:**

Manufacturer	Cummins Generator Technologies(China) Co. Ltd
Model	UCI224E
Output power	40KW
AVR model	AS440
Number of phase	3
Power factor (Cos Phi)	0,8
Altitude	≤ 1000 m
Overspeed	2250RPM
Number of Pole	4
Exciter type	Shunt
Insulation class	H
Protection	IP23
Voltage regulation	±1%
Waveform distortion	no load < 1.5% non-distorting balanced linear load < 5.0%
Telephone interference	THF< 2%
Bearing	single
Coupling	Direct

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### ***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 DEEPSEA 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

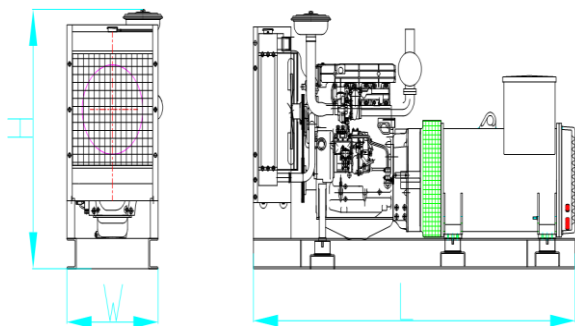
for expansion device connectivity.

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.

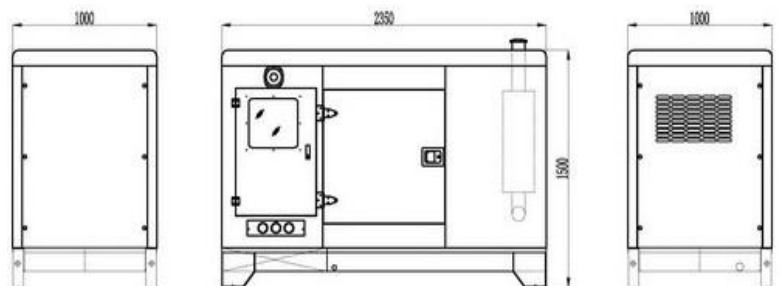
## Weight and Dimensions

### 1. Open Version:



Open Type (Standard Configuration)  
Overall Size: 1780×730 ×1285mm(L\*W\*H)  
Weight: 800kg

### 2. Soundproof Version:



Soundproof Type  
Overall size: 2350× 1000×1550mm(L\*W\*H)  
Weight: 1130kg

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