

MODEL: VG55CS

Genset Model	VG55CS
Prime Power	40KW / 50KVA
Standby Power	44KW /55KVA
Frequency/Speed	50Hz/1500rpm
Standard Voltage	230V/400V
Phases	Three phases, four wires
Manufacturer	Vega Power International PTE.LTD

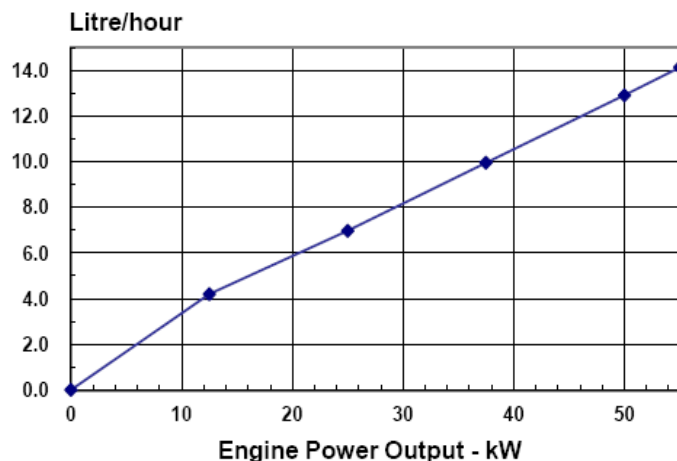
- ◆ Assembled by Cummins diesel engine and Stamford alternator.
- ◆ Three filters as standard, fuel and water separator as optional.
- ◆ Radiator and fan with safety guard.
- ◆ Single bearing alternator IP 23, Insulation Class H.
- ◆ Heavy duty steel as base frame and 8hrs operation base fuel tank.
- ◆ 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	55kw/ 74HP
Base output power	50kw /67HP
Aspiration	Turbo-charged and aftercooler
Cylinder quantity	4
Bore * Stroke	102*120mm
Displacement	3.9L
Fuel system	BYC A/RSV Mechanical
Governor Regulation	≤5%
Low idle	950-1050 rpm
Piston speed	6.0 m/s
Friction energy output	8.2 kw

Fuel Consumption:

output power			fuel consumption	
%	KW	HP	g/KWm.h	L/h
standby power				
100	55	74	212	14,1
base output power				
100	50	67	213	12,9
75	37,5	50,25	219	10
50	25	33,5	230	7
25	12,5	16,75	277	4,2
continuous power				
TBD	TBD	TBD	TBD	TBD



Exhaust system:

Maximum Back Pressure	10kPa
Exhaust temperature (prime power - standby power)	526-548 °C
Exhaust Gas Flow (prime power - standby power)	125-134 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 A Direct Injection
Maximum Restriction at Lift Pump	13.6kPa
Maximum fuel inlet Temperature	70 °C
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	625 0°F CCA	312 0°F CCA

Air intake system:

Maximum Intake Air Restriction with Heavy Duty Air Cleaner	
Dirty Element	6.2kPa
Clean Element	3.7kPa
Air intake flow (prime power _ standby power)	49-52L/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	UCI224D
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

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

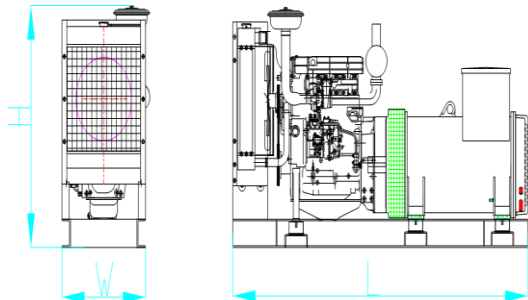
for expansion device connectivity.

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.

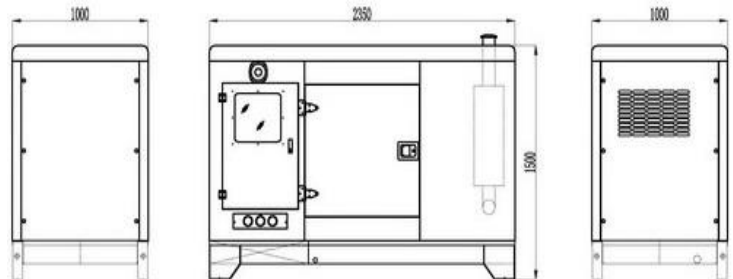
Weight and Dimensions

1. Open Version:



Open Type (Standard Configuration)
Overall Size: 1675×730 ×1285mm(L*W*H)
Weight: 770kg

2. Soundproof Version:



Soundproof Type
Overall size: 2350× 1000×1550mm(L*W*H)
Weight: 1100kg