

MODEL: VG788CS



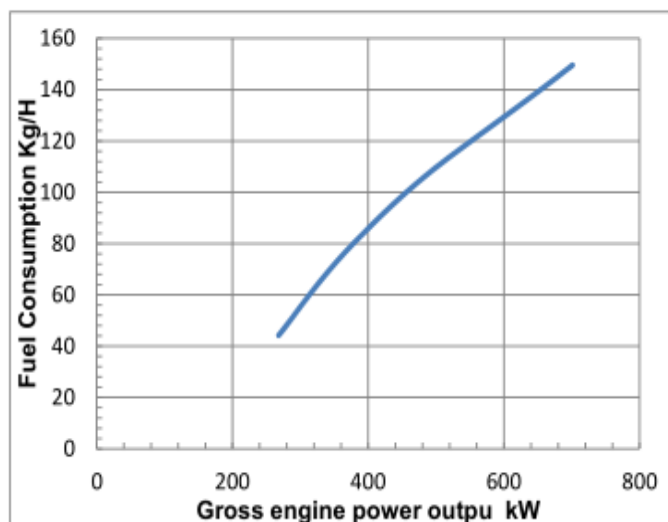
Genset Model	VG788CS
Prime Power(50HZ)	560KW/700KVA
Standby Power(50HZ)	630KW/788KVA
Frequency/Speed	50Hz/1500rpm
Standard Voltage	240V/415V
Phases	Three phases, four wires
Manufacturer	Vega Power International PTE.LTD

- ◆ 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	Chongqing Cummins Engine Co. Ltd.
Model	KTA38-G1
Engine speed	1500rpm
Engine power	
-----Standby power	701kw /940HP
-----Prime power	634kw /850HP
Type	4 cycle, 60°Vee; 12-cylinder
Aspiration	Turbocharged and Aftercooled
Governor	electrical
Bore * Stroke	159*159 mm
Displacement	3 8 L
Compression ratio	14.5:1
Idle speed	725 – 775 r/min
Brake mean effective pressure	1407- 1551kPa(prime power-standby power)
Piston speed	7.9 m/s
Friction horsepower	86kw(115HP)

Fuel Consumption:



OUTPUT POWER			CONSUMPTION		BFSC	
%	BHP	kW	Lb/h	Kg/h	g/kW.h	Lb/BHP.h
1500RPM						
STANDBY						
100	940	701	330	150	213	0.351
PRIME						
100	850	634	300	136	215	0.353
75	638	476	230	105	220	0.361
50	479	357	163	74	207	0.340
25	359	268	97	44	165	0.271
CONTINUOUS						
100	810	604	0	0	0	0.000

Exhaust system

Max. allowable back pressure	10 kPa
Standard exhaust pipe diameter	152 mm

Air induction

Maximum allowable intake air restriction	
-----with clean filter element	3.73 kPa
-----with dirty filter element	6.23 kPa
Intake Air alarm temperature	82 °C

Cooling system

Coolant capacity	
-----With heat exchanger	66L
-----With explanation tank & LTA	112L
Standard thermostat(modulating) range	82-93 °C
Max. coolant temerature	96.1 °C
Max. allowable top tank temerature for standby/prime power	104/100 °C

Lubrication system

Oil Pressure	
-----Idle speed	138 kPa
-----Rated speed	310-448 kPa
Max. allowable oil temperature	121°C
Oil Pan capacity - Low/High	121.1 /151.4L
Total system capacity(excluding by-pass filter)	135.1 L
Angularity of oil pan-Front Down	30°

Fuel System

Type Injection system	Direct injection Cummins PT
Min. Allowable fuel tank vent capability	425 L/h

Electric system

Min. recommended battery capacity (24V)	
-----Cold soak at 10°C or above-----CCA	1200
-----Cold soak at 0-10°C or above-----CCA	1280
-----Cold soak at -18-0°C or above-----CCA	1800
Max. allowable resistance of Starting circuit	0.002 ohm
Starter(heave,Anode)	24 Volt
Battery recharge system, negative ground	35 ampere

Performance data

	Standby power	Prime power
Governed Engine Speed.....RPM	1500RPM	1500RPM
Engine Idle Speed.....RPM	725-775	725-775
Gross Engine Power Output.....KW	701	634
Friction Horsepower.....KW	86	86
Intake Air Flow.....Litre/sec	873	802
Exhaust Gas Flow.....Litre/sec	2480	2256
Exhaust Gas Temperature...°C	546	538
Heat Rejection to Ambient/min(KW)	106	97
Heat Rejection to Coolant.....KW	430	389

Alternator Specifications:

Manufacturer	Cummins Generator Technologies(China) Co. Ltd
Model	LVI634B
Frequency	50HZ
Voltage	415V
Output power-----Continuous duty/40°C	725kVA / 580kW
-----Stand-by/27°C	800kVA / 640kW
Phase	3 ph.
Power factor	P.F.=0.8
Insulation class	H
Winding pitch	2/3 (N° 6S)
Number of wires	6
Protection	IP23
Altitude	≤ 1000 m
Overspeed	2250 min ⁻¹
Excitation system	shunt
AVR type	MX321
Voltage regulation	±0.5%
Short-circuit current	300% (3IN) 0s
Waveform distortion	no load < 1.5% non-distorting balanced linear load < 5.0%
Telephone interference	THF< 2%
Air follow	1.1 m ³ /s
Relative humidity	≤ 95%
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

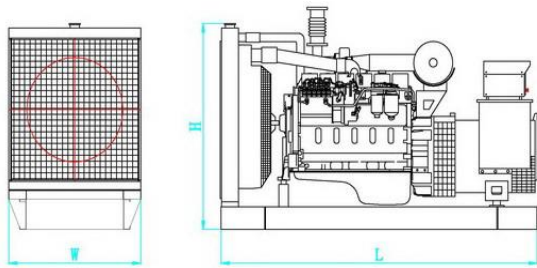
for expansion device connectivity.

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.

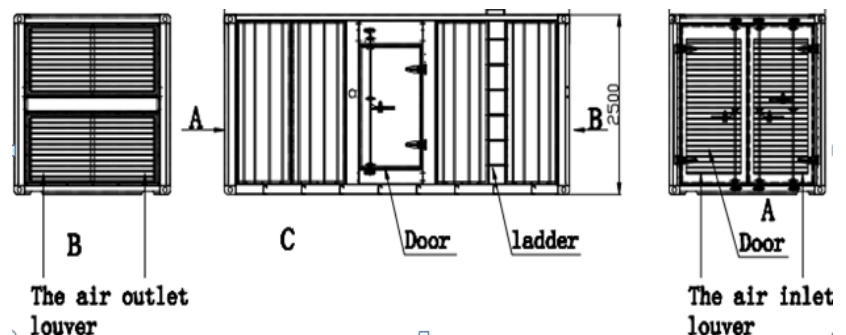
Weight and Dimensions

1. Open Version:



Open Type (Standard Configuration)
Overall Size: 4050×1800 ×2350mm(L*W*H)
Weight: 7250kg

2. Soundproof Version:



Soundproof Type
Overall size: 5800× 2280×2500mm(L*W*H)
Weight: 9500kg

