

MODEL: VG388CS



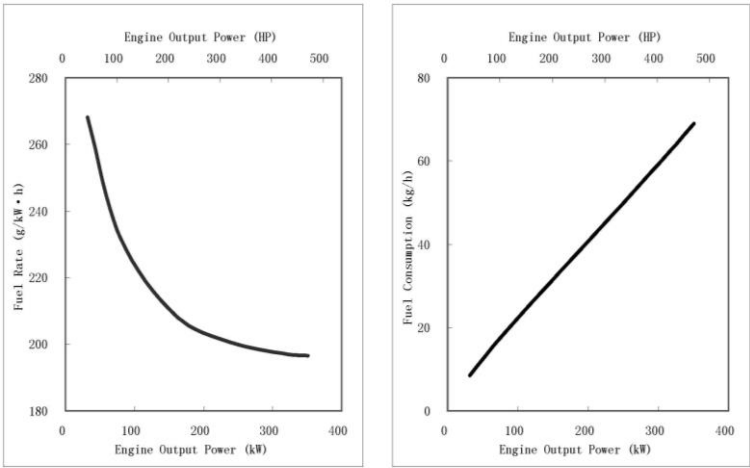
Genset Model	VG388CS
Prime Power(50HZ)	280KW / 350KVA
Standby Power(50HZ)	310KW / 388KVA
Frequency/Speed	50Hz/1500rpm
Standard Voltage	230V/400V
Phases	Three phases, four wires
Manufacturer	Vega Power International PTE.LTD

- ◆ 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	Chongqing Cummins Engine Co. Ltd.
Model	NTA855-G4
Engine speed	1500rpm
Engine power	
-----Standby power	351kw /470HP
-----Prime power	317kw /425HP
Type	4 cycle, In-line, 6-cylinder
Aspiration	Turbocharged, Aftercooled
Bore * Stroke	140*152 mm
Displacement	14 L
Compression ratio	14.0:1
Idle speed	650-750 r/min
Brake mean effective pressure(rated_ Max condition)	1811 _ 2006 kPa
Piston speed	7.62 m/s
Friction horsepower	22kw

Fuel Consumption:



	Output Power		Fuel Consumption		Fuel Rate
	HP	kW	kg/h	L/h	g/kW·h
110%	470	351	69.0	83.1	196.6
100%	425	317	62.5	75.3	197.2
75%	319	238	47.7	57.5	200.6
50%	213	159	33.1	39.9	208.8
25%	106	79	18.4	22.2	232.2
10%	43	32	8.5	10.2	268.1

Exhaust system

Max. allowable back pressure	10 kPa
Standard exhaust pipe diameter	127 mm

Air induction system

Maximum allowable intake air restriction	
-----with clean filter element	3.74 kPa
-----with dirty filter element	6.22 kPa
Minimum dirt holding capacity	53 g/L/s
Maximum allowable intake air temperature	17 °C

Cooling system

Coolant capacity	
-----Engine only	20.8 L
-----With radiator	60.6 L
-----With heat exchanger	49.2 L
Standard thermostat(modulating) range	82-94 °C
Max. coolant temerature	96 °C
Max. allowable top tank temerature for standby/prime power	104/100 °C
Min. recommended top tank temperature	71 °C

Lubrication system

Oil Pressure	
-----Idle speed	103 kPa
-----Governed speed	241-345 kPa
Max. allowable oil temperature	121°C
Max. oil consumption	0.24 L/h
Oil Pan capacity - Low/High	28.4 / 36.0 L
Total system capacity	38.6 L
Angularity of oil pan-Front Down/Front Up/Side to Side	38 °/38 °/38 °

Fuel System

Type Injection system	Direct injection Cummins PT
Min. fuel supply line size	16 mm
Min. fuel return line size	13 mm
Max. fuel pump supply	329L
Fuel rail pressure	1254kPa
Max. Fuel temperature	71°C

Electric system

Min. recommended battery capacity (24V)	
-----Cold soak(no Load)----CCA	900
-----Min. reserved capacity---CCA	320
-----Cold soak(with Load)----CCA	900
-----Min. reserved capacity---CCA	320
Max. allowable resistance of cranking circuit	0.002 ohm
Standard cranking moto(heavy duty,positive engagement)	24 Volt
Standard battery charging system, negative ground	35 ampere

Performance data

Idle speed	575-650 r/min
Max. no-load governed speed	1800 r/min
Max over speed capability	2700 r/min

	Standby power	Prime power
Governed Engine Speed.....RPM	1500RPM	1500RPM
Engine Idle Speed.....RPM		
Gross Engine Power Output.....KW	317	351
Friction Horsepower.....KW	22	22
Engine Water Flow to Engine.....Litre/sec	3,4	3,4
Intake Air Flow.....Litre/sec	408	434
Exhaust Gas Flow.....Litre/sec	1128	1225
Exhaust Gas Temperature...°C	524	541
Radiated Heat to Ambient.....KW	198	219
Heat Rejection to Coolant.....KW	238	263
Heat Radiation.....KW	40	44

Alternator Specifications:

Manufacturer	Cummins Generator Technologies(China) Co. Ltd
Model	HCI444E
Output power	280KW
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
Voltage regulation	±1%
protection	IP23
Waveform distortion	no load < 1.5% non-distorting balanced linear load <
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

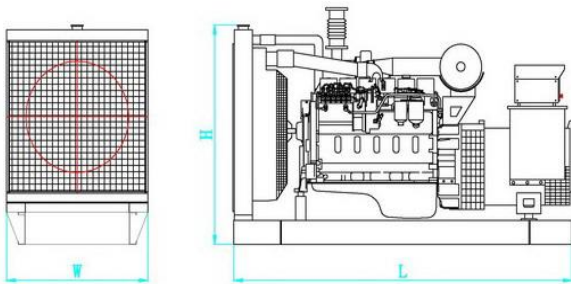
for expansion device connectivity.

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.

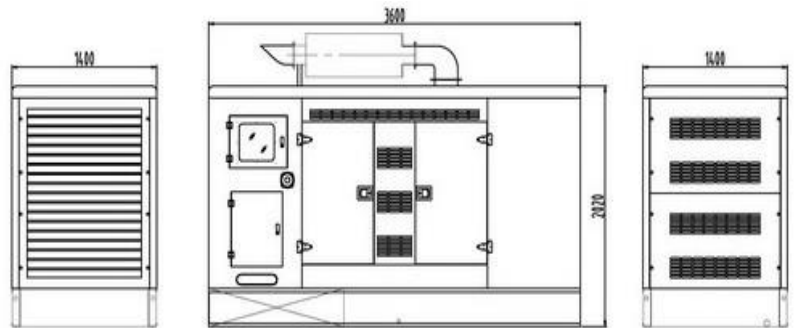
Weight and Dimensions

1. Open Version:



Open Type (Standard Configuration)
Overall Size: $2930 \times 1100 \times 1930\text{mm}$ (L*W*H)
Weight: 3150kg

2. Soundproof Version:



Soundproof Type
Overall size: $3600 \times 1400 \times 2120\text{mm}$ (L*W*H)
Weight: 3900kg

