

MODEL: VG1375-ICS



Genset Model	VG1375-ICS
Prime Power(50HZ)	1000KW /1250 KVA
Standby Power(50HZ)	1100KW /1375KVA
Frequency/Speed	50Hz/1500rpm
Standard Voltage	230V/400V
Phases	Three phases, four wires
Manufacturer	Vega Power International PTE.LTD

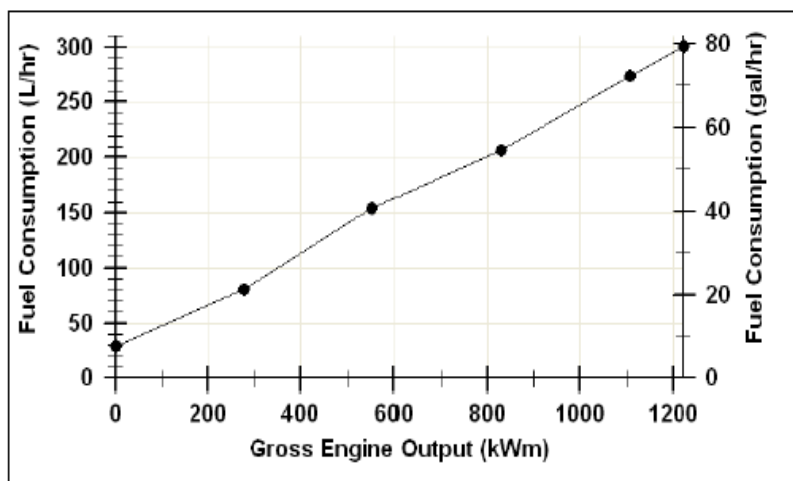
- ◆ Assembled by Cummins diesel engine and Stamford alternator.
- ◆ Three filters as standard, fuel and water separator as optional.
- ◆ Radiator and fan with safety guard.
- ◆ Single bearing alternator IP 23, Insulation Class H.
- ◆ Heavy duty steel as base frame and 8hrs operation base fuel tank.
- ◆ 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	Chongqing Cummins Engine Co. Ltd.
Model	QSK38-G5
Engine speed	1500rpm
Engine power	
-----Standby power	1107kw /1484HP
-----Prime power	1224kw /1641HP
Type	4 cycle, 60°Vee; 12-cylinder
Aspiration	Turbocharged and Aftercooled
Governor	electrical
Bore * Stroke	159*159 mm
Displacement	37.7 L
Compression ratio	15:1
Idle speed	700 - 900 r/min
Brake mean effective pressure	2586_2337kpa
Piston speed	7.9 m/s
Friction horsepower	86kw(115HP)

Fuel Consumption:

Output Power			Fuel Consumption			
%	bhp	kWm	lb/ bhp-h	kg/ kWm-h	gal/hr	l/hr
Standby Power						
100	1,641	1,224	0.343	0.209	79.4	301
Prime Power						
100	1,484	1,107	0.347	0.211	72.5	274
75	1,113	830	0.348	0.212	54.5	206
50	742	553	0.391	0.238	40.8	154
25	371	277	0.407	0.248	21.3	81
Continuous Power						
100	1,250	932	0.345	0.210	60.8	230



Exhaust system

Max. back pressure at standby power	7 kPa
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Air induction system

Maximum intake air restriction	
-----with normal duty air cleaner and clean filter element	3.7 kPa
-----with dirty filter element	6.2 kPa

Cooling system

Coolant capacity	
-----Engine	106 L
-----Aftercoolers	22.7L
Standard thermostat(modulating) range	82-94 °C
Max. allowable top tank temerature for standby/prime power	104/100 °C

Lubrication system

Oil Pressure	
-----Idle speed	138 kPa
-----Governed speed	344.7-482.6 kPa
Max. allowable oil temperature	120°C
Oil Pan capacity - Low/High	140.1 /166.6L
Total system capacity(with combo filter)	170.3 L

Fuel System

Type Injection system	Cummins MCRS
Max. fuel inlet temperature	71°C
Max. supply fuel flow	700 L/hr
Max. return fuel flow	375 L/hr

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

Cold start capability

Unaided cold start	
Min. cranking speed	150 rpm
Min. ambient temerature for unaided cold start	7.2°C

Performance data

	Standby power	Prime power
Governed Engine Speed.....RPM	1500RPM	1500RPM
Engine Idle Speed.....RPM	700-900	700-900
Gross Engine Power Output.....KW	1224	1107
Friction Horsepower.....KW	86	86
Intake Air Flow.....Litre/sec	1595	1524
Exhaust Gas Flow.....Litre/sec	3912	3741
Exhaust Gas Temperature...°C	486	483
Heat Rejection to Ambient/min(KW)	120	110
Heat Rejection to Coolant.....KW	446	420

Alternator Specifications:

Manufacturer	Cummins Generator Technologies Ltd
Model	LVI634G
Frequency	50HZ
Voltage	400V
Output power-----Continuous duty/40°C	1250kVA / 1000kW
Phase	3 ph.
Power factor	P.F.=0.8
Insulation class	H
Winding pitch	2/3
Number of wires	6
Protection	IP23
Altitude	≤ 1000 m
Overspeed	2250 min ⁻¹
Excitation system	PMG
AVR type	MX321
Voltage regulation	±0.5%
Short-circuit current	300% (3IN) 10s
Total harmonics (THD)	no load < 3.5%
Wave form : NEMA = TIF	< 50
Air follow	1.1 m ³ /s
Relative humidity	≤ 95%
Bearing	Single

ALTERNATOR GENERAL DATA :

- ◆ Operate either 50Hz or 60Hz.
- ◆ Standard enclosure IP23, but IP44, IP55 for option
- ◆ Insulation class H.
- ◆ Shunt excitataion systems.
- ◆ AREP or 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:



Deepsea 7320

Auto start and stop control panel



DEEPSEA advanced model DSE7320 is an automatic start and stop single generator control module, it has AMF function, and the controller has USB, RS232, RS485 ports as well as dedicated DSENet terminals for expansion device connectivity. It is an intelligent generator monitoring control panel.

Parameters:

This controller can provide Generator power in kw and kva, Kvar, kwh, kvah and kvarh, frequency and speed, Under/over speed, Generator volts, Generator current, Engine oil pressure, Engine coolant temperature, Flexible fuel level, Hours run counter, Battery volts, Fail to start/stop, Emergency Stop, power factor, Failed to reach loading voltage/frequency, Charge fail, Loss of magnetic pick-up signal, Low DC voltage, CAN diagnostics and CAN fail/error, Mains volts 3 phase, Mains frequency, AMF indications.

Protection:

- ◆ Low Oil Pressure
- ◆ High water Temperature
- ◆ High voltage and low voltage
- ◆ Overspeed
- ◆ Low fuel level alarm.

- ◆ Overload and unbalanced load protection
- ◆ Volt trimmer and frequency trimmer
- ◆ Emergency stop
- ◆ Fail to start

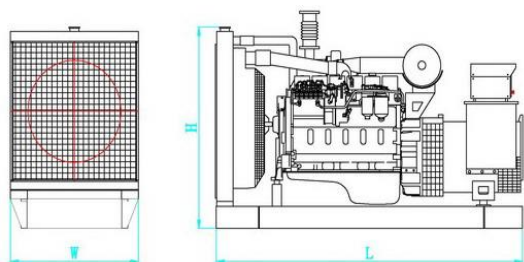
Features:

- Backed up real time clock
- Configurable display languages
- Five-key menu navigation
- Engine exercise mode
- Configurable start & fuel outputs
- Automatic load transfer
- Eight configurable digital inputs
- Six configurable outputs
- Modbus RTU
- Selected front panel programming
- SMS messaging (additional external modem required)
- User selectable RS232 & RS485 communications
- Ethernet communications via DSE860/865
- Improved programmable event log (250) showing date and time
- 3 alternative configurations
- Multiple date and time scheduler
- Independent Earth fault trip
- Load switching (Load shedding and dummy load outputs)
- Operator configurable virtual LEDs visible in SCADA
- Remote control sources (10) can be

- ① Power switch
- ② Lamp switch
- ③ Power indicator
- ④ Operation buttons
- ⑤ LCD display

Weight and Dimensions

1. Open Version:

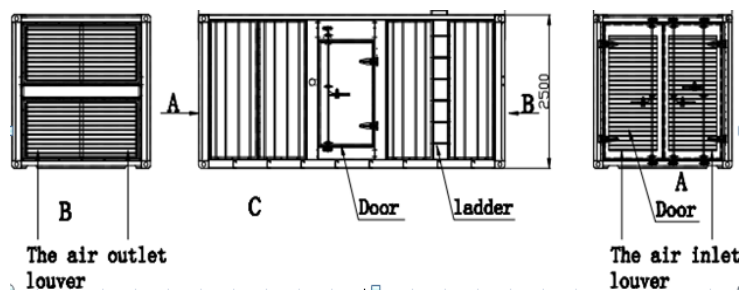


Open Type (Standard Configuration)

Overall Size: 4470 × 2080 × 2520mm(L*W*H)

Weight: 8600kg

2. Soundproof Version:



Soundproof Type

Overall size: 5800 × 2280 × 2800mm(L*W*H)

Weight: 10700kg

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