

# GORAN GENERATOR

## GGC500 GENSET

Generating Set Powered By



**STAMFORD**



### Output Ratings

Generating Set Model	Prime Power	Standby Power
1500rpm, 50 Hz / 400V	364KWe / 455KVA	400KWe / 500KVA
1800rpm, 60 Hz / 440V	400KWe / 500KVA	440KWe / 550KVA

### Genset Specifications

Engine Make & Model	Cummins QSZ13G5
Origin	China
Alternator Type	Stamford HCI544C
Control Panel	Deap Sea - 7310
Circuit Breaker Type	3 Pole MCB
Water Cooling System	
Electronic Governor	
Emission Compliant	

### Fuel System

	%50	%75	%100
1500rpm, 50 Hz	49	70	93
1800rpm, 60Hz	54	81	107

\*Prime Power (l/hr)

### International Standards

Engine confirm to ISO 9001:2000, ISO 14001, ISO 10054, ISO 3046, BS 5514, DIN 6271. Alternator confirm to ISO 9001, ISO 14001, BS EN 60034, BS 5000, VDE 0530, NEMA MG32-I, IEC34 CSA C-22.2100, AS 1359, BS 1 6861, B En -6-610002:2001



### RATING GUIDELINES

**PRIME POWER** rating corresponds to ISO Standard Power for continuous operation. It is applicable for supplying electrical power at variable load for an unlimited number of hours instead of commercially purchased power. A10 % overload capability for governing purpose is available for this rating.

**MAXIMUM STANDBY POWER** rating corresponds to ISO Standard Fuel Stop Power. It is applicable for supplying standby electrical power at variable load in areas with well established electrical networks in the event of normal utility power failure. No overload capability is available for this rating.  $1 \text{ hp} = 1 \text{ kW} \times 1.36$

### Engine Technical Data

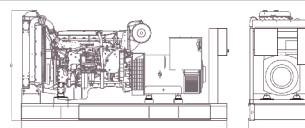
No. of Cylinders / Alignment	6/ In Line
Cycle	4 - Stroke
Aspiration	Turbocharged
Injection	Direct
Bore, mm	130
Stroke, mm	163
Displacement, l	13
Compression Ratio	17.0:1
Starting	24V Electric
Alternators, Amps	24V/35A

### Alternator Technical Data

No. of Bearings	Single Bearing
Insulation System	Class H
Excitation	Self Excited
Voltage Regulator	AS440
Protection	IP23
Temperature Rise, °C	125
Regulation	%1.0±
No. of Phases	3
No. of Poles	4

### Dimensions & Weights

Length(m)	Width(m)	Height(m)	Weight(kg)	Tank Capacity(L)
3.24	1.13	2.0	3100	380



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## Performances

	1500rpm	1800rpm
<b>Alternator Efficiency</b>	%93.8	%94.1
<b>Engine Power</b>		
Prime Power, KWm(hp)	526(393)	589(440)
Standby Power, KWm(hp)	605(452)	675(482)
<b>Alternator</b>		
Prime Power, KWe	400	440

## Lubrication System

	1500rpm	1800rpm
<b>Oil Consumption (l/hr)</b>	0.03	0.03
<b>Oil Sump Capacity, l</b>	75.3	
<b>Oil System Capacity Include Filters, l</b>	78	

## Cooling System

	1500rpm	1800rpm
<b>Heat Radiation from Engine and Alternator, Power KW</b>	44	48
<b>Heat Rejection to Coolant and Lube Oil at Standby Power, KW</b>	171	188
<b>Radiator Cooling Air Flow, m<sup>3</sup>/s</b>	8.1	10.3
<b>Coolant Capacity, l</b>	85.1	

## Intake & Exhaust System

	1500rpm	1800rpm
<b>Air Flow Combustion at Standby Power, m<sup>3</sup>/min(cfm)</b>	1254(35.52)	1254(35.52)
<b>Heat Rejection Exhaust at Standby Power, KW</b>	312	333
<b>Exhaust Gas Temperature at Standby °C</b>	523	476
<b>Max Allowable Back Pressure in Exhaust Line, Kpa</b>	13	13
<b>Exhaust Gas Flow at Standby Power, m<sup>3</sup>/min(cfm)</b>	2854(80.82)	3239(91.68)

## Accessories

<b>Oil Drain Pump</b>	<b>Anti-Vibration Pads</b>
<b>Stainless Steel Flexible</b>	<b>Genuine Oil</b>
<b>Oil (VDS40/15 3)</b>	<b>Genuine Coolant</b>
<b>Coolant 'Ready Mix'</b>	<b>Fuel Tank Base Frame for 8hrs</b>
<b>Standard Silencer</b>	

## Control Panel Readings

- AC volts, AC currents, DC volts, frequency, rpm, hour counter, power factor.
- Low oil pressure, high water temperature, boost pressure and temperature, KW, KWh, KVA, KVAR
- Oil pressure, low oil level, high oil temperature
- DC alternator failure, over speed, over crank (Fail to start), over under voltage, over under current, any sensor failure
- Low coolant level - Configurable inputs&outputs
- Upgradable for GSM network connection, Signal SMS messages.

## Optional Equipment

- **Engine**
  - Coolant heater
  - Oversize batteries
  - Extra fuel pre-filter water separator
  - Battery Disconnect Switch
  - Electrical Governor
- **Alternator**
  - Excitation Boost System (EBS)
  - Upgrade to 3 phase sensing AVR
  - Qadrature droop kit
  - Anti-condensation heater
  - Air inlet filters
- **General**
  - Upgrade to modular controller for paralleling
  - Upgrade to 4 pole circuit breaker
  - Battery charger
  - Automatic transfer switch
  - Fuel level switch High / Low for alarm and control
  - Fuel transfer pump Automatic / Manual
  - Residential grade silencer
  - Weather protective and acoustic enclosure.

## Spare Parts Kit (Optional)

## Genuine - Cummins

Oil filter	(1)
Fuel filter water separator	(1)
Fuel filter	(1)
Air filter	(1)
Fan belt set	(1)
Coolant filter	(1)

## General Information

### Documentation

Engine instruction book-English  
Alternator manual- English  
Wiring diagram

### Warranty

One year or 1000 thousand hours whichever elapsed first against all defects in material / or workmanship, subject to the terms and conditions of the Manufacturer's warranty.

# GORAN

GENERATOR

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