

GORAN GENERATOR

GGC450 GENSET

Generating Set Powered By



STAMFORD



Output Ratings

Generating Set Model	Prime Power	Standby Power
1500rpm, 50 Hz	327KWe / 409KVA	360KWe / 450KVA
1800rpm, 60 Hz	364KWe / 455KVA	400KWe / 500KVA

Genset Specifications

Engine Make & Model	Cummins QSZ13G7
Origin	India
Alternator Type	Stamford HCI444F
Control Panel	Deap Sea - 7310
Circuit Breaker Type	3 Pole MCB
Water Cooling System	
Fully Electronic	
Emission Compliant	

Fuel System

	%50	%75	%100
1500rpm, 50 Hz	54	73	89
1800rpm, 60Hz	61	85	102

*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

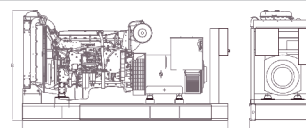
No. of Cylinders / Alignment	6/ In Line
Cycle	4 - Stroke
Aspiration	Turbocharged
Injection	XPI
Bore, mm	130
Stroke, mm	163
Displacement, l	13
Compression Ratio	17.0:1
Starting	24V Electric
Alternators, Amps	24V/35A

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
Alternator Efficiency	%93.4	%93.4
Engine Power		
Prime Power, KWm(hp)	466(348)	548(409)
Standby Power, KWm(hp)	516(385)	561(419)
Alternator		
Prime Power, KWe	320	384

Lubrication System

	1500rpm	1800rpm
Oil Consumption (l/hr)	0.03	0.03
Oil Sump Capacity, l	83	
Oil System Capacity Include Filters, l	91	

Cooling System

	1500rpm	1800rpm
Heat Radiation from Engine and Alternator, Power KW	35	36
Heat Rejection to Coolant and Lube Oil at Standby Power, KW	125	130
Radiator Cooling Air Flow, m³/s	11.8	11.8
Coolant Capacity, l	66	

Intake & Exhaust System

	1500rpm	1800rpm
Air Flow Combustion at Standby Power, m³/min(cfm)	1060(30)	1890(36.53)
Heat Rejection Exhaust at Standby Power, KW	299	329
Exhaust Gas Temperature at Standby °C	488	443
Max Allowable Back Pressure in Exhaust Line, Kpa	10.13	10.13
Exhaust Gas Flow at Standby Power, m³/min(cfm)	3100(87.78)	2620(74.19)

Accessories

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

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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