

# ICG500 GENSET

Generating Set Powered By



**LEROY SOMER**  
**STAMFORD**

## Output Ratings

Generating Set Model	Prime Power	Standby Power
1500rpm, 50 Hz / 400V400kWe / 500KVA	440KWe / 550KVA	440KWe / 550KVA
1800rpm, 60 Hz / 440V360KWe / 450KVA	400KWe / 500KVA	400KWe / 500KVA

## Genset Specifications

Engine Make & Model	Cummins QSX15G8		
Origin	USA		
Alternator Type	UCI544D		
Control Panel	Digital Deap Sea		
Circuit Breaker Type	3 Pole MCCB		
Water Cooling System			
Mechanical Governor			
Electrical Stop Solenoid, Energized to Run			
Compact Size			
Fuel System	50%	75%	100%
1500rpm, 50 Hz	55.00	79.00	105.0
1800rpm, 60Hz	53.40	77.50	102.0

\*Prime Power (l/hr)

## 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 hp = 1 kW x 1.36

## Engine Technical Data

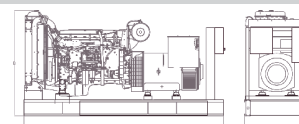
No. of Cylinders / Alignment	6/ In Line
Cycle	4 - Stroke
Aspiration	Turbocharged
Injection	Direct HPI-TP
Bore, mm	137
Stroke, mm	169
Displacement, l	15
Compression Ratio	17.0:1
Starting	24V Electric
Alternators, Amps	24V/35A

## 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 & Weight

Length(m)	Width(m)	Height(m)	Weight(kg)	Tank Capacity(L)
3.7	1.41	2.0	3750	380



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Performances	1500rpm	1800rpm
Alternator Efficiency	94.3%	94.6%
<b>Engine Power</b>		
Prime Power, KWm(hp)	426(571)	383(513)
Standby Power, KWm(hp)	477(639)	419(561)
<b>Alternator</b>		
Prime Power, KWe	440	475

Lubrication System	1500rpm	1800rpm
Oil Consumption (l/hr)		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	40	36
Heat Rejection to Coolant and Lube Oil at Standby Power, KW	167	130
Radiator Cooling Air Flow, m <sup>3</sup> /s	12	12
Coolant Capacity, l		66

Intake & Exhaust System	1500rpm	1800rpm
Air Flow Combustion at Standby Power, m <sup>3</sup> /min(cfm)	36.3(1280)	36.5(1290)
Heat Rejection Exhaust at Standby Power, KW	390	329
Exhaust Gas Temperature at Standby °C	515	443
Max Allowable Back Pressure in Exhaust Line, Kpa	10	10
Exhaust Gas Flow at Standby Power, m <sup>3</sup> /min(cfm)	82.2(2900)	90.6(3200)

## Accessories

Oil Drain Pump	Anti-Vibration Pads
Stainless Steel Flexible	Genuine Oil
Genuine Oil	Coolant 'Ready Mix'
Genuine Coolant	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
  - Quadrature 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	(1)
Air filter	(1)
Fan belt set	(1)
Alternator belt set	(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.

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