



# KMGC90 GENSET

Generating Set Powered By



**STAMFORD LEROY-SOMER™**

## Output Ratings

Speed,Frequency/Volt	Prime Power	Standby Power
1500rpm, 50 Hz / 400V	68KW <sub>e</sub> / 85KVA	72KW <sub>e</sub> / 90KVA

## Genset Specifications

**Engine Make & Model** Cummins 6BTA5.9G5

**Origin** India

**Alternator Type** UCI224G

**Control Panel** Deep Sea - 6110 MKIII

**Circuit Breaker Type** 3 Pole MCCB

**Water Cooling System**

**Electronic Governor**

**Electrical Stop Solenoid, Energized to Run**

**Compact Size**

Fuel System (prime)	50%	75%	100%
1500rpm, 50 Hz (L/hr)	12	18	25

## 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 MG1-32, IEC34 CSA C22.2-100, AS 1359, BS 6861 1, B En 61000-6-2:2001



## 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 hp = 1 kW x 1.36**

## Engine Technical Data

<b>No. of Cylinders / Alignment</b>	6/ In Line
<b>Cycle</b>	4 - Stroke
<b>Aspiration</b>	Turbocharged
<b>Injection</b>	Direct
<b>Bore, mm</b>	102
<b>Stroke, mm</b>	120
<b>Displacement, l</b>	5.9
<b>Compression Ratio</b>	17.6:1
<b>Starting</b>	12V Electric
<b>Alternators, Amps</b>	12V/55A

## Alternator Technical Data

<b>No. of Bearings</b>	Single Bearing
<b>Insulation System</b>	Class H
<b>Excitation</b>	Self Excited
<b>Voltage Regulator SX460</b>	AS440
<b>Protection</b>	IP23
<b>Temperature Rise, °C</b>	Prime 125/40 Standby 163/27
<b>Regulation</b>	±1.0%
<b>No. of Phases</b>	3
<b>No. of Poles</b>	4

## Dimensions (m) & Weights (kg)

	L	W	H	Weight	Tank Capacity(L)
<b>Open</b>	2.64	0.85	1.62	1200	130
<b>Enclosed</b>	3.66	1.13	1.9Q	2150	195

For the enclosed type:-  
The sound level is around 85 dB(A) @ 3m .  
The height to be increased by 12cm for the hook.

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Performances		1500rpm
<b>Alternator Efficiency</b>		90.3%
<b>Engine Power</b>		
Prime Power, KWm(hp)		90(121)
Standby Power, KWm(hp)		98(131)
<b>Alternator</b>		
Prime Power, KWe		68

Lubrication System		1500rpm
<b>Oil Consumption (l/hr)</b>		-
<b>Oil Sump Capacity, l</b>		14.3
<b>Oil System Capacity Include Filters, l</b>		16.4

Cooling System		1500rpm
<b>Heat Radiation from Engine and Alternator, Power KW</b>		12
<b>Heat Rejection to Coolant and Lube Oil at Standby Power, KW</b>		78
<b>Radiator Cooling Air Flow, m<sup>3</sup>/s</b>		3.59
<b>Coolant Capacity, l</b>		19.75

Intake & Exhaust System		1500rpm
<b>Air Flow Combustion at Standby Power, m<sup>3</sup>/min(cfm)</b>		7.86(276)
<b>Heat Rejection Exhaust at Standby Power, KW</b>		85
<b>Exhaust Gas Temperature at Standby °C</b>		533
<b>Max Allowable Back Pressure in Exhaust Line, Kpa</b>		10.25
<b>Exhaust Gas Flow at Standby Power, m<sup>3</sup>/min(cfm)</b>		21.42(755)

Accessories	
<b>Standard Silencer</b>	<b>Anti-Vibration Pads</b>
<b>Stainless Steel Flexible</b>	<b>Genuine Coolant 'Ready Mix'</b>
<b>Genuine Oil</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	(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 with unlimited hours against all defects in material or workmanship, subject to the terms and conditions of the Manufacturer's warranty

