



# **GGC1875 GENSET**Generating Set Powered By





### **Output Ratings**

| Generating Set Model  | Prime Power       | Standby Power     |
|-----------------------|-------------------|-------------------|
| 1500rpm, 50 Hz / 400V |                   |                   |
| 1800rpm, 60 Hz / 440V | 1295KWe / 1619KVA | 1500KWe / 1875KVA |

### **Genset Specifications**

| Engine Make & Model  | Cummins KTA50G9 |
|----------------------|-----------------|
| Origin               | India           |
| Alternator Type      | Stamford PI734C |
| Control Panel        | Deap Sea - 7310 |
| Circuit Breaker Type | 3 Pole ACB      |
| Water Cooling System |                 |
| Electronic Governor  |                 |
| Emission Compliant   |                 |

| Fuel System    | 50% | 75% | 100% |
|----------------|-----|-----|------|
| 1500rpm, 50 Hz | -   | -   | -    |
| 1800rpm, 60Hz  | 180 | 257 | 330  |

<sup>\*</sup>Prime Power (I/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 MGI-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 govering 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. I  $hp = 1 kW \times 1.36$ 

### **Engine Technical Data**

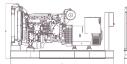
| No. of Cylinders / Alignment | 16/60°V      |
|------------------------------|--------------|
| Cycle                        | 4 - Stroke   |
| Aspiration                   | Turbocharged |
| Injection                    | Direct       |
| Bore, mm                     | 158.8        |
| Stroke, mm                   | 158.8        |
| Displacement,I               | 50           |
| Compression Ratio            | 13.9:1       |
| Starting                     | 24V Electric |
| Alternators, Amps            | 24V/55A      |

| Alternator reclinical Data |                |
|----------------------------|----------------|
| No. of Bearings            | Single Bearing |
| Insulation System          | Class H        |
| Excitation                 | PMG            |
| Voltage Regulator          | MX34I          |
| 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) Capacity(L)

3.0 10200 5.75 2.25 N/A





## GGC1875 GENSET





| Performances   | 1500rpm | 1800rpm                  |
|--|---------|--------------------------|
| Alternator Efficiency                                    | -       | 95.2%                    |
| Engine Power Prime Power, KWm(hp) Standby Power, KWm(hp) | Ī       | 1349(1809)<br>1605(1252) |
| <b>Alternator</b><br>Prime Power, KWe                    | -       | 1240                     |

| Lubrication System                       | I500rpm | 1800rpm |
|--|---------|---------|
| Oil Consumption (I/hr)                   | -       | 0.03    |
| Oil Sump Capacity,I                      | -       | 178     |
| Oil System Capacity<br>Include Filters,I | -       | 204     |

| Cooling System   | I500rpm | 1800rpm |
|--|---------|---------|
| Heat Radiation from Engine and Alternator, Power KW            | -       | 200     |
| Heat Rejection to Coolant and<br>Lube Oil at Standby Power, KW | -       | 460     |
| Radiator Cooling Air Flow, m <sup>3</sup> /s                   | -       | 28.2    |
| Coolant Capacity, I  | -       | 414     |

| Intake & Exhaust System                              | I500rpm | 1800rpm      |
|--|---------|--------------|
| Air Flow Combustion at<br>Standby Power, m³/min(cfm) | -       | 124.5(4400)  |
| Heat Rejection Exhaust at<br>Standby Power, KW       | -       | 1040         |
| Exhaust Gas Temperature at Standby °C                | -       | 515          |
| Max Allowable Back Pressure in Exhaust Line, Kpa     | -       | 6.8          |
| Exhaust Gas Flow at<br>Standby Power, m³/min(cfm)    | -       | 301.5(10650) |

| Accessories              |                               |
|--------------------------|-------------------------------|
| Oil Drain Pump           | Anti-Vibration Pads           |
| Stainless Steel Flexible | Genuine Oil                   |
| Oil (VDS3 15/40)         | 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 temparature, 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 Disconnector 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                 | (2)               |
| Fuel filter                | (2)               |
| Air filter                 | (I)               |
| Fan belt set               | (I)               |
| Coolant filter             | (2)               |
|                            |                   |
| Commention                 |                   |

### General Information

### **Documentation**

Engine instruction book-English Alternator manual- English Wiring diagram

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.

