Diesel Powered Generating Sets

**C70-D5**

### Standard Genset Features
- Cummins water cooled Diesel engine,
- Oil and fuel filter fitted, water separator,
- Lube-oil drain valve fitted
- Electric starter & Charge alternator 12 v D.C.
- Mechanical governor
- Normal duty air filter
- Single bearing alternator, class H/H
- Standard voltage 400/230 volts 50 Hz
- Excluier/Voltage reg - Torque Match as std
- PCC1300 without Bargraph as standard
- 3 pole C/B
- Steel base frame with A/V mounting,
- Single skin fuel tank
- Tank capacity of up to 8 hours operation at 70% standby load
- Optional Silencer
- Optional Set mounted starting batteries
- Engine, Alternator, Chassis & Control Box
- Mussell Jade Green
- Radiator black
- Packing under shrunken plastic film
- Operation & Maintenance manual
- Standard set of labels

### Generator Set Performance
- **Voltage Regulation**
  - Maintains voltage output to within ±1.0%.
  - At any power factor between 0.8 and 1.0
  - At any variations from No load to Full load.
  - At any variations from Cold to Hot.
  - At speed droop variations up to 4.5%.
- **Frequency Regulation**
  - Isochronous under varying loads from no load to 100% full load when electronic governor is fitted.
- **Random Frequency Variation**
  - Will not exceed ±0.25% of its mean value for constant loads – no load to full load.
- **Waveform**
  - Total harmonic distortion open circuit voltage waveform in the order of 1.8%. Three-phase balanced load in the order of 5.0%.
- **Telephone In'tue Factor (TIF)**
  - TIF better than 50.
  - THF to BS 4999 Part 40 better than 2%.
- **Alternator Temperature Rise**
  - Class H insulation.
- **Radio Interference**
  - In compliance with BS 800 and VDE levels G and N.

### Generator Set Options
- **Fuel options**
  - Fuel Tank deletion
  - Steel Fuel Tank replacing Plastic Fuel Tank
- **Exhaust Options**
  - Exhaust Silencer - Industrial In-Line
  - Exhaust Bellows
  - Exhaust Silencer - Residential , In-Line
- **Warranty**
  - Warranty - 5 Year Extended Standby Appln
  - Warranty - 2 Year Extended Prime Appln
- **Voltage Connections**
  - 254/440V
  - 240/416V
  - 230/400V
  - 127/220V
  - 115/200V
  - 110/190V
- **Miscellaneous Options**
  - Coolant heater -240V
  - Battery Charger 240V.5A
  - AUTO START - AMF Module (Loose)
- **Compliance Standards**
  - To BS4999/5000 pt 99, VDE 0530, UTE5100,
  - NEMA MG1-22, CEMA,
  - IEC 34, CSA 622.2,
  - AS1359, BSS 5514,
  - ISO 3046 and ISO 8528

### Specifications may change without notice

<table>
<thead>
<tr>
<th>Model name</th>
<th>kVA</th>
<th>kWe</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standby</td>
<td>Prime</td>
</tr>
<tr>
<td>C70 D5</td>
<td>70</td>
<td>63</td>
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</table>
**Technical Data**

<table>
<thead>
<tr>
<th>Model</th>
<th>Speed</th>
<th>1500 rpm</th>
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<tbody>
<tr>
<td>Set output</td>
<td>380-440 V 50 Hz</td>
<td>Alternator voltage regulation</td>
</tr>
<tr>
<td>Prime Rating</td>
<td>50 kWe 63 kVA</td>
<td>Alternator insulation class</td>
</tr>
<tr>
<td>Standby Rating</td>
<td>56 kWe 70 kVA</td>
<td>Fuel consumption (Prime)</td>
</tr>
<tr>
<td>Engine Make</td>
<td>Cummins</td>
<td>Fuel consumption (Standby)</td>
</tr>
<tr>
<td>Engine Model</td>
<td>4BT3.9-G4</td>
<td>Lubrication system oil capacity</td>
</tr>
<tr>
<td>Cylinders</td>
<td>Four</td>
<td>Base fuel tank capacity – open set</td>
</tr>
<tr>
<td>Engine build</td>
<td>In-line</td>
<td>Coolant capacity</td>
</tr>
<tr>
<td>Standard Governor/Class</td>
<td>Mechanical</td>
<td>Exhaust temp – prime</td>
</tr>
<tr>
<td>Aspiration and cooling</td>
<td>Turbocharged</td>
<td>Exhaust gas flow – prime</td>
</tr>
<tr>
<td>Bore and stroke</td>
<td>102 mm x 120 mm</td>
<td>Exhaust gas back pressure max</td>
</tr>
<tr>
<td>Compression Ratio</td>
<td>16.5:1</td>
<td>Air flow – radiator*</td>
</tr>
<tr>
<td>Cubic capacity</td>
<td>3.92 Litres</td>
<td>Air intake – engine (Prime)</td>
</tr>
<tr>
<td>Starting/Min °C</td>
<td>Unaided/10°C</td>
<td>Minimum air opening to room</td>
</tr>
<tr>
<td>Battery capacity</td>
<td>50 A/hr</td>
<td>Minimum discharge opening</td>
</tr>
<tr>
<td>Gross Engine output – Prime</td>
<td>58kWm</td>
<td>Pusher fan head (duct allowance)*</td>
</tr>
<tr>
<td>Gross Engine output – Standby</td>
<td>44kWm</td>
<td>Heat radiated by eng (Prime)</td>
</tr>
</tbody>
</table>

PRIME POWER (PRP)
Prime power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO8528-1.

A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation, in accordance with ISO 3046-1.

STANDBY POWER RATING (ESP)
The Standby Power Rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

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See your distributor for more information.

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**Dimensions and Weights**

<table>
<thead>
<tr>
<th>Model</th>
<th>Engine</th>
<th>Length (mm)</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
<th>Set weight wet (Kg)</th>
<th>Set weight dry (Kg)</th>
<th>Enclosed Set (Kg)</th>
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</thead>
<tbody>
<tr>
<td>C70-D5</td>
<td>4BT3.9G4</td>
<td>1950</td>
<td>1084</td>
<td>1480</td>
<td>1167</td>
<td>1063</td>
<td>1778</td>
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- Altitude above sea level - 150 metres
- Relative humidity – 60%