QSB7-G9
Emissions Certified:
EPA Tier 4 Final @ 60 Hz & 50 Hz
EU Stage IIIA @ 50Hz

Description
The QSB7 Tier 4 Final incorporates the latest diesel engine technology, including a high pressure common rail fuel system for greater fuel efficiency, lower noise and reduced emissions.

The addition of the Cummins Emissions Solution (CES) aftertreatment system achieves Tier 4 Final and EU Stage IIIA emissions by integrating a Cummins Compact Catalyst (CCC), Selective Catalytic Reduction (SCR) and Diesel Exhaust Fuel (DEF) Dosing Module into the diesel engine.

This engine is suitable in all markets and applications that require compliance with EPA Tier 4 Final emissions.

Features
Low Exhaust Emissions – Utilizing an in house design and proven solution for emission control – the QSB7-G9 design has an integrated cooled Exhaust Gas Recirculation (EGR) system, Cummins Compact Catalyst (CCC), Selective Catalytic Reduction (SCR) and Direct Flow™ Air Filter.

The QSB7-G9 engine requires Ultra Low Sulfur Diesel (ULSD) fuel (15 ppm sulfur maximum) and Low Ash CJ-4 lube oil.

Full-Authority Electronic Controls – Integrated system that combines Tier 4 Final aftertreatment electronics into the engine control. Optimize engine operation and deliver critical information for controlling costs and reducing maintenance. Provides faster processing power and increased memory capability while allowing seamless electronic interface to other systems and seamless integration with other components.

Low-Maintenance Fuel Filter Assembly – The QSB7 uses Fleetguard NanoNet™ fuel filters that utilize nanotechnology in the filtration media, providing an exceptional level of efficiency and harmful particulate removal media. The primary fuel filter incorporates an integral water separator and water-in-fuel sensor; 500-hour filter life with easy replacement.

Integrated Design – Each component (Engine, CCC, SCR and Direct Flow™ Air Filter) has been specifically developed and rigorously tested for G-Drive products, ensuring high performance, durability and reliability.

Dripless Crankcase Breather System – Open, low emission crankcase breather filter system includes coalescing filter to remove emissions as required by regulations – with added benefit of eliminating oil drips and mist.

Reduced Operating Costs – Extended service intervals for oil and filter changes.

Service and Support - G-Drive products are backed by an uncompromising level of technical support and after sales service, delivered through a world class service network.

1800 rpm (60 Hz Ratings)

<table>
<thead>
<tr>
<th>Gross Engine Output</th>
<th>Typical Generator Set Output (kVA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standby (kWm/BHP)</td>
<td>Standby (ESP)</td>
</tr>
<tr>
<td>234/314</td>
<td>200</td>
</tr>
<tr>
<td>210/282</td>
<td>180</td>
</tr>
<tr>
<td>189/254</td>
<td>160</td>
</tr>
</tbody>
</table>

1500 rpm (50 Hz Ratings)

<table>
<thead>
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<th>Typical Generator Set Output (kVA)</th>
</tr>
</thead>
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<tr>
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</tr>
<tr>
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<td>176</td>
</tr>
<tr>
<td>185/248</td>
<td>160</td>
</tr>
<tr>
<td>167/224</td>
<td>145</td>
</tr>
</tbody>
</table>
**General Engine Data**

Type | 4 Cycle, In-line, Turbocharged, Charge Air Cooled and EGR  
Bore | 107 mm (4.21 in.)  
Stroke | 124 mm (4.88 in.)  
Displacement | 6.7 litre (409 in.³)  
Cylinder Block | Cast iron, 6 cylinder  
Battery Charging | 70 amps  
Starting Voltage | 24 volt  
Fuel System | High Pressure Common Rail (HPCR)  
Fuel Filter | Primary (Stage1) spin-on fuel filter, 8 micron, with water separator and Water in Fuel (WIF) sensor - OEM fitted  
 | Secondary fuel filter (Stage 2 ) spin-on fuel filter , 5 micron - engine mounted  
Lube Oil Filter Type(s) | Spin-on full flow filter  
Lube Oil Capacity | 17.5 litre  
Flywheel Dimensions | SAE 3/11.5

**Ratings Definitions**

**Emergency Standby Power (ESP):** Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

**Limited-Time Running Power (LTP):** Applicable for supplying power to a constant electrical load for limited hours. Limited-Time Running Power (LTP) is in accordance with ISO 8528.

**Prime Power (PRP):** Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

**Base Load (Continuous) Power (COP):** Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) in accordance with ISO 8528, ISO 3046, AS 2789, DIN6271 and BS 5514.

**Engine Weight & Dimensions (excluding air cleaner & aftertreatment components)**

<table>
<thead>
<tr>
<th>Length</th>
<th>Width</th>
<th>Height</th>
<th>Weight (wet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm / in</td>
<td>mm / in</td>
<td>mm / in</td>
<td>kg / lb</td>
</tr>
<tr>
<td>1057 / 41.6</td>
<td>976 / 38.4</td>
<td>1082 / 42.6</td>
<td>519 / 1144</td>
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</table>

**Fuel Consumption 1800 (60 Hz)**

<table>
<thead>
<tr>
<th>%</th>
<th>kWm</th>
<th>BHP</th>
<th>L/h</th>
<th>US gal/h</th>
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</thead>
<tbody>
<tr>
<td>Standby Power</td>
<td>100</td>
<td>234</td>
<td>314</td>
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<tr>
<td>Prime Power</td>
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<td>75</td>
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<td>25</td>
<td>53</td>
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<td>16</td>
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<tr>
<td>Continuous Power</td>
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<td>189</td>
<td>254</td>
<td>47</td>
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</tbody>
</table>

**Fuel Consumption 1500 (50 Hz)**

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<thead>
<tr>
<th>%</th>
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<th>BHP</th>
<th>L/h</th>
<th>US gal/h</th>
</tr>
</thead>
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<tr>
<td>Standby Power</td>
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<td>204</td>
<td>274</td>
<td>49</td>
</tr>
<tr>
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<td>100</td>
<td>185</td>
<td>248</td>
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</tr>
<tr>
<td>Continuous Power</td>
<td>100</td>
<td>167</td>
<td>224</td>
<td>40</td>
</tr>
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