QSL9-G8

Emissions Compliance:
EU Stage IIIA at 50Hz and 60Hz
EPA Tier 4i at 50Hz and 60Hz

Description
The QSL9 incorporates the latest diesel engine technology, including a high pressure common rail fuel system for greater fuel efficiency, lower noise and reduced emissions. This engine will replace the QSL9 EPA Tier 3 engines in all markets that require compliance to the EPA Tier 4 Interim emissions

Features
Low Exhaust Emissions – A state of the art, efficient exhaust diesel particulates filter (DPF) system reduces exhaust emissions to meet 2011 USA and European standards. The QSL9-G8 engine requires Ultra Low Sulfur Diesel (ULSD) fuel (15 ppm sulfur maximum).

Full-Authority Electronic Controls - Optimize engine operation and deliver critical information for controlling costs, reducing maintenance and seamless integration with other components.

Low-Maintenance Fuel Filter Assembly - The fuel filter incorporates an integral water separator and water-in-fuel sensor; 500-hour filter life with easy top-load replacement using standard Fleetguard® filters.

Integrated Design – Each component (Engine, DPF and Air Cleaner) has been specifically developed and rigorously tested for G-Drive products, ensuring high performance, durability and reliability.

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.

1500 rpm (50 Hz Ratings)

<table>
<thead>
<tr>
<th>Gross Engine Output</th>
<th>Typical Generator Set Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standby</td>
<td>Prime</td>
</tr>
<tr>
<td>kWm/BHP</td>
<td>kW</td>
</tr>
<tr>
<td>276/370</td>
<td>251/336</td>
</tr>
</tbody>
</table>

1800 rpm (60 Hz Ratings)

<table>
<thead>
<tr>
<th>Gross Engine Output</th>
<th>Typical Generator Set Output</th>
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<tbody>
<tr>
<td>Standby</td>
<td>Prime</td>
</tr>
<tr>
<td>kWm/BHP</td>
<td>kW</td>
</tr>
<tr>
<td>323/354</td>
<td>293/393</td>
</tr>
</tbody>
</table>
General Engine Data

Type
Bore mm
Stroke mm
Displacement Litre
Cylinder Block
Battery Charging Alternator
Starting Voltage
Fuel System
Fuel Filter
Lube Oil Filter Type(s)
Lube Oil Capacity (l)
Flywheel Dimensions

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 8528. Ten percent overload capability is available 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, DIN 6271 and BS 5514.

Coolpac Performance Data

Cooling System Design
Coolant Ratio
Coolant Capacity (l)
Limiting Ambient Temp.**
Fan Power
Cooling System Air Flow (m³/s)**
Air Cleaner Type

** @ 13 mm H²O

Engine Weight & Dimensions

<table>
<thead>
<tr>
<th>Length (mm)</th>
<th>Width (mm)</th>
<th>Height (mm)</th>
<th>Weight (dry) (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1208</td>
<td>925</td>
<td>1266</td>
<td>708</td>
</tr>
</tbody>
</table>

Fuel Consumption 1500 (50 Hz)

<table>
<thead>
<tr>
<th>% Standby Power</th>
<th>kWm</th>
<th>BHP</th>
<th>L/hr</th>
<th>US gal/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>276</td>
<td>370</td>
<td>70</td>
<td>18.5</td>
</tr>
<tr>
<td>75</td>
<td>224</td>
<td>324</td>
<td>50</td>
<td>20.3</td>
</tr>
<tr>
<td>50</td>
<td>184</td>
<td>254</td>
<td>35</td>
<td>25.2</td>
</tr>
<tr>
<td>25</td>
<td>144</td>
<td>204</td>
<td>20</td>
<td>30.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% Prime Power</th>
<th>kWm</th>
<th>BHP</th>
<th>L/hr</th>
<th>US gal/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>293</td>
<td>393</td>
<td>74</td>
<td>19.5</td>
</tr>
<tr>
<td>75</td>
<td>220</td>
<td>290</td>
<td>58</td>
<td>15.3</td>
</tr>
<tr>
<td>50</td>
<td>147</td>
<td>197</td>
<td>41</td>
<td>10.7</td>
</tr>
<tr>
<td>25</td>
<td>73</td>
<td>98</td>
<td>23</td>
<td>6.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% Continuous Power</th>
<th>kWm</th>
<th>BHP</th>
<th>L/hr</th>
<th>US gal/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>264</td>
<td>354</td>
<td>68</td>
<td>17.9</td>
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</tbody>
</table>

Fuel Consumption 1800 (60 Hz)

<table>
<thead>
<tr>
<th>% Standby Power</th>
<th>kWm</th>
<th>BHP</th>
<th>L/hr</th>
<th>US gal/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>323</td>
<td>433</td>
<td>82</td>
<td>21.6</td>
</tr>
<tr>
<td>75</td>
<td>220</td>
<td>290</td>
<td>58</td>
<td>15.3</td>
</tr>
<tr>
<td>50</td>
<td>147</td>
<td>197</td>
<td>41</td>
<td>10.7</td>
</tr>
<tr>
<td>25</td>
<td>73</td>
<td>98</td>
<td>23</td>
<td>6.2</td>
</tr>
</tbody>
</table>

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