High Efficiency and Low-Emissions

The FM | Opposed-Piston 38D 8-1/8 engine has been designed and developed for a wide array of electrical power generation and heavy industrial applications. This high efficiency, low-emission engine combines time-tested design features with modern advances, including dual-fuel technology suited for low-cost power production.

**FM | OP 38D 8-1/8 DIESEL & DUAL FUEL**

**POWER RANGE**
2,349 – 3,290 kWm
(3,150 – 4,412 BHP)

**APPLICATIONS**
- Power Generation
- Emergency Nuclear Reactor Cooling
- Compression
- Pumping
- Emergency Power

**INSTALLATIONS**
- Nuclear Power Plants
- Water Management Facilities
- Natural Gas Compressors
- Pump Drives
- Hospitals
- Municipalities
- Industrial Power Generation
- Nuclear Power Plants
- Water Management Facilities
- Natural Gas Compressors
- Pump Drives
- Hospitals
- Municipalities
- Industrial Power Generation

**KEY ADVANTAGES**
- 1% Pilot Fuel, 99% Gas
- Designed & developed for a wide array of electrical power generation and heavy industrial applications
- 40+ year service life
- Shock-qualified cylinder block with excellent maintenance access
- 40% thermal efficiency - simple cycle
- Automatic seamless switch from gas to diesel if gas supply is interrupted
- Base load (110% overload 2/24 hrs)
- Longer bearing life due to conservative operating speed

**ENGINE SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinder Configuration</td>
<td>9L, 12L</td>
</tr>
<tr>
<td>Displacement/Cylinder-L (cu in)</td>
<td>16.9 (1,037)</td>
</tr>
<tr>
<td>Cylinder Bore - mm (in)</td>
<td>206 (8.1)</td>
</tr>
<tr>
<td>Mean Piston Speed - m/s (ft/min)</td>
<td>7.6 – 8.5 (25.0 – 27.8)</td>
</tr>
<tr>
<td>Piston Stroke - mm (in)</td>
<td>254 (10.0)</td>
</tr>
<tr>
<td>BMEP – bar (psi)</td>
<td>9.3 – 10.8 (134 – 157)</td>
</tr>
<tr>
<td>Cycle</td>
<td>2 Stroke</td>
</tr>
</tbody>
</table>
FM | OP 38D 8-1/8

POWER RANGE
2,349 – 3,290 kWm
(3,150 – 4,412 BHP)

DIMENSIONS

<table>
<thead>
<tr>
<th>CYLINDERS</th>
<th>A (mm)</th>
<th>B (mm)</th>
<th>C (mm)</th>
<th>DRY WEIGHT (KG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9L</td>
<td>7,874</td>
<td>3,327</td>
<td>2,496</td>
<td>34,000</td>
</tr>
<tr>
<td>12L</td>
<td>8,992</td>
<td>3,327</td>
<td>2,496</td>
<td>39,000</td>
</tr>
</tbody>
</table>

Drawings are for illustration only. For installation obtain certified prints.

POWER RATINGS

<table>
<thead>
<tr>
<th>CYLINDERS</th>
<th>Aspiration</th>
<th>50Hz 1,000 RPM kWe</th>
<th>60Hz 900 RPM kWe</th>
</tr>
</thead>
<tbody>
<tr>
<td>9L</td>
<td>Turbo-blower</td>
<td>2,510</td>
<td>2,260</td>
</tr>
<tr>
<td>12L</td>
<td>Turbocharged</td>
<td>2,630</td>
<td>2,370</td>
</tr>
<tr>
<td>9L</td>
<td>Turbo-blower</td>
<td>3,345</td>
<td>3,013</td>
</tr>
<tr>
<td>12L</td>
<td>Turbocharged</td>
<td>3,510</td>
<td>3,165</td>
</tr>
</tbody>
</table>

NOTES
All ratings subject to factory approved application. Ratings are based on: 90°F (32.2°C) ambient temp. 28.25 in Hg (71.6 cm Hg) barometric pressure (min). 1,500 ft. (457 m) altitude (max). Standby ratings available. The kWe ratings are based on generators with nominal efficiencies of 96.2%.