## DIESEL ENGINES SERIES 4000 R04

for locomotives EPA Tier 3

<table>
<thead>
<tr>
<th>Engine</th>
<th>Dimensions (LxWxH) mm (in)</th>
<th>Mass, dry kg (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12V – R54</td>
<td>2670 x 1696 x 2001 (105.1 x 66.8 x 78.8)</td>
<td>7700 (16976)</td>
</tr>
<tr>
<td>16V – R54</td>
<td>3140 x 1696 x 2001 (123.6 x 66.8 x 78.8)</td>
<td>9050 (19952)</td>
</tr>
</tbody>
</table>

All dimensions are approximate, for complete information refer to the installation drawing.

### Engine

- **Bore/stroke**: mm (in)
- **Cylinder configuration**: 90° V
- **Displacement**: l (cu in)
- **Displacement, total**: l (cu in)
- **Fuel specification**: ASTM D975 (Sulfur content max. 15 mg/kg)

### Rated power

<table>
<thead>
<tr>
<th>Engine type</th>
<th>Rated power</th>
<th>Peak torque</th>
<th>Fuel consumpt. at rated power</th>
<th>Optim. *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>kW</td>
<td>bhp</td>
<td>rpm</td>
<td>g/kWh</td>
</tr>
<tr>
<td>12V 4000 R54</td>
<td>1800</td>
<td>2414</td>
<td>1800</td>
<td>199</td>
</tr>
<tr>
<td>16V 4000 R54</td>
<td>2400</td>
<td>3218</td>
<td>1800</td>
<td>199</td>
</tr>
</tbody>
</table>

**Stage**

- EPA 3

**Emissions**: EPA Rail Tier 3 (40CFR1033) Linehaul

For additional technical data and project support please consult your distributor.
### Standard equipment

- Advanced Diesel Engine Control (ADEC)
- Standard interface with J 1939 (MTU)
- Common rail injection system
- Two-stage turbocharging
- Charge-air cooling as separate circuit
- Flywheel housing SAE # 00
- Resilient engine mountings
- 64V Starter
- Long-life 4-valve cylinder heads

### Optional equipment

- Dry-type air filter
- Auxiliary PTOs
- Assembly and drive parts for hydrostatic pump
- Various interface for I/O signals
- Fuel prefilter
- Various adapters for connections and interfaces
- Coupling for main drive

Reference conditions:

- Intake temperature: 25°C (77°F)
- Ambient air pressure: 1000 mbar
- Charge air coolant temp.: 45°C (113°F)
- Altitude above sea level: 100 m (328 ft)

Subject to change without notice. Customization possible. Engines illustrated in this document may feature options not fitted as standard to standard engine.