DC13 076A. 331 kW (450 hp)
EU Stage IIIA, China Phase III, India Bharat Stage III and Brazil MAR-I

The industrial engines from Scania are based on a robust design with a strength optimised cylinder block containing wet cylinder liners that can easily be exchanged. Individual cylinder heads with 4 valves per cylinder promotes reparability and fuel economy.

The engine is equipped with a Scania developed Engine Management System, EMS, in order to ensure the control of all aspects related to engine performance. The injection system is based on electronically controlled unit injectors that give low exhaust emissions with good fuel economy and a high torque. The engine can be fitted with many accessories such as air cleaners, PTOs and flywheels in order to suit a variety of installations.

<table>
<thead>
<tr>
<th>Engine speed (rpm)</th>
<th>1200</th>
<th>1500</th>
<th>1800</th>
<th>2100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross power (kW)</td>
<td>229</td>
<td>307</td>
<td>331</td>
<td>331</td>
</tr>
<tr>
<td>Gross power (hp, metric)</td>
<td>311</td>
<td>418</td>
<td>450</td>
<td>450</td>
</tr>
<tr>
<td>Gross torque (Nm)</td>
<td>1822</td>
<td>1954</td>
<td>1756</td>
<td>1505</td>
</tr>
<tr>
<td>Spec fuel consumption. Full load (g/kWh)</td>
<td>183</td>
<td>203</td>
<td>213</td>
<td>225</td>
</tr>
<tr>
<td>Spec fuel consumption. 3/4 load (g/kWh)</td>
<td>193</td>
<td>211</td>
<td>221</td>
<td>240</td>
</tr>
<tr>
<td>Spec fuel consumption. 1/2 load (g/kWh)</td>
<td>199</td>
<td>217</td>
<td>237</td>
<td>264</td>
</tr>
<tr>
<td>Heat rejection to coolant (kW)</td>
<td>68</td>
<td>91</td>
<td>99</td>
<td>120</td>
</tr>
</tbody>
</table>

Rating: IFN – Intermittent service: Rated output available 1/6 h.
Unlimited h/year service time at a load factor of 80%
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Engine description

- No of cylinders: 6 in-line
- Working principle: 4-stroke
- Firing order: 1 - 5 - 3 - 6 - 2 - 4
- Displacement: 12.7 litres
- Bore x stroke: 130 x 160 mm
- Compression ratio: 17.3:1
- Weight: 1050 kg (excl oil and coolant)
- Piston speed at 1500 rpm: 8.0 m/s
- Piston speed at 1800 rpm: 9.6 m/s
- Camshaft: High position alloy steel
- Pistons: Steel pistons
- Connection rods: I-section press forgings of alloy steel
- Crankshaft: Alloy steel with hardened and polished bearing surfaces
- Oil capacity: 34-45 dm³
- Electrical system: 1-pole 24V

Output

- kW
- hp

Spec fuel consumption

- g/kWh
- g/hph

Test conditions: Air temperature +25°C. Barometric pressure 100 kPa (750 mmHg). Humidity 30%. Diesel fuel acc. to ECE R 24 Annex B. Density of fuel 0.840 kg/dm³. Viscosity of fuel 3.0 cSt at 40°C. Energy value 42700 kJ/kg. Power test code: ISO 3046. Power and fuel values +/-3%.