The marine 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 repairability and fuel economy. The engines are type approved in all major classification societies.

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 gives low exhaust emissions with good fuel economy and a high torque already at low revs. The engine can be fitted with many accessories such as air cleaners, PTOs, transmissions and type approved instrumentation in order to suit a variety of installations.

### Standard equipment
- Scania Engine Management System, EMS
- Unit injectors, PDE
- Turbocharger
- Fuel pre-filter with water separator
- Fuel filter
- Oil filter, full flow
- Centrifugal oil cleaner
- Oil cooler, integrated in block
- Oil filler, in engine block
- Oil dipstick, in block
- Starter, 2-pole 7.0 kW
- Alternator, 2-pole 100A
- Flywheel SAE 14
- Silumin flywheel housing, SAE 1 flange
- Front-mounted engine brackets
- Protection covers
- Closed crankcase ventilation
- Operator’s manual

### Engines with heat exchanger:
- Sea water pump
- Heat exchanger with expansion tank

### Optional equipment
- Hydraulic pump
- Side-mounted PTO
- Front-mounted PTO
- Exhaust connections
- Electrical base system
- Control and instrument panels
- Accelerator position sensor
- Engine heater
- Power pack engine bracket
- Stiff rubber suspension
- Air cleaner
- Studs in flywheel housing
- Reversible fuel filter
- Low coolant level reaction
- Variable idle speed setting
- Low and extra low oil sump
- Long oil dipstick
- Oil level sensor
- Bilge pump

<table>
<thead>
<tr>
<th></th>
<th>Rating</th>
<th>Engine speed (rpm)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1200</td>
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<tr>
<td>Gross power, full load (kW)</td>
<td>ICFN</td>
<td>197</td>
</tr>
<tr>
<td>Gross power, full load (hp, metric)</td>
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</tr>
<tr>
<td>Gross power, propeller curve (kW)</td>
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<td>Gross power, propeller curve (hp, metric)</td>
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<td>Gross torque (Nm)</td>
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<tr>
<td>Spec fuel consumption. Full load (g/kWh)</td>
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<tr>
<td>Spec fuel consumption. 3/4 load (g/kWh)</td>
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<td>Spec fuel consumption. 1/2 load (g/kWh)</td>
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<td>Spec fuel consumption. Propeller curve (l/h)</td>
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<tr>
<td>Optimum fuel consumption (g/kWh)</td>
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<tr>
<td>Heat rejection to coolant (kW)</td>
<td>ICFN</td>
<td>147</td>
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</tbody>
</table>

ICFN – Continuous service: Rated power available 1 h/1 h.
Unlimited h/year service time at a load factor of 100%

This specification may be revised without notice.
DI13 080M. 249 kW (338 hp)
IMO Tier II

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 (excl oil and coolant) 1285 kg (Engine with heat exchanger)
1180 kg (Engine with keel cooling)
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 28-34 dm³ (standard oil sump)
Electrical system 2-pole 24V

Output

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<tr>
<th>kW</th>
<th>hp</th>
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<td>135</td>
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<td>150</td>
<td>175</td>
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<tr>
<td>200</td>
<td>215</td>
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<tr>
<td>250</td>
<td>255</td>
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Torque

<table>
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<tr>
<th>Nm</th>
<th>rpm</th>
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<td>125</td>
</tr>
<tr>
<td>1300</td>
<td>125</td>
</tr>
<tr>
<td>1400</td>
<td>125</td>
</tr>
<tr>
<td>1500</td>
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Spec fuel consumption

<table>
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<tr>
<th>g/kWh</th>
<th>l/h</th>
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<tbody>
<tr>
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<tr>
<td>200</td>
<td>85</td>
</tr>
<tr>
<td>180</td>
<td>85</td>
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</tbody>
</table>

Test conditions: Air temperature +25°C, Barometric pressure 101 kPa (750 mmHg), Humidity 30%. Diesel fuel acc. to DCE 3.14 Annex 6. Density of fuel 0.84 g/cm³. Viscosity of fuel 3.0 cSt at 40°C. Energy value 42700 kJ/kg.

Propeller curve, assumed exponent 2.5
Full load curve

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