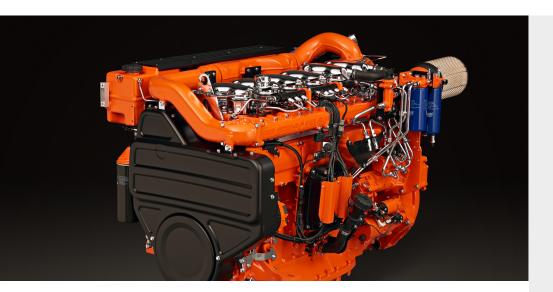




DI13 087M. 552 kW (751 hp)

US Tier 3, IMO Tier II, EU Stage IIIA



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 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 Scania's XPI (Extra High Pressure Injection), a common rail system that gives low exhaust emissions with good fuel economy and a high torque. The engine can be equipped 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
- Extra high pressure fuel injection system, XPI
- 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
- Sea water pump
- Heat exchanger with expansion tank

| | | Engine speed (rpm) | | | | |
|--|-------------------|--------------------|------|------|------|------|
| | Rating | 1200 | 1500 | 1800 | 2100 | 2300 |
| Gross power, full load (kW) | | 324 | 482 | 535 | 552 | 552 |
| Gross power, full load (hp, metric) | | 441 | 656 | 728 | 751 | 751 |
| Gross power, propeller curve (kW) | Patrol craft long | 109 | 190 | 299 | 440 | 552 |
| Gross power, propeller curve (hp, metric) | | 148 | 258 | 407 | 598 | 751 |
| Gross torque (Nm) | | 2578 | 3069 | 2838 | 2510 | 2292 |
| Spec fuel consumption. Full load (g/kWh) | | 209 | 196 | 197 | 212 | 215 |
| Spec fuel consumption. Propeller curve (I/h) | | 26 | 47 | 75 | 114 | 142 |
| Optimum fuel consumption (g/kWh) | | | | 196 | | |
| Heat rejection to coolant (kW) | | 251 | 319 | 357 | 394 | 416 |

Patrol craft long: Intended for intermittent use where rated power is available 1 h/6 h. Between full load operations engine rpm must be reduced at least 10% from max. obtained rpm. Accumulated total service time max. 2000 h/year.



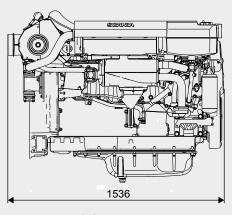


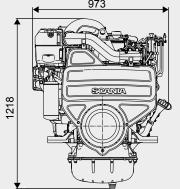
DI13 087M. 552 kW (751 hp)

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Engine description

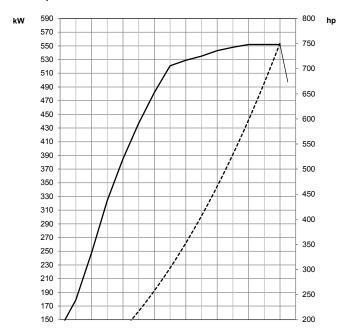
| No of cylinders | 6 in-line | |
|-------------------------------|-------------------------------|--|
| Working principle | 4-stroke | |
| Firing order | 1 - 5 - 3 - 6 - 2 - 4 | |
| Displacement | 12.7 litres | |
| Bore x stroke | 130 x 160 mm | |
| Compression ratio | 17.3:1 | |
| Weight (excl oil and coolant) | 1285 kg | |
| Oil capacity | 28-34 dm³ (standard oil sump) | |
| Electrical system | 2-pole 24V | |
| | | |



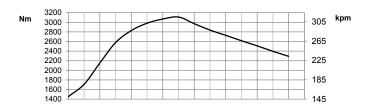


All dimensions in mm

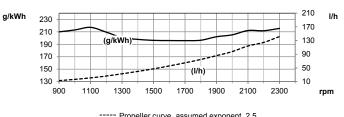
Output



Torque



Spec fuel consumption



----- Propeller curve, assumed exponent 2.5 Full load curve

Test conditions Air temperature +25°C. Barometric pressure 100 kPa (750 mmHg). Humidity 30 %. Diesel fuel acc. to ECE R 24 Annex 6. Density of fuel 0.840 kg/dm². Viscosity of fuel 3.0 cSt at 40°C. Energy value 42700 kJ/kg. Power test code ISO 3046. Power and fuel values +/-3%.



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