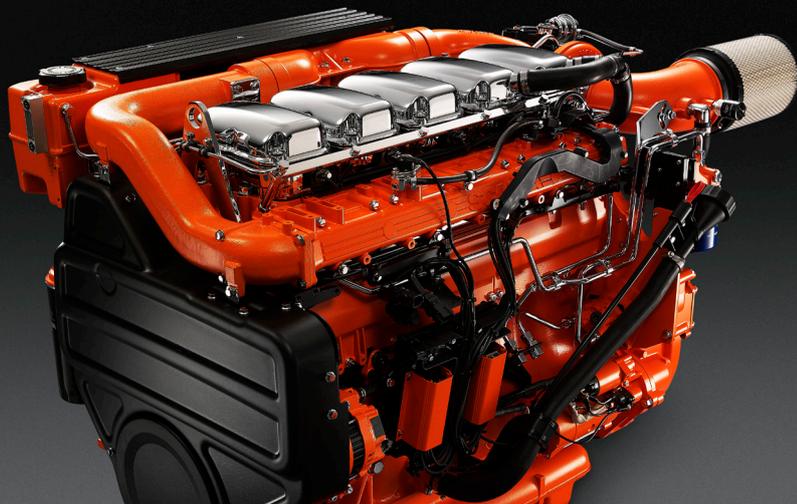


DI09 070M. 162 kW (220 hp)

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 reparability 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.

| | Rating | Engine speed (rpm) | | |
|----------------------------------------------|--------|--------------------|------|------|
| | | 1200 | 1500 | 1800 |
| Gross power, full load (kW) | ICFN | 162 | 162 | 162 |
| Gross power, full load (hp, metric) | ICFN | 220 | 220 | 220 |
| Gross power, propeller curve (kW) | ICFN | 59 | 103 | 162 |
| Gross power, propeller curve (hp, metric) | ICFN | 80 | 140 | 220 |
| Gross torque (Nm) | ICFN | 1289 | 1031 | 859 |
| Spec fuel consumption. Full load (g/kWh) | | 203 | 195 | 204 |
| Spec fuel consumption. 3/4 load (g/kWh) | | 204 | 200 | 212 |
| Spec fuel consumption. 1/2 load (g/kWh) | | 212 | 211 | 230 |
| Spec fuel consumption. Propeller curve (l/h) | | 15 | 25 | 39 |
| Optimum fuel consumption (g/kWh) | | 193 | | |
| Heat rejection to coolant (kW) | | 123 | 117 | 130 |

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

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 oil sump
- Long oil dipstick
- Oil level sensor
- Bilge pump

This specification may be revised without notice.

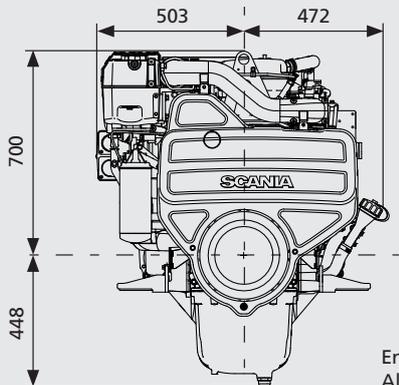
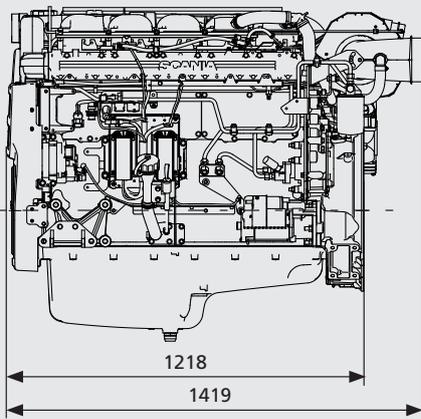


DI09 070M. 162 kW (220 hp)

IMO Tier II, EU Stage IIIA

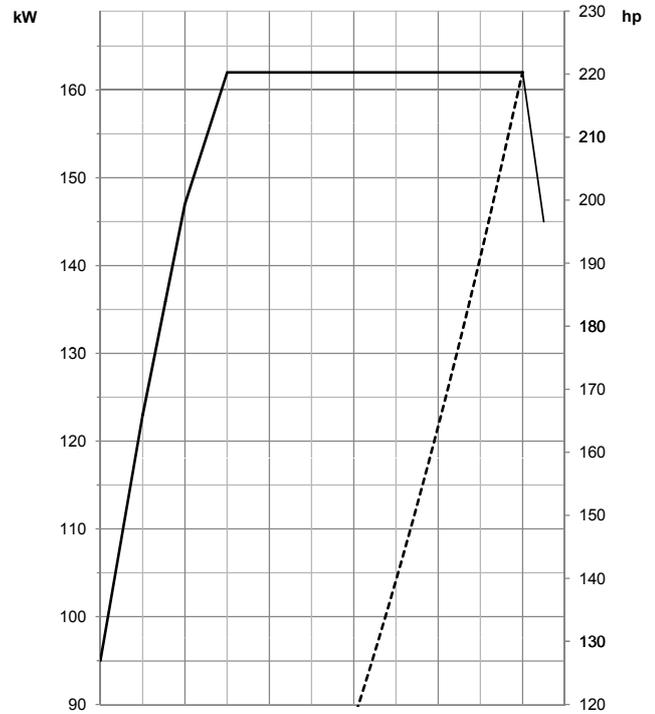
Engine description

| | |
|--------------------------|---------------------------------------------------------|
| No of cylinders | 5 in-line |
| Working principle | 4-stroke |
| Firing order | 1 - 2 - 4 - 5 - 3 |
| Displacement | 9.3 litres |
| Bore x stroke | 130 x 140 mm |
| Compression ratio | 18:1 |
| Weight | (excl oil and coolant) |
| with heat exchanger | 1150 kg |
| with keel cooling | 1044 kg |
| Piston speed at 1500 rpm | 7.0 m/s |
| Piston speed at 1800 rpm | 8.4 m/s |
| Camshaft | High position alloy steel |
| Pistons | Aluminum pistons |
| Connection rods | I-section press forgings of alloy steel |
| Crankshaft | Alloy steel with hardened and polished bearing surfaces |
| Oil capacity | 32-38 dm ³ (standard oil sump) |
| Electrical system | 2-pole 24V |

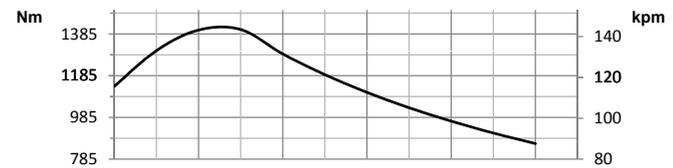


Engine with heat exchanger
All dimensions in mm

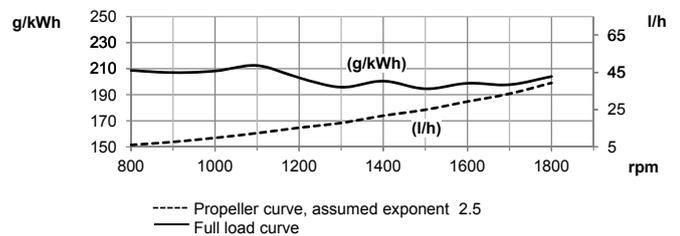
Output



Torque



Spec fuel consumption



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/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%.



SCANIA

SE 151 87 Södertälje, Sweden
Telephone +46 8 553 810 00
Telefax +46 8 553 829 93
www.scania.com
engines@scania.com