



DI16 070M. 460 kW (625 hp)

IMO Tier II, US Tier 2, 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 | 368 | 437 | 460 |
| Gross power, full load (hp, metric) | | 501 | 595 | 625 |
| Gross power, propeller curve (kW) | | 167 | 292 | 460 |
| Gross power, propeller curve (hp, metric) | | 227 | 397 | 625 |
| Gross torque (Nm) | | 2931 | 2784 | 2440 |
| Spec fuel consumption. Full load (g/kWh) | | 199 | 198 | 204 |
| Spec fuel consumption. 3/4 load (g/kWh) | | 197 | 202 | 208 |
| Spec fuel consumption. 1/2 load (g/kWh) | | 203 | 202 | 215 |
| Spec fuel consumption. Propeller curve (l/h) | | 41 | 70 | 112 |
| Optimum fuel consumption (g/kWh) | | 196 | | |
| Heat rejection to coolant (kW) | | 278 | 320 | 354 |

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

Standard equipment

- Scania Engine Management System, EMS
- Unit injectors, PDE
- Twin turbochargers, heat insulated
- Fuel pre-filter with water separator
- Fuel filter
- Oil filter, full flow
- Centrifugal oil cleaner
- Oil cooler, integrated in block
- Oil filler, in valve cover
- Deep front oil sump
- Oil dipstick, front
- Starter, 2-pole 7.0 kW
- Alternator, 2-pole 100A
- Flywheel SAE 14
- Silumin flywheel housing, SAE 1 flange
- Front-mounted engine brackets
- Catwalk and cover for belt transmission
- Closed crankcase ventilation
- Sea water charge air cooler
- Sea water pump
- Dual heat exchangers with expansion tanks
- Operator's manual

Optional equipment

- Electrical base system
- Accelerator position sensor
- Control panel
- Instrument panel
- Scania EMS display
- Hydraulic pump
- Side-mounted PTO
- Front-mounted PTO
- Exhaust connections
- Engine heater
- Power pack engine brackets
- Stiff rubber suspension
- Air cleaner
- Studs in flywheel housing
- Reversible fuel filter
- Low coolant level reaction
- Variable idle speed setting
- Low oil sump
- Oil draining with pump
- Oil level sensor
- Bilge pump

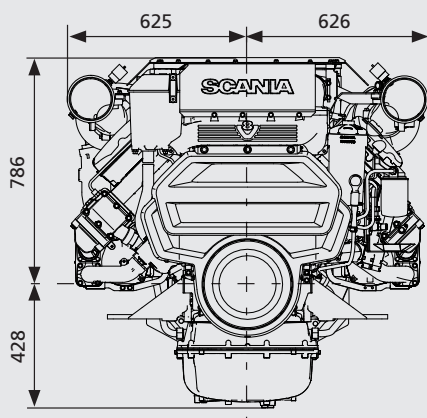
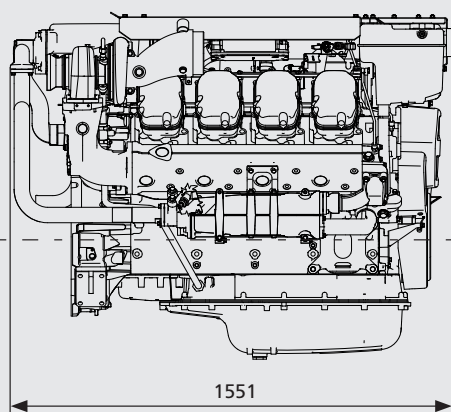
This specification may be revised without notice.

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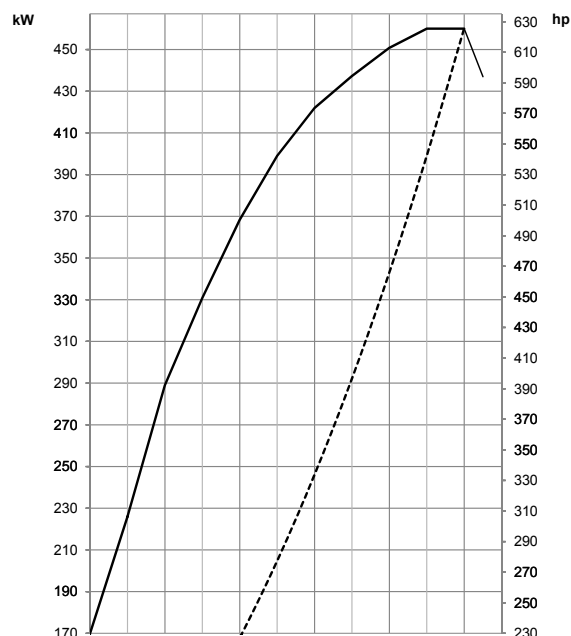
Engine description

| | |
|--------------------------|---|
| No of cylinders | V 8 |
| Working principle | 4-stroke |
| Firing order | 1 - 5 - 4 - 2 - 6 - 3 - 7 - 8 |
| Displacement | 16.4 litres |
| Bore x stroke | 130 x 154 mm |
| Compression ratio | 16.7:1 |
| Weight | 1670 kg (excl oil and coolant) |
| Piston speed at 1500 rpm | 7.7 m/s |
| Piston speed at 1800 rpm | 9.24 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 | 40-48 dm ³ (standard oil sump) |
| Electrical system | 2-pole 24V |

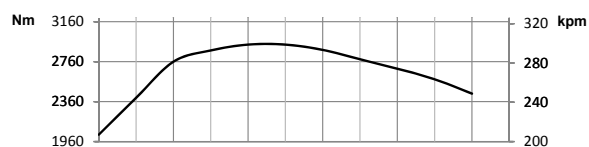


All dimensions in mm

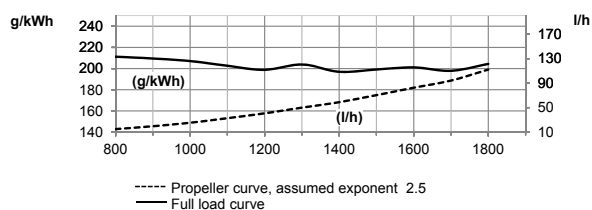
Output



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%.



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