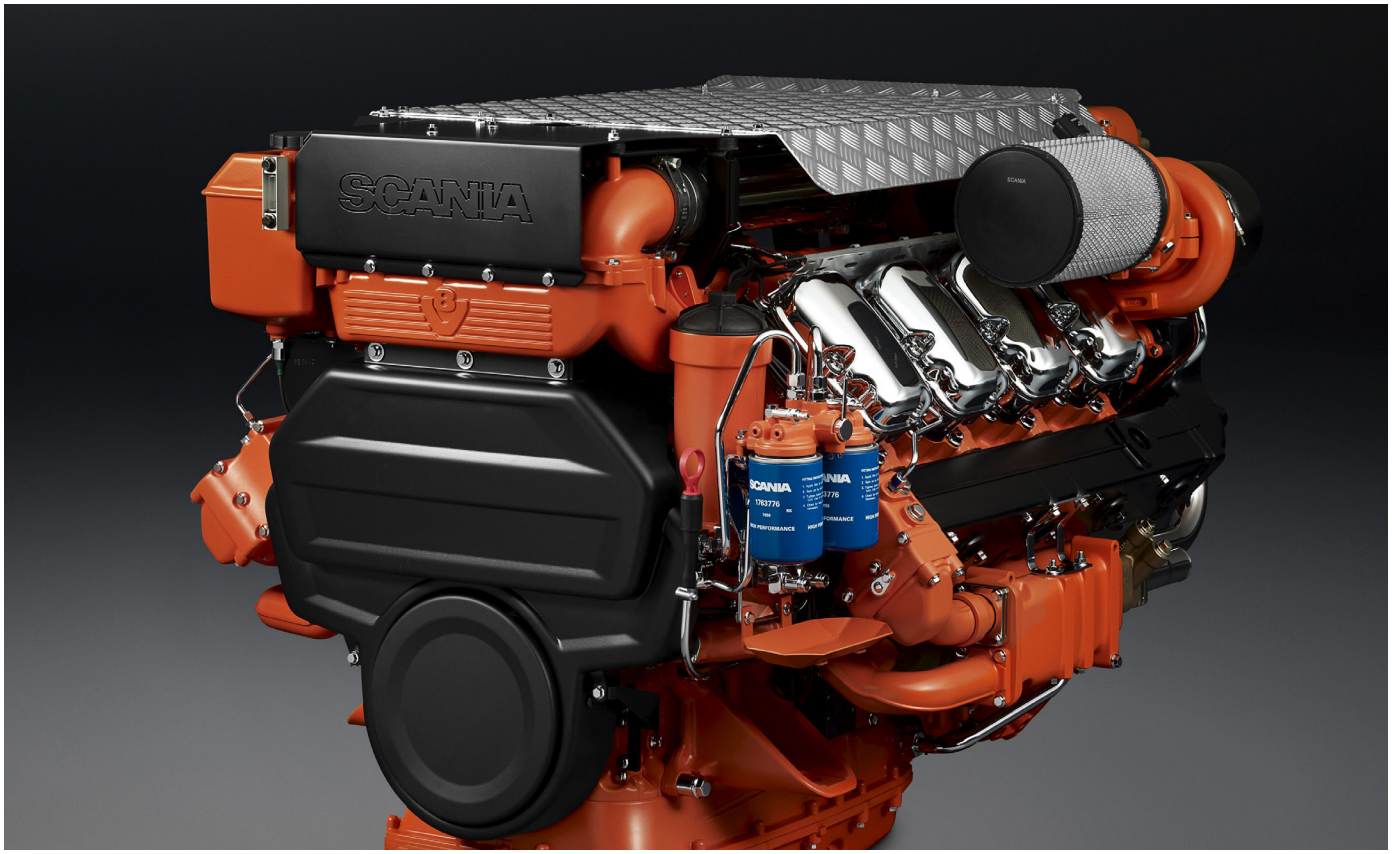
SCANIA MARINE ENGINE: IMO TIER II, IMO TIER III*, EU STAGE IIIA

16-LITRE ENGINE



Engine description

DI16 072M. 477 kW (650 hp)

Engine speed	2,100 rpm
Emission compliance	IMO Tier II, IMO Tier III*, EU Stage IIIA
Rating	IFN
No of cylinders	V8
Working principle	4-stroke
Displacement	16.4 litres
Weight	1,670 kg (excluding oil and coolant)
Oil capacity	40-48 litres (standard oil sump)
Electric system	2-pole, 24 V DC

The marine engines from Scania are based on a robust design with a strength optimized 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, to ensure the control of all aspects related to engine performance. The injection system is based on electronically controlled unit injectors, which gives low exhaust emissions with good fuel economy and a high torque already at low revs.

The engine can be equipped with many accessories such as air cleaners, PTOs, transmissions and instrumentation, to suit a variety of installations.

* IMO Tier III compliant when using aftertreatment system from external supplier.

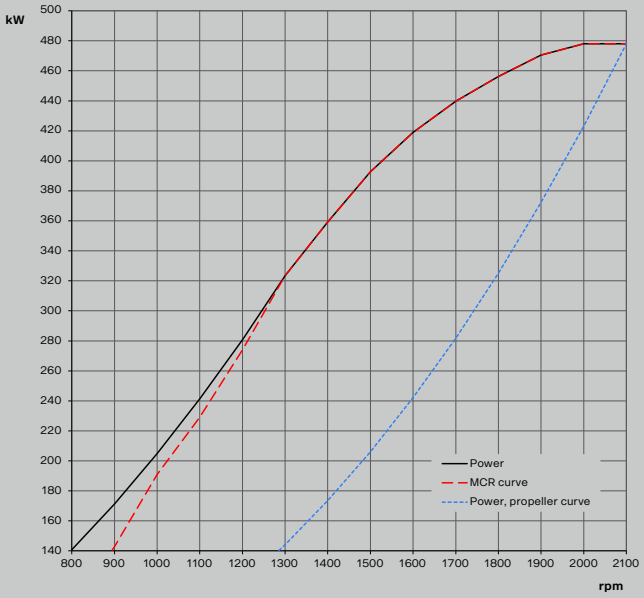
Standard equipment

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

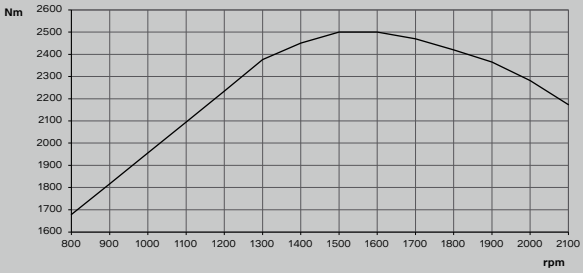
IFN – Intermittent service: Intended for intermittent use where rated power is available 1 h/3 h. Accumulated load factor must not exceed 80% of rated power. Unlimited h/year service time.

Power charts

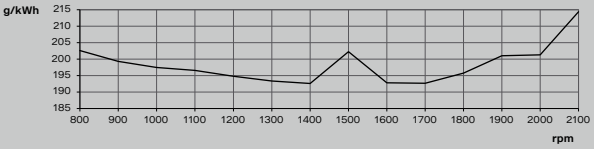
Power



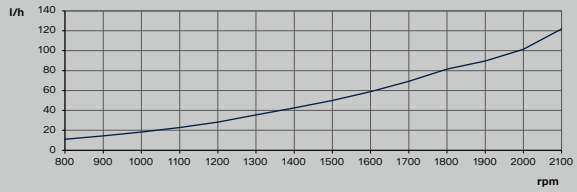
Torque



Fuel consumption



Fuel consumption, propeller curve

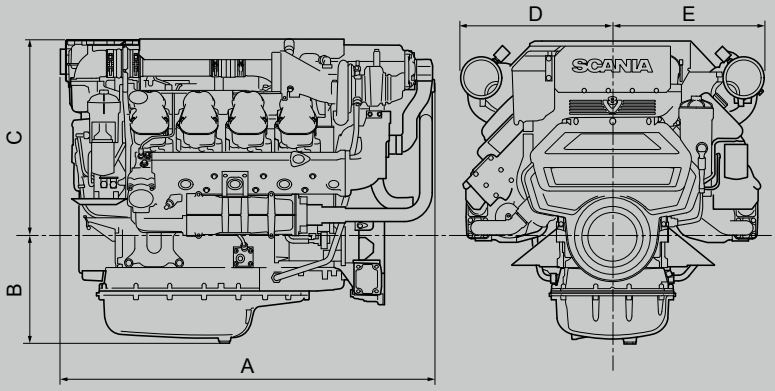


Test conditions. Air temperature 25°C. Barometric pressure 100 kPa (750 mmHg). Humidity 30%. Diesel fuel acc.to ECE R 24 Annex 6. Density of fuel 0.84 kg/dm³. Viscosity of fuel 3.0 cSt at 40°C. Energy value 42,700 kJ/kg. **Power test code** ISO 3046. Power and fuel values ±3%.

Dimensions

A Overall length	1,550
B Centre of crankshaft to bottom	428
C Centre of crankshaft to top	786
D Centre of crankshaft to right-hand side	625
E Centre of crankshaft to left-hand side	625

All dimensions indicated in mm.



Technical data

	Engine speed (rpm)			
	1,200	**1,500**	**1,800**	**2,100**
Gross power (kW)	281	393	456	477
Gross power (hp, metric)	382	534	620	650
Gross power, propeller curve (kW)	118	206	325	477
Gross power, propeller curve (hp, metric)	160	280	442	650
Gross torque (Nm)	2,234	2,500	2,420	2,174
Spec. fuel consumption at full load (g/kWh)	195	202	196	214
Spec. fuel consumption, propeller curve (l/h)	28.2	49.9	81.5	122.0
Heat rejection to coolant (kW)	205	291	324	405

Edition 04

This specification may be revised without notice.