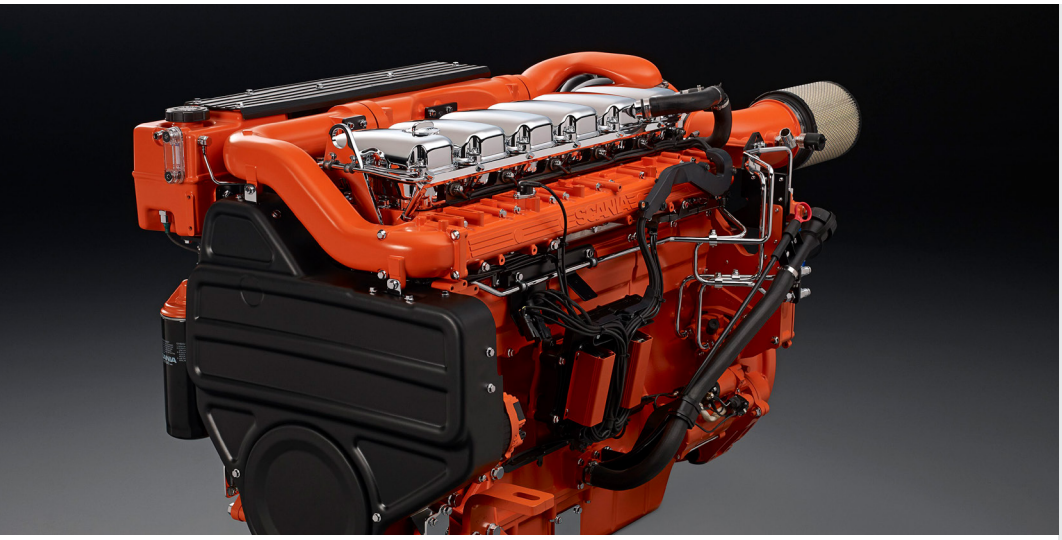
DI13 092M. 294 kW (400 hp)

IMO Tier III, 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 based on electronically controlled unit injectors that in combination with SCR (Selective Catalytic Reduction) 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, cast iron flywheel housing with dual positions for starter 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	232	279	294
Gross power, full load (hp, metric)	ICFN	316	380	400
Gross power, propeller curve (kW)	ICFN	107	186	294
Gross power, propeller curve (hp, metric)	ICFN	145	253	400
Gross torque (Nm)	ICFN	1850	1779	1560
Spec fuel consumption. Full load (g/kWh)		193	190	194
Spec fuel consumption. 3/4 load (g/kWh)		192	192	198
Spec fuel consumption. 1/2 load (g/kWh)		199	200	210
Spec fuel consumption. Propeller curve (l/h)		26	43	68
Optimum fuel consumption (g/kWh)		191		
Reductant consumption. Full load (g/kWh)		21	23	23
Reductant consumption. Propeller curve (l/h)		1.3	3.0	5.0
Heat rejection to coolant (kW)		162	182	199

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
- SCR-system
- Protection covers
- Closed crankcase ventilation

Engines with heat exchanger:

- Impeller sea water pump
- Heat exchanger with expansion tank

Optional equipment

- Hydraulic pump
- Side-mounted PTO
- Front-mounted PTO
- Exhaust connections
- Scania instrumentation 2.0
- Type approved instrumentation
- Engine heater
- Engine bracket with different heights
- Stiff rubber suspension
- Air cleaner
- Cast iron flywheel housing, SAE 1 flange
- Reversible fuel filter
- Low coolant level sensor
- Low and extra low oil sump
- Reversible oil filters
- Long oil dipstick
- Oil level sensor
- Reductant feed pump
- Bilge pump

Engines with heat exchanger:

- Self priming sea water pump

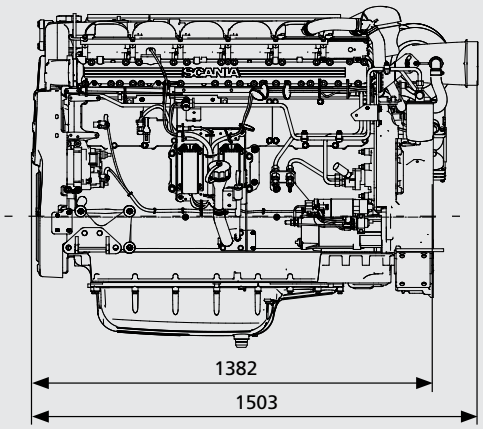
This specification may be revised without notice.

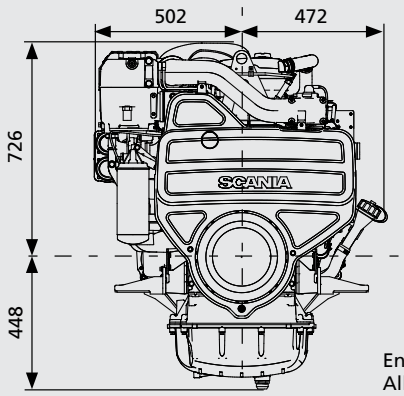
DI13 092M. 294 kW (400 hp)

IMO Tier III, EU Stage IIIA

Engine description

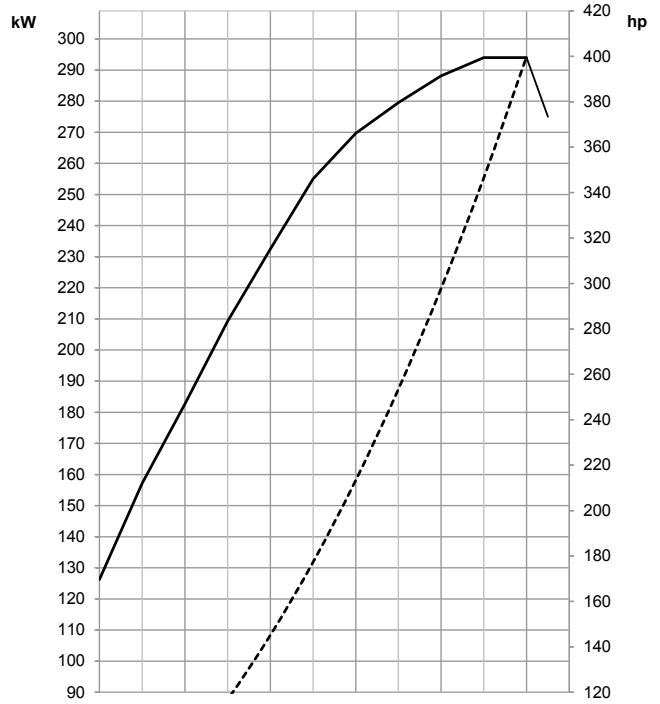
No of cylinders	6 in-line
Working principle	4-stroke
Firing order	1 - 5 - 3 - 6 - 2 - 4
Displacement	12.7 litres
Bore x stroke	130 x 160 mm
Compression ratio	17.3:1
Weight (excl oil and coolant)	1285 kg (Engine with heat exchanger) 1180 kg (Engine with keel cooling)
Piston speed at 1500 rpm	8.0 m/s
Piston 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



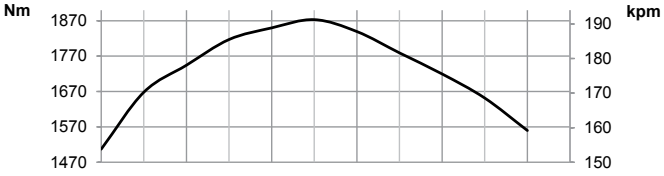


Engine with heat exchanger
All dimensions in mm

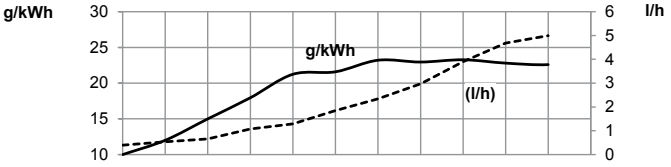
Output



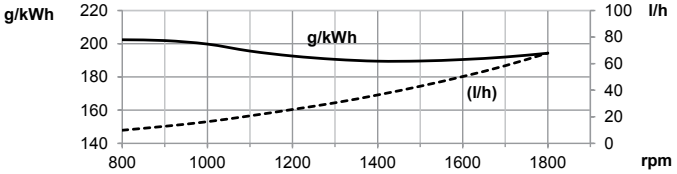
Torque



Spec reductant consumption



Spec fuel consumption



Propeller curve, assumed exponent 2.5
Full load curve

SCANIA

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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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