

DI09 072M. 221 kW (300 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 repairability 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.

		Engine speed (rpm)			
	Rating	1200	1500	1800	2100
Gross power, full load (kW)	IFN	204	221	221	221
Gross power, full load (hp, metric)	IFN	277	300	300	300
Gross power, propeller curve (kW)	IFN	55	95	150	221
Gross power, propeller curve (hp, metric)	IFN	74	130	204	300
Gross torque (Nm)	IFN	1623	1407	1172	1005
Spec fuel consumption. Full load (g/kWh)		200	192	196	210
Spec fuel consumption. 3/4 load (g/kWh)		196	194	199	213
Spec fuel consumption. 1/2 load (g/kWh)		199	202	210	228
Spec fuel consumption. Propeller curve (I/h)		14	23	36	55
Optimum fuel consumption (g/kWh)		191			
Heat rejection to coolant (kW)		155	156	164	178

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

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.

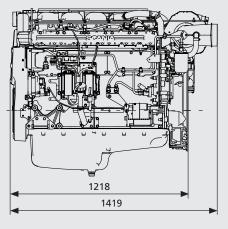


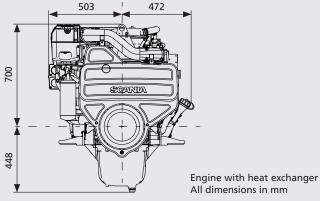
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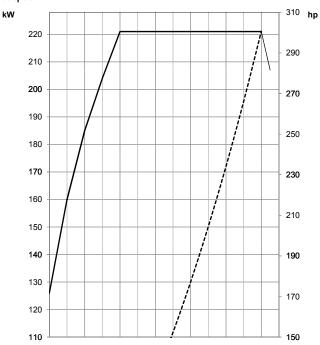
Engine description

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 with heat exchanger with keel cooling	(excl oil and coolant) 1150 kg 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 dm³ (standard oil sump)
Electrical system	2-pole 24V

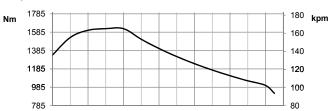




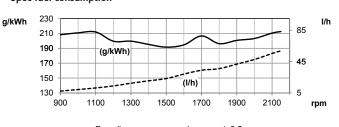
Output



Torque



Spec fuel consumption



----- Propeller curve, assumed exponent 2.5

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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