



## DI16 085M. 522 kW

US Tier 3



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.

	Rating	Engine speed (rpm)
		1800
Gross power, full load (kW)	PRP	522
Gross torque (Nm)		2769
Spec fuel consumption. Full load (g/kWh)		210
Spec fuel consumption. 3/4 load (g/kWh)		216
Spec fuel consumption. 1/2 load (g/kWh)		224
Optimum fuel consumption (g/kWh)		209
Heat rejection to coolant (kW)		424

**PRP - Prime power:** For continuous operation and unlimited yearly operation at varying load. Max. mean load factor of 70% of rated power over 24 h of operation. 1 hour/12 hours period of accumulated peak overload to 110%.

### 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
- Operator's manual

### Engines with heat exchanger:

- Sea water pump
- Dual heat exchangers with expansion tanks

### 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

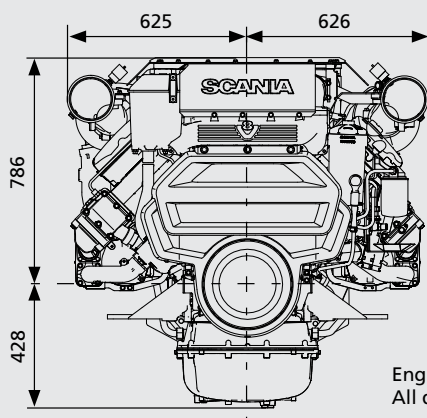
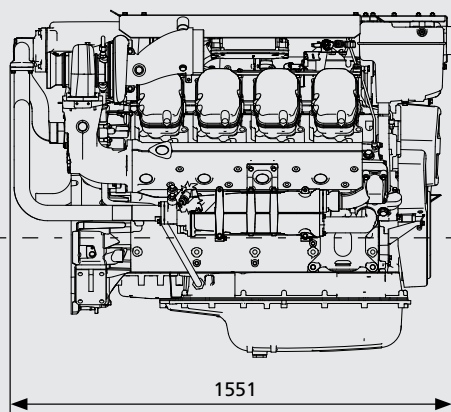


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### Engine description

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 <sup>3</sup> (standard oil sump)
Electrical system	2-pole 24V



Engine with heat exchanger  
All dimensions in mm



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