

# DI16 090M. 535-640 kW



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	1500	1800
Gross power, full load (kW)	PRP -	535	640
Gross torque (Nm)		3406	3395
Spec fuel consumption. Full load (g/kWh)		196	204
Spec fuel consumption. 3/4 load (g/kWh)		194	199
Spec fuel consumption. 1/2 load (g/kWh)		196	199
Optimum fuel consumption (g/kWh)		193	
Heat rejection to coolant (kW)		406	501

**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 charge air cooler
- Sea water pump
- Dual heat exchangers with expansion tanks

#### **Optional equipment**

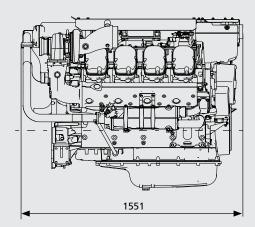
- Instrument panel
- Scania EMS display
- Hydraulic pump
- Side-mounted PTO
- Front-mounted PTO
- Exhaust connections
- Engine heater
- Power pack engine brackets
- Stiff rubber suspension
- Air cleaner
- Studs in flywheel housing
- · Reversible fuel filter
- Low coolant level reaction
- Variable idle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

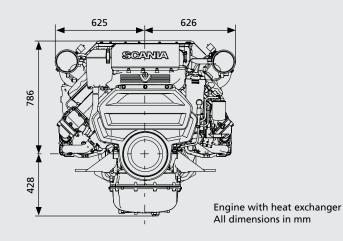


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## Engine description

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	







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