

# DI16 071M. 460 kW (625 hp)

IMO Tier II, US Tier 2, 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
Gross power, full load (kW)		325	437	460
Gross power, full load (hp, metric)		442	594	625
Gross power, propeller curve (kW)	ICFN	167	292	460
Gross power, propeller curve (hp, metric)		227	397	625
Gross torque (Nm)		2586	2782	2440
Spec fuel consumption. Full load (g/kWh)		207	209	212
Spec fuel consumption. 3/4 load (g/kWh)		204	215	222
Spec fuel consumption. 1/2 load (g/kWh)		206	222	234
Spec fuel consumption. Propeller curve (I/h)		41	76	116
Optimum fuel consumption (g/kWh)		201		
Heat rejection to coolant (kW)		266	341	366

ICFN - Continuous service: Rated power available 1 h/1 h. Unlimited h/year service time at a total load factor of 100%.

### 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

### **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

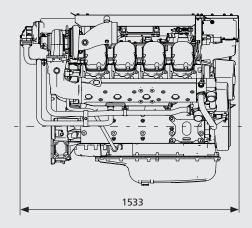


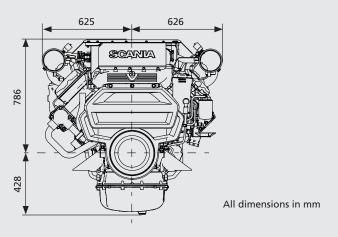
# DI16 071M. 460 kW (625 hp)

# IMO Tier II, US Tier 2, EU Stage IIIA

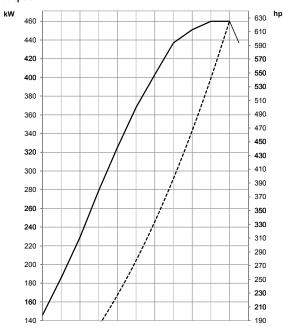
## **Engine description**

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	17.4:1	
Weight	1600 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 dm³ (standard oil sump)	
Electrical system	2-pole 24V	

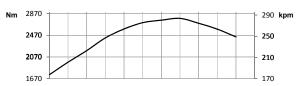




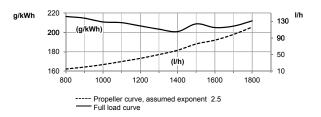
### Output



## Torque



## Spec fuel consumption



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%.



SE 151 87 Södertälje, Sweden Telephone +46 8 553 810 00 Telefax +46 8 553 829 93 www.scania.com engines@scania.com