

DC16 093A. 447-496 kW (501-567 kVA)

Fuel optimized



The engines for power generation 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 gives low exhaust emissions with good fuel economy and high torque. The engine can be fitted with many accessories such as air cleaners, radiators and PTOs in order to suit a variety of installations.

	Engine speed (rpm)			
	1500 rpm (50 Hz)		1800 rpm (60 Hz)	
	PRP	ESP	PRP	ESP
Gross power (kW)	451	496	447	492
Gross power (kVA)	514	567	501	553
Spec fuel consumption. Full load (g/kWh)	189	191	199	199
Spec fuel consumption. 3/4 load (g/kWh)	190	190	202	200
Spec fuel consumption. 1/2 load (g/kWh)	197	195	211	208
Heat rejection to coolant (kW)	139	156	158	174

PRP – **Prime power**: For continuous 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%. **ESP** – **Stand-by power**: For operation under normal varying load during a power outage. Not overloadable. Max mean load factor of 70% of rated power over 24 h of operation. Not for applications intended for more than 200 h/year.

Standard equipment

- Scania Engine Management System, EMS
- Unit injectors, PDE
- Turbocharger
- Fuel filter and extra pre-filter with water separator
- Oil filter, full flow
- Centrifugal oil cleaner
- Oil cooler, integrated in block
- Oil filler, in valve cover
- Deep front oil sump
- · Oil dipstick, in block
- · Magnetic drain plug for oil draining
- Starter, 1-pole 7.0 kW
- Alternator, 1-pole 100A
- Flywheel, SAE 14
- Silumin flywheel housing, SAE 1 flange
- Front-mounted engine brackets
- Open crankcase ventilation
- · Operator's manual

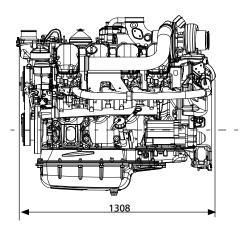


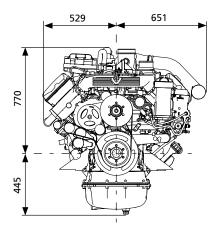
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Engine description

No of cylinders	90° V8	
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	15.7:1	
Weight	1340 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	
Electrical system	1-pole 24V	





All dimensions in mm

