

DC16 071A. 438-483 kW (500-540 kVA)

EU Stage IIIA, China Phase III and CPCB-II



The power generation engines from Scania are based on a robust design with a strength-optimized cylinder block containing wet cylinder liners, which can easily be exchanged. Individual cylinder heads with 4 valves per cylinder promotes reparability and fuel economy.

The engine is equipped with a Scania-developed Engine Management System, EMS, to ensure control of all aspects related to engine performance. The injection system is based on electronically controlled unit injectors, which gives low exhaust emissions with good fuel economy and a high torque.

For further reduction of NOx emissions, the engines are also equipped with an exhaust gas recirculation (EGR) system, developed by Scania. The engine can be fitted with many options such as air cleaners, PTOs and cooling package, to suit a variety of installations.

	Engine speed (rpm)	
	1500 rpm (50 Hz)	1800 rpm (60 Hz)
	PRP	PRP
Gross power (kW)	438	483
Gross power (kVA)	500	540
Fuel consumption at full load (g/kWh)	204	211
Fuel consumption at 3/4 load (g/kWh)	210	213
Fuel consumption at 1/2 load (g/kWh)	211	215
Heat rejection to coolant (kW)	198	219

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 hour period above 100% load. Max. 25 h accumulated service time above 100% load per 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 cylinder block
- Oil filler, in valve cover
- Deep front oil sump
- Oil dipstick, in cylinder block
- Magnetic drain plug for oil draining
- Starter motor, 1-pole 7.0 kW
- Alternator, 1-pole 100 A
- Flywheel, SAE 14
- Silumin flywheel housing, SAE 1 flange
- Front-mounted engine suspension
- EGR system
- Open crankcase ventilation

Optional equipment

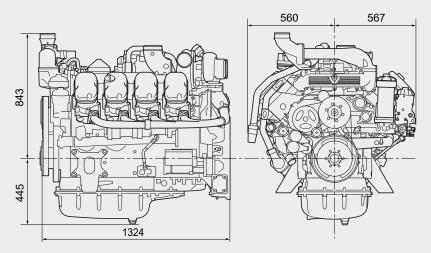
- Cooling package
- Fans
- Cast iron flywheel housing
- Side-mounted PTO
- Exhaust connections
- Engine heater
- Stiff rubber engine suspension
- Air cleaner
- Closed crankcase ventilation
- Studs in flywheel housing
- Coolant level sensor
- Fine tune potentiometer
- Ramp start delay
- Ramp-up rate

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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	16.7:1	
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 dm ³	
Electrical system	1-pole 24 V DC	



All dimensions in mm



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