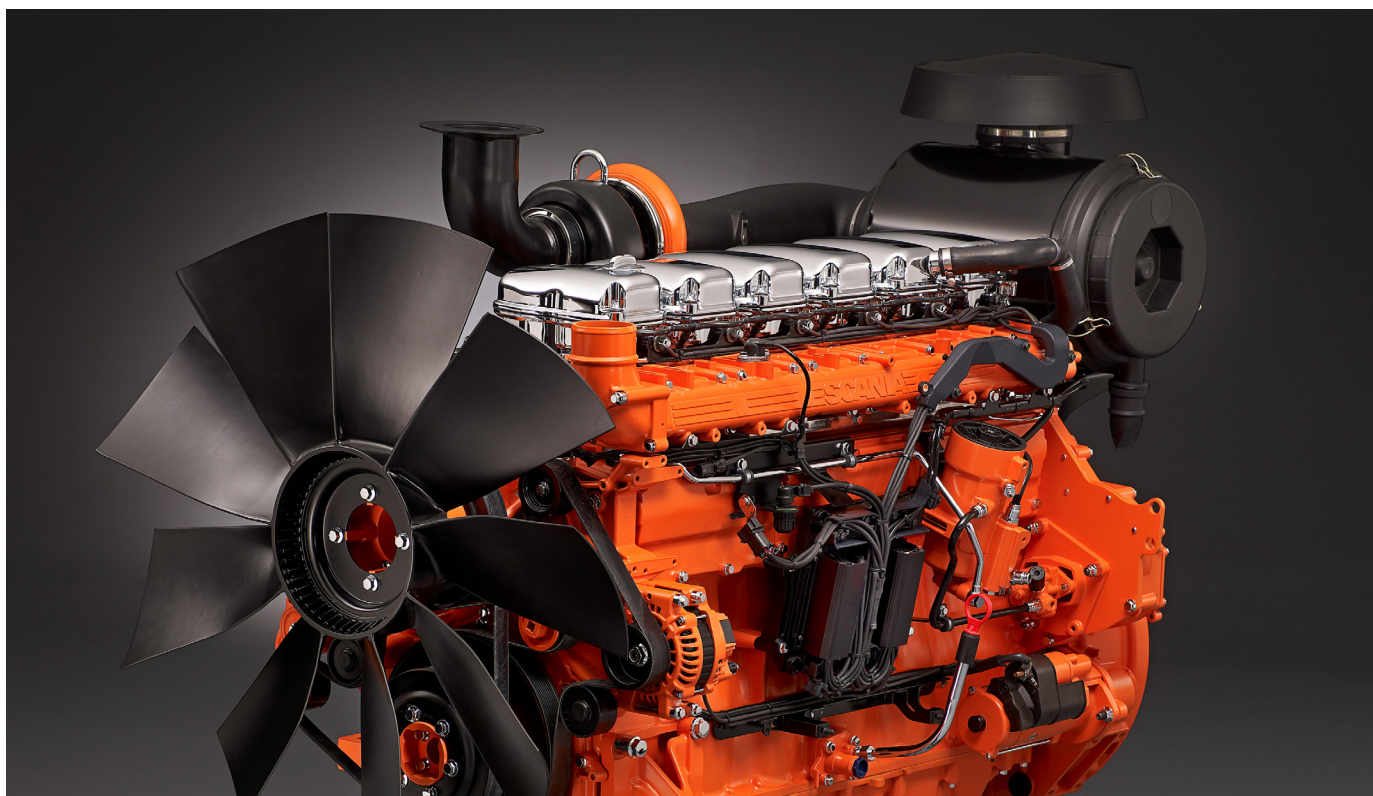


SCANIA POWER GENERATION ENGINE: FUEL OPTIMIZED

13-LITRE ENGINE



Engine description

DC13 093A. 443-487 kW (500-552 kVA)

Engine speed	1,800 rpm
Emission compliance	Fuel optimized
Rating	PRP/ESP
No of cylinders	6 in-line
Working principle	4-stroke
Displacement	12.7 litres
Weight	1,050 kg (excluding oil and coolant)
Oil capacity	30-36 litres (standard oil sump)
Electrical system	1-pole 24 V DC

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.

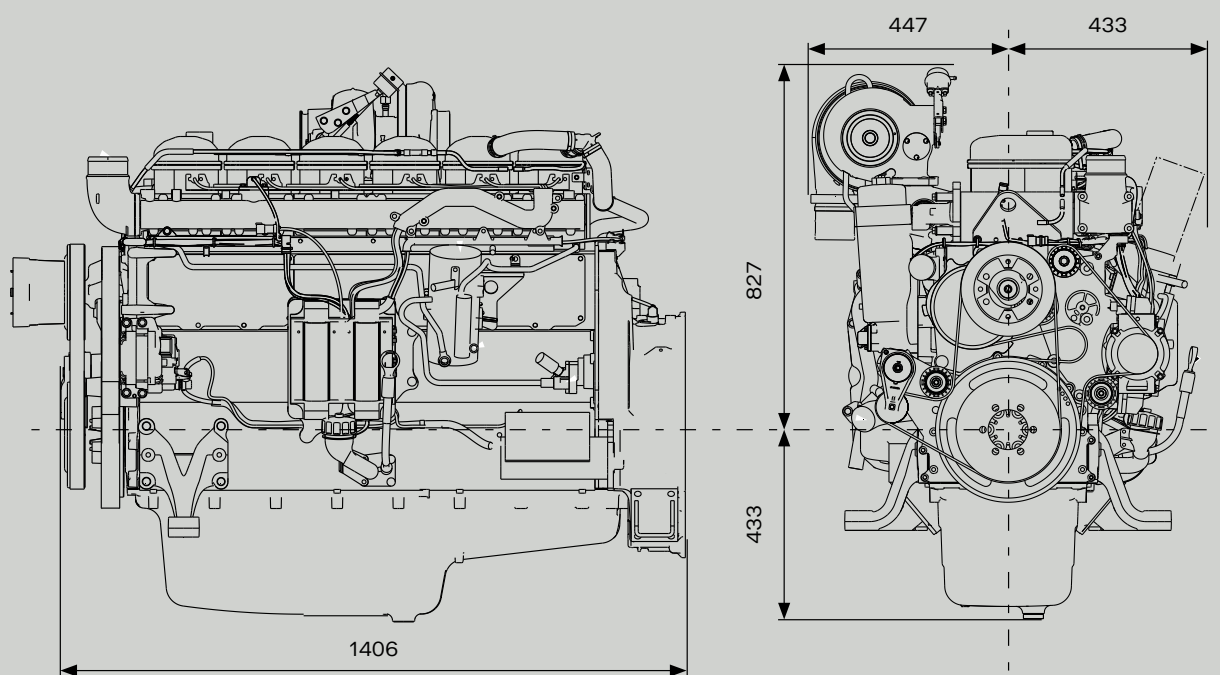
The injection system is based on electronically controlled unit injectors, which provide good fuel economy and a high torque. The engine can be fitted with many options such as air cleaners, PTOs and cooling package, to suit a variety of installations. It is developed for 60 Hz applications.

Standard equipment

- Scania Engine Management System, EMS
- Unit injectors, PDE
- Turbocharger
- Saver ring in cylinder liner
- 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
- Open crankcase ventilation

This specification may be revised without notice.

Dimensions



Edition 03

Technical data

	1800 rpm (60 Hz)		Unit
	PRP	ESP	
Gross power	443	487	kW
	501	552	kVA
Gross torque	2,350	2,584	Nm
Fuel consumption at full load	190	193	g/kWh
Heat rejection			
to coolant	115	127	kW
to exhaust gas	315	364	kW
to charge air	95	104	kW
to surrounding air	40	45	kW
Air consumption	38	39	kg/min
Air temperature			
upstream of charge air cooler	192	200	°C
downstream of charge air cooler	42	44	°C
Pressure in intake manifold	2.1	2.3	bar
Pressure drop in charge air cooler	0.10	0.10	bar
Exhaust flow	39	41	kg/min
Exhaust temperature	472	514	°C
Step load performance (according to class G2)	76	69	%
	335	335	kW

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.

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 hours of operation. Not for applications intended for more than 200 hours/year.