

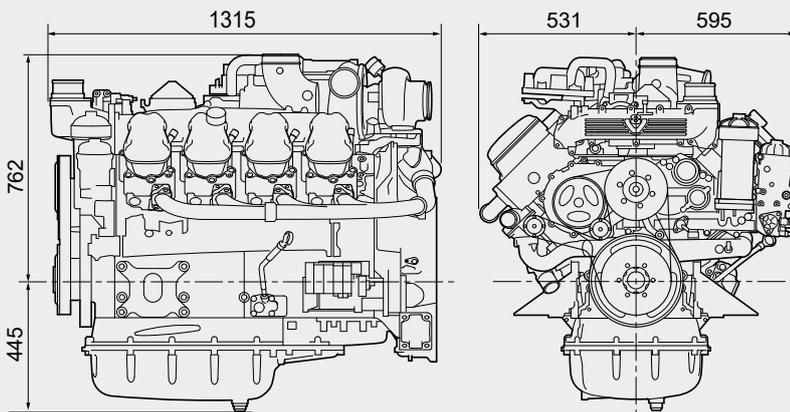


DC16 078A, 620-680 kW (700-770 kVA)

Fuel optimized

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

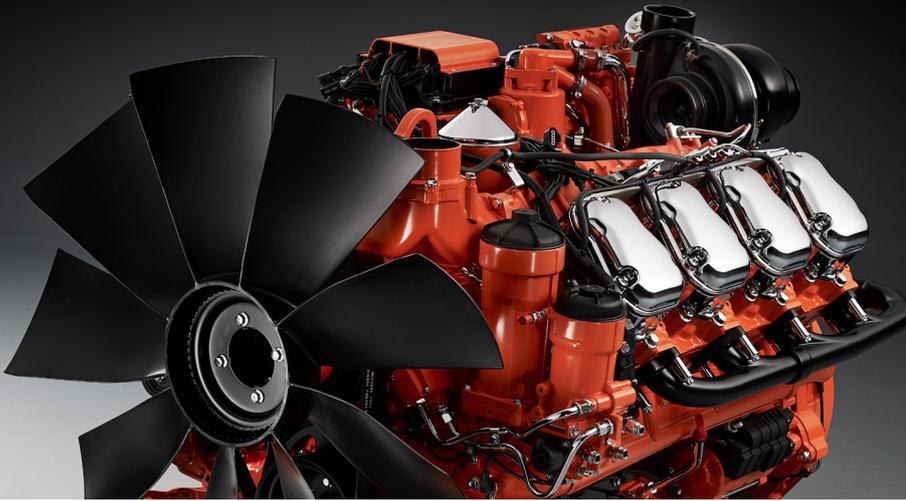


SCANIA

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DC16 078A, 576-634 kW (650-715 kVA)

Fuel optimized



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 the control of all aspects related to engine performance.

The injection system is Scania's XPI (Extra High Pressure Injection), a common rail system which provides good fuel economy and a high torque. The engine can be fitted with many accessories 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	ESP	PRP	ESP
Gross power (kW)	578	634	576	632
Gross power (kVA)	650	715	650	715
Fuel consumption at full load (g/kWh)	192	191	199	201
Fuel consumption at 3/4 load (g/kWh)	188	190	196	197
Fuel consumption at 1/2 load (g/kWh)	190	189	199	197
Heat rejection to coolant (kW)	186	194	206	238

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 over-loadable. 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
- Extra high pressure fuel injection system, XPI
- Turbocharger
- Fuel filter and extra pre-filter with water separator
- Fuel heater
- 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
- Cast iron flywheel housing, SAE 1 flange
- Front-mounted engine suspension
- Open crankcase ventilation

Optional equipment

- Cooling package
- Fans
- 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