

## DC16 076A. 405 kW (550 hp)

### China Phase III and India Bharat Stage III



The industrial 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 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. The engine can be fitted with many accessories such as air cleaners, silencers, PTOs and flywheels in order to suit a variety of installations.

		Engine speed (rpm)			
	Rating	1200	1500	1800	1900
Gross power (kW)	IFN	280	374	405	405
Gross power (hp, metric)	IFN	381	508	550	550
Gross torque (Nm)	IFN	2230	2380	2149	2036
Spec fuel consumption. Full load (g/kWh)		205	203	218	246
Spec fuel consumption. 3/4 load (g/kWh)		200	201	216	252
Spec fuel consumption. 1/2 load (g/kWh)		201	202	221	266
Heat rejection to coolant (kW)		136	139	163	194

**IFN** – **Intermittent service:** Rated output available 1 h/6 hours period. Unlimited h/year service time at a load factor of 80%.

#### 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, for use with friction clutch
- Silumin flywheel housing, SAE 1 flange
- Front mounted engine brackets
- Open crankcase ventilation
- · Operator's manual

### **Optional equipment**

- Prepared for cooling package
- Puller and pusher fans
- Fan ring with sealing
- Hydraulic pump
- Air compressor
- AC compressor
- Side-mounted PTOFront-mounted PTO
- Exhaust connections
- Electrical base system
- Control and instrument panels
- Accelerator position sensor
- Engine heater
- Flywheel: SAE14"
- Stiff rubber engine suspension
- Air cleaner
- Closed crankcase ventilation
- Studs in flywheel housing
- External thermostat for extra oil cooler
- Low coolant level reaction
- Variable idle speed setting
- Low oil sump

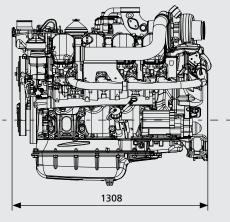


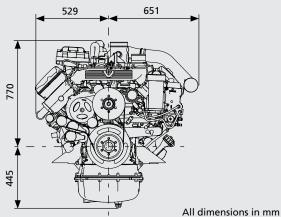
# DC16 076A. 405 kW (550 hp)

## China Phase III and India Bharat Stage III

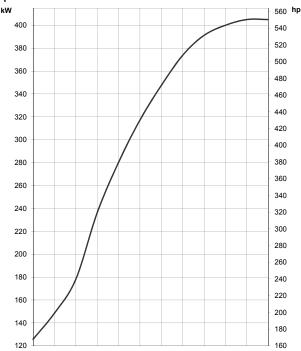
### **Engine description**

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	35-45 dm³	
Electrical system	1-pole 24V	

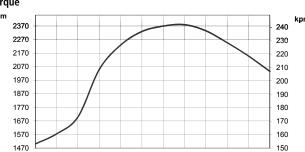




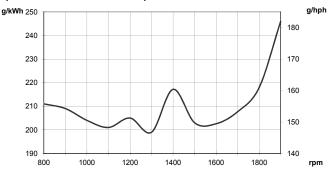
### Output



### Torque



### Spec fuel and reductant 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%.

