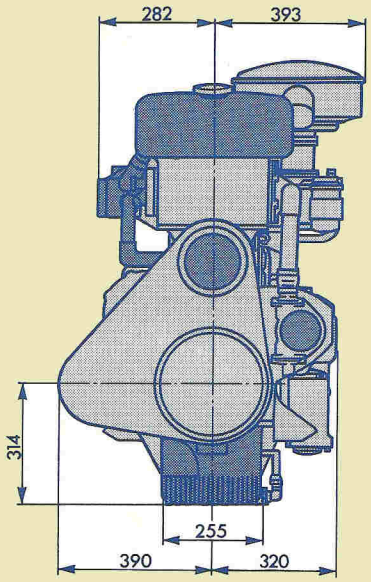
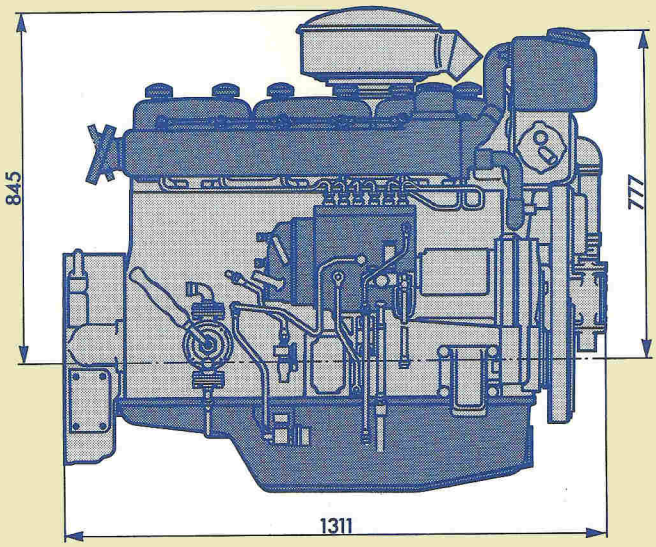
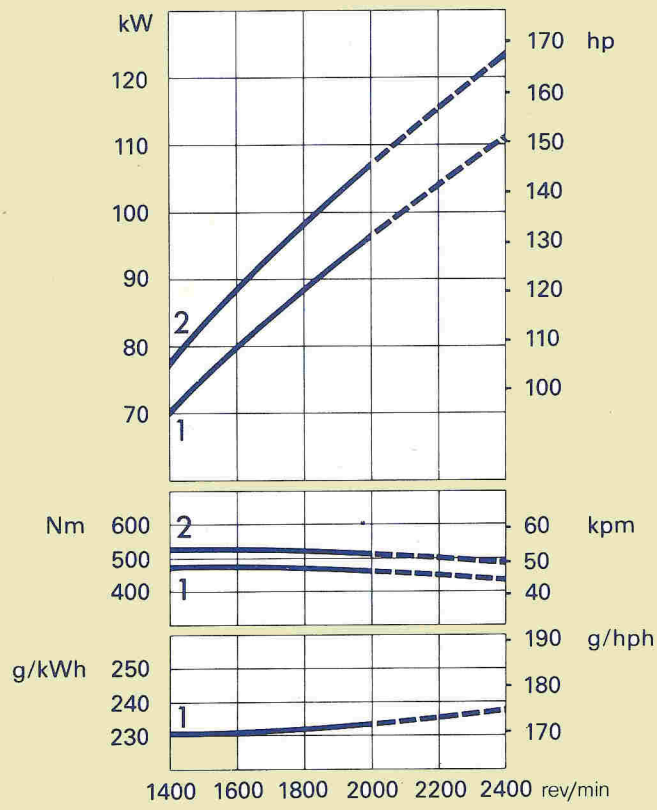
SCANIA D 8
Marine Diesel







TECHNICAL DATA

Number of cylinders	6 (in line)
Working cycle	4-stroke
Injection	direct
Cylinder bore	115 mm (4.53 in)
Cylinder stroke	125 mm (4.92 in)
Displacement	7.8 dm³ (475 in³)
Output, light cont. service at 2000 rev/min	107 kW (145 hp DIN)
Output, heavy cont. service at 2000 rev/min	96 kW (131 hp DIN)
Max. torque, light cont. service at 1500 rev/min	530 Nm (54 kpm)
Max. torque, heavy cont. service at 1500 rev/min	475 Nm (49 kpm)
Spec. fuel consumption at 100 % load and 1500 rev/min	230 g/kWh (169 g/hph)
Approx. weight excl. oil, water and gear	850 kg

SCANIA D 8

GENERAL DESCRIPTION

CYLINDER BLOCK. Of alloy cast-iron, with replaceable wet-type cylinder liners of centrifugally cast special cast-iron. The main-bearing caps are nodular-iron castings. Rings of oil- and heat-resistant rubber provide sealing between the coolant spaces and the crankcase.

CYLINDER HEADS. Three cylinder heads, each covering two cylinders. Steel plate gasket. Sealing around coolant and oil canals between block and cylinder head effected by O-rings. Valve seats made of special alloy.

VALVES. Made of heat-resistant steel. Stellite faced valve heads. The valve stems are chromium-plated and provided with replaceable hardened steel caps. Double springs on each valve.

CAMSHAFT. Drop-forged of alloy steel, hardened, ground and polished. Carried in bushings in the cylinder block. Camshaft, injection pump and lubricating-oil pump, along with certain other ancillaries where needed, are driven from the crankshaft through silent-running helical gearing.

PISTONS. Pistons made of light alloy. The groove for the top compression ring reinforced with a cast-iron insert. Compression and oil rings of alloy cast-iron. Top compression ring chromium plated. Floating type piston pin of case-hardened chromium steel. Piston cooled from inside by lubricating oil, sprayed from a nozzle in the cylinder block.

CRANKSHAFT. Drop-forged in alloy steel, with surface-hardened and polished bearing surfaces, and statically and dynamically balanced. Seven main bearings with replaceable bearing shells consisting of a thin steel body coated with lead-bronze and surfaced with a layer of lead-indium.

CONNECTING RODS. Drop-forged in alloy steel. Bronze bushing for piston pin, and replaceable big-end bearings of the same type as the main bearings. The small-end of the connecting rod is wedge shaped to give a large bearing surface.

FLYWHEEL. Of cast-iron, with shrunk-on gear ring.

LUBRICATING SYSTEM. A gear-wheel pump forces the oil to the engine bearings. The oil pressure is controlled by a relief valve. The lubrication system has an electric contact which delivers an impulse to a warning lamp if the oil pressure should go too low. The lube oil is cleaned before the oil pump by a strainer in the sump and after the oil pump by a patented cleaner unit consisting of a cyclone and a centrifugal cleaner.

COOLING SYSTEM. The engine including exhaust manifold is fresh-water cooled. Cooling is effected by a heat exchanger mounted directly on the engine. The sea-water is passed through the heat exchanger by a corrosion-resistant pump driven directly from the engine front end gears. The fresh-water system is thermostatically controlled and circulation is provided by a corrosion-resistant circulation pump. The oil cooler is fresh-water cooled.

FUEL SYSTEM. The injection pump is driven from the crankshaft by helical gearing through an adjustable coupling, and is automatically lubricated from the engine lubricating system. The fuel is forced by the feed pump through double paper filters to the injection pump. The camshaft of the injection pump has a special design which prevents reverse running of the engine.

COLD-START DEVICE. Supplies extra fuel during the starting period at low temperatures. Automatic cut-out.

STANDARD EQUIPMENT

Injection pump with mechanical governor. Feed pump with fuel strainer. Double fuel filters. Air cleaner. Patented cyclone and centrifugal oil cleaner. Heat exchanger. Water cooled exhaust manifold. Sea-water pump. Fresh-water pump. Sea-water cooled oil cooler. Hand pump for oil draining. Alternator 2-pole 35 A, 28 V with separate relay. Starter motor 2-pole 2.9 kW (4 hp), 24 V. 2-pole oil pressure switch. Stopping solenoid. Flywheel. Flywhetl housing SAE 2 of nodular cast iron. Side-mounted power take off. Front mounting brackets. Engine manual.

OPTIONAL EQUIPMENT

Flywheel for various clutches.

EXTRA EQUIPMENT

Different clutches and flexible couplings. Hydraulically operated reverse gear with or without reduction. Engine brackets for soft, stiff or fixed suspension. Instrumentation. Crankshaft pulleys Silencer. Flexible exhaust pipe. Air compressor. Hydraulic or pneumatic controls for couplings and injection pump. Manual starting device. Tool kit. Spare parts kit.

Classification and spare parts in accordance with the requirements of specified classification societies.

This specification may be revised without notice.

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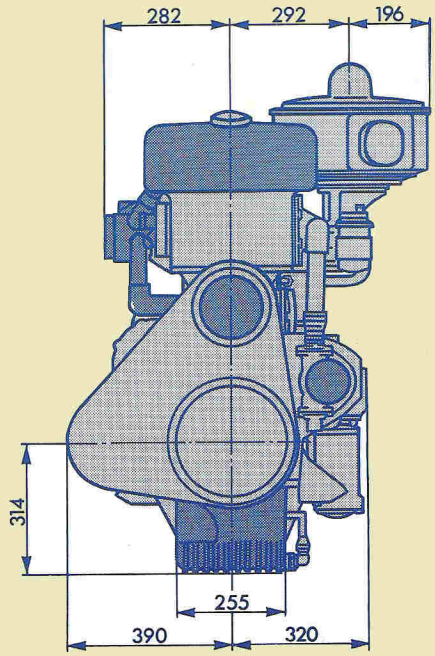
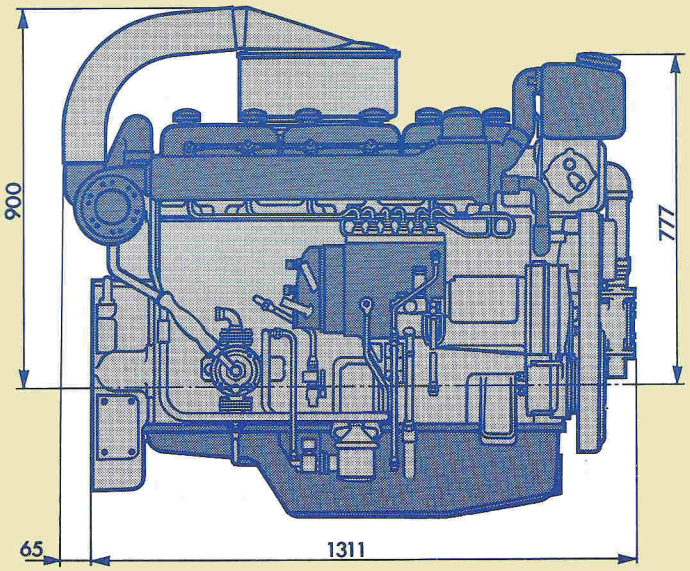
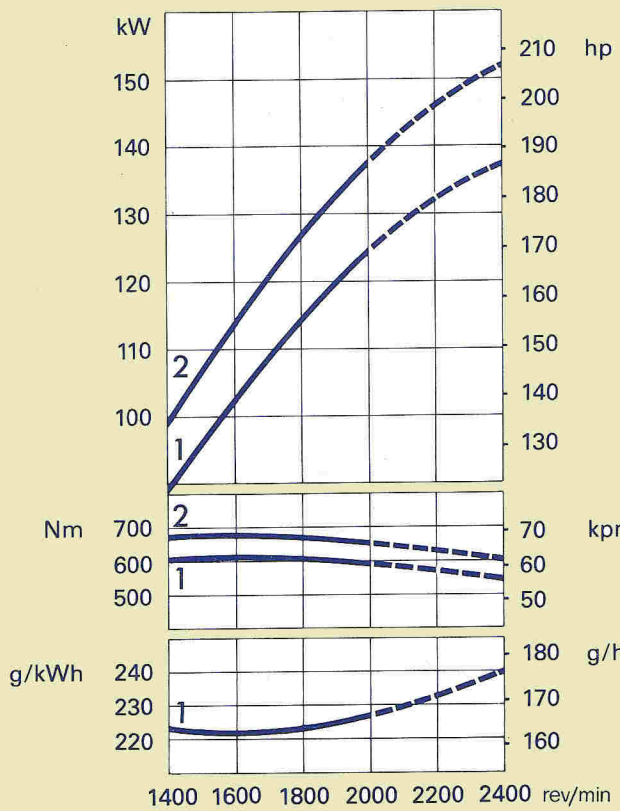
SCANIA DS 8
Marine Diesel







TECHNICAL DATA

Number of cylinders	6 (in line)
Working cycle	4-stroke (turbo-charged)
Injection	direct
Cylinder bore	115 mm (4.53 in)
Cylinder stroke	125 mm (4.92 in)
Displacement	7.8 dm^3 (475 in^3)
Output, light cont. service at 2000 rev/min	137 kW (186 hp DIN)
Output, heavy cont. service at 2000 rev/min	123 kW (167 hp DIN)
Max. torque, light cont. service at 1400 rev/min	677 Nm (69 kpm)
Max. torque, heavy cont. service at 1400 rev/min	608 Nm (62 kpm)
Spec. fuel consumption at 100 % load and 1500 rev/min	222 g/kWh (163 g/hph)
Approx. weight excl. oil, water and gear	875 kg

SCANIA DS 8

GENERAL DESCRIPTION

CYLINDER BLOCK. Of alloy cast-iron, with replaceable wet-type cylinder liners of centrifugally cast special cast-iron. The main-bearing caps are nodular-iron castings. Rings of oil- and heat-resistant rubber provide sealing between the coolant spaces and the crankcase.

CYLINDER HEADS. Three cylinder heads, each covering two cylinders. Steel plate gasket. Sealing around coolant and oil canals between block and cylinder head effected by O-rings. Valve seats made of special alloy.

VALVES. Made of heat-resistant steel. Stellite faced valve heads. The valve stems are chromium-plated and provided with replaceable hardened steel caps. Double springs on each valve.

CAMSHAFT. Drop-forged of alloy steel, hardened, ground and polished. Carried in bushings in the cylinder block. Camshaft, injection pump and lubricating-oil pump, along with certain other ancillaries where needed, are driven from the crankshaft through silent-running helical gearing.

PISTONS. Pistons made of light alloy. The groove for the top compression ring reinforced with a cast-iron insert. Compression and oil rings of alloy cast-iron. Top compression ring chromium plated. Floating type piston pins of case-hardened chromium steel. Piston cooled from inside by lubricating oil, sprayed from a nozzle in the cylinder block.

CRANKSHAFT. Drop-forged in alloy steel, with surface-hardened and polished bearing surfaces, and statically and dynamically balanced. Seven main bearings with replaceable bearing shells consisting of a thin steel body coated with lead-bronze and surfaced with a layer of lead-indium.

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FLYWHEEL. Of cast-iron, with shrunk-on gear ring.

LUBRICATING SYSTEM. A gear-wheel pump forces the oil to the engine bearings. The oil pressure is controlled by a relief valve. The lubrication system has an electric contact which delivers an impulse to a warning lamp if the oil pressure should go too low. The lube oil is cleaned before the oil pump by a strainer in the sump and after the oil pump by a patented cleaner unit consisting of a cyclone and a centrifugal cleaner. Extra oil filter for the turbo-charger.

COOLING SYSTEM. The engine including exhaust manifold is fresh-water cooled. Cooling is effected by a heat exchanger mounted directly on the engine. The sea-water is passed through the heat exchanger by a corrosion-resistant pump driven directly from the engine front end gears. The fresh-water system is thermostatically controlled and circulation is provided by a corrosion-resistant circulation pump. The oil cooler is fresh-water cooled.

FUEL SYSTEM. The injection pump is driven from the crankshaft by helical gearing through an adjustable coupling, and is automatically lubricated from the engine lubricating system. The fuel is forced by the feed pump through double paper filters to the injection pump. The camshaft of the injection pump has a special design which prevents reverse running of the engine.

COLD-START DEVICE. Supplies extra fuel during the starting period at low temperatures. Automatic cut-out.

TURBO-CHARGER. Comprised of a single-stage radial turbine and a single-stage centrifugal compressor mounted on a common shaft carried in journal bearings. The turbine is driven by the escaping exhaust gases and automatically assumes a speed to match the load on the engine. The turbine blades are made of stellite. The units is lubricated and cooled by oil from the engine lubricating system. Extra oil filter. Insulation cover.

STANDARD EQUIPMENT

Injection pump with mechanical governor. Feed pump with fuel strainer. Double fuel filters. Air cleaner. Patented cyclone and centrifugal oil cleaner. Exhaust-driven turbo-charger. Heat exchanger. Water cooled exhaust manifold. Sea-water pump. Sea-water cooled oil cooler. Hand pump for oil draining. Alternator 2-pole 35 A, 28 V with separate relay. Starter motor 2-pole 2.9 kW (4 hp), 24 V. 2-pole oil pressure switch. Stopping Solenoid. Flywheel. Flywheel housing SAE 2 of nodular cast iron. Side-mounted power take off. Front mounting brackets. Engine manual.

OPTIONAL EQUIPMENT

Flywheel for various clutches.

EXTRA EQUIPMENT

Different clutches and flexible couplings. Hydraulically operated reverse gear with or without reduction. Engine brackets for soft, stiff or fixed suspension. Instrumentation. Crankshaft pulles. Silencer. Flexible exhaust pipe. Air compressor. Hydraulic or pneumatic controls for couplings and injection pump. Manual starting device. Tool kit. Spare parts kit.

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