

D65A MT

VOLVO PENTA INBOARD DIESEL

16-cylinder, 4-stroke, direct-injected, turbocharged marine diesel engine with aftercooler – crankshaft power 1380 kW (1877 hp)

Powerful and reliable engine for demanding operation in commercial applications

The Volvo Penta D65A MT engine is constructed to meet the most demanding requirements, such as marine main propulsion or marine generator drive. Its compactness and durability applies the most advanced technologies and engineering know-how; all this to benefit the operator.

The Volvo Penta D65A MT diesel engine is built to the highest quality standards recognized by all the major marine classification societies, such as Germanischer Lloyd, Norske Veritas etc. as well as the national Shipping Inspections.

Volvo Penta is continuously making intensive research work on the marine application of the engine to produce an engine with a compact design, which gives many advantages, such as low running costs in relation to high output.

An optimal combination of combustion chambers, fuel injection system, and effective turbocharger and charge air cooling system, provide an excellent fuel consumption over the whole range of engine speeds, through which the engine is economical in operation.

Maintenance is very easy, as supplementary equipment such as fuel injection pump, governor; water pump and turbocharger do not need any separate lubrication. The cylinder heads are individually divided by cylinder, and the engine has large inspection covers in crankcase and oil pan.

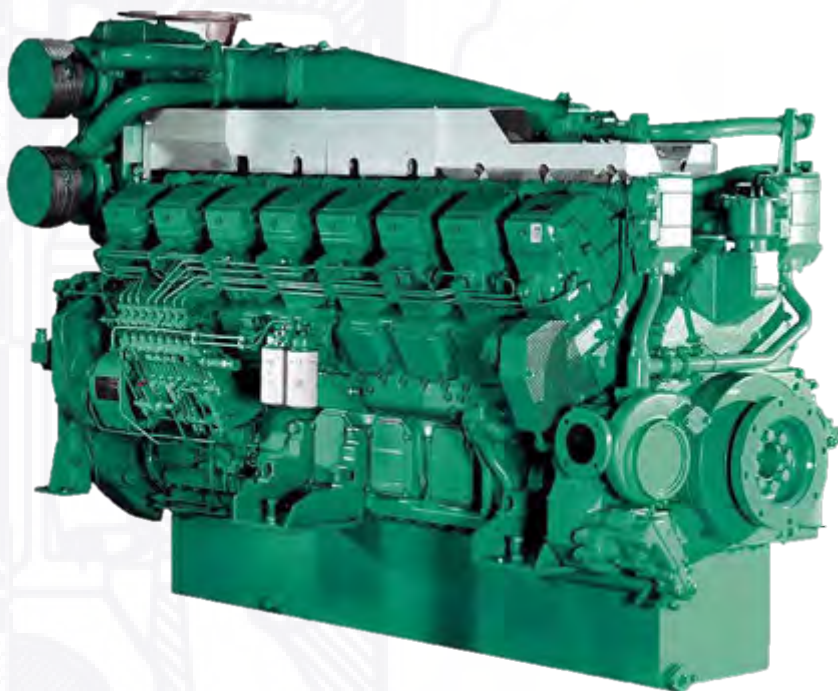
As the dimensions of the D65A MT engine are kept as small as possible, it takes up surprisingly little space. This asset will be subscribed whole-heartedly by the person who is in charge of the engine room. An engine room equipped with this engine is a well-ordered engine room.

Warranty and Service

All Volvo Penta marine engines come with the additional benefit and security of the Cost Control Program, a unique system of operator support and financial control – from installation to after-sales service.

The optional international limited Volvo Penta three-year warranty provides the owner peace of mind.

Qualified Volvo Penta dealers stand by for service and support in more than 100 countries all over the world.



D65A MT

Technical Data

Engine designation	D65A MT
No. of cylinders and configuration	V 16
Method of operation 4-stroke, direct-injected, turbocharged diesel engine with aftercooler	
Bore, mm	170
Stroke, mm	180
Displacement, l	65.37
Compression ratio	14:1
Dry weight, kg	6200
Crankshaft power at calculated propeller load, Rating 1, kW (hp) 1600 rpm	1250 (1700)
Rating 2, kW (hp) 1650 rpm	1380 (1877)
Torque at calculated propeller load, Rating 1, Nm 1600 rpm	7759
Rating 2, Nm 1650 rpm	n.a.
Recommended fuel to conform to	ASTM No. 2-D
Specific fuel cons. at calculated propeller load, Rating 1, g/kWh 1600 rpm	198
Rating 2, g/kWh 1650 rpm	n.a.

All data represent net performance with standard accessories such as fuel injection pump, water pump, L.O. pump and charging alternator under the conditions of 100kPa (750 mm Hg), barometric pressure 300K (27°C) ambient temperature and 60% relative humidity.

Standard Equipment:

Engine

- Flywheel housing with connection acc. to SAE 00
- Flywheel (21")
- Engine brackets

Lubrication system

- Fresh water cooled oil cooler
- Spin-on type oil filter with shift valve
- Spin-on type oil by-pass filter

Fuel system

- Hydraulic governor
- Jacketed fuel pipes
- Spin-on type fuel filter (change over type)
- 24V fuel shut-off valve, electrically operated

Exhaust system

- Dry exhaust manifold (with insulator cover)
- Non-cooled turbocharger
- Air inlet filter/silencer

Cooling system

- Raw water cooled aftercooler
- Fresh water pump (gear driven)
- Raw water pump (V-belt driven)

Electrical system

- Starter motor (DC 24V-7.5kW)
- Alternator (24V-35A)

Other equipment

- Front P.T.O. pulley (2x B groove)
- Front safety cover
- Standard tools

Optional Equipment:

- Electrical system including wiring, senders, switches and terminal box mounted on engine
- Instrument panel for engine-room and wheel-house
- Air starting system on request
- Oil drain pump
- Flexible exhaust hose for dry exhaust line
- Dry exhaust silencer
- Fuel filter/water separator with shift valve
- Classification under regulations of: LR, ABS, DNV or GL
- Gearbox on request
- Spare parts
- Spare parts according to classification recommendations

Contact Volvo Penta for further information.

Not all models, standard equipment and accessories are available in all countries. All specifications are subject to change without notice.

The engine illustrated may not be entirely identical to production standard engines.

Performance Data

Heavy Duty Rating 1

Crankshaft power at full load, R1, kW (hp) 1600 rpm	1250 (1700)
R1, kW (hp) 1500 rpm	1238 (1684)
R1, kW (hp) 1400 rpm	1193 (1622)
R1, kW (hp) 1300 rpm	1121 (1524)
R1, kW (hp) 1200 rpm	1050 (1427)
Crankshaft power at calculated propeller load, R1, kW (hp) 1600 rpm	1250 (1700)
R1, kW (hp) 1454 rpm	938 (1275)
R1, kW (hp) 1270 rpm	625 (850)
R1, kW (hp) 1008 rpm	313 (425)
Torque at full load, R1, Nm 1600 rpm	7759
R1, Nm 1500 rpm	8198
R1, Nm 1400 rpm	8460
R1, Nm 1300 rpm	8564
R1, Nm 1200 rpm	8685
Torque at calculated propeller load, R1, Nm 1600 rpm	7759
R1, Nm 1454 rpm	6404
R1, Nm 1270 rpm	4888
R1, Nm 1008 rpm	3079
Specific fuel consumption at full load, R1, g/kWh 1600 rpm	198
R1, g/kWh 1500 rpm	198
R1, g/kWh 1400 rpm	198
R1, g/kWh 1300 rpm	198
R1, g/kWh 1200 rpm	201
Specific fuel cons. at calculated propeller load, R1, g/kWh 1600 rpm	198
R1, g/kWh 1454 rpm	198
R1, g/kWh 1270 rpm	204
R1, g/kWh 1008 rpm	217

Medium Duty Rating 2

Crankshaft power at full load, R1, kW (hp) 1650 rpm	1380 (1876)
R1, kW (hp) 1600 rpm	1370 (1862)
R1, kW (hp) 1500 rpm	1340 (1822)
R1, kW (hp) 1400 rpm	1291 (1755)
R1, kW (hp) 1300 rpm	1214 (1651)
Crankshaft power at calculated propeller load, R1, kW (hp) 1650 rpm	1380 (1876)
R1, kW (hp) 1500 rpm	1035 (1408)
R1, kW (hp) 1310 rpm	690 (938)
R1, kW (hp) 1039 rpm	345 (470)
Torque at full load, R1, Nm 1650 rpm	8305
R1, Nm 1600 rpm	8500
R1, Nm 1500 rpm	8869
R1, Nm 1400 rpm	9154
R1, Nm 1300 rpm	9276
Torque at calculated propeller load, R1, Nm 1650 rpm	8305
R1, Nm 1500 rpm	6854
R1, Nm 1310 rpm	5230
R1, Nm 1039 rpm	3301
Specific fuel consumption at full load, R1, g/kWh 1650 rpm	198
R1, g/kWh 1600 rpm	196
R1, g/kWh 1500 rpm	194
R1, g/kWh 1400 rpm	193
R1, g/kWh 1300 rpm	194
Specific fuel cons. at calculated propeller load, R1, g/kWh 1650 rpm	198
R1, g/kWh 1500 rpm	197
R1, g/kWh 1310 rpm	202
R1, g/kWh 1039 rpm	214

Dimensions D65A MT

Dimensions in mm.
Not for installation.

