



Technical data sheet

Marine diesel engine

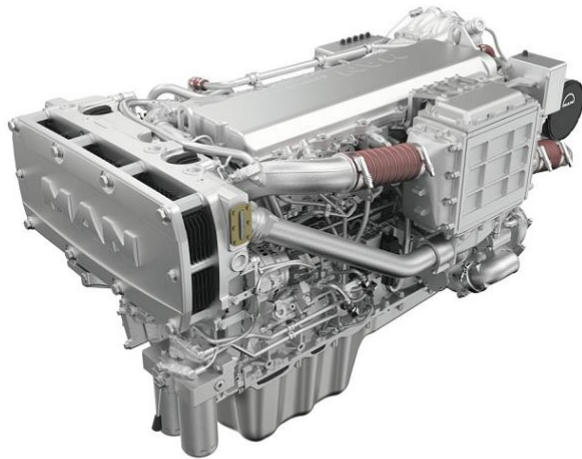
D2676LE422

04.07.2022

(Version 3)

Performance data ¹

Rated power	478	kW
Rated power	650	PS
Speed	2100	rpm
Bore/Stroke	126/166	mm
Displacement	12,42	liter
Rated torque	2174	Nm
Maximum torque	2402	Nm
at speed	1300-1900	rpm
Compression ratio [ε]	16,5	:1
Mean effective pressure	21,99	bar
Mean piston speed	11,62	m/s



Consumption data ²

Specific fuel consumption ¹	209	g/kWh
Absolute fuel consumption ¹	119	l/h
Lowest fuel consumption ³	201	g/kWh

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

Engine description

Application	Main propulsion diesel for ships with fixed pitch propeller or variable pitch propeller (only IMO)
Operation profile	Up to 3000 hours per year at a maximum of 50 % of time at full load average load < 70 %
Construction	Four-stroke marine diesel engine, direct injection, SAE 1 flywheel housing
Cylinders	6 cylinders in line, wet replaceable cylinder liners
Air system	Single-stage turbocharger with charge air intercooler and wastegate
Cooling system	Seawater cooled charge air cooler and plate heat exchanger by rubber impeller pump
Oil system	Force-feed lubrication by gear pump, lubricating oil cooler in cooling water circuit of the engine
Fuel system	Common Rail injection system with EDC17 control, fuel to DIN EN 590
Auxiliary PTO	PTO for hydraulic pump 16 cm ²
Alternator	Three-phase generator with rectifier and transistorized governor, 28V, 120A
Starting system	Solenoid-operated electric starter, 24V, 5.5kW
Service	Oil change interval 500 operating hours, average TBO 12.000 operating hours*
Classification	Engine according to classification requirements available => see MAN Marine Configurator

Exhaust status IMO Tier II

¹ Values at rated power

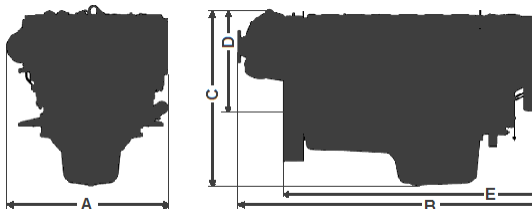
² Diesel fuel according to DIN EN 590 (tolerance +5% - ISO 3046)

³ Values on propeller curve

*TBO 12.000 operating hours for non or low particulate matters (PM) regulated jurisdictions (IMO, Canada, EU Stage IIIA)

D2676LE422

A - overall width.....	986 mm
B - overall length.....	1795 mm
C - overall height.....	1096 mm
D - above crank shaft....	674 mm
E - length to flywheel....	1527 mm
Engine weight (dry).....	1251 kg



Combustion parameters ¹

Intake air temperature (max.)	45 °C
Intake air vacuum (min/max)	30/60 mbar
Intake air volume flow	2110 m ³ /h

Exhaust gas temperature	500 °C
Exhaust gas volume flow	5610 m ³ /h
Exhaust gas mass flow	2485 kg/h
Exhaust back pressure (min/max)	20/80 mbar

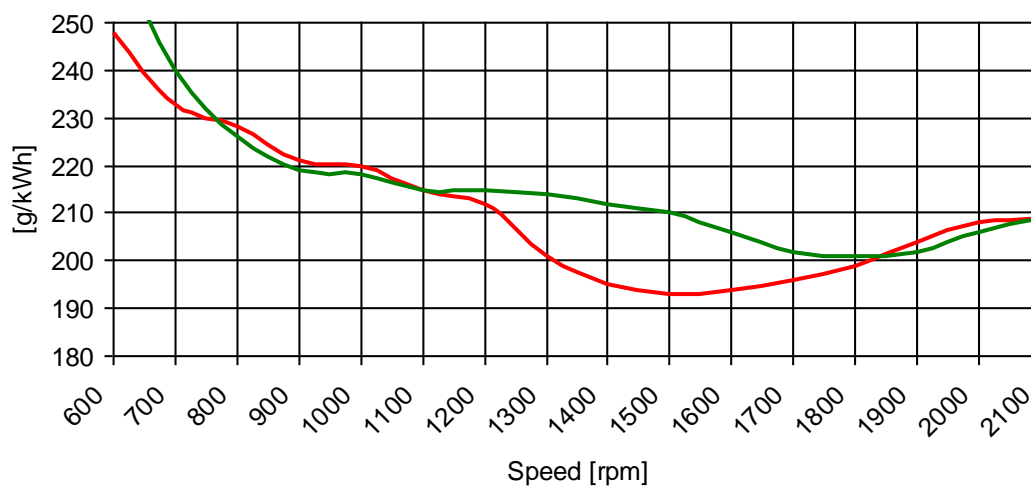
Heat balance ¹

Exhaust gas heat	390 kW
Cooling water heat	200 kW
Intercooler heat	100 kW
Radiation heat	27 kW

Noise emission (sound power) ¹

Engine surface noise (Lwa)	114,2 dB(A)
Free exhaust noise (Lwa)	127,0 dB(A)

Specific fuel consumption²



— full load curve — propeller curve

< The rated power is based on reference conditions according to ISO 3046-1 (2002) >

< Intake air temperature, max. 45°C | sea water temperature, max. 32°C >

< Barometric pressure 1000 mbar | air humidity 60% >

< Exponent for propeller curve 2,7 >

< **Engine specifications are subjected to change without prior notice** >

¹ Values at rated power

² Diesel fuel according to DIN EN 590 (tolerance +5% - ISO 3046)

³ Values on propeller curve

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