Technical data sheet

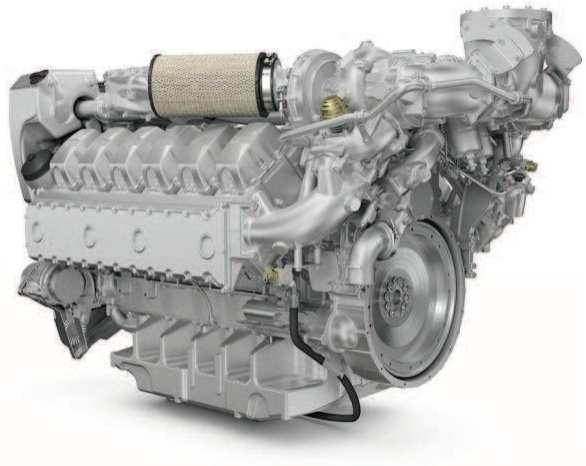
Marine diesel engine

D2862LE434 ()

17.01.2017
(Version 2)

Performance data [1]

Rated power	551	kW
Rated power	749	PS
Speed	1800	rpm
Bore	128	mm
Stroke	157	mm
Displacement	24,24	liter
Rated torque	2923	Nm
Maximum torque	3305	Nm
at speed	1000-1600	rpm
Compression ratio [ε]	19,0	:1
Mean effective pressure	15,15	bar
Mean piston speed	9,42	m/s



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

Consumption data [1]

Specific fuel consumption [2]	204	g/kWh
Absolute fuel consumption [2]	134	l/h
Lowest fuel consumption [3]	202	g/kWh

Engine description

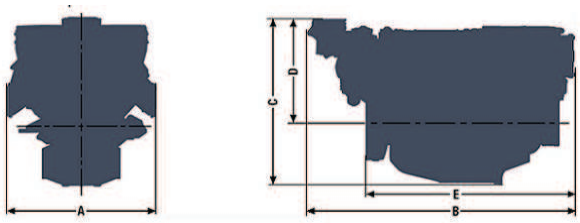
Operation profile	unlimited operating hours per year at a maximum of 100 % of time at full load
Construction	four-stroke marine diesel engine, direct injection, SAE 1 flywheel housing
Cylinders	12 cylinders in V-arrangement, single cylinder heads with wet replaceable cylinder liners
Air system	single-stage turbocharger with charge air intercooler
Cooling system	seawater cooled by rubber impeller pump or two-circuit-cooling system for hull cooling
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 high pressure pump and EDC control, fuel to DIN EN 590
Auxiliary PTO	PTO for hydraulic pump 16 cm³ (180Nm), front-PTO by crank shaft extension
Alternator	three-phase generator with rectifier and transistorized governor, 28 V, 120 A
Starting system	solenoid-operated electric starter, 24 V, 7.0 kW
Service	oil change interval 600 operating hours, average TBO 18.000 operating hours
Classification	BV, DNV, GL, RINA

Exhaust status	**IMO Tier II, RCD 2013/53/EC, EPA Tier 3 commercial, 97/68/EC**

[1] values at rated power
[2] Tolerance +5% according to ISO 3046, diesel fuel to DIN EN 590
[3] values on propeller curve

D2862LE434 ()

A - overall width.....	1153	mm
B - overall length.....	2130	mm
C - overall height.....	1230	mm
D - above crank shaft....	765	mm
E - length to flywheel....	1630	mm
Engine weight (dry).....	2270	kg



Combustion parameters [1]

Intake air temperature (max.)	45	°C
Intake air vacuum (min/max)	30/60	mbar
Intake air volume flow	2700	m³/h
Exhaust gas temperature	335	°C
Exhaust gas volume flow	5480	m³/h
Exhaust gas mass flow	3100	kg/h
Exhaust back pressure (min/max)	20/80	mbar

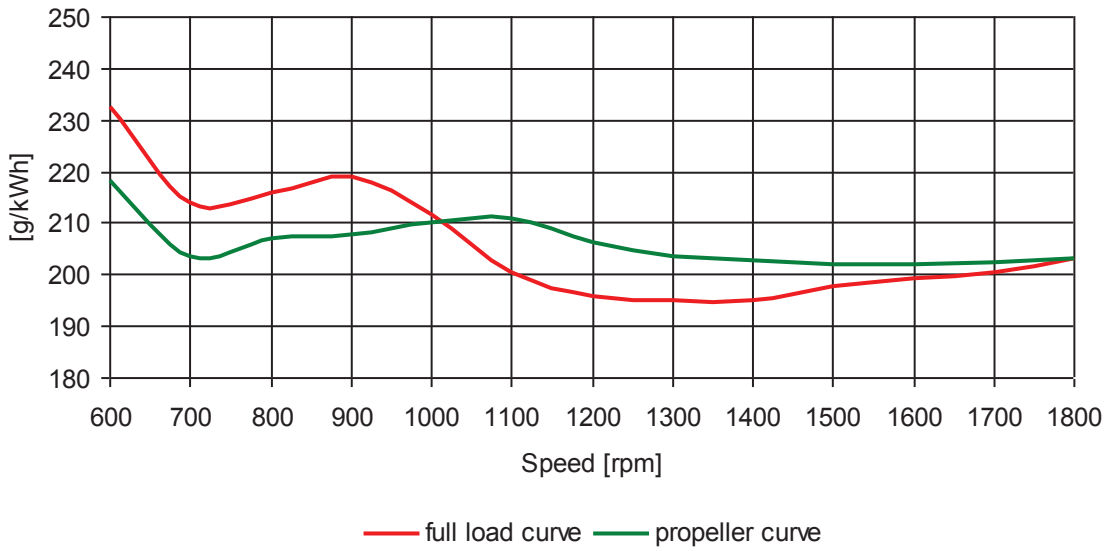
Heat balance [1]

Exhaust gas heat	262	kW
Cooling water heat	360	kW
Intercooler heat	135	kW
Radiation heat	35	kW

Noise emission [1]

Engine surface noise (Lwa)	100,5	dB(A)
Free exhaust noise (Lwa)	108,0	dB(A)

Specific fuel consumption[2]



< 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 3 >

< Engine specifications are subjected to change without prior notice >

[1] values at rated power
[2] Tolerance +5% according to ISO 3046, diesel fuel to DIN EN 590
[3] values on propeller curve

Engine curves

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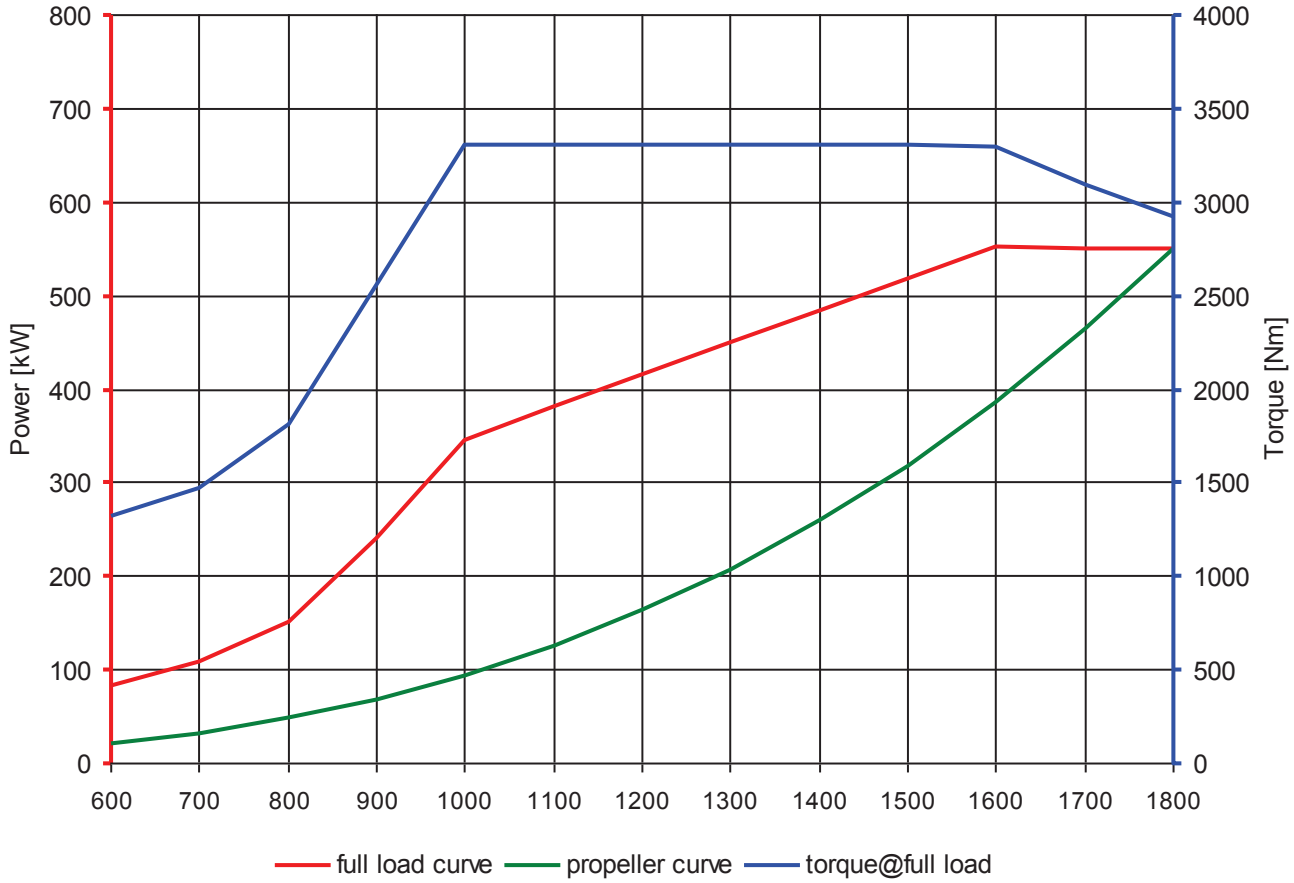
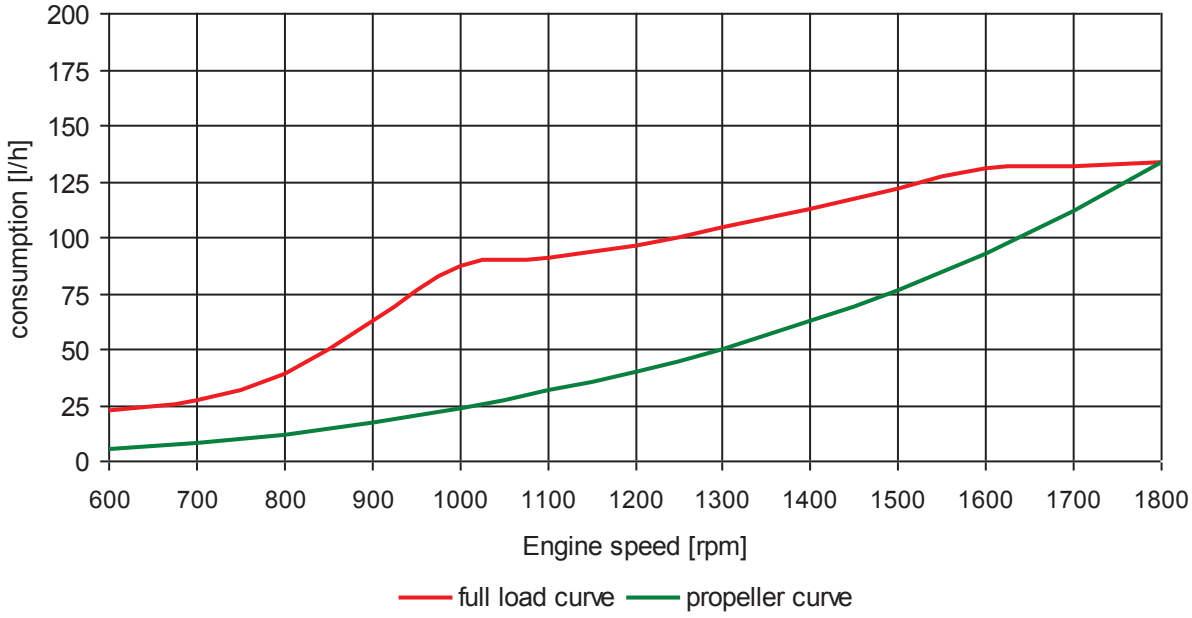
(Version 2)

D2862LE434 (551kW@1800rpm) ()

Power/torque curves



Absolute fuel consumption[1]



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

< Exponent for propeller curve 3 >

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