Technical data sheet

Marine diesel engine

D2862LE476 (V12-1900)

27.04.2016
(Version 1)

Performance data [1]

Rated power	1397	kW
Rated power	1900	PS
Speed	2300	rpm
Bore	128	mm
Stroke	157	mm
Displacement	24,24	liter
Rated torque	5800	Nm
Maximum torque	6220	Nm
at speed	1200-2100	rpm
Compression ratio [ε]	17,0	:1
Mean effective pressure	30,07	bar
Mean piston speed	12,04	m/s

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

Consumption data [1]

Specific fuel consumption [2]	224	g/kWh
Absolute fuel consumption [2]	373	l/h
Lowest fuel consumption [3]	200	g/kWh

Engine description

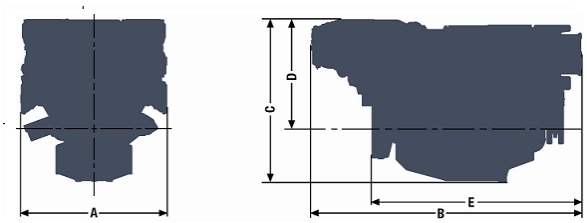
Operation profile	up to 500 hours per year at a maximum of 5 % of time at full load
Construction	four-stroke marine diesel engine, direct injection, SAE 1 flywheel housing
Cylinders	12 cylinders in V-arrangement, single cylinder heads with wet replaceable cylinder liners
Air system	two-stage turbocharger with charge air intercooler and wastegate
Cooling system	seawater cooled charge air cooler and plate heat exchanger by 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 high pressure pump and EDC control, fuel to DIN EN 590
Auxiliary PTO	PTO for hydraulic pump 16 cm³ (180Nm)
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 400 operating hours, average TBO 5.000 operating hours
Classification	--------

Exhaust status	**IMO Tier II, RCD 2013/53/EC, RCD 94/25/EC, EPA Tier 3 recreational, 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

D2862LE476 (V12-1900)

A - overall width.....	1153	mm
B - overall length.....	2139	mm
C - overall height.....	1272	mm
D - above crank shaft....	808	mm
E - length to flywheel....	1658	mm
Engine weight (dry).....	2380	kg



Combustion parameters [1]

Intake air temperature (max.)	45	°C
Intake air vacuum (min/max)	30/60	mbar
Intake air volume flow	5470	m³/h
Exhaust gas temperature	590	°C
Exhaust gas volume flow	15850	m³/h
Exhaust gas mass flow	6280	kg/h
Exhaust back pressure (min/max)	20/80	mbar

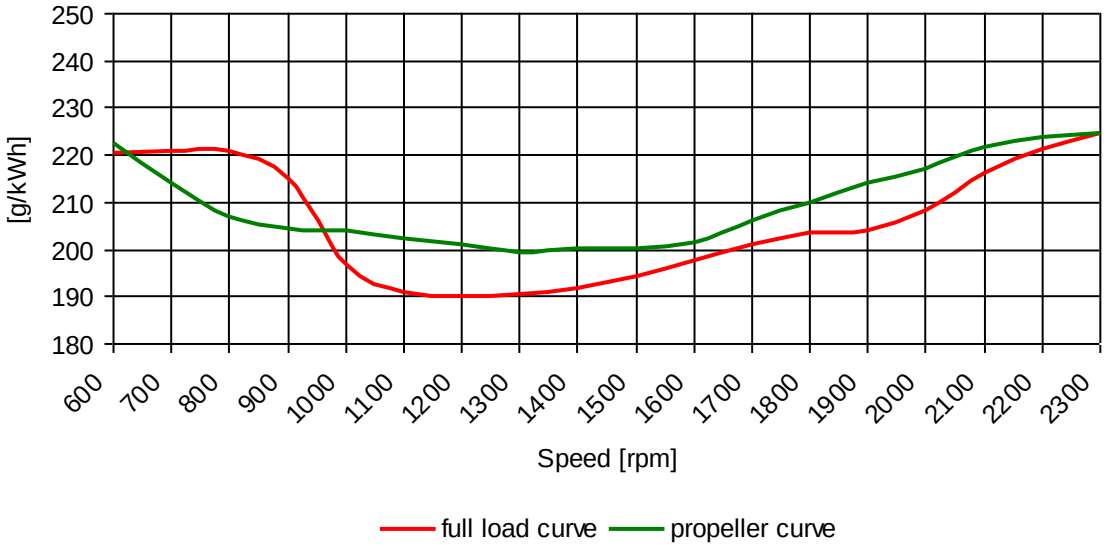
Heat balance [1]

Exhaust gas heat	992	kW
Cooling water heat	960	kW
Intercooler heat	350	kW
Radiation heat	41	kW

Noise emission [1]

Engine surface noise (Lwa)	105,3	dB(A)
Free exhaust noise (Lwa)	116,2	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 2,5 >

< 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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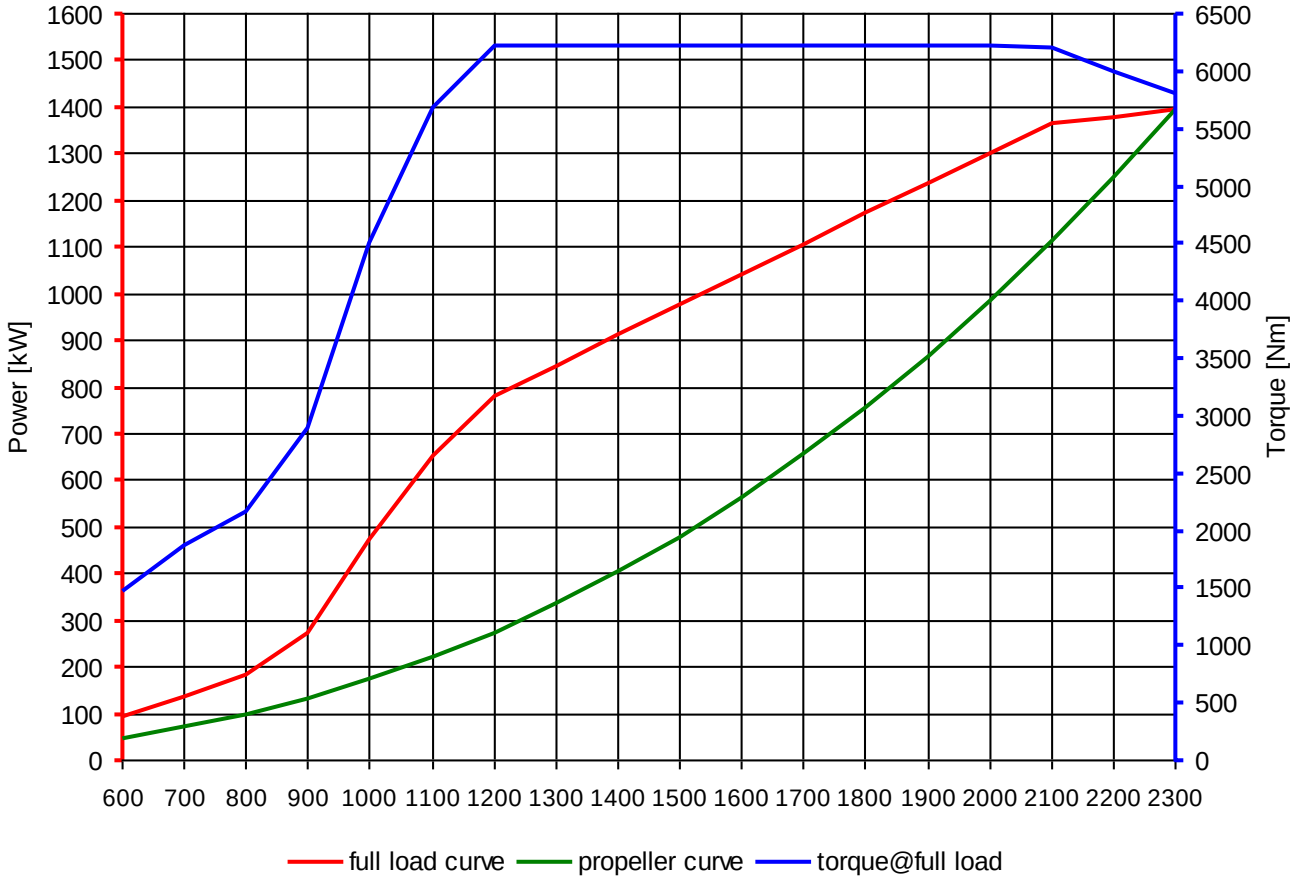
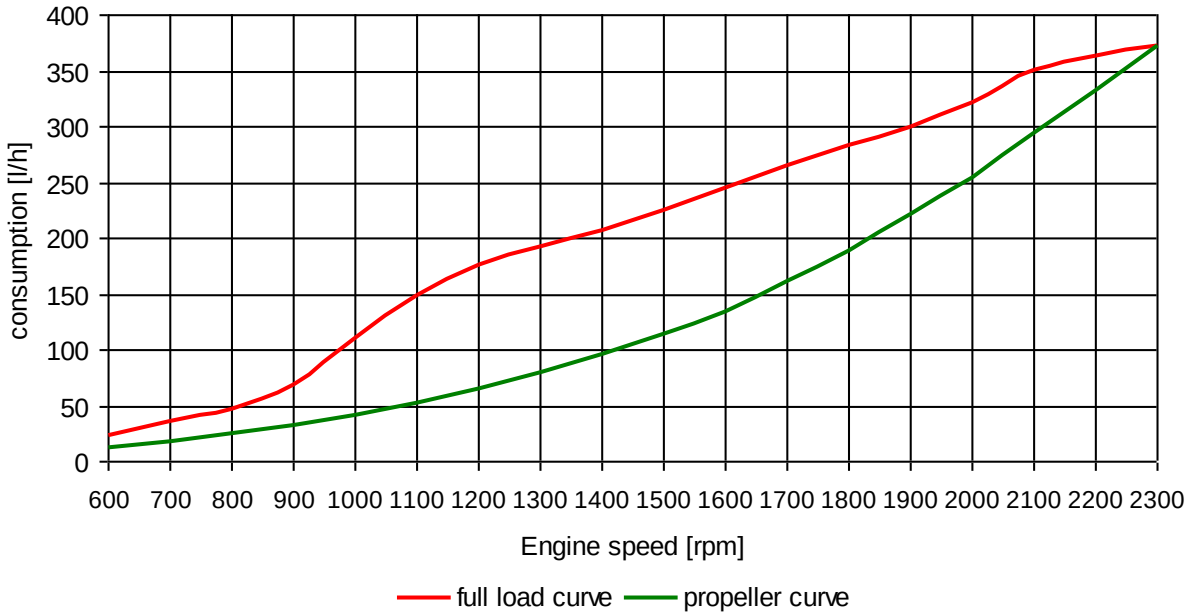
Power/torque curves



Absolute fuel consumption[1]



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