

# Technical data sheet

20.04.2021 (Version 3)

# Marine diesel engine D2862LE466

#### Performance data <sup>1</sup>

Rated power	1029	kW
Rated power	1400	PS
Speed	2100	rpm
Bore/Stroke	128/157	mm
Displacement	24,24	liter
Rated torque	4680	Nm
Maximum torque	5180	Nm
at speed	1200-1900	rpm
Compression ratio [ɛ]	17,0	:1
Mean effective pressure	24,26	bar
Mean piston speed	10,99	m/s



Specific fuel consumption <sup>1</sup>	216	g/kWh
Absolute fuel consumption <sup>1</sup>	265	l/h
Lowest fuel consumption <sup>3</sup>	203	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
Operation profile	Up to 3000 hours per year at a maximum of 20 $\%$ of time at full load   average load < 50 $\%$
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 and wastegate
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 EDC17 control, fuel to DIN EN 590
Auxiliary PTO	PTO for hydraulic pump 16 cm <sup>3</sup> (180Nm), front-PTO by crank shaft extension
Alternator	Three-phase generator with rectifier and transistorized governor, 28V, 120A
Starting system	Solenoid-operated electric starter, 24V, 7.0kW
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, RCD 2013/53/EC, China 2 commercial

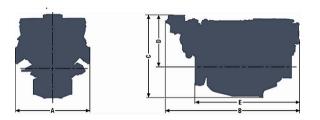
<sup>1</sup> Values at rated power

<sup>&</sup>lt;sup>2</sup> Diesel fuel according to DIN EN 590 (tolerance +5% - ISO 3046)

<sup>&</sup>lt;sup>3</sup> Values on propeller curve

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

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 <sup>1</sup>

Intake air temperature (max.)	45	°C
Intake air vacuum (min/max)	30/60	mbar
Intake air volume flow	4250	m³/h
Exhaust gas temperature	572	°C
Exhaust gas volume flow	12250	m³/h
Exhaust gas mass flow	4980	kg/h
Exhaust back pressure (min/max)	20/80	mbar

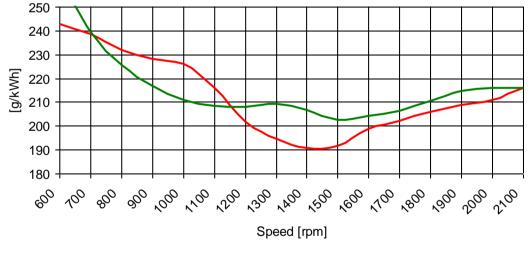
#### Heat balance <sup>1</sup>

Exhaust gas heat	710	kW
Cooling water heat	680	kW
Intercooler heat	200	kW
Radiation heat	36	kW

# Noise emission (sound power)<sup>1</sup>

Engine surface noise (Lwa)	121,2 dB(A)
Free exhaust noise (Lwa)	124,1 dB(A)

Specific fuel consumption<sup>2</sup>



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 >

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