

# Technical data sheet

25.07.2019 (Version 1)

# Marine diesel engine D2862LE483

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

Rated power	1066	kW
Rated power	1450	PS
Speed	2100	rpm
Bore/Stroke	128/157	mm
Displacement	24,24	liter
Rated torque	4847	Nm
Maximum torque	5355	Nm
at speed	1100-1900	rpm
Compression ratio [ε]	17,0	:1
Mean effective pressure	25,13	bar
Mean piston speed	10,99	m/s



### Consumption data <sup>2</sup>

Specific fuel consumption <sup>1</sup>	206	g/kWh
Absolute fuel consumption <sup>1</sup>	261	l/h
Lowest fuel consumption <sup>3</sup>	197	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 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	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 (180 Nm), 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 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, EU Stage IIIA

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<sup>&</sup>lt;sup>1</sup> Values at rated power

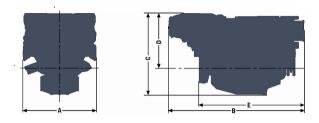
<sup>&</sup>lt;sup>2</sup> Diesel fuel according to DIN EN 590 (tolerance +5% - ISO 3046)

<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)

#### D2862LE483

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)	2420	kg



#### Combustion parameters <sup>1</sup>

Intake air temperature (max.)	45	°C
Intake air vacuum (min/max)	30/60	mbar
Intake air volume flow	4650	m³/h

Exhaust gas temperature	420	°C
Exhaust gas volume flow	10900	m³/h
Exhaust gas mass flow	5370	kg/h
Exhaust back pressure (min/max)	20/80	mbar

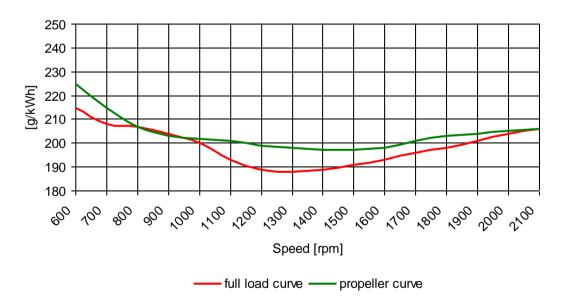
#### Heat balance 1

Exhaust gas heat	630	kW
Cooling water heat	690	kW
Intercooler heat	200	kW
Radiation heat	39	kW

#### Noise emission (sound power) 1

Engine surface noise (Lwa)	107,3	dB(A)
Free exhaust noise (Lwa)	111,8	dB(A)

#### Specific fuel consumption<sup>2</sup>



- < 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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