



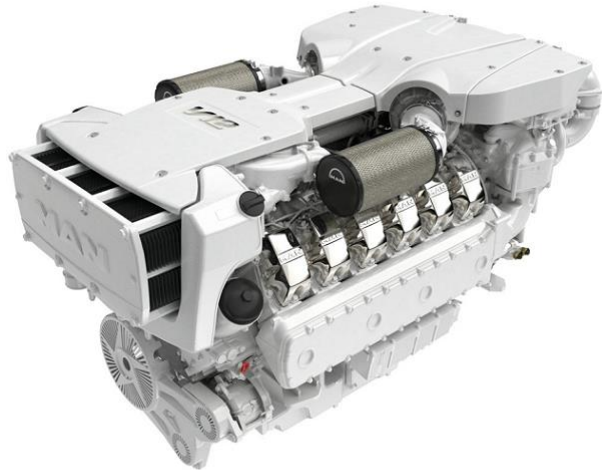
# Technical data sheet

19.02.2019  
(Version 1)

Marine diesel engine  
D2862LE496 (V12-2000)

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

Rated power	1471	kW
Rated power	2000	PS
Speed	2300	rpm
Bore/Stroke	128/157	mm
Displacement	24,24	liter
Rated torque	6107	Nm
Maximum torque	6520	Nm
at speed	1200-2100	rpm
Compression ratio [ε]	17,0	:1
Mean effective pressure	31,66	bar
Mean piston speed	12,04	m/s



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

Specific fuel consumption <sup>1</sup>	229	g/kWh
Absolute fuel consumption <sup>1</sup>	401	l/h
Lowest fuel consumption <sup>3</sup>	199	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 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 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 high pressure pump and EDC control, fuel to DIN EN 590
Auxiliary PTO	PTO for hydraulic pump 16 cm <sup>3</sup> (180Nm)
Alternator	Three-phase generator with rectifier and transistorized governor, 28 V, 110 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, EPA Tier 3 recreational, EU Stage IIIA

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

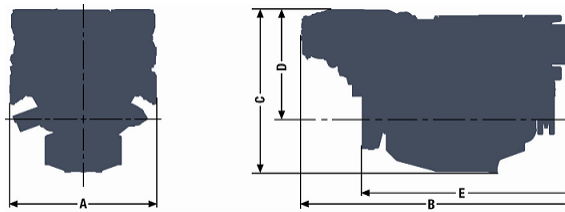
<sup>2</sup> Diesel fuel according to DIN EN 590 (tolerance +5% - ISO 3046)

<sup>3</sup> Values on propeller curve

\*TBO 5.000 operating hours for non or low particulate matters (PM) regulated jurisdictions (IMO, Canada, EU Stage IIIA) | TBO 2.000 operating hours for high particulate matters (PM) regulated jurisdictions (EPA Tier 3, RCD)

## D2862LE496 (V12-2000)

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 <sup>1</sup>

Intake air temperature (max.)	45 °C
Intake air vacuum (min/max)	30/60 mbar
Intake air volume flow	6275 m <sup>3</sup> /h

Exhaust gas temperature	533 °C
Exhaust gas volume flow	17100 m <sup>3</sup> /h
Exhaust gas mass flow	7270 kg/h
Exhaust back pressure (min/max)	20/80 mbar

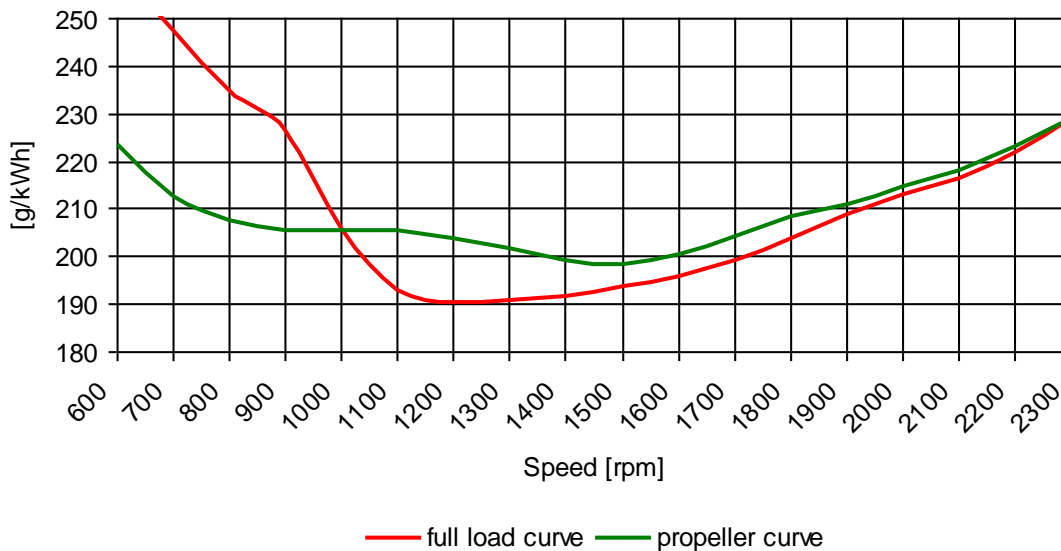
### Heat balance <sup>1</sup>

Exhaust gas heat	1120 kW
Cooling water heat	1010 kW
Intercooler heat	370 kW
Radiation heat	42 kW

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

Engine surface noise (Lwa)	105,8 dB(A)
Free exhaust noise (Lwa)	116,7 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 2,5 >

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

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

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

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