

# Technical data sheet

01.07.2022 (Version 1)

# Constant speed marine diesel D2862LE32E

#### Performance data

Rated power (100%)	700	kW
Maximum power (110%)	770	kW
Flywheel power	700	kW
Speed	1800	rpm
Bore/Stroke	128/157	mm
Displacement	24,24	liter
Rated torque	3714	Nm
Compression ratio [ε]	17,0	:1
Mean effective pressure	19,25	bar
Mean piston speed	9,4	m/s



#### Consumption data 1

Specific fuel consumption <sup>2</sup>	198	g/kWh
Absolute fuel consumption <sup>2</sup>	165	l/h
Lowest fuel consumption <sup>2</sup>	198	g/kWh
Absolute urea consumption <sup>2</sup>	12	l/h
Lube oil consumption (max)	175	g/h

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

# **Engine description**

Application	Marine auxiliary diesel for power generation (60Hz) on board or diesel-electric propulsion
Operation profile	Up to 5500 operating hours per year and a maximum average load < 75 %
Construction	Four-stroke diesel with exhaust after-treatment system (DPF+SCR), 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 cm³ (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 600 operating hours, average TBO 18.000 operating hours
Classification	Engine according to classification requirements available => see MAN Marine Configurator

Exhaust status	IMO Tier III, EU Stage V
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<sup>&</sup>lt;sup>1</sup> Values at rated power

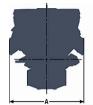
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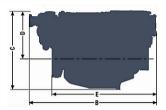
<sup>&</sup>lt;sup>2</sup> Diesel fuel according to DIN EN 590 (tolerance +5% - ISO 3046), urea solution 32,5% according to ISO 22241 (tolerance +3%)

<sup>&</sup>lt;sup>3</sup> Including engine and SCR catalyst

#### D2862LE32E

A - overall width	1151	mm
B - overall length	2023	mm
C - overall height	1281	mm
D - above crank shaft	816	mm
E - length to flywheel	1608	mm
Engine weight (dry)	2280	ka





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

Intake air temperature (max)	45	°C
Intake air vacuum (min/max)	30/60	mbar
Intake air volume flow	2770	m³/h
Charge air temp. after cooler	35	°C
Exhaust gas temperature	419	°C
Exhaust gas volume flow	6590	m³/h
Exhaust gas mass flow	3270	kg/h
Exhaust back pressure (min/max) downstream of SCR catalyst	20/80	mbar

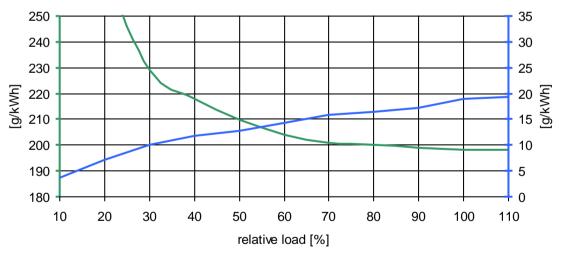
#### Heat balance 1

Exhaust gas heat	370	kW
Cooling water heat	430	kW
Intercooler heat	140	kW
Radiation heat <sup>3</sup>	39	kW

### Noise emission (sound power) 1

Engine surface noise (Lwa)	122,5 dB(A)
Free exhaust noise (Lwa) <sup>3</sup>	99,8 dB(A)

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



specific fuel consumption —— specific urea consumption

- < The rated power is based on reference conditions according to ISO 3046-1 (2002) >
- < Intake air temperature 45°C | sea water temperature 32°C >
- < Barometric pressure 1000 mbar | air humidity 60% >

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

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