



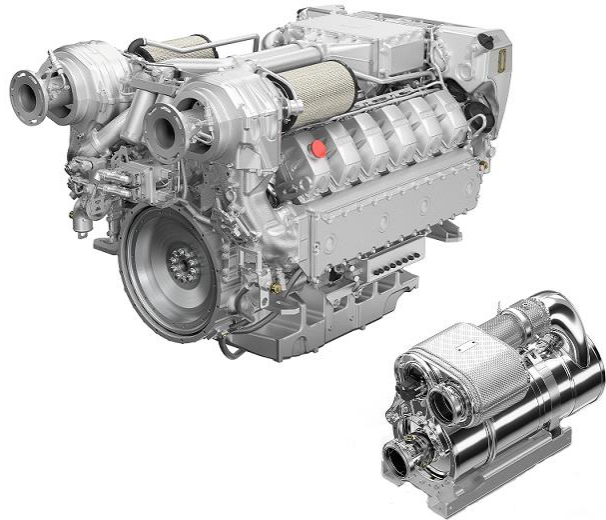
Technical data sheet

Marine diesel engine
D2862LE447

04.07.2022
(Version 1)

Performance data

| | | |
|-------------------------|-----------|-------|
| Rated power | 735 | kW |
| Rated power | 1000 | PS |
| Speed | 1800 | rpm |
| Bore/Stroke | 128/157 | mm |
| Displacement | 24,24 | liter |
| Rated torque | 3900 | Nm |
| Maximum torque | 4340 | Nm |
| at speed | 1100-1600 | rpm |
| Compression ratio [ε] | 19,0 | :1 |
| Mean effective pressure | 20,21 | bar |
| Mean piston speed | 9,42 | m/s |



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

Consumption data ²

| | | |
|--|-----|-------|
| Specific fuel consumption ¹ | 201 | g/kWh |
| Absolute fuel consumption ¹ | 176 | l/h |
| Lowest fuel consumption ³ | 193 | g/kWh |
| Absolute urea consumption ¹ | 8 | l/h |

Engine description

| | |
|-------------------|--|
| Application | Main propulsion diesel for ships with fixed pitch propeller or variable pitch propeller (only IMO) |
| Operation profile | Unlimited operating hours per year at a maximum of 100 % of time at full load |
| Construction | Four-stroke diesel, direct injection, exhaust after-treatment system, 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 high pressure pump and EDC control, fuel to DIN EN 590 |
| Auxiliary PTO | PTO for hydraulic pump 16 cm ³ (180Nm), 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 600 operating hours |
| Classification | Engine according to classification requirements available => see MAN Marine Configurator |

Exhaust status IMO Tier III, EPA Tier 4

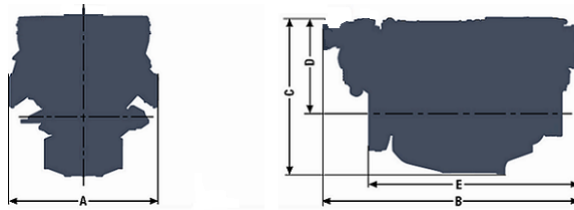
¹ Values at rated power

² Diesel fuel according to DIN EN 590 (tolerance +5% - ISO 3046), urea solution 32,5% according to ISO 22241 (tolerance +3%)

³ Values on propeller curve

D2862LE447

| | |
|------------------------------------|---------|
| A - overall width..... | 1157 mm |
| B - overall length..... | 1939 mm |
| C - overall height..... | 1293 mm |
| D - above crank shaft..... | 827 mm |
| E - length to flywheel..... | 1608 mm |
| Engine weight, dry..... | 2270 kg |
| (depending on the scope of supply) | |



Combustion parameters ¹

| | |
|--|------------------------|
| Intake air temperature (max) | 45 °C |
| Intake air vacuum (min/max) | 30/60 mbar |
| Intake air volume flow | 2860 m ³ /h |
| Exhaust gas temperature | 468 °C |
| Exhaust gas volume flow | 7250 m ³ /h |
| Exhaust gas mass flow | 3390 kg/h |
| Exhaust back pressure (min/max) downstream of SCR catalyst | 20/80 mbar |

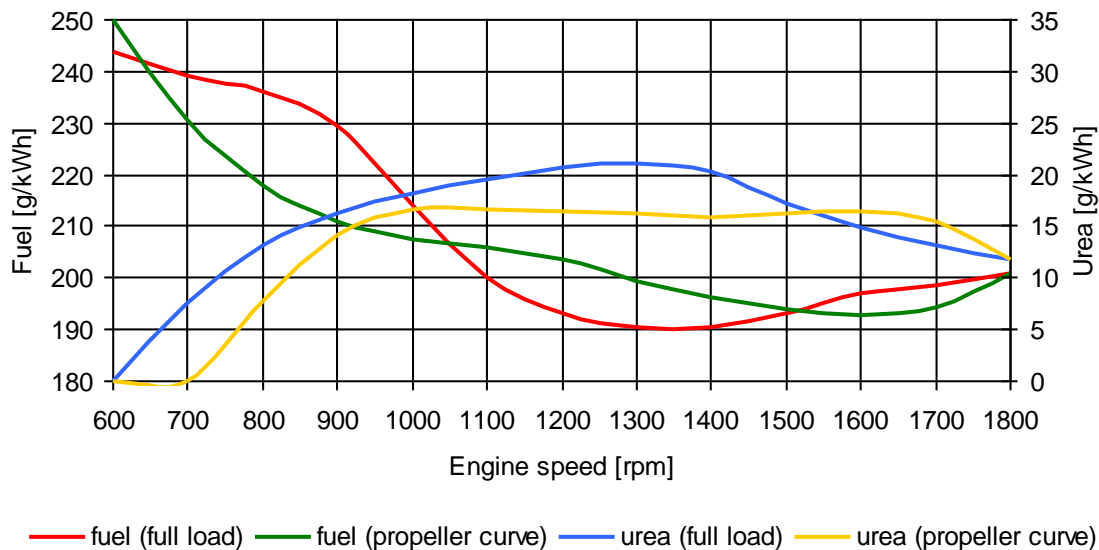
Heat balance ¹

| | |
|--------------------|--------|
| Exhaust gas heat | 360 kW |
| Cooling water heat | 480 kW |
| Intercooler heat | 150 kW |
| Radiation heat | 35 kW |

Noise emission (sound power) ¹

| | |
|----------------------------|-------------|
| Engine surface noise (Lwa) | 121,5 dB(A) |
| Free exhaust noise (Lwa) | 107,6 dB(A) |

Specific consumption²



< 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 3 >

< Engine specifications are subjected to change without prior notice >

¹ Values at rated power

² Diesel fuel according to DIN EN 590 (tolerance +5% - ISO 3046), urea solution 32,5% according to ISO 22241 (tolerance +3%)

³ Values on propeller curve