

Technical data sheet

17.05.2016 (Version 2)

Marine diesel engine D2862LE432 ()

Performance data ¹

| Rated power | 882 | kW |
|-------------------------|-----------|-------|
| Rated power | 1200 | PS |
| Speed | 2100 | rpm |
| Bore | 128 | mm |
| Stroke | 157 | mm |
| Displacement | 24,24 | liter |
| Rated torque | 4010 | Nm |
| Maximum torque | 4450 | Nm |
| at speed | 1300-1900 | rpm |
| Compression ratio [ɛ] | 19,0 | :1 |
| Mean effective pressure | 20,79 | bar |
| Mean piston speed | 10,99 | m/s |



Consumption data ¹

| Specific fuel consumption ² | 211 | g/kWh |
|--|-----|-------|
| Absolute fuel consumption ² | 222 | l/h |
| Lowest fuel consumption ³ | 198 | g/kWh |

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

Engine description

| Operation profile | up to 4000 operating hours per year average load < 60 % |
|-------------------|--|
| 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 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 500 operating hours, average TBO 12.000 operating hours |
| Classification | ABS, BV, CCS, CRS, DNV, GL, NK, RINA, RMRS, RRR |

Exhaust status IMO Tier II, RCD 94/25/EC, 97/68/EC

¹ values at rated power

² Tolerance +5% according to ISO 3046, diesel fuel to DIN EN 590

D2862LE432 ()

| 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 ¹

| - | | |
|---------------------------------|-------|------|
| Intake air temperature (max.) | 45 | °C |
| Intake air vacuum (min/max) | 30/60 | mbar |
| Intake air volume flow | 3950 | m³/h |
| | | |
| Exhaust gas temperature | 435 | °C |
| Exhaust gas volume flow | 9560 | m³/h |
| Exhaust gas mass flow | 4600 | kg/h |
| Exhaust back pressure (min/max) | 20/80 | mbar |
| | | |

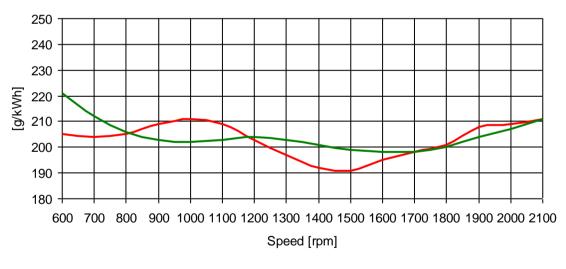
Heat balance ¹

| Exhaust gas heat | 556 | kW |
|--------------------|-----|----|
| Cooling water heat | 580 | kW |
| Intercooler heat | 170 | kW |
| Radiation heat | 36 | kW |

Noise emission ¹

| Engine surface noise (Lwa) | 101,0 dB(A) |
|----------------------------|-------------|
| Free exhaust noise (Lwa) | 111,0 dB(A) |

Specific fuel 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 2,7 >

< Engine specifications are subjected to change without prior notice >

¹ values at rated power

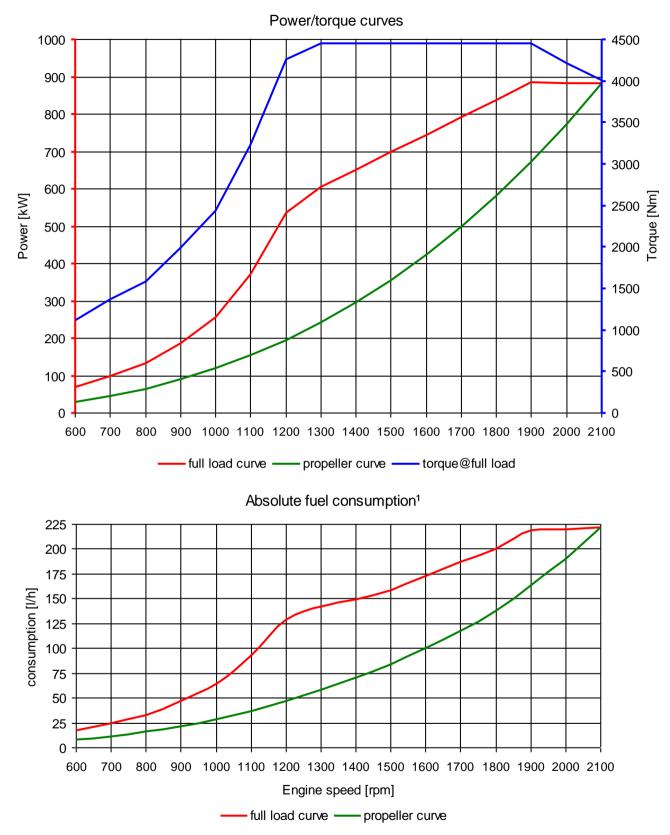
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Engine curves

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D2862LE432 (882kW@2100rpm) ()



< The rated power is based on reference conditions according to DIN ISO 3046-1 (2002) >

< Exponent for propeller curve 2,7 >

< Engine specifications are subjected to change without notice >

¹ Tolerance +5% according ISO 3046, diesel fuel to DIN EN 590