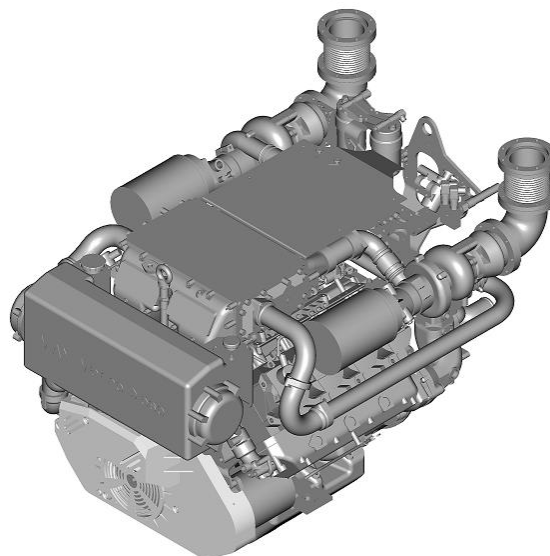


Marine diesel engine

D2848LE423 (V8-900)

Performance data ¹

| | |
|------------------------------|-----------------|
| Rated power..... | 662 [kW] |
| Rated power..... | 900 [PS] |
| Speed..... | 2300 [rpm] |
| Bore..... | 128 [mm] |
| Stroke..... | 142 [mm] |
| Displacement..... | 14,62 [l] |
| Rated torque..... | 2750 [Nm] |
| Maximum torque..... | 2900 [Nm] |
| at speed..... | 1500-2100 [rpm] |
| Compression ratio [ε]..... | 15,5 :1 |
| Mean effective pressure..... | 23,63 [bar] |
| Mean piston speed..... | 10,89 [m/s] |



Consumption data ¹

| | |
|--|-------------|
| Specific fuel consumption ² ... | 223 [g/kWh] |
| Absolute fuel consumption ² . | 176 [l/h] |
| Lube oil consumption, max... | 265 [g/h] |

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

Engine description

| | |
|-------------------|--|
| Operation profile | up to 1000 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 | 8 cylinder 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 charge air cooler and 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 (90Nm), additional front pulley |
| Alternator | three-phase generator with rectifier and transistorized governor, 28 V, 55 A /120 A |
| Starting system | solenoid operated electric starter, 24 V, 5,4 kW |
| Service | oil change interval 400 operating hours, average TBO 5.000 operating hours |
| Classification | ----- |

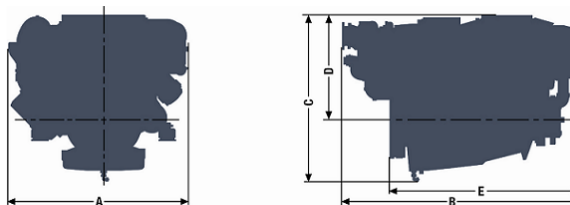
| | |
|-----------------------|--|
| Exhaust status | IMO Tier 2, RCD 94/25/EC, 97/68/EC, SAV/BSO |
|-----------------------|--|

¹ values at rated power

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

D2848LE423 (V8-900)

| | |
|-----------------------------|-----------|
| A - complete width..... | 1240 [mm] |
| B - complete length..... | 1546 [mm] |
| C - complete height..... | 1173 [mm] |
| D - above crank shaft.... | 789 [mm] |
| E - length to flywheel..... | 1175 [mm] |
| Engine weight (dry)..... | 1565 [kg] |



Combustion parameters ¹

| | |
|----------------------------------|---------------|
| Intake air temperature, max..... | 45 [°C] |
| Intake air vacuum (min/max)..... | 80/120 [mbar] |
| Intake air volume flow..... | 2630 [m³/h] |

| | |
|------------------------------------|--------------|
| Exhaust gas temperature..... | 565 [°C] |
| Exhaust gas volume flow..... | 7395 [m³/h] |
| Exhaust gas mass flow..... | 3020 [kg/h] |
| Exhaust back pressure (min/max)..< | 20/80 [mbar] |

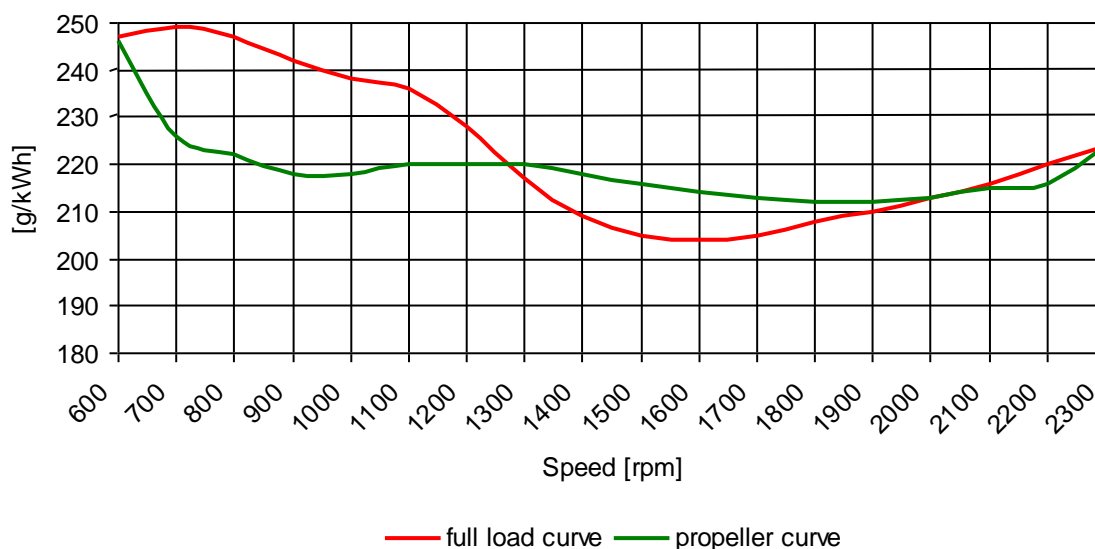
Heat balance ¹

| | |
|-------------------------|----------|
| Exhaust gas heat..... | 500 [kW] |
| Cooling water heat..... | 420 [kW] |
| Intercooler heat..... | 155 [kW] |
| Radiation heat..... | 30 [kW] |

Noise emission ¹

| | |
|-------------------------------|---------------|
| engine surface noise (Lwa). | 115,4 [dB(A)] |
| free exhaust noise (Lwa)..... | 142,5 [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 2,5 >

< Engine specifications are subjected to change without notice >

¹ values at rated power

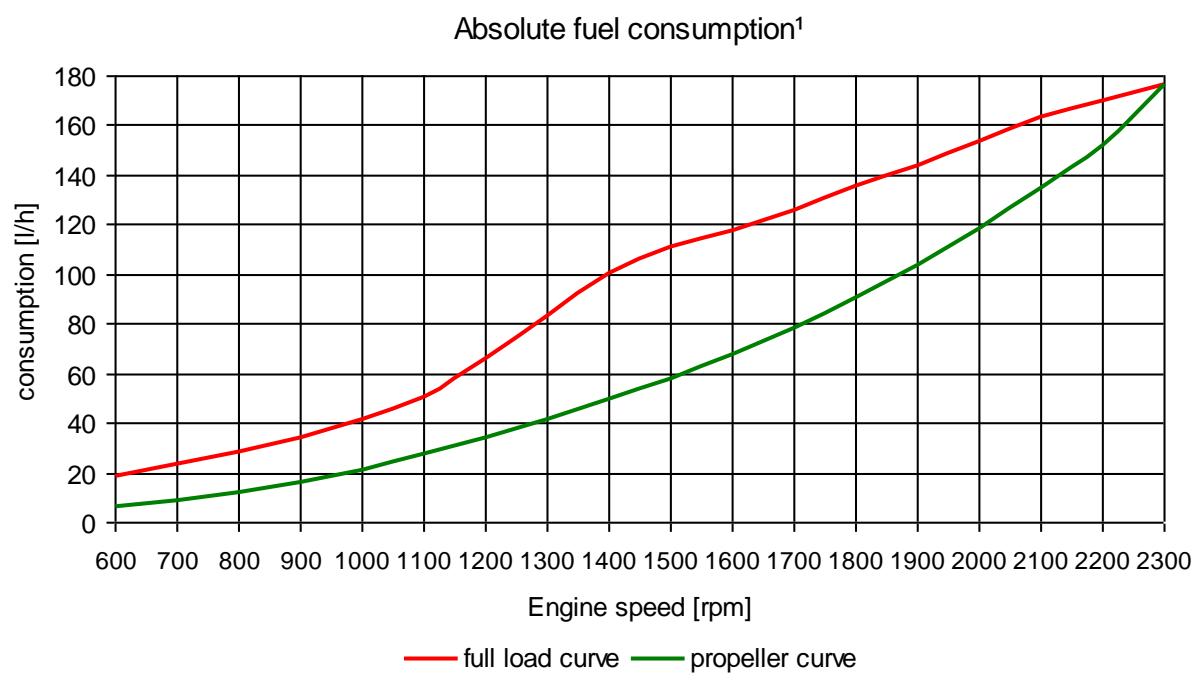
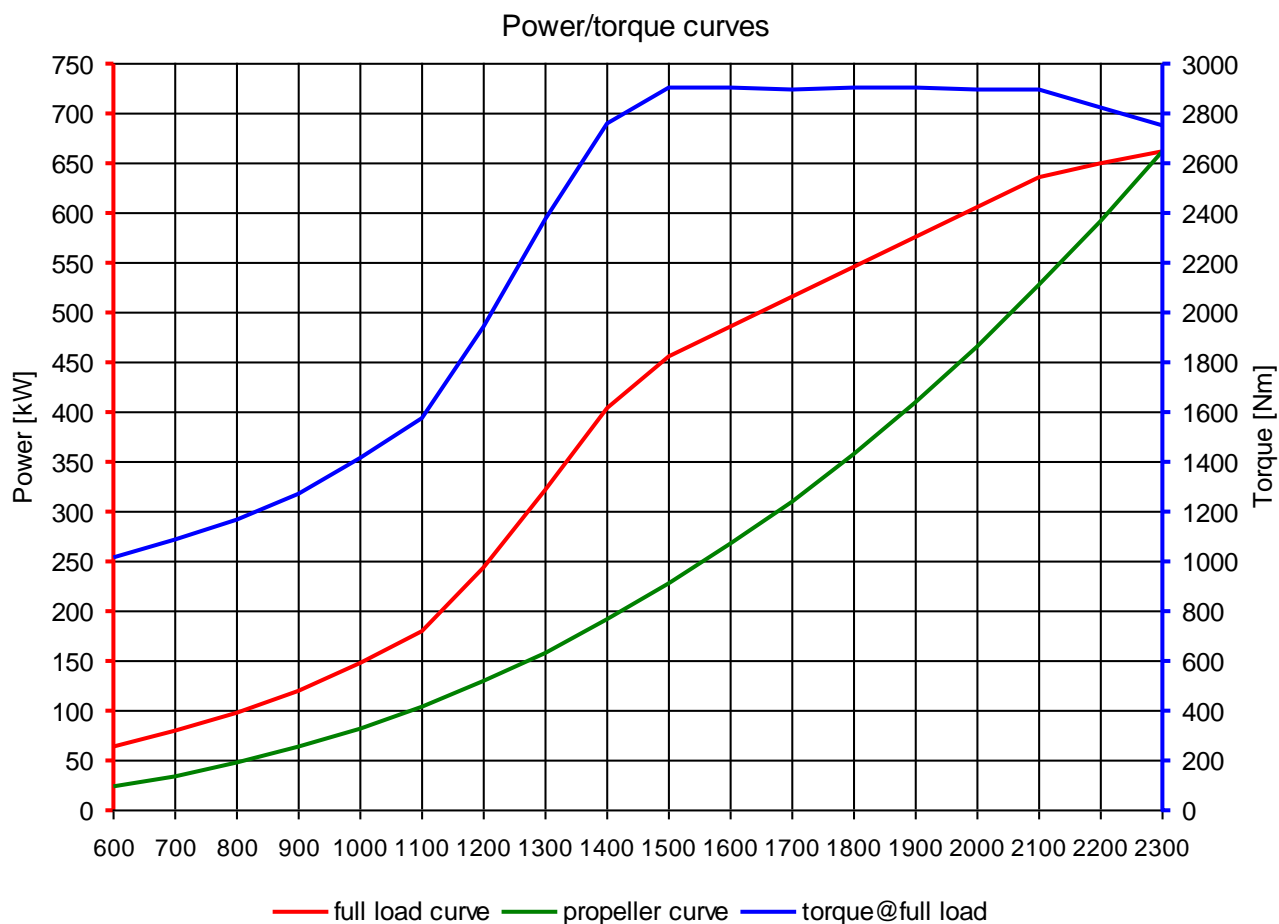
² Tolerance +5% according ISO 3046, diesel fuel to DIN EN 590



Engine curves

21.04.2014
(Version 2)

D2848LE423 (662kW @2300rpm) (V8-900)



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

< Exponent for propeller curve 2,5 >

< Engine specifications are subjected to change without notice >

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