**Performance data**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated power</td>
<td>382 kW</td>
</tr>
<tr>
<td>Rated power</td>
<td>520 PS</td>
</tr>
<tr>
<td>Speed</td>
<td>1800 rpm</td>
</tr>
<tr>
<td>Bore</td>
<td>126 mm</td>
</tr>
<tr>
<td>Stroke</td>
<td>166 mm</td>
</tr>
<tr>
<td>Displacement</td>
<td>12,42 liter</td>
</tr>
<tr>
<td>Rated torque</td>
<td>2027 Nm</td>
</tr>
<tr>
<td>Maximum torque at speed</td>
<td>2270 Nm</td>
</tr>
<tr>
<td>at speed</td>
<td>1200-1600 rpm</td>
</tr>
<tr>
<td>Compression ratio [ε]</td>
<td>17,0 :1</td>
</tr>
<tr>
<td>Mean effective pressure</td>
<td>20,51 bar</td>
</tr>
<tr>
<td>Mean piston speed</td>
<td>9,96 m/s</td>
</tr>
</tbody>
</table>

**Consumption data**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific fuel consumption</td>
<td>210 g/kWh</td>
</tr>
<tr>
<td>Absolute fuel consumption</td>
<td>96 l/h</td>
</tr>
<tr>
<td>Lowest fuel consumption</td>
<td>204 g/kWh</td>
</tr>
</tbody>
</table>

**Engine description**

- **Operation profile**: Unlimited operating hours per year at a maximum of 100 % of time at full load
- **Construction**: Four-stroke marine diesel engine, direct injection, SAE 1 flywheel housing
- **Cylinders**: 6 cylinders in line, 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 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 cm²
- **Alternator**: Three-phase generator with rectifier and transistorized governor, 28 V, 110 A
- **Starting system**: Solenoid operated electric starter, 24 V, 5.5 kW
- **Service**: Oil change interval 600 operating hours, average TBO 18,000 operating hours
- **Classification**: DNV-GL, RINA, LRS, BV, ABS, CCS

**Exhaust status**: IMO Tier II, RCD 2013/53/EC, RCD 94/25/EC, EPA Tier 3 commercial, 97/68/EC

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¹ values at rated power
² Tolerance +5% according to ISO 3046, diesel fuel to DIN EN 590
³ values on propeller curve
A - overall width............ 986 mm
B - overall length........... 1795 mm
C - overall height.......... 1096 mm
D - above crank shaft..... 674 mm
E - length to flywheel.... 1527 mm
Engine weight (dry)........ 1215 kg

Combustion parameters¹

| Parameter                                | Value  
|------------------------------------------|--------
| Intake air temperature (max.)            | 45 °C  
| Intake air vacuum (min/max)              | 30/60 mbar 
| Intake air volume flow                   | 1830 m³/h 
| Exhaust gas temperature                  | 460 °C  
| Exhaust gas volume flow                  | 4460 m³/h 
| Exhaust gas mass flow                    | 2080 kg/h 
| Exhaust back pressure (min/max)          | 20/80 mbar 

Heat balance¹

| Parameter      | Value
|----------------|-------
| Exhaust gas heat | 280 kW
| Cooling water heat | 190 kW
| Intercooler heat | 80 kW
| Radiation heat  | 26 kW

Noise emission¹

| Parameter                        | Value
|----------------------------------|------
| Engine surface noise (Lwa)       | dB(A)
| Free exhaust noise (Lwa)         | 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 3 >

¹ values at rated power
² Tolerance +5% according to ISO 3046, diesel fuel to DIN EN 590
³ values on propeller curve

< Engine specifications are subjected to change without prior notice >