12 M33.2

4 Stroke diesel engine, direct injection

- Bore and stroke: 150 x 185 mm
- Number of cylinders: 12V@ 90°
- Total displacement: 39,2 litres
- Compression ratio: 15/1
- Engine rotation (ISO 1204 standard): counterclockwise
- Idle speed: 650 rpm
- Flywheel housing: SAE 0
- Flywheel: SAE 18°

Customer benefits

- Continuous compact power with reference torque performance in its category
- Global environment care with low exhaust emissions and controlled fuel consumption at any running cycle
- Simple technology with mechanical injection
- Life cycle cost efficiency with extended mean time between overhauls (MBTO)

Rated power - Fuel consumption

<table>
<thead>
<tr>
<th>Duty</th>
<th>kW</th>
<th>hp</th>
<th>rpm</th>
<th>Fuel consumption g/kWh</th>
<th>Peak torque / speed (N.m / rpm)</th>
<th>I/h</th>
<th>IMO</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>956</td>
<td>1300</td>
<td>1600</td>
<td>210</td>
<td>6520 / 1100</td>
<td>245</td>
<td>II</td>
</tr>
<tr>
<td>P1</td>
<td>956</td>
<td>1300</td>
<td>1800</td>
<td>215</td>
<td>6900 / 1100</td>
<td>245</td>
<td>II</td>
</tr>
<tr>
<td>P2</td>
<td>1029</td>
<td>1400</td>
<td>1800</td>
<td>218</td>
<td>7360 / 1200</td>
<td>267</td>
<td>II</td>
</tr>
<tr>
<td>P2</td>
<td>1103</td>
<td>1500</td>
<td>1800</td>
<td>219</td>
<td>8196 / 1200</td>
<td>288</td>
<td>II</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>P1 duty</th>
<th>P2 duty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>unrestricted continuous</td>
<td>continuous</td>
</tr>
<tr>
<td>Engine load variations</td>
<td>very little or none</td>
<td>Numerous</td>
</tr>
<tr>
<td>Average engine load factor</td>
<td>80 to 100 %</td>
<td>30 to 80 %</td>
</tr>
<tr>
<td>Annual working time</td>
<td>5000 hr +</td>
<td>3000 to 5000 h</td>
</tr>
<tr>
<td>Time at full load</td>
<td>unlimited</td>
<td>8 h each 12 h</td>
</tr>
</tbody>
</table>

Power definition

Standard ISO 3046/1

Reference conditions

- Ambient temperature: 25 °C / 77 °F
- Barometric pressure: 100 kPa
- Relative humidity: 30%R
- Raw water temperature: 25 °C / 77 °F

Fuel oil

- Relative density: 0,840 ± 0,005
- Lower calorific power: 42 700 kJ/kg
- Consumption tolerances: 0 ± 5%
- Inlet limit temperature: 35 °C / 95 °F

Our ratings also comply with classification societies maximum temperature definition without power derating.

- Ambient temperature: 45 °C / 113 °F
- Raw water temperature: 32 °C / 90 °F
### Standard equipment

#### Cooling system
- Fresh / raw water heat exchanger with integrated thermostatic valves and expansion tank
- Cast iron centrifugal fresh water pump, mechanically driven
- Bronze self-priming raw water pump, mechanically driven

#### Lubrication system
- Full flow screwable oil filters
- Fresh water cooled lube oil cooler
- Lube oil purifier with replaceable cartridge
- Manual prelubricating oil pump

#### Fuel system
- In-line injection pump with flanged mechanical governor
- Double wall injection bundle with leakage collector
- Duplex fuel filters replaceable while engine running

#### Intake air and exhaust system
- Fresh water cooled turbo blower
- Fresh water cooled exhaust gas manifold

#### Electrical system
- Voltage: 24V DC
- Electrical starter on flywheel crown
- 175A battery charger
- Engine room and bridge panels

### Dimensions and dry weight (mm / kg)

- **Baudouin.com**
**Performance**

**P1 - 956 kW - 1300 hp @1600 rpm**

**P2 - 1103 kW - 1500 hp @1800 rpm**

**P1 - 956 kW - 1300 hp @1800 rpm**

**P2 - 1103 kW - 1500 hp @1800 rpm**