The MAN 48/60CR is a striking combination of top performance, operational flexibility and reliability. High power output, low fuel consumption and low emissions make it perfect for every kind of marine application with a mechanical or diesel-electric propulsion drive.

Benefits at a glance

- High efficiency
- High specific power output
- Low emissions
- Low operating and life cycle costs
- Long maintenance intervals and service life
- High reliability
General
- Engine cycle: Four-Stroke
- No. of cylinders: 12, 14, 16, 18
- Bore: 480 mm – Stroke: 600 mm
- Swept volume per cyl: 108.6 dm³

Fuel consumption at 85 % MCR
- SFOC: 173 g/kWh

Cylinder output (MCR)
- At 514/500 rpm: 1200 kW
- Power-to-weight ratio: 12.3 – 13.1 kg/kW

Compliance with emission regulations
- IMO Tier II
- IMO Tier III (with MAN SCR)

Main features
- Turbocharging system
  High efficiency constant pressure MAN TCA series exhaust turbocharging system
- Engine automation and control
  MAN in-house developed engine attached Safety and Control System SaCoS
- Fuel system
  Advanced MAN electronic Common Rail injection system
- Cooling system
  2-string high and low temperature cooling water systems
- Starting system
  Starting air valves within cylinder heads
- Engine mounting
  Resilient or rigid mounting

Optional equipment
- ECOMAP concept – using of different IMO Tier II-compliant injection maps to improve fuel economy
- Additional Power Take-Off at engine free end available

Dimensions
<table>
<thead>
<tr>
<th>Cyl. No.</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>10,790</td>
<td>11,790</td>
<td>13,140</td>
<td>14,140</td>
</tr>
<tr>
<td>L₁</td>
<td>9,088</td>
<td>10,088</td>
<td>11,088</td>
<td>12,088</td>
</tr>
<tr>
<td>Dry mass</td>
<td>189</td>
<td>213</td>
<td>240</td>
<td>265</td>
</tr>
</tbody>
</table>

Output
<table>
<thead>
<tr>
<th>Speed</th>
<th>514</th>
<th>500</th>
<th>rpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>mep</td>
<td>25.8</td>
<td>26.5</td>
<td>bar</td>
</tr>
<tr>
<td>MAN 12V48/60CR</td>
<td>14,400</td>
<td>14,400</td>
<td>kW</td>
</tr>
<tr>
<td>MAN 14V48/60CR</td>
<td>16,800</td>
<td>16,800</td>
<td>kW</td>
</tr>
<tr>
<td>MAN 16V48/60CR</td>
<td>19,200</td>
<td>19,200</td>
<td>kW</td>
</tr>
<tr>
<td>MAN 18V48/60CR</td>
<td>21,600</td>
<td>21,600</td>
<td>kW</td>
</tr>
</tbody>
</table>

Minimum centreline distance for twin engine installation: 4,800 mm
Last updated August 2016