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
MAN V48/60CR

Propulsion

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 (mm)</td>
<td>10,790</td>
<td>11,790</td>
<td>13,140</td>
<td>14,140</td>
</tr>
<tr>
<td>L₁ (mm)</td>
<td>9,088</td>
<td>10,088</td>
<td>11,088</td>
<td>12,088</td>
</tr>
<tr>
<td>Dry mass (t)</td>
<td>169</td>
<td>213</td>
<td>240</td>
<td>265</td>
</tr>
</tbody>
</table>

Output

| Speed (rpm) | 514 | 500 |
| mep (bar)   | 25.8 | 26.5 |
| MAN 12V48/60CR (kW) | 14,400 | 14,400 |
| MAN 14V48/60CR (kW) | 16,800 | 16,800 |
| MAN 16V48/60CR (kW) | 19,200 | 19,200 |
| MAN 18V48/60CR (kW) | 21,600 | 21,600 |

Minimum centerline distance for twin engine installation: 4,800 mm

Last updated July 2018

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: 173.5 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 turbo-charging system

Engine automation and control
- MAN in-house developed engine attached safety and control system MAN SaCoS

Fuel system
- Advanced 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

- MAN ECOMAP concept – using different IMO Tier II compliant injection maps to improve fuel economy
- Additional power take-off at engine free end available

MCR = Maximum continuous rating
SCR = Selective catalytic reduction
SFOC = Specific fuel oil consumption
* According to IMO E2 test cycle

All data provided in this document is non-binding. This data serves informational purposes only and is not guaranteed in any way. Depending on the subsequent specific individual projects, the relevant data may be subject to changes and will be assessed and determined individually for each project. This will depend on the particular characteristics of each individual project, especially specific site and operational conditions. Copyright © MAN Energy Solutions. D2366564-N1 Printed in Germany GGKM-AUG-18072

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