CATERPILLAR 3304 MARINE ENGINE

### MARINE ENGINE

<table>
<thead>
<tr>
<th>Description</th>
<th>Turbocharged</th>
<th>Natural Aspiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum (Flywheel)* BHP @ 2200 RPM</td>
<td>200</td>
<td>115</td>
</tr>
<tr>
<td></td>
<td>203</td>
<td>117</td>
</tr>
<tr>
<td>Intermittent (Flywheel)* BHP @ 2200 RPM</td>
<td>165</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>167</td>
<td>101</td>
</tr>
<tr>
<td>Continuous (Flywheel) BHP @ 2000 RPM</td>
<td>125</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>127</td>
<td>86</td>
</tr>
<tr>
<td>Continuous (Shaft) BHP @ 2000 RPM</td>
<td>121</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>123</td>
<td>84</td>
</tr>
<tr>
<td>Approx. Fuel Consumption Gal/Hr Full Cont. Shaft HP</td>
<td>7.4</td>
<td>5.2</td>
</tr>
<tr>
<td></td>
<td>28.1</td>
<td>19.7</td>
</tr>
</tbody>
</table>

*For Maximum & Intermittent Applications, consult Factory.

### DESCRIPTION

Four stroke cycle, Diesel
Number of cylinders .................................. In-Line 4
Bore and stroke: inches ................................ 4.75 x 6.00
                                      millimetres .................................. 121 x 152
Displacement: cu. in ................................ 425
                                      litres .................................. 7.0
Low idle speed ........................................ 650 RPM
Engine Rotation ........................................ SAE Standard
Approximate dry weight lb .......................... 1900
                                      kg .......................... 861
Engine (T) (NA*) ...................................... 1900
                                      861
Marine gear ........................................... 340
                                      154
Total .................................................. 2240
                                      1015
                                      2190
                                      994

Manuals - specs - Bolt torques
https://barringtondieselclub.co.za/
EXCESS FUEL SHOULD BE PIPED TO FUEL SUPPLY TANK TO ELIMINATE ENTRAINED AIR FROM SYSTEM.

https://barringtondieselclub.co.za/
STANDARD EQUIPMENT INCLUDES*

- Air Cleaner, Single-Stage, dry
- Alternator, Charging, 24 volt, 35 amp
- Breather, Crankcase
- Cooler, Lubricating Oil
- Drive, Tachometer, with Adapter
- Filters, Fuel, Lubricating Oil
- Flywheel and Flywheel Housing, SAE No. 2
- Gauge, Fuel Pressure
- Governor, Hydra-mechanical
- Lifting Eyes
- Paint, Caterpillar yellow
- Pumps, Fuel Priming, Jacket Water, gear-driven
- SAE Standard Rotation
- Service Meter
- Starting, Electric, 24-volt
- Supports
- Cooler, Marine Gear Oil
- Lines, Flexible Fuel
- Fuel Ratio Control
- Gear, Reverse and Reduction, Twin Disc MG506, includes propeller shaft flange.
- Governor Control Lever
- Heat Exchanger, installed, removable tube bundle.
- Manifold, Exhaust, Copper Nickel Watercooled
- Pump, Auxiliary (Sea Water), Gear-Driven
- Shutoff, Rack Solenoid
- Tank, Expansion

*Option of Engine only can be specified

ATTACHMENTS

- Rain cap, air cleaner, service indicator.
- Engine mounted controls, positive locking and vernier options, remote actuated, single cable, right side.
- Pilot house controls, single and two-lever, cable and fittings.
- Keel cooling conversion (excludes keel cooler).
- Exhaust fittings, elbows, water cooled elbows, mufflers for horizontal and vertical installations.
- Primary fuel filters
- Electric and mechanical tachometers, single and dual engines.
- Instrument panels, engine mounted or for pilot house, electric or mechanical instrumentation.
- Auxiliary drives, gear and pulley driven.
- Front enclosed clutch, Twin-Disc.
- Alarm switch, oil pressure and water temperature.
- Air starting motor, includes fuel priming pump, air receiver, pressure reducing air valve.
- Hydraulic starting.
- Battery sets for electric starting, glow plugs.
- Bilge and deck-washing pumps.
RATING CURVES—SHAFT HORSEPOWER

**TURBOCHARGED**  **NATURALLY ASPIRATED**

<table>
<thead>
<tr>
<th>shp</th>
<th>180</th>
<th>160</th>
<th>140</th>
<th>120</th>
<th>100</th>
<th>80</th>
<th>60</th>
<th>40</th>
</tr>
</thead>
<tbody>
<tr>
<td>rpm</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>

**RATINGS:**

**INTERMITTENT** is the horsepower and speed capability in applications having variable speed and/or load requirements.

**CONTINUOUS** is the horsepower and speed capability that can be utilized without interruption or load cycling.

**OTHER RATINGS:** Published intermittent and continuous ratings are a general guide for world-wide use over a broad application range. Other ratings, yielding higher performance and economic return, are available to meet the requirements of particular applications.

Intermittent and continuous metric performance at 736mm (28.97 In. Hg.) and 20°C (68°F) — DIN 6270.

Fuel consumption is based on fuel oil having a HHV of 19,590 btu/lb (45,570 kJ/kg) and weighing 7.076 lb. per U.S. Gal. (848 gm per litre). Engine equipped with fuel, lube oil, and jacket water pumps.

**MARINE GEAR SPECIFICATIONS . . .**

**TWIN-DISC MG506**

- Adjustment-free oil-bathed multiple-disc sintered metal clutches . . . hydraulically controlled . . . separate clutch pack for forward and reverse.
- Gears in constant mesh, full power for both forward and reverse duty . . . twinning flexibility.
- Lubricant strained and cooled before entering pressurized system.
- Hardened, ground and honed gears.
- Come-Home lock-up feature.
- Warranted by Caterpillar.

**MARINE GEAR RATIOS**

<table>
<thead>
<tr>
<th>MARINE GEAR</th>
<th>GEAR RATIOS</th>
</tr>
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<tbody>
<tr>
<td>Twin-Disc MG506</td>
<td>1.97:1 Forward and Reverse</td>
</tr>
</tbody>
</table>

□ Certification by major marine classification societies is available.
□ Auxiliary-power engine configurations can be specified. Consult your application specialist.

http://www.barringtondieselclub.co.za/