

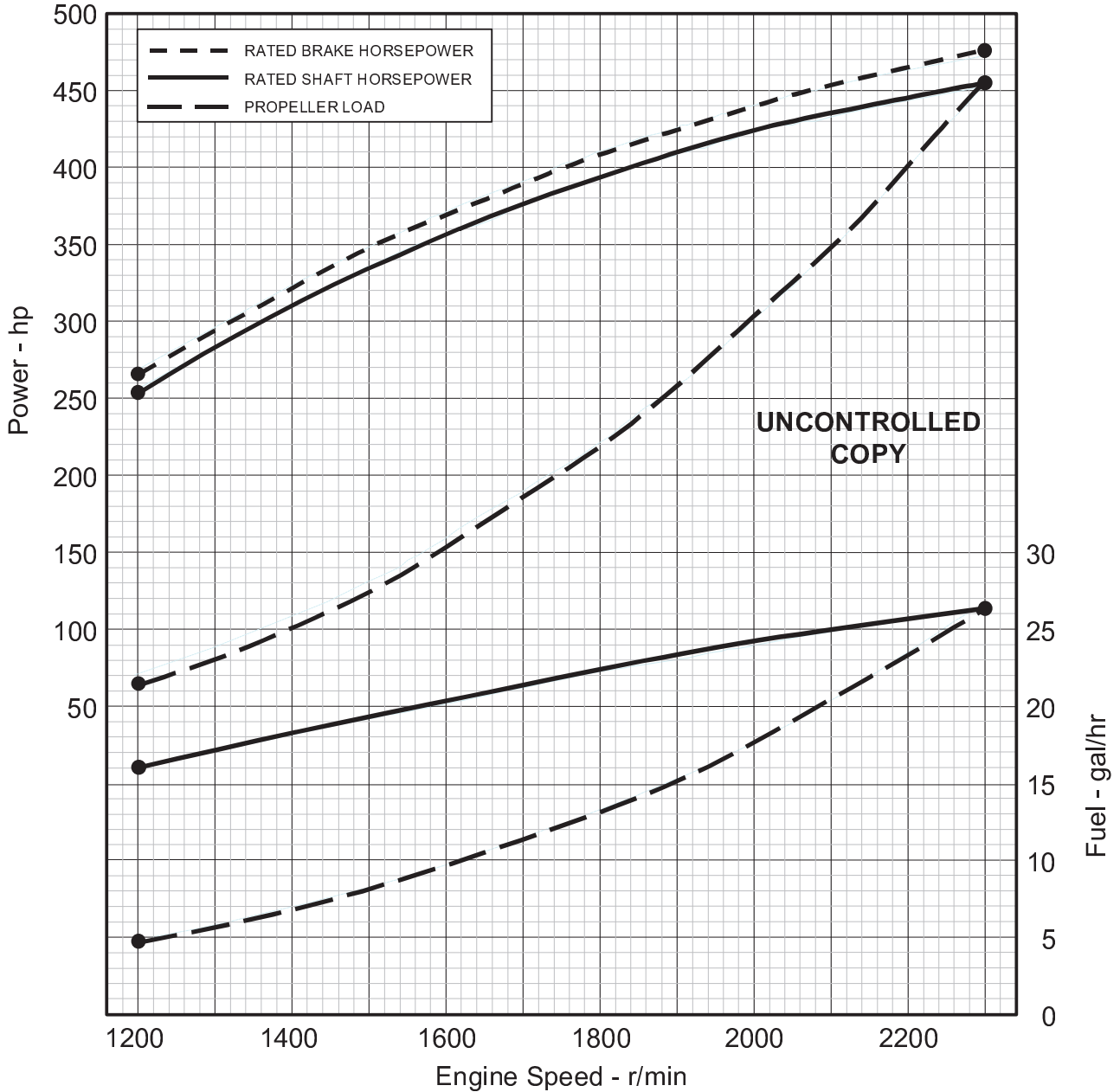


Marine Power

Model: 6V-92TA

Rating: 475 bhp (354 kW) @ 2300 r/min
455 shp (339 kW) @ 2300 r/min

Marine
Maximum
Net Power



| | | |
|--|--|---|
| <p>Power output guaranteed within 5% SAE J1228 conditions: 77°F (25°C) air inlet temperature; 29.31 in. Hg (99kPa) dry barometer; 100°F (38°C) fuel inlet temperature; .853 specific gravity at 60°F. Power rated in accordance with NMMA Procedure Air intake restriction: 10 in. H₂O (2.5 kPa) Exhaust Back Pressure: 15 in. H₂O (3.7 kPa)</p> | <p><i>Conversion Factors:</i> Power: kW = bhp x 0.746 Fuel: kg/kW · hr = lb/bhp · hr x 0.608 Torque: N · m = lb · ft x 1.356</p> | <p>Turbo: TW73 (1.03 A/R) Injector: 7025 Accessories: DD5091V Gear Alternator: 24V, 75A Raw Water Pump: Included</p> |
|--|--|---|

Certified by: JR Lebringer

Curve No. E4-8062-32-18
Rev. / Date: 3 / 12-23-97
Sheet No. 1 of 2

Performance Curve

MARINE SPECIFICATION SHEET

General Data

| | |
|--|-------------------------|
| Model..... | 8062-7490 |
| Number of Cylinders..... | 6 |
| Bore and Stroke – in. x in. (mm x mm)..... | 4.84 x 5.00 (123 x 127) |
| Displacement – in. ³ (L)..... | 552 (9.05) |
| Compression Ratio..... | 17.0:1 |
| Piston Speed – ft/min (m/min)..... | 1917 (584) |
| Exhaust Valves..... | 4 |
| Combustion System..... | DIRECT INJECTION |
| Engine Type..... | 63.5 ° VEE – 2 Cycle |
| Aspiration..... | TURBOCHARGED |

Configuration

| | |
|------------------------------------|-----------------|
| Injection Device..... | MUI |
| Turbocharger..... | TW73 (1.03 A/R) |
| Charge Air Cooling System..... | JWAC |
| Blower Type..... | 100% Bypass |
| Blower Drive Ratio..... | 2.05:1 |
| Low Idle Speed – r/min..... | 550 |
| Maximum No Load Speed – r/min..... | 2500 |
| Engine Crankcase Vent System..... | OPEN |

Physical Data

| | | |
|--|--------------|--------------|
| Size: | WITH GEAR | WITHOUT GEAR |
| Length – in. (mm)..... | 63.2 (1605) | 46.65 (1853) |
| Width – in. (mm)..... | 42.6 (1082) | 42.6 (1082) |
| Height – in. (mm)..... | 45.8 (1163) | 45.8 (1163) |
| Weight, Dry – lb (kg)..... | 3280 (1488) | 2795 (1268) |
| Weight, Wet – lb (kg)..... | 3511 (1593) | 3004 (1363) |
| Center of Gravity Distance: | | |
| From R.F.O.Fl/g/Blk. (x axis) – in. (mm)..... | 29.5 (749) | 9.46 (240) |
| Above Output Shaft (y axis) – in. (mm)..... | 7.4 (188) | 13.28 (337) |
| Right of Output Shaft (z axis) – in. (mm)..... | -1.65 (41.9) | -1.65 (41.9) |
| Installation Drawing..... | 23504647 | |
| Mechanical Data..... | E4-8000-32-1 | |

Marine Gear

| | |
|--|---------------|
| Type..... | DD5091V |
| Reduction Ratio..... | 2.95:1 |
| Lube Oil Capacity – qt (L)..... | 11.6 (11.0) |
| (marine gear must use straight viscosity oil) | |
| Gear Weight, Dry – lb (kg)..... | 485 (220) |
| Center of Gravity Distance: | |
| From Mounting Face (x axis) – in. (mm)..... | 7.69 (195) |
| Above Output Shaft (y axis) – in. (mm)..... | 1.82 (46) |
| Right of Output Shaft (z axis) – in. (mm)..... | -1.11 (-28.2) |

Fuel System

| | |
|---|--------------|
| Fuel Injector..... | 7025 |
| Injection Timing Height – in..... | 1.508 |
| Fuel Consumption – lb/hr (kg/hr)..... | 184.0 (83.5) |
| Fuel Spill Rate gal/hr (L/hr)..... | 68.0 (257.4) |
| Total Fuel Flow gal/hr (L/hr)..... | 94.3 (357) |
| Maximum Fuel Inlet Temperature – °F (°C)..... | 140 (60) |
| Maximum Fuel Pump Suction: | |
| Clean System – in. Hg (kPa)..... | 6 (20.3) |
| Dirty System – in. Hg (kPa)..... | 12 (41) |
| Fuel Filter Size, Primary – Microns..... | 30 |
| Fuel Filter Size, Secondary – Microns..... | 12 |
| Recommended Supply Line I.D. – in. (mm)..... | 0.5 (12.7) |
| Smoke Control Device/Setting..... | MOD. 0.454 |

Lubrication System

| | |
|--|-------------------------|
| Oil Pressure at Rated Speed – lb/in. ² (kPa)..... | 49-70 (338-483) |
| Oil Pressure at Low Idle – lb/in. ² (kPa)..... | 5.0 (34) |
| In Pan Oil Temperature – °F (°C)..... | 200 – 250 (93 – 121) |
| Oil Flow – gal/min (L/min)..... | 39 (148) |
| Oil Pan Capacity at Installation Angle | 0° 15° |
| High Limit – qt (L)..... | 19.2 (18.2) 18.2 (17.2) |
| Low Limit – qt (L)..... | 14.2 (13.4) 16.3 (15.4) |
| Total Engine Oil Capacity with Filters – qt (L)..... | 21.2 (20.1) 20.2 (19.1) |
| Maximum Installation Angle – Degrees..... | 15.0 |

Electrical System

| | |
|---|--------|
| Recommended Battery Capacity (CCA @ 0°F): | |
| 12 Volt System, Above 32°..... | 1900 |
| 12 Volt System, Below 32°..... | 2500 |
| 24 Volt System, Above 32°..... | 950 |
| 24 Volt System, Below 32°..... | 1250 |
| Maximum Resistance of Starting Circuit: | |
| 12 Volt System – ohms..... | 0.0012 |
| 24 Volt System – ohms..... | 0.002 |

Cooling System

| | |
|--|-----------------------|
| Engine Heat Rejection – Btu/min (kW)..... | 18330 (322.3) |
| Boost Cooler Heat Rejection – Btu/min (kW)..... | 3140 (55.2) |
| Engine Radiated Heat – Btu/min (kW)..... | 790 (13.9) |
| Coolant Flow: | |
| Fresh Water Flow – gal/min (L/min)..... | 185 (700) |
| Raw Water Flow – gal/min (L/min)..... | 92 (348) |
| Maximum Water Pump: | Fresh Water Raw Water |
| Inlet Restriction – in. Hg (kPa)..... | 3.0 (10.2) 5.0 (17.0) |
| Fresh Water Capacity – qt (L)..... | 80 (75.7) |
| Maximum Coolant Pressure | |
| (Exclusive of Pressure Cap) – lb/in. ² (kPa)..... | 18 (124) |
| Maximum Raw Water Pump Pressure – lb/in. ² (kPa)..... | 14 (97) |
| Maximum Top Tank Temperature – °F (°C)..... | 210 (99) |
| Recommended Raw Water Pipe I.D. | |
| Inlet – in. (mm)..... | 4.0 (152) |
| Outlet – in. (mm)..... | 3.0 (76) |
| Recommended Sea Strainer Size: | |
| (Max. Screen Opening – 2.0 mm) | |
| Simplex – in. (mm)..... | 3.0 (76) |
| Duplex – in. (mm)..... | 4.0 (102) |

Air System

| | |
|---|--------------|
| Maximum Temperature Rise | |
| (Ambient Air to Engine Inlet) – °F (°C)..... | 30 (16.7) |
| Maximum Air Intake Restriction: | |
| Clean Air Cleaner – in. H ₂ O (kPa)..... | 12 (3.0) |
| Dirty Air Cleaner – in. H ₂ O (kPa)..... | 20 (5.0) |
| Engine Air Flow – ft ³ /min (m ³ /min)..... | 1225 (34.7) |
| Air Box Pressure – in. Hg (kPa)..... | 67.5 (228.0) |
| Recommended Intake Pipe Dia. – in. (mm)..... | 6.0 (152) |
| Minimum Net Engine Room Vent Area, – in. ² (cm ²)..... | 118 (761) |
| Maximum Crankcase Pressure – in. H ₂ O (kPa)..... | 3.5 (0.87) |

Exhaust System

| | |
|--|-------------------|
| Exhaust Flow – ft ³ /min (m ³ /min)..... | 2470 (70.0) |
| Exhaust Temperature – °F (°C)..... | 600 (316) |
| Maximum Back Pressure – in. Hg (kPa)..... | 2.5 (8.4) |
| Recommended Exhaust Pipe Diameter: | Dry Wet |
| Single – in. (mm)..... | 5.0 (127) 6 (152) |
| Dual – in. (mm)..... | Not Applicable |

Performance Data

| | |
|---------------------------------------|--------------|
| BMEP – lb/in. ² (kPa)..... | 148.2 (1022) |
| Friction Power – fhp (kW)..... | 94 (45) |

| Engine Speed r/min | Brake Power bhp (kW) | Shaft Power shp (kW) | Rated Fuel Usage gal/hr (L/hr) | Rated BSFC lb/bhp-hr (g/kW-hr) |
|-----------------------|-------------------------|-------------------------|-----------------------------------|-----------------------------------|
| 2300 | 475 (354) | 455 (339) | 26.3 (99.6) | 0.387 (235) |
| 2100 | 453 (338) | 435 (325) | 24.8 (93.8) | 0.382 (232) |
| 1950 | 434 (324) | 417 (311) | 23.5 (88.9) | 0.378 (230) |
| 1800 | 410 (306) | 394 (294) | 22.2 (83.9) | 0.378 (230) |
| 1500 | 348 (260) | 334 (249) | 19.2 (72.8) | 0.386 (235) |
| 1200 | 266 (198) | 254 (189) | 16.0 (60.5) | 0.420 (256) |

| Engine Speed r/min | Prop Load shp (kW) | Prop Fuel Usage gal/hr (L/hr) | Prop BSFC lb/bhp-hr (g/kW-hr) |
|-----------------------|-----------------------|----------------------------------|----------------------------------|
| 2300 | 455 (339) | 26.3 (99.6) | 0.387 (235) |
| 2100 | 346 (258) | 20.1 (76.2) | 0.388 (236) |
| 1950 | 277 (207) | 16.2 (61.3) | 0.388 (236) |
| 1800 | 218 (163) | 13.1 (49.4) | 0.396 (241) |
| 1500 | 126 (94) | 8.1 (30.7) | 0.418 (254) |
| 1200 | 65 (48) | 4.7 (17.8) | 0.455 (277) |

Emissions Data

| | |
|--|---------------|
| Smoke, Rated Speed – Bosch Number..... | 1.0 |
| Noise – dB(A) @ 1..... | 101.5 |
| Additional Noise Data..... | Not Available |
| NO _x – g/hr..... | 3515 |
| CO – g/hr..... | 2200 |
| HC – gh/r..... | 21 |
| SO ₂ – g/hr..... | 785 |

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All values are at rated speed and power at SAE J1228 with standard engine hardware, unless otherwise noted.

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Rev. / Date: 3 / 12-23-97
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All information subject to change without notice.

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