

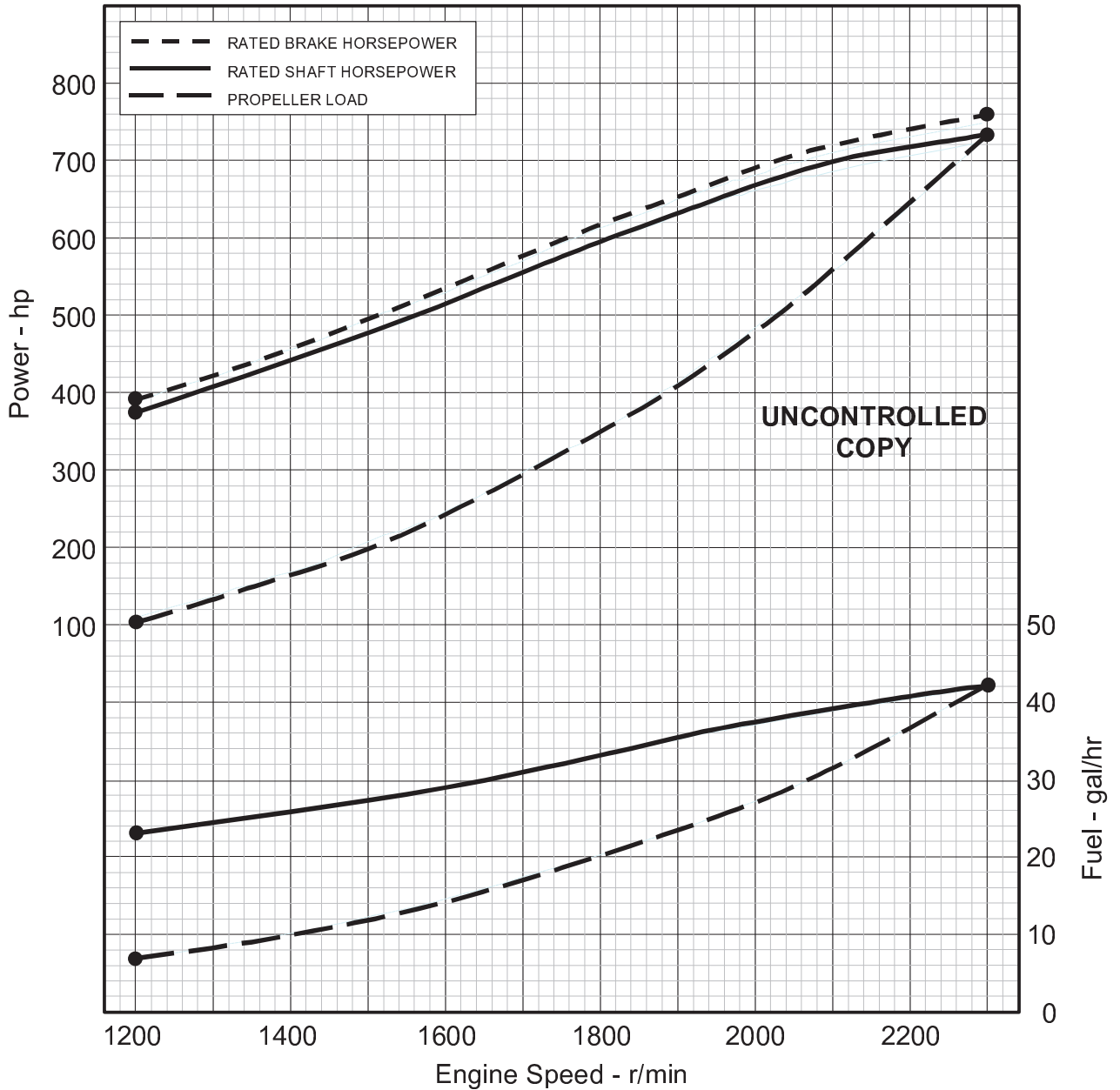


Marine Power

Model: 8V-92TA DDEC®

Rating: 760 bhp (567 kW) @ 2300 r/min
735 shp (548 kW) @ 2300 r/min

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>Conversion Factors: 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: TW7302 (1.03 A/R) Injector: 5236035 Accessories: DD5111V Gear Alternator: 24V, 65A Raw Water Pump: Included</p>
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Certified by: TJMOORE

Curve No. E4-8082-32-21
Rev. / Date: 7 / 10-26-98
Sheet No. 1 of 2

Performance Curve

MARINE SPECIFICATION SHEET

General Data

Model	8082-7K00
Number of Cylinders	8
Bore and Stroke – in. x in. (mm x mm)	4.84 x 5.00 (123 x 127)
Displacement – in. ³ (L)	736 (12.1)
Compression Ratio	15.0:1
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	TW7302 (1.03 A/R)
Charge Air Cooling System	JWAC
Blower Type	Dual Bypass
Blower Drive Ratio	2.60:1
Low Idle Speed – r/min	400
Maximum No Load Speed – r/min	2400
Engine Crankcase Vent System	Open

Physical Data

Size:	WITH GEAR	WITHOUT GEAR
Length – in. (mm)	72.5 (1842)	57.07 (1297)
Width – in. (mm)	48.3 (1227)	48.3 (1227)
Height – in. (mm)	48.5 (1232)	48.5 (1232)
Weight, dry – lb (kg)	4200 (1905)	3675 (1653)
Weight, wet – lb (kg)	4505 (2043)	3956 (1794)
Center of Gravity Distance:		
From R.F.O. Flg/Blk. (x axis) – in. (mm)	34.5 (876)	19.3 (490)
Above Output Shaft (y axis) – in. (mm)	13.1 (333)	7.0 (178)
Right of Output Shaft (z axis) – in. (mm)	-1.12 (-28.4)	-0.99 (25.1)
Installation Drawing	23504645	

Mechanical Data

E4-8000-32-1

Marine Gear

Type	DD5111V
Reduction Ratio	1.74:1
Lube Oil Capacity – qt (L)	13.0 (12.3)
(marine gear must use straight viscosity oil)	
Gear Weight, Dry – lb (kg)	555 (252)
Center of Gravity Distance:	
From Mounting Face (x axis) – in. (mm)	9.97 (253)
Above Output Shaft (y axis) – in. (mm)	4.18 (106)
Right of Output Shaft (z axis) – in. (mm)	-1.97 (-50.0)

Fuel System

Fuel Injector	5234925
Injection Timing Height – in	1.460
Fuel Consumption – lb/hr (kg/hr)	293.7 (133.2)
Fuel Spill Rate gal/hr (L/hr)	93.0 (352)
Total Fuel Flow gal/hr (L/hr)	135 (511)
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)

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°
High Limit – qt (L)	24.5 (23.2)
Low Limit – qt (L)	18.5 (17.5)
Total Engine Oil Capacity with Filters – qt (L)	27.5 (26.0)
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)	31880 (560.6)	
Boost Cooler Heat Rejection – Btu/min (kW)	5600 (98.5)	
Engine Radiated Heat – Btu/min (kW)	1350 (23.7)	
Coolant Flow:		
Fresh Water Flow – gal/min (L/min)	300 (1135)	
Raw Water Flow – gal/min (L/min)	107 (405)	
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)	108 (102.2)	
Maximum Coolant Pressure		
(Exclusive of Pressure Cap) – lb/in. ² (kPa)	17 (117)	
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)	2050 (58.1)
Air Box Pressure – in. Hg (kPa)	55.0 (185.7)
Recommended Intake Pipe Dia. – in. (mm)	6.0 (152)
Minimum Net Engine Room Vent Area. – in. ² (cm ²)	197 (1270)
Maximum Crankcase Pressure – in. H ₂ O (kPa)	3.5 (0.87)

Exhaust System

Exhaust Flow – ft ³ /min (m ³ /min)	4900 (138.8)	
Exhaust Temperature – °F (°C)	640 (338)	
Maximum Back Pressure – in. Hg (kPa)	2.5 (8.4)	
Recommended Exhaust Pipe Diameter:	Dry Wet	
Single – in. (mm)	8.0 (203)	10 (254)
Dual – in. (mm)	6.0 (152)	8.0 (203)

Performance Data

BMEP – lb/in. ² (kPa)	177.8 (1226)
Friction Power – fhp (kW)	125 (93)

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	760 (567)	735 (548)	42.0 (159.1)	0.386 (235)
2100	720 (537)	696 (519)	38.9 (147.3)	0.378 (230)
1950	676 (504)	654 (488)	36.3 (137.3)	0.375 (228)
1800	619 (462)	598 (446)	33.1 (125.5)	0.374 (228)
1500	498 (372)	481 (358)	27.4 (103.8)	0.385 (234)
1200	390 (291)	375 (280)	23.4 (88.4)	0.419 (255)

Engine Speed r/min	Prop Load shp (kW)	Prop Fuel Usage gal/hr (L/hr)	Prop BSFC lb/bhp-hr (g/kW-hr)
2300	735 (548)	42.0 (159.1)	0.386 (235)
2100	559 (417)	31.3 (118.7)	0.378 (230)
1950	448 (334)	25.3 (95.8)	0.380 (231)
1800	352 (263)	20.4 (77.1)	0.388 (236)
1500	204 (152)	12.5 (47.2)	0.407 (248)
1200	104 (78)	7.1 (27.0)	0.445 (270)

Emissions Data

Smoke, Rated Speed – Bosch Number	1.3
Noise – dB(A) @ 1	107.0
Additional Noise Data	Not Available
NO _x – g/hr	8000
CO – g/hr	3160
HC – g/hr	1330
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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