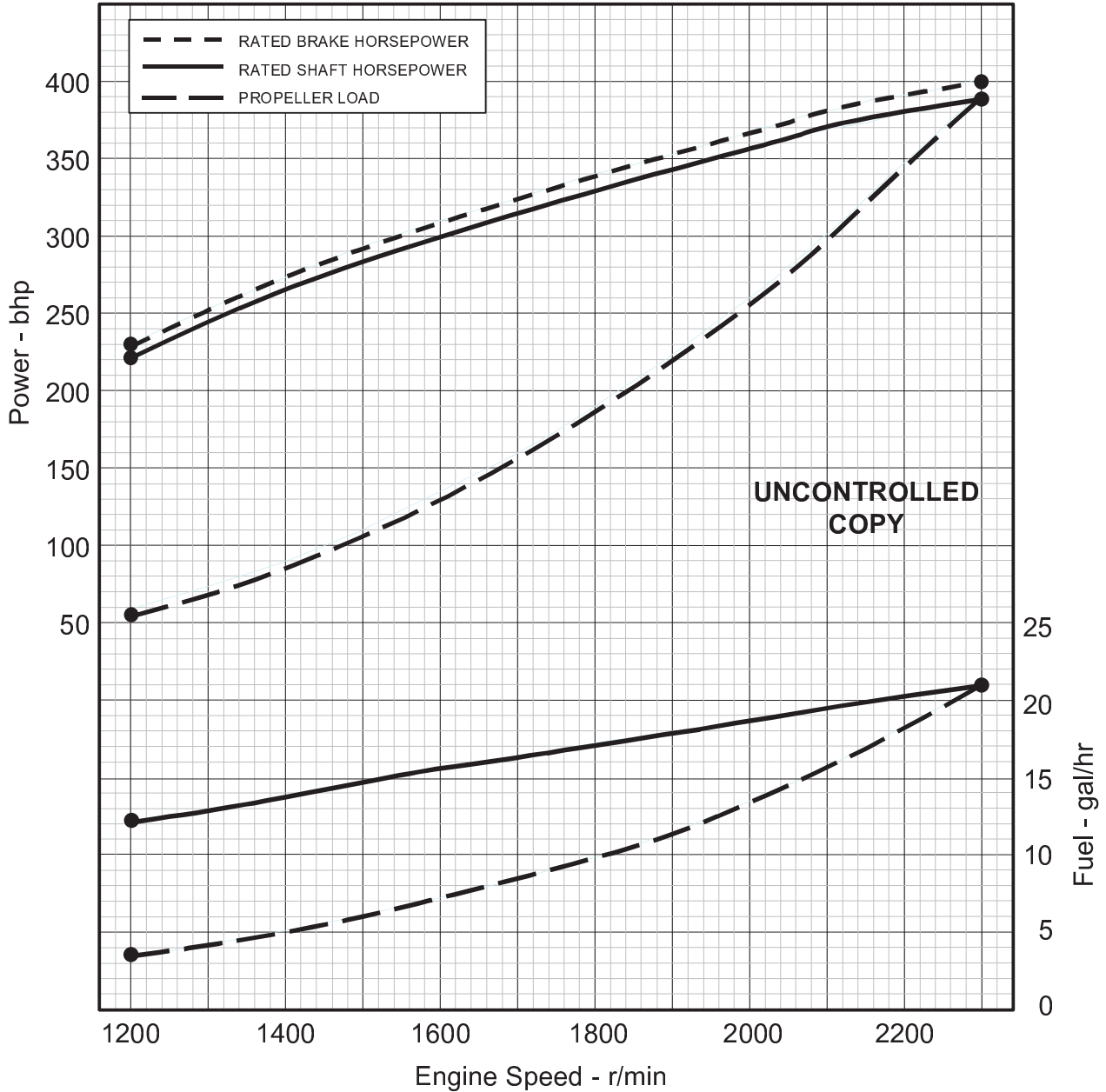




## Marine Power

**Model:** 6-71TI  
**Rating:** 400 bhp (298 kW) @ 2300 r/min  
 388 shp (289 kW) @ 2300 r/min

Intermittent  
 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. H<sub>2</sub>O (2.5 kPa)                  Exhaust Back Pressure: 15 in. H<sub>2</sub>O (3.7 kPa)</p>	<p><i>Conversion Factors:</i>                  Power: kW = hp x 0.746                  Fuel: L/hr = gal/hr x 3.785</p>	<p><b>Turbo:</b> TW7302 (1.03 A/R)  <b>Injector:</b> 7570  <b>Accessories:</b> DD-507-1  <b>Alternator:</b> 12V, 66A  <b>Raw Water Pump:</b> Not Included</p>
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Certified by: *JR Schringer*

Curve No. E4-1062-32-8  
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 Sheet No. 1 of 2

### Performance Curve

# MARINE SPECIFICATION SHEET

## General Data

Model	1062-5620, -7620
Number of Cylinders	6
Bore and Stroke – in. x in. (mm x mm)	4.25 x 5.00 (108 x 127)
Displacement – in. <sup>3</sup> (L)	426 (6.99)
Compression Ratio	17.0:1
Piston Speed – ft/min (m/min)	1917 (584)
Exhaust Valves	4
Combustion System	Direct Injection
Engine Type	Inline 2 Cycle
Aspiration	Turbocharged

## Configuration

Injection Device	MUI
Turbocharger	TW7302 (1.03 A/R)
Charge Air Cooling System	JWAC
Blower Type	Bypass
Blower Drive Ratio	2.00:1
Low Idle Speed – r/min	500
Maximum No Load Speed – r/min	2500
Engine Crankcase Vent System	CLOSED

## Physical Data

Size:		
Length – in. (mm)	72.2 (1834)	53.3 (1346)
Width – in. (mm)	34.0 (864)	34.0 (864)
Height – in. (mm)	40.1 (1019)	40.1 (1019)
Weight, dry – lb (kg)	2925 (1327)	2575 (1168)
Weight, wet – lb (kg)	3101 (1406)	2737 (1241)
Center of Gravity Distance:		
From R.F.O. Flange/Blk. (x axis) – in. (mm)	30.5 (775)	13.98 (355)
Above Crankshaft (y axis) – in. (mm)	8.10 (206)	9.0 (229)
Right of Crankshaft (z axis) – in. (mm)	-0.12 (-3.0)	0.01 (0.25)
Installation Drawing	23505514 (Ref.)	
Mechanical Data	E4-1000-32-1	

## Marine Gear

Type	DD507-1	
Reduction Ratio	1.77:1	
Lube Oil Capacity – qt (L)	7.4 (7.0)	
(marine gear must use straight viscosity oil)		
Gear Weight, Dry – lb (kg)	350 (159)	
Center of Gravity Distance:		
From Rear Face of Flange (x axis) – in. (mm)	30.5 (775)	
Above Output Shaft (y axis) – in. (mm)	8.10 (206)	
Right of Output Shaft (z axis) – in. (mm)	-1.2 (-3.0)	

## Fuel System

Fuel Injector	7570
Injection Timing Height – in.	1.515
Fuel Consumption – lb/hr (kg/hr)	146.1 (66.3)
Fuel Spill Rate gal/hr (L/hr)	77.4 (293)
Total Fuel Flow gal/hr (L/hr)	98.3 (372.1)
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. <sup>2</sup> (kPa)	42-55 (290-379)
Oil Pressure at Low Idle – lb/in. <sup>2</sup> (kPa)	5.0 (34)
In Pan Oil Temperature – °F (°C)	200 – 250 (93 – 121)
Oil Flow – gal/min (L/min)	40 (151)
Oil Pan Capacity at Installation Angle	0° 9°
High Limit – qt (L)	29.0 (27) 29.0 (27)
Low Limit – qt (L)	25.0 (24) 25.0 (24)
Total Engine Oil Capacity with Filters – qt (L)	32.0 (30) 32.0 (30)
Maximum Installation Angle - Degrees	9.0

## Electrical System

Recommended Battery Capacity (CCA @ 0°F):	
12 Volt System, Above 32°	950
12 Volt System, Below 32°	1250
24 Volt System, Above 32°	475
24 Volt System, Below 32°	625
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)	14600 (256.7)
Boost Cooler Heat Rejection – Btu/min (kW)	Not Applicable
Engine Radiated Heat – Btu/min (kW)	670 (11.8)
Coolant Flow:	
Fresh Water Flow – gal/min (L/min)	97 (367)
Raw Water Flow – gal/min (L/min)	Not Applicable
Maximum Water Pump:	
Inlet Restriction – in. Hg (kPa)	3.0 (10.2)
Fresh Water Capacity – qt (L)	48 (45)
Maximum Coolant Pressure	
(Exclusive of Pressure Cap) – lb/in. <sup>2</sup> (kPa)	37 (255)
Maximum Raw Water Pump Pressure – lb/in. <sup>2</sup> (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 <sub>2</sub> O (kPa)	10 (2.5)
Dirty Air Cleaner – in. H <sub>2</sub> O (kPa)	15 (3.7)
Engine Air Flow – ft <sup>3</sup> /min (m <sup>3</sup> /min)	1085 (30.7)
Air Box Pressure – in. Hg (kPa)	60.0 (202.6)
Recommended Intake Pipe Dia. – in. (mm)	6.0 (152)
Minimum Net Engine Room Vent Area, – in. <sup>2</sup> (cm <sup>2</sup> )	104 (672)
Maximum Crankcase Pressure – in. H <sub>2</sub> O (kPa)	3.0 (0.75)

## Exhaust System

Exhaust Flow – ft <sup>3</sup> /min (m <sup>3</sup> /min)	2280 (64.6)
Exhaust Temperature – °F (°C)	645 (341)
Maximum Back Pressure – in. Hg (kPa)	2.5 (8.4)
Recommended Exhaust Pipe Diameter:	
Single – in. (mm)	6.0 (152) 8 (204)
Dual – in. (mm)	Not Applicable

## Performance Data

BMEP – lb/in. <sup>2</sup> (kPa)	161.8 (1116)
Friction Power – fhp (kW)	72 (54)

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	400 (298)	388 (289)	20.9 (79.2)	0.365 (222)
2100	379 (283)	368 (274)	19.5 (73.7)	0.359 (218)
1800	338 (252)	328 (244)	17.2 (64.9)	0.355 (216)
1600	308 (230)	298 (223)	15.6 (58.9)	0.353 (215)
1400	272 (203)	263 (196)	13.8 (52.3)	0.355 (216)
1200	229 (171)	221 (165)	12.1 (45.8)	0.369 (224)

Engine Speed r/min	Prop Load shp (kW)	Prop Fuel Usage gal/hr (L/hr)	Prop BSFC lb/bhp-hr (g/kW-hr)
2300	388 (289)	20.9 (79.1)	0.365 (222)
2100	295 (220)	15.7 (59.3)	0.359 (218)
1800	186 (139)	9.9 (37.5)	0.359 (218)
1600	131 (97)	7.3 (27.7)	0.376 (229)
1400	88 (65)	5.2 (19.7)	0.397 (241)
1200	55 (41)	3.6 (13.5)	0.426 (259)

## Emissions Data

Smoke, Rated Speed – Bosch Number	0.4
Noise – dB(A) @ 1	102
Additional Noise Data	Not Available
NO <sub>x</sub> – g/hr	3850
CO – g/hr	1600
HC – g/hr	55
SO <sub>2</sub> – g/hr	663

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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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