



Engine Performance Curve

Model: 6V-92TA

Rating: NET POWER - SEE BELOW

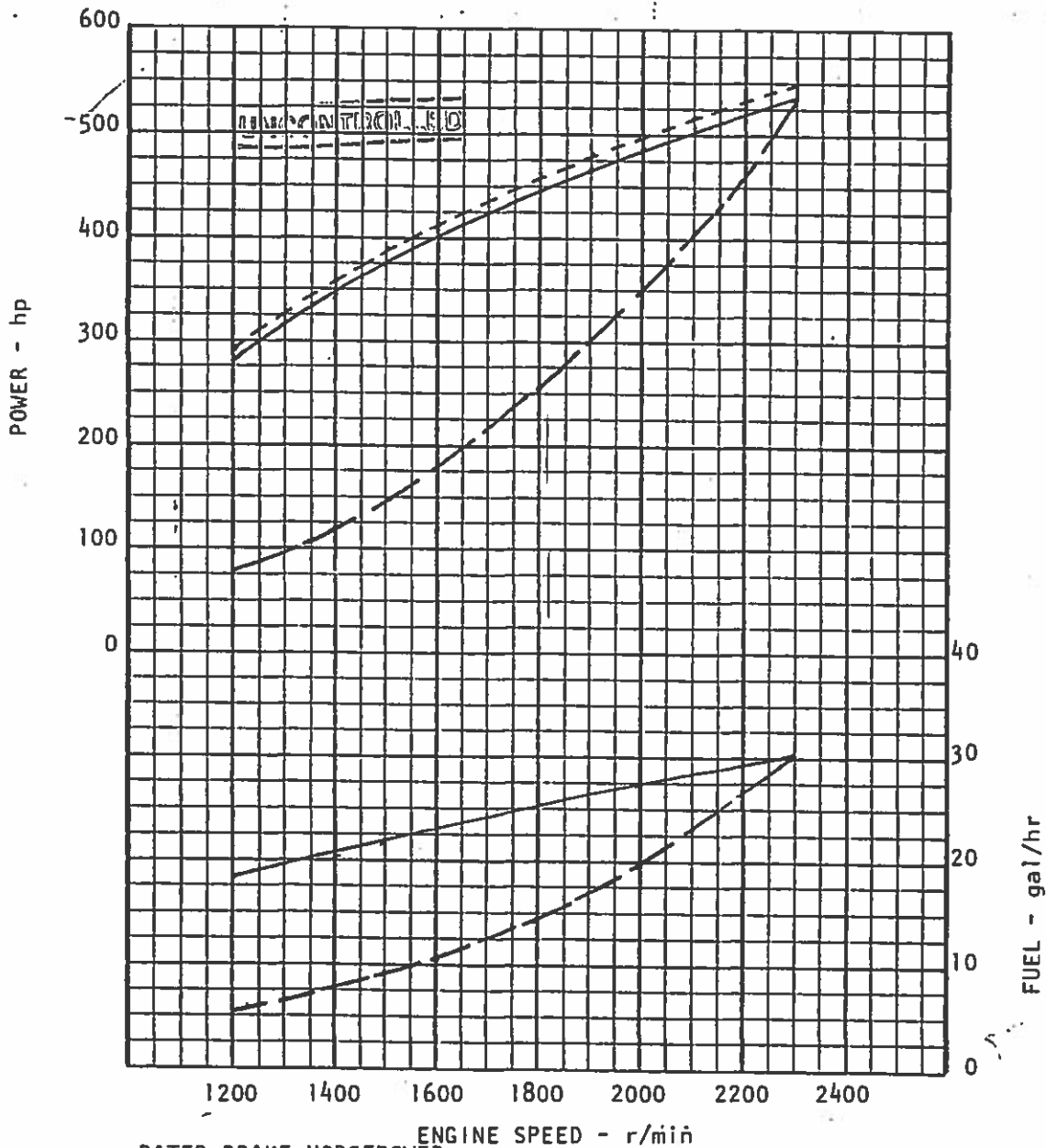
550 bhp @ 2300 R/MIN
535 shp @ 2300 R/MIN

Application: MARINE - MAXIMUM

TURBOCHARGER:

INJECTOR: TW83 (1.19 A/R)
7125 (1.508 Tmg)

Accessories: ALLISON M20 Gear
RAW WATER PUMP, ALTERNATOR 24V, 75A



--- RATED BRAKE HORSEPOWER
— RATED SHAFT HORSEPOWER
--- PROPELLER LOAD

Air Intake Restriction - In. H₂O (kPa) . . 10 (2.5)

Exhaust Back Pressure - In. H₂O (kPa) . . 15 (3.7)

• POWER OUTPUT GUARANTEED WITHIN 5% AT SAE J1349 CONDITIONS:
77°F (25°C) AIR INLET TEMPERATURE; 29.31 in. Hg (99kPa) DRY BAROMETER;
100°F (39°C) FUEL INLET TEMPERATURE (.853 SPECIFIC GRAVITY AT 60°F).
• CONVERSION FACTORS: POWER: kW = bhp × 0.746
FUEL: kg/kW-hr = lb/bhp-hr × 0.608
TORQUE: N-m = lb-ft × 1.356
• VALUES DERIVED ARE FROM CURRENTLY AVAILABLE DATA AND SUBJECT TO
CHANGE WITHOUT NOTICE.

CERTIFIED BY:

Mark A. Kuhn
STAFF ENGINEER

CURVE NO.

E4-8062-32-6

DATE: 4-18-86

REV./DATE: 7/5-15-91

SHT. 1 OF 4

MARINE ENGINE SPECIFICATION DATA

General Data

Model.....	8062-7403, -3403
Number of Cylinders.....	6
Bore and Stroke-in(mm).....	4.84x5.00(123x127)
Displacement-in (L).....	552(9.05)
Compression Ratio.....	17:1
Piston Speed-ft/min(m/min).....	1917(584)
Valves Per Cylinder	
Intake.....	NOT APPLICABLE
Exhaust.....	4
Combustion System.....	DIRECT INJECTION
Engine Type.....	63.5" VEE - 2 CYCLE
Aspiration.....	TURBOCHARGED

Configuration

Turbocharger.....	TW83(1.19 A/R)
Charge Air Cooling System.....	JWAC with Boost Cooler
Blower Type.....	100% - Standard - Bypass
Blower Drive Ratio.....	2.60:1
Low Idle Speed-r/min.....	550
Maximum No Load Speed-r/min.....	2500
Engine Crankcase Vent System.....	OPEN
Maximum Pressure-in H ₂ O(kPa).....	3.5(0.87)

Physical Data

	-7403	-3403
Size		
Length-in(mm).....	64.8(1647)	64.8(1647)
Width-in(mm).....	41.3(1048)	41.3(1048)
Height-in(mm).....	45.8(1164)	45.8(1164)
Weight, dry-lb(kg).....	3300(1497)	3300(1497)
Weight, wet-lb(kg).....	3447(1563)	3447(1563)
Center of Gravity Distance		
From R.F.O.F. (x axis)-in(mm).....	28.1(713)	28.1(713)
Above Output shaft (y axis)-in(mm).....	12.3(313)	12.3(313)
Right of Output Shaft (z axis)-in(mm).....	0.09(2.3)	-0.09(2.3)
Installation Drawing.....	23502499	23502500

Marine Gear

Type.....	ALLISON M20
Reduction Ratios.....	2.00:1
Lube oil Capacity approx. qts(litre)....	6(5.7)
(Marine gear must use straight viscosity oil)	

Fuel System

Fuel Injector/Timing.....	7125/1.508#
Fuel Consumption-lb/hr(kg/hr).....	211.6(96.0)
Fuel Spill Rate-gal/hr(L/hr).....	108.0(408.8)
Total Fuel Flow-gal/hr(L/hr).....	138.3(523.4)
Maximum Allowable Fuel Pump Suction	
Clean System-in Hg(kPa).....	6(20)
Dirty System-in Hg(kPa).....	12(41)
Fuel Filter Micron Size	
Primary - Micron.....	30
Secondary - Micron.....	12
Recommended Supply Line I.D.	
In(mm).....	0.5(12.7)

Lubrication System

Oil Pressure	
Rated Speed-lbf/in ² (kPa).....	49-70(338-483)
Low Idle-lbf/in ² (kPa).....	5(34)
In Pan Oil Temperature-°F(°C).....	200-250(93-121)
Oil Flow-gal/min(L/min).....	39(148)
Oil Pan Capacity	
High-qt(L).....	20(19)
Low-qt(L).....	16(15)
Total Engine Oil Capacity with	
filters-qt(L).....	22(21)
Maximum Installation Angle.....	15°

Emission Data

CO-g/hr.....	NOT AVAILABLE
HC-g/hr.....	NOT AVAILABLE
NO _x -g/hr.....	NOT AVAILABLE
SO _x -g/hr.....	960
Smoke - Bosch Number.....	1.1
Noise - dB(A) @ 1m.....	101.8

Advanced Camshaft Timing
Ref: E4PR-8062-32-5

All values at rated speed and power and with standard engine hardware unless otherwise noted.

Cooling System

Engine Heat Rejection-Btu/min(kW).....	19500(342.9)
Boost Cooler Heat Reject.-Btu/min(kW)...	3040(53.5)
Engine Radiated Heat-Btu/min(kW).....	970(17.1)
Max. Fresh Water Flow-gal/min(L/min)...	185(700)
Raw Water Flow-gal/min(L/min).....	92(348)
Maximum Water Pump Inlet Restriction	
Fresh water-in Hg(kPa).....	3.0(10.2)
Raw water-in Hg(kPa).....	5.0(17.0)
Fresh Water Capacity-qt(L).....	72(68)
Maximum Coolant Pressure, (Exclusive	
of Pressure Cap)-lbf/in ² (kPa).....	NOT AVAILABLE
Maximum raw water pump Pressure	
lbf/in ² (kPa).....	14(97)
Maximum Top Tank Temperature-°F(°C)....	210(99)
Suggested Raw Water Pipe Size - in(mm)...	2.5(64)
Suggested Sea Strainer Size	
Simplex - in(mm).....	3.0(76)
Duplex - in(mm).....	4.0(102)

Air System

Maximum Allowable Temperature Rise	
(Outside Air to Engine Inlet)-°F(°C)...	30(16.7)
Air Intake Restriction Maximum Limit	
Dirty Air Cleaner-in H ₂ O(kPa).....	15(3.7)
Clean Air Cleaner-in H ₂ O(kPa).....	10(2.5)
Engine Air Flow - ft ³ /min(m ³ /min).....	1400(39.6)
Engine Air Box/Manifold Pressure-	
in Hg(kPa).....	56.0(189.1)
Recommended Intake Pipe Dia.-in(mm)....	6.0(152)
Suggested min. engine room vent area	
(Max. engine room depression	
0.2 in. H ₂ O)-in ² (cm ²).....	134(867)

Exhaust System

Exhaust Flow-ft ³ /min(m ³ /min).....	2840(80.4)
Exhaust Temperature-°F(°C).....	630(332)
Maximum Allowable Back	
Pressure-in Hg(kPa).....	2.5(8.4)
Recommended Dry Exhaust Pipe Dia.	
Single-in(mm).....	5.0(127)
Dual-in(mm).....	NOT APPLICABLE

Electrical System

Recommended Battery Capacity(CCA @ 0°F)	
12 Volt System	
Above 32°F(0°C)-A.....	1900
Below 32°F(0°C)-A.....	2500
24 Volt System	
Above 32°F(0°C)-A.....	950
Below 32°F(0°C)-A.....	1250
Maximum Allowable Resistance of	
Starting Circuit	
12 volt system - ohm.....	0.0012
24 volt system - ohm.....	0.002

Performance Data

BNEP-lbf/in ² (kPa).....	171.7(1183)
Friction Power - rated speed-fhp(kW)...	94(45)

Engine Speed r/min	Power bhp(kW)	Power shp(kW)	Fuel gal/hr (liter/hr)	BSFC lb/bhp hr (g/kw hr)
2300	550(410)	535(399)	30.3(114.6)	.387(235)
2100	517(386)	506(378)	28.4(107.5)	.384(234)
1800	458(341)	448(334)	25.3(95.9)	.387(235)
1500	384(287)	375(280)	22.0(83.2)	.400(243)
1200	292(218)	284(212)	18.3(69.3)	.438(267)

Engine Speed r/min	PROP LQW shp(kW)	PROP Fuel gal/hr (liter/hr)	PROP BSFC lb/bhp hr (g/kw hr)
2300	535(399)	30.3(114.6)	.387(235)
2100	407(304)	22.9(86.7)	.383(233)
1800	256(191)	14.7(55.7)	.386(235)
1500	148(110)	9.2(34.6)	.407(248)
1200	76(57)	5.2(19.7)	.435(265)

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Sht. 2 of 4