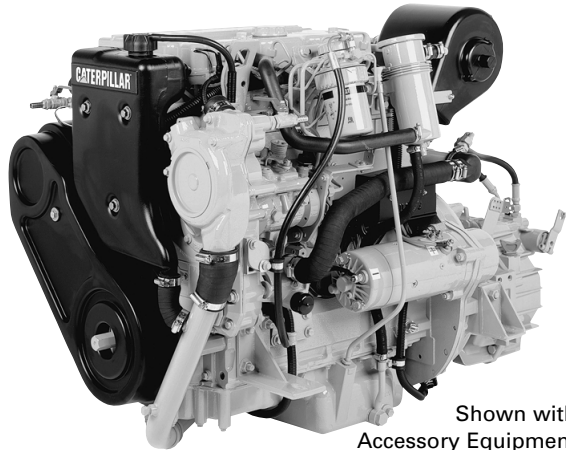




# Marine Propulsion 3054B

64 bkW @ 2400 rpm  
86 bhp @ 2400 rpm



Shown with  
Accessory Equipment

## SPECIFICATIONS

### I-4, 4-Stroke-Cycle-Diesel

Bore—mm (in).....	103 (4.06)
Stroke—mm (in) .....	127 (5.0)
Displacement—L (cu in).....	4.2 (258)
Aspiration .....	DINA
Rotation (from flywheel end).....	Counterclockwise
Compression Ratio.....	18.5:1
Capacity for Liquids—L (U.S. gal)	
Cooling System .....	19 (5.0)
Lube Oil System (refill).....	8.5 (2.25)
Oil Change Interval — hrs .....	250*
Caterpillar DEO 10W30 or 15W40	
Engine Weight (wet)	
(approx) — kg (lb) .....	418 (921)

\*Engines in E applications and some D applications where load factors are less than 30 percent may be capable of an extended service interval of up to 500 hours for lube oil and filter change.

## STANDARD ENGINE EQUIPMENT

### Air Inlet System

air cleaner/fumes disposal (closed system)

### Control System

mechanical governor

### Cooling System

gear-driven centrifugal jacket water pump, gear-driven self-priming sea water pump (heat exchanger cooled arrangements), heat exchanger with cupro-nickel tube bundle (heat exchanger cooled arrangements), de-aeration expansion tank, keel cooling connections (keel cooled arrangements), plate-type engine oil cooler in oil filter base, thermostat and housing, transmission oil cooler

### Exhaust System

water cooled exhaust manifold

### Flywheel and Flywheel Housing

SAE No. 3

### Fuel System

fuel filter

### Lube System

crankcase breather (closed system), oil filter, oil sump drain pump, LH service oil level gauge

### Protection System

shutoff solenoid (ETS)

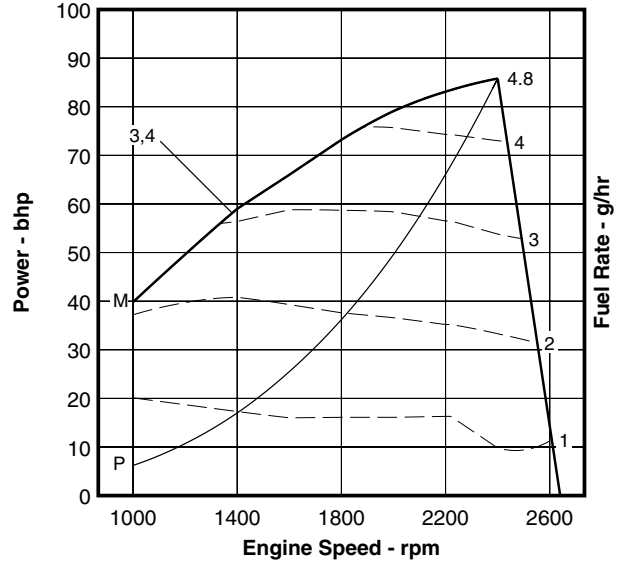
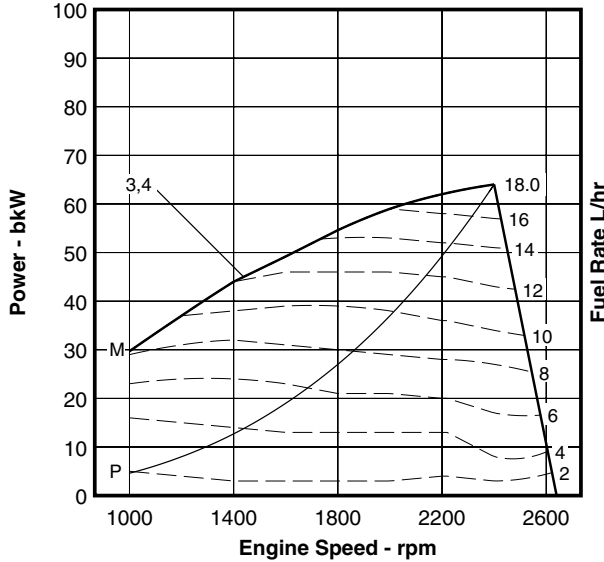
### General

English decals, lifting eyes, plastic wrap packaging, belt cover

*Power produced at the flywheel will be within standard tolerances up to 50°C (122°F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52°C (125°F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft power by 3% for propeller shaft power.*

**PERFORMANCE CURVES**

**C Rating — DM6323-00**



**64 kW**

**SI Metric**

**86 hp**

**English**

**Performance Data**

**Performance Data**

	Engine Speed rpm	Engine Power kW	BSFC g/kW-h	Fuel Rate L/h	Intake Air Flow m <sup>3</sup> /min	Exh Stack Temp °C	Exh Gas Flow m <sup>3</sup> /min
<b>Zone 3</b>	2400	64.0	236	18.0	4.3	533	12.2
<b>Curve: 3</b>	2000	59.0	227	16.0	3.8	526	10.6
	1600	49.2	224	13.1	3.2	482	8.5
	1200	37.0	229	10.1	2.6	435	6.4
	1000	29.7	233	8.3	2.3	415	5.5

	Engine Speed rpm	Engine Power hp	BSFC lb/hp-h	Fuel Rate gph	Intake Air Flow cfm	Exh Stack Temp °F	Exh Gas Flow cfm
<b>Zone 3</b>	2400	86	.388	4.8	152	992	431
<b>Curve: 3</b>	2000	79	.373	4.2	134	979	374
	1600	66	.368	3.5	113	900	300
	1200	50	.376	2.7	92	815	226
	1000	40	.383	2.2	81	779	194

<b>Max</b>	2400	64.0	236	18.0	4.3	533	12.2
<b>Limit</b>	2000	59.0	227	16.0	3.8	526	10.6
<b>Curve: 4</b>	1600	49.2	224	13.1	3.2	482	8.5
	1200	37.0	229	10.1	2.6	435	6.4
	1000	29.7	233	8.3	2.3	415	5.5

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<b>Limit</b>	2000	79	.373	4.2	134	979	374
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	1200	50	.376	2.7	92	815	226
	1000	40	.383	2.2	81	779	194

<b>Max Power</b>	2400	64.0	236	18.0	4.3	533	12.2
	2000	59.0	227	16.0	3.8	526	10.6
<b>Curve: M</b>	1600	49.2	224	13.1	3.2	482	8.5
	1200	37.0	229	10.1	2.6	435	6.4
	1000	29.7	233	8.3	2.3	415	5.5

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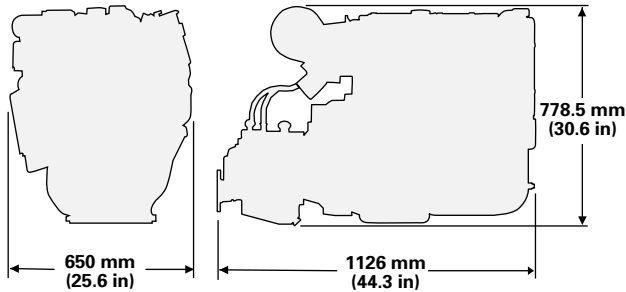
<b>Prop Demand</b>	2400	64.0	236	18.0	4.3	533	12.2
	2200	49.3	224	13.2	4.1	417	9.8
<b>Curve: P</b>	2000	37.0	223	9.8	3.9	339	8.2
	1800	27.0	226	7.3	3.7	277	6.9
	1600	19.0	241	5.4	3.3	227	5.7
	1400	12.7	290	4.4	3.0	185	4.7
	1200	8.0	350	3.3	2.7	206	4.3
	1000	4.6	412	2.3	2.3	319	3.3

<b>Prop Demand</b>	2400	86	.388	4.8	152	992	431
	2200	66	.369	3.5	145	783	346
<b>Curve: P</b>	2000	50	.366	2.6	138	642	289
	1800	36	.371	1.9	131	431	243
	1600	25	.396	1.4	116	443	201
	1400	17	.477	1.2	106	366	166
	1200	11	.576	0.9	95	403	152
	1000	6	.677	0.6	81	282	116

Brake Mean Effective Pressure .....756 kPa  
 Heat Rejection to Coolant ..... 58.7 kW  
 Heat Rejection to Exhaust ..... 48 kW  
 Heat Radiation to Atmosphere from Engine ..... 8.5 kW

Brake Mean Effective Pressure .....110 psi  
 Heat Rejection to Coolant ..... 3338.2 Btu/min  
 Heat Rejection to Exhaust ..... 2729.7 Btu/min  
 Heat Radiation to Atmosphere from Engine ..... 483.4 Btu/min

## DIMENSIONS



with ZF 45 A Transmission

## RATING DEFINITIONS AND CONDITIONS

**C RATING** – Vessels such as ferries, harbor tugs, fishing boats moving at higher speeds out and back (e.g. lobster, crayfish, and tuna), offshore service boats, and also displacement hull yachts and short trip coastal freighters where engine load and speed are cyclical.

**RATINGS** are based on SAE J1228/ISO8665 standard conditions of 100 kPa (29.61 in. Hg), 25°C (77°F), and 30% relative humidity. These ratings also apply at ISO3046/1, DIN6271/3, and BS5514 conditions of 100 kPa (29.61 in. Hg), 27°C (81°F), and 60% relative humidity. Ratings are valid for air cleaner inlet temperatures up to and including 50°C (122°F). Emissions are certified for sea water temperatures of 30°C (86°F) and lower. No derates or engine life penalties will result from sea water temperatures up to and including 42°C (108°F).

**FUEL RATES** are based on fuel oil of 35° API [16°C (60°F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29°C (85°F) and weighing 838.9 g/liter (7.001 lbs/U.S. gal). Fuel consumption shown with all oil, fuel, and water pumps, engine driven. For a “without pumps” condition, deduct approximately 0.5% for each pump not engine driven.

Additional ratings may be available for specific customer requirements. Consult your Caterpillar representative for additional information.

Performance data is calculated in accordance with tolerances and conditions stated in this specification sheet and is only intended for purposes of comparison with other manufacturers' engines. Actual engine performance may vary according to the particular application of the engine and operating conditions beyond Caterpillar's control.

TMI Reference No.: DM6323-00 (4-11-01)

Materials and specifications are subject to change without notice.

The International System of Units (SI) is used in this publication.

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