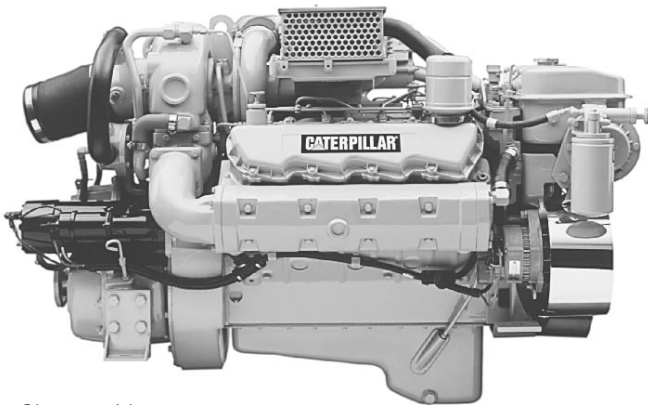




# Marine Engine

# 3208

157-324 kW/210-435 bhp  
2800 rpm



Shown with  
Accessory Equipment

## CATERPILLAR® ENGINE SPECIFICATIONS

V-8, Four-Stroke-Cycle Diesel

Emissions.....	IMO compliant
Bore — mm (in) .....	114.3 (4.5)
Stroke — mm (in) .....	127 (5.0)
Displacement — L (cu in) .....	10.4 (636)
Rotation (from flywheel end) .	Counterclockwise
Compression Ratio.....	16.5:1
435 hp.....	15.5:1
Capacity for Liquids — L (U.S. gal)	
Cooling System (engine only)	
DINA.....	47.3 (12.5)
DITA .....	56.0 (14.8)
Lube Oil System (refill)	
DINA.....	12.0 (3.2)
DITA .....	15.0 (4.0)
Oil Change Interval — hrs.....	250
Engine Weight, Net Dry (approx) — kg (lb)	
210 hp .....	722 (1592)
375 hp .....	772 (1702)
435 hp .....	899 (1982)

## STANDARD EQUIPMENT

### Air Intake

dry type, single stage air cleaner; AirSep for 435 & 375 hp Classic Editions

### Alternator

belt driven, 51 Amp, 12 Volt

### Cooling

thermostats, jacket water pump, auxiliary sea water pump, expansion tank, coolant recovery tank (DITA), marine gear oil cooler (DITA: sea water cooled, DINA: jacket water cooled), engine mounted heat exchanger

### Exhaust system

exhaust manifold and turbocharger, water cooled, 152 mm (6 in) round flanged outlet (DITA); exhaust manifold, water cooled, dual 64 mm (2.5 in) round flanged threaded outlets (DINA)

### Flywheel and flywheel housing

SAE No. 2, SAE No. 3

### Fuel

filter, priming pump

### Governor

mechanical

### Instrumentation

tachometer drive, wiring harness

### Lubricating

oil filter, filler, oil level gauge, crankcase breather (DITA), positive crankcase ventilation valve (DINA)

### Starting

12V electric

### Support

front

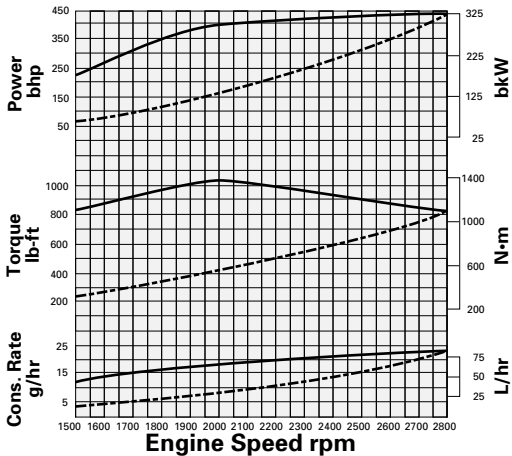
*Power produced at the flywheel will be within standard tolerances up to 50° C (122° F) combustion air temperature measured at the air cleaner inlet, and fuel temperature up to 52° C (125° F) measured at the fuel filter base. Power rated in accordance with NMMA procedure as crankshaft power. Reduce crankshaft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



### PERFORMANCE CURVES

Turbocharged-Aftercooled (DITA) — Separate Circuit Aftercooling 30° C (86° F) sea water

#### E Rating – 2800 rpm 324 bkW (435 bhp) 441 mhp



Cubic Prop Demand Curve Data  
(for displacement hulls only)

Speed rpm	Power bkW	Torque N-m	Fuel Cons g/bkW-hr	Fuel Rate L/hr
2800	325	1107	235	90.7
2600	260	954	217	67.3
2400	204	813	209	50.8
2200	157	683	206	38.6
2000	118	565	207	29.2
1800	86	457	215	22.0
1700	73	408	222	19.2
1600	61	361	229	16.6
1500	50	318	232	13.8

Speed rpm	Power bhp	Torque lb-ft	Fuel Cons lb/bhp-hr	Fuel Rate g/hr
2800	435	816	.386	24.0
2600	348	704	.357	17.8
2400	274	600	.344	13.4
2200	211	504	.339	10.2
2000	159	417	.340	7.7
1800	116	337	.353	5.8
1700	97	301	.365	5.1
1600	81	266	.376	4.4
1500	67	235	.381	3.6

TMI — TM9905-02  
Max Power Curve Data

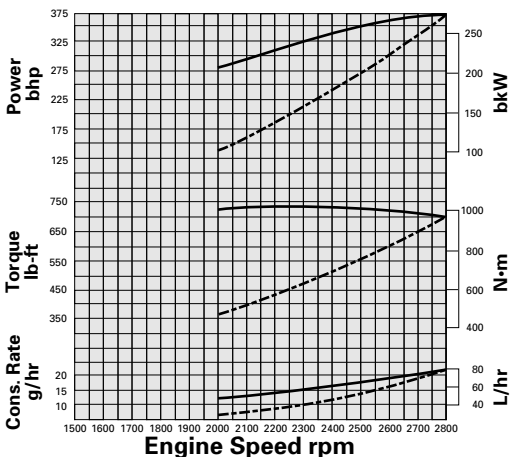
Power bkW	Torque N-m	Fuel Cons g/bkW-hr	Fuel Rate L/hr
325	1107	235	90.7
322	1184	221	85.1
315	1251	209	78.3
303	1314	205	73.9
293	1397	210	73.1
255	1352	214	65.1
221	1241	215	56.7
194	1158	217	50.2
174	1105	225	46.6

Power bhp	Torque lb-ft	Fuel Cons lb/bhp-hr	Fuel Rate g/hr
435	816	.386	24.0
432	873	.363	22.5
422	923	.344	20.7
406	969	.337	19.5
392	1030	.345	19.3
342	997	.352	17.2
296	915	.353	15.0
260	854	.357	13.3
233	815	.370	12.3

E RATING – Planing hull vessels such as pleasure craft, harbor patrol, harbor master, and some fishing and pilot boats.

#### E Rating – 2800 rpm 280 bkW (375 bhp) 380 mhp



Cubic Prop Demand Curve Data  
(for displacement hulls only)

Speed rpm	Power bkW	Torque N-m	Fuel Cons g/bkW-hr	Fuel Rate L/hr
2800	280	956	238	79.5
2600	224	824	225	60.1
2400	176	702	217	45.5
2000	102	490	202	24.5

Speed rpm	Power bhp	Torque lb-ft	Fuel Cons lb/bhp-hr	Fuel Rate g/hr
2800	375	703	.391	21.0
2600	300	606	.370	15.9
2400	236	516	.357	12.0
2000	137	360	.332	6.5

TMI — TM3131-03  
Max Power Curve Data

Power bkW	Torque N-m	Fuel Cons g/bkW-hr	Fuel Rate L/hr
280	956	238	79.5
269	991	229	73.5
254	1015	210	63.7
209	1000	199	49.6

Power bhp	Torque lb-ft	Fuel Cons lb/bhp-hr	Fuel Rate g/hr
375	703	.391	21.0
361	729	.376	19.4
341	746	.345	16.8
280	735	.327	13.1

E RATING – Planing hull vessels such as pleasure craft, harbor patrol, harbor master, and some fishing and pilot boats.

- Prop Demand ----- 3.0 Exponent (for displacement hulls only)
- Engine Performance Parameters: Power +/- 3%;  
Specific Fuel Consumption +/- 3%; Fuel Rate +/- 5%.

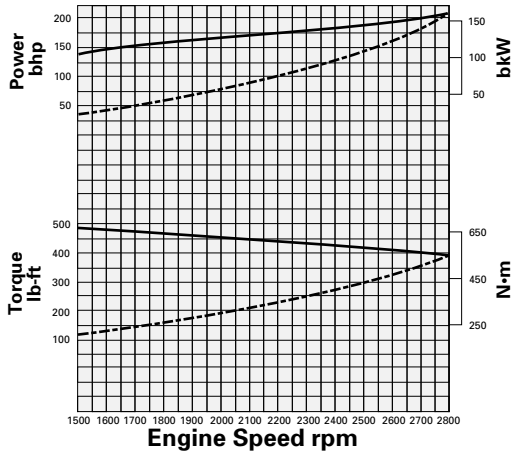
# 3208 MARINE ENGINE – 157-324 bkW



## PERFORMANCE CURVES

Naturally Aspirated (DINA) PRELIMINARY

**E Rating – 2800 rpm**  
157 bkW (210 bhp) 213 mhp



**Cubic Prop Demand Curve Data**  
(for displacement hulls only)

Speed rpm	Power bkW	Torque N·m
2800	157	534
2600	125	460
2400	99	392
2200	76	330
2000	57	272
1800	42	221
1700	35	197
1600	29	174
1500	24	153

Speed rpm	Power bhp	Torque lb-ft
2800	210	394
2600	168	339
2400	132	289
2200	102	243
2000	76	201
1800	56	163
1700	47	145
1600	39	128
1500	32	113

**Max Power Curve Data**

Speed rpm	Power bkW	Torque N·m
2800	157	534
2600	151	554
2400	144	574
2200	137	595
2000	129	615
1800	120	636
1700	115	645
1600	109	653
1500	104	663

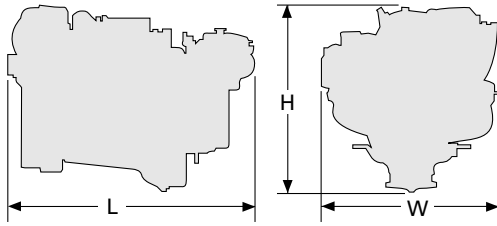
  

Speed rpm	Power bhp	Torque lb-ft
2800	210	394
2600	202	409
2400	193	423
2200	184	439
2000	173	454
1800	161	469
1700	154	476
1600	147	482
1500	140	489

**E RATING** – Planing hull vessels such as pleasure craft, harbor patrol, harbor master, and some fishing and pilot boats.

- Prop Demand ----- 3.0 Exponent (for displacement hulls only)
- Engine Performance Parameters: Power +/- 3%;  
Specific Fuel Consumption +/- 3%; Fuel Rate +/- 5%.

**DIMENSIONS**



	L		H		W	
	mm	in	mm	in	mm	in
DINA	1086	42.7	921	36.2	917	36.1
DITA	1271	50.0	1019	40.1	963	37.9

**RATING DEFINITIONS AND CONDITIONS**

**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.

**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).

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