

C12 ACERT[®] COMPACT

MARINE PROPULSION ENGINE

715 mhp

(705 bhp)

526 kW

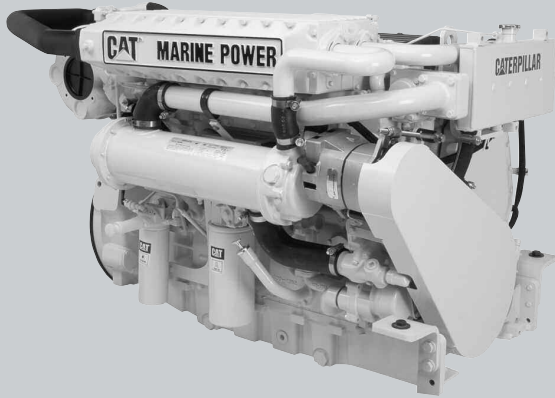


Image shown may not reflect actual engine

CATERPILLAR[®]

STANDARD ENGINE EQUIPMENT

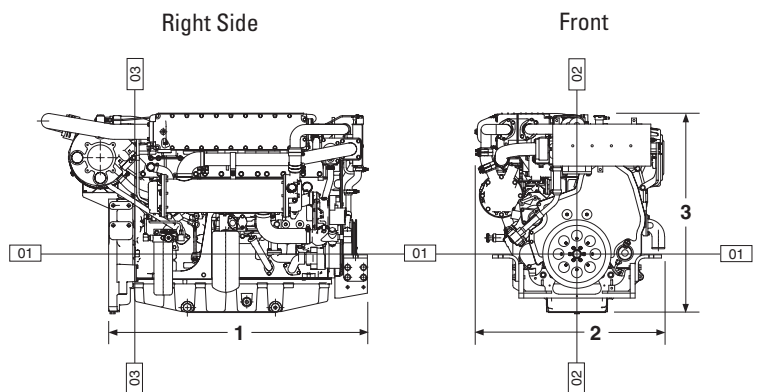
- Corrosion resistant sea water aftercooler
- MEUI fuel system
- Air cleaner/fumes disposal system
- Gear-driven jacket water pump
- Expansion tank
- Thermostat and housing
- Watercooled exhaust manifold and turbocharger
- Round flanged outlet
- Fuel transfer and fuel priming pump
- Electric service meter
- Crankcase breather
- Oil filter and oil level gauge (RH or LH service)
- Front support mounting system
- 11 tooth spline SAE A hydraulic pump drive
- 12 or 24 volt electronic shutdown
- Vibration damper and guard
- Customer wiring and service tool connector
- Variable engine wiring
- Center sump oil pan

SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

- EPA Tier 2 Commercial/Recreational, IMO compliant
- 12 L (732 cu. in.) displacement
- 2300 rpm rated engine speed.
- 130.0 mm (5.1 in.) bore x 150.0 mm (5.9 in.) stroke
- Turbocharged-aftercooled aspiration
- Electronically governed
- Heat exchanger cooled
- Refill capacity
 - Cooling system: 45 L (12.0 U.S. gal)
 - Lube Oil system: 28 L (7.5 U.S. gal)
- SAE No. 1 flywheel and flywheel housing
- 113 flywheel teeth
- Counterclockwise rotation from flywheel end
- 200-hour oil change interval
- Caterpillar Diesel Engine Oil 10W30 or 15W40

DIMENSIONS



ENGINE DIMENSIONS & WEIGHT

(1) Length to Flywheel Housing	1329.9 mm	52.36 in.
(2) Width	968.6 mm	38.13 in.
(3) Height	1008.7 mm	39.71 in.
Weight, Net Dry (approx)	1174 kg	2,588 lb

Note: Do not use these dimensions for installation design. See general dimension drawings for detail (Drawing #248-6176). For complete information, please refer to the Marine Spec Sheet LEHM3415-01.

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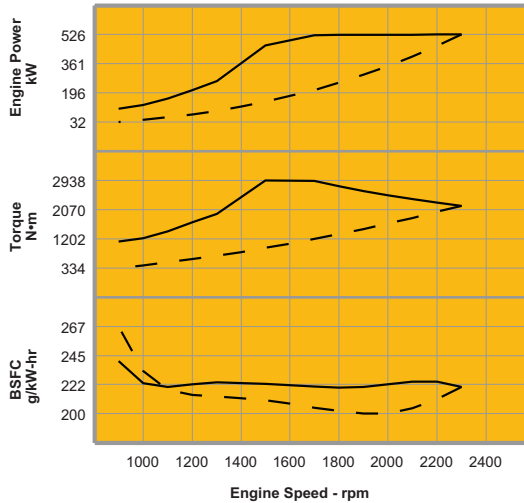
MARINE ENGINE PERFORMANCE

C12 TA ACERT

526 bkW (705 bhp) @ 2300 rpm

E Rating (High Performance) — DM7676-00

EPA T2CR/EU RCD

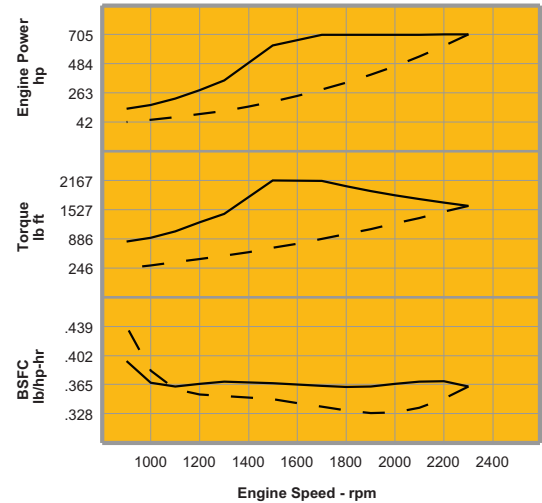


Metric: Maximum Power Prop Demand — — 526 kW

Performance Data

	Engine Speed rpm	Engine Power kW	Engine Torque N·m	BSFC g/kW-hr	Fuel Rate L/hr
Maximum Power Data	2300	526.0	2184	220.2	138.1
	2200	525.0	2279	224.9	140.7
	2100	523.1	2378	224.5	140.0
	2000	522.0	2493	222.3	138.3
	1900	522.0	2624	220.4	137.1
	1700	521.1	2927	220.8	137.1
	1500	461.5	2938	222.7	122.5
	1300	263.8	1938	223.9	70.4
	1200	211.4	1683	222.2	56.0
	1000	128.3	1225	223.3	34.1
900	105.5	1120	240.5	30.3	
Prop Demand Data	2300	526.0	2184	220.2	138.1
	2200	460.3	1998	210.9	115.7
	2100	400.4	1821	204.0	97.4
	1900	296.5	1490	200.0	70.7
	1800	252.1	1338	202.0	60.7
	1600	177.1	1057	207.7	43.8
	1500	145.9	929	210.4	36.6
	1300	95.0	698	213.0	24.1
	1200	74.7	594	214.2	19.1
	1000	43.2	413	232.9	12.0
900	31.5	334	266.8	10.0	

Cubic prop demand curve with 3.0 exponent for displacement hulls only.



English: Maximum Power Prop Demand — — 705 hp

Performance Data

	Engine Speed rpm	Engine Power hp	Engine Torque lb ft	BSFC lb/hp-hr	Fuel Rate gph
Maximum Power Data	2300	705.4	1611	.362	36.5
	2200	704.0	1681	.370	37.2
	2100	701.5	1754	.369	37.0
	2000	700.0	1839	.365	36.5
	1900	700.0	1935	.362	36.2
	1700	698.8	2159	.363	36.2
	1500	618.9	2167	.366	32.4
	1300	353.8	1429	.368	18.6
	1200	283.5	1241	.365	14.8
	1000	172.1	903	.367	9.0
900	141.5	826	.395	8.0	
Prop Demand Data	2300	705.4	1611	.362	36.5
	2200	617.3	1474	.347	30.6
	2100	536.9	1343	.335	25.7
	1900	397.6	1099	.329	18.7
	1800	338.1	987	.332	16.0
	1600	237.5	780	.341	11.6
	1500	195.7	685	.346	9.7
	1300	127.4	515	.350	6.4
	1200	100.2	438	.352	5.0
	1000	57.9	305	.383	3.2
900	42.2	246	.439	2.6	

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.