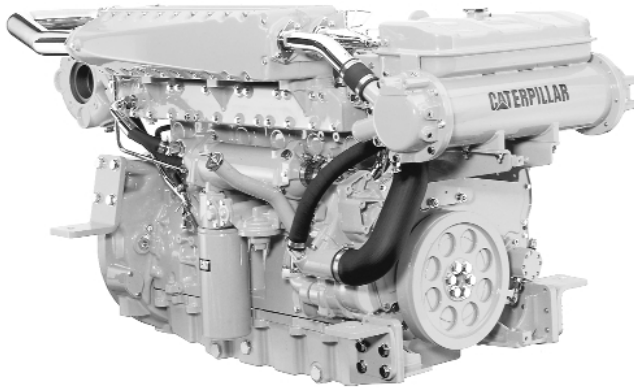


492 kW (660 bhp) 669 mhp @ 2300 rpm



Shown with
Accessory Equipment

STANDARD EQUIPMENT

Air Inlet System

Corrosion resistant sea water aftercooler; air cleaner/fumes disposal, closed system

Cooling System

Gear driven, self priming sea water pump with rubber impeller; gear driven jacket water pump; integral heat exchanger and expansion tank; thermostat and housing

Exhaust System

Watercooled manifold and turbocharger; round flanged outlet, 152 mm (6 in.)

Flywheel and Flywheel Housing

SAE No. 1 (113 teeth)

Fuel System

Fuel priming pump, fuel transfer pump, fuel filter — RH service or LH service, flexible fuel lines

Instruments

Electric service meter

Lube System

Crankcase breather; engine oil cooler; oil filter and oil level gauge — RH service or LH service; gear driven oil pump; center sump oil pan

Mounting System

Front support

Power Takeoffs

11 tooth spline, SAE A, hydraulic pump drive (57 ft-lbs. max. torque); crankshaft pulley, 345 mm (13.6 in), single groove, 15.88 mm (.63 in) width

General

Vibration damper and guard, Caterpillar yellow paint, lifting eyes, variable engine wiring, customer wiring connector, service tool connector

SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

Emissions	IMO compliant
Displacement	12 L (732 cu. in.)
Bore	130 mm (5.1 in.)
Stroke	150 mm (5.9 in.)
Aspiration	Turbocharged-Aftercooled
Governor	Electronic
Engine Weight, Net Dry (approx)	1177 kg (2595 lb)
Capacity for Liquids	
Cooling System	45 L (12.0 U.S. gal)
Lube Oil System (refill)	28 L (7.5 U.S. gal)
Oil Change Interval	250 hr
Caterpillar DEO 10W30 or 15W40	
Rotation (from flywheel end)	Counterclockwise

ACCESSORY EQUIPMENT

Air Starting Motor

12V 51 Amp, 12V 105 Amp, 24V 35 Amp, 24V 60 Amp Alternator

Coolant Recovery Tank

Crankshaft Pulley

Cruise Kits

Digital Tachometer

Dress-Up Kit

Electric Starting Motor

Engine Monitoring System

Engine-to-Engine Wiring Harness

Engine Vision Display System

Exhaust Elbow, Pipe, Flange, Flexible Fitting

Front Stub Shaft

Fuel Cooler

GPS Interface Module

4-Hole Instrument Panel

Jacket Water Heater

Low Profile Air Inlet Line and Shield

Marine Power Display System

Non-Self-Priming Sea Water Pump

OEM Wiring Harness

Primary Fuel Filter/Water Separator

Single Station Control Panel

Spare Parts Kit

Throttle Position Sensor

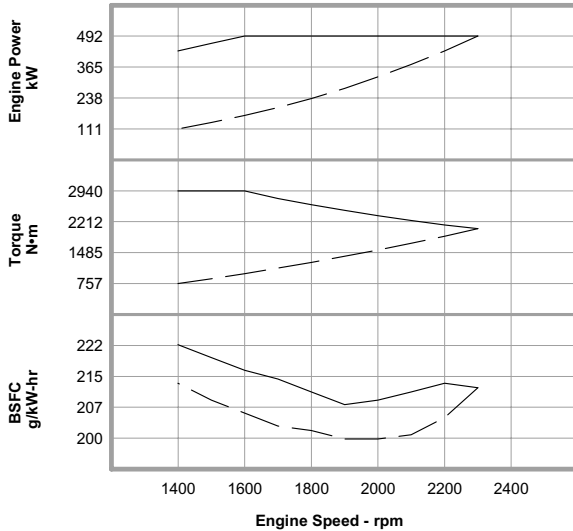
Transmission Oil Cooler

Vibration Isolation Mounting

PERFORMANCE CURVES

E Rating — DM7389-00

IMO Compliant

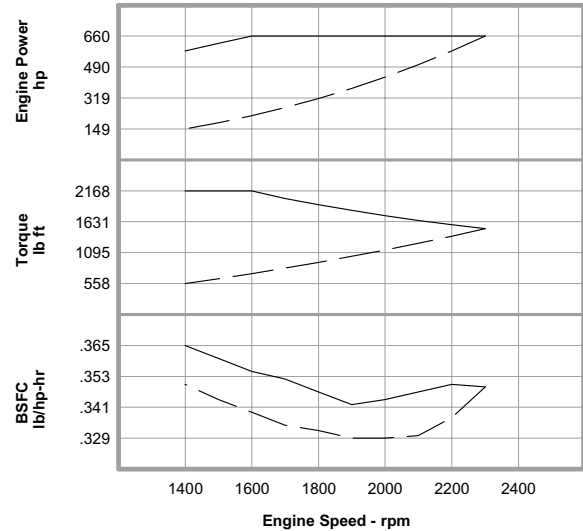


Metric **Maximum Power** **Prop Demand** **492 kW**

Performance Data

	Engine Speed rpm	Engine Power kW	Engine Torque N·m	BSFC g/kW-hr	Fuel Rate L/hr
Maximum Power Data	2300	492	2043	212.0	124.1
	2200	492	2135	213.0	124.6
	2100	492	2237	211.0	123.6
	2000	492	2349	209.0	122.4
	1900	492	2474	208.0	122.2
	1800	492	2610	211.0	123.6
	1700	492	2763	214.0	125.2
	1600	492	2936	216.0	126.7
	1500	462	2940	219.0	120.3
	1400	431	2938	222.0	114.2
Prop Demand Data	2300	492	2043	212.0	124.1
	2200	431	1869	205.0	105.3
	2100	375	1703	201.0	89.9
	2000	324	1545	200.0	77.1
	1900	277	1394	200.0	66.3
	1800	236	1251	202.0	56.6
	1700	199	1116	203.0	48.1
	1600	166	989	206.0	40.6
	1500	137	869	209.0	34.0
	1400	111	757	213.0	28.2

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

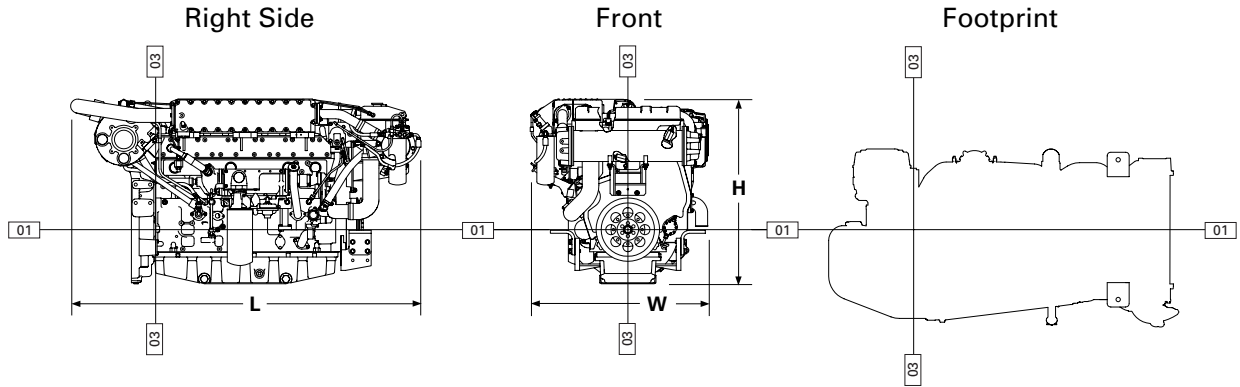


English **Maximum Power** **Prop Demand** **660 hp**

Performance Data

	Engine Speed rpm	Engine Power hp	Engine Torque lb ft	BSFC lb/hp-hr	Fuel Rate gph
Maximum Power Data	2300	660	1507	.349	32.8
	2200	660	1575	.350	32.9
	2100	660	1650	.347	32.7
	2000	660	1732	.344	32.3
	1900	660	1825	.342	32.3
	1800	660	1925	.347	32.7
	1700	660	2038	.352	33.1
	1600	660	2165	.355	33.5
	1500	619	2168	.360	31.8
	1400	578	2167	.365	30.2
Prop Demand Data	2300	660	1507	.349	32.8
	2200	577	1378	.337	27.8
	2100	502	1256	.330	23.7
	2000	434	1139	.329	20.4
	1900	372	1028	.329	17.5
	1800	316	923	.332	15.0
	1700	266	823	.334	12.7
	1600	222	729	.339	10.7
	1500	183	641	.344	9.0
	1400	149	558	.350	7.4

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.



DIMENSIONS*

	mm	in.
Overall Length	1904.6	75.0
Length from front to rear face of block	1442.4	56.8
Length from front to rear of flywheel housing	1573.9	62.0
Overall Height	1004.5	39.6
Height from crankshaft centerline to top of engine	710.5	28.0
Height from crankshaft centerline to bottom of oil pan	294.0	11.6
Overall Width	968.6	38.1
Width from crankshaft centerline to port side (left side)	438.6	17.3
Width from crankshaft centerline to starboard side (right side)	530.0	20.9
	Front	
Customer mounting hole diameter	24.0	1.0
Width from crankshaft centerline to mounting holes	380.0	15.0
Length from rear face of block to mounting holes	1111.7	43.8

*Illustrations and dimensions from drawing: 216-9705

RATING DEFINITIONS AND CONDITIONS

E Rating –

Typical Application... Planing hull vessels such as pleasure craft, harbor patrol, harbor master, and some fishing and pilot boats.
 Typical Hours Per Year 250 to 1000
 Time at Rated Speed Up to 8%
 Load Factor Up to 30%
 Typical Time at Full Load 1/2 out of 6 hours

Rated Speed 2300 rpm
 Maximum Cruise Speed..... 2100 rpm
 Maximum Continuous Cruise Speed... 1900 rpm

Power at declared engine speed is in accordance with ISO8665. Caterpillar maintains ISO9000 approved engine test facilities to assure accurate calibration of test equipment. Electronically controlled engines are set at the factory at the advertised power corrected to standard ambient conditions. The published fuel consumption rates are in accordance with ISO3046-1.

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/L (7.001 lb/U.S. gal).

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.: DM7389-00 (4-25-02)

Materials and specifications are subject to change without notice.

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

LEHM2622-00 (6-02)

Printed in U.S.A.

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