



Cat® C12 Diesel Marine Propulsion Engines, with ratings of 340-490 bhp (254-366 kW) at 1800-2300 rpm, meet IMO II emission standards with the exception of the 497 mhp (490 bhp) rating at 2300 rpm which meets IMO I emissions standards. The C12 takes full advantage of the electronically controlled unit injection fuel system, resulting in an environmentally friendly engine with outstanding performance and fuel economy. There is also a wide range of optional equipment available to meet the needs of your marine commercial or pleasure craft application.

Specifications

Power Rating	
Power Range	340-490 bhp (254-366 kW)

Engine Specifications		
Speed Range	1800-2300 rpm	
Emissions	IMO I, IMO II	
Aspiration	TA	
Bore	130 mm	5.1 in
Stroke	150 mm	5.9 in
Displacement	12 l	732 in ³
Rotation from Flywheel End	Counterclockwise	
Configuration	In-line 6, 4-Stroke-Cycle Diesel	

Dimensions & Weights		
Dry Weight	1174 kg	2588 lb
Height	1005 mm	39.5 in
Length	1574 mm	62 in
Width	969 mm	38.1 in

Benefits and Features

ADEM III Control System

More control inputs and outputs, capacity for additional features, additional monitoring capabilities, expansion capability for future enhancements

Most Advanced Electronic Control System

Adjustment free control of engine speed, customer defined operating characteristics, protection and warning system, optional display systems available

Future Enhancement Capability

The electronic control system has additional capacity for future enhancements to ensure a long useful engine life.

Redesigned Exhaust Manifold

Provides a smoother passage for improved exhaust gas flow to the turbocharger which leads to more usable energy and lower exhaust temperatures.

Easy Replacement for 3196

The C12 has the same physical size, same footprint, and the same connection points as the 3196 engine as well the same optional attachments.

Optional Monitoring System

Caterpillar offers several “plug and play” monitoring systems which display everything from the basic engine operating parameters to engine load factor and trip totals. Ask your local Caterpillar dealer for additional information on our Marine Power Display (MPD), Marine Analog Power Display (MAPD), and our Engine Vision Display (EVD).

Product Support

Trained technicians at over 1800 authorized service locations worldwide support Caterpillar products. Use our Internet Dealer Locator www.cat.com to identify the Caterpillar dealer location nearest to you.

Warranty

C-12 Marine Propulsion engines used in commercial applications are covered for 12 months from the date of delivery to the end user. Engines used in non-revenue producing pleasure craft applications are covered for 24 months, unlimited hours, from the date of delivery. Concurrently, specific engine components are covered for 60 months, unlimited hours, from the date of delivery to the end user.

Extended Service Coverage (ESC)

Optional engine protection coverage for up to 60 months from date of delivery may be purchased through your local Caterpillar dealer.

Standard Equipment

Air Inlet System

- Aftercooler - sea water; corrosion resistant, Air Cleaner/Fumes Disposal (closed system), Turbocharger, Jacket Water Cooled

Control System

- Electronic governing, Cold mode start strategy, Power compensation for fuel temperature, Programmable low idle, Electronic diagnostics and fault logging, Engine and transmission monitoring (speed, temperature, pressure), Fuel/air ratio control, Emergency stop switch (A&B ratings only)

Cooling System

- Thermostat and housing, Jacket water pump; gear driven, Sea water pump; rubber impeller; self-priming; gear-driven, Integral heat exchanger/expansion tank; removable tube bundle; replaceable copper-nickel tubes, Keel cooling - combined circuit (includes pipe thread flange kit)

Exhaust System

- Watercooled Manifold & Turbocharger

Flywheels & Flywheel Housings

- Flywheel; SAE No. 1; 113 teeth, Flywheel housing; SAE No. 1 (10 degree slant pad), SAE standard rotation

Fuel System

- Fuel filler; RH service on Port; LH service on Starboard, Fuel transfer pump, Fuel priming pump, Flexible fuel lines

Instrumentation

- Service meter, electric

Lube System

- Crankcase breather, Oil cooler, Oil filter; spin-on; RH service on Port; LH service on Starboard, Oil filler, Dipstick; RH service on Port; LH service on Starboard, Oil pump; gear driven

Mounting System

- Front support

Power Take-Offs

- Hydraulic pump drive; SAE A; 11 tooth spline, 57 ft-lbs max torque; counterclockwise as viewed from the rear of the engine looking into the pump drive and turns 1.41 x engine speed, Crankshaft pulley; 345 mm (13.6 in) single groove; 15.88 mm (.63in) width

Protection System

- Shutdown; electronic; 12 or 24 volt; energized to run

General

- Vibration damper, Lifting eyes, RH or LH service options, Literature, Variable engine wiring, Upper rear-facing customer wiring connector and ECAP connection, Electronic installation kit (connectors, pins, sockets)

Optional Equipment

Air Inlet System

- Low Profile Air Inlet Line, Shield (Air Inlet Line)

Charging System

- Charging Alternators, Voltmeter Guages, Voltmeter Guage Mounting, Alternator Mounting Group

Cooling System

- Sea Water Pump, Coolant Recovery Tank, Flange Kit

Exhaust System

- Flexible Fitting, Elbow, Dry Elbow, Watercooled Elbow, Exhaust Connection, Exhaust Outlet Pipe, EXH Outlet Flange, Rain Cap, Muffler

Fuel System

- Fuel Cooler, Fuel Connections, Primary Fuel Filter, Primary Fuel/Water Separator

Instrumentation

- OEM Wiring Harness, Engine to Engine Harness, Digital Tachometer, Tachometer Mounting, Magnetic Pickup, RH 4 Hole Instrument Panel, LH 4 Hole Instrument, Marine Power Display System, Marine Power Display Unit (for additional monitoring stations), Marine Power Display Bracket, Wiring Group, Transmission Sensors

Lube System

- Manual sump pump, Transmission oil cooler

Mounting System

- Vibration Isolators

Power Take-Offs



- Crankshaft Pulley, Front Stub Shaft, Front Stub Shaft & Pulley

Starting System

- Air Pressure Regulator, Air Start Silencer, Start Switch, Jacket Water Heater, Battery sets (24 volt - dry)

General

- Wiring Harness Removal, Belt Guard - Alternator, Belt Guard - Alternator Pulley, Filter Cover Kit

Packing

- Overseas Preservation, Engine Protective Cover, Storage Preservation, Export Packing

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