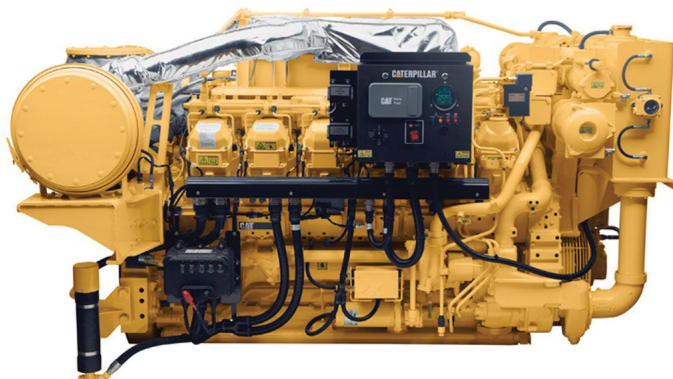




The Cat 3512C marine propulsion engine makes your investment work harder. Through a wide range of available power ratings (including High Displacement ratings), no required aftertreatment technology, and nominal rated BSFC fuel consumption - it will drive down your total cost of ownership. With a redesigned piston bowl shape to improve combustion, and improved fuel delivery, this engine is IMO II emissions compliant and committed to sustainable environmental development. Single-source support, the Caterpillar warranty, and industry-leading one-year warranty on parts make the 3512C a fully integrated marine power solution.

Specifications

Power Rating

Power Range	1280-2551 bhp (955-1902 kW)
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Engine Specifications

Speed Range	1200 rpm, 1600 rpm, 1800 rpm	
Configuration	Vee 12, 4-Stroke-Cycle Diesel	
Aspiration	TTA	
Bore	170 mm	6.69 in
Stroke	190 mm	7.48 in
Stroke (High Displacement)	215 mm	8.5 in
Displacement	51.8 L	3161 in ³
Displacement (High Displacement)	58.6 L	3574 in ³
Rotation (from flywheel end)	Counterclockwise or Clockwise	
Emissions	IMO II, EU IW	

Dimensions & Weights

Minimum Length	2590 mm	102 in
Maximum Length	2669 mm	105.1 in
Minimum Width	2037 mm	80.2 in
Maximum Width	2232 mm	87.9 in
Minimum Height	1904 mm	75 in
Maximum Height	2242 mm	88.3 in
Minimum Dry Weight	6532 kg	14400 lb
Maximum Dry Weight	7411 kg	16340 lb

Benefits and Features

Driving down total cost of ownership

A wide range of power ratings available, No aftertreatment technology required, Fuel consumption nominal rated BSFC

COMMITTED TO SUSTAINABLE DEVELOPMENT

Modified piston bowl shape to improve combustion and reduce emissions, Uses K-factor injector to align with predictive model analysis, Better electronic injection control using crank timing vs. cam timing, IMO Tier II Emissions Compliant, Lower IMAT = Lower NOx

IMPROVING WORKFORCE EFFICIENCY

Electronic governing (A4 ECU), Instrument panel shipped loose with Color Marine Power Display (MPD), Cold mode start strategy, Programmable low idle, Optional marine alarm and protection system

FULLY INTEGRATED MARINE POWER SOLUTION

Single-source support, Caterpillar warranty for all factory packaged components, Industry-leading one-year warranty on parts

Standard Equipment

Air Inlet System

- Separate circuit aftercooler core, corrosion resistant coated (air side)
- Powercore air cleaner

Control System

- Dual Caterpillar A4 Electronic Engine Control with Electronic Unit Injector Fuel System
- Rigid Wiring Harness (10 amp DC power required to drive Electronic Engine Control Module)

Exhaust System

- 3500C engines:

Fuel System

- Fuel transfer pump
- Electronically Controlled Unit Injectors

Instrumentation

- Electronic service meter, instrument panel (24V), start/stop switch, emergency stop button, maintenance due light, diagnostic light, warning light, maintenance clear switch, start motor magnetic switch, 15 and 3A breakers

Lube System

- Crankcase breather groups, Top mounted
- Oil filler and dipstick, LH or RH
- Oil pump, gear type
- 250 or 1000 hour sump oil pan

Mounting System

- Rails, engine mounting, ledge type, 203 mm x 203 mm (8 in x 8 in) or Front Trunnion

Power Takeoffs

- Accessory drives: Lower RH, lower LH
- Front housing, two-sided

Protection System

- A4 Electronic Monitoring System provides customer programmable engine derating strategies to protect against adverse operating conditions
- Emergency stop push button (located in Electronic Instrument Panel)
- Safety shutoff protection:

General

- Vibration damper and guard
- Lifting eyes
- NOTE: Engines for heat exchanger cooling do NOT include heat exchange

Flywheel and Flywheel Housing

- Flywheel, SAE No. 00, 183 teeth
- Flywheel housing, SAE No. 00

Cooling System

- Oil cooler
- Thermostats and housing, Full open temperature 92 C (198 F)
- Jacket water pump, gear driven, centrifugal
- Auxiliary fresh water pump
- Aftercooler system: If using glycol, up to maximum 20% glycol concentration is allowed

Instrumentation

- Graphical Unit (Color Marine Power Display) for analog or digital of:

Optional Equipment

Air Inlet System

- Air Inlet Adapters

Charging System

- Battery Chargers
- Charging Alternator

Control System

- Throttle Control

Cooling System

- Coolant Shunt Tank
- Cooling System Options

Exhaust System

- Flexible Fittings
- Elbows
- Flanges
- Flange and Exhaust Expanders
- Mufflers

Fuel System

- Fuel Cooler Heat Exchanger - Sea Water
- Primary Fuel Filter
- Fuel Level Switch
- Rigid Fuel Lines
- Flexible Fuel Lines

Instrumentation

- Communication Modules
- Color Marine Power Display System
- Pilot House Instrument Panels
- Marine Gear Sensors

Lube System

- Sump Pumps
- Lubricating Oil

Power Take-Offs

- Stub Shafts
- Crankshaft Pulleys
- Damper Guard
- Flexible Coupling and Guards

Marine Society Requirements

- Green Passport Documentation
- Spray Shielding

Protection System

- Shutoff and Alarm Contactors

Special Appearance Packages

- Special Appearance Packages with Chrome Covers
- Yacht Class Finish

Starting System

- Air Starting Motor Options
- Battery Sets - 24 Volt - Dry
- Battery Rack

Mounting System

- Engine Supports
- Vibration Isolation Mountings

Transitional Vibration Analysis

Packing

- Shrink Wrap Protection
- Storage Preservation with Glycol Solution/Vapor Corrosion Inhibitor



- Export Boxing
- Export Packaging

Parts Kits

The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, ADEM, EUI, S•O•S, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.