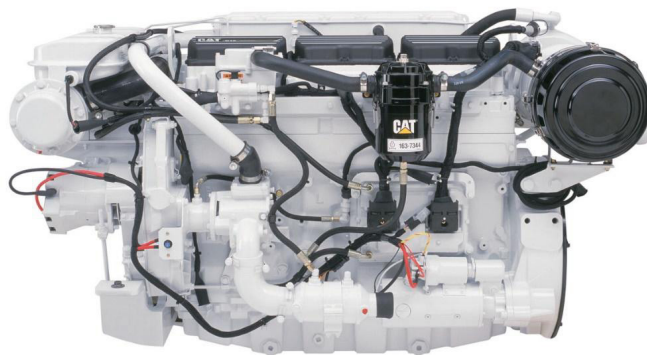


C12

Marine Propulsion Engine Commercial Applications



ENGINE SPECIFICATIONS

CONFIGURATION	In-line 6, 4-stroke cycle diesel
EMISSIONS	IMO I, IMO II
RATED ENGINE SPEED	1800, 2100, 2300 rpm
DISPLACEMENT	12 L (732 cu in)
ASPIRATION	Turbocharged - aftercooled
GOVERNOR	Electronic
FLYWHEEL HOUSING	SAE No. 1 (113 teeth)

BORE x STROKE	130 mm x 150 mm / 5.1 in x 5.9 in
REFILL CAPACITY LUBE OIL SYSTEM W/ OIL FILTER CHANGE	28 L (7.5 gal)
OIL CHANGE INTERVAL	250 hrs
ROTATION (from flywheel end)	Counterclockwise
COOLING	Heat exchanger and combined

KEY FEATURES & BENEFITS

- Advanced electronically controlled unit injection fuel system, resulting in an environmentally friendly engine with outstanding performance and fuel economy
- Ease of serviceability and maintenance
- 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.
- Global dealer network for unparalleled support
- Wide range of optional equipment to meet your commercial or pleasure craft needs.
- Easy upgrade from the 3196 engines with the same footprint, physical size and connection points

STANDARD EQUIPMENT

- Water-cooled turbocharger and exhaust manifold
- Electronic diagnostics and fault logging
- Gear-driven sea water pump (self-priming)
- Corrosion-resistant sea water aftercooler
- 12V or 24V electrical system
- Engine oil cooler
- Primary fuel filters
- Combined circuit keel cooling or integrated heat exchanger
- RH and LH locations service options for fuel and oil filters, as well as dipstick location for easily accessible service
- Compatible with Cat® displays
- Electronic control system has additional capacity for extra capabilities

OPTIONAL ATTACHMENTS

- Alternators – 24V / 60 or 105 amp, 12V / 105 amp
- Transmission gear oil cooler (engine mounted for HEX)
- Additional engine and transmission sensor packages
- “Plug and play” instrument panels and monitoring for engine operating parameters
- Electric starting motors – 12V or 24V
- Air starting motor
- Jacket water heater
- Fuel cooler
- PTO Drives – V-belt pulley stack, stub shaft

RATINGS & FUEL CONSUMPTION

IMO II

Rating	mhp	bhp	bkW	rpm	U.S. g/h	g/bkW-hr	IMO	U.S. EPA	EU	China
A	345	340	253.5	1800	16.1	204.4	II	NC	NC	NC
B	390	385	287	1800	18.0	201.9	II	NC	NC	NC
C	460	454	338.5	2100	21.3	202.2	II	NC	NC	NC
C	498	491	366	2300	23.3	205.0	I	NC	NC	NC
D	578	570	425	2300	27.0	204.9	I	NC	NC	NC
E	608	600	447.5	2300	28.4	204.0	I	NC	NC	NC
E	669	660	492	2300	33.0	215.6	II	NC	NC	NC
E	715	705	526	2300	35.0	214.0	II	NC	NC	NC

Rating Definitions:

A Rating (Unrestricted Continuous): Typical Applications: For Vessels operating at rated load and rated speed up to 100% of the time without interruption or load cycling (80% to 100% load factor). Typical operation ranges from 5000 to 8000 hours per year.

B Rating (Heavy Duty): Typical applications: For vessels operating at rated load and rated speed up to 80% of the time with some load cycling (40% to 80% load factor). Typical operation ranges from 3000 to 5000 hours per year.

C Rating (Maximum Continuous): Typical applications: For vessels operating at rated load and rated speed up to 50% of the time with cyclical load and speed (20% to 80% load factor). Typical operation ranges from 2000 to 4000 hours per year.

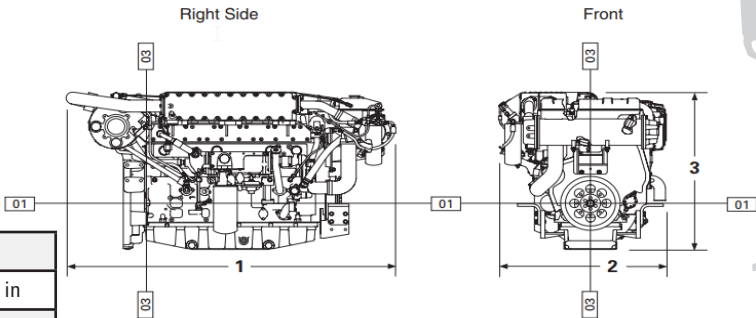
D Rating (Intermittent Duty): Typical applications: For vessels operating at rated load and rated speed up to 16% of the time (up to 50% load factor). Typical operating ranges from 1000 to 3000 hours per year.

E Rating (High Performance): Typical applications: For vessels operating at rated load and rated speed up to 8% of the time (up to 30% load factor). Typical operation ranges from 250 to 1000 hours per year.

ENGINE DIMENSIONS & WEIGHT

LENGTH	62.0 in / 1574 mm
HEIGHT	39.5 in / 1005 mm
WIDTH	38.1 in / 969 mm
DRY WEIGHT	2588 lb / 1174 kg

Preliminary Engine Dimensions		
(1) Length to Flywheel Housing	1573.9 mm	61.96 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



LEHM21659-00

© 2023 Caterpillar. All Rights Reserved. CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Corporate Yellow", the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

