

Image shown may not reflect actual configuration

Cat® C18

Marine Propulsion Engine

Commercial Applications

The Cat® C18 commercial propulsion engine delivers 454 – 803 bhp across a wide operating speed range of 1800–2100 rpm, built for high-utilization workboat operations. With an 18.1 L inline-6 diesel, separate circuit aftercooling, and meeting EPA Tier 3, IMO Tier II / III, EU Stage V, and China II emission standards, the C18 gives workboat operators the power, flexibility, and uptime they need, from harbor tugs and ferries to fishing vessels and offshore support.

Features and Benefits:

ENGINE DESIGN

- Electronic control system provides rapid torque and throttle response at low speeds, while maintaining fuel efficiency at high speeds
- Compatible with Cat displays for seamless vessel integration
- Available remote-mounted display panel with start, stop, and engine diagnostics
- Certified by all marine classification societies

VERSATILE POWER

- Optimized for commercial applications with a powerful 18.1L inline-6 diesel featuring WOSR for superior efficiency and responsiveness. Turbocharged with SCAC and flexible cooling options, it delivers reliable high output across diverse vessels and missions.

COMPACT DESIGN

- This compact sub-4,000 lb engine fits tight spaces with ease. Freshwater aftercooling reduces corrosion, delivering reliable performance for propulsion, auxiliary, and genset applications in demanding marine environments.

SERVICEABILITY

- Maximize uptime with advanced diagnostics and real-time engine monitoring for proactive maintenance. Supported by Caterpillar's global marine dealer network, ensuring reliable parts availability and expert service wherever you operate.

Specifications

Configuration	Inline 6, 4-Stroke Diesel	**Bore x Stroke**	145 mm (5.7 in) x 183 mm (7.2 in)
Emissions	IMO II, IMO III, U.S. EPA Tier 3, China Stage II, EU Stage V	**Refill Capacity Lube Oil System w/ Oil Filter Change**	49 L (13 gal) Shallow Pan 68 L (18 gal) Deep Pan
Rated Engine Speed	1500 / 1800 / 2100 rpm		
Displacement	18.1 L (1106 in^3)		
Aspiration	Turbocharged – Aftercooled	**Oil Change Interval**	250 / 500 hours
Governor	Electronic	**Rotation (from flywheel end)**	Counterclockwise
Flywheel Housing	SAE No. 0 (136 teeth) or SAE No. 1 (113 teeth)	**Cooling**	Heat Exchanger or Keel Cooled

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Ratings and Fuel Consumption

Commercial Propulsion Engines

Rating	mhp	bhp	bkW	rpm	U.S. g/h	g/bkW-h	IMO	U.S. EPA	EU	China
A	460	454	339	1800	21.9	208.0	II	NC	NC	NC
A	475	469	350	1800	23.1	212.3	II	T3C	RCD	C-II
A	485	479	357	1800	23.0	207.3	II	NC	NC	NC
A	591	583	435	1800	29.0	214.5	NC	NC	EU V	NC
A	608	600	447	1800	29.1	209.1	II	NC	NC	NC
B	560	553	412	2100	27.8	217.1	II	NC	NC	NC
B	680	670	500	2100	34.1	219.6	III	T3C	RCD/EU V[1]	C-II
C	725	715	533	2100	36.4	219.6	II	NC	NC	NC
D	786	775	577	2100	40.6	218.5	NC	T3C	NC	NC
D	814	803	599	2100	41.1	220.8	II	NC	RCD	C-II
D[2]	885	873	651	2200	43.7	216.0	II	NC	NC	NC
E	1015	1001	747	2300	52.1	224.5	II	T3R	RCD	C-II
E	1150	1136	847	2300	56.5	214.5	II	T3R	RCD	NC

IMO III and EU Stage V require exhaust aftertreatment

[1] Wide Operating Speed Range (WOSR) Heat Exchanger (32 °C Sea Water Temp), Keel Colled (52 °C SCAC Temp)

[2] Sea Water Aftercooled

Rating Definition:

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)

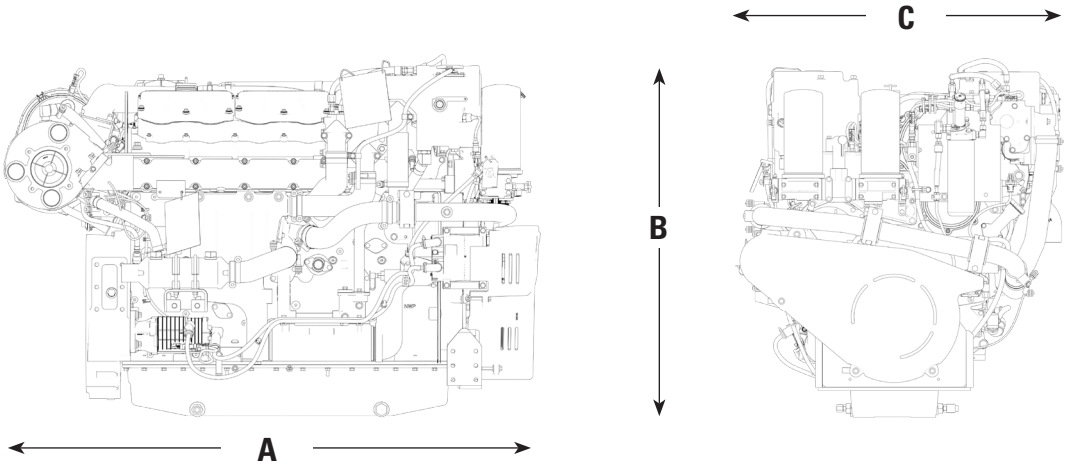
Typical applications: For vessels operating at rated load and rated speed up to 8% of the time (up to 30% load factor).

Typical operation ranges from 250 to 1000 hours per year.

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Dimensions

All dimensions are approximate.



A	Length	1854 mm	73.0 in	**C**	Width	1134 mm	44.6 in
B	Height	1198 mm	47.2 in		Dry Weight	1814 - 1950 kg	4000 - 4299 lb

Note: Do not use for installation design. See general dimension drawings for detail. Weights and dimensions are approximations.

Standard and Optional Equipment

Standard Equipment

- Separate circuit aftercooler (SCAC)
- Heat exchanger or keel cooling
- SCAC and jacket water shunt tanks with sight glass
- Water-cooled exhaust manifold and turbocharger
- Center sump oil pan, deep or shallow
- Oil and fuel filter service located on the front of the engine
- MEUI fuel system
- Front mounting supports
- Electronic controls
- Front vibration damper and guard
- EU Stage V and IMO III includes airless dosing SCR and DPF

Optional Equipment

- Alternators – 24 V 70 or 105 A
- Closed crankcase ventilation
- Transmission gear oil cooler
- Fuel cooler
- Instrument panels
- Electric or Air Starting motor
- PTO Drives – Crank driven V-belt pulley stack and stub shaft
- SAE-B pump adapter front gear train (keel only)
- Duplex fuel and oil filters
- SAE #0 - #1 Flywheel Housing

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LEHM23036-01 (09-2026)
Replaces LEHM23036-00
(Global)

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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