

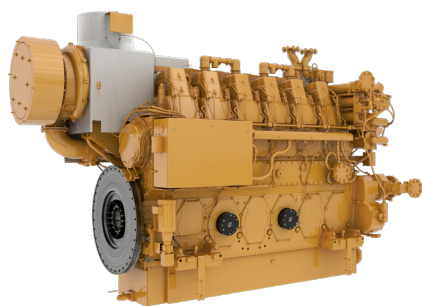


Image shown may not reflect actual configuration

Cat® C280-6

Marine Propulsion Engine

Commercial Applications

The Cat® C280 commercial propulsion engine series is engineered for high-utilization workboat applications where power, durability, and uptime matter most. Delivering up to 23% more power with increased durability, the C280 series combines high power density, proven heavy-duty build, and long service intervals to help operators move more, pull harder, and stay working longer, day after day, compared to previous C280 models.

Features and Benefits:

ENGINE DESIGN

- Optimized engine design to enable increased power density
- Improved engine durability lowering total cost of ownership compared to previous C280 models
- Factory certified IMO II system
- Updated engine electronic control module (ADEM IV)
- Updated Aftercooler design for increased cooling
- Marine alarm and protection system available
- Improved core engine component design delivers a more robust engine when compared to previous C280 models

BUILT FOR EXTREME CONDITIONS

- Proven in the field: rigorous endurance testing; thermal, overspeed, cold starts, and emissions, alongside 350,000+ field hours. Heavy-duty design and marine-hardened electronics.

HIGH POWER DENSITY

- Delivering 5,420–8,000 kW at 900–1000 rpm, the C280 series combines exceptional power density with flexible ratings and optimized torque at low speeds, maximizing performance for diverse marine propulsion demands.

SERVICEABILITY

- Maximize uptime with extended service intervals with up to 1400 hours on select configurations. Supported by clear maintenance plans and backed by Caterpillar's global network for fast parts, expert technicians, and lifecycle support worldwide.

Specifications

Configuration	In-line 6, 4 -Stroke Diesel	Bore x Stroke	280 mm x 300 mm / 11.0 in x 11.8 in
Emissions	IMO II	Refill Capacity	900 - 1075 L (238 - 284 gal) /
Rated Engine Speed	900 / 1000 rpm	Lube Oil System	697 L (184 gal)
Displacement	111 L (6,773 in³)	w/ Oil Filter Change	
Aspiration	Turbocharged-Aftercooled	Oil Change Interval	1025 hours
Governor	Electronic (ADEM IV)	Rotation	Clockwise or Counterclockwise
Flywheel Housing	N/A	(from flywheel end)	
		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
CS	2352	2320	1730	900	107	198.6	II	NC	NC	NC
CS	2515	2481	1850	1000	116	201.2	II	NC	NC	NC
MC	2583	2548	1900	900	117	197.6	II	NC	NC	NC
MC	2760	2722	2030	1000	126	200.0	II	NC	NC	NC

Rating Definition:

A Continuous Service (CS) Rating is suitable for continuous duty applications, including dredges, for operation without interruption or load cycling. **Maximum Continuous (MC) Rating** is generally used for vessel applications involving varying loads. The engine power actually produced is limited by application guidelines, leaving a power reserve for unusual operating conditions. Operating time at loads above the Continuous Service Rating for a given rpm is limited to one hour in 12 or 8.3% of total operating hours.

Ratings are based on SAE J1995/ISO3046 standard conditions of 100 kPa (29.61 in. Hg), 25°C (77°F), and 30% relative humidity at the stated charge air cooler water temperature. Ratings also meet classification society maximum temperature requirements of 45°C (113°F) air temperature to the turbocharger and 32°C (90°F) seawater temperature without derate.

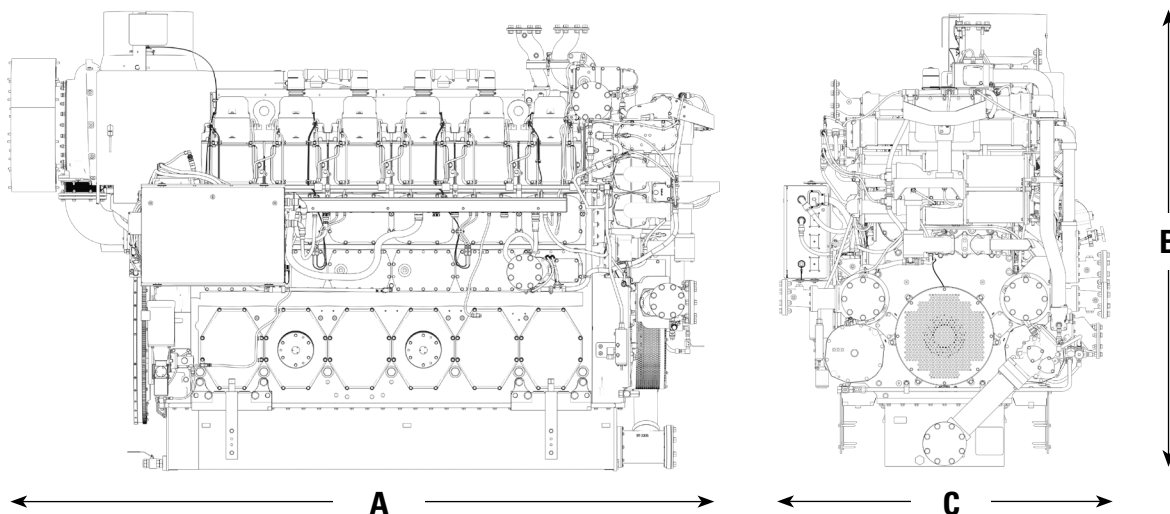
Additional ratings may be available for specific customer requirements. Consult your Cat representative for additional information.

Fuel rates are based on 35° API, 16°C (60°F) fuel used at 29°C (85°F) with a density of 838.9 g/liter (7.001 lbs/U.S. gal). Lower Heat Value (LHV) of 42 780 kJ/kg (18,390 Btu/lb). Tolerance is +5%. Includes all engine mounted pumps. BSFC without pumps is 3% less.

Marine Certification — Ratings are marine classification society approved by ABS, BV, CCS, DnV, GL, KR, LRS, NKK, RINA, and RS. These societies have also granted C280 factory line production approval which eliminates requirement for society surveyor witness test.

Dimensions

All dimensions are approximate.



A Length (Approx)	4011 mm	157.9 in	C Width (Approx)	1796 mm	70.7 in
B Height (Approx)	2734 mm	107.6 in	Dry Weight (Approx)	15,680 kg	34,496 lb

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

C280-6 Commercial Propulsion Engine

Standard and Optional Equipment

Standard Equipment

- Air Cleaner / Closed Crankcase Ventilation
- Air-cooled exhaust manifolds and turbochargers
- Duplex fuel and oil filters
- Centrifugal oil filters
- Electronically controlled fuel injectors (EUI fuel system)
- Fuel transfer pump
- Gear driven coolant and oil pumps
- Oil pressure regulating valve
- SOLAS Compliant heat shield system
- Dual A4 ECM with rigid wiring harness
- Explosion relief valves
- Air starters

Optional Equipment

- Connections for driven equipment
- Air shutoff valve
- Air driven or electric pre/post-lube pump
- Jacket water heaters, Lube oil heater
- Oil mist detector
- Front or rear drive capability
- MCS Certification
- Cold weather boost control valve
- RH/LH service options & RH/LH water connection options

See Marine price list for additional attachments

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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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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LEHM23850-00 (06-2026)
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