

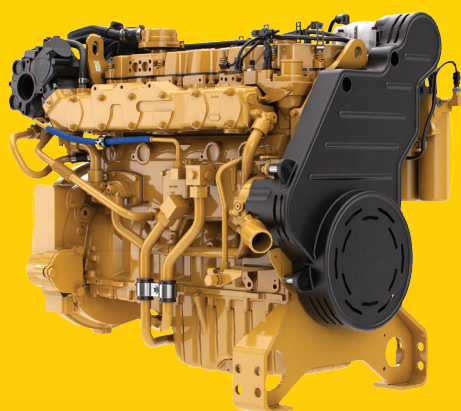
C9.3

MARINE AUXILIARY ENGINE

436 bhp
369 bhp

325 bkW
275 bkW

1800 rpm
1800 rpm



SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

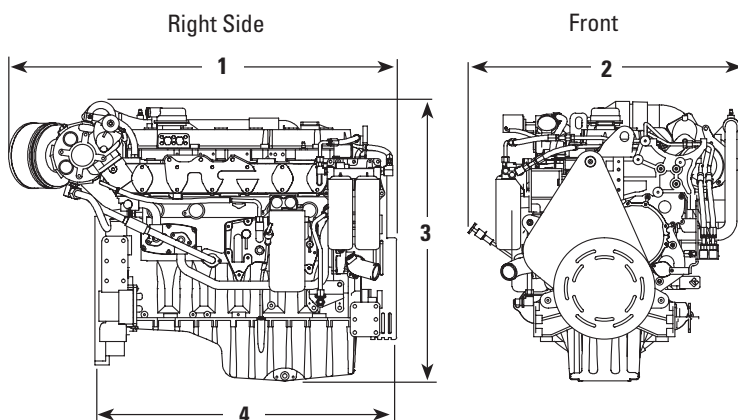
- U.S. EPA Tier 3/CCNR Stage II/IMO II certified
- Displacement 9.3 L (567.5 in³)
- 115 mm (4.5 in) bore x 149 mm (5.8 in) stroke
- Electronically governed
- Common rail fuel system
- Turbocharged-aftercooled
- Heat exchanger or keel cooled
- Refill capacity
 - Lube oil system: 24.5 L (6.5 gal) – Simplex
 - Cooling system: 41.3 L (11 gal) – HEX
- SAE No. 1 Flywheel Housing
- SAE No. 14 Flywheel (113 teeth)
- 500-hour oil change interval
- Counterclockwise rotation



FEATURES AND BENEFITS

- Electronic control system provides industry-leading torque and throttle response at low speeds, while maintaining fuel efficiency at high speeds
- Common rail fuel system enables optimum combustion and low emissions
- RH and LH locations for fuel and oil filters and dipstick improves serviceability
- Compatible with Cat® displays
- Available remote-mounted display panel with start, stop, and engine diagnostics
- 12V or 24V electrical system
- Marine classification society certificates: ABS, BV, CCS, CRS, DNV, GL, IRS, KR, LR, NK, PRS, RINA, RS

DIMENSIONS



ENGINE DIMENSIONS & WEIGHT

(1) Length	1470.8 mm	57.9 in
(2) Width	1028.6 mm	40.5 in
(3) Height	1060.1 mm	41.7 in
(4) Length (front to flywheel)	1144.3 mm	45.1 in
Weight, dry (approx.)	1045-1122 kg	2304-2474 lb

Note: Do not use these dimensions for installation design. See general dimension drawings for detail.

MARINE ENGINE PERFORMANCE

60 Hz – EM0781				
% Load	bhp	g/hr	bkW	g/bkW-hr
110	406	20.0	302	210.1
100	369	18.6	275	215.1
75	277	14.5	206	223.3
50	184	9.6	138	221.9
25	92	5.5	69	254.7
10	37	3.0	28	348.2

60 Hz – EM0783				
% Load	bhp	g/hr	bkW	g/bkW-hr
110	479	23.9	358	212.4
100	436	21.8	325	212.8
75	327	16.7	244	218.2
50	218	11.5	162	224.9
25	109	6.2	81	242.8
10	44	3.4	33	329.1

STANDARD EQUIPMENT

- Watercooled turbocharger and exhaust manifold
- Electronic control system
- Thermostats and housing
- Gear-driven sea water pump (self-priming)
- Common rail fuel system
- Shell and tube aftercooler
- Corrosion-resistant sea water aftercooler
- Engine oil cooler
- Vibration damper and guard
- Primary fuel filters

OPTIONAL EQUIPMENT

- Alternators – 24V 70, 105 amp
- Closed crankcase ventilation system
- Auxiliary/PTO oil cooler (engine mounted for HEX)
- Additional engine sensor packages
- Instrument panels
- Electric starting motors – 24V
- Air starting motor
- Dual starting motors
 - 24V electric and air
 - 24V electric (2)
- Electric fuel priming pump
- Fuel cooler
- PTO Drives – V belt pulley stack, stub shaft
- Duplex fuel and oil filters
- Double wall fuel rail
- Jacket water heater – 120V or 240V

RATING DEFINITIONS AND CONDITIONS

Caterpillar has offered packaged power systems for over 70 years. We assure power and performance ratings, as advertised, through extensive factory testing.

Cat Generator Sets typically exceed NEMA and IEEE standards for load acceptance. All rotor designs have been type tested at 150% overspeed for two hours at 338°F (170°C) ambient temperature.

Rating Definition

All Caterpillar Marine Auxiliary engines and generator sets are rated for prime power for continuous electric service according to ISO 8528-1.

Hours per Year	Unlimited
Load Factor	≤ 70%
Overload Capacity	+ 10%
	maximum of 1 hour in 12
	maximum of 25 hours per year

Rating Conditions

Ratings are based on SAE J3046 and J1349 standard conditions of 29.61 in. Hg (100 kPa) and 77°F (25°C). These ratings also apply at ISO8665, ISO3046-1:2002E, DIN6271-3, and BS5514 standard conditions of 29.61 in. Hg (100 kPa), 81°F (27°C), and 60% relative humidity.

Fuel rates are based on fuel oil of 35° API [60°F (16°C)] gravity having an LHV of 18,390 Btu/lb (42 780 kJ/kg) when used at 85°F (29°C) and weighing 7.001 lbs/U.S. gal. (838.9 g/liter).

Marine Auxiliary Engines are mainly used as generator set engines; however, they can be used for electrically driven pumps, winches, conveyors, thrusters, when it is specified. Engines can be radiator cooled or heat exchanger/keel cooled.