

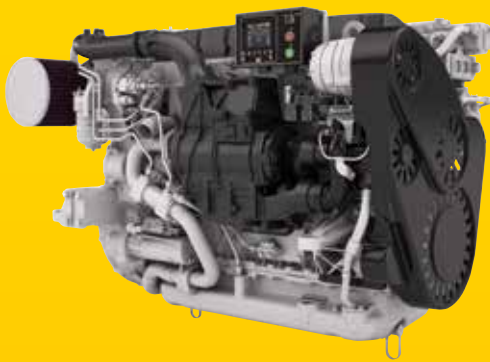
C8.7

MARINE PROPULSION ENGINE

650 mhp

(641 bhp)

478 bkW



SPECIFICATIONS

I-6, 4-Stroke-Cycle-Diesel

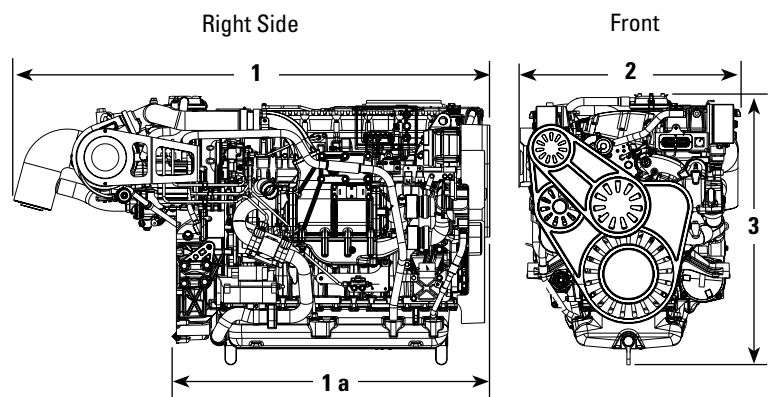
- EPA Tier 3 Recreational compliant
- IMO II compliant
- RCD compliant
- EU Stage IIIA compliant
- 8.7 L displacement
- 2300 rpm rated speed
- 117 mm (4.61 in) bore x 135 mm (5.31 in) stroke
- Electronically governed
- Common rail fuel system
- Turbocharged, supercharged, aftercooled
- Heat exchanger cooled
- Refill capacity
 - Lube oil system: 24 L (6.3 gal)
 - Cooling system: 46 L (12 gal)
- SAE No. 1 Flywheel Housing
- SAE No. 14 Flywheel (149 teeth)
- 250-hour oil change interval
- Counterclockwise rotation



FEATURES AND BENEFITS

- Electronically controlled supercharger provides industry-leading torque and throttle response at low speeds, while maintaining fuel efficiency at high speeds
- Closed crankcase ventilation system improves engine room cleanliness
- Common rail fuel system enables optimum combustion and low emissions
- Single access point improves serviceability
- Grid heater for improved cold weather starting
- Compatible with Cat® displays
- Available engine-mounted display panel with start, stop, and engine diagnostics
- 12V or 24V electrical system
- *glink* ready for remote monitoring

DIMENSIONS



ENGINE DIMENSIONS & WEIGHT

(1) Length	1850.4 mm	72.9 in
(1a) Length to flywheel housing	1218.0 mm	47.9 in
(2) Width	881 mm	34.7 in
(3) Height	984 mm	38.7 in
Weight, dry (approx.)	1041 kg	2295 lb

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

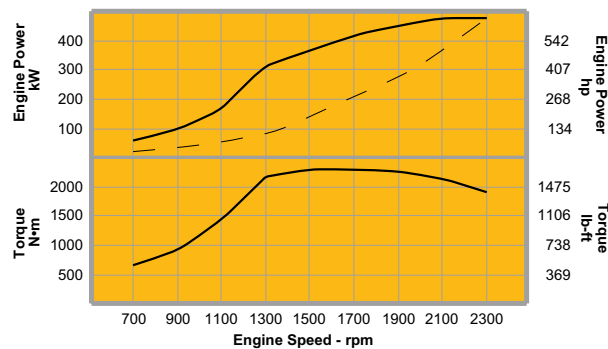
MARINE ENGINE PERFORMANCE

Max Power
E Rating – EM0870

rpm	bhp	g/hr	bkW	g/bkW-hr
2300	641	32.7	478	217.1
2000	635	31.9	474	214.1
1500	491	24.3	366	211.3
1300	410	20.5	306	212.6
950	146	7.8	109	227.1
700	74	4.0	55	230.5

Prop Demand
E Rating – EM0870

rpm	bhp	g/hr	bkW	g/bkW-hr
2300	641	32.7	478	217.1
2000	422	21.4	315	216.3
1500	178	9.7	133	231.6
1300	116	6.1	86	224.8
950	45	2.4	34	228.4
700	18	1.1	14	261.8



Maximum Power ——— Prop Demand - - - - -

STANDARD EQUIPMENT

- Watercooled turbocharger and exhaust manifold
- Electronically controlled supercharger
- Closed crankcase ventilation system
- Thermostats and housing
- Gear-driven sea water pump (bronze impeller)
- Common rail fuel system
- Shell and tube type jacket water heat exchanger
- Corrosion resistant sea water aftercooler
- Fuel cooler
- Engine oil cooler
- Vibration damper and guard
- Grid heater
- Electric fuel priming pump

ATTACHMENTS

- Alternators
 - 24V 120 amp
 - 12V 200 amp
- Transmission gear oil cooler (engine mounted)
- Additional engine and transmission sensor packages for on or off vessel monitoring
- Instrument panels
- Starting motors – 12V or 24V

RATING DEFINITIONS AND CONDITIONS

E Rating (High Performance)

Typical applications: For vessels operating at rated load and rated speed up to 8% of the time, or 1/2 hour out of 6, (up to 30% load factor). Typical applications could include but are not limited to vessels such as

pleasure craft, harbor patrol boats, harbor master boats, some fishing or patrol boats. Typical operation ranges from 250 to 1000 hours per year.

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