

C7.1



MARINE PROPULSION ENGINE

507 mhp	(500 bhp)	373 kW
456 mhp	(450 bhp)	336 kW
406 mhp	(400 bhp)	298 kW



SPECIFICATIONS

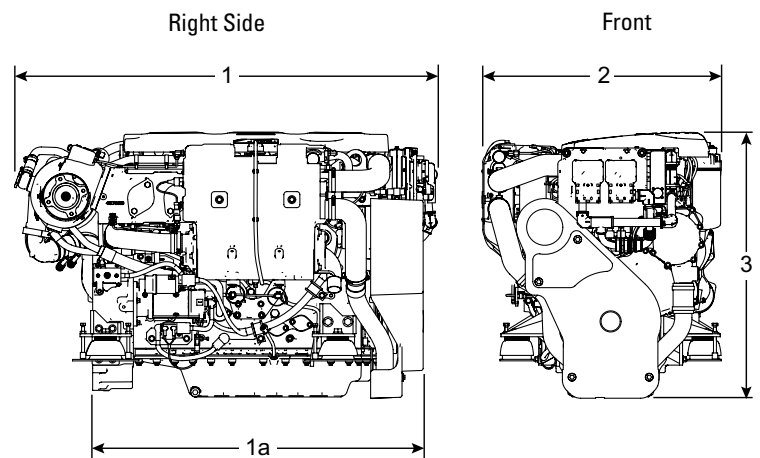
I-6, 4-Stroke-Cycle-Diesel

- EPA Tier 3 Recreational compliant
- IMO II compliant
- RCD 2016 compliant
- EU Stage IIIA compliant
- 7.01 L displacement
- 2900 rpm rated speed
- 105 mm (4.13 in) bore x 135 mm (5.31 in) stroke
- Electronically governed
- Common rail fuel system
- Turbocharged, aftercooled
- Heat exchanger cooled
- Refill capacity
 - Lube oil system: 20 L (5.3 gal)
 - Cooling system: 43 L (11.4 gal)
- SAE No. 3 flywheel housing
- 250-hour oil change interval
- Counterclockwise rotation

FEATURES AND BENEFITS

- Superior response time and acceleration
- Common rail fuel system enables optimum combustion and low emissions
- Reduced combustion noise through advanced electronic control
- No visible smoke
- 12V or 24V electrical system
- Compatible with Cat® displays and electronics
- Closed crankcase ventilation system improves engine room cleanliness

DIMENSIONS



ENGINE DIMENSIONS & WEIGHT

(1) Length	1394 mm	54.9 in
(1a) Length to flywheel housing	1095 mm	43.1 in
(2) Width	798 mm	31.4 in
(3) Height	876 mm	34.5 in
Weight, dry (approx.)	750 kg	1653 lb

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

MARINE ENGINE PERFORMANCE

Max Power
500 bhp – E Rating

rpm	bhp	g/hr	bkW	g/bkW-hr
2900	500	25.8	373	232
2500	498	25.8	372	225
1900	354	16.7	264	206
1600	261	12.6	195	209
1200	118	5.9	88	225
600	31	1.4	23	222

Prop Demand
500 bhp – E Rating

rpm	bhp	g/hr	bkW	g/bkW-hr
2900	500	25.8	373	232
2500	320	16.6	239	224
1900	141	7.4	105	229
1600	84	4.3	63	223
1200	34	1.9	25	228
600	4	0.3	3	336

Max Power
450 bhp – E Rating

rpm	bhp	g/hr	bkW	g/bkW-hr
2900	450	23.9	336	228
2500	450	22.9	336	220
1900	354	17.0	264	206
1600	261	12.6	195	209
1200	118	5.9	88	225
600	31	1.4	23	222

Prop Demand
450 bhp – E Rating

rpm	bhp	g/hr	bkW	g/bkW-hr
2900	450	23.9	336	228
2500	289	14.9	216	223
1900	127	6.8	95	231
1600	76	4.0	57	226
1200	32	1.7	24	231
600	4	0.3	3	356

Max Power
400 bhp – E Rating

rpm	bhp	g/hr	bkW	g/bkW-hr
2900	400	20.8	299	227
2500	400	20.1	299	215
1900	378	17.0	282	206
1600	261	12.6	195	209
1200	118	5.9	88	225
600	31	1.4	23	222

Prop Demand
400 bhp – E Rating

rpm	bhp	g/hr	bkW	g/bkW-hr
2900	400	20.8	298	227
2500	256	13.5	191	227
1900	113	5.9	84	226
1600	67	3.5	50	225
1200	28	1.6	21	241
600	3	0.3	2	400

STANDARD EQUIPMENT

- Watercooled turbocharger and exhaust manifold
- Closed crankcase ventilation system
- Starter motors – 12V or 24V
- Gear-driven sea water pump (rubber impeller)
- Common rail fuel system
- Fin and tube type jacket water heat exchanger
- Corrosion resistant sea water aftercooler
- Fuel cooler
- Integral engine oil cooler

- Vibration damper and guard
- Electric fuel priming pump
- Self-tensioning multi-vee belt drive

ATTACHMENTS

- Alternators
– 24V 100 amp – 12V 175 amp
- Transmission gear oil cooler (engine mounted)
- Additional engine and transmission sensor packages for on or off vessel monitoring
- Instrument panels
- Glow plugs

- Jacket water heater
- 6" water cooled exhaust elbow
- Isolation mounts
- Primary fuel filter/water separator (remote mount)
- Selection of factory-fitted marine transmissions and oil hoses
- Cabin heater (calorifier) connections
- Triple groove PTO pulley (crankshaft mounted)
- Flexible fuel hoses
- Left-hand and right-hand oil dipsticks

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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