3516C

MARINE PROPULSION ENGINE

2480 mhp	(2446 bhp)	1825 bkW
2610 mhp	(2574 bhp)	1920 bkW
2712 mhp	(2675 bhp)	1995 bkW

Image shown may not reflect actual engine

COMPLETE SOLUTIONS FOR YOUR MARINE APPLICATION

- Single-source for support and service
- Industry-leading warranty coverage for factory packaged components
- Global dealer network for service in any location

EFFICIENT OPERATION

- Instrument panel with cold mode start strategy and programmable low idle
- Electronic governing control unit minimizes fuel consumption and monitors engine operating parameters
- Optional alarm and protection system

IMPROVED PERFORMANCE AND FUNCTION

- Advanced combustion design uses the optimum configurations and cylinder geometry
- Enhanced control of fuel injection optimized through crank timing

ENVIRONMENTALLY CONSCIOUS

- Closed crankcase ventilation system and redesigned piston for improved efficiency and lower emissions
- Optimal nozzle geometry and electronic injection control for improved fuel delivery
- EPA Marine Tier 3/IMO Tier II Emissions Compliant

SPECIFICATIONS

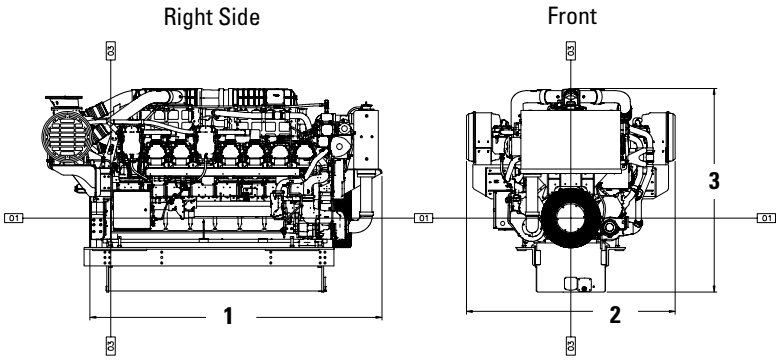
V-16, 4-Stroke-Cycle-Diesel

- EPA Marine Tier 3 compliant
- IMO Tier II emissions compliant
- 78.08 L (4765 in^3) displacement
- 1600 rpm
- 170 mm (6.69 in) bore x 215 mm (8.46 in) stroke
- Turbocharged-aftercooled aspiration
- Electronically governed A4 ECU
- Heat exchanger or keel cooled
- Refill capacity
  Lube oil system: 779.8 L (206 gal)
- 1000-hour oil change interval
- Counterclockwise rotation
- SAE No. 00 flywheel and flywheel housing (183 teeth)
- Engine diagnostic system data link messaging

All new 3500C marine EPA Tier 3 capable engines, including both propulsion and auxiliary units, will be required to use a maximum concentration of 20% glycol mixture in the aftercooler circuit. This restriction applies equally to both heat exchanger cooled and keel cooled configurations (box coolers). In the event that specific project needs require higher levels of freeze protection, (lower freeze temperature), please contact ASC to review the specific engine rating and glycol concentration desired.

The jacket water circuit will continue to be capable of operation up to 50% glycol.

DIMENSIONS



ENGINE DIMENSIONS & WEIGHT		
(1) Length to Flywheel Housing	3191.8 mm	125.7 in
(2) Width	2283.8 mm	89.9 in
(3) Height	2224.5 mm	87.6 in
Weight, Net Dry (approx)	9600 kg	21,164 lb

Note: Do not use these dimensions for installation design. See general dimension drawings for detail (Drawing #420-1880). For complete information, please refer to the Marine Spec Sheet Wizard.

3516C

MARINE PROPULSION ENGINE

MARINE ENGINE PERFORMANCE

Max Power

	A Rating				B Rating				C Rating			
rpm	bhp	g/hr	bkW	g/bkW-hr	bhp	g/hr	bkW	g/bkW-hr	bhp	g/hr	bkW	g/bkW-hr
1600	2447	118.9	1825	206.9	2575	125.0	1920	206.7	2675	129.8	1995	206.6
1300	2447	115.7	1825	201.3	2575	122.2	1920	202.1	2675	127.5	1995	203.0
1100	2119	97.2	1580	195.3	2119	97.2	1580	195.3	2119	97.2	1580	195.3
900	1021	50.0	761	208.7	1021	50.0	761	208.7	1021	50.0	761	208.7
700	528	26.9	394	216.6	528	26.9	394	216.6	528	26.9	394	216.6
650	471	24.1	351	218.0	471	24.1	351	218.0	471	24.1	351	218

Prop Demand

	A Rating				B Rating				C Rating			
rpm	bhp	g/hr	bkW	g/bkW-hr	bhp	g/hr	bkW	g/bkW-hr	bhp	g/hr	bkW	g/bkW-hr
1600	2447	118.9	1825	206.9	2575	125.0	1920	206.7	2675	129.8	1995	206.6
1300	1313	65.1	979	211.1	1381	68.4	1030	210.9	1435	70.9	1070	210.4
1100	795	38.8	593	207.7	837	40.6	624	206.7	869	42.1	648	206.0
900	436	21.9	325	213.7	458	22.9	342	212.9	476	23.7	355	212.4
700	205	10.9	153	226.0	216	11.3	161	224.2	224	11.7	167	222.9
650	164	8.9	122	232.1	173	9.3	129	230.1	179	9.6	134	228.6

STANDARD ENGINE EQUIPMENT

- Corrosion-resistant aftercooler core
- Dual A4 engine control modules w/electronic unit injector fuel system
- Dual turbochargers with water-cooled bearings and heat shields
- Vibration damper and guard
- Closed crankcase ventilation system
- Thermostats and housing
- Electronically cooled unit injectors
- Engine oil cooler and oil filler
- Auxiliary fresh water pump
- Gear-driven, centrifugal jacket water pump
- Oil filter, oil level gauge, and oil pump

OPTIONAL ATTACHMENTS

- Plate-type heat exchanger
- Special appearance packages with chrome cover
- Marine society certifications
- Power takeoff
- Shutoff and alarm contactors
- SOLAS compliant fuel connections with spill shield
- Instrument panel with color Marine Power Display (MPD)
- Mounting rails
- Sea water pump
- See Marine Price List for additional attachments

RATING DEFINITIONS AND CONDITIONS

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 applications could include but are not limited to vessels such as freighters, tugboats, bottom trawlers, or deep river tugboats. 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, or 10 hours out of 12, with some load cycling (40% to 80% load factor). Typical applications could include but are not limited to vessels such as mid-water trawlers, purse seiner, crew and supply boats, ferries, or towboats. 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, or 6 hours out of 12, with cyclical load and speed (20% to 80% load factor). Typical applications could include but are not limited to vessels such as ferries, harbor tugs, fishing boats, offshore service boats, displacement hull yachts, or short trip coastal freighters. Typical operation ranges from 2000 to 4000 hours per year.

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