3512C with DGB™

MARINE AUXILIARY/ELECTRIC PROPULSION ENGINE

1632 bkW **(1550 ekW)** **1800 rpm**

Image shown may not reflect actual engine

SPECIFICATIONS

V-12, 4-Stroke-Cycle-Diesel

- Meets IMO Tier II emission standards
- 78.08 L (4765 in^3) displacement
- 1800 rpm
- 170 mm (6.69 in) bore x 215 mm (8.346 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

COMPLETE SOLUTIONS FOR YOUR MARINE APPLICATIONS

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

DYNAMIC GAS BLENDING™ (DGB™) FEATURES AND BENEFITS

- Offers a closed-loop control system which enables 70% maximum substitution over the widest load range in the marine high speed engine industry.
- Maintains diesel performance and safe engine operation which is unmatched by non-OEM solutions.
- Accepts a wide range of gas quality and automatically adjusts to fuel quality changes, eliminating the need for field calibration.
- Maintains existing diesel maintenance and overhaul intervals proven in marine applications

IMPROVED PERFORMANCE AND FUNCTION

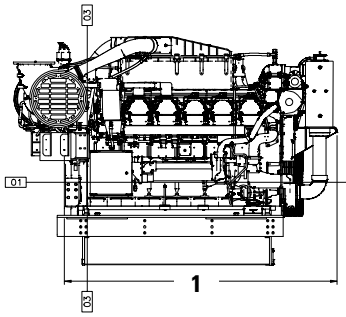
- Advanced combustion design uses the optimum configurations and cylinder geometry.

ENVIRONMENTALLY CONSCIOUS

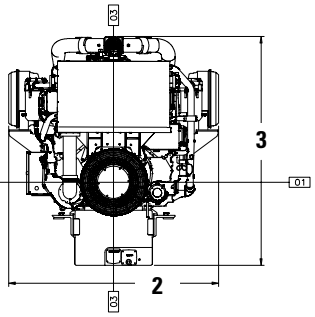
- Significant emissions reduction in gas mode.
- Optimal nozzle geometry and electronic injection control for improved fuel delivery.
- Meets IMO Tier II emission standards

DIMENSIONS

Right Side



Front



ENGINE DIMENSIONS & WEIGHT		
(1) Length (to flywheel housing)	2644.5 mm	104.11 in
(2) Width	2036.9 mm	80.19 in
(3) Height	2113.3 mm	83.20 in
Weight, Net Dry (approx)	6532-7411 kg	14,400-16,340 lb

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

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MARINE ENGINE PERFORMANCE

% Load	ekW	bkW	DGB Diesel Consumption			DGB Gas Consumption	Non-DGB Consumption		
			l/hr	g/bkW-hr	U.S. g/hr	Btu/min	l/hr	g/bkW-hr	U.S. g/hr
100	1550	1632	169	86.6	45	161447	387	199.0	102
90	1395	1459	118	67.6	31	154543	351	202.0	93
40	620	649	67	87.0	18	82707	180	232.5	48
30	465	491	53	91.1	14	69344	140	239.4	37
25	388	411	59	119.6	15	54352	121	246.0	32
10	155	167	67	334.5	18	0	67	334.5	18

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
- 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

- Special appearance packages with chrome cover
- Marine society certifications
- Power take-off
- 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

Rating Definition

For all vessels operating with generator sets that provide power to the propulsions systems. All ratings are Prime Ratings according to ISO8528-1 for unlimited usage per year at a load factor of < 70%. 10% overload capability is required for a maximum of 1 hour out of every 12 and a maximum of 25 hours total per year.

Rating Conditions

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

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

Marine auxiliary engines are mainly used as generator set engines; however, they can be used for electrically driven pumps, winches, conveyors, and thrusters, when it is specified. Engines can be radiator cooled or heat exchanger/keel cooled. Typical applications of DEP engines could include but are not limited to supply vessels, cruise vessels, research vessels, or any other ship using diesel electric drive systems.

U.S. Sourced
LEHM0180-00 (12-14)