C2.2 50Hz

MARINE GENERATOR SET

15.0 ekW @ 1500 rpm

C2.2 Marine Generator Set
Tier 3 Compliant

Engine Specifications

Configurations
I4, 4 stroke-cycle-diesel

Emissions
Tier 3 compliant

Rated Engine Speed
1500 rpm

Bore x Stroke
84 mm x 100 mm
(3.31 in x 3.94 in)

Displacement
2.2 Liter (135 cu in)

Aspiration
Naturally Aspirated

Governor
Electrical-Isochronous

Refill Capacity
10.6 (2.8)

Oil Change Interval
500 hrs

Cooling
Hex or Keel cooled

Generator
3 ph 12 lead re-connectable
1ph 4 lead re-connectable

FEATURES AND BENEFITS

Compact, Efficient Power

- This compact unit provides required power on demand, operating very efficiently with optimum performance.

Quiet, Clean Power

- The 4 cylinder naturally aspirated engine operates with little vibration and low sound levels. Available as an open set or with a sound enclosure, this package is ideal for power requirements in any application.

Reliable Power

- Low operating and maintenance costs are achieved through excellent fuel economy and a minimum of required maintenance. The single side servicing with extended service intervals makes maintenance easy.

STANDARD ENGINE EQUIPMENT

Air Inlet System

- Air cleaner, single element canister type with rain cap (open gen set only)

Cooling System

- Belt-driven centrifugal jacket water pump, heat exchanger, gear-driven seawater pump, expansion tank

Exhaust System

- Water-cooled exhaust manifold and elbow

Generator

- 12 lead re-connectable (three phase), 4 lead re-connectable (single phase), brushless

Starting/Charging System

- 12 or 24 volt electric starting motor, 12 volt 55 amp alternator

Lube System

- Lubricating oil, oil filter (RH), dipstick (RH), fumes disposal (closed system)

Mounting System

- Anti-vibration mounts.

Protection System

- Electronic automatic safety shutdown for low oil pressure, high water temperature, high exhaust temperature, and overspeed

OPTIONAL ATTACHMENTS

- Sound attenuated enclosure
- Basic, Deluxe and remote instrument panel options
- AC circuit breakers
- Flexible fuel lines
- Primary fuel filter/water separator
- Siphon break
- Keel cooling kit
- Exhaust system components
- Oil drain pump
- Insulated electric system

TECHNICAL DATA

C2.2 Marine Generator Set

FUEL & DEF CONSUMPTION

	Brake Specific Fuel Consumption				
rpm	ekW	bhp	lb/bhp-hr	bkW	g/bkW-hr
1500	15.0	25.1	0.409	18.7	248.8

ISO 3046/1 fluid consumption tolerance of -0/+5%
Reference 32.5% DEF density of 1.0895 kg/L
Reference 40% DEF density of 1.1120 kg/L

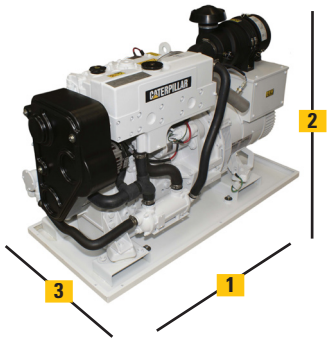
Consult your local Cat® dealer to create a customized engine TCO (Total Cost of Ownership) analysis specific to your vessel as well as for IMO II optimized performance data.

For Cat® dealers:
Please reference TMI Web for most current information.

DIMENSIONS & WEIGHT

	Length (1)	Height (2)	Width (3)	Engine dry weight
min.	47.3 in/1202 mm	30.9 in/785 mm	21.3 in/541 mm	857 lb/389 kg
max.	50.8 in/1290 mm	32.9 in/835 mm	24.7 in/628 mm	1027 lb/466 kg

Note: Do not use these dimensions for installation design.
See general dimension drawings for detail - Drawing 5058546-01 (Open) & 5058547-01 (Enclosed)



RATING DEFINITION AND CONDITIONS - PRIME POWER

Typical applications: For vessels operating with generator sets that provide power to the propulsion systems. All ratings are Prime Ratings according to ISO 8528-1 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.

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, thrusters, when it is specified. Engines can be radiator cooled or heat exchanger/keel cooled.

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To find your nearest dealer, please visit:
www.cat.com/marine