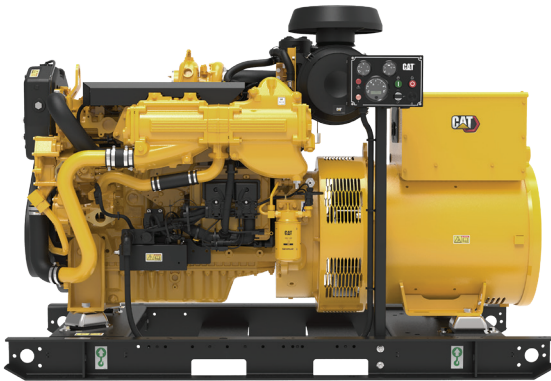


# C7.1

## Marine Generator Set Electronic Control System



### ENGINE SPECIFICATIONS

<b>CONFIGURATION</b>	Inline 6, 4-Stroke Cycle Diesel	<b>BORE x STROKE</b>	105 mm x 135 mm / 4.13 in x 5.31 in
<b>EMISSIONS</b>	IMO II, IMO III (SCR required) U.S. EPA Tier 4, EU Stage V, China II	<b>REFILL CAPACITY</b>	Lube Oil System w/oil filter change: 21 L / 5.6 gal
<b>RATED ENGINE SPEED</b>	1,500 rpm / 1,800 rpm	<b>OIL CHANGE INTERVAL</b>	500 hrs
<b>DISPLACEMENT</b>	7.01 L (428 cu in)	<b>ROTATION</b>	Counterclockwise
<b>ASPIRATION</b>	Turbocharged / Aftercooled	<b>COOLING</b>	Heat exchanger, Seperate Circuit Keel Cooled, Combined Circuit Keel Cooled, Radiator Cooled
<b>GOVERNOR</b>	Electronic (A5 ECM)		

### KEY FEATURES & BENEFITS

- Gear Driven Water Pumps
- Automatic Valve Adjustment
- Variety of Different Cooling Systems
- Multiple Control Panel Options
- Engine Mounted Filtration and Electrical System Streamlined Option
- Independent Shutdown Sensors and Controller
- Generator Paralleling Droop Kit for Load Sharing
- Streamlined Options for Easy Installation and Maintenance

### STANDARD EQUIPMENT

- Filtered Crankcase Ventilation
- Common Rail Fuel System
- Mounted Air Cleaner
- Integral Plate Type Oil Cooler
- Isolated Sump
- Anti-vibration Mounts
- Gear Driven Sea Water Pump
- Gear Driven Jacket Water Pump
- Safety Shutdowns
- Water Cooled Exhaust Manifold
- Watercooled Turbocharger
- Glow Plugs to Aid Cold Weather Starting

### OPTIONAL ATTACHMENTS

- Marine Classification Society (MCS) Approval
- Generator Space Heater
- Engine Jacket Water Heater
- Duplex Oil Filters
- Duplex Fuel Filters
- Double Wall High Pressure Fuel Lines
- Additional Starter Motor
- Fuel Cooler
- Charging Alternator
- PTO Drive
- Service Parts Kit
- Generator Droop Kit

# RATINGS & FUEL CONSUMPTION

ekW@8pf	kVA	Hz	rpm	U.S. g/h	g/bkW-hr	IMO	U.S. EPA	EU	China
100	125	50	1500	7.9	230.4	NST	T3C	V	C-II
118	147.5	50	1500	9.2	228.6	NST	T3C	V	C-II
150	187.5	50	1500	11.2	218.5	II/III	T3C	NC	C-II
118	147.5	60	1800	9.5	234.9	NST	T3C	V	C-II
150	187.5	60	1800	11.3	220.1	II/III	T3C	NC	C-II
175	218.75	60	1800	13.2	219.7	II/III	T3C	NC	C-II
200	250	60	1800	14.9	217.2	II/III	T3C	NC	C-II
92 R	115	50	1500	7.8	234.9	NST	T3C	V	C-II
111 R	138.75	50	1500	9.3	232.9	NST	T3C	V	C-II
143 R	178.75	50	1500	11.3	217.9	II/III	T3C	NC	C-II
106 R	132.5	60	1800	9.1	240.1	NST	T3C	V	C-II
138 R	172.5	60	1800	11.1	223.4	II/III	T3C	NC	C-II
163 R	203.75	60	1800	12.7	226.7	II/III	T3C	NC	C-II

All ratings subject to IMO can be configured as an IMO II engine without aftertreatment  
R – Radiator cooled ratings

### Rating Definition

All Cat marine auxiliary engines and generator sets are rated for prime power for continuous electric service according to ISO 8528-1.

Hours per Year Unlimited

Load Factor < 70%

Overload Capacity + 10%

maximum of 1 hour in 12

maximum of 25 hours per year

### Rating Conditions

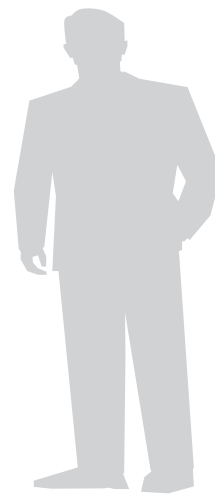
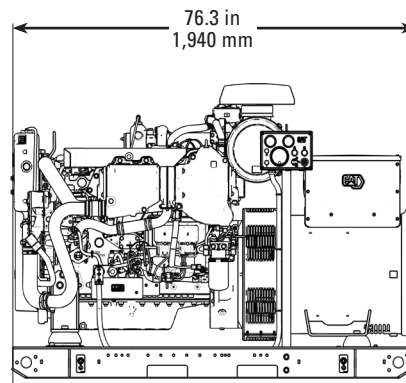
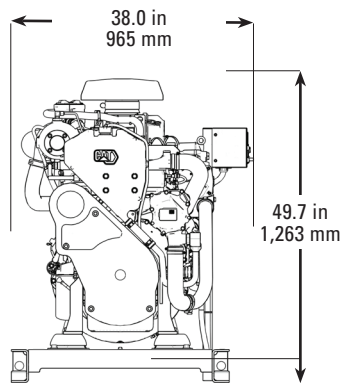
Ratings are based on SAE J3046 and J1349 standard conditions of 29.61 in. Hg (100 kPa) and 77°F (25°C). These ratings also apply at ISO8665, ISO3046-1:2002E, DIN6271-3, and BS5514 standard conditions of 29.61 in. Hg (100 kPa), 81°F (27°C), and 60% relative humidity.

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

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.

## ENGINE DIMENSIONS & WEIGHT

<b>LENGTH</b>	76.3 in / 1,940 mm
<b>HEIGHT</b>	49.7 in / 1,263 mm
<b>WIDTH</b>	38.0 in / 965 mm
<b>DRY WEIGHT</b>	3355 lb / 1,522 kg



Contact your Local Cat® Dealer for more information!

