

C32 ACERT™

MARINE AUXILIARY ENGINE



| | | |
|----------|---------|----------|
| 791 bhp | 590 bkW | 1500 rpm |
| 923 bhp | 688 bkW | 1500 rpm |
| 1172 bhp | 874 bkW | 1500 rpm |



Image shown may not reflect actual engine

SPECIFICATIONS

Vee-12, 4-Stroke-Cycle-Diesel

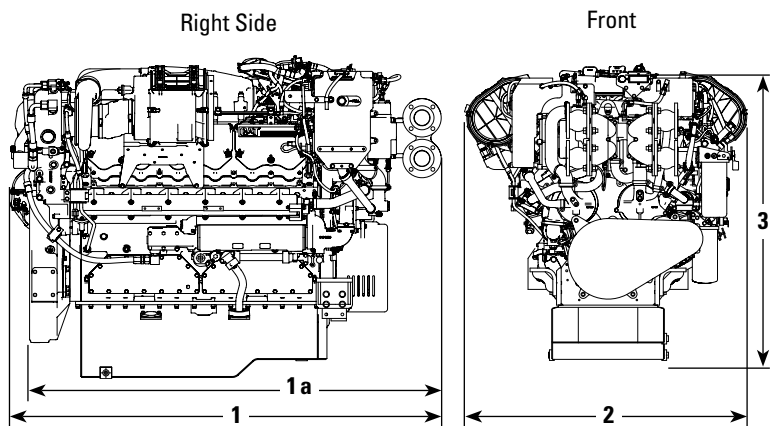
- IMO II compliant
- 32.1 L (1959 cu in) displacement
- 1500 rpm rated engine speed
- 145 mm (5.7 in) bore x 162 mm (6.38 in) stroke
- Turbocharged and aftercooled aspiration
- Electronically governed
- Refill capacity*
 - Cooling system:
 - Jacket Water 128 L (33.75 gal)
 - SCAC 26.5 L (7 gal)
 - Lube oil system: 138 L (36.5 gal)
- 750-hour oil change interval*
- Caterpillar Diesel Engine Oil 10W30 or 15W40
- SAE No. 0 flywheel and flywheel housing, 136 flywheel teeth
- Counterclockwise rotation from flywheel end

*Engine Operation & Maintenance Manual is the safe source for this information.

STANDARD ENGINE EQUIPMENT

- Separate circuit aftercooler (SCAC)
- Air cleaner
- Heat exchanger or keel cooling
- Sea water pump (heat exchanger only)
- Jacket water and SCAC pumps
- Watercooled exhaust manifold and turbocharger
- Round flanged exhaust outlet
- Deep sump oil pan
- Oil filler, filter, and dipstick, RH or LH service
- MEUI fuel system
- Duplex fuel filters, RH or LH service
- Fuel transfer and priming pumps
- Hybrid fuel lines
- Fuel cooler
- Front support mounting system

DIMENSIONS



ENGINE DIMENSIONS & WEIGHT

| | | |
|--|-----------|---------|
| (1) Length (overall – keel) | 2121 mm | 83.5 in |
| Length (overall – heat exchanger) | 2284.2 mm | 89.9 in |
| (1a) Length (flywheel housing – keel) | 2030.4 mm | 79.9 in |
| Length (flywheel housing – heat exchanger) | 2008.1 mm | 79.1 in |
| (2) Width | 1528.3 mm | 60.2 in |
| (3) Height | 1038.4 mm | 40.9 in |
| Weight, Net Dry (keel) | 3155 kg | 6956 lb |
| Weight, Net Dry (heat exchanger) | 3245 kg | 7155 lb |

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

MARINE ENGINE PERFORMANCE

Prime Rating – EM0438-00

| % Load | bhp | g/hr | bkW | g/bkW-hr |
|--------|-----|------|-----|----------|
| 100 | 791 | 37.9 | 590 | 203.8 |
| 75 | 593 | 29.3 | 442 | 210.2 |
| 50 | 396 | 19.6 | 295 | 211.4 |
| 25 | 198 | 10.9 | 148 | 235.6 |

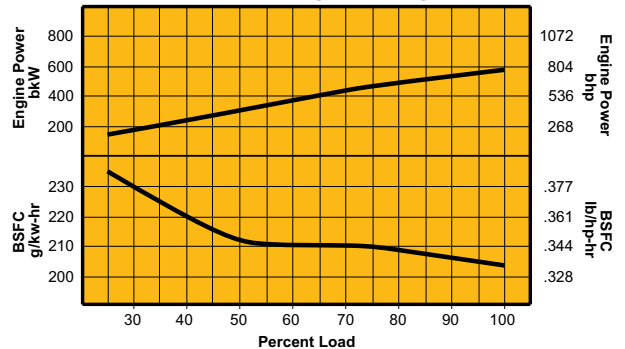
Prime Rating – EM0439-00

| % Load | bhp | g/hr | bkW | g/bkW-hr |
|--------|-----|------|-----|----------|
| 100 | 923 | 44.0 | 688 | 203.0 |
| 75 | 692 | 34.3 | 516 | 211.0 |
| 50 | 461 | 23.0 | 344 | 212.7 |
| 25 | 231 | 12.3 | 172 | 227.2 |

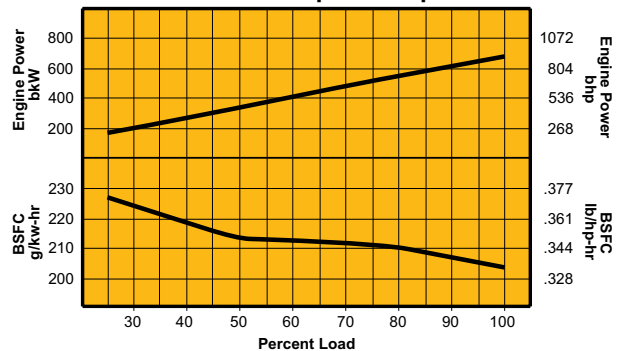
Prime Rating – EM0406-00

| % Load | bhp | g/hr | bkW | g/bkW-hr |
|--------|------|------|-----|----------|
| 100 | 1172 | 57.0 | 874 | 207.0 |
| 75 | 879 | 44.4 | 656 | 215.0 |
| 50 | 586 | 29.1 | 437 | 211.7 |
| 25 | 293 | 15.6 | 218 | 226.8 |

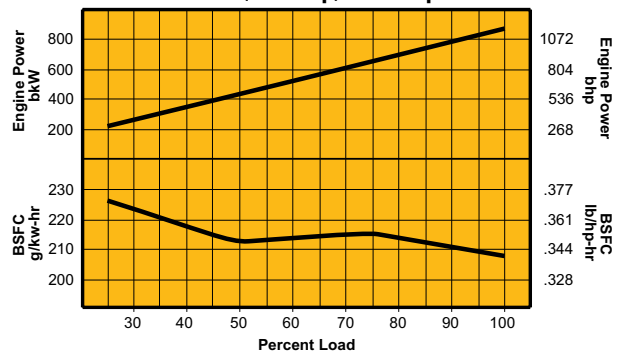
590 bkW (791 bhp) @ 1500 rpm



688 bkW (923 bhp) @ 1500 rpm



874 bkW (1172 bhp) @ 1500 rpm



RATING DEFINITIONS AND CONDITIONS

Rating Definition

For all vessels operating with generator sets that provide power to the propulsion systems. All ratings are Prime Ratings according to ISO8528-1 for unlimited usage per year at a load factor of $\leq 70\%$. 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.

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