

C4.4

MARINE AUXILIARY ENGINE (ELECTRIC CONTROL SYSTEM)

118 kW @ 1800 rpm (60 Hz)
99 kW @ 1800 rpm (60 Hz)

75 kW @ 1800 rpm (60 Hz)
65 kW @ 1800 rpm (60 Hz)

99 kW @ 1500 rpm (50 Hz)
80 kW @ 1500 rpm (50 Hz)

65 kW @ 1500 rpm (50 Hz)



C4.4 Marine Auxiliary
Image may not reflect actual product.

ENGINE SPECIFICATIONS

Configuration

In-line 4, 4-stroke-cycle diesel

Emissions

U.S. EPA Tier 3 certified,
EU Stage V certified

Rated Engine Speed

1500/1800 rpm

Bore x Stroke

105 mm x 127 mm / 4.13 in x 5.0 in

Displacement

4.4 Liter
268 cu in

Aspiration

Turbocharged-aftercooled
and turbo only aspiration
(Turbocharged aspiration only for
65kW (71kW))

Governor

Electronic (A5 ECM)

Refill Capacity

Lube Oil System w/Oil filter change:
11 L 2.8 gal)

Oil Change Interval

500 hrs

Cooling

Heat exchanger, combined circuit keel
cooling, or separate circuit keel cooling

Flywheel Housing

SAE No. 03 with SAE 11.5 flywheel
(126 teeth)

FEATURES AND BENEFITS

- Simplicity = Reliability
- Configure the engine how you want it, package it yourself
- Compact engine profile with high power density
- Ease of repower with multiple cooling system options
 - Single circuit keel cooling
 - Separate circuit keel cooling
 - Heat exchanger
- Clean, smooth, and quiet operations
- Advanced fuel system provides excellent fuel consumption and low smoke
- Proven core engine design with millions of operating hours
- Fewer maintenance touchpoints and longer service intervals
- Global dealer network for unparalleled support

STANDARD ENGINE EQUIPMENT

- Common Rail fuel system
- Engine mounted air cleaner and expansion tank
- Gear-driven jacket-water and auxiliary water pumps
- Watercooled exhaust manifold and turbocharger
- Integral plate-type oil cooler
- 12V or 24V starter motor
- Open crankcase ventilation system
- Internal engine balancing shaft
- Engine mounted fuel and oil filters
- Engine mounted customer interface and control relays

OPTIONAL ATTACHMENTS

- MGGP 200 Gauge Panel and interface harness
- Engine shutdown sensors and shutdown controller
- EMCP engine control panel
- Double wall high pressure fuel lines
- Exhaust elbow and bellows
- Rear mounting feet
- Jacket water heater
- Glow plugs
- Jacket water connections (keel cooled)
- S-O-SSM sample points

AUXILIARY 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 |

TECHNICAL DATA

C4.4 Marine Auxiliary Engine (Electric Control System)

FUEL CONSUMPTION - AUXILIARY/GENSET/DEP

| Constant Speed Fuel & DEF Consumption 129 bkW (173.0 bhp) @ 1800 rpm | | | | | |
|---|-------|-------|-----------|-----|----------|
| Brake Specific Fuel Consumption | | | | | |
| %Power | ekW | bhp | lb/bhp-hr | bkW | g/bkW-hr |
| 100 | 118.0 | 173.0 | 0.356 | 129 | 216.7 |
| 90 | 106.2 | 155.7 | 0.358 | 116 | 218.5 |
| 80 | 94.4 | 138.4 | 0.361 | 103 | 220.0 |
| 70 | 82.6 | 121.1 | 0.366 | 90 | 223.0 |
| 60 | 70.8 | 103.8 | 0.373 | 77 | 227.5 |
| 50 | 59.0 | 86.5 | 0.379 | 65 | 231.2 |
| 40 | 47.2 | 69.2 | 0.398 | 52 | 242.5 |
| 30 | 35.4 | 51.9 | 0.418 | 39 | 255.0 |

- ISO 3046/1 fluid consumption tolerance of +5%

| Constant Speed Fuel & DEF Consumption 108.6 bkW (145.6 bhp) @ 1800 rpm | | | | | |
|---|------|-------|-----------|-------|----------|
| Brake Specific Fuel Consumption | | | | | |
| %Power | ekW | bhp | lb/bhp-hr | bkW | g/bkW-hr |
| 100 | 99.0 | 145.6 | 0.359 | 108.6 | 219.1 |
| 90 | 89.1 | 131.1 | 0.366 | 98 | 223.0 |
| 80 | 79.2 | 116.5 | 0.372 | 87 | 226.8 |
| 70 | 69.3 | 101.9 | 0.379 | 76 | 231.0 |
| 60 | 59.4 | 87.4 | 0.386 | 65 | 235.5 |
| 50 | 49.5 | 72.8 | 0.393 | 54 | 239.5 |
| 40 | 39.6 | 58.3 | 0.400 | 43 | 244.0 |
| 30 | 29.7 | 43.7 | 0.416 | 33 | 253.5 |

- ISO 3046/1 fluid consumption tolerance of +5%

| Constant Speed Fuel & DEF Consumption 81.5 bkW (109.3 bhp) @ 1800 rpm | | | | | |
|--|------|-------|-----------|------|----------|
| Brake Specific Fuel Consumption | | | | | |
| %Power | ekW | bhp | lb/bhp-hr | bkW | g/bkW-hr |
| 100 | 75.0 | 109.3 | 0.375 | 81.5 | 228.6 |
| 90 | 67.5 | 98.4 | 0.380 | 73 | 231.5 |
| 80 | 60.0 | 87.4 | 0.385 | 65 | 234.5 |
| 70 | 52.5 | 76.5 | 0.390 | 57 | 237.5 |
| 60 | 45.0 | 65.6 | 0.395 | 49 | 240.5 |
| 50 | 37.5 | 54.6 | 0.400 | 41 | 243.6 |
| 40 | 30.0 | 43.7 | 0.416 | 33 | 253.5 |
| 30 | 22.5 | 32.8 | 0.443 | 24 | 270.0 |

- ISO 3046/1 fluid consumption tolerance of +5%

Note: Consult your local Cat dealer to create a customized engine TCO (Total Cost of Ownership) analysis specific to your vessel.
Dealers (only): Please reference TMI Web for most current information.

TECHNICAL DATA

C4.4 Marine Auxiliary Engine (Electric Control System)

Constant Speed Fuel & DEF Consumption

71.1 bkW (95.3 bhp) @ 1800 rpm

| Brake Specific Fuel Consumption | | | | | |
|---------------------------------|--------------------------------|------|-----------|------|----------|
| %Power | ekW | bhp | lb/bhp-hr | bkW | g/bkW-hr |
| 100 | 65.0 (turbocharged aspiration) | 95.3 | 0.405 | 71.1 | 247.0 |
| 90 | 58.5 | 85.8 | 0.408 | 64 | 249.0 |
| 80 | 52.0 | 76.3 | 0.412 | 57 | 251.2 |
| 70 | 45.5 | 66.7 | 0.418 | 50 | 255.0 |
| 60 | 39.0 | 57.2 | 0.427 | 43 | 260.4 |
| 50 | 32.5 | 47.7 | 0.437 | 36 | 266.5 |
| 40 | 26.0 | 38.1 | 0.448 | 28 | 272.8 |
| 30 | 19.5 | 28.6 | 0.463 | 21 | 282.0 |

- ISO 3046/1 fluid consumption tolerance of +5%

Constant Speed Fuel & DEF Consumption

108.6 bkW (145.6 bhp) @ 1500 rpm

| Brake Specific Fuel Consumption | | | | | |
|---------------------------------|------|-------|-----------|-------|----------|
| %Power | ekW | bhp | lb/bhp-hr | bkW | g/bkW-hr |
| 100 | 99.0 | 145.6 | 0.363 | 108.6 | 221.2 |
| 90 | 89.1 | 131.1 | 0.365 | 98 | 222.5 |
| 80 | 79.2 | 116.5 | 0.367 | 87 | 223.7 |
| 70 | 69.3 | 101.9 | 0.368 | 76 | 224.1 |
| 60 | 59.4 | 87.4 | 0.366 | 65 | 223.2 |
| 50 | 49.5 | 72.8 | 0.364 | 54 | 222.1 |
| 40 | 39.6 | 58.3 | 0.376 | 43 | 229.2 |
| 30 | 29.7 | 43.7 | 0.391 | 33 | 238.5 |

- ISO 3046/1 fluid consumption tolerance of +5%

Constant Speed Fuel & DEF Consumption

86.8 bkW (116.4 bhp) @ 1500 rpm

| Brake Specific Fuel Consumption | | | | | |
|---------------------------------|------|-------|-----------|------|----------|
| %Power | ekW | bhp | lb/bhp-hr | bkW | g/bkW-hr |
| 100 | 80.0 | 116.4 | 0.382 | 86.8 | 232.8 |
| 90 | 72.0 | 104.8 | 0.384 | 78 | 234.0 |
| 80 | 64.0 | 93.1 | 0.386 | 69 | 235.5 |
| 70 | 56.0 | 81.5 | 0.387 | 61 | 236.0 |
| 60 | 48.0 | 69.8 | 0.385 | 52 | 234.7 |
| 50 | 40.0 | 58.2 | 0.383 | 43 | 233.7 |
| 40 | 32.0 | 46.6 | 0.394 | 35 | 240.2 |
| 30 | 24.0 | 34.9 | 0.411 | 26 | 250.5 |

- ISO 3046/1 fluid consumption tolerance of +5%

Note: Consult your local Cat dealer to create a customized engine TCO (Total Cost of Ownership) analysis specific to your vessel. Dealers (only): Please reference TMI Web for most current information.

TECHNICAL DATA

C4.4 Marine Auxiliary Engine (Electric Control System)

| Constant Speed Fuel & DEF Consumption 108.6 bkW (145.6 bhp) @ 1500 rpm | | | | | |
|---|--------------------------------|------|-----------|------|----------|
| Brake Specific Fuel Consumption | | | | | |
| %Power | ekW | bhp | lb/bhp-hr | bkW | g/bkW-hr |
| 100 | 65.0 (turbocharged aspiration) | 95.3 | 0.424 | 71.1 | 258.6 |
| 90 | 58.5 | 85.8 | 0.430 | 64 | 262.0 |
| 80 | 52.0 | 76.3 | 0.435 | 57 | 265.3 |
| 70 | 45.5 | 66.7 | 0.439 | 50 | 267.5 |
| 60 | 39.0 | 57.2 | 0.440 | 43 | 268.0 |
| 50 | 32.5 | 47.7 | 0.441 | 36 | 269.0 |
| 40 | 26.0 | 38.1 | 0.447 | 28 | 272.5 |
| 30 | 19.5 | 28.6 | 0.459 | 21 | 280.0 |

- ISO 3046/1 fluid consumption tolerance of +5%

DIMENSIONS & WEIGHT

| | Length (1) | Height (2) | Width (3) | Engine dry weight |
|------|------------------|-------------------|------------------|-------------------|
| min. | 33.7 in / 856 mm | 40.9 in / 1038 mm | 30.6 in / 778 mm | 1200 lb / 544 kg |
| max. | 33.7 in / 856 mm | 40.9 in / 1038 mm | 32.0 in / 814 mm | 1278 lb / 5791 kg |

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

