C32B Marine Propulsion Engines Commercial Applications





ENGINE SPECIFICATIONS

| CONFIGURATION | V 12, 4-Stroke Cycle Diesel |
|--------------------|---------------------------------------|
| EMISSIONS | IMO II, IMO II / III, U.S. EPA Tier 4 |
| RATED ENGINE SPEED | 1600 - 2100 |
| DISPLACEMENT | 32.1 L (1959 in³) |
| ASPIRATION | Twin Turbocharged – Aftercooled |
| GOVERNOR | Electronic (ADEM VI) |
| FLYWHEEL HOUSING | SAE No. 0 |

| BORE X STROKE | 145 mm x 162 mm / 5.7 in x 6.38 in |
|---|--|
| REFILL CAPACITY LUBE OIL SYSTEM W/OIL FILTER CHANGE | 146 L (38.5 gal) – Deep Sump |
| OIL CHANGE INTERVAL | 1000 hour A rating / 750 hour B rating |
| ROTATION (FROM FLYWHEEL END) | Counterclockwise |
| COOLING | Heat Exchanger or Keel Cooled |

KEY FEATURES & BENEFITS

- Optimized engine design to enable increased power density
- Improved engine durability lowering total cost of ownership compared to previous models. Airless aftertreatment injection system
- Factory certified IMOII / IMO III / U.S. EPA Tier 4 systems
- IMO III system can be switched to IMO II mode in approved areas
- Updated engine electronic control module (ADEM VI)
- Updated Aftercooler design for increased cooling
- Marine alarm and protection system available
- MCS certifications available

STANDARD EQUIPMENT

- ADEM VI electronic control module
- Air Cleaner / Closed Crankcase Ventilation
- Gear-driven JW and SW pump (if equipped)
- Water-cooled exhaust manifolds and turbochargers
- MEUI-C fuel system
- 1000-hour oil pan (deep sump with A-Rating)
- RH or LH service side options
- · Duplex fuel filtration

OPTIONAL ATTACHMENTS

- 120 V or 240 V jacket water heater
- SAE A or B PTO (RH rear)
- SAE A or B PTO (LH rear with Keel only)
- Front driven PTO
- 75 A, 105 A, or 175 A alternator
- Duplex lube oil
- · Shallow sump oil pan
- Marine alarm & protection
- SOLAS shielding
- See Marine price list for additional attachments

RATINGS & FUEL CONSUMPTION

PROPULSION ENGINES

| Rating | mhp | bhp | bkW | rpm | U.S. g/h | g/bkW-h | IMO | U.S. EPA | EU | China |
|--------|------|------|------|-----------|----------|---------|----------|----------|----|-------|
| Α | 1217 | 1200 | 895 | 1600-1800 | 58 | 209.4 | 11 / 111 | Tier 4 | NC | NC |
| Α | 1319 | 1300 | 970 | 1800 | 63 | 208 | 11 / 111 | Tier 4 | NC | NC |
| В | 1470 | 1450 | 1081 | 1800-2100 | 73 | 218.2 | II / III | Tier 4 | NC | NC |

Rating Definition:

A Rating (Unrestricted Continuous)

Typical applications: For Vessels operating at rated load and rated speed up to 100% of the time without interruption or load cycling (80% to 100% load factor).

Typical operation ranges from 5000 to 8000 hours per year.

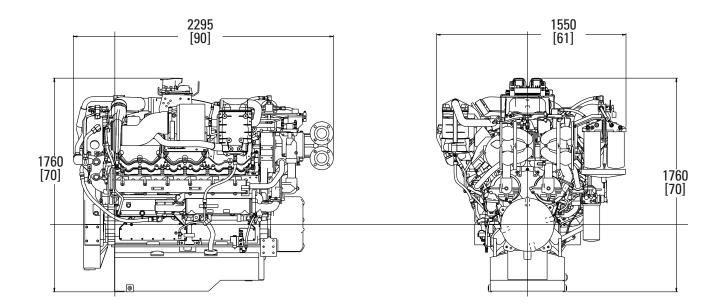
B Rating (Heavy Duty)

Typical applications: For vessels operating at rated load and rated speed up to 80% of the time with some load cycling (40% to 80% load factor).

Typical operation ranges from 3000 to 5000 hours per year.

ENGINE DIMENSIONS & WEIGHT

| LENGTH | Max: 90 in. / 2295 mm Min: 84 in. / 2131 mm |
|------------|--|
| HEIGHT | Max: 70 in. / 1760 mm Min: 70 in. / 1760 mm |
| WIDTH | Max: 61 in. / 1550 mm Min: 61 in. / 1550 mm |
| DRY WEIGHT | Max: 8050 lb / 3650 kg Min: 7495 lb / 3400 kg |





CLEAN EMISSIONS MODULE (CEM)

| Dimensions and Weight | | | | | | |
|-----------------------|------------|------------|-----------|-----------|--|--|
| Model | Length (1) | Height (2) | Width (3) | Weight | | |
| Z-Flow | 2508 mm | 711 mm | 1606 mm | 648 kg | | |
| | 98.7 in | 28 in | 63.2 in | 1428.6 lb | | |
| U-Flow | 2336 mm | 711 mm | 1605 mm | 647 kg | | |
| | 92 in | 28 in | 63.2 in | 1426.4 lb | | |
| Dosing Cabinet | 794 mm | 1453 mm | 344 mm | 145 kg | | |
| | 31.3 in | 57.2 in | 13.5 in | 319.7 lb | | |

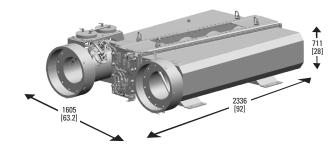
The C32B engine requires Selective Catalyst Reduction (SCR) technology.

The easy-to-install Cat® SCR System is an exhaust gas aftertreatment solution compliant with U.S. EPA Tier 4 / IMO III emission standards.

- Airless SCR technology
- IMO II-III switchable calibrations available
- · Maintains engine efficiency, durability and reliability
- Easy to install with minimum impact to vessel design
- Compact package from one single source
- · Available for new builds and retrofits
- Wall mounted dosing cabinet design for easier service and installation
- For detailed dimensions and installation requirements, please refer to the latest revision of the A&I guide

Clean Emissions Module (CEM)

Available in U-flow configurations (shown) and Z-flow configurations.



Dosing Cabinet



