QSK50 IMO III

MARINE AUXILIARY ENGINES

COMMERCIAL AND RECREATIONAL APPLICATIONS

GENERAL SPECIFICATIONS

| Configuration | V-16 cylin | | | |
|---------------|------------|--|--|--|
| Aspiration | Turbocha | | | |
| Displacement | 50.3 L [30 | | | |
| Bore & Stroke | 159 x 159 | | | |
| Rotation | Counterc | | | |
| Fuel System | Modular | | | |

V-16 cylinder, 4-stroke diesel Turbocharged / Low Temp. Aftercooled 50.3 L [3068 in³] 159 x 159 mm [6.25 x 6.25 in] Counterclockwise facing flywheel Modular Common Rail

PRODUCT DIMENSIONS AND WEIGHT

| Overall Length | mm (in) | 2780 (109) |
|-----------------------|---------|---------------|
| Overall Width | mm (in) | 1573 (62) |
| Overall Height | mm (in) | 2232 (88) |
| Weight | kg (lb) | 6720 (13,823) |
| Aftertreatment Weight | kg (lb) | 164 (362) |



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POWER RATINGS

| Engine | Output Power | | Engine | Rating | Fuel Consumption | | | | Emissions |
|-------------|--------------|------|--------------|------------|------------------------------|-------|-----------------------|------|-----------|
| Model | kW | BHP | Speed RPM | Definition | Rated Speed L/hr (gal/hr) | | ISO* L/hr (gal/hr) | | IMO |
| Fixed Speed | | | | | | | | | |
| QSK50-DM1 | 1290 | 1730 | 1500 | Prime | 316.6 | 83.6 | 164.9 | 43.5 | 3 |
| QSK50-DM1 | 1342 | 1800 | 1800 | Prime | 339.9 | 89.8 | 177.6 | 46.9 | 3 |
| QSK50-DM1 | 1628 | 2183 | 1800 | Prime | 405.1 | 107.0 | 211.0 | 55.7 | 3 |

*Average fuel consumption based on ISO 8178 E3 Standard Test Cycle (variable speed models) and ISO 8178 D2 Standard Cycle (fixed speed models).

FEATURES AND BENEFITS

Engine Design – Reliable base engine uses common components from the proven K19, K38 and K50 engines. A new cast-iron, ductile single-piece piston with nitride-coated rings and hardened cylinder liner provides excellent durability and long life. No matter the vessel, Cummins will keep you always on.

Fuel System – Modular Common Rail Fuel System features a simplified design which provides constant high injection pressure regardless of engine speed or load condition. Benefits include low noise and vibration for quiet operation, idle stability and low-end torque.

Cooling System – Two-pump, two-loop, low temperature aftercooling maximizes efficiency and improves performance. Engine-mounted titanium plate heat exchanger provides superior durability with minimal maintenance requirements.

Exhaust System – Dry-shielded exhaust manifold and turbocharger. Vertical or horizontal exhaust connections available for installation flexibility.

Air System – Turbocharger optimized for vessel operating conditions and safety. Mounted or remote marine grade air cleaner with replaceable canister reduces maintenance cost.

Lubrication System – Standard capacity 151 L (40 gal) and high capacity 204 L (54 gal) marine grade oil pan. Cummins spin-on oil filters available for easy accessibility and servicing.

Electronics – 24v Quantum System electronics feature an ECM to monitor operating parameters, while providing diagnostics, prognostics and complete engine protection. Simplified electrical customer interface box for all vessel connections to reduce installation complexity. **Certifications –** Complies with IMO Tier III emissions regulations. Designed to meet the International Association of Classification Societies (IACS) and SOLAS requirements.

Consult your local Cummins professional for a complete listing of available class approvals.

Aftertreatment System – Lower DEF Consumption, Higher Sulfur Tolerance, and keeping idle up to speed.

OPTIONAL EQUIPMENT

- C Command panels
- ELIMINATOR[™] oil filtration system
- Premium coolant hose connections
- Duplex lube oil and fuel filtration
- SAE A or B (keel cooled only) accessory drives
- Front PTO adaptor
- Pre-lube with QuickEvac
- Air or electric starter
- Rigid or flexible mounting arrangements



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