QSC8.3
QUANTUM SERIES ENGINE

Features
Fuel System: Cummins High-Pressure Common-Rail; handed spin-on engine mounted fuel filter
Lubrication System: Handed spin-on engine mounted lube filter, cast aluminum oil pan
Electrical System: 12-volt and 24-volt systems available
Coolant System: Sea water heat exchanger cooling system
Emissions: EPA Tier 3, IMO II, and RCD certified, EIAPP and RRR certificate options available

Engine Overview
• Unmatched performance from industry-leading power density on this four-valve-per-cylinder engine
• Increased durability from innovative engine design characteristics
• Improved fuel economy and sociability from the high-pressure common-rail fuel system
• Maximize vessel performance and access comprehensive vessel diagnostic information via SmartCraft® electronics
• Peace of mind delivered by the Cummins Captain’s Briefing and global service network

Engine Specifications
Configuration In-line 6-cylinder, 4-stroke diesel
Bore & Stroke 114 mm x 135 mm (4.49 in x 5.31 in)
Displacement 8.3 L (505 in³)
Aspiration Turbocharged / Aftercooled
Rotation Counterclockwise facing flywheel

Power Ratings

<table>
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<tr>
<th>Rating</th>
<th>Cooling type</th>
<th>kW</th>
<th>MHP</th>
<th>BHP</th>
<th>Rated RPM</th>
<th>Max Torque</th>
<th>Emissions</th>
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Ratings and specifications subject to change without notice. Not responsible for typographical errors.
Fuel consumption data represents performance along a 2.7 fixed pitch propeller curve (for HO, ID, MCD, 3.0 for HD and CON ratings). Fuel consumption is based on fuel of 35° API gravity at 16°C (60°F) 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 lb/US gal). Observed horsepower is certified within ±5% of rated horsepower. Consult your local Cummins professional for further information.

Intermittent (ID): Intended for intermittent use in variable load applications, where full power is limited to two hours out of every eight hours of operation. Also, reduced power operation must be at or below cruise rpm, which is 200 rpm below the maximum rated speed. This rating is for applications operating less than 1500 hours per year.

Government Service (GS): Intended for infrequent use in variable load applications, where full power is limited to one hour out of every eight hours of operation. Also, reduced power operation must be at or below cruise speed (rpm). Cruise speed (rpm) is dependent on the engine rated speed (rpm), refer to Table 1 below. For applications operating less than 500 hours per year. Engines with this rating are restricted to non-revenue generating government service propulsion applications. It is not to be used in any revenue generating commercial applications, nor is it to be used in recreational/pleasure operations.

High Output (HO): Intended for infrequent use in variable load applications, where full power is limited to one hour out of every eight hours of operation. Also, reduced power operation must be at or below cruise speed (rpm). Cruise speed (rpm) is dependent on the engine rated speed (rpm), refer to Table 1 below. For applications operating less than 500 hours per year. Engines with this rating are intended for powering recreational/pleasure use vessels only. Commercial use is defined as any work or employment related use of the product, or any use of the product which generates income, for any part of the warranty period, even if the product is only occasionally used for such purposes.

Rating Conditions: Declared power ratings are based upon ISO 15550 reference conditions/air pressure of 100kPa (29.612 in Hg) air temperature of 25° C (77°F) and 30% relative humidity. Propeller Shaft Power represents the net power available after typical reverse/reduction gear losses and is 97% of rated power. Power rated in accordance with IMCI procedures.