MARINE PRODUCTS GUIDE 2019







TECHNOLOGY THAT TRANSFORMS

Consolidating the power of Cummins to better serve the recreational, government, and commercial marine segments.



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FROM THE COVER



Courtesy of Nordhavn

NORDHAVN

The Nordhavn 59 Coastal Pilot features a "CE Category A" unlimited offshore rating, insuring that the vessel has the sea keeping and strength capabilities to take on the most serious coastal cruises of up to 1000 miles. The semi-displacement hull is designed for modest top speeds in the 18-20 knot range with an efficient and sea kindly ride at lower cruising speeds. The 59CP is powered by two QSM11 main propulsion engines of 715 hp each and AC power is provided to the vessel via a 21.5 kW Onan generator.



ST. FRANCIS

St. Francis is the latest edition to the San Francisco fire departments' three boat fleet. Known on the radio as "Fireboat 3" to avoid confusion during response time. The 88 ft Jensen Maritime Consultants designed, Vigor Industrial built vessel is a multipurpose fireboat. Powered by three QSK19 EPA Tier 3 engines each rated at 750 hp, "Fireboat 3" is capable of 18,000 gpm using all three engines. One of the QSK19 engines is dedicated to run a fire pump while the other two are used as propulsion Courtesy of Vigor and pump units.



Courtesy of SEACOR Marine

SEACOR PANTHER

SEACOR PANTHER is the latest addition to SEACOR's catamaran fast-supply vessel fleet. 188 ft in length and powered by four 4,000 hp Cummins QSK95 engines, the vessel is capable of running 40 knots. PANTHER is also equipped with two QSM11 powered generators rated at 290 kWe as well as one fully enclosed QSM11 powered deck generator rated at 270 kWe.

WE ARE CUMMINS.

LEGACY

Founded in 1919 by self-taught mechanic and inventor Clessie Cummins and Columbus, Indiana banker W.G. Irwin, Cummins Inc. has a long history powering marine applications. Today, we provide products and services across a range of commercial, government and recreational marine applications globally.

SUSTAINABILITY

Cummins takes a broad view of sustainability including such things as safety, diversity, leadership and governance along with environmental practices, community involvement and financial performance.

INNOVATION

From our very first marine diesel engine in 1919 to launching the first EPA Tier 2-certified marine diesel engine in 2005, Cummins empowers its employees to apply the creative ingenuity necessary to make us better, faster, first. We are confident this spirit of creativity will lead us to future success with the launch of marine aftertreatment and the most powerful high speed marine diesel engine, the QSK95.

GLOBAL SUPPORT

Present in over 190 countries and territories, Cummins has the most extensive service network in the world with over 600 servicing distributor locations. Plus, our regional response teams ensure service and application expertise is available when and where it's needed, even in the most remote operating locations.

MARINE EXPERTISE

Cummins employs an experienced team of technical and market experts focused on the marine industry and its customers. Factory trained Marine Application Engineers will help you select the right spec for your vessel and Qualified Marine Technicians keep you up and running once in service.

COMPLETE MARINE SOLUTIONS

Cummins offers a complete line of propulsion, generating set and auxiliary power solutions designed specifically for the challenges of marine applications. Because we understand customer needs and operating conditions vary, we also offer custom generator set packaging through our distribution channel.

MARINE LEGACY



1919

Cummins first diesel was the 1.5 to 8 hp HVID used by farmers for powering pumps. Founded by Clessie Cummins and W.G. Irwin, the company is still located at the original factory site in Columbus, Indiana. Sixty percent of production in that first year was marine.

1920s

Cummins introduced its first fully enclosed marine diesel engine in 1925.

1940s

The Halton, a logging tug built by Russell Boatyard of Ontario in 1941, was capable of towing a mile-long boom of logs with a weight equivalent of 20,000 tons. With 440 hp from twin Cummins and a heavy steel hull, the tug could break through ice on the arduous waters from the forest to the pulp mill.







1960s

In 1968, the HM2 hovercraft was the first with an immersed sidewall design to be built. Propulsion came from two Cummins VT8 320 hp and lift from a V6 185 hp for 5 air cushion fans. Highly maneuverable and with a top speed of 40 mph, the U.K.-built HM2 pioneered the fast ferry concept.



1970s

Cummins launched the V903, V504 and



555 engines, the first modern compact marine inboard diesels.

1986

Cummins acquired a majority stake in Onan Corporation and the remaining share six years later. With over 60 years of relentless pursuit in product excellence, Onan was a legendary name in power generation.

1993

Cummins established its Marine headquarters in Charleston, SC.



1990s

In 1999, the world's largest floating crane barge lifted bridge sections on the 10 mile Oresund link between Denmark and Sweden. Powered by Cummins KV 50 liter generator sets, the self-propelled Svanen (Swan) has a lift capacity of almost 9,600 tons up to 250 ft.



2004

Cummins entered the diesel electric market with the launch of Orleans, a platform supply vessel owned and operated by Louisiana-based Rigdon Marine, since acquired by Gulfmark. Powered by two QSK60 and one KTA38 powered marine generators, Orleans was the first of 10 Guido Perladesigned 64m x 16.5m vessels built.



MARINE LEGACY



2005

Cummins introduced its first electronically-controlled marine engines and was the first to certify an electronic engine to EPA Tier 2 standards.



2010

Cummins introduced its dual product line to meet global IMO Tier II standards, making the company the only diesel engine manufacturer to offer both mechanically- and electronically-controlled products meeting the most stringent emissions standards.

2011

Cummins introduced its largest engine to date, the QSK95.



2000s

In 2009, Cummins provided power for the world's first hybrid tug, the Carolyn Dorothy. Foss Maritime won the Environmental Protection Agency's Clean Air Technology Award for the design and also contracted with Lloyd's Register to obtain the first Green Passport certification for a North American tug! In addition to two QSK50 main engines, the Carolyn Dorothy also features C Command Elite and two QSM11 generator sets.

2015

Cummins announced one larger marine organization, combining the Engine and Power Generation businesses under the Cummins Marine umbrella. The new Cummins Marine offers a complete line of propulsion and auxiliary power solutions from 75 to 3150 kw (100–4224 hp) and generator sets from four to 1240 kWe.

INNOVATION

THE MOST POWERFUL HIGH-SPEED MARINE DIESEL.

With ratings from 2386 kW to 3132 kW (3200–4200 hp), the QSK95 achieves a power output previously available only from larger medium-speed marine engines, while bringing the advantages of a lower capital cost and a more compact installation.

The QSK95 provides 95 liters of displacement in a 78-liter package. Nested cylinders and a 60-degree V enable a short, narrow engine block relative to other engines of comparable displacement. Even with the compact package size, the QSK95 provides best-inclass power density. In addition, the QSK95 weighs in just over 13,000 kg (28,660 lb) – this is between 25 percent and 70 percent less than medium-speed platforms of similar power output.

As operators continue to seek better vessel maneuverability, the QSK95 delivers faster transient response through a unique turbo arrangement and a dry system. By using one turbo per four cylinders, the QSK95 is able to utilize a small turbo model. The dry turbo housings and dry exhaust manifold maximize the available energy to the turbos, allowing them to spool up quickly, resulting in fast engine response. Cummins design, validation and service teams devoted countless hours to ensuring that the QSK95 sets industry serviceability standards. From the early phases of engine design, qualified technicians participated in service tool and procedure validation, evaluating for safety, ergonomics, durability, reliability and repair quality robustness, and to reduce the cost and time of repairs. Design concepts were also evaluated for progressive damage prevention. Initial feedback from technicians servicing QSK95 engines in the field has confirmed that the focus on serviceability will provide considerable payback over the life of the engines.

At launch, the QSK95 will meet global International Maritime Organization (IMO) Tier II emissions standards with highly efficient fuel injection and clean combustion. It is manufactured at the Seymour Engine Plant in Seymour, Indiana; the first marine engines were put into service in the spring of 2017.

For technical data, see pages 52 and 80.

For availability, please contact your local Cummins distributor.

GLOBAL SUPPORT

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cabo.customerassistance@ cummins.com

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Kothrud, Pune 411029 Phone: 091 20 336680 Fax: 091 20 345916 powermaster@kcl.cummins.com

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Cummins Vendas e Serviços de Motores e Geradores Ltda. Av. Brasil, 20289 – Fazenda Botafogo – Rio de Janeiro / RJ 21515-000, Brazil Phone: 55 (21) 2196 3131

NORTH AMERICA

4500 Leeds Avenue – Suite 301 Charleston, SC 29405 U.S.A. Phone: 1-800-Cummins

SOUTH PACIFIC

2 Caribbean Drive Scoresby Victoria 3179 Australia Phone: 1 800 351 004 sthpac.enquiries@cummins.com

SOUTHEAST ASIA

8 Tanjong Penjuru Jurong Industrial Estate Singapore 609019 Phone: 65 6265 0155 Fax: 65 6266 0432

For more information, please contact your local Cummins distributor.

To find your closet distributor, visit locator.cummins.com

LOCAL EXPERTS

Cummins sells its engines, generator sets and associated components through a global network of 600 distributor locations. Our local presence guarantees a face-to-face relationship wherever our products are operating, ensuring fast access to reliable service, engineering expertise and parts support.

Cummins provides fully integrated support at all stages of a new build or repower project, from vessel concept to installation, commissioning and sea trial. We work closely with partner suppliers, including gear manufacturers and system integrators to ensure proper engine selection, application and installation.

Our Marine Application Engineers (MAE) support projects during design and construction to ensure appropriate products are installed, while our Local Qualified Marine Technicians (QMT) support the equipment and customer once the vessel is in-service.

Both MAEs and QMTs undergo rigorous factory training and certification, including regular training in the latest advances in engines, diagnostics and repair. Distributors make a heavy investment in state-of-the-art repair tools, electronic hardware and software. In addition to on-site support, Cummins distributors operate workshops for more complex repairs and rebuilds, as well as custom builds and upfit.

Many Cummins distributors employ in-house engineering experts to design custom solutions featuring our marine auxiliary engines, base rails, electronics and customer's choice of alternator, including our own STAMFORD and AvK brands. These distributors also offer design and validation testing to ensure custom power packages meet performance, emissions and class society requirements.



GLOBAL MANUFACTURING

Cummins has an impressive global manufacturing presence that produces the right technology products for global and regional markets. We are the only engine manufacturer with a fully global network of production facilities, technical centers and service coverage — a unique capability which puts us ahead of the competition.

- » Global build capability to meet local application and emission requirements
- » Six Sigma led process improvement common across all worldwide facilities
- » All products externally certified to ISO 9001–2000, the international standard for the highest quality design, manufacturing and supply



Cummins Generator Technologies Manufacturing Locations

EXPERIENCE

Cummins offers a complete line of propulsion, generating set and auxiliary power solutions designed specifically for the challenges of commercial, government and recreational marine applications.

We have significant experience working with vessel owners, operators and fleets in a number of market segments including:



Commercial transport photo courtesy of Ari Jonkman; government/defense photo courtesy of Marsun Shipyard; offshore photo courtesy of Bourbon Offshore; passenger transport photo courtesy of Alan Haig–Brown; recreational photo courtesy of Princess Yachts; special use photo courtesy of the Hillstrand family.

THE RIGHT TECHNOLOGY

Cummins offers a range of engines with both mechanical and electronic fuel systems compliant to global emission requirements. This allows us to meet a variety of customer needs while distinguishing ourselves from other engine manufacturers who are offering only electronic emissionized products.

MECHANICAL PRODUCT LINE

Cummins customers have communicated significant interest in mechanical products for IMO Tier II based on preference, the crew's comfort level in servicing the product and operator requirements—some operators simply do not need or require the features available on an electronic product. In addition, the mechanical product has lower initial costs and is a great option for fleets already powered by Cummins mechanical products who are seeking to standardize their fleet.

- » B, K, N and V products with mechanical fuel systems
- » Simple, proven design
- » Easy to service
- » Lower cost of ownership
- Basic functionality and monitoring
- Marine Classification Society approved

QUANTUM SERIES ELECTRONIC PRODUCT LINE

Electronic engines offer numerous benefits including higher power while meeting more stringent emissions and providing a more sociable operating environment. Cummins Quantum Series engines allow engine fueling to be precisely measured and optimized, which can significantly reduce smoke when operating in transient conditions. Because fuel injection can be specifically controlled at varying loads and engine speed, fuel consumption can be optimized -- not only at full power, but also at partial load conditions. Perhaps the most beneficial feature of an electronic engine is the ability to capture and interpret engine parameters specific to the vessel's operating pattern.

- Quantum Series with electronic fuel systems
- Advanced functionality, options and features
- » World class durability
- » Proven electronics
- » Enhanced engine protection
- » Marine Classification Society approved

COMPLEMENTARY PRODUCTS

Cummins Inc., a global power leader, is a corporation of complementary business units that design, manufacture, distribute and service engines and related technologies, including fuel systems, controls, air handling, filtration, emission solutions and electrical power generation systems.



Aftertreatment



Filtration



Alternators



Power Generation



Cummins Emissions Solutions is

dedicated to innovation and dependability in meeting global emissions regulations, developing and producing various emission technologies for all engine makes. Current solutions, along with future technologies under development, are designed to meet emission standards across all industries around the globe.

Cummins Filtration is the industry leader in filtration, exhaust, coolant and chemical technologies for diesel and gas markets, offering dependability and reliability beyond OEM specifications and customer requirements.

Cummins Generator Technologies

offers premium quality alternators from two to 10,000 kVA. Our family of brands – MARKON[®], STAMFORD[®] and AvK[®] – is known for their robust build, reliable performance and versatile configurations.

Cummins Power Systems provides dependable solutions for all your power needs. Our comprehensive line of products can be found in recreational vehicle, marine, commercial mobile, residential standby and portable applications.

Cummins Turbo Technologies is the world's largest manufacturer of turbochargers for the medium-heavy duty diesel engine market and has a reputation for bringing innovative and dependable solutions to this key market sector.

CUMMINS MARINE PROPULSION

Cummins offers a complete line of variable speed propulsion solutions designed specifically for the challenges of commercial, government and recreational marine applications. Our propulsion line includes the mechanical K and N Series and the electronic Quantum Series.

Both the N Series and the K Series have proven reliable and durable in tough marine environments for over 25 years. Many of our NTA855 and KTA19/38/50 propulsion ratings are now certified to meet more stringent IMO Tier II global emissions standards. The Quantum Series product line was introduced in 2005 to meet the U.S. Environmental Protection Agency's stringent Tier 2 emission standard. Today the product line is certified to current EPA, IMO and EU regulations and will serve as the platform for future more stringent standards.



POWER RANGE FOR CUMMINS MARINE PROPULSION ENGINES

(To view Cummins ReCon product offering, visit pages 138-150)



RATING DEFINITIONS

Continuous Duty (CON): Intended for continuous use in applications requiring a load factor of 70–90 percent.

Heavy Duty (HD): Intended for continuous use in variable load applications with a load factor of 60–75 percent. Full power is limited to 10 hours out of every 12 hours of operation. Reduced power operations must be at or below 80 percent load.

Medium Continuous (MCD): Intended for continuous use in variable load applications with a load factor of 40–60 percent. Full power is limited to six out of every 12 hours of operation. Reduced power operation must be at or below 80 percent load.

Intermittent (INT): Intended for intermittent use in variable load applications with a load factor of 20–40 percent. Full power is limited to two out of every eight hours of operation. Reduced power operations must be at or below 80 percent load.

Light Duty (LD): Intended for intermittent use in variable load applications with a load factor of 10–30 percent. Full power is limited to one hour out of every eight hours of operation. Reduced power operation must be at or below 80 percent load.

High Output (HO): Intended for infrequent use in variable load applications with a load factor of 10–30 percent. Full power is limited to one out of every eight hours of operation. Reduced power operation must be at or below 80 percent load.

Engines with HO rating are restricted to recreational applications. It is not to be used in any revenue-generating commercial applications. Use of HO ratings in commercial applications will, at Cummins' discretion, void the warranty.

Contact your local Cummins applications expert for assistance matching a power rating to your specific installation. The definitions outlined here are intended to be a guide for selecting the appropriate ratings for a given application based on duty cycle and load factor.

CONTINUOUS DUTY RATINGS

| kW | BHP | RPM | Engine Model | Fuel System |
|------|------|------|--------------|-------------|
| 210 | 281 | 1800 | QSL9 | Electronic |
| 213 | 286 | 1800 | QSL9 | Electronic |
| 220 | 295 | 1800 | QSM11 | Electronic |
| 242 | 325 | 1800 | NTA855 | Mechanical |
| 261 | 350 | 1800 | QSM11 | Electronic |
| 297 | 398 | 1800 | QSM11 | Electric |
| 298 | 400 | 1800 | NTA855 | Mechanical |
| 336 | 450 | 1800 | X15 | Electronic |
| 373 | 500 | 1800 | KTA19 | Mechanical |
| 373 | 500 | 1800 | X15 | Electronic |
| 373 | 500 | 1800 | QSK19 | Electronic |
| 429 | 575 | 1800 | X15 | Electronic |
| 447 | 600 | 1800 | KTA19 | Mechanical |
| 447 | 600 | 1800 | X15 | Electronic |
| 447 | 600 | 1800 | QSK19 | Electronic |
| 492 | 660 | 1800 | QSK19 | Electronic |
| 559 | 750 | 1600 | KTA38 | Mechanical |
| 559 | 750 | 1800 | QSK19 | Electronic |
| 597 | 800 | 1800 | KTA38 | Mechanical |
| 634 | 850 | 1800 | KTA38 | Mechanical |
| 634 | 850 | 1800 | K38 | Mechanical |
| 671 | 900 | 1600 | KTA38 | Mechanical |
| 746 | 1000 | 1800 | KTA38 | Mechanical |
| 746 | 1000 | 1800 | K38 | Mechanical |
| 746 | 1000 | 1800 | QSK38 | Electronic |
| 783 | 1050 | 1600 | KTA38 | Mechanical |
| 895 | 1200 | 1800 | KTA38 | Mechanical |
| 969 | 1300 | 1600 | QSK38 | Electronic |
| 969 | 1300 | 1800 | QSK38 | Electronic |
| 1044 | 1400 | 1600 | KTA50 | Mechanical |
| 1193 | 1600 | 1800 | KTA50 | Mechanical |
| 1268 | 1700 | 1600 | QSK50 | Electronic |
| 1268 | 1700 | 1800 | QSK50 | Electronic |
| 1491 | 2000 | 1600 | QSK60* | Electronic |
| 1491 | 2000 | 1800 | QSK60 | Electronic |
| 1641 | 2200 | 1800 | QSK60* | Electronic |
| 2386 | 3200 | 1500 | QSK95 | Electronic |

* Note: IMOIII ratings available, please consult your local distributor for more information.

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HEAVY DUTY RATINGS

| kW | внр | RPM | Engine Model | Fuel System |
|------|------|------|--------------|-------------|
| 184 | 247 | 2600 | QSB6.7 | Electronic |
| 243 | 326 | 1800 | QSL9 | Electronic |
| 246 | 330 | 1800 | QSL9 | Electronic |
| 298 | 400 | 2100 | QSM11 | Electronic |
| 395 | 530 | 1800 | KTA19 | Mechanical |
| 477 | 640 | 1800 | KTA19 | Mechanical |
| 522 | 700 | 2100 | KTA19 | Mechanical |
| 559 | 750 | 1800 | QSK19 | Electronic |
| 567 | 760 | 2100 | QSK19 | Electronic |
| 597 | 800 | 1800 | QSK19 | Electronic |
| 597 | 800 | 2100 | QSK19 | Electronic |
| 820 | 1100 | 1800 | KTA38 | Mechanical |
| 969 | 1300 | 1800 | KTA38 | Mechanical |
| 1007 | 1350 | 1900 | KTA38 | Mechanical |
| 1007 | 1350 | 1950 | KTA38 | Mechanical |
| 1044 | 1400 | 1600 | QSK38 | Electronic |
| 1044 | 1400 | 1800 | QSK38 | Electronic |
| 1044 | 1400 | 1900 | QSK38 | Electronic |
| 1193 | 1600 | 1900 | KTA50 | Mechanical |
| 1268 | 1700 | 1800 | KTA50 | Mechanical |
| 1342 | 1800 | 1900 | KTA50 | Mechanical |
| 1342 | 1800 | 1600 | QSK50 | Electronic |
| 1342 | 1800 | 1800 | QSK50 | Electronic |
| 1342 | 1800 | 1900 | QSK50 | Electronic |
| 1715 | 2300 | 1900 | QSK60 | Electronic |
| 2685 | 3600 | 1700 | QSK95 | Electronic |

Typical vessel applications include displacement hull vessels such as mid-water trawlers, purse seiners and towboats where frequent slowing is common and engine speed and load is stable. Also used in high speed vessels such as ferries and crewboats.

Typical auxiliary applications include cargo pumps and thrusters in dynamic positioning modes.

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Courtesy of ERGOTRAK SA





Courtesy of Arie Jonkman

Courtesy of Brian Gauvin

MEDIUM CONTINUOUS RATINGS

| kW | BHP | RPM | Engine Model | Fuel System |
|------|------|------|--------------|-------------|
| 224 | 301 | 2600 | QSB6.7 | Electronic |
| 298 | 400 | 2100 | QSL9 | Electronic |
| 302 | 404 | 2100 | QSL9 | Electronic |
| 334 | 448 | 2100 | QSM11 | Electronic |
| 336 | 450 | 2100 | QSL9 | Electronic |
| 336 | 450 | 2100 | QSM11 | Electronic |
| 597 | 800 | 2100 | QSK19 | Electronic |
| 1044 | 1400 | 1950 | KTA38 | Mechanical |
| 1398 | 1875 | 1950 | KTA50 | Mechanical |
| 1529 | 2050 | 1800 | QSK50 | Electronic |
| 1641 | 2200 | 1900 | QSK50 | Electronic |
| 1864 | 2500 | 1800 | QSK60* | Electronic |
| 1864 | 2500 | 1900 | QSK60 | Electronic |
| 2013 | 2700 | 1800 | QSK60* | Electronic |
| 2013 | 2700 | 1900 | QSK60* | Electronic |
| 2983 | 4000 | 1700 | QSK95 | Electronic |

* Note: IMOIII ratings available, please consult your local distributor for more information.

Typical vessel applications include planing hull ferries, fishing boats designed for high speeds to and from fishing grounds, (non-cargo) displacement hull yachts and short trip coastal freighters where engine load and speed are cyclical. Typical auxiliary applications include powerpacks and some cargo pumps.

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Courtesy of Harald M. Valderhaug

Courtesy of Cummins South Pacific

Courtesy of New York Water Taxi

INTERMITTENT RATINGS

| kW | внр | RPM | Engine Model | Fuel System |
|------|------|------|--------------|-------------|
| 169 | 227 | 3000 | QSB6.7 | Electronic |
| 261 | 350 | 2800 | QSB6.7 | Electronic |
| 261 | 350 | 3000 | QSB6.7 | Electronic |
| 280 | 375 | 3000 | QSB6.7 | Electronic |
| 312 | 419 | 3000 | QSB6.7 | Electronic |
| 353 | 473 | 3000 | QSB6.7 | Electronic |
| 368 | 493 | 2600 | QSC8.3 | Electronic |
| 449 | 602 | 2300 | QSM11 | Electronic |
| 1119 | 1500 | 2050 | KTA38 | Mechanical |
| 1998 | 2680 | 1900 | QSK60 | Electronic |
| 3132 | 4200 | 1700 | QSK95 | Electronic |

Typical vessel applications include planing hulls such as customs, military and police vessels, charter and some fishing vessels. Typical auxiliary applications include hydraulic powerpacks and thrusters for maneuvering, as well as emergency fire pumps.

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Courtesy of Alan Haig-Brown

LIGHT DUTY RATINGS

| kW | BHP | RPM | Engine Model | Fuel System |
|-----|-----|------|--------------|-------------|
| 353 | 473 | 3300 | QSB6.7 | Electronic |
| 404 | 542 | 3300 | QSB6.7 | Electronic |
| 441 | 592 | 2800 | QSC8.3 | Electronic |
| 442 | 593 | 3000 | QSC8.3 | Electronic |
| 493 | 661 | 2300 | QSM11 | Electronic |
| 526 | 705 | 2500 | QSM11 | Electronic |

Typical applications include patrol, rescue, fire and assault vessels used by federal and state/local agencies.

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HIGH OUTPUT RATINGS

| kW | BHP | RPM | Engine Model | Fuel System |
|-----|-----|------|--------------|-------------|
| 184 | 247 | 2600 | QSB6.7 | Electronic |
| 220 | 295 | 1800 | QSM11 | Electronic |
| 224 | 301 | 2600 | QSB6.7 | Electronic |
| 261 | 350 | 3000 | QSB6.7 | Electronic |
| 280 | 375 | 3000 | QSB6.7 | Electronic |
| 298 | 400 | 2100 | QSM11 | Electronic |
| 302 | 404 | 2100 | QSL9 | Electronic |
| 312 | 419 | 3000 | QSB6.7 | Electronic |
| 336 | 450 | 2100 | QSM11 | Electronic |
| 353 | 473 | 3300 | QSB6.7 | Electronic |
| 368 | 493 | 2600 | QSC8.3 | Electronic |
| 404 | 542 | 3300 | QSB6.7 | Electronic |
| 404 | 543 | 3000 | QSC8.3 | Electronic |
| 442 | 593 | 3000 | QSC8.3 | Electronic |
| 449 | 602 | 2300 | QSM11 | Electronic |
| 474 | 636 | 2300 | QSM11 | Electronic |
| 493 | 661 | 2300 | QSM11 | Electronic |
| 526 | 705 | 2500 | QSM11 | Electronic |

Typical applications include sportfishers, motor yachts and cruisers.

| Page | IMO I | IMO II | EPA3 | RCD2 |
|------|-------|--------|------|------|
| 33 | | | | • |
| 39 | | - | | |
| 33 | | | | |
| 33 | | - | | |
| 33 | | • | | |
| 39 | | • | | • |
| 37 | | • | | |
| 33 | | | • | • |
| 39 | | • | | |
| 33 | | - | | |
| 35 | | | | |
| 33 | | • | • | • |
| 35 | | • | | |
| 35 | | • | • | • |
| 39 | | | | |
| 39 | | • | | |
| 39 | | | | |
| 39 | | - | - | |



GEAR MATCHES

| Engine Model | Duty Cycle | kW | МНР | RPM |
|--------------|-------------------|-----|-----|------|
| QSB6.7 | High Output | 184 | 250 | 2600 |
| | | 224 | 305 | |
| | | | | |
| | | 261 | 355 | 3000 |
| | | | | |
| | | 280 | 380 | 3000 |
| | | 312 | 425 | |
| | | | | |
| | | 353 | 480 | 3300 |
| | | | | |
| | | 405 | 550 | 3300 |
| | Light Duty | 353 | 480 | 3300 |
| | | 404 | 550 | 3300 |
| | | | | |
| | Intermittent | 169 | 230 | 3000 |
| | | 261 | 355 | 2800 |
| | | 261 | 355 | 3000 |
| | | 280 | 380 | |
| | | 312 | 425 | |
| | | 353 | 473 | 3000 |
| | Medium Continuous | 224 | 305 | 2600 |
| | | | | |
| | Heavy Duty | 184 | 250 | 2600 |

| Gear Model | Gear Ratio (:1) |
|--|---|
| MG 5050 A ZF 85 A ZF 85 IV ZF 280–1 A | 1.80 1.750, 1.962, 2.500 1.644, 2.008, 2.493 1.769, 2.000, 2.227 |
| MG 5050 A ZF 85 A ZF 85 IV ZF 280–1 A ZF 286 A | 1.80 1.750, 1.962, 2.500 1.644, 2.008, 2.493 1.769, 2.000, 2.227 1.750, 2.391 |
| ZF 85 A ZF 85 IV ZF 280–1 A ZF 286 A | 1.750, 1.962, 2.500 1.644, 2.008, 2.493 1.769, 2.000, 2.227 1.750, 2.391 |
| ZF 85 A ZF 85 IV ZF 280–1 A ZF 286 A | 1.750, 1.962, 2.500 1.644, 2.008, 2.493 1.769, 2.000, 2.227 1.750, 2.391 |
| ZF 280–1 A ZF 280 IV ZF 286 A | 1.769, 2.000, 2.227 2.063 1.750, 2.391 |
| ZF 280–1 A | 1.214 |
| ZF 280-1 A ZF 280 IV ZF 286 A | 1.214, 1.769, 2.000, 2.227 2.063 1.75, 2.391 |
| MG 5050 A | 1.80 |
| MG 5050 A | 1.80 |
| ZF 85 A ZF 85 IV ZF 280–1 A ZF 286 A | 1.750, 1.962, 2.500 1.644, 2.008, 2.493 1.769, 2.000, 2.227 1.750, 2.391 |
| ZF 286 A | 1.750, 2.391 |
| MG 5050 A | 1.80 |
| MG 5050 A ZF 85 A ZF 85 IV ZF 280–1 A | 1.80 1.750, 1.962, 2.500 1.644, 2.008, 2.493 1.769, 2.000, 2.227 |

GEAR MATCHES

| Engine Model | Duty Cycle | kW | МНР | RPM |
|--------------|--------------|------------|------------|--------------|
| QSC8.3 | High Output | 368 | 500 | 2600 |
| | | 404 | 550 | 3000 |
| | | 441 | 600 | 3000 |
| | Intermittent | 368 | 500 | 2600 |
| QSM11 | High Output | 449 493 | 610 670 | 2300 |
| | | 526 | 715 | 2500 |
| | Light Duty | 493 526 | 670 715 | 2300 2500 |
| | Intermittent | 449 | 610 | 2300 |

| Gear Model | Gear Ratio (:1) |
|--|---|
| MG 5065 A ZF 280–1 A ZF 286 ZF 286 A ZF 286 IV ZF 305–3 A | 1.72, 2.04, 2.43 1.769 1.000 1.484, 1.750, 1.962, 2.208, 2.391 1.535, 2.011, 2.322, 2.539 1.733, 2.423 |
| MG 5065 A ZF 280 IV ZF 286 A ZF 286 IV ZF 305–3 A | 1.72, 2.04, 2.43 1.772 1.484, 1.750, 1.962, 2.208, 2.391 1.535, 2.011, 2.322, 2.539 1.733, 2.423 |
| MG 5065 A ZF 286 A ZF 286 IV ZF 305–3 A | 1.72, 2.04, 2.43 1.484, 1.750, 1.962, 2.208, 2.391 1.535, 2.011, 2.322, 2.539 1.733, 2.423 |
| MG 5065 A ZF 286 A ZF 286 IV ZF 305–3 A | 2.43 1.484, 1.750, 1.962, 2.208, 1.535, 2.011 1.733, 2.423 |
| ZF 325–1 A ZF 325 IV | 1.733, 2.037, 2.240, 2.417 1.793, 2.037, 2.417 |
| ZF 325–1 ZF 325–1 A ZF 325 IV | 1.000 1.733, 2.037, 2.240, 2.417 1.793, 2.037, 2.417 |
| ZF 325–1 ZF 325–1 A ZF 325 IV | 1.000 1.733, 2.037, 2.240, 2.417 1.793, 2.037, 2.417 |
| ZF 325–1 A ZF 325 IV | 1.733, 2.037, 2.240, 2.417 1.793, 2.037, 2.417 |

QSB6.7 MAIN PROPULSION



GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | | |
|---------------|--------------------------------------|---------------------|--|--|--|
| Aspiration | Turbocharged/Aftercooled | | | | |
| Displacement | 6.7 L | 408 in ³ | | | |
| Bore & Stroke | 107 x 124 mm | 4.21 x 4.88 in | | | |
| Fuel System | High Pressure Common Rail (HPCR) | | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | ISSIO | IS |
|-------------------|-------|------|------------------------|--------------------------|-----|-------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Heavy I | Duty | | | | | | |
| 184* | 247 | 2600 | 46.9 (12.4) | 33.0 (8.7) | 2 | 3 | За |
| 184** | 247 | 2600 | 49.7 (13.1) | 34.1 (9.0) | 2 | З | За |
| Medium Continuous | | | | | | | |
| 224* | 301 | 2600 | 55.7 (14.7) | 39.2 (10.4) | 2 | З | За |
| 224** | 301 | 2600 | 58.7 (15.5) | 40.4 (10.7) | 2 | 3 | За |
| Intermi | ttent | | | | | | |
| 169* | 227 | 3000 | 47.3 (12.5) | 32.2 (8.5) | 2 | З | 3a |
| 261* | 350 | 2800 | 68.1 (18.0) | 47.7 (12.6) | 2 | З | За |
| 261** | 350 | 3000 | 71.8 (19.0) | 48.6 (12.8) | 2 | З | За |
| 280* | 375 | 3000 | 73.9 (19.5) | 50.4 (13.3) | 2 | З | За |
| 280** | 375 | 3000 | 75.7 (20.0) | 51.7 (13.7) | 2 | З | За |
| 312* | 419 | 3000 | 82.2 (21.7) | 55.0 (14.5) | 2 | 3 | За |
| 312** | 419 | 3000 | 84.3 (22.3) | 56.9 (15.0) | 2 | З | За |
| 353* | 473 | 3000 | 91.8 (24.3) | 61.7 (16.3) | 2 | З | За |

For more information on average fuel consumption and emissions, refer to the Reference Materials section. * Heat exchanged (HX) configuration

** Keel cooled (KC) configuration

QSB6.7 MAIN PROPULSION

LIGHT DUTY RATINGS

| | | | FUEL CONSUMPTION | | EN | NISSION | IS |
|---------|-----|------|------------------------|--------------------------|-----|---------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Light D | uty | | | | | | |
| 353 | 473 | 3300 | 96.2 (25.4) | 64.1 (16.9) | 2 | 3 | За |
| 404 | 542 | 3300 | 110.2 (29.1) | 72.7 (19.2) | 2 | З | За |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

RECREATIONAL RATINGS

| | | | FUEL CONSUMPTION | | EN | lissio | NS |
|-------------|-----|------|------------------------|--------------------------|-----|--------|-----|
| kW | BHP | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | RCD |
| High Output | | | | | | | |
| 184 | 247 | 2600 | 46.9 (12.4) | 33.0 (8.7) | 2 | 3 | 2 |
| 224 | 301 | 2600 | 55.7 (14.7) | 39.2 (10.4) | 2 | 3 | 2 |
| 261 🗸 | 350 | 3000 | 67.6 (17.9) | 47.5 (12.5) | 2 | З | 2 |
| 280 🗸 | 375 | 3000 | 73.9 (19.5) | 50.3 (13.3) | 2 | 3 | 2 |
| 312 🗸 | 419 | 3000 | 81.1 (21.4) | 55.0 (14.5) | 2 | З | 2 |
| 353 | 473 | 3300 | 96.2 (25.4) | 64.1 (16.9) | 2 | 3 | 2 |
| 404 | 542 | 3300 | 110.2 (29.1) | 72.6 (19.2) | 2 | 3 | 2 |

For more information on average fuel consumption and emissions, refer to the Reference Materials section. Available with SL option package; contact your local Cummins distributor for more information.

PRODUCT DIMENSIONS

| Length | mm (in) | 1074 | (42) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 898 | (35) | |
| Height | mm (in) | 857 | (34) | |
| Weight | kg (lb) | 634 | (1398) | |

Dimensions may vary based on selected engine configuration.

See pages 28–29 for available gear matches.

QSC8.3 MAIN PROPULSION



GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | | |
|---------------|--------------------------------------|---------------------|--|--|--|
| Aspiration | Turbocharged/Aftercooled | | | | |
| Displacement | 8.3 L | 505 in ³ | | | |
| Bore & Stroke | 114 x 135 mm | 4.49 x 5.31 in | | | |
| Fuel System | High Pressure Common Rail (HPCR) | | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | |
|--------------|-----|------|------------------------|--------------------------|-----------|-----|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Intermittent | | | | | | | |
| 368* | 493 | 2600 | 96.1 (25.4) | 65.3 (17.3) | 2 | - | 3a |
| 368* | 493 | 2600 | 96.2 (25.4) | 66.0 (17.4) | 2 | 3 | Зa |
| 368** | 493 | 2600 | 101.8 (26.9) | 68.6 (18.1) | 2 | 3 | За |

For more information on average fuel consumption and emissions, refer to the Reference Materials section. * Heat exchanged (HX) configuration

** Keel cooled (KC) configuration

LIGHT DUTY RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | | |
|------------|-----|------|------------------------|--------------------------|-----------|-----|----|--|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU | |
| Light Duty | | | | | | | | |
| 441 | 592 | 2800 | 122.7 (32.4) | 80.9 (21.4) | 2 | 3 | За | |
| 442 | 593 | 3000 | 123.1 (32.5) | 75.5 (20.0) | 2 | З | | |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.
QSC8.3 MAIN PROPULSION

RECREATIONAL RATINGS

| | | | FUEL CONSUMPTION | | EN | lissio | NS |
|--------|-------|------|------------------------|--------------------------|-----|--------|-----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | RCD |
| High O | utput | | | | | | |
| 368 | 493 | 2600 | 96.2 (25.4) | 66.0 (17.4) | 2 | 3 | 2 |
| 404 | 543 | 3000 | 113.0 (29.9) | 76.0 (20.1) | 2 | 3 | 2 |
| 442 | 593 | 3000 | 123.1 (32.5) | 83.6 (22.1) | 2 | 3 | 2 |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1174 | (46) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 839 | (33) | |
| Height | mm (in) | 982 | (39) | |
| Weight | kg (lb) | 896 | (1975) | |

Dimensions may vary based on selected engine configuration.

See pages 30–31 for available gear matches.



Also built by Moose Boats, this Bridgeport Police boat is powered by a pair of QSC8.3 main engines.

Courtesy of Moose Boats

QSL9 MAIN PROPULSION



GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | | |
|---------------|--------------------------------------|---------------------|--|--|--|
| Aspiration | Turbocharged/Aftercooled | | | | |
| Displacement | 8.9 L | 542 in ³ | | | |
| Bore & Stroke | 114 x 145 mm | 4.49 x 5.71 in | | | |
| Fuel System | Cummins XPI | | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | IS |
|---------|-----------|------|------------------------|--------------------------|-----------|-----|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Continu | lous | | | | | | |
| 210** | 281 | 1800 | 54.3 (14.4) | 36.9 (9.8) | 2 | _ | За |
| 213* | 286 | 1800 | 53.4 (14.1) | 37.3 (9.9) | 2 | З | За |
| 213** | 286 | 1800 | 54.9 (14.5) | 38.0 (10.0) | 2 | З | 3a |
| Heavy I | Duty | | | | | | |
| 243** | 326 | 1800 | 61.7 (16.0) | 42.1 (11.0) | 2 | - | За |
| 246* | 330 | 1800 | 63.1 (16.7) | 43.6 (11.5) | 2 | 3 | За |
| 246** | 330 | 1800 | 66.1 (17.5) | 44.4 (11.7) | 2 | 3 | За |
| Medium | n Continu | lous | | | | | |
| 298** | 400 | 2100 | 80.2 (21.2) | 53.0 (14.0) | 2 | - | За |
| 302* | 404 | 2100 | 78.6 (20.8) | 53.5 (14.1) | 2 | З | За |
| 302** | 404 | 2100 | 82.3 (21.8) | 55.9 (14.8) | 2 | 3 | За |
| 336 | 450 | 2100 | 86.9 (23.0) | 58.9 (15.5) | 2 | З | За |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

* Heat exchanged (HX) configuration ** Keel cooled (KC) configuration

QSL9 MAIN PROPULSION

RECREATIONAL RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | NS |
|-------------|-----|------|------------------------|--------------------------|-----------|-----|-----|
| kW | BHP | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | RCD |
| High Output | | | | | | | |
| 302 | 404 | 2100 | 7837 (20.8) | 53.5 (14.1) | 2 | 3 | 2 |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1174 | (46) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 842 | (33) | |
| Height | mm (in) | 1086 | (43) | |
| Weight | kg (lb) | 907 | (2000) | |



Courtesy of Michael W Burnett

The Charleston, SC-based pilot boat Fort Johnson served as the field test boat for new QSL9 Tier 3 ratings.

QSM11 MAIN PROPULSION



GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | | |
|---------------|--------------------------------------|---------------------|--|--|--|
| Aspiration | Turbocharged/Aftercooled | | | | |
| Displacement | 10.8 L | 661 in ³ | | | |
| Bore & Stroke | 125 x 147 mm | 4.92 x 5.79 in | | | |
| Fuel System | Celect | | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | IISSIO | NS |
|--------|---------|-------|------------------------|--------------------------|-----|--------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Contin | uous | | | | | | |
| 220** | 295 | 1800 | 55.2 (14.6) | 39.4 (10.4) | 2 | - | За |
| 260* | 350 | 1800 | 67.6 (17.9) | 46.1 (12.2) | 2 | 3 | За |
| 260** | 349 | 1800 | 70.2 (18.5) | 47.5 (12.5) | 2 | З | За |
| 297 | 398 | 1800 | 80.4 (21.2) | 54.2 (14.3) | 2 | 3 | За |
| Heavy | Duty | | | | | | |
| 298** | 400 | 2100 | 75.2 (19.9) | 52.5 (13.9) | 2 | _ | За |
| 298* | 400 | 2100 | 80.6 (21.3) | 54.3 (14.4) | 2 | З | За |
| 297** | 398 | 2100 | 82.6 (21.8) | 55.8 (14.7) | 2 | 3 | За |
| Mediu | m Conti | nuous | | | | | |
| 336** | 450 | 2100 | 87.6 (23.1) | 59.3 (15.7) | 2 | - | За |
| 334* | 448 | 2100 | 92.5 (24.4) | 60.9 (16.1) | 2 | 3 | За |
| 334** | 448 | 2100 | 93.4 (24.7) | 62.2 (16.4) | 2 | З | За |
| Interm | ittent | | | | | | |
| 449* | 602 | 2300 | 112.5 (29.7) | 75.8 (20.0) | 2 | 3 | За |
| 449* | 602 | 2300 | 116.6 (30.8) | 76.1 (20.1) | 2 | _ | _ |

For more information on average fuel consumption and emissions, refer to the Reference Materials section. * Heat exchanged (HX) configuration

** Keel cooled (KC) configuration

QSM11 MAIN PROPULSION

LIGHT DUTY RATINGS

| | | | FUEL CONSUMPTION | | EN | NISSION | IS |
|----------|-----|------|------------------------|--------------------------|-----|---------|----|
| kW | BHP | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU |
| Light Du | uty | | | | | | |
| 493* | 661 | 2300 | 128.1 (33.9) | 83.9 (22.2) | 2 | 3 | _ |
| 526* | 705 | 2500 | 139.2 (36.8) | 92.6 (24.5) | 2 | 3 | - |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

RECREATIONAL RATINGS

| | | | FUEL CONSUMPTION | | EN | lissioi | NS |
|--------|-------|------|------------------------|--------------------------|-----|---------|-----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | RCD |
| High O | utput | | | | | | |
| 220 | 295 | 1800 | 55.2 (14.6) | 39.4 (10.4) | 2 | _ | 2 |
| 298 | 400 | 2100 | 75.2 (19.9) | 52.5 (13.9) | 2 | - | 2 |
| 336 | 450 | 2100 | 87.6 (23.1) | 59.3 (15.7) | 2 | _ | 2 |
| 449 | 602 | 2300 | 112.5 (29.7) | 75.8 (20.0) | 2 | 3 | 2 |
| 474 | 636 | 2300 | 127.9 (33.8) | 81.7 (21.6) | 2 | _ | - |
| 493 | 661 | 2300 | 127.9 (33.8) | 83.9 (22.2) | 2 | 3 | 2 |
| 526 | 705 | 2500 | 139.2 (36.8) | 92.1 (24.3) | 2 | 3 | 2 |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1349 | (52) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 1104 | (44) | |
| Height | mm (in) | 1012 | (40) | |
| Weight | kg (lb) | 1188 | (2620) | |

Dimensions may vary based on selected engine configuration.

See pages 30–31 for available gear matches.

NTA855 MAIN PROPULSION

GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | | |
|---------------|--------------------------------------|---------------------|--|--|--|
| Aspiration | Turbocharged/Aftercooled | | | | |
| Displacement | 14 L | 855 in ³ | | | |
| Bore & Stroke | 140 x 152 mm | 5.50 x 6.00 in | | | |
| Fuel System | Pressure Time (PT) | | | | |

COMMERCIAL RATINGS

| | | | FUEL CON | EN | NISSION | IS | |
|------------|------|------|------------------------|--------------------------|---------|-----|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Continuous | | | | | | | |
| 242 | 325* | 1800 | 61.0 (16.1) | 45.0 (11.9) | 2 | - | - |
| 298 | 400* | 1800 | 79.0 (20.9) | 55.3 (14.6) | 2 | - | - |

* Rating is restricted, please contact your dealer for further information.

For more information on average fuel consumption and emissions, refer to the Reference Materials section. For additional standard options available regionally, contact your local Cummins distributor.

PRODUCT DIMENSIONS

| Length | mm (in) | 1298 | (61) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 817 | (32) | |
| Height | mm (in) | 1367 | (53) | |
| Weight | kg (lb) | 1433 | (3160) | |

Dimensions may vary based on selected engine configuration.



The M/V Royale Floatel is a NTA855–powered luxury floating hotel operating on the Mandovi River.

Courtesy of Vijai Marine

KTA19 MAIN PROPULSION

GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------------------|----------------------|--|--|
| Aspiration | Turbocharged/Aftercooled | | | |
| Displacement | 19 L | 1150 in ³ | | |
| Bore & Stroke | 159 x 159 mm | 6.25 x 6.25 in | | |
| Fuel System | Pressure Time (PT) | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | NISSION | NS |
|-------|--------|------|------------------------|--------------------------|-----|---------|----|
| kW | BHP | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Conti | nuous | | | | | | |
| 373 | 500 | 1800 | 96.0 (25.4) | 66.4 (17.5) | 1 | - | - |
| 447 | 600 | 1800 | 111.1 (29.4) | 79.8 (21.1) | 1 | - | - |
| 447 | 600 | 1800 | 116.9 (30.9) | 82.6 (21.8) | 2 | - | - |
| Heavy | / Duty | | | | | | |
| 395 | 530 | 1800 | 98.2 (25.9) | N/A | 1 | - | - |
| 477 | 640 | 1800 | 119.9 (31.7) | 84.1 (22.2) | 1 | - | - |
| 522 | 700 | 2100 | 136.5 (36.0) | 91.96 (24.3) | 1 | _ | - |

For more information on average fuel consumption and emissions, refer to the Reference Materials section. For additional standard options available regionally, contact your local Cummins distributor.

PRODUCT DIMENSIONS

| Length | mm (in) | 1877 | (74) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 1003 | (40) | |
| Height | mm (in) | 1905 | (75) | |
| Weight | kg (lb) | 2073 | (4570) | |

X15 MAIN PROPULSION



GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------------------|----------------------------------|--|--|
| Aspiration | Turbocharged/Aftercooled | | | |
| Displacement | 14.9 L | 912 in ³ | | |
| Bore & Stroke | 137 x 169 mm | 5.39 x 6.65 in | | |
| Rotation | Counterclockwis | Counterclockwise facing flywheel | | |
| Fuel System | Cummins XPI | | | |

COMMERCIAL RATINGS

| | | | | FUEL CONSUMPTION | | EM | ISSIO | NS |
|-------|-------|-----|------|------------------------|--------------------------|-----|-------|----|
| kW | МНР | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU |
| Conti | nuous | | | | | | | |
| 336 | 456 | 450 | 1800 | 87.2 (23.0) | 60.7 (16.0) | 2 | 3 | 3a |
| 336 | 456 | 450 | 1800 | 82.0 (21.7) | 56.5 (14.9) | 2 | - | - |
| 373 | 507 | 500 | 1800 | 95.9 (25.3) | 66.7 (17.6) | 2 | 3 | 3a |
| 373 | 507 | 500 | 1800 | 91.0 (24.0) | 62.4 (16.5) | 2 | - | _ |
| 429 | 583 | 575 | 1800 | 113.0 (29.8) | 77.2 (20.4) | 2 | 3 | 3a |
| 447 | 608 | 600 | 1800 | 109.7 (29.0) | 74.0 (19.5) | 2 | _ | За |

For more information on average fuel consumption and emissions, refer to the Reference Materials section. For additional standard options available regionally, contact your local Cummins distributor.

PRODUCT DIMENSIONS

| Length | mm (in) | 1810 | (71) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 1120 | (44) | |
| Height | mm (in) | 1681 | (52) | |
| Weight | kg (lb) | 1400 | (3080) | |

QSK19 MAIN PROPULSION



GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------------------|----------------------|--|--|
| Aspiration | tercooled | | | |
| Displacement | 19 L | 1150 in ³ | | |
| Bore & Stroke | 159 x 159 mm | 6.25 x 6.25 in | | |
| Fuel System | Modular Common Rail (MCRS) | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | NISSION | IS |
|---------|-----------|------|------------------------|--------------------------|-----|---------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Continu | lous | | | | | | |
| 373 | 500 | 1800 | 95.3 (25.2) | 68.8 (18.2) | 2 | - | За |
| 373 | 500 | 1800 | 100.1 (26.5) | 72.4 (19.1) | - | З | - |
| 447 | 600 | 1800 | 119.1 (31.5) | 85.2 (22.5) | 2 | - | 3a |
| 492 | 660 | 1800 | 126.0 (33.3) | 94.9 (25.1) | 2 | - | За |
| 492 | 660 | 1800 | 128.1 (33.8) | 90.7 (24.0) | 2 | З | _ |
| 559 | 750 | 1800 | 147.5 (39.0) | 104.5 (27.6) | 2 | З | - |
| Heavy I | Duty | | | | | | |
| 560 | 750 | 1800 | 140.4 (37.1) | 99.2 (26.2) | 2 | - | 3a |
| 567 | 760 | 2100 | 148.7 (39.3) | 104.0 (27.5) | 2 | - | 3a |
| 597 | 800 | 1800 | 156.2 (41.3) | 109.9 (29.0) | 2 | 3 | Зa |
| 597 | 800 | 2100 | 166.9 (44.1) | 114.8 (30.3) | 2 | З | - |
| Medium | n Continu | lous | | | | | |
| 597 | 800 | 2100 | 158.8 (41.9) | 109.7 (29.0) | 2 | _ | За |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 2007 | (79) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 963 | (38) | |
| Height | mm (in) | 1880 | (74) | |
| Weight | kg (lb) | 2189 | (4825) | |

K38 MAIN PROPULSION

GENERAL SPECIFICATIONS

| Configuration | V-12 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------------|----------------------|--|--|
| Aspiration | Turbocharged/Aftercooled | | | |
| Displacement | 38 L | 2300 in ³ | | |
| Bore & Stroke | 159 x 159 mm | 6.25 x 6.25 in | | |
| Fuel System | Pressure Time (PT) | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | |
|---------|------|------|------------------------|--------------------------|-----------|-----|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Continu | Jous | | | | | | |
| 634 | 850 | 1800 | 161.0 (42.5) | 113.5 (30.0) | 2 | - | 3a |
| 746 | 1000 | 1800 | 185.5 (48.6) | 128.7 (34.1) | 2 | - | За |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 2152 | (84) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 1462 | (58) | |
| Height | mm (in) | 2083 | (82) | |
| Weight | kg (lb) | 4218 | (9003) | |



Courtesy of Greenland Institute of Natural Resources

Powered by a K38–M, the R/V Sanna researches halibut, crab and cod stocks in Greenland's coastal waters and ice fjords.

KTA38 MAIN PROPULSION

GENERAL SPECIFICATIONS

| Configuration | V-12 cylinder, 4-s | V-12 cylinder, 4-stroke diesel | | |
|---------------|--------------------|--------------------------------|--|--|
| Aspiration | Turbocharged/Af | Turbocharged/Aftercooled | | |
| Displacement | 38 L | 2300 in ³ | | |
| Bore & Stroke | 159 x 159 mm | 6.25 x 6.25 in | | |
| Fuel System | Pressure Time (PT) | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | NISSIO | IS |
|--------|---------|-------|------------------------|--------------------------|-----|--------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Contin | uous | | | | | | |
| 559 | 750 | 1600 | 145.4 (38.4) | 102.6 (27.1) | 1 | - | _ |
| 597 | 800 | 1800 | 155.6 (41.1) | 106.4 (28.1) | 1 | - | - |
| 634 | 850 | 1800 | 162.1 (42.8) | 115.9 (30.6) | 1 | _ | - |
| 671 | 900 | 1600 | 169.6 (44.8) | 120.0 (31.7) | 1 | - | - |
| 746 | 1000 | 1800 | 185.1 (48.9) | 132.3 (34.9) | 1 | - | _ |
| 783 | 1050 | 1600 | 201.5 (53.2) | 138.0 (36.5) | 1 | _ | _ |
| 895 | 1200 | 1800 | 224.4 (59.3) | 153.1 (40.4) | 1 | — | - |
| 895 | 1200 | 1800 | 229.1 (60.5) | 162.0 (42.8) | 2 | - | _ |
| Heavy | Duty | | | | | | |
| 820 | 1100 | 1800 | 200.3 (52.9) | 144.8 (38.3) | 1 | — | _ |
| 969 | 1300 | 1800 | 239.2 (63.2) | 153.1 (40.4) | 1 | _ | _ |
| 1007 | 1350 | 1900 | 250.3 (66.1) | 172.6 (45.6) | 1 | — | _ |
| 1007 | 1350 | 1900 | 260.5 (68.8) | 181.4 (47.9) | 2 | _ | _ |
| 1007 | 1350 | 1950 | 247.1 (65.3) | 181.1 (47.8) | 1 | - | _ |
| Mediur | n Conti | nuous | | | | | |
| 1044 | 1400 | 1950 | 256.7 (67.8) | 179.0 (47.3) | 1 | _ | _ |
| Interm | ittent | | | | | | |
| 1119 | 1500 | 2050 | 279.0 (73.7) | 197.6 (52.2) | 1 | _ | _ |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

See next page for product dimensions.

KTA38 MAIN PROPULSION

PRODUCT DIMENSIONS

| Length | mm (in) | 2152 | (84) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 1462 | (58) | |
| Height | mm (in) | 2083 | (82) | |
| Weight | kg (lb) | 4218 | (9300) | |

Dimensions may vary based on selected engine configuration.



Hope Services' Capt. Jack Higman is one of the many KTA38 powered pushboats operating on the U.S. inland rivers.

Courtesy of Jeff Yates

QSK38 MAIN PROPULSION



GENERAL SPECIFICATIONS

| Configuration V-12 cylinder, 4-stroke diesel | | | | |
|--|----------------------------|----------------------|--|--|
| Aspiration | Turbocharged/Aftercooled | | | |
| Displacement | 38 L | 2300 in ³ | | |
| Bore & Stroke | 159 x 159 mm | 6.25 x 6.25 in | | |
| Fuel System | Modular Common Rail (MCRS) | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | ISSION | IS |
|--------|------|------|------------------------|--------------------------|-----|--------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Contin | uous | | | | | | |
| 746 | 1000 | 1800 | 191.7 (50.6) | 143.9 (38.0) | 2 | З | - |
| 746 | 1000 | 1800 | 185.6 (49.0) | 136.6 (36.1) | 2 | - | За |
| 969 | 1300 | 1600 | 247.4 (65.3) | 183.6 (48.5) | 2 | 3 | - |
| 969 | 1300 | 1600 | 235.8 (62.3) | 169.9 (44.9) | 2 | — | Зa |
| 969 | 1300 | 1800 | 247.6 (65.4) | 182.8 (48.3) | 2 | З | - |
| 969 | 1300 | 1800 | 248.4 (65.6) | 170.8 (45.1) | 2 | — | За |
| Heavy | Duty | | | | | | |
| 1044 | 1400 | 1600 | 251.3 (66.4) | 181.3 (47.9) | 2 | - | За |
| 1044 | 1400 | 1800 | 271.4 (71.7) | 194.4 (51.4) | 2 | 3 | - |
| 1044 | 1400 | 1800 | 261.2 (69.0) | 182.3 (48.2) | 2 | — | За |
| 1044 | 1400 | 1900 | 265.4 (70.1) | 194.4 (51.4) | 2 | 3 | - |
| 1044 | 1400 | 1900 | 257.5 (68.0) | 183.5 (48.5) | 2 | _ | Зa |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 2282 | (90) | |
|--------|---------|------|---------|--|
| Width | mm (in) | 1573 | (62) | |
| Height | mm (in) | 2242 | (88) | |
| Weight | kg (lb) | 4850 | (10692) | |

KTA50 MAIN PROPULSION

GENERAL SPECIFICATIONS

| Configuration | n V-16 cylinder, 4-stroke diesel | | | | |
|---------------|----------------------------------|--------------------------|--|--|--|
| Aspiration | Turbocharged/Af | Turbocharged/Aftercooled | | | |
| Displacement | 50 L | 3067 in ³ | | | |
| Bore & Stroke | 159 x 159 mm | 6.25 x 6.25 in | | | |
| Fuel System | Pressure Time (PT) | | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | NISSION | IS |
|--------|-------------------|------|------------------------|--------------------------|-----|---------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Contin | uous | | | | | | |
| 1044 | 1400 | 1600 | 261.3 (69.0) | 179.0 (47.3) | 1 | - | - |
| 1193 | 1600 | 1800 | 290.7 (76.8) | 209.1 (55.2) | 1 | - | - |
| 1193 | 1600 | 1800 | 303.6 (80.2) | 209.5 (55.3) | 2 | - | - |
| Heavy | Duty | | | | | | |
| 1193 | 1600 | 1900 | 299.7 (79.2) | 208.5 (55.1) | 1 | - | - |
| 1268 | 1700 | 1800 | 309.9 (81.9) | 221.2 (58.4) | 1 | - | - |
| 1342 | 1800 | 1900 | 336.0 (88.8) | 232.8 (61.5) | 1 | - | - |
| 1342 | 1800 | 1900 | 345.8 (91.3) | 236.7 (62.5) | 2 | - | - |
| Mediu | Medium Continuous | | | | | | |
| 1398 | 1875 | 1950 | 348.0 (91.9) | 248.6 (65.7) | 1 | _ | - |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 2694 | (106) | |
|--------|---------|------|---------|--|
| Width | mm (in) | 1564 | (62) | |
| Height | mm (in) | 2260 | (89) | |
| Weight | kg (lb) | 5166 | (11389) | |

QSK50 MAIN PROPULSION



GENERAL SPECIFICATIONS

| Configuration | troke diesel | | | |
|---------------|-----------------|----------------------------|--|--|
| Aspiration | Turbocharged/Af | Turbocharged/Aftercooled | | |
| Displacement | 50 L | 3068 in ³ | | |
| Bore & Stroke | 159 x 159 mm | 6.25 x 6.25 in | | |
| Fuel System | Modular Commo | Modular Common Rail (MCRS) | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | IS |
|-------------------|------|------|------------------------|--------------------------|-----------|-----|----|
| kW | BHP | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Continuous | | | | | | | |
| 1268 | 1700 | 1600 | 311.5 (82.3) | 220.5 (58.2) | 2 | - | За |
| 1268 | 1700 | 1800 | 324.3 (85.7) | 223.9 (59.1) | 2 | - | За |
| Heavy Duty | | | | | | | |
| 1342 | 1800 | 1600 | 335.3 (88.6) | 238.2 (62.9) | 2 | - | За |
| 1342 | 1800 | 1800 | 346.6 (91.6) | 235.8 (62.3) | 2 | - | За |
| 1342 | 1800 | 1900 | 353.3 (93.3) | 240.0 (63.4) | 2 | - | За |
| Medium Continuous | | | | | | | |
| 1529 | 2050 | 1800 | 388.2 (102.6) | 271.0 (71.6) | 2 | _ | За |
| 1641 | 2200 | 1900 | 426.7 (112.7) | 287.6 (76.0) | 2 | - | За |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 2780 | (109) | |
|--------|---------|------|---------|--|
| Width | mm (in) | 1573 | (62) | |
| Height | mm (in) | 2232 | (88) | |
| Weight | kg (lb) | 6270 | (13823) | |

QSK60 MAIN PROPULSION



GENERAL SPECIFICATIONS

| Configuration | stroke diesel | | | |
|---------------|-----------------|----------------------------|--|--|
| Aspiration | Turbocharged/Af | Turbocharged/Aftercooled | | |
| Displacement | 60.2 L | 3672 in ³ | | |
| Bore & Stroke | 159 x 190 mm | 6.25 x 7.48 in | | |
| Fuel System | Modular Commo | Modular Common Rail (MCRS) | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | IS | |
|--------|--------------|-------|------------------------|--------------------------|-----------|-----|----|--|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU | |
| Contin | Continuous | | | | | | | |
| 1491 | 2000 | 1600 | 361.2 (95.4) | 255.6 (67.5) | 2 | - | За | |
| 1491 | 2000 | 1800 | 376.8 (99.5) | 257.5 (68.0) | 2 | - | За | |
| 1641 | 2200 | 1800 | 404.4 (106.8) | 280.8 (74.2) | 2-3 | - | За | |
| Heavy | Heavy Duty | | | | | | | |
| 1715 | 2300 | 1900 | 434.4 (114.8) | 296.3 (78.3) | 2 | _ | Зa | |
| Mediu | m Contir | nuous | | | | | | |
| 1864 | 2500 | 1800 | 463.2 (122.4) | 314.6 (83.1) | 2-3 | - | - | |
| 1864 | 2500 | 1900 | 462.2 (122.1) | 322.6 (85.2) | 2 | - | Зa | |
| 2013 | 2700 | 1800 | 502.3 (132.7) | 339.2 (89.6) | 2-3 | - | — | |
| 2013 | 2700 | 1900 | 506.9 (133.9) | 352.6 (93.2) | 2-3 | - | - | |
| Interm | Intermittent | | | | | | | |
| 1998 | 2680 | 1900 | 521.9 (137.9) | 358.9 (94.8) | 2 | _ | _ | |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

QSK60 MAIN PROPULSION



PRODUCT DIMENSIONS

| Length | mm (in) | 3290 | (130) | |
|--------|---------|------|---------|--|
| Width | mm (in) | 1757 | (69) | |
| Height | mm (in) | 2415 | (95) | |
| Weight | kg (lb) | 8754 | (19300) | |

Dimensions may vary based on selected engine configuration.



Courtesy of Bordelon Marine

Sheila Bordelon, the second in the three-vessel Stingray series, is powered by a pair of QSK60s.

QSK95 MAIN PROPULSION

GENERAL SPECIFICATIONS

| Configuration | V-16 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------------|----------------------|--|--|
| Aspiration | Turbocharged/Af | tercooled | | |
| Displacement | 95 L | 5797 in ³ | | |
| Bore & Stroke | 190 x 210 mm | 7.48 x 8.27 in | | |
| Fuel System | Modular Common Rail (MCRS) | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | IS |
|------------|--------------|-------|------------------------|--------------------------|-----------|-----|----|
| kW | BHP | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Continuous | | | | | | | |
| 2386 | 3200 | 1500 | 555.7 (146.8) | 388.9 (102.7) | 2 | - | _ |
| Heavy | Duty | | | | | | |
| 2685 | 3600 | 1700 | 643.9 (170.1) | 441.8 (116.7) | 2 | - | - |
| Mediu | m Contii | nuous | | | | | |
| 2983 | 4000 | 1700 | 703.3 (185.8) | 484.5 (128.0) | 2 | - | - |
| Interm | Intermittent | | | | | | |
| 3132 | 4200 | 1700 | 743.2 (196.3) | 507.2 (134.0) | 2 | _ | - |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 3654 | (144) | |
|--------|---------|-------|---------|--|
| Width | mm (in) | 1728 | (63) | |
| Height | mm (in) | 2362 | (93) | |
| Weight | kg (lb) | 13282 | (29282) | |



ALWAYS ON

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POWER RANGE FOR CUMMINS MARINE AUXILIARY ENGINES



RATING DEFINITIONS

Prime Power Engines with this rating are available for an unlimited number of hours per year in variable load applications. Variable load is not to exceed a 80 percent average of the rated power. A 10 percent overload capability is available for a period of one hour within a 12 hour period of operation. Total operating time at the 10 percent overload power shall not exceed 25 hours per year. This power rating follows ISO 8528 guidelines.

| kW | внр | Engine Model | Fuel System |
|-------------|------|--------------|-------------|
| 50 Hz Ratin | gs | | |
| 78 | 104 | 6BT5.9 | Mechanical |
| 91 | 122 | 6BT5.9 | Mechanical |
| 122 | 164 | QSB7 | Electronic |
| 122 | 164 | 6CT8.3 | Mechanical |
| 163 | 219 | 6CTA8.3 | Mechanical |
| 164 | 220 | QSB7 | Electronic |
| 164 | 220 | 6CTA8.3 | Mechanical |
| 265 | 355 | QSM11 | Electronic |
| 306 | 410 | NTA855 | Mechanical |
| 336 | 450 | KTA19 | Mechanical |
| 358 | 480 | KTA19 | Mechanical |
| 373 | 500 | X15 | Electronic |
| 403 | 540 | KTA19 | Mechanical |
| 410 | 550 | KTA19 | Mechanical |
| 421 | 565 | VTA28 | Mechanical |
| 433 | 580 | QSK19 | Electronic |
| 447 | 600 | KTA19 | Mechanical |
| 526 | 705 | QSK19 | Electronic |
| 560 | 750 | VTA28 | Mechanical |
| 634 | 850 | KTA38 | Mechanical |
| 664 | 890 | KTA38 | Mechanical |
| 746 | 1000 | KTA38 | Mechanical |
| 806 | 1080 | KTA38 | Mechanical |
| 880 | 1180 | KTA38 | Mechanical |
| 880 | 1180 | KTA38 | Mechanical |
| 880 | 1180 | KTA50 | Mechanical |

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| kW | внр | Engine Model | Fuel System | | | |
|---------------|------|--------------|-------------|--|--|--|
| 50 Hz Ratings | | | | | | |
| 900 | 1206 | KTA50 | Mechanical | | | |
| 984 | 1320 | QSK38 | Electronic | | | |
| 1007 | 1350 | KTA50 | Mechanical | | | |
| 1096 | 1470 | KTA50 | Mechanical | | | |
| 1097 | 1470 | KTA50 | Mechanical | | | |
| 1290 | 1730 | QSK50 | Electronic | | | |
| 1563 | 2095 | QSK60 | Electronic | | | |
| 1899 | 2547 | QSK60 | Electronic | | | |
| 2625 | 3520 | QSK95 | Electronic | | | |

Engines with a Prime Power rating are available for an unlimited number of hours per year in variable load applications. Variable load is not to exceed a 80 percent average of the rated power.

A 10 percent overload capability is available for a period of one hour within a 12 hour period of operation. Total operating time at the 10 percent overload power shall not exceed 25 hours per year. This power rating follows ISO 8528 guidelines.

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Courtesy of Bourbon Offshore



Courtesy of Simon Møkster Rederi



Courtesy of ASL Shipyard

| kW | BHP E | ngine Model | Fuel System |
|-------------|-------|-------------|-------------|
| 60 Hz Ratin | gs | | |
| 91 | 122 | 6BT5.9 | Mechanical |
| 98 | 132 | QSB7 | Electronic |
| 112 | 150 | 6BT5.9 | Mechanical |
| 112 | 150 | QSB7 | Electronic |
| 130 | 174 | QSB7 | Electronic |
| 140 | 188 | 6CT8.3 | Mechanical |
| 142 | 190 | QSB7 | Electronic |
| 180 | 242 | 6CTA8.3 | Mechanical |
| 186 | 250 | QSB7 | Electronic |
| 188 | 252 | 6CTA8.3 | Mechanical |
| 201 | 270 | 6CTA8.3 | Mechanical |
| 210 | 282 | QSB7 | Electronic |
| 265 | 355 | QSM11 | Electronic |
| 295 | 395 | NT855 | Mechanical |
| 313 | 420 | NTA855 | Mechanical |
| 317 | 425 | QSM11 | Electronic |
| 358 | 480 | NTA855 | Mechanical |
| 373 | 500 | X15 | Electronic |
| 392 | 525 | KTA19 | Mechanical |
| 425 | 570 | KTA19 | Mechanical |
| 425 | 570 | X15 | Electronic |
| 462 | 620 | KTA19 | Mechanical |
| 485 | 650 | KTA19 | Mechanical |
| 507 | 680 | KTA19 | Mechanical |
| 563 | 755 | QSK19 | Electronic |
| 597 | 800 | QSK19 | Electronic |
| 608 | 815 | VTA28 | Mechanical |
| 768 | 1030 | KTA38 | Mechanical |

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Continued from previous page.

| kW | BHP E | ngine Model | Fuel System |
|-------------|-------|-------------|-------------|
| 60 Hz Ratin | gs | | |
| 809 | 1085 | KTA38 | Mechanical |
| 821 | 1100 | KTA38 | Mechanical |
| 910 | 1220 | KTA38 | Mechanical |
| 970 | 1300 | KTA38 | Mechanical |
| 1000 | 1340 | KTA50 | Mechanical |
| 1007 | 1350 | KTA38 | Mechanical |
| 1007 | 1350 | KTA50 | Mechanical |
| 1044 | 1400 | QSK38 | Electronic |
| 1141 | 1530 | KTA50 | Mechanical |
| 1220 | 1635 | KTA50 | Mechanical |
| 1290 | 1730 | KTA50 | Mechanical |
| 1342 | 1800 | QSK50 | Electronic |
| 1628 | 2183 | QSK50 | Electronic |
| 1899 | 2547 | QSK60* | Electronic |
| 2001 | 2683 | QSK60* | Electronic |
| 3150 | 4224 | QSK95 | Electronic |

* Note: IMOIII ratings available, please consult your local distributor for more information.

Engines with a Prime Power rating are available for an unlimited number of hours per year in variable load applications. Variable load is not to exceed a 80 percent average of the rated power.

A 10 percent overload capability is available for a period of one hour within a 12 hour period of operation. Total operating time at the 10 percent overload power shall not exceed 25 hours per year. This power rating follows ISO 8528 guidelines.

| Page | IMO I | IMO II | EPA3 | EU3a |
|------|-------|--------|------|------|
| | | | | |
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Courtesy of Bourbon Offshore

Courtesy of Simon Møkster Rederi

Courtesy of ASL Shipyard

6BT5.9 MARINE AUXILIARY

GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------------------|---------------------|--|--|
| Aspiration | Turbocharged | Turbocharged | | |
| Displacement | 5.9 L | 359 in ³ | | |
| Bore & Stroke | 102 x 120 mm | 4.02 x 4.75 in | | |
| Fuel System | Inline Injection Pump | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | IISSION | IS |
|----------------------|----------|-------|------------------------|--------------------------|-----|---------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Prime Power at 50 Hz | | | | | | | |
| 78 | 104 | 1500 | 19.8 (5.2) | 10.7 (2.8) | _ | _ | _ |
| 91 | 122 | 1500 | 22.4 (5.9) | 11.3 (3.0) | - | _ | - |
| Prime F | Power at | 60 Hz | | | | | |
| 91 | 122 | 1800 | 23.4 (6.2) | 12.7 (3.3) | _ | _ | _ |
| 112 | 150 | 1800 | 27.1 (7.2) | 14.0 (3.7) | - | _ | - |

Ratings below 130 kW are not subject to IMO emission regulations

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1020 | (40) | |
|--------|---------|------|-------|--|
| Width | mm (in) | 601 | (24) | |
| Height | mm (in) | 1201 | (47) | |
| Weight | kg (lb) | 426 | (940) | |

Dimensions may vary based on selected engine configuration.



Weeks Marine's accommodation barge BT213 served as the field test boat for Cummins QSB7–DM.

Courtesy of Alan Haig-Brown

QSB7 MARINE AUXILIARY



GENERAL SPECIFICATIONS

| Configuration In-line, 6 cylinder, 4-stroke diesel | | | | | |
|--|---------------------------------|---------------------|--|--|--|
| Aspiration | Turbocharged | Turbocharged | | | |
| Displacement | 6.7 L | 408 in ³ | | | |
| Bore & Stroke | 107 x 124 mm | 4.21 x 4.88 in | | | |
| Fuel System | High Pressure Common Rail (HPCR | | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | IISSION | IS |
|----------------------|----------|-------|------------------------|--------------------------|-----|---------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Prime F | Power at | 50 Hz | | | | | |
| 122 | 164 | 1500 | 33.4 (8.8) | 16.6 (4.4) | 2 | 3 | 3a |
| 164 | 220 | 1500 | 46.0 (12.2) | 22.7 (6.0) | 2 | 3 | За |
| Prime Power at 60 Hz | | | | | | | |
| 98 | 132 | 1800 | 28.1 (7.4) | 15.0 (4.0) | 2 | 3 | _ |
| 112 | 150 | 1800 | 31.7 (8.4) | 16.6 (4.4) | 2 | 3 | _ |
| 130 | 174 | 1800 | 36.0 (9.5) | 18.4 (4.9) | 2 | 3 | _ |
| 142 | 190 | 1800 | 39.2 (10.4) | 19.8 (5.2) | 2 | 3 | - |
| 186 | 250 | 1800 | 51.8 (13.7) | 25.2 (6.7) | 2 | 3 | _ |
| 210 | 282 | 1800 | 58.1 (15.4) | 28.4 (7.5) | 2 | 3 | - |

Ratings below 130 kW are not subject to IMO emission regulations

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1283 | (50.5) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 952 | (37.5) | |
| Height | mm (in) | 994 | (39.1) | |
| Weight | kg (lb) | 708 | (1558) | |

6CT8.3 MARINE AUXILIARY

GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder | In-line, 6 cylinder, 4-stroke diesel | | |
|----------------------------------|---------------------|--------------------------------------|--|--|
| Aspiration | Turbocharged | Turbocharged | | |
| Displacement | 8.3 L | 504.5 in ³ | | |
| Bore & Stroke | 114 x 135 mm | 4.49 x 5.32 in | | |
| uel System Inline Injection Pump | | ump | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | NISSION | IS |
|----------------------|---------|-------|------------------------|--------------------------|-----|---------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Prime F | ower at | 50 Hz | | | | | |
| 122 | 164 | 1500 | 30.3 (8.0) | 14.9 (3.9) | 1 | _ | _ |
| Prime Power at 60 Hz | | | | | | | |
| 140 | 188 | 1800 | 36.3 (9.6) | 18.7 (4.9) | 1 | _ | _ |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1182 | (47) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 710 | (28) | |
| Height | mm (in) | 1137 | (45) | |
| Weight | kg (lb) | 684 | (1505) | |

Dimensions may vary based on selected engine configuration.



Built by Saigon Shipmarin, the LPG carrier FACO is powered by a pair of N855 engines. Auxiliary power is provided by two 6C-powered generator sets.

Courtesy of Alan Haig-Brown

6CTA8.3 MARINE AUXILIARY

GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | | | |
|---------------|--------------------------------------|--------------------------|--|--|--|--|
| Aspiration | Turbocharged/Af | Turbocharged/Aftercooled | | | | |
| Displacement | 8.3 L | 504.5 in ³ | | | | |
| Bore & Stroke | 114 x 135 mm | 4.49 x 5.32 in | | | | |
| Fuel System | Inline Injection Pump | | | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | NISSION | IS |
|-------|---------|---------|------------------------|--------------------------|-----|---------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Prime | Power a | t 50 Hz | | | | | |
| 163 | 219 | 1500 | 40.1 (10.6) | 19.3 (5.1) | 1 | _ | _ |
| 164 | 220 | 1500 | 41.3 (10.9) | 20.5 (5.4) | 1 | - | - |
| Prime | Power a | t 60 Hz | | | | | |
| 180 | 242 | 1800 | 46.6 (12.3) | 23.4 (6.2) | 1 | - | - |
| 188 | 252 | 1800 | 47.3 (12.5) | 23.0 (6.1) | 1 | - | - |
| 201 | 270 | 1800 | 56.6 (14.9) | 27.1 (7.2) | 2 | - | _ |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1182 | (47) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 710 | (28) | |
| Height | mm (in) | 1137 | (45) | |
| Weight | kg (lb) | 702 | (1545) | |





GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | | |
|---------------|--------------------------------------|---------------------|--|--|--|
| Aspiration | Turbocharged/Aftercooled | | | | |
| Displacement | 10.8 L | 661 in ³ | | | |
| Bore & Stroke | 125 x 147 mm | 4.92 x 5.79 in | | | |
| Fuel System | Celect | | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | IISSION | IS |
|----------------------|-----|------|------------------------|--------------------------|-----|---------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU |
| Prime Power at 50 Hz | | | | | | | |
| 265 | 355 | 1500 | 65.0 (17.2) | 32.1 (8.5) | 2 | - | _ |
| Prime Power at 60 Hz | | | | | | | |
| 265 | 355 | 1800 | 65.4 (17.3) | 33.7 (8.9) | 2 | - | _ |
| 265 | 355 | 1800 | 68.2 (18.0) | 35.3 (9.3) | 2 | 3 | - |
| 317 | 425 | 1800 | 78.6 (20.8) | 39.2 (10.4) | 2 | - | - |
| 317 | 425 | 1800 | 82.9 (21.9) | 41.6 (11.0) | 2 | З | - |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1475 | (58) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 1081 | (43) | |
| Height | mm (in) | 1039 | (41) | |
| Weight | kg (lb) | 1118 | (2464) | |

Dimensions may vary based on selected engine configuration.



Powered by four QSK60s, the Alex F. McCall is also equipped with three Cummins QSM11 powered 290–kW main generators.

Courtesy of SEACOR Marine



GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | | | |
|---------------|--------------------------------------|---------------------|--|--|--|--|
| Aspiration | Turbocharged | Turbocharged | | | | |
| Displacement | 14 L | 855 in ³ | | | | |
| Bore & Stroke | 140 x 152 mm | 5.50 x 6.00 in | | | | |
| Fuel System | Pressure Time (P | Ϋ́Τ) | | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | IS |
|---------|----------|-------|------------------------|--------------------------|-----------|-----|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Prime F | Power at | 60 Hz | | | | | |
| 295 | 395 | 1800 | N/A | N/A | _ | _ | _ |

For more information on average fuel consumption and emissions, refer to the Reference Materials section. For additional standard options available regionally, contact your local Cummins distributor

PRODUCT DIMENSIONS

| Length | mm (in) | 1298 | (61) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 817 | (32) | |
| Height | mm (in) | 1367 | (53) | |
| Weight | kg (lb) | 1388 | (3060) | |

NTA855 MARINE AUXILIARY

GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | | |
|---------------|--------------------------------------|---------------------|--|--|--|
| Aspiration | Turbocharged/Aftercooled | | | | |
| Displacement | 14 L | 855 in ³ | | | |
| Bore & Stroke | 140 x 152 mm | 5.50 x 6.00 in | | | |
| Fuel System | Pressure Time (P | Τ) | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | ISSION | IS |
|----------------------|----------|------|------------------------|--------------------------|-----|--------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Prime Power at 50 Hz | | | | | | | |
| 306 | 410 | 1500 | N/A | N/A | _ | - | - |
| Prime F | Power at | | | | | | |
| 313 | 420 | 1800 | N/A | N/A | _ | — | _ |
| 358 | 480 | 1800 | 86.7 (22.9) | N/A | _ | _ | - |

For more information on average fuel consumption and emissions, refer to the Reference Materials section. For additional standard options available regionally, contact your local Cummins distributor.

PRODUCT DIMENSIONS

| Length | mm (in) | 1298 | (61) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 817 | (32) | |
| Height | mm (in) | 1376 | (53) | |
| Weight | kg (lb) | 1433 | (3160) | |
KTA19 MARINE AUXILIARY

GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder | In-line, 6 cylinder, 4-stroke diesel | | |
|---------------|--------------------------|--------------------------------------|--|--|
| Aspiration | Turbocharged/Aftercooled | | | |
| Displacement | 19 L | 1150 in ³ | | |
| Bore & Stroke | 159 x 159 mm | 6.25 x 6.25 in | | |
| Fuel System | Pressure Time (P | Ϋ́Τ) | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | IISSION | IS |
|-------|---------|---------|------------------------|--------------------------|-----|---------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Prime | Power a | t 50 Hz | | | | | |
| 336 | 450 | 1500 | 82.5 (21.8) | 44.8 (11.8) | _ | _ | _ |
| 403 | 540 | 1500 | 96.5 (25.5) | 49.5 (13.1) | 1 | - | - |
| 447 | 600 | 1500 | 107.5 (28.4) | 54.2 (14.3) | _ | _ | _ |
| 358 | 480 | 1500 | 91.2 (24.1) | 47.1 (12.5) | 2 | - | - |
| 410 | 550 | 1500 | 102.6 (27.1) | 52.5 (13.9) | 2 | - | - |
| Prime | Power a | t 60 Hz | | | | | |
| 392 | 525 | 1800 | 98.4 (26.0) | 53.6 (14.2) | _ | - | - |
| 425 | 570 | 1800 | 106.4 (28.1) | 58.8 (15.5) | 2 | - | - |
| 485 | 650 | 1800 | 120.8 (31.9) | 64.7 (17.1) | 2 | - | _ |
| 462 | 620 | 1800 | 110.9 (29.3) | 59.3 (15.7) | 1 | - | - |
| 507 | 680 | 1800 | 122.3 (32.3) | 62.5 (16.5) | _ | _ | _ |

For more information on average fuel consumption and emissions, refer to the Reference Materials section. For additional standard options available regionally, contact your local Cummins distributor.

PRODUCT DIMENSIONS

| Length | mm (in) | 1877 | (74) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 1003 | (40) | |
| Height | mm (in) | 1905 | (75) | |
| Weight | kg (lb) | 2073 | (4570) | |





| Configuration | In-line, 6 cylinder | In-line, 6 cylinder, 4-stroke diesel | | |
|---------------|---------------------|--------------------------------------|--|--|
| Aspiration | Turbocharged/Af | Turbocharged/Aftercooled | | |
| Displacement | 14.9 L | 912 in ³ | | |
| Bore & Stroke | 137 x 169 mm | 5.39 x 6.65 in | | |
| Rotation | Counterclockwis | Counterclockwise facing flywheel | | |
| Fuel System | Cummins XPI | | | |

COMMERCIAL RATINGS

| | | | | FUEL CONSUMPTION | | EM | ISSION | NS |
|---------------------|-------|--------|------|------------------------|--------------------------|-----|--------|----|
| kW | мнр | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Prime | Power | at 50H | z | | | | | |
| 373 | 507 | 500 | 1500 | 88.9 (23.5) | 45.1 (11.9) | 2 | — | Зa |
| Prime Power at 60Hz | | | | | | | | |
| 373 | 507 | 500 | 1800 | 99.3 (26.2) | 45.7 (12.1) | 2 | 3 | Зa |
| 425 | 578 | 570 | 1800 | 103.9 (27.5) | 52.7 (13.9) | 2 | 3 | За |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1810 | (71) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 1120 | (44) | |
| Height | mm (in) | 1681 | (52) | |
| Weight | kg (lb) | 1400 | (3080) | |





| Configuration | In-line, 6 cylinder | In-line, 6 cylinder, 4-stroke diesel | | | |
|---------------|----------------------------|--------------------------------------|--|--|--|
| Aspiration | Turbocharged/Aftercooled | | | | |
| Displacement | 19 L | 1150 in ³ | | | |
| Bore & Stroke | 159 x 159 mm | 6.25 x 6.25 in | | | |
| Fuel System | Modular Common Rail (MCRS) | | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | NISSION | IS |
|----------------------|---------|---------|------------------------|--------------------------|-----|---------|----|
| kW | BHP | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Prime | Power a | t 50 Hz | | | | | |
| 433 | 580 | 1500 | 111.1 (29.3) | 57.9 (15.3) | 2 | - | - |
| 526 | 705 | 1500 | 133.7 (35.3) | 66.2 (17.5) | 2 | - | - |
| Prime Power at 60 Hz | | | | | | | |
| 563 | 755 | 1800 | 142.3 (37.6) | 72.4 (18.8) | 2 | _ | За |
| 563 | 755 | 1800 | 148.5 (39.2) | 75.8 (20.0) | 2 | З | - |
| 597 | 800 | 1800 | 158.1 (41.8) | 81.9 (21.6) | 2 | 3 | - |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 2007 | (79) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 693 | (38) | |
| Height | mm (in) | 1880 | (74) | |
| Weight | kg (lb) | 2189 | (4825) | |



| Configuration | V-12 cylinder, 4-stroke diesel | | |
|---------------|--------------------------------|----------------------|--|
| Aspiration | Turbocharged/Aftercooled | | |
| Displacement | 28 L | 1710 in ³ | |
| Bore & Stroke | 140 x 152 mm | 5.50 x 6.00 in | |
| Fuel System | Pressure Time (PT) | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | lission | IS |
|----------------------|---------|-------|------------------------|--------------------------|-----|---------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Prime F | ower at | 50 Hz | | | | | |
| 421 | 565 | 1500 | 104.3 (27.6) | N/A | 2 | - | - |
| 560 | 750 | 1500 | 140.1 (37.0) | N/A | 1 | - | - |
| 560 | 750 | 1500 | 134.2 (35.4) | N/A | 2 | — | - |
| Prime Power at 60 Hz | | | | | | | |
| 608 | 815 | 1800 | 154.0 (40.7) | N/A | 1 | _ | _ |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1900 | (75) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 995 | (39) | |
| Height | mm (in) | 1641 | (65) | |
| Weight | kg (lb) | 2901 | (6395) | |

Dimensions may vary based on selected engine configuration.



One of the two accommodation boats built at Guangzhou Mangtong Shipbuilding and outfitted with a pair of QSK60 main engines and three KTA38-powered generator sets.

Courtesy of Guangzhou Mangtong Shipbuilding

KTA38 MARINE AUXILIARY

GENERAL SPECIFICATIONS

| Configuration | V-12 cylinder, 4-s | V-12 cylinder, 4-stroke diesel | | | |
|---------------|--------------------|--------------------------------|--|--|--|
| Aspiration | Turbocharged/Af | Turbocharged/Aftercooled | | | |
| Displacement | 38 L | 2300 in ³ | | | |
| Bore & Stroke | 159 x 159 mm | 6.25 x 6.25 in | | | |
| Fuel System | Pressure Time (PT) | | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | ISSIO | IS |
|---------|----------|-------|------------------------|--------------------------|-----|-------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU |
| Prime I | Power at | 50 Hz | | | | | |
| 634 | 850 | 1500 | 160.0 (42.3) | 84.3 (22.3) | - | - | - |
| 664 | 890 | 1500 | 167.0 (44.2) | 87.5 (23.1) | _ | - | — |
| 746 | 1000 | 1500 | 176.8 (46.7) | 91.7 (24.2) | 1 | _ | — |
| 806 | 1080 | 1500 | 194.0 (51.3) | 103.7 (27.4) | _ | - | — |
| 880 | 1180 | 1500 | 208.6 (55.1) | 109.4 (28.9) | _ | - | — |
| 880 | 1180 | 1500 | 215.9 (57.0) | 109.0 (28.8) | 1 | - | - |
| 880 | 1180 | 1500 | 216.7 (57.2) | 115.2 (30.4) | 2 | - | — |
| Prime I | Power at | 60 Hz | | | | | |
| 768 | 1030 | 1800 | 195.0 (51.5) | 104.4 (27.6) | - | - | - |
| 809 | 1085 | 1800 | 204.4 (54.0) | 108.6 (28.7) | _ | _ | - |
| 821 | 1100 | 1800 | 195.7 (51.7) | 104.0 (27.5) | 1 | - | - |
| 910 | 1220 | 1800 | 217.7 (57.5) | 116.8 (30.9) | _ | - | — |
| 970 | 1300 | 1800 | 240.0 (63.4) | 129.3 (34.2) | 1 | - | - |
| 970 | 1300 | 1800 | 243.2 (64.2) | 132.2 (34.9) | 2 | - | - |
| 1007 | 1350 | 1800 | 244.5 (64.6) | 131.6 (34.8) | - | - | - |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 2152 | (84) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 1462 | (58) | |
| Height | mm (in) | 2083 | (82) | |
| Weight | kg (lb) | 4218 | (9300) | |

QSK38 MARINE AUXILIARY



GENERAL SPECIFICATIONS

| Configuration | V-12 cylinder, 4-stroke diesel | | | | |
|---------------|--------------------------------|----------------------|--|--|--|
| Aspiration | Turbocharged/Aftercooled | | | | |
| Displacement | 38 L | 2300 in ³ | | | |
| Bore & Stroke | 159 x 159 mm | 6.25 x 6.25 in | | | |
| Fuel System | Modular Common Rail (MCRS) | | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | |
|----------------------|---------|---------|------------------------|--------------------------|-----------|-----|----|
| kW | BHP | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Prime | Power a | t 50 Hz | | | | | |
| 984 | 1320 | 1500 | 234.3 (61.9) | 124.6 (32.9) | 2 | - | 3a |
| Prime Power at 60 Hz | | | | | | | |
| 1044 | 1400 | 1800 | 262.6 (69.4) | 144.2 (38.1) | 2 | 3 | - |
| 1044 | 1400 | 1800 | 252.5 (66.7) | 135.8 (35.9) | 2 | — | Зa |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 2282 | (90) | |
|--------|---------|------|---------|--|
| Width | mm (in) | 1573 | (62) | |
| Height | mm (in) | 2242 | (88) | |
| Weight | kg (lb) | 4850 | (10692) | |

Dimensions may vary based on selected engine configuration.



The U.S. Navy's latest Ocean Class Auxiliary General Purpose Oceanographic Research (AGOR) vessel, R/V Neil Armstrong, is equipped with four QSK38-powered diesel electric generator sets.

Courtesy of Cummins Northwest

KTA50 MARINE AUXILIARY

GENERAL SPECIFICATIONS

| Configuration | V-16 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------------|----------------------|--|--|
| Aspiration | Turbocharged/Aftercooled | | | |
| Displacement | 50 L | 3067 in ³ | | |
| Bore & Stroke | 159 x 159 mm | 6.25 x 6.25 in | | |
| Fuel System | Pressure Time (PT) | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | lission | IS |
|-------|---------|---------|------------------------|--------------------------|-----|---------|----|
| kW | BHP | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Prime | Power a | t 50 Hz | | | | | |
| 880 | 1180 | 1500 | 217.3 (57.4) | 116.8 (30.9) | - | - | - |
| 900 | 1206 | 1500 | 252.9 (66.8) | N/A | - | - | - |
| 1007 | 1350 | 1500 | 228.9 (60.5) | 118.9 (31.4) | 1 | _ | _ |
| 1096 | 1470 | 1500 | 267.0 (70.5) | 141.4 (37.3) | 1 | - | — |
| 1096 | 1470 | 1500 | 275.9 (72.9) | 141.9 (37.5) | 2 | _ | _ |
| 1097 | 1470 | 1500 | 253.6 (67.0) | 134.1 (35.4) | _ | - | — |
| Prime | Power a | t 60 Hz | | | | | |
| 1000 | 1340 | 1800 | N/A | N/A | _ | _ | - |
| 1007 | 1350 | 1800 | N/A | 138.1 (36.5) | _ | - | - |
| 1141 | 1530 | 1800 | 262.7 (69.4) | 138.6 (36.6) | 1 | _ | _ |
| 1220 | 1635 | 1800 | 282.0 (74.5) | 153.7 (40.6) | _ | - | - |
| 1290 | 1730 | 1800 | 314.6 (83.1) | 161.4 (42.6) | 2 | - | _ |
| 1290 | 1730 | 1800 | 320.8 (84.7) | 168.6 (44.6)) | 1 | _ | - |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 2694 | (106) | |
|--------|---------|------|---------|--|
| Width | mm (in) | 1564 | (62) | |
| Height | mm (in) | 2260 | (89) | |
| Weight | kg (lb) | 5431 | (11973) | |

QSK50 MARINE AUXILIARY



GENERAL SPECIFICATIONS

| Configuration | V-16 cylinder, 4-stroke diesel | | | |
|---------------|---------------------------------|----------------------|--|--|
| Aspiration | Turbocharged/Aftercooled | | | |
| Displacement | 50 L | 3068 in ³ | | |
| Bore & Stroke | e 159 x 159 mm 6.25 x 6. | | | |
| Fuel System | Modular Common Rail (MCRS) | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | ISSION | IS |
|----------------------|---------|---------|------------------------|--------------------------|-----|--------|----|
| kW | BHP | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU |
| Prime | Power a | t 50 Hz | | | | | |
| 1290 | 1730 | 1500 | 308.0 (81.4) | 162.5 (42.9) | 2 | - | Зa |
| Prime Power at 60 Hz | | | | | | | |
| 1342 | 1800 | 1800 | 339.3 (89.6) | 184.2 (48.7) | 2 | З | _ |
| 1342 | 1800 | 1800 | 332.3 (87.8) | 177.3 (46.8) | 2 | - | Зa |
| 1628 | 2183 | 1800 | 413.8 (109.3) | 209.7 (55.4) | 2 | _ | За |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 2780 | (109) | |
|--------|---------|------|---------|--|
| Width | mm (in) | 1573 | (62) | |
| Height | mm (in) | 2232 | (88) | |
| Weight | kg (lb) | 6270 | (13823) | |





| Configuration | V-16 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------------|----------------------|--|--|
| Aspiration | Turbocharged/Aftercooled | | | |
| Displacement | 60.2 L | 3672 in ³ | | |
| Bore & Stroke | 159 x 190 mm | 6.25 x 7.48 in | | |
| Fuel System | Modular Common Rail (MCRS) | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | ISSION | IS |
|----------------------|----------|-------|------------------------|--------------------------|-----|--------|----|
| kW | BHP | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU |
| Prime F | Power at | 50 Hz | | | | | |
| 1563 | 2095 | 1500 | 378.1 (99.9) | 192.1 (50.7) | 2 | - | 3a |
| 1899 | 2547 | 1500 | 451.8 (119.3) | 222.7 (58.8) | 2 | - | - |
| Prime Power at 60 Hz | | | | | | | |
| 1899 | 2547 | 1800 | 486.3 (128.5) | 239.8 (63.4) | 2-3 | - | За |
| 2001 | 2683 | 1800 | 480.3 (126.9) | 244.2 (64.5) | 2-3 | _ | — |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 3290 | (130) | |
|--------|---------|------|---------|--|
| Width | mm (in) | 1757 | (69) | |
| Height | mm (in) | 2415 | (95) | |
| Weight | kg (lb) | 8754 | (19300) | |

QSK95 MARINE AUXILIARY

GENERAL SPECIFICATIONS

| Configuration | V-16 cylinder, 4-stroke diesel | | | | |
|---------------|--------------------------------|--------------------------|--|--|--|
| Aspiration | Turbocharged/A | Turbocharged/Aftercooled | | | |
| Displacement | 95 L | 5797 in ³ | | | |
| Bore & Stroke | 190 x 210 mm | 7.48 x 8.27 in | | | |
| Fuel System | Modular Common Rail (MCRS) | | | | |

COMMERCIAL RATINGS

| | | | FUEL CONSUMPTION | | EN | NISSION | IS |
|----------------------|------|------|------------------------|--------------------------|-----|---------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Prime Power at 50 Hz | | | | | | | |
| 2625 | 3520 | 1500 | 599.8 (158.4) | 302.7 (80.0) | 2 | — | _ |
| Prime Power at 60 Hz | | | | | | | |
| 3150 | 4224 | 1800 | 765.8 (202.3) | 380.4 (100.5) | 2 | _ | _ |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 3654 | (144) | |
|--------|---------|-------|---------|--|
| Width | mm (in) | 1728 | (63) | |
| Height | mm (in) | 2362 | (93) | |
| Weight | kg (lb) | 13282 | (29282) | |

PERFORMANCE HAS A NAME.

For decades, Cummins has provided dependability and performance to marine operations around the world. And our legacy of innovation continues with our new X15 engine solutions.

The perfect size for inland waterway applications, the X15 gives you reduced fuel consumption, without reduced performance; and is an efficient option for a new build or a repower opportunity. Plus, it's backed by a 2-year warranty and our world-class support network in over 190 countries.

cummins

ALWAYS ON

Innovative solutions from a name you can trust. No matter the vessel, Cummins will keep you Always On.

Contact your local authorized Cummins dealer or learn more at CUMMINS.COM.

CUMMINS DIESEL ELECTRIC

With a decade of experience and hundreds of diesel electric packages in operation globally, Cummins is one of the pioneers in diesel electric propulsion.

The company has developed in-house capability to design generator set packages and support diesel electric vessels, long offering custom packages through the Cummins marine distribution channel as well as more standardized C Power generator sets from the factory.

THE DIFFERENCE IS EXPERIENCE.

- » Hundreds of diesel electric packages in operation globally
- » Regular integration meetings begin at vessel concept and continue through commissioning
- » Customized packages for constant and variable speed propulsion feature Cummins marine auxiliary engines matched to customer's choice of alternator, including Cummins own STAMFORD® and AvK®, to meet your vessel requirements
- » Major components designed and built by Cummins as an integrated unit
- » Supported by a global network of marine service specialists available 24/7/365



POWER RANGE FOR CUMMINS MARINE AUXILIARY ENGINES FOR DIESEL ELECTRIC PROPULSION



RATING DEFINITIONS

Prime Power: Engines with this rating are available for an unlimited number of hours per year in variable load applications. Variable load is not to exceed a 80 percent average of the rated power. A 10 percent overload capability is available for a period of one hour within a 12 hour period of operation. Total operating time at the 10 percent overload power shall not exceed 25 hours per year. This power rating follows ISO 8528 guidelines.

DIESEL ELECTRIC RATINGS

| kW | BHP E | ngine Model | Fuel System |
|-------------|---------------|-------------|-------------|
| 50 Hz Fixed | Speed Ratings | | |
| 358 | 480 | KTA19 | Mechanical |
| 373 | 500 | X15 | Electronic |
| 410 | 550 | KTA19 | Mechanical |
| 433 | 580 | QSK19 | Electronic |
| 526 | 705 | QSK19 | Electronic |
| 880 | 1180 | KTA38 | Mechanical |
| 984 | 1320 | QSK38 | Electronic |
| 1096 | 1470 | KTA50 | Mechanical |
| 1290 | 1730 | QSK50 | Electronic |
| 1563 | 2095 | QSK60 | Electronic |
| 1899 | 2547 | QSK60 | Electronic |
| 2625 | 3520 | QSK95 | Electronic |
| 60 Hz Fixed | Speed Ratings | | |
| 425 | 570 | KTA19 | Mechanical |
| 373 | 500 | X15 | Electronic |
| 425 | 570 | X15 | Electronic |
| 485 | 650 | KTA19 | Mechanical |
| 563 | 755 | QSK19 | Electronic |
| 563 | 755 | QSK19 | Electronic |
| 597 | 800 | QSK19 | Electronic |
| 970 | 1300 | KTA38 | Mechanical |
| 1044 | 1400 | QSK38 | Electronic |
| 1044 | 1400 | QSK38 | Electronic |
| 1290 | 1730 | KTA50 | Mechanical |
| 1342 | 1800 | QSK50 | Electronic |
| 1342 | 1800 | QSK50 | Electronic |
| 1628 | 2183 | QSK50 | Electronic |
| 1899 | 2547 | QSK60 | Electronic |
| 2001 | 2683 | QSK60 | Electronic |
| 3150 | 4224 | QSK95 | Electronic |

| | Fuel Consumption (L/hr (Gal/hr)) | | E | mission | s |
|------|----------------------------------|--------------|-----|---------|----|
| Page | Rated | ISO Avg | IMO | EPA | EU |
| | | | | | |
| 71 | 91.2 (24.1) | 47.1 (12.5) | 2 | - | - |
| 72 | 88.9 (23.5) | 45.1 (11.9) | 2 | - | За |
| 71 | 102.6 (27.1) | 52.5 (13.9) | 2 | - | - |
| 73 | 111.1 (29.3) | 57.9 (15.3) | 2 | - | - |
| 73 | 133.7 (35.3) | 66.2 (17.5) | 2 | _ | - |
| 75 | 216.7 (57.2) | 115.2 (30.4) | 2 | - | - |
| 76 | 234.3 (61.9) | 124.6 (32.9) | 2 | - | За |
| 77 | 275.9 (72.9) | 141.9 (37.5) | 2 | - | - |
| 78 | 308.8 (81.4) | 162.8 (42.9) | 2 | - | За |
| 79 | 378.1 (99.9) | 192.1 (50.7) | 2 | - | Зa |
| 79 | 451.8 (119.3) | 222.7 (58.8) | 2 | - | - |
| 80 | 619.0 (163.5)* | N/A | 2 | - | - |
| | | | | | |
| 71 | 106.4 (28.1) | 58.8 (15.5) | 2 | - | - |
| 72 | 99.3 (26.2) | 45.7 (12.1) | 2 | 3 | 3a |
| 72 | 103.9 (27.5) | 52.7 (13.9) | 2 | 3 | 3a |
| 71 | 120.8 (31.9) | 64.7 (17.1) | 2 | - | _ |
| 73 | 142.3 (37.6) | 72.4 (18.8) | 2 | - | 3a |
| 73 | 148.5 (39.2) | 75.8 (20.0) | 2 | 3 | _ |
| 73 | 158.1 (41.8) | 81.9 (21.6) | 2 | 3 | - |
| 75 | 243.2 (64.2) | 132.2 (34.9) | 2 | - | _ |
| 76 | 262.6 (69.4) | 144.2 (38.1) | 2 | 3 | - |
| 76 | 252.5 (66.7) | 135.8 (35.9) | 2 | - | За |
| 77 | 314.6 (83.1) | 161.4 (42.6) | 2 | - | - |
| 78 | 339.3 (89.6) | 184.2 (48.7) | 2 | 3 | - |
| 78 | 332.3 (87.8) | 177.3 (46.8) | 2 | - | За |
| 78 | 413.8 (109.3) | 209.7 (55.4) | 2 | _ | За |
| 79 | 486.3 (128.5) | 239.8 (63.4) | 2 | - | За |
| 79 | 480.3 (126.9) | 244.2 (64.5) | 2 | - | - |
| 80 | 765.9 (202.3)* | N/A | 2 | - | _ |

CUMMINS MARINE GENSETS

With more than 80 years of marine experience gained by supplying generators for commercial, recreational and government marine applications globally, Cummins marine generators offer the same reliability and durability operators have come to expect from Cummins.

Our line of marine generator sets include Cummins Onan and C Power generator sets for ship's service and emergency power, as well as diesel electric propulsion.

Every major component our marine generator sets, including the engine, alternator and control system, is either designed and manufactured or integrated by divisions of the Cummins family. This means all elements of the generator set are engineered to operate with complete system harmony for optimal performance and maximum efficiency. And the best part is knowing your generator is backed by the full power of Cummins — support and service from the world's largest distributor/dealer network in the industry and a comprehensive global warranty.



POWER RANGE FOR ONAN MARINE GENERATOR SETS



POWER RANGE FOR C POWER MARINE GENERATOR SETS



MARINE GENERATOR SETS

| kWe | Hz | RPM | Model | Product Line |
|------------|--------------|------|-------|--------------|
| KC- and HX | -cooled rati | ngs | | |
| 4 | 50 | 2400 | MDKBH | Onan |
| 5 | 60 | 2900 | MDKBH | Onan |
| 6 | 50 | 2400 | MDKBJ | Onan |
| 7 | 50 | 1500 | MDKDK | Onan |
| 7 | 50 | 1500 | MDKDL | Onan |
| 7.5 | 60 | 2900 | MDKBJ | Onan |
| 8 | 50 | 2880 | MDKBW | Onan |
| 9 | 60 | 1800 | MDKDK | Onan |
| 9 | 60 | 1800 | MDKDL | Onan |
| 9.5 | 50 | 1500 | MDKDM | Onan |
| 11 | 50 | 1500 | MDKDN | Onan |
| 11.5 | 60 | 1800 | MDKDM | Onan |
| 13.5 | 50 | 1500 | MDKDP | Onan |
| 13.5 | 60 | 1800 | MDKDN | Onan |
| 17 | 60 | 1800 | MDKDP | Onan |
| 17.5 | 50 | 1500 | MDKDR | Onan |
| 19 | 50 | 1500 | MDKDV | Onan |
| 21.5 | 60 | 1800 | MDKDR | Onan |
| 22.5 | 50 | 1500 | MDKDT | Onan |
| 27 | 50 | 1500 | MDKDU | Onan |
| 29 | 60 | 1800 | MDKDS | Onan |
| 40 | 50 | 1500 | MDDCW | Onan |
| 40 | 60 | 1800 | MDDCU | Onan |
| 50 | 50 | 1500 | MDDCY | Onan |
| 55 | 60 | 1800 | MDDCS | Onan |
| 65 | 50 | 1500 | MDDCH | Onan |

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MARINE GENERATOR SETS

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| kWe | Hz | RPM | Model | Product Line |
|------------|---------------|---------|--------|--------------|
| KC- and HX | (-cooled rati | ngs | | |
| 65 | 60 | 1800 | MDDCT | Onan |
| 80 | 50 | 1500 | MDDCJ | Onan |
| 80 | 50 | 1500 | 6B-CP | C Power |
| 80 | 60 | 1800 | MDDCP | Onan |
| 99 | 60 | 1800 | MDDCR | Onan |
| 99 | 60 | 1800 | 6B-CP | C Power |
| 136 | 50 | 1500 | 6C-CP | C Power |
| 160 | 60 | 1800 | 6C-CP | C Power |
| 170 | 60 | 1800 | 6C-CP | C Power |
| 335 | 50 | 1500 | K19-CP | C Power |
| 380 | 50 | 1500 | K19-CP | C Power |
| 390 | 50 | 1500 | K19-CP | C Power |
| 400 | 60 | 1800 | K19-CP | C Power |
| 450 | 60 | 1800 | K19-CP | C Power |
| 460 | 60 | 1800 | K19-CP | C Power |
| 764 | 50 | 1500 | K38-CP | C Power |
| 804 | 50 | 1500 | K38-CP | C Power |
| 832 | 50 | 1500 | K38-CP | C Power |
| 845 | 50 | 1500 | K38-CP | C Power |
| 888 | 60 | 1800 | K38-CP | C Power |
| 920 | 60 | 1800 | K38-CP | C Power |
| 1004 | 50 | 1500 | K50-CP | C Power |
| 1050 | 50 | 1500 | K50-CP | C Power |
| 1184 | 60 | 1800 | K50-CP | C Power |
| 1230 | 60 | 1800 | K50-CP | C Power |
| RAD-coole | d emergency | ratings | | |
| 74 | 50 | 1500 | 6B-CP | C Power |
| 92 | 60 | 1800 | 6B-CP | C Power |
| 136 | 50 | 1500 | 6C-CP | C Power |
| 152 | 60 | 1800 | 6C-CP | C Power |

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4–5 kW ONAN MARINE GENSET



HX- cooled ratings

| kWe | kVa* | Hz | RPM | Phase | Voltage | Amps | Emissions |
|------|------|----|------|-------|-------------------------------------|---|-----------|
| Mode | MDKB | н | | | | | |
| 4 | 4 | 50 | 2400 | 1 | 110 220 115 230 120 240 | 36.4 18.2 34.8 17.4 33.3 16.6 | |
| 5 | 5 | 60 | 2900 | 1 | 120 120 240 | 41.7 41.7 20.8 | EPA3 |

Ratings below 130 kW are not subject to IMO emission regulations.

* Single phase output at 1.0 power factor; three phase output at .8 power factor.

FUEL CONSUMPTION

| kWe | Hz | 1/4 Load L/hr (Gal/hr) | 1/2 Load L/hr (Gal/hr) | 3/4 Load L/hr (Gal/hr) | Full Load L/hr (Gal/hr) |
|-------|-----------|---------------------------|---------------------------|---------------------------|----------------------------|
| KC-an | d HX- cod | oled ratings | | | |
| 4 | 50 | 0.8 (0.21) | 1.0 (0.28) | 1.3 (0.35) | 1.7 (0.44) |
| 5 | 60 | 1.0 (0.27) | 1.3 (0.35) | 1.7 (0.44) | 2.1 (0.55) |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 662 | (26) | |
|--------|---------|-----|-------|--|
| Width | mm (in) | 511 | (20) | |
| Height | mm (in) | 524 | (21) | |
| Weight | kg (lb) | 166 | (365) | |

Dimensions may vary based on selected engine configuration.



Electrical power for the R–31S from Ranger Tugs is provided by a 5 kWe MDKBH Onan marine generator set.

Courtesy of Ranger Tugs

6-8 kW ONAN MARINE GENSET



| HX- cooled ratings | | | | | | | | |
|--------------------|------|----|------|-------|-------------------------------------|---|-----------|--|
| kWe | kVa* | Hz | RPM | Phase | Voltage | Amps | Emissions | |
| Mode | | J | | | | | | |
| 6 | 6 | 50 | 2400 | 1 | 110 220 115 230 120 240 | 54.5 27.3 52.2 26.1 50.0 25.0 | | |
| 7.5 | 7.5 | 60 | 2900 | 1 | 120 120 240 | 62.5 62.5 31.3 | EPA3 | |
| Mode | | W | | | | | | |
| 8 | 8 | 50 | 2880 | 1 | 110 220 115 230 120 240 | 72.7 36.4 69.6 34.8 66.6 33.3 | | |

Ratings below 130 kW are not subject to IMO emission regulations.

* Single phase output at 1.0 power factor; three phase output at .8 power factor.

FUEL CONSUMPTION

| kWe | Hz | 1/4 Load L/hr (Gal/hr) | 1/2 Load L/hr (Gal/hr) | 3/4 Load L/hr (Gal/hr) | Full Load L/hr (Gal/hr) |
|--------|-----------|---------------------------|---------------------------|---------------------------|----------------------------|
| KC- an | d HX- coo | oled ratings | | | |
| 6 | 50 | 1.12 (0.30) | 1.46 (0.39) | 1.84 (0.48) | 2.28 (0.60) |
| 7.5 | 60 | 1.40 (0.37) | 1.84 (0.48) | 2.33 (0.61) | 2.93 (0.70) |
| 8 | 50 | 1.41 (0.37) | 1.85 (0.49) | 2.35 (0.62) | 2.97 (0.78) |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 664 | (26) | |
|--------|---------|-----|-------|--|
| Width | mm (in) | 583 | (23) | |
| Height | mm (in) | 535 | (21) | |
| Weight | kg (lb) | 195 | (429) | |

7–9 kW ONAN MARINE GENSET



KC- and HX- cooled ratings

| kWe | kVa* | Hz | RPM | Phase | Voltage | Amps | Emissions |
|------|------|----|------|-------|-------------------------------------|---|-----------|
| Mode | MDKD | к | | | | | |
| 7 | 7 | 50 | 1500 | 1 | 110 220 115 230 120 240 | 63.6 31.8 60.9 30.4 58.3 29.2 | _ |
| 9 | 9 | 60 | 1800 | 1 | 120 120 240 | 75 75 37.5 | EPA3 |

Ratings below 130 kW are not subject to IMO emission regulations.

* Single phase output at 1.0 power factor; three phase output at .8 power factor.

FUEL CONSUMPTION

| kWe | Hz | 1/4 Load L/hr (Gal/hr) | 1/2 Load L/hr (Gal/hr) | 3/4 Load L/hr (Gal/hr) | Full Load L/hr (Gal/hr) |
|--------|----------|---------------------------|---------------------------|---------------------------|----------------------------|
| KC- an | d HX- co | oled ratings | | | |
| 7 | 50 | 1.1 (0.3) | 1.5 (0.4) | 2.0 (0.5) | 2.8 (0.8) |
| 9 | 60 | 1.3 (0.3) | 1.9 (0.5) | 2.6 (0.7) | 3.8 (1.0) |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 823 | (32) | |
|--------|---------|-----|-------|--|
| Width | mm (in) | 479 | (19) | |
| Height | mm (in) | 560 | (22) | |
| Weight | kg (lb) | 238 | (525) | |

7–9 kW ONAN MARINE GENSET



KC- and HX- cooled ratings

| kWe | kVa* | Hz | RPM | Phase | Voltage | Amps | Emissions |
|-------|------|----|------|-------|-------------------------------------|---|-----------|
| Model | MDKD | L | | | | | |
| 7 | 7 | 50 | 1500 | 1 | 110 220 115 230 120 240 | 63.6 31.8 60.9 30.4 58.3 29.2 | _ |
| 9 | 9 | 60 | 1800 | 1 | 120 120 240 | 75 75 37.5 | EPA3 |

Ratings below 130 kW are not subject to IMO emission regulations.

* Single phase output at 1.0 power factor; three phase output at .8 power factor.

FUEL CONSUMPTION

| kWe | Hz | 1/4 Load L/hr (Gal/hr) | 1/2 Load L/hr (Gal/hr) | 3/4 Load L/hr (Gal/hr) | Full Load L/hr (Gal/hr) |
|--------|---------|---------------------------|---------------------------|---------------------------|----------------------------|
| KC- an | d HX- c | ooled ratings | | | |
| 7 | 50 | 1.1 (0.3) | 1.5 (0.4) | 2.0 (0.5) | 2.8 (0.8) |
| 9 | 60 | 1.3 (0.3) | 1.9 (0.5) | 2.6 (0.7) | 3.8 (1.0) |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| | | HOL | ISED | UNHOUSED | |
|--------|---------|-----|-------|----------|-------|
| Length | mm (in) | 911 | (36) | 911 | (36) |
| Width | mm (in) | 566 | (22) | 566 | (22) |
| Height | mm (in) | 593 | (23) | 585 | (23) |
| Weight | kg (lb) | 272 | (600) | 252 | (555) |

9.5–13.5 kW **ONAN MARINE** GENSET



| KC- and HK- cooled rating | KC- | and | HX- | cooled | ratings |
|---------------------------|-----|-----|-----|--------|---------|
|---------------------------|-----|-----|-----|--------|---------|

| kWe | kVa* | Hz | RPM | Phase | Voltage | Amps | Emissions | | |
|-------------|------|----|------|-------|-------------------------------------|---|-----------|--|--|
| Model MDKDM | | | | | | | | | |
| 9.5 | 9.5 | 50 | 1500 | 1 | 110 220 115 230 120 240 | 86.4 43.2 82.6 41.3 79.2 39.6 | _ | | |
| 11.5 | 11.5 | 60 | 1800 | 1 | 120 120 240 | 95.8 95.8 47.9 | EPA3 | | |
| Mode | | N | | | | | | | |
| 11 | 11 | 50 | 1500 | 1 | 110 220 115 230 120 240 | 100 50 95.7 47.8 91.7 46 | _ | | |
| 13.5 | 13.5 | 60 | 1800 | 1 | 120 120 240 | 112.5 112 56.3 | EPA3 | | |

Ratings below 130 kW are not subject to IMO emission regulations. * Single phase output at 1.0 power factor; three phase output at .8 power factor.

FUEL CONSUMPTION

| kWe | Hz | 1/4 Load L/hr (Gal/hr) | 1/2 Load L/hr (Gal/hr) | 3/4 Load L/hr (Gal/hr) | Full Load L/hr (Gal/hr) |
|--------|----------|---------------------------|---------------------------|---------------------------|----------------------------|
| KC- an | d HX- co | oled ratings | | | |
| 9.5 | 50 | 1.4 (0.4) | 2.1 (0.6) | 2.8 (0.7) | 3.4 (0.9) |
| 11 | 50 | 1.5 (0.4) | 2.2 (0.6) | 3.0 (0.8) | 4.0 (1.0) |
| 11.5 | 60 | 1.7 (0.4) | 2.5 (0.7) | 3.2 (0.8) | 3.9 (1.0) |
| 13.5 | 60 | 1.8 (0.5) | 2.6 (0.7) | 3.6 (1.0) | 4.5 (1.2) |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| | | нои | SED | UNHO | USED |
|--------|---------|------|-------|------|-------|
| Length | mm (in) | 1033 | (41) | 1033 | (41) |
| Width | mm (in) | 566 | (22) | 566 | (22) |
| Height | mm (in) | 593 | (23) | 585 | (23) |
| Weight | kg (lb) | 315 | (695) | 290 | (640) |

13.5–21.5 kW ONAN MARINE GENSET



KC- and HX- cooled ratings

| kWe | kVa* | Hz | RPM | Phase | Voltage | Amps | Emissions |
|------|------|----|------|-------|-------------------------------------|--|-----------|
| Mode | | P | | | | | |
| 13.5 | 13.5 | 50 | 1500 | 1 | 110 220 115 230 120 240 | 122.7 61.4 117.4 58.7 112.5 56.3 | EU3a |
| 13.5 | 16.9 | 50 | 1500 | 3 | 220 380 | 25.6 | EU3a |
| 17 | 17 | 60 | 1800 | 1 | 120 240 | 141.7 70.8 | EPA3 |
| 17 | 21.1 | 60 | 1800 | 3 | 120 208 | 59 | EPA3 |
| Mode | | R | | | | | |
| 17.5 | 17.5 | 50 | 1500 | 1 | 110 220 115 230 120 240 | 159.1 79.5 152.2 76.1 145.8 72.9 | EU3a |
| 17.5 | 21.9 | 50 | 1500 | 3 | 220 380 | 33.2 | EU3a |
| 21.5 | 21.5 | 60 | 1800 | 1 | 120 240 | 179 89.6 | EPA3 |
| 21.5 | 26.9 | 60 | 1800 | 3 | 120 208 | 74.6 | EPA3 |
| Mode | | v | | | | | |
| 19 | 19 | 50 | 1500 | 1 | 110 220 115 230 | 172.7 86.4 165.2 82.6 | EU3a |
| 19 | 23.8 | 50 | 1500 | 3 | 220 380 | 36.1 | EU3a |

Ratings below 130 kW are not subject to IMO emission regulations.

* Single phase output at 1.0 power factor; three phase output at .8 power factor.

FUEL CONSUMPTION

| kWe | Hz | 1/4 Load L/hr (Gal/hr) | 1/2 Load L/hr (Gal/hr) | 3/4 Load L/hr (Gal/hr) | Full Load L/hr (Gal/hr) |
|--------|----------|---------------------------|---------------------------|---------------------------|----------------------------|
| KC- an | d HX- co | oled ratings | | | |
| 13.5 | 50 | 1.9 (0.5) | 2.7 (0.7) | 3.6 (0.9) | 4.8 (1.3) |
| 17 | 60 | 2.6 (0.7) | 3.6 (1.0) | 4.8 (1.3) | 6.1 (1.6) |
| 17.5 | 50 | 2.3 (0.6) | 3.4 (0.9) | 4.7 (1.2) | 6.5 (1.7) |
| 19 | 50 | 2.5 (0.7) | 3.9 (1.0) | 5.2 (1.4) | 6.6 (1.7) |
| 21.5 | 60 | 2.9 (0.8) | 4.1 (1.1) | 5.7 (1.5) | 8.2 (2.2) |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

See next page for product dimensions.

13.5–21.5 kW ONAN MARINE GENSET



PRODUCT DIMENSIONS

| | | ноц | ISED | UNHC | USED | |
|--------|---------|------|-------|------|-------|-------|
| Length | mm (in) | 1127 | (44) | 1127 | (44) | |
| Width | mm (in) | 602 | (24) | 602 | (24) | |
| Height | mm (in) | 698 | (28) | 672 | (27) | |
| Weight | kg (lb) | 408 | (899) | 381 | (840) | MDKDP |
| | | 422 | (930) | 395 | (870) | MDKDR |
| | | 422 | (930) | 395 | (870) | MDKDV |

Dimensions may vary based on selected model.

22.5–29 kW ONAN MARINE GENSET



| KC- a | KC- and HX- cooled ratings | | | | | | | | | |
|-------------|----------------------------|----|------|-------|-------------------------------------|---------------------------------------|-----------|--|--|--|
| kWe | kVa* | Hz | RPM | Phase | Voltage | Amps | Emissions | | | |
| Model MDKDT | | | | | | | | | | |
| 22.5 | 22.5 | 50 | 1500 | 1 | 110 220 115 230 120 240 | 205 102 196 97.8 188 93.8 | - | | | |
| 22.5 | 28.1 | 50 | 1500 | 3 | 220 380 | 42.7 | - | | | |
| Model MDKDU | | | | | | | | | | |
| 27 | 27 | 50 | 1500 | 1 | 110 220 115 230 120 240 | 245 123 235 117 225 113 | - | | | |
| 27 | 33.8 | 50 | 1500 | 3 | 220 380 | 51.3 | - | | | |
| Model MDKDS | | | | | | | | | | |
| 29 | 29 | 60 | 1800 | 1 | 120 240 | 241.7 120.8 | EPA3 | | | |
| 29 | 36.2 | 60 | 1800 | 3 | 120 208 | 100.6 | EPA3 | | | |

Ratings below 130 kW are not subject to IMO emission regulations.

* Single phase output at 1.0 power factor; three phase output at .8 power factor.

FUEL CONSUMPTION

| kWe | Hz I | 1/4 Load L/hr (Gal/hr) | 1/2 Load L/hr (Gal/hr) | 3/4 Load L/hr (Gal/hr) | Full Load L/hr (Gal/hr) |
|--------|-----------|---------------------------|---------------------------|---------------------------|----------------------------|
| KC- an | d HX- coo | oled ratings | | | |
| 22.5 | 50 | 3.0 (0.8) | 4.0 (1.1) | 5.2 (1.4) | 7,0 (1.8) |
| 27 | 50 | 3.0 (0.8) | 4.7 (1.2) | 6.2 (1.6) | 9.1 (2.4) |
| 29 | 60 | 3.9 (1.0) | 5.6 (1.5) | 7.6 (2.0) | 10.7 (2.8) |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| | | HOUSED | | UNHC | | |
|--------|---------|--------|--------|------|--------|-------|
| Length | mm (in) | 1358 | (54) | 1358 | (54) | |
| Width | mm (in) | 622 | (25) | 622 | (25) | |
| Height | mm (in) | 761 | (30) | 731 | (29) | |
| Weight | kg (lb) | 601 | (1325) | 565 | (1245) | MDKDT |
| | | 626 | (1380) | 590 | (1300) | MDKDU |
| | | 626 | (1380) | 590 | (1300) | MDKDS |

40 kW ONAN MARINE GENSET



PRIME POWER RATINGS

KC- and HX- cooled ratings

| kWe | kVa* | Hz | RPM | Phase | Voltage | Amps | Emissions |
|------|------|----|------|-------|--|--|-----------|
| Mode | | w | | | | | |
| 40 | 40 | 50 | 1500 | 1 | 110 220 115 230 120 240 | 363.6 181.8 347.8 173.9 333.3 166.7 | _ |
| 40 | 50 | 50 | 1500 | 3 | 110/190 115/200 120/208 110/220 115/230 120/240 220/380 230/400 240/416 255/410 | 151.9 144.3 138.8 131.2 125.5 120.3 76 72.2 69.4 65.6 | - |
| Mode | | ະບ | | | | | |
| 40 | 40 | 60 | 1800 | 1 | 120 240 | 333.3 166.7 | EPA3 |
| 40 | 50 | 60 | 1800 | 3 | 120/208 127/220 120/240 139/240 240/416 255/440 277/480 115/230 220/380 | 138.8 131.2 120.3 120.3 69.4 65.6 60.1 69.4 131 | EPA3 |

Ratings below 130 kW are not subject to IMO emission regulations.

* Single phase output at 1.0 power factor; three phase output at .8 power factor.

40 kW ONAN MARINE GENSET

FUEL CONSUMPTION

| kWe | Hz | 1/4 Load L/hr (Gal/hr) | 1/2 Load L/hr (Gal/hr) | 3/4 Load L/hr (Gal/hr) | Full Load L/hr (Gal/hr) |
|--------|----------|---------------------------|---------------------------|---------------------------|----------------------------|
| KC- an | d HX- co | oled ratings | | | |
| 40 | 50 | 3.9 (1.0) | 6.4 (1.7) | 9.0 (2.4) | 11.5 (3.0) |
| 40 | 60 | 4.5 (1.2) | 7.2 (1.9) | 9.9 (2.6) | 12.7 (3.4) |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| | | HOUSED | | UNHOUSED | | |
|--------|---------|--------|--------|----------|--------|--|
| Length | mm (in) | 1738 | (69) | 1734 | (69) | |
| Width | mm (in) | 840 | (33) | 822 | (32) | |
| Height | mm (in) | 1039 | (41) | 994 | (39) | |
| Weight | kg (lb) | 1098 | (2420) | 998 | (2200) | |

Dimensions may vary based on selected model.

50–65 kW ONAN MARINE GENSET



PRIME POWER RATINGS

KC- and HX- cooled ratings

| kWe | kVa* | Hz | RPM | Phase | Voltage | Amps | Emissions |
|------|-------|----|------|-------|--|--|-----------|
| Mode | | Y | | | | | |
| 50 | 50 | 50 | 1500 | 1 | 110 220 115 230 120 240 | 454.4 227.3 434.8 217.4 416.7 208.3 | _ |
| 50 | 62.5 | 50 | 1500 | 3 | 110/190 115/200 120/208 110/220 115/230 120/240 220/380 230/400 240/416 255/440 | 189.9 180.4 173.5 164 156.9 150.4 95 90.2 86.7 82 | - |
| Mode | | s | | | | | |
| 55 | 55 | 60 | 1800 | 1 | 120 240 | 458.4 229.2 | EPA3 |
| 55 | 68.75 | 60 | 1800 | 3 | 120/208 127/220 120/240 139/240 240/416 255/440 277/480 | 190.8 180.4 165.4 165.4 95.4 90.2 82.7 | EPA3 |
| Mode | | т | | | | | |
| 65 | 65 | 60 | 1800 | 1 | 120 240 | 541.7 270.8 | EPA3 |
| 65 | 81.25 | 60 | 1800 | 3 | 120/208 127/220 120/240 139/240 240/416 255/440 277/480 | 225.5 213.2 195.5 195.5 112.8 106.6 97.7 | EPA3 |

Ratings below 130 kW are not subject to IMO emission regulations.

* Single phase output at 1.0 power factor; three phase output at .8 power factor.

50–65 kW ONAN MARINE GENSET

FUEL CONSUMPTION

| kWe | Hz | 1/4 Load L/hr (Gal/hr) | 1/2 Load L/hr (Gal/hr) | 3/4 Load L/hr (Gal/hr) | Full Load L/hr (Gal/hr) |
|--------|-----------|---------------------------|---------------------------|---------------------------|----------------------------|
| KC- an | d HX- cod | oled ratings | | | |
| 50 | 50 | 4.6 (1.2) | 7.6 (2.0) | 10.8 (2.9) | 14.1 (3.7) |
| 55 | 60 | 5.5 (1.4) | 9.3 (2.4) | 13.0 (3.4) | 16.8 (4.4) |
| 65 | 60 | 5.8 (1.5) | 10.7 (2.8) | 14.3 (4.0) | 19.7 (5.2) |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| | | | JSED | UNHOUSED | | |
|--------|---------|------|--------|----------|--------|--|
| Length | mm (in) | 1738 | (70) | 1779 | (70) | |
| Width | mm (in) | 840 | (33) | 822 | (32) | |
| Height | mm (in) | 1039 | (41) | 994 | (39) | |
| Weight | kg (lb) | 1167 | (2752) | 1067 | (2352) | |

65–80 kW ONAN MARINE GENSET



PRIME POWER RATINGS

KC- and HX- cooled ratings

| kWe | kVa* | Hz | RPM | Phase | Voltage | Amps | Emissions |
|------|-------|----|------|-------|--|--|-----------|
| Mode | | ж | | | | | |
| 65 | 65 | 50 | 1500 | 1 | 110 220 115 230 120 240 | 590.9 295.5 565.2 282.6 541.7 270.8 | _ |
| 65 | 81.25 | 50 | 1500 | 3 | 110/190 115/200 120/208 110/220 115/230 120/240 220/380 230/400 240/416 255/440 | 246.9 234.5 225.5 213.2 204 195.5 123.4 117.3 112.8 106.6 | _ |
| Mode | | J | | | | | |
| 80 | 80 | 50 | 1500 | 1 | 110 220 115 230 120 240 | 727.3/363.6 695.7/347.8 666.7/333.3 | _ |
| 80 | 100 | 50 | 1500 | 3 | 110/190 115/200 120/208 110/220 115/230 120/240 220/380 230/400 240/416 255/440 | 303.9 288.7 277.6 262.4 251 240.6 151.9 144.3 138.8 131.2 | _ |

Ratings below 130 kW are not subject to IMO emission regulations.

* Single phase output at 1.0 power factor; three phase output at .8 power factor.

65–80 kW ONAN MARINE GENSET

FUEL CONSUMPTION

| kWe | Hz I | 1/4 Load L/hr (Gal/hr) | 1/2 Load L/hr (Gal/hr) | 3/4 Load L/hr (Gal/hr) | Full Load L/hr (Gal/hr) | | |
|----------------------------|------|---------------------------|---------------------------|---------------------------|----------------------------|--|--|
| KC- and HX- cooled ratings | | | | | | | |
| 65 | 50 | 5.7 (1.5) | 9.9 (2.6) | 14.1 (3.7) | 18.4 (4.9) | | |
| 80 | 50 | 6.7 (1.8) | 11.8 (3.1) | 16.9 (4.5) | 22.4 (5.9) | | |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| | | HOL | JSED | UNHOUSED | | |
|--------|---------|------|--------|----------|--------|--|
| Length | mm (in) | 2146 | (85) | 2142 | (84) | |
| Width | mm (in) | 840 | (33) | 822 | (32) | |
| Height | mm (in) | 1039 | (41) | 994 | (39) | |
| Weight | kg (lb) | 1434 | (3161) | 1320 | (2910) | |

80–99 kW ONAN MARINE GENSET



PRIME POWER RATINGS

KC- and HX- cooled ratings

| kWe | kVa* | Hz | RPM | Phase | Voltage | Amps | Emissions |
|------|--------|----|------|-------|-----------|---------------|-----------|
| Mode | | | | | | | |
| 80 | 80 | 60 | 1800 | 1 | 120 240 | 666.7 333.3 | - |
| | | | | | 120/208 | 277.6 | |
| | | | | | 127/220 | 262.4 | |
| | | | | | 120/240 | 240.6 | |
| 80 | 100 | 60 | 1800 | 3 | 139/240 | 240.6 | - |
| | | | | | 240/416 | 138.8 | |
| | | | | | 255/440 | 131.2 | |
| | | | | | 277/480 | 120.3 | |
| Mode | | R | | | | | |
| 99 | 99 | 60 | 1800 | 1 | 120 240 | 825 412.5 | - |
| | | | | | 120/208 | 343.5 | |
| | | | | | 127/220 | 324.8 | |
| | | | | | 120/240 | 297.7 | |
| 99 | 123.75 | 60 | 1800 | 3 | 139/240 | 297.7 | - |
| | | | | | 240/416 | 171.7 | |
| | | | | | 255/440 | 162.4 | |
| | | | | | 277/480 | 148.8 | |

Ratings below 130 kW are not subject to IMO emission regulations.

* Single phase output at 1.0 power factor; three phase output at .8 power factor.

FUEL CONSUMPTION

| kWe | Hz | 1/4 Load L/hr (Gal/hr) | 1/2 Load L/hr (Gal/hr) | 3/4 Load L/hr (Gal/hr) | Full Load L/hr (Gal/hr) | | |
|----------------------------|----|---------------------------|---------------------------|---------------------------|----------------------------|--|--|
| KC- and HX- cooled ratings | | | | | | | |
| 80 | 60 | 7.6 (2.0) | 13.2 (3.5) | 18.7 (4.9) | 24.2 (6.4) | | |
| 99 | 60 | 9.2 (2.4) | 15.5 (4.1) | 22.9 (6.0) | 29.4 (7.8) | | |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| | | HOL | JSED | UNHOUSED | | |
|--------|---------|------|--------|----------|--------|--|
| Length | mm (in) | 2146 | (85) | 2142 | (84) | |
| Width | mm (in) | 840 | (33) | 822 | (32) | |
| Height | mm (in) | 1039 | (41) | 994 | (39) | |
| Weight | kg (lb) | 1434 | (3161) | 1320 | (2910) | |
ONAN CRUISE KITS

The cruise kits provide all the necessary and essential generator maintenance and service parts boaters need for worry-free voyages. Enjoy peace-of-mind by having the parts on hand for routine maintenance.



The following parts are included:

- » (2) Oil filters
- » (1) Oil filter wrench (for MDKBJ/W only)
- » (2) Fuel filters
- » (2) Sea water pump impeller kit
- » (1) V-belt
- » (2) Zinc pencils (not required or included for the MDKBH/J/W)
- » Convenient plastic carrying case
- » Laminated marine service & maintenance schedule

For more information on available accessories, visit cummins.com.



Helen Merrill, the last in a series of five pushboats, is powered by a pair of KTA50s. Electrical requirements are met by a pair of 99 kW MDDCR generator sets.

Courtesy of Jeff L. Yates

6B-CP C POWER MARINE GENSET



GENERAL SPECIFICATIONS

| Engine Model | 6BT5.9-D(M) |
|--------------|------------------|
| Alternator | STAMFORD UCM274E |

PRIME POWER RATINGS

| | | | | FUEL CON | SUMPTION | EN | IISSION | NS |
|------|--------|-------|--------------------------|------------------------|--------------------------|-----|---------|----|
| kWe | kVa | Hz | Voltage | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| KC-a | and H | X-coc | oled rating | s | | | | |
| 80 | 100 | 50 | 380 400 415 | 22.4 (5.9) | 11.3 (3.0) | _ | _ | _ |
| 99 | 124 | 60 | 416 440 460 480 | 27.1 (7.2) | 14.0 (3.7) | _ | _ | _ |
| RAD | -coole | ed em | ergency ra | atings | | | | |
| 74 | 93 | 50 | 380 400 415 | 22.4 (5.9) | 11.3 (3.0) | _ | _ | _ |
| 92 | 115 | 60 | 416 440 460 480 | 27.1 (7.2) | 14.0 (3.7) | _ | _ | _ |

Ratings below 130 kW are not subject to IMO emission regulations.

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| | | KC AI CONFIGL | ND HX JRATIONS | RAD CONFIGURATION | | |
|--------|---------|------------------|-------------------|----------------------|--------|--|
| Length | mm (in) | 2440 | (88) | 2320 | (91) | |
| Width | mm (in) | 1250 | (49) | 1250 | (49) | |
| Height | mm (in) | 1270 | (50) | 1280 | (50) | |
| Weight | kg (lb) | 1270 | (2800) | 1370 | (3020) | |

6C-CP C POWER MARINE GENSET



GENERAL SPECIFICATIONS

| Engine Model | 6CTA8.3-D(M) |
|--------------|------------------|
| Alternator | STAMFORD UCM274H |

PRIME POWER RATINGS

| | | | | FUEL CON | SUMPTION | EN | IISSION | IS |
|------|--------|--------|--------------------------|------------------------|--------------------------|-----|---------|----|
| kWe | kVa | Hz | Voltage | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| KC-a | and H) | (-cool | ed rating | s | | | | |
| 136 | 170 | 50 | 380 400 415 | 22.4 (5.9) | 11.3 (3.0) | _ | _ | _ |
| 160 | 200 | 60 | 416 | 41.3 (10.9) | 23.4 (6.2) | 2 | З | - |
| 170 | 213 | 60 | 416 440 460 480 | 27.1 (7.2) | 14.0 (3.7) | _ | _ | _ |
| RAD- | -coole | d eme | ergency ra | atings | | | | |
| 136 | 170 | 50 | 380 400 415 | 46.6 (12.3) | 20.5 (5.4) | 2 | _ | _ |
| 152 | 190 | 60 | 416 440 460 480 | 41.3 (10.9) | 23.4 (6.2) | 2 | 3 | _ |

Ratings below 130 kW are not subject to IMO emission regulations.

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| | | KC AI | | R | | |
|--------|---------|---------|---------|---------------|--------|--|
| | | CONFIGU | HATIONS | CONFIGURATION | | |
| Length | mm (in) | 2400 | (94) | 2550 | (100) | |
| Width | mm (in) | 1250 | (49) | 1250 | (49) | |
| Height | mm (in) | 1270 | (50) | 1480 | (58) | |
| Weight | kg (lb) | 1720 | (3792) | 1850 | (4079) | |

K19-CP C POWER MARINE GENSET



GENERAL SPECIFICATIONS

Engine Model KTA19–D(M1)

Alternator STAMFORD HCM534E

PRIME POWER RATINGS

| | | | | FUEL CON | SUMPTION | EN | NISSION | IS |
|------|-------|-------|--------------------------|------------------------|--------------------------|-----|---------|----|
| kWe | kVa | Hz | Voltage | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| KC-a | and H | X-coc | led rating | s | | | | |
| 335 | 419 | 50 | 380 400 415 440 | 91.1 (24.1) | 47.1 (12.4) | 2 | _ | _ |
| 380 | 475 | 50 | 380 | 102.6 (27.1) | 52.5 (13.9) | 2 | - | - |
| 390 | 488 | 50 | 400 415 440 | 102.6 (27.1) | 52.5 (13.9) | 2 | _ | _ |
| 400 | 500 | 60 | 416 440 460 480 | 106.4 (28.1) | 58.8 (15.5) | 2 | _ | _ |
| 450 | 563 | 60 | 416 | 120.8 (31.9) | 64.7 (17.1) | 2 | - | _ |
| 460 | 575 | 60 | 440 460 480 | 120.8 (31.9) | 64.7 (17.1) | 2 | _ | _ |

Ratings below 130 kW are not subject to IMO emission regulations.

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| | | KC / CONFIG | AND HX URATIONS | |
|--------|---------|----------------|--------------------|--|
| Length | mm (in) | 3500 | (137) | |
| Width | mm (in) | 1540 | (60) | |
| Height | mm (in) | 2100 | (62) | |
| Weight | kg (lb) | 4100 | (9039) | |

K38-CP C POWER MARINE GENSET



GENERAL SPECIFICATIONS

Engine Model KTA38–D(M1)

Alternator STAMFORD PM734B

PRIME POWER RATINGS

| | | | | FUEL CONSUMPTION | | EN | NISSION | IS |
|---------------------------|------|----|-------------------|------------------------|--------------------------|-----|---------|----|
| kWe | kVa | Hz | Voltage | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU |
| KC- and HX-cooled ratings | | | | | | | | |
| 764 | 955 | 50 | 380 | 206.0 (54.4) | 107.5 (28.4) | 2 | _ | - |
| 804 | 1005 | 50 | 400 | 206.0 (54.4) | 113.3 (29.9) | 2 | - | - |
| 832 | 1040 | 50 | 415 | 206.0 (54.4) | 117.1 (30.9) | 2 | - | _ |
| 845 | 1056 | 50 | 440 | 206.0 (54.4) | 118.4 (31.3) | 2 | - | - |
| 888 | 1110 | 60 | 416 | 226.7 (59.9) | 129.7 (34.3) | 2 | - | - |
| 920 | 1150 | 60 | 440 460 480 | 226.7 (59.9) | 134.8 (35.6) | 2 | _ | - |

Ratings below 130 kW are not subject to IMO emission regulations.

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| | | KC / CONFIG | AND HX SURATIONS | |
|--------|---------|----------------|---------------------|--|
| Length | mm (in) | 4500 | (177) | |
| Width | mm (in) | 1900 | (74) | |
| Height | mm (in) | 2100 | (82) | |
| Weight | kg (lb) | 8200 | (18078) | |

Dimensions may vary based on selected engine configuration.



Ship's service power is provided to Eilbek by three KTA38–CP marine generator sets.

Courtesy of Hansa Hamburg Shipping International

K50-CP C POWER MARINE GENSET



GENERAL SPECIFICATIONS

| Engine Model | KTA50–D(M1) |
|--------------|-----------------|
| Alternator | STAMFORD PM734E |

PRIME POWER RATINGS

| | | | | FUEL CONSUMPTION | | EN | lissioi | ١S |
|--------|--------|--------|-------------------|------------------------|--------------------------|-----|---------|----|
| kWe | kVa | Hz | Voltage | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| KC- an | d HX–o | cooled | d ratings | | | | | |
| 1004 | 1255 | 50 | 380 | 224.5 (64.6) | 141.9 (37.5) | 2 | _ | - |
| 1050 | 1255 | 50 | 400 415 440 | 224.5 (64.6) | 141.9 (37.5) | 2 | _ | - |
| 1184 | 1480 | 60 | 416 | 290.7 (76.8) | 169.6 (44.8) | 2 | - | - |
| 1230 | 1538 | 60 | 440 460 480 | 290.7 (76.8) | 290.7 (76.8) | 2 | _ | - |

Ratings below 130 kW are not subject to IMO emission regulations.

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| | | KC A CONFIG | ND HX URATIONS | |
|--------|---------|----------------|-------------------|--|
| Length | mm (in) | 5150 | (203) | |
| Width | mm (in) | 1900 | (75) | |
| Height | mm (in) | 2100 | (83) | |
| Weight | kg (lb) | 9700 | (21384) | |

ENDLESS POWER OPTIONS

Through the Cummins marine distribution channel, Cummins offers a range of marine auxiliary engines from 6 to 95 liters, packaged with the customer's choice of engine monitoring and control system and alternator, including our own STAMFORD® and AvK® brands. A list of auxiliary ratings suitable for diesel electric applications is available on pages 84–85; a list of compatible alternators is available on pages 114–115.

Our marine experts work closely with our partner suppliers and customers, starting from the vessel concept and continuing through installation, testing and commissioning, to guarantee a product perfectly matched to vessel design, operating conditions and local content requirements.



Courtesy of (from top to bottom): Jeff L. Yates; New Generation Marine Services; Cummins Northwest; Eastern Shipbuilding

We have designed countless packages for customers across the globe. Some of these projects include:

- » QSB7 generator sets provide auxiliary power for Blessey Marine's latest K38 powered pushboat, the Erin C. Grenon
- » QSM11 generator sets meet the auxiliary power requirements of New Generation Marine Service's supply vessel, Mr. Ernie
- » QSK38 diesel electric generator sets for the U.S. Navy's latest research vessels, including the R/V Neil Armstrong
- » KTA50 diesel electric generator sets for a series of Vard Group-designed PSVs built at Cochin Shipyard in India
- » QSK60 emergency generator sets for Deepsea Metro II, a drill ship build by Hyundai Heavy Industries
- » QSK60 diesel electric generator sets for Bravante Group's series of five platform supply vessels

MARINE ALTERNATORS

Cummins Generator Technologies manufactures the world's broadest range of alternators from 4 to 11,200 kVA under the STAMFORD[®] and AvK[®] product brands. Internationally renowned for built-in quality, our alternators set the standard for ruggedness, reliability and versatility.

Cummins Generator Technologies uses the experience and knowledge gathered from a large and diverse number of applications worldwide to expertly provide integrated design solutions that help our customers compete more successfully throughout the world.

STAMFORD and AvK alternators are used exclusively on Cummins C Power marine generator sets and can also be matched with any Cummins auxiliary engine for a custom configuration. For more information, contact your regional Cummins Generator Technologies office by visiting *stamford-avk.com*.









STAMFORD

- » 2-6 pole / 1,000-3,600 rpm
- » Power range: 5-4,150 kVA
- » Voltage range: 220–13,800V at 50 & 60 Hz

AvK

- » 4-10 pole / 600-1,800 rpm
- » Power range: 650–11,250 kVA
- » Voltage range: 380–13,800V at 50 & 60 Hz

STAMFORD and AvK alternators are in operation worldwide across a diverse range of application environments:

- » Diesel electric propulsion systems for a variety of vessel and rig types
- » PTO shaft generators for economical electrical power generation
- » PTO/PTI shaft generator operating as auxiliary propulsion drive system
- » Self-starting Power Take Home (PTH) shaft generators for redundant propulsion
- » Auxiliary and onboard power supply
- » Compliant to fixed Water Based Local Application Fire Fighting Systems (FWBLAFFS)

STAMFORD

Compact in design, STAMFORD[®] alternators are easy to install and maintain for marine applications. A range of single and three phase voltages are available from either 6 or 12 wire reconnectable winding.

2/3 pitch main stator and damper windings make STAMFORD alternators suitable for parallel operation when equipped with suitable voltage regulator, quadrature droop kit and PFC.

Most generator models are fit with a Permanent Magnet Generator (PMG) to power the excitation system. The PM0/1 range is fit with an Excitation Boost System (EBS) to provide short circuit maintenance and improved motor starting.

PROTECTION AND INSULATION

All marine alternators for LV and MV [P80] conform to Class H thermal insulation requirements. Open drip-proof enclosure protection according to IP23 is standard. Optional air inlet/outlet filters as well as higher IP protection modes can be supplied for certain models upon request.

AUTOMATIC VOLTAGE REGULATORS

AVRs are designed and built to achieve maximum performance from STAMFORD alternators. All AVRs are encapsulated to provide protection against moisture and salt in the atmosphere.

OPTIONS

A range of accessory options are available to meet application requirements, including, but not limited to:

- » Winding and bearing RTDs
- » Anti-condensation heater
- » Quadrature droop kit
- » PFC





AvK[®] marine alternators are made of a rigid and robust steel construction with form wound stator coils and flat copper rotor windings that can withstand high levels of vibration and load variation.

PROTECTION AND COOLING

Standard AvK design is open drip-proof in accordance with IP23 SOLAS requirements. Air inlet/outlet filters and higher protection up to IP55 can be supplied. A wide range of cooling systems allows an optimum choice for operating and environmental conditions. Options include top-mounted air-to-air (IC611 + IC616) or air-to-water (IC81W) heat exchangers.

BEARINGS

AvK alternators are equipped with either anti-friction or sleeve bearings subject to load, speed and application. Sleeve bearings are split type, to permit easy access for maintenance. Subject to frame size, speed and inclination they may be self-lubricated or force lubricated.

EXCITATION SYSTEM

Our alternators are equipped with brushless excitation; the auxiliary winding supplies the automatic voltage regulator (AVR) with sufficient power to ensure short-circuit levels of > 3x rated current. Subject to frame size and bearing arrangement, PMG is also available.

AUTOMATIC VOLTAGE REGULATOR

A range of digital Automatic Voltage Regulators (AVR) are available to meet varying application requirements. Typical AVR features include:

- » Voltage regulation in island mode (+/-0.5 percent)
- » Reactive load sharing by static droop or cross-current compensation
- » U/f characteristic for applications with floating frequency
- » Under/over-excitation voltage protection
- » Excitation fault monitoring
- » Fast PID response for high-class regulation characteristic.

INSULATION

All windings are bar-wound type and conform to either Class F or Class H thermal insulation. Increased machine life and reliability is ensured through AvK's advanced insulation system: Resin Rich and Vacuum Pressure Impregnation (VPI) ensures excellent dielectric properties, enhanced dimensional and mechanical stability as well as superior resistance against chemicals and/or moisture.

ALTERNATOR PROTECTION

All AvK alternators are fully assembled with bearing and stator winding temperature detectors (RTDs), which can be used for protection against thermal overload.

ALTERNATOR MATCHING GUIDE 50 Hz FIXED SPEED RATINGS

| kW | ВНР | Engine Model | Page | | | | |
|-------------------|---------------------------|--------------|------|--|--|--|--|
| 50 Hz Fixed Speed | 50 Hz Fixed Speed Ratings | | | | | | |
| 91 | 122 | 6BT5.9 | 64 | | | | |
| 122 | 164 | 6CT8.3 | 66 | | | | |
| 163 | 219 | 6CTA8.3 | 67 | | | | |
| 164 | 220 | QSB7 | 65 | | | | |
| 265 | 355 | QSM11 | 68 | | | | |
| 358 | 480 | KTA19 | 71 | | | | |
| 410 | 550 | KTA19 | 71 | | | | |
| 433 | 580 | QSK19 | 73 | | | | |
| 746 | 1000 | KTA38 | 75 | | | | |
| 984 | 1320 | QSK38 | 76 | | | | |
| 1096 | 1470 | KTA50 | 77 | | | | |
| 1290 | 1730 | QSK50 | 78 | | | | |
| 1563 | 2095 | QSK60 | 79 | | | | |
| 2625 | 3520 | QSK95 | 80 | | | | |
| | | | | | | | |

Alternator matches for 60 Hz auxiliary engines can be found on the next page.

STAMFORD and AvK alternators can be matched with any Cummins marine auxiliary engine for a custom configuration. All ratings are 415V and heat exchanger cooled. Other ratings are available upon request. This list matches each auxiliary engine to the appropriately sized Cummins alternator, using standard sizing calculations. For more information, contact your regional Cummins Generator Technologies office by visiting **stamford-avk.com**.

| ALTERNATOR OPTION | | 415 | 5 V |
|-----------------------|------------|------|------------|
| STAMFORD | AvK | kWe | kVa |
| | | | |
| UCM274E | _ | 84 | 105 |
| UCM274F | - | 112 | 140 |
| UCDM274K / S4LIM-C | _ | 150 | 187 |
| UCDM274K / S4LIM-C | - | 151 | 189 |
| S4L1M-F | - | 244 | 305 |
| HCM534D | - | 340 | 425 |
| HCM534E | - | 390 | 487 |
| HCM534E | DSG62 M1/4 | 411 | 514 |
| HCM634K | DSG62 L1/4 | 709 | 886 |
| PM734C* | DSG74 M1/4 | 935 | 1169 |
| PM734D* | DSG74 M1/4 | 1042 | 1303 |
| PM734F* | DSG74 M2/4 | 1226 | 1533 |
| PM734G* | DSG74 L2/4 | 1436 | 1795 |
| LVSM804X | DSG99 K1/4 | 2500 | 3125 |

*Class F Temp. Rise



ALTERNATOR MATCHING GUIDE 60 Hz FIXED SPEED RATINGS

| kW | BHP | Engine Model | Page |
|------------------|------------|--------------|------|
| 60 Hz Fixed Spee | ed Ratings | | |
| 112 | 150 | 6BT5.9 | 64 |
| 140 | 188 | 6CT8.3 | 66 |
| 201 | 270 | 6CTA8.3 | 67 |
| 210 | 282 | QSB7 | 65 |
| 317 | 425 | QSM11 | 68 |
| 425 | 570 | KTA19 | 71 |
| 485 | 650 | KTA19 | 71 |
| 563 | 755 | QSK19 | 73 |
| 970 | 1300 | KTA38 | 75 |
| 1044 | 1400 | QSK38 | 76 |
| 1290 | 1730 | KTA50 | 77 |
| 1342 | 1800 | QSK50 | 78 |
| 1899 | 2547 | QSK60 | 79 |
| 3150 | 4224 | QSK95 | 80 |
| | | | |

Alternator matches for 50 Hz auxiliary engines can be found on the previous page.

STAMFORD and AvK alternators can be matched with any Cummins marine auxiliary engine for a custom configuration. All ratings are 415V and heat exchanger cooled. Other ratings are available upon request. This list matches each auxiliary engine to the appropriately sized Cummins alternator, using standard sizing calculations. For more information, contact your regional Cummins Generator Technologies office by visiting **stamford-avk.com**.

| ALTERNATOR OPTION | | 41 | 5 V |
|-------------------|------------|------|------------|
| STAMFORD | AvK | kWe | kVa |
| | | | |
| UCM274E | - | 103 | 129 |
| UCM274F | - | 129 | 161 |
| S4L1M-C | - | 185 | 231 |
| S4L1M-C | - | 193 | 242 |
| S4L1M-E | - | 292 | 365 |
| HCM534C | - | 404 | 505 |
| HCM534E | - | 461 | 576 |
| HCM534F | DSG62 M1/4 | 535 | 669 |
| HCM634K | DSG62 L2/4 | 922 | 1152 |
| PM734B* | DSG62 L2/4 | 992 | 1240 |
| PM734C* | DSG74 M2/4 | 1226 | 1533 |
| PM734D* | DSG74 M2/4 | 1276 | 1595 |
| PM734G* | DSG74 L2/4 | 1796 | 2245 |
| LVSM804X | DSG99 K1/4 | 3000 | 3750 |
| | | | |

*Class F Temp. Rise



PREMIUM OPTIONS



C Command





ELIMINATOR





Cummins Inboard Joystick

Cummins offers a variety of premium options to help vessel owners and operators manage their cost of operation, reduce maintenance and tailor the engine for a specific application.

- » C Command includes a selection of monitoring and display options that provide instantaneous access to operating information
- » CENTINEL eliminates or extends oil change intervals by burning used oil and replacing it with clean oil
- » ELIMINATOR is a self-cleaning centrifuge that replaces all disposable canisters on the engine
- » Pre-Lube reduces engine wear by providing lubrication prior to start
- » Quick Evac reduces oil change time by quickly removing used oil from the engine oil pan
- » Cummins Inboard Joystick is a docking system designed specifically for use with traditional inboard engines and transmissions



Available as an aftermarket kit for K Series engines or installed as a factory option on Quantum Series MCRS engines, CENTINEL eliminates or extends oil change intervals by burning used oil and replacing it with clean oil.

The CENTINEL Advanced Engine Oil Management System automates oil changes. While the equipment is running, CENTINEL monitors the engine's duty cycle. At precise intervals, it bleeds off a small amount of used oil and sends it to the fuel tank, where it blends with diesel fuel and is burned during combustion.

CENTINEL allows equipment to work up to 4,000 hours between service events. Depending on the duty cycle, that could eliminate 15–20 oil changes from current maintenance schedules.

- » Reduces downtime and the cost of oil change service
- » Reduces the risk of engine damage due to poor oil change maintenance practice



ELIMINATOR

Available on the KTA38, KTA50, and all QSK MCRS engines, ELIMINATOR



is a combination full-flow and centrifugal system that incorporates a permanent stainless steel core that eliminates the need for disposable oil filters.

ELIMINATOR consists of a two-stage filter media system. The first filter screens for particles as small as 20 microns, while a centrifugal separator constantly spins, depositing the heaviest particles on a replaceable liner.

Because ELIMINATOR uses the oil pressure in the lubricating system to spin the centrifugal separator, there is no additional load on the engine, with no drain on power or fuel economy. This option lowers the cost of operation by:

- » Eliminating the recurring cost and maintenance of spin-on filters
- » Reducing downtime for filter changes
- » Eliminating disposal cost of used filter elements
- » Improving filtration and reducing component wear which can extend overhaul periods
- » Extending oil change intervals when used concurrently with oil sampling and CENTINEL

ELIMINATOR satisfies most Marine Classification Society requirements for duplex filters.



Courtesy of Gladding-Hearn Shipbuilding

Lake Charles' pilot boat Calcasieu Pass Pilot is powered by two QSK38–M engines fit with the ELIMINATOR.

PRE-LUBE WITH QUICK EVAC

Available on QSK38 and QSK50 engines, Pre-Lube with Quick Evac is an engine-mounted pump with off-engine mounted controls. Pre-Lube reduces engine wear by providing lubrication prior to engine start, while Quick Evac reduces oil change time by quickly removing oil from the engine oil pan. This option is available in 24 volt DC only.

- » Empties the oil sump in 60 seconds, allowing operators to consistently complete regular oil changes in 30 minutes or less
- » Enables clean, fast and safe oil changes by pumping used oil directly into a containment barrel to prevent technician contact with lube oil



C COMMAND BASIC

C COMMAND FOR QSK19/38/50/60 MCRS ENGINES

The cost-effective basic system offers the flexibility to function with or without an engine room panel and features a variety of display options to ensure engine data is easily accessible.

All connections are centralized in a customer interface box (CIB), which helps simplify vessel installation. The CIB contains all ECM connections, start/stop logic, emergency stop button and OEM connections.



ENGINE ROOM PANEL (ERP) FEATURES

- » ED-3 reads all engine data from the ECM and displays information in text and graphics. Includes fault code logging with text description
- » Soft buttons control start/stop as well as alarm indication and acknowledgement
- » Enclosed in an IP44 rated box designed for operation in harsh engine room environments



C COMMAND ELITE

C COMMAND FOR QSK19/38/50/60 MCRS ENGINES

C Command Elite offers additional functionality and monitoring over the C Command system with the added benefit of easy-to-read, customer configured, color displays.

CUSTOMER INTERFACE BOX (CIB) FEATURES

- » Includes integral control panel
- » Full color text and graphics in menu format
- » Multiple languages and configurations may be saved to accommodate multinational crews
- » Stores a comprehensive history of alarms and faults for more efficient troubleshooting and service scheduling, easily downloaded via Ethernet connection
- » Capable of supporting customer-supplied temperature, pressure and switch inputs



C COMMAND ELITE PLUS

C COMMAND FOR QSK19/38/50/60/95 MCRS ENGINES

C Command Elite Plus utilizes the same displays for both main station and remote monitoring as the Elite system, but also includes Classification Society mandated sensors, alarms and shutdowns. The result is a globally supported, fully classed engine and electronic and safety system that protects against the substantial risk of non-compliance. The Elite Plus system is fully approved by ABS, BV, DNV–GL and LR.

C Command Elite Plus is now available for the QSK95. In addition to the above functionality, the CIB is larger to accommodate higher power capability and meets additional class requirements for this engine size. There is additional I/O available for vessel integration and customization.





C COMMAND HD

C COMMAND FOR MID-RANGE & HEAVY DUTY ENGINES

Based on C Command architecture, C Command HD and HD Elite Plus are now available for QSB7 auxiliary and QSM11 propulsion and auxiliary engines. Both systems offer simplified installation and include local and remote control options.



C Command HD, the cost-effective basic system, comes standard with digital displays and includes an engine room panel. Customers also have the choice of up to two remote control panels and two electronic digital displays.

C Command HD Elite Plus, the type-approved system, includes Classification Society mandated sensors, alarms and shutdowns. Easily integrated to vessel networks, this system comes standard with full color displays and optional remote control panels.



The world's first hybrid tug, Foss Maritime's Carolyn Dorothy, is powered by two QSK50–Ms complemented by C Command Elite Plus panels.

Courtesy of Foss Maritime

C COMMAND PT

C COMMAND FOR K SERIES ENGINES

Operators can now have all the benefits of modern engine monitoring on



mechanical products with Cummins C Command PT panels. Based on C Command architecture, this modular panel system includes a selection of display options designed to enhance K Series engine performance and manage costs.

C Command PT Elite Plus includes Classification Society mandated sensors, alarms and shutdowns. The result is a globally supported, fully classed engine and safety & alarm system that protects against the substantial risk of noncompliance. Certification is available from ABS, BV, DNV, GL and LR.



Available exclusively with C Command PT Elite Plus, Cummins Fuel Consumption Monitor enables accurate, reliable monitoring within +/-3 percent while providing trip, total and instantaneous measurements on digital remote datalink.

C COMMAND CONNECT

C COMMAND FOR MID-RANGE AND HEAVY DUTY PROPULSION ENGINES

Designed for Cummins Quantum Series QSB6.7, QSC8.3, QSL9 and QSM11 marine engines, C Command Connect leverages existing engine capabilities and throttle-shift systems, including third-party systems, making it easy to upfit existing boat designs.



C Command Connect: The cost-effective basic system, includes all harnessing, user interfaces, an optional ED-4 display panel with a 3.5-inch color display, and N2K gateway capability for remote monitoring. The basic system also includes manual start/stop at the helm.



C Command Connect Premiere: The premium system, provides additional functionality and monitoring over the basic system. It includes a CIB with integrated ED-4 display panel, N2K output and alarm indication to the helm. Vessel sensor capability allows operators to monitor fuel level, gear oil pressure and temperature and rudder angle.

C COMMAND REMOTE OPTIONS



CONTROL PANEL (CP)

The control panel (CP) is a soft button remote interface for engine control featuring start/stop and alarm acknowledgement. It also includes red alarm indication with buzzer and local and remote control indication. It is compatible with:

- » C Command (Basic, Elite and Elite Plus)
- » C Command HD (Basic and Elite Plus)
- » C Command PT Elite Plus

ELECTRONIC DIGITAL DISPLAY* (ED-3)



The ED-3 reads all engine data from the ECM and displays information in text and graphics. It includes full text alarm indication, data trending, internal buzzer and external alarm contact, as well as fault code logging with text description and service tool connection port. The ED-3 is compatible with:

- » C Command (Basic, Elite and Elite Plus*)
- » C Command HD (Basic and Elite Plus)
- » C Command PT Elite Plus
- » K Series engines with CENTRY
- » Electronic Digital Display (ED-4)



GAUGE INSTRUMENT PANEL* (GP)

The gauge instrument panel provides fault code readout through a mini-digital display in the tachometer. This option displays coolant temperature, engine oil pressure, system voltage, exhaust stack temperature and gear oil pressure (if applicable). The GP is compatible with C Command Basic, Elite and Elite Plus*



REMOTE CONTROL PANEL (RP)

This remote digital interface to engine control is an 8.4" configurable touch screen featuring superior visibility even in direct sunlight. The RP can simultaneously monitor and control up to eight engines, can support as many as three remote panels and may be complemented by an ED-3 in areas where only basic monitoring is required. The RP is compatible with:

- » C Command Elite and Elite Plus
- » C Command HD Elite Plus
- » C Command PT Elite Plus

* Not available on the QSK95

C COMMAND UPGRADES

- » Switch panel engages electronic features, including alternate idle, engine protection override and intermediate speed control
- » Back-up throttle provides operators with added security in the event of a main throttle failure
- » Gear oil pressure and temperature protects marine gear from damage caused by low oil pressure and high oil temperature
- » Individual cylinder exhaust gas temperature (EGT) is available on the QSK38, QSK50, QSK60 and QSK95 MCRS engines to detect in -cylinder temperature deviation
- » Pre-lube on the QSK38, QSK50, QSK60 and QSK95 helps reduce friction at start-up and engine wear by providing lubrication prior to engine start



Switch panel



Back-up throttle

INBOARD JOYSTICK

The Cummins Inboard Joystick is a joystick-controlled docking system that integrates engines, transmissions and thrusters. It is best suited for twin-engine fiberglass boats from 35–60 foot used for recreational boating. Most systems will include only a bow thruster, but a bow and stern thruster system is available. Cummins provides application guidelines and tools to help with the integration process and to ensure optimal performance of the finished system.



INBOARD JOYSTICK FEATURES

- » Cummins applications expertise ensures each vessel need is met with four thruster size options – 95kg, 160kg and 220kg
- » Compatible with all Cummins engines recreational ratings
- » Multiple station capability three lever stations and up to five joystick stations

INBOARD JOYSTICK ADVANTAGES

- » Inboard simplicity
- » Minimum components
- » Confidence at the helm
- » Engines, controls, harnessing, thrusters and Cummins supplied thruster tubes supported and warranted by Cummins



WARRANTY

Every Cummins marine engine is backed by a comprehensive warranty that is valid and consistent worldwide. Major components, including the block, camshaft, crankshaft and connecting rods, are covered for an extended period under the base engine warranty.

PROTECT YOUR INVESTMENT WITH ENCOMPASS

With Encompass, you can extend your coverage period up to six years from engine in-service date depending on your specific engine and rating. This coverage can include parts, labor and travel. You can customize the amount of coverage required for your vessel's application. Onan Marine generator sets are also available with an extended coverage plan.

Coverage limitations and responsibilities are accessible at anytime on our website, *cummins.com*. For more details, please contact your local Cummins professional.

| Rating | Engine (19-60 liter) | Base Warranty |
|-----------------|----------------------|----------------------|
| High Output | QSB, QSC, QSL, QSM | 2 yr / 1000 hrs |
| Light Duty | QSB, QSC, QSL, QSM | 2 yr / 1000 hrs |
| | QSK95 | 1 yr / Unlimited hrs |
| Intermittent- | QSB, QSC, QSL, QSM | 2 yr / 3000 hrs |
| Duty | 19-60 liter engines | 1 yr / 3000 hrs |
| | QSK95 | 1 yr / Unlimited hrs |
| Medium | QSB, QSC, QSL | 2 yr / 5000 hrs |
| Continuous-Duty | QSM | 2 yr / 6000 hrs |
| | 19-60 liter engines | 1 yr / 4000 hrs |
| | QSK95 | 1 yr / Unlimited hrs |
| Heavy-Duty | QSB, QSC, QSL | 2 yr / 6000 hrs |
| | QSM | 2 yr / 8000 hrs |
| | 19-60 liter engines | 1 yr / 6000 hrs |
| | QSK95 | 1 yr / Unlimited hrs |
| Continuous-Duty | QSB, QSC, QSL | 2 yr / Unlimited hrs |
| | QSM | 2 yr / Unlimited hrs |
| | 19-60 liter engines | 1 yr / Unlimited hrs |
| | QSK95 | 1 yr / Unlimited hrs |

GENUINE CUMMINS PARTS

Cummins understands how much every hour of downtime can cost you. That's why we always recommend Genuine Cummins new and ReCon[®] parts, built for your engine's original specifications for reliability, and durability. You aren't just replacing a worn part – you're improving the performance of your engine and your vessel.

GENUINE CUMMINS PARTS

- » Designed to work with your specific engine
- » Promote longer engine life
- Include the latest upgrades in materials, component design and workmanship
- » Backed by the best warranty in the business

BETTER PARTS. BETTER AVAILABILITY.

Of course, it doesn't matter how good Genuine Cummins quality is if a part isn't close at hand when you need it. That's why Cummins marine distributors maintain a full inventory of parts for all marine engines registered in their territory, including yours. Cummins also operates parts distribution centers in strategic locations around the globe, helping to ensure that your parts arrive as quickly as possible. In critical need situations, we work hard to get the parts you need delivered to you within 24 hours.

When your vessel is offshore in a remote location and the clock is ticking, you don't want to take chances on anything less than the unmatched quality of Genuine Cummins parts.

A BETTER WARRANTY THAT TRAVELS WELL.

Genuine Cummins quality is the reason these parts come with a full factory warranty. Cummins new and ReCon parts warranty is comprehensive, ensuring peace of mind and financial protection. Every part is backed 100 percent for parts, labor, progressive damage and consumables, with no deductible.

Having a great warranty doesn't matter when you've got a problem 500 miles from an authorized repair shop. That's the advantage of buying a Genuine Cummins engine or part. We have a network of over 6,500 authorized parts and service locations worldwide where your warranty will be honored and the work will be completed by professional technicians who are trained and certified by Cummins. For additional warranty information or to find an authorized service location near you, visit *quickserve.cummins.com*.

CUMMINS RECON® PRODUCTS:

Genuine Cummins ReCon engines and parts provide you with a cost-effective, environmentally friendly, no-surprise solution that quickly puts your Cummins powered equipment back to work. Cummins ReCon products are not simply repaired or rebuilt; they are remanufactured in authorized factories around the world.

Cummins offers factory remanufactured parts for all engine models. In addition Cummins remanufactures Short Blocks, Long Blocks and Heavy-Duty L10, M, N and ISX/QSX engine platforms, as well as, MidRange B, C and ISL/QSL engine platforms.

The following describes the measures Cummins takes to remanufacture its engines and parts, creating a product that is comparable to a new Cummins product.

- » Core Acceptance: A great benefit of Cummins remanufacturing is that you can get money back for exchanging your worn out engine or part. Any Cummins authorized repair facility worldwide can perform the simple visual inspection on your old part and give you immediate credit toward its replacement.
- » Disassembly: Engines and parts are completely disassembled with great care to protect and prepare key components for processing right down to the last screw, nut, bolt and spring.
- » Cleaning: Each part is carefully cleaned using the latest technology to remove debris without removing any metal, including the use of dry ice, enzymes and lasers for specialized cleaning needs.
- » Inspection: The latest technology, including ultrasonic inspection, is just one of the many methods used to verify that every ReCon part meets original factory specifications.
- Restoration: Cummins uses a variety of techniques to ensure that parts meet original specifications or improved standards of performance. If a part doesn't meet specifications, it is scrapped and replaced with a new Genuine Cummins part. Any upgrades or supercessions that have taken place in the years since the original part was made will be included as part of the Cummins remanufacturing process.
- » Testing: Validation testing using fail-safe processes verifies that the performance and reliability of the finished product meet Cummins standards.
- » Reintroduction: Once the remanufacturing process is complete Cummins engines and parts are ready to be reintroduced into the field.

Genuine Cummins New and ReCon Parts are built to meet or exceed your engine's original specifications for performance, reliability and durability. For more information about Cummins ReCon products, please visit *cummins.com* or contact your local Cummins distributor or authorized dealer.

THE SMART CHOICE

POWER RANGE FOR CUMMINS RECON PRODUCTS





4BT RECON MAIN PROPULSION

GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------------------|---------------------|--|--|
| Aspiration | Turbocharged/Aftercooled | | | |
| Displacement | 3.9 L | 239 in ³ | | |
| Bore & Stroke | 102 x 119 mm | 4.02 x 4.72 in | | |
| Fuel System | Rotary | | | |

RECON RATINGS

| | | | FUEL CONSUMPTION | | EN | IISSION | IS |
|--------|--------|------|------------------------|--------------------------|-----|---------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU |
| Interm | ittent | | | | | | |
| 112 | 150 | 2800 | 28.8 (7.6) | N/A | - | _ | - |
| High O | utput | | | | | | |
| 112 | 150 | 2800 | 28.8 (7.6) | N/A | _ | _ | _ |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 707 | (27.8) | |
|--------|---------|-----|--------|--|
| Width | mm (in) | 772 | (30.4) | |
| Height | mm (in) | 793 | (31.2) | |
| Weight | kg (lb) | 360 | (794) | |

6BT RECON MAIN PROPULSION

GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------------------|---------------------|--|--|
| Aspiration | Turbocharged/Aftercooled | | | |
| Displacement | 5.9 L | 359 in ³ | | |
| Bore & Stroke | 102 x 119 mm | 4.02 x 4.72 in | | |
| Fuel System | Rotary | | | |

RECON RATINGS

| | | | FUEL CONSUMPTION | | E | vissio | NS |
|-------------------|-----|------|------------------------|--------------------------|-----|--------|------|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU |
| Medium Continuous | | | | | | | |
| 134 | 180 | 2500 | N/A | N/A | _ | _ | - |
| Intermittent | | | | | | | |
| 157 | 210 | 2600 | 44.9 (11.9) | N/A | 1 | - | - |
| High Output | | | | | | | |
| 157 | 210 | 2600 | 44.9 (11.9) | N/A | 1 | _ | RCD1 |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1074 | (42.3) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 711 | (28) | |
| Height | mm (in) | 812 | (32) | |
| Weight | kg (lb) | 465 | (1025) | |

6BTA RECON MAIN PROPULSION

GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | | |
|---------------|--------------------------------------|---------------------|--|--|--|
| Aspiration | Turbocharged/Aftercooled | | | | |
| Displacement | 5.9 L | 359 in ³ | | | |
| Bore & Stroke | 102 x 119 mm | 4.02 x 4.72 in | | | |
| Fuel System | Inline Injection Pump | | | | |

RECON RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | NS | |
|--------------|-----|------|------------------------|--------------------------|-----------|-----|------|--|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU | |
| Intermittent | | | | | | | | |
| 194 | 260 | 2600 | 56.8 (15.0 | N/A | 1 | - | - | |
| 235 | 315 | 2800 | 63.7 (16.8) | N/A | 1 | _ | - | |
| High Output | | | | | | | | |
| 184 | 247 | 2600 | N/A | N/A | 1 | _ | - | |
| 194 | 260 | 2600 | 56.8 (15.0) | N/A | 1 | _ | RCD1 | |
| 214 | 287 | 2800 | N/A | N/A | 1 | _ | - | |
| 235 | 315 | 2800 | 63.7 (16.8) | N/A | 1 | _ | RCD1 | |
| 265 | 355 | 3000 | 76.1 (20.1) | N/A | 1 | _ | RCD1 | |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1028 | (40.5) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 826 | (32.5) | |
| Height | mm (in) | 837 | (33) | |
| Weight | kg (lb) | 469 | (1035) | |
QSB5.9 RECON MAIN PROPULSION

GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------------------|---------------------|--|--|
| Aspiration | Turbocharged/Aftercooled | | | |
| Displacement | 5.9 L | 359 in ³ | | |
| Bore & Stroke | 102 x 119 mm | 4.02 x 4.72 in | | |
| Fuel System | High Pressure Common Rail (HPCR) | | | |

RECON RATINGS

| | | | FUEL CONSUMPTION | | EN | NISSION | IS |
|---------|-----------|------|------------------------|--------------------------|-----|---------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU |
| Heavy I | Duty | | | | | | |
| 169 | 227 | 2600 | 42.2 (11.1) | 29.6 (7.8) | _ | 2 | - |
| Medium | n Continu | uous | | | | | |
| 224 | 300 | 2600 | 57.3 (15.1) | 38.7 (10.2) | _ | 2 | _ |
| Intermi | ttent | | | | | | |
| 261 | 350 | 2800 | 68.1 (18.0) | 45.8 (12.1) | _ | 2 | - |
| Light D | uty | | | | | | |
| 280 | 375 | 3000 | 76.2 (20.1) | 49.7 (13.1) | _ | 2 | - |
| 313 | 420 | 3000 | 87.6 (23.1) | N/A | - | 2 | - |
| 352 | 472 | 3400 | 97.4 (25.7) | 63.9 (16.9) | _ | 2 | _ |
| High O | utput | | | | | | |
| 169 | 227 | 2600 | 42.2 (11.1) | 29.6 (7.8) | - | 2 | - |
| 224 | 300 | 2600 | 57.3 (15.1) | 38.7 (10.2) | - | 2 | - |
| 242 | 325 | 2800 | 63.3 (16.7) | 42.7 (11.3) | - | 2 | _ |
| 261 | 350 | 2800 | 68.1 (18.0) | 45.8 (12.1) | - | 2 | - |
| 280 | 375 | 3000 | 76.2 (20.1) | 49.7 (13.1) | _ | 2 | _ |
| 325 | 436 | 3400 | 90.6 (23.9) | N/A | - | 2 | - |
| 352 | 472 | 3400 | 97.4 (25.7) | 63.9 (16.9) | - | 2 | - |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

See next page for product dimensions.

QSB5.9 RECON MAIN PROPULSION

PRODUCT DIMENSIONS

| Length | mm (in) | 1036 | (40.8) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 836 | (32.9) | |
| Height | mm (in) | 831 | (32.7) | |
| Weight | kg (lb) | 658 | (1450) | |

QSB6.7 RECON MAIN PROPULSION



GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | |
|---------------|--------------------------------------|---------------------|--|
| Aspiration | Turbocharged/Aftercooled | | |
| Displacement | 6.7 L | 408 in ³ | |
| Bore & Stroke | 107 x 124 mm | 4.21 x 4.88 in | |
| Fuel System | High Pressure Common Rail (HPCR) | | |

RECON RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | |
|--------------|-----|------|------------------------|--------------------------|-----------|-----|----|
| kW | BHP | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU |
| Intermittent | | | | | | | |
| 313 | 419 | 3000 | 82.2 (21.7) | 55.0 (14.5) | 2 | 3 | За |
| High Output | | | | | | | |
| 313 | 419 | 3000 | 81.1 (21.4) | 55.0 (14.5) | 2 | 3 | За |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1074 | (42) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 898 | (35) | |
| Height | mm (in) | 857 | (34) | |
| Weight | kg (lb) | 634 | (1398) | |

6CTA RECON MAIN PROPULSION



GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder | In-line, 6 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------|--------------------------------------|--|--|--|
| Aspiration | Turbocharged/Aftercooled | | | | |
| Displacement | 8.3 L | 504.5 in ³ | | | |
| Bore & Stroke | 114 x 135 mm | 4.49 x 5.32 in | | | |
| Fuel System | Inline Injection Pump | | | | |

RECON RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | NS |
|--------------|----------|------|------------------------|--------------------------|-----------|-----|------|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Mediur | n Contin | uous | | | | | |
| 221 | 300 | 2500 | N/A | N/A | _ | _ | - |
| Intermittent | | | | | | | |
| 316 | 430 | 2600 | 89.0)23.4) | 59.2 (15.6) | 1 | _ | - |
| High Output | | | | | | | |
| 316 | 430 | 2600 | 89.0 (23.4) | 59.2 (15.6) | 1 | _ | RCD1 |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1177 | (41) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 849 | (33.4) | |
| Height | mm (in) | 954 | (37.5) | |
| Weight | kg (lb) | 712 | (1570) | |

QSC8.3 RECON MAIN PROPULSION



GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------------------|---------------------|--|--|
| Aspiration | Turbocharged/Aftercooled | | | |
| Displacement | 8.3 L | 505 in ³ | | |
| Bore & Stroke | 114 x 135 mm | 4.49 x 5.31 in | | |
| Fuel System | High Pressure Common Rail (HPCR) | | | |

RECON RATINGS

| | | | FUEL CONSUMPTION | | EN | lission | IS |
|-------------|--------|------|------------------------|--------------------------|-----|---------|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU |
| Intermi | ittent | | | | | | |
| 368 | 493 | 2600 | 96.1 (25.4) | N/A | - | 2 | - |
| Light Duty | | | | | | | |
| 442 | 593 | 3000 | 123.1 (32.5) | N/A) | - | 2 | - |
| High Output | | | | | | | |
| 1368 | 493 | 2600 | 96.1 (25.4) | N/A | - | 2 | - |
| 405 | 543 | 3000 | 112.7 (29.8) | N/A | - | 2 | - |
| 442 | 593 | 3000 | 123.1 (32.5) | N/A) | - | 2 | - |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1036 | (40.8) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 836 | (32.9) | |
| Height | mm (in) | 831 | (32.7) | |
| Weight | kg (lb) | 658 | (1450) | |

QSM11 RECON MAIN PROPULSION

GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------------------|---------------------|--|--|
| Aspiration | Turbocharged/Aftercooled | | | |
| Displacement | 10.8 L | 661 in ³ | | |
| Bore & Stroke | 125 x 147 mm | 4.92 x 5.79 in | | |
| Fuel System | Celect | | | |

RECON RATINGS

| | | | FUEL CONSUMPTION | | EN | IISSION | IS |
|---------|----------|------|------------------------|--------------------------|-----|---------|----|
| kW | BHP | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU |
| Continu | lous | | | | | | |
| 220 | 295 | 1800 | 55.2 (14.6) | 39.4 (10.4) | _ | 2 | _ |
| 261 | 350 | 1800 | 65.3 (17.2) | 45.8 (12.1) | _ | 2 | - |
| Heavy I | Duty | | | | | | |
| 298 | 400 | 2100 | 75.2 (19.9) | 52.5 (13.9) | - | 2 | - |
| Medium | n Contin | uous | | | | | |
| 336 | 450 | 2100 | 87.6 (23.1) | 59.3 (15.7) | _ | 2 | - |
| Intermi | ttent | | | | | | |
| 449 | 602 | 2300 | 117 (30.8) | 75.8 (20) | _ | 2 | - |
| High O | utput | | | | | | |
| 220 | 295 | 1800 | 55.2 (14.6) | 39.4 (10.4) | - | 2 | - |
| 261 | 350 | 1800 | 65.3 (17.2) | 45.8 (12.1) | - | 2 | - |
| 298 | 400 | 2100 | 75.4 (19.9) | 52.5 (13.9) | _ | 2 | _ |
| 336 | 450 | 2100 | 87.6 (23.1) | 59.3 (15.7) | _ | 2 | - |
| 449 | 602 | 2300 | 117 (30.8) | 75.8 (20) | _ | 2 | _ |
| 474 | 636 | 2300 | 128 (33.8) | N/A | _ | 2 | - |
| 493 | 661 | 2300 | 128 (33.8) | 83.8 (22.1) | _ | 2 | - |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1329 | (82.3) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 1104 | (43.5) | |
| Height | mm (in) | 1012 | (39.9) | |
| Weight | kg (lb) | 1188 | (2620) | |

KTA19 RECON MAIN PROPULSION

GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | |
|---------------|--------------------------------------|----------------------|--|
| Aspiration | Turbocharged/Aftercooled | | |
| Displacement | 19 L | 1150 in ³ | |
| Bore & Stroke | 159 x 159 mm | 6.25 x 6.25 in | |
| Fuel System | Pressure Time (PT) | | |

RECON RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | IS |
|--------|---------|-------|------------------------|--------------------------|-----------|-----|----|
| kW | BHP | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | ІМО | EPA | EU |
| Contin | uous | | | | | | |
| 317 | 425 | 1800 | N/A | N/A | _ | _ | - |
| 373 | 500 | 1800 | N/A | N/A | - | - | - |
| 447 | 600 | 1800 | 111.1 (29.4) | N/A | _ | _ | - |
| Heavy | Duty | | | | | | |
| 522 | 700 | 2100 | 143.0 (38.0) | N/A | _ | - | _ |
| 522 | 700 | 2100 | 140.5 (36.1) | N/A | - | - | - |
| Mediu | n Conti | nuous | | | | | |
| 410 | 550 | 2100 | 102.6 (27.1) | N/A | _ | _ | _ |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 1877 | (74) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 1003 | (40) | |
| Height | mm (in) | 1905 | (75) | |
| Weight | kg (lb) | 2073 | (4570) | |

QSK19 RECON MAIN PROPULSION



GENERAL SPECIFICATIONS

| Configuration | In-line, 6 cylinder, 4-stroke diesel | | | |
|---------------|--------------------------------------|--------------------------|--|--|
| Aspiration | Turbocharged/Af | Turbocharged/Aftercooled | | |
| Displacement | 19 L | 1150 in ³ | | |
| Bore & Stroke | 159 x 159 mm | 6.25 x 6.25 in | | |
| Fuel System | Modular Common Rail (MCRS) | | | |

RECON RATINGS

| | | | FUEL CONSUMPTION | | EMISSIONS | | |
|---------|-------|------|------------------------|--------------------------|-----------|-----|----|
| kW | внр | RPM | Rated L/hr (Gal/hr) | ISO Avg L/hr (Gal/hr) | імо | EPA | EU |
| Continu | lous | | | | | | |
| 492 | 660 | 1800 | 128.1 (33.8) | N/A | - | _ | _ |
| Intermi | ttent | | | | | | |
| 563 | 755 | 1800 | 148.5 (39.2) | N/A | _ | _ | _ |

For more information on average fuel consumption and emissions, refer to the Reference Materials section.

PRODUCT DIMENSIONS

| Length | mm (in) | 2007 | (79) | |
|--------|---------|------|--------|--|
| Width | mm (in) | 963 | (38) | |
| Height | mm (in) | 1880 | (74) | |
| Weight | kg (lb) | 2189 | (4825) | |

RELIABILITY HAS A NAME.

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ALWAYS ON

REFERENCE MATERIALS

FUEL CONSUMPTION

One of the most commonly asked customer questions is, "How much fuel will that engine use in my boat?" The answer may be derived using any of the following four prediction methods:

- » Advertised fuel consumption at rated power (single point)
- » Average fuel consumption over a standard test cycle
- » Average fuel consumption over a specific duty cycle
- » Surrogate vessel comparison

The Marine Products Guide lists the average fuel consumption at rated power and over standard cycles recommended by the International Standard Organization (ISO 8178 E3 standard test cycle for propulsion applications and D2 for auxiliary applications). It represents the fuel consumption for a typical marine customer, as defined by ISO.

ISO 8178 E3 STANDARD TEST CYCLE*

| Mode | % HP | % RPM | Weight Factor |
|------|------|-------|---------------|
| 1 | 100 | 100 | 0.20 |
| 2 | 75 | 91 | 0.50 |
| 3 | 50 | 80 | 0.15 |
| 4 | 25 | 63 | 0.15 |

* For "propeller-law operated main and propeller-law operated auxiliary engine" applications.

ISO 8178 D2 STANDARD TEST CYCLE

| Mode | % HP | % RPM | Weight Factor |
|------|------|-------|---------------|
| 1 | 100 | 100 | 0.20 |
| 2 | 75 | 91 | 0.50 |
| 3 | 50 | 80 | 0.15 |
| 4 | 25 | 63 | 0.15 |
| 5 | 10 | 100 | 0.10 |

*For "constant-speed auxiliary engine" applications.

Fuel consumption values from engine control modules and displayed on instrument panels are not absolute. Tolerance varies with speed and load, but is generally less than +/–5 percent when operating within 30 percent of rated power.

Please note: fuel consumption calculations are 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) with LTA when available.

If you have any questions, please contact your local Cummins professional.

REFERENCE MATERIALS

MARINE EMISSIONS

| IMO | | | | | | | |
|-------|-------|-------------------------------------|------|------|------|------|------|
| kW | HP | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| > 130 | > 174 | Tier II (Tier III within a NOx ECA) | | | | | |

U.S. EPA

| kW | HP | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|-------|-------|--------|------|------|------|------|------|
| < 600 | < 805 | Tier 3 | | | | | |
| ≥ 600 | ≥ 805 | Tier 4 | | | | | |

E.U.

| kW | НР | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|-------------|--------------|----------|-----------|---|----------|------|---|
| 19–299 | 25-401 | Stg Illa | | Stg V | | | |
| > 299 | > 401 | Stg Illa | | | Stg V | | |
| Recreationa | l Propulsion | RCD 2 | | | | | |
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EPA: The United States Environmental Protection Agency (EPA) regulates exhaust emissions from diesel engines installed on U.S. flagged/registered marine vessels.

EU: The Nonroad Mobile Machinery Directive regulates exhaust emissions from diesel engines installed on inland waterway vessels operating in the European Union. The Recreational Craft Directive regulates noise and exhaust emissions from propulsion engines installed on recreational craft operating in the European Union.

IMO: The International Maritime Organization (IMO) regulates exhaust emissions on diesel engines above 130 kW (174 hp). Engines used exclusively in emergency applications are exempt. IMO Tier III applies only when operating within a NOx Emission Control Area. The Tier III regulation is in effect for North America and U.S. Caribbean Sea NOx ECA's for vessels built after January 1, 2016.

Certain ratings may not be available for sale in all areas due to emissions compliance. Other local certifications may be available.



REFERENCE MATERIALS

PRODUCT CERTIFICATION: CLASSIFICATION SOCIETY

Cummins understands the importance of classification society certification to the commercial marine industry. Therefore, Cummins obtains type approvals from major marine classification societies worldwide including:

- » American Bureau of Shipping (ABS)
- » Bureau Veritas (BV)
- » China Classification Society (CCS)
- » DNV GL
- » Korean Register of Shipping (KR)
- » Lloyds Register (LR)
- » Nippon Kaiji Kyokai (NK)

To achieve this certification, Cummins designs and builds products that comply with the strictest safety standards. In accordance with marine classification society rules, Cummins offers a full line of options such as independent safety and alarm systems, dual-walled fuel lines and duplex filtration to meet vessel certification requirements.

For more information on emission or marine classification society certification, please contact your local Cummins professional.



SUPPORT RESOURCES

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Factory certified marine technicians



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