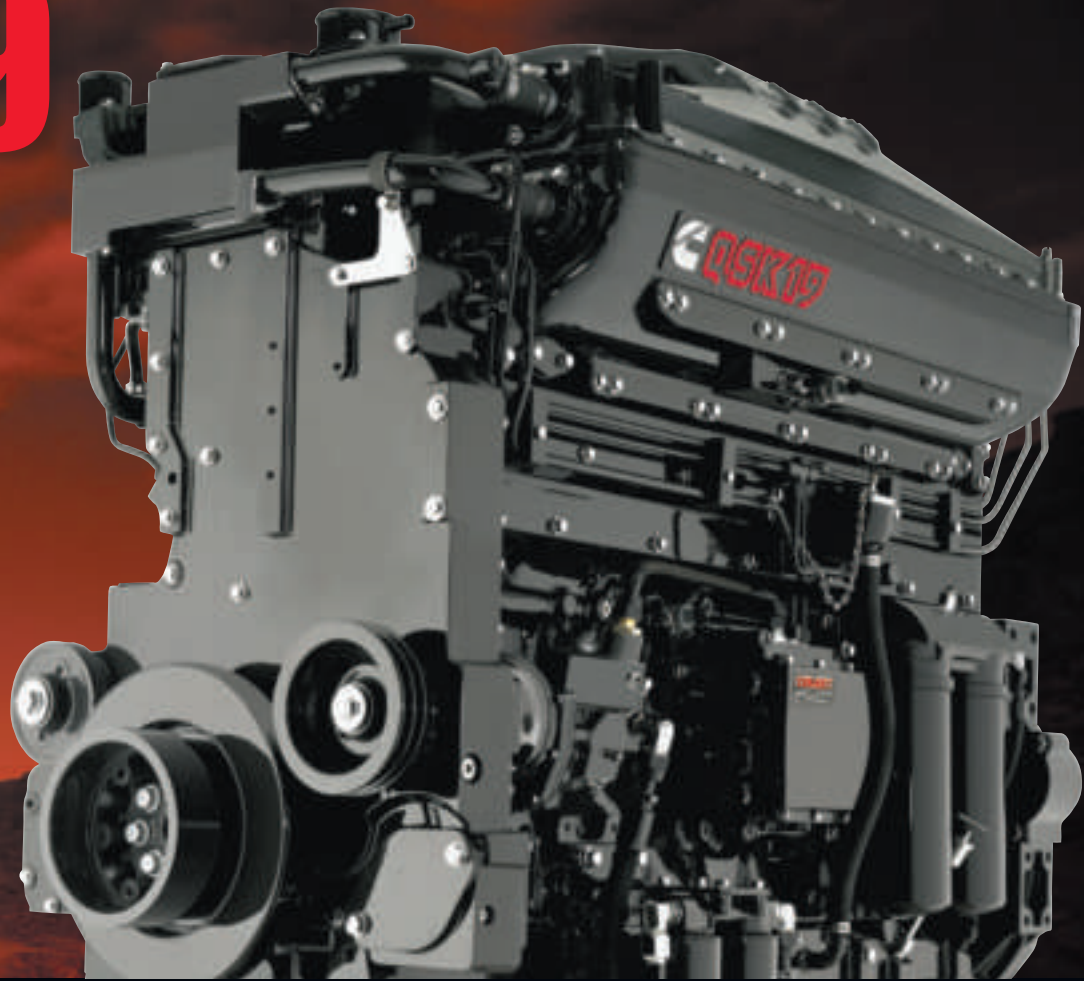




# EVERY™ TON. QSK19



**NON-CERTIFIED ENGINES  
FOR MINING APPLICATIONS**

# FOR MINING APPLICATIONS.

## QSK19

### Performance.

The QSK19 delivers the lowest life cycle cost with the longest life-to-overhaul of any engine in its class. Thousands of K19 and QSK19 engines in mining haul truck, excavator, blast hole drill and wheel loader applications have been delivering superior uptime around the world, above ground and below, for decades. Cummins state-of-the-art electronic controls are combined with our robust high-pressure fuel injection system to ensure better utilization of fuel for reduced emissions and greater power output. Electronic engine protection helps to maximize productivity and equipment uptime.

### Features And Benefits.

- Broad power range, compact size and natural balance allow for application in every mining installation.
- High-pressure injection (HPI) fuel system provides a high-peak injection pressure for optimum combustion for lower emissions and great fuel economy. Other benefits include excellent cold-starting characteristics and improved transient response at all engine speeds.
- The CM500 Electronic Control Module (ECM) allows for a broad range in combustion timing to accommodate every engine load. Programmable features include variable speed governing, low and high idle control, variable droop, torque curve shaping and more.
- A large-diameter camshaft with microfinished surfaces supports high injection pressures with excellent wear properties.
- The extra-wide gear train is quiet, long-lasting and handles high loads and injector pressures with ease.

### Ratings

ENGINE MODEL	ADVERTISED HP (KW) @ RPM	PEAK TORQUE LB-FT (N•M) @ RPM	RATING TYPE
QSK19 800	800 (597) @ 2100	2275 (3084) @ 1300	RESTRICTED
QSK19 775	775 (578) @ 1800	2275 (3084) @ 1300	RESTRICTED
QSK19 760	760 (567) @ 2100	2275 (3084) @ 1300	INTERMITTENT
QSK19 755	755 (563) @ 1800	2275 (3084) @ 1200	INTERMITTENT
QSK19 750	750 (559) @ 2100	2275 (3084) @ 1300	INTERMITTENT
QSK19 700	700 (522) @ 2100	2300 (3118) @ 1500	INTERMITTENT
QSK19 700	700 (522) @ 2000	2275 (3084) @ 1200	INTERMITTENT
QSK19 700	700 (522) @ 1800	2275 (3084) @ 1300	INTERMITTENT
QSK19 675	675 (503) @ 2100	2275 (3084) @ 1300	INTERMITTENT
QSK19 675	675 (503) @ 1800	2275 (3084) @ 1300	INTERMITTENT
QSK19 650	650 (485) @ 2100	2300 (3118) @ 1500	INTERMITTENT
QSK19 640	640 (477) @ 1800	1950 (2644) @ 1200	INTERMITTENT
QSK19 635	635 (474) @ 2100	1747 (2369) @ 1500	INTERMITTENT
QSK19 600	600 (447) @ 2100	1950 (2644) @ 1300	INTERMITTENT
QSK19 600	600 (447) @ 1800	1950 (2644) @ 1300	CONTINUOUS
QSK19 550	550 (410) @ 1800	1820 (2468) @ 1100	CONTINUOUS
QSK19 545	545 (406) @ 2100	1650 (2237) @ 1300	INTERMITTENT
QSK19 530	530 (395) @ 2000	1627 (2206) @ 1300	INTERMITTENT
QSK19 525	525 (391) @ 2100	1775 (2407) @ 1300	INTERMITTENT
QSK19 525	525 (391) @ 1800	1775 (2407) @ 1300	INTERMITTENT
QSK19 510	510 (380) @ 1800	1650 (2237) @ 1300	CONTINUOUS
QSK19 500	500 (373) @ 1800	1775 (2407) @ 1100	INTERMITTENT
QSK19 480	480 (358) @ 1800	1570 (2129) @ 1000	INTERMITTENT
QSK19 480	480 (358) @ 1800	1650 (2237) @ 1200	CONTINUOUS
QSK19 450	450 (336) @ 2100	1350 (1830) @ 800	INTERMITTENT
QSK19 450	450 (336) @ 1800	1650 (2237) @ 1100	CONTINUOUS

Additional ratings may be available. These engines emit at either former Tier 1 or Tier 2 levels. Check with your Cummins distributor or dealer for complete details.

### Specifications

ENGINE TYPE	INLINE 6-CYLINDER	
ASPIRATION	TURBOCHARGED AND AFTERCOOLED	
DISPLACEMENT	1159 CU IN	19 LITERS
BORE AND STROKE	6.25 IN X 6.25 IN	159 MM X 159 MM
OIL SYSTEM CAPACITY	80 U.S. QT	76 LITERS
COOLANT CAPACITY	44 U.S. QT	41.6 LITERS
LENGTH	66.1 IN	1679 MM
WIDTH	34.3 IN	872 MM
HEIGHT	63.6 IN	1616 MM
DRY WEIGHT	4,170 LB	1,890 KG
WET WEIGHT	4,600 LB	2,085 KG

- Jacket-water aftercooling with a one-pump, one-loop system is standard on the QSK19, providing simple and cost-effective intake air temperature regulation. Optional one-pump, two-loop or charge air cooling (CAC) systems are available to provide more efficient low-temperature aftercooling for performance and durability in higher-horsepower and high-temperature applications.
- Most QSK19s use a single Holset® HX82 turbocharger by Cummins Turbo Technologies with watercooled bearing housings for better temperature regulation, precise airflow and longer life than previous models. On higher-horsepower ratings with CAC, an HX83 turbocharger with advanced titanium impellers is used for increased durability.
- One-piece ferrous cast ductile iron pistons provide superior strength and durability to handle high cylinder pressures for longer life-to-overhaul. Advanced piston combustion bowl geometry allows for a clean and more efficient fuel burn.
- Piston-cooling nozzles provide a cooling stream of oil beneath each piston for long life and outstanding reliability.
- Oil filtration is handled by twin Cummins spin-on LF3000 filters, also available as Fleetguard®. An optional two-stage oil filter system combines full-flow and bypass filtration to effectively remove harmful sludge and up to three times as many contaminants to reduce engine wear.
- Standard on mining engines, the proven Prelub system distributes lubrication to engine oil rifles and friction surfaces before cranking can occur, greatly extending life-to-rebuild.
- Longer service intervals are achieved with optional Centriguard™ centrifuge filters and the CENTINEL™ continuous oil replacement system.



## A Name You Can Trust. Every Time. Everywhere.



Cummins possesses a vast amount of knowledge in mine operations. We are ready to assist you with experienced and dedicated local

mining business leaders and high-horsepower-engine technical support – fully backed by the strength of Cummins industry-leading technology and total support of top management. When you buy a piece of equipment with a Cummins QSK19, you get more than just an engine. You get:

- Full life cycle support, with proven engineering expertise from engine commissioning through final overhaul.
- Immediate parts and service availability.
- An established worldwide network with over 500 distributor facilities in nearly 190 countries, dedicated and empowered to service your needs. Every hour, every day.
- The best warranty in the business, which includes full coverage for unlimited hours during the first year, extending through two years or 2,000 hours (whichever comes first). The base warranty also includes 3-year/10,000-hour standard protection on major components. Extended warranties are available as well.

With the strength of Cummins at your side, your mine can process more material with increased uptime and greater productivity at a low cost per ton. Most important, our worldwide presence and comprehensive support make Cummins a proven, committed mining partner you can always depend on.

For more about the proven advantages of Cummins QSK19 and all our advanced technology for mining applications, see your local Cummins distributor.



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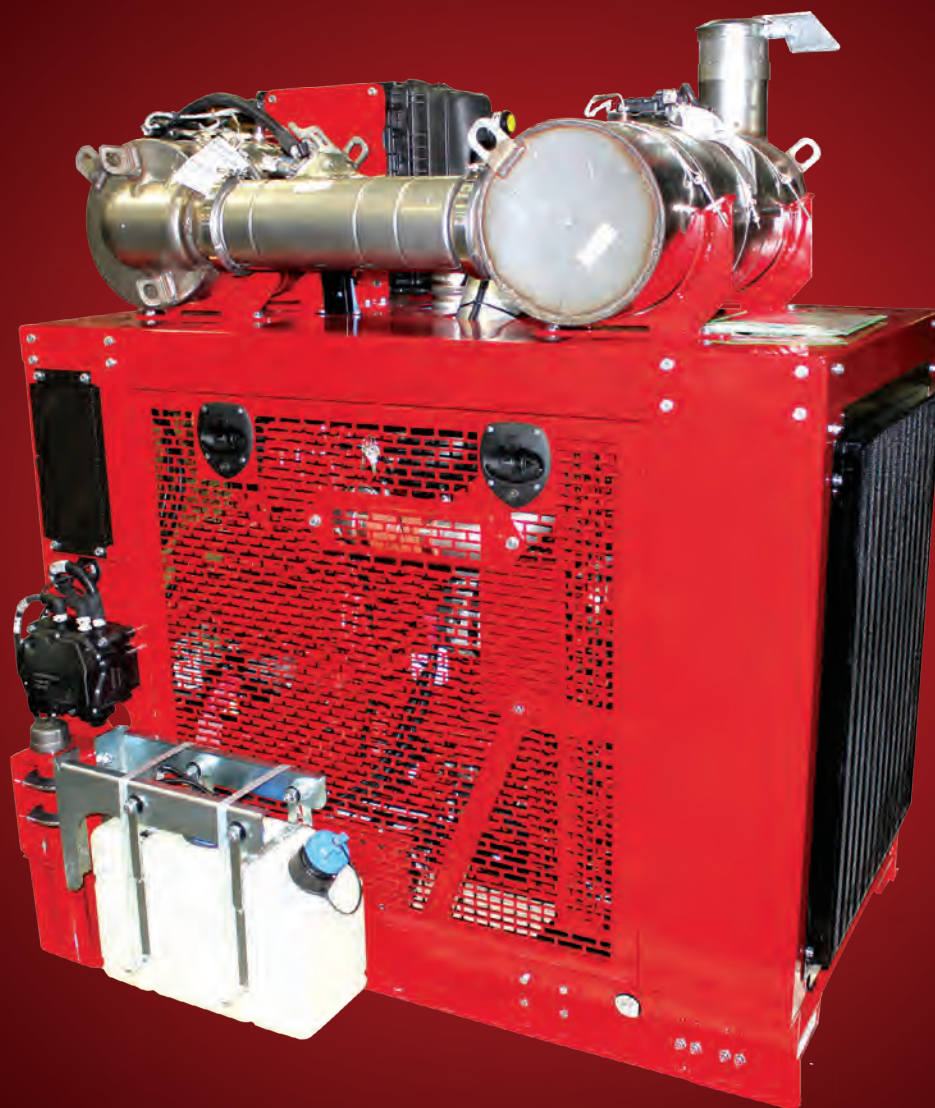
For other countries, see [everytime.cummins.com/customercenter](http://everytime.cummins.com/customercenter)

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Every™ Power.

Cummins Power Products.





In today's business world, you need a total package – one that delivers value of ownership, the most advanced technology and second-to-none support. Cummins Power Products offers a total solution for your power-unit needs, with a full range of diesel and compressed gas products from 60 hp to 1500 hp (45-1119 kW) and options designed to meet your specific needs.

### **Power By Design.**

What is a power unit? Essentially, a power unit is “torque in a box,” specifically engineered to provide a solution for a mechanical power need. Every product we make is powered exclusively by a Cummins engine, the most rugged, reliable and advanced technology available. Customized to the unique specifications necessary to meet your power demands, Cummins Power Products designs the right product, with the right fit, to do the job right, backed by our global parts and service network.

### **Ready For Tier 4 Final.**

Our Tier 4 Final technology solution for power units builds on the proven durability of our Tier 3 and Tier 4 Interim power units. Cummins has a unique advantage in that we design and develop all of the critical engine subsystems and aftertreatment components. Cummins Power Products then upfits the base engine and validates the entire power unit design to offer a completely integrated power package. The total system is optimized to minimize installation impact and achieve the lowest cost of operation.

### **Every Application.**

There is added value in working with Cummins Power Products. We eliminate the need to search for the right components. We have done that for you, and the result is a package designed specifically for your job. We offer turnkey solutions in both open and enclosed platforms from a standard line of base-engine models or a customized unit specifically engineered for a unique piece of equipment in virtually any application. We have the people, processes and products to make it happen. Cummins Power Products employs a qualified engineering staff with decades of experience in Pro/ENGINEER design. Our power units are built for everything from brush chippers and rock crushers to dewatering pumps and rail maintenance units. And if your need for power is larger than that, we also work on mud pumps, frac rigs and other heavy-duty applications.



**Durable and reliable power for oil field equipment.**



**Locomotive and rail maintenance track packs keep business moving.**

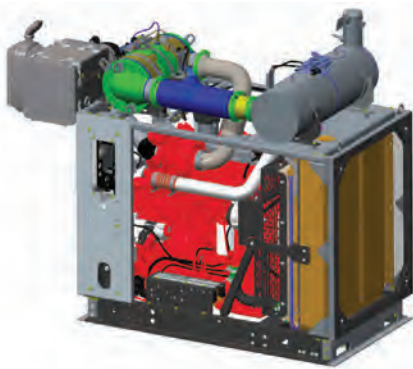
## The Cummins Power Products Difference.

Quality. Experience. Support. All customized for you. We don't take these things lightly. Our quality standards are unmatched in the power unit industry. Through our state-of-the-art production processes and a battery of product tests, each power unit provides unparalleled quality and dependability. Since 1997, we have produced over 30,000 power units designed to unique standards. And each one has the backing of Cummins worldwide parts and service network to support you.

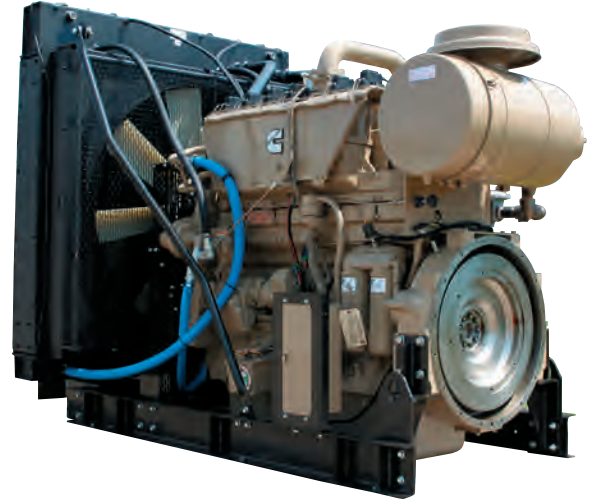
## 1,500 By Design. One For You.

With over 1,500 options available, a design may already exist to fit your exact need. We have already done the work to meet Tier 4 emissions requirements, with a number of models available. If no existing models meet your need, Cummins Power Products utilizes virtual prototyping to ensure a correct design and fit for your specific application. Our prototyping is very competitive, and allows close accuracy to the actual part production pricing. Some of the customizable options available include:

- Electronic or mechanical controls
- Cooling packages
- Mounting options
- Intake and exhaust locations
- Instrument panel locations



**QSB6.7 Tier 4 Final Standard Package**



## Every Strength.

There is power in our power units. Cummins Power Products power units last longer because they are built better. Our enclosure housings use 12-gauge steel. All metals are powder-coated, which increases chip resistance and allows our units to pass 1,000-hour salt spray tests. Components are bolted, not welded, so they resist mounting distortion and are easier to service. Each engine design is fully tested by Cummins Power Products to meet or exceed Cummins application guidelines. In addition, the electrical systems on each of our power units are tested before they leave our factory. Our power units are built and tested to handle the most extreme conditions.



**Cummins Power Products' advanced engineering design process utilizes 3D prototyping in a virtual environment to customize each power unit to the exact needs of the customer and application.**

### **Our Confidence. Total Coverage.**

The warranty for Cummins Power Products power units mirrors the Cummins Industrial warranty. The first year is completely covered regardless of the number of hours run. Coverage continues through the second year or until 2,000 hours of operation have been reached (whichever occurs first).

### **World-Class Service. Every Time.**

Cummins Power Products is a global provider of power units. Our value with customers overseas is realized in the dependability and durability of our products. We've shipped units to customers all over the world. Each power unit is backed by Cummins worldwide parts and service network. With over 6,600 authorized service locations around the world, your power unit will have support wherever you need it. Qualified technicians and Genuine Cummins Parts are never far away, even in the most remote location.



### **Every Advantage.**

Cummins QuickServe® offers you factory-trained technicians, the most sophisticated diagnostic and repair tools in the industry and the largest international parts and service network of any engine manufacturer. Our worldwide team of mobile service technicians is always ready to deliver service when and where you need it. Every minute. Every day. Every year. Plus, Cummins distributors have access to an entire library of parts and service information for Cummins engines on the Internet. QuickServe Online provides engine part numbers, diagrams, service bulletins and alerts, up-to-date supersessions and more – 24 hours a day, for nearly 11 million Cummins engines. The Cummins Power Products web site is linked through QuickServe Online for rapid serial number identification.



### **Every Contact.**

Cummins Power Products offer the best long-term value for your equipment needs and cost of ownership, whether your power unit is one of our standard configurations or designed specifically for your application and equipment. To learn more about Cummins Power Units, and to realize the power of our design, contact your local Cummins distributor location. Find out how we can design the exact power to work for you.



# Cummins Power Products.

## Engine Ratings Gross Horsepower (w/o Fan)

ENGINE MODEL	EMISSIONS TIER	HORSEPOWER RANGE (BHP)	HORSEPOWER RANGE (kW)	DISPLACEMENT (CU IN)	LENGTH (IN)	OPEN			ENCLOSED				
						WIDTH (IN)	HEIGHT (IN)	WEIGHT (LB)	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	WEIGHT (LB)	CENTERLINE HEIGHT (IN)
<b>Diesel Products</b>													
QSF2.8 CAC	4F	49-74	37-55	171	50.15	38.00	50.60	1187	46.28	37.53	50.60	NA	12.5
QSF2.8 Non-CAC	4F	49-65	37-48	171	50.15	38.00	50.60	1187	46.28	38.53	50.60	NA	12.5
B3.3NA-P	4i	60-65	45-48	199	40.20	33.68	47.20	842	47.88	30.00	53.28	884	12.50
B3.3T-P	4i	74	55	199	40.20	33.68	47.60	842	36.98	30.00	53.28	884	12.50
B3.3TAA-P	3	75-85	56-63	199	53.24	39.49	58.56	1017	41.75	33.68	58.56	1121	12.50
QSB3.3-P	4i	85-120	63-89	199	NA	NA	NA	NA	43.82	29.46	53.05	NA	12.50
QSB3.3-P	3	80-110	60-82	199	53.24	39.49	58.56	1017	41.75	33.68	58.56	1121	12.50
QSF3.8	4F	74-130	55-97	232	65.60	52.00	50.50	1740	64.67	49.50	60.00	NA	13.13
B4.5-P	2	80	60	275	47.40	29.25	69.40	1208	47.44	31.54	58.13	1332	13.06
B4.5T-P	2	92-99	68-74	275	52.30	29.25	65.40	1208	43.00	31.55	60.34	1332	13.06
QSB4.5	4F	121-173	90-129	275	56.52	32.93	67.06	1860	56.52	32.93	67.06	1950	13
QSB4.5-P	4i	110-163	82-122	272	59.40	38.50	56.40	1431	53.80	35.00	56.40	1574	13.14
QSB4.5-P	3	110-170	82-127	272	57.45	31.88	65.40	1270	48.00	31.88	61.82	1461	13.14
QSB6.7	4F	173-300	129-223	408	81.00	45.27	69.06	2590	81.09	45.27	69.06	2750	14
QSB6.7-P	4i	146-173	109-129	409	65.31	40.82	57.13	1915	58.00	36.30	66.50	2165	14.10
QSB6.7-P	4i	190-300	142-223	409	65.31	40.82	57.13	1915	58.00	36.30	66.50	2165	14.10
QSB6.7-P	3	190-275	142-205	409	68.48	33.91	81.80	1800	58.00	33.91	69.91	2050	14.10
QSC8.3-P	3	305	172-227	506	77.25	41.32	82.26	2380	64.75	41.32	81.03	2755	16.50
QSL9	4F	250-380	186-283	543	86.11	53.57	76.41	3150	86.11	53.57	76.41	3573	16.5
QSL9-P	4i	230-380	172-283	543	74.20	41.30	61.70	NA	64.80	41.30	72.40	2794	16.50
QSL9-P	3	300-365	224-272	543	77.25	41.32	82.26	2380	64.75	41.32	81.03	2755	16.50
QSM11-P	3	300-400	224-298	660	77.38	46.88	70.07	3394	74.49	43.10	82.22	3718	20.00
QSX11.9	4i	350-500	261-373	726	85.90	48.00	78.50	4121	NA	NA	NA	NA	20.00
QSX15	4F	472-675	352-503	915	98.50	71.83	84.60	6250	98.50	71.83	84.60	6656	20
QSX15-P	4i	400-600	298-447	912	87.80	57.50	85.50	5034	NA	NA	NA	NA	20.00
QSX15-P	3	375-630	280-470	915	106.25	62.75	84.05	5140	106.25	62.75	94.29	5750	20.00
QSK19-P	3	560-700	418-522	1159	115.13	61.88	78.78	6570	NA	NA	NA	NA	16.02
QSK19-P	2	525-700	391-522	1150	116.13	62.81	78.64	7100	NA	NA	NA	NA	15.88
QSK19-P	2	755-800	563-597	1150	116.13	62.81	78.64	7200	NA	NA	NA	NA	16.00
QSK19-P	1	755-800	563-597	1150	114.25	62.00	78.52	6530	NA	NA	NA	NA	16.02
QSK23-P	2	760-950	567-708	1412	NA	NA	NA	NA	NA	NA	NA	NA	23.00
QST30-P	1	760-1200	567-895	1861	156.00	59.71	92.27	11400	NA	NA	NA	NA	27.00
QST30-P	1	1350-1500	1007-1119	1861	131.34	95.00	110.66	16120	NA	NA	NA	NA	27.00
QST30-P	2	760-1200	567-895	1861	142.00	82.00	96.71	11400	NA	NA	NA	NA	27.00
QST30-P	2	1350-1500	1007-1119	1861	NA	NA	NA	NA	NA	NA	NA	NA	27.00
QSK38-P	2	920	686	2300	146.66	86.13	103.06	NA	NA	NA	NA	NA	30.00
<b>Natural Gas Products</b>													
G5.9	NA	41-99	31-74	359	65.74	33.91	64.72	1530	64.52	33.91	70.41	1641	17.65
G5.9e	NA	70-99	52-74	359	NA	NA	NA	NA	68.02	33.91	69.51	1899	17.65
G8.3	NA	99-135	74-101	505	67.38	41.32	73.80	1860	60.69	41.32	71.75	2525	17.75
G8.3e	NA	99-118	74-88	505	NA	NA	NA	NA	72.81	41.32	69.26	2444	17.75
GTA8.3 SLB	NA	175	131	505	78.50	48.88	71.50	NA	77.25	43.90	75.50	NA	17.75
G855	NA	157-188	117-140	855	92.50	42.76	66.38	3900	NA	NA	NA	NA	22.38
G855e	NA	157-188	117-140	855	83.17	42.70	77.59	3944	NA	NA	NA	NA	22.38
GTA855	NA	213-286	159-213	855	100.00	59.76	74.25	4596	NA	NA	NA	NA	22.38
GTA855e	NA	225	168	855	93.00	62.25	84.75	NA	NA	NA	NA	NA	22.38
KTA19GC	NA	265-420	198-313	1125	112.57	60.00	74.87	6495	NA	NA	NA	NA	21.13
KTA19GC SLB	NA	380-420	283-313	1125	104.96	62.25	80.50	6495	NA	NA	NA	NA	21.13
KTA38GC SLB	NA	635-850	474-634	2300	153.78	85.25	100.75	16500	NA	NA	NA	NA	29.89
KTA38GC-E	NA	635-760	474-567	2300	NA	NA	NA	NA	234.60	85.50	152.30	26,114	29.89

- Dimensions and weights will vary slightly depending on the exact engine configuration.
- All ratings are restricted unless otherwise noted. Some ratings are intermittent.
- Height dimensions are measured from bottom of rail to highest point on unit, usually the muffler.
- Natural gas power unit centerline height indicated with high-capacity oil pans.
- 4i Refers to Tier 4 Interim EPA 2011 emissions standards.
- T4F refers to Tier 4 Final EPA 2014 emissions standards.
- \* Anticipated 2014 releases planned.







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