



EVERY TON. QSK23



FOR MINING APPLICATIONS

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QSK23

Mining is a tough, demanding business. A business that depends on people who've got what it takes – supported by equipment with the power, the durability, the reliability, the cost-effectiveness and the ratings that the job demands. You can count on the Cummins QSK23 to fit your most aggressive and specialized applications. Every time.

No matter what kind of challenge you're facing, this electronically controlled, lower-emissions workhorse is the right choice for tough applications. Known for excellent power density, economical operation and exceptional uptime, the QSK23 is proven around the clock, in the harshest conditions imaginable, in every corner of the world. Plus, the QSK23 meets current EPA and European standards for all horsepower ratings today and will be developed for Tier 3/ Stage IIIA with minimal installation impact.

Performance.

The Cummins QSK23 truly delivers performance under pressure. Its high-pressure injection (HPI) system injects fuel at 29,000 psi (199,955 kPa) for impressive response and the best fuel economy of any engine in its class. The HPI system is so sophisticated that it adjusts to fuel quality.

And its durability is without question. The QSK23 is based on an engine platform that's been proven in industrial applications for over 20 years. The block is one-piece cast iron, with wide cylinder spacing for long life and excellent rebuildability.

The QSK23 shares the electronic components and the proven power cylinder design of our larger QST30 and QSK78 engines, for performance and reliability you can count on. Every day and every year. No matter what kind of mining equipment you need to power – or repower – the QSK23 is tough enough to get the job done. Every time.



Ratings

ENGINE MODEL	ADVERTISED HP (kW) @ RPM	PEAK TORQUE LB-FT (N•M) @ RPM
QSK23-950	950 (708) @ 2100	2896 (3926) @ 1400
QSK23-900	900 (671) @ 2100	2700 (3661) @ 1400
QSK23-860	860 (641) @ 2100	2600 (3525) @ 1400
QSK23-800	800 (597) @ 2440	2440 (3308) @ 1400
QSK23-760	760 (567) @ 2100	2400 (3254) @ 1300

All ratings are intermittent unless otherwise noted. Additional ratings may be available. Check with your Cummins distributor or dealer.

Specifications

ENGINE TYPE	IN-LINE, 6-CYLINDER	
DISPLACEMENT	1,404 CU IN	23 LITERS
ADVERTISED HORSEPOWER	760-950 HP	567-708 kW
PEAK TORQUE	2400-2896 LB-FT	3254-3926 N•M
BORE AND STROKE	6.69 IN X 6.69 IN	170 MM X 170 MM
ASPIRATION	TURBOCHARGED/CHARGE AIR COOLED	
OIL SYSTEM CAPACITY	54.8 U.S. QT	52 LITERS
COOLANT CAPACITY*	48.8 U.S. QT	46.2 LITERS
LENGTH	76.3 IN	1939 MM
WIDTH	42 IN	1067 MM
HEIGHT	66.7 IN	1694 MM
WET WEIGHT	6,300 LB	2,858 KG

*Engine only.

Features And Benefits.

These are some of the heavy-duty components that make the QSK23 the right choice for your applications.

- One-Piece Cast-Iron Block – Heavy-duty design with wide cylinder spacing for long life and excellent rebuildability.
- Quantum System – Programmable full-authority electronic controls optimize combustion based on engine load and atmospheric conditions. They also provide advanced monitoring, diagnostic and reporting capabilities, with integrated engine protection features.
- High-Pressure Injection – Works at up to 29,000 psi (199,955 kPa) to optimize engine response with the best fuel economy and lowest emissions.
- Precision-Honed Cylinder Liners – Precise liner machining with superior metal technology creates exceptional surface smoothness and durability. Made of ferrous cast ductile iron so expansion and contraction won't create excess wear.
- Ferrous Cast Ductile Iron Pistons – For even expansion and contraction during thermal cycles. This is the same technology found in our 3500-hp (2611 kW) QSK78.
- Large-Diameter Camshaft – 105 mm of hardened surfaces handle high load capacities. Created specifically to work with high-pressure injection systems.
- Rear Gear Train – Significantly reduces engine noise.
- Seven-Bolt Cylinder Head – Delivers even clamping force, enabling high cylinder and injector pressures.
- Two-Stage Oil Filter – Combination full-flow and bypass oil filter reduces maintenance costs, extends service intervals and takes oil drain intervals up to 500 hours.

Maintenance And Service.

Every foreman knows, the less time an engine spends in service, the more productive it is on the job. That's why the Cummins QSK23 only requires oil and oil filter changes every 250 hours or 6 months.

MiningGateway.com.

Whether you are in your office or at home, MiningGateway.com gives you access to a complete mining information station with links to current news stories of interest, maintenance updates and success stories from Cummins users around the world. In addition, there is a forum where you can talk to Cummins mining experts and ask them your toughest questions. Every time.



Cummins QuickCheck III.

Questions about engine information? Cummins QuickCheck III* puts every answer in the palm of your hand! QuickCheck III software, together with your handheld device, reads and captures engine data quickly and conveniently from any Cummins electronic diesel engine or other engines you run (via J2587 and J1939). Use it to check everything from fuel burned and total engine hours to coolant temperature and boost pressure. QuickCheck III even logs fault codes, which can be used with Cummins INSITE to get detailed repair instructions for faster service.



*For information on hardware compatibility, please visit us online at <http://quickcheck.cummins.com> or see Bulletin 4081450.



The Cummins QuickServe® Commitment.

Cummins QuickServe offers you factory-certified 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.

QuickServe® Online.

QuickServe Online (<http://quickservice.cummins.com>) gives you easy access to parts and service information. While there are over eight million engines and literally billions of part numbers indexed in the QuickServe Online database, you can find the information you need in seconds with our high-speed search function and your engine's serial number.



INSITE.™

Cummins proprietary INSITE software includes step-by-step engine diagnostics, drawings and diagrams to improve troubleshooting and repair accuracy.

Base Warranty.

QSK23 engines come with a full 2-year/2,000-hour warranty that covers all Cummins branded components, including electrics such as starters and alternators. Major components coverage continues into the third year, up to 10,000 hours of operation from the time your QSK23 engine goes in service.



Three simple steps explain everything you need to know:

Step One: Full coverage on all Cummins industrial engines and branded components with unlimited hours during the first year of operation. This includes Cummins branded electrics such as alternators, starters, etc.

Step Two: Full coverage is extended for the second year, up to 2,000 hours of operation. Total hours are cumulative from the time the engine goes in service.

Step Three: Major components coverage including block, crankshaft, camshaft and rods on all products for the third year or up to 10,000 hours of operation.

Encompass Protection Plans.

Unlike plans offered by other diesel manufacturers, Encompass gives you a choice of hourly or unlimited plans and options that include parts only, parts and labor, or parts, labor and travel coverage. Encompass protection plans are available for your QSK23 engine with your choice of up to four years of extended coverage with unlimited hours. There are also years/hours plans available. Including 5 years/2,000 hours, 5 years/6,000 hours or 5 years/10,000 hours.

These plans cover all Cummins-manufactured components. Maintenance components are included through the end of the second year.

Encompass protection plans may be purchased up to six months after the in-service date of your QSK23 engine. See your Cummins distributor for pricing. For additional details, ask to see Bulletin 3624570.

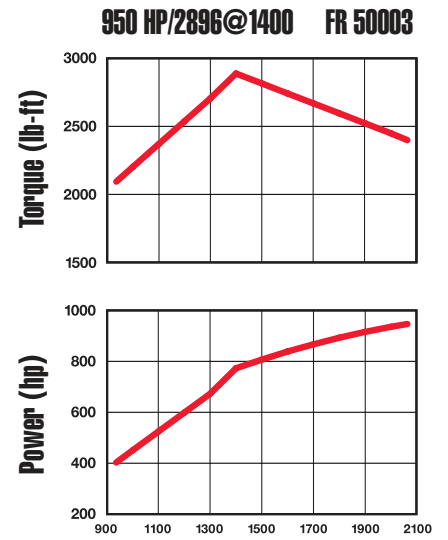
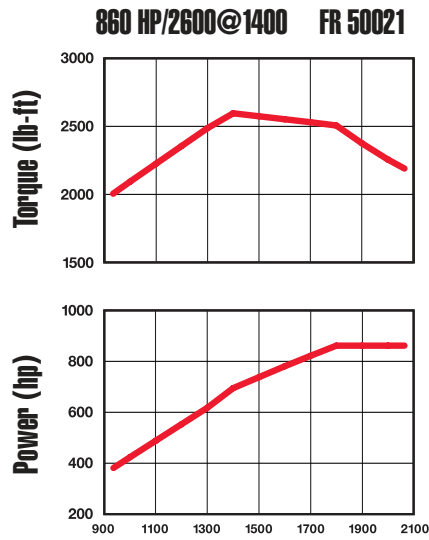
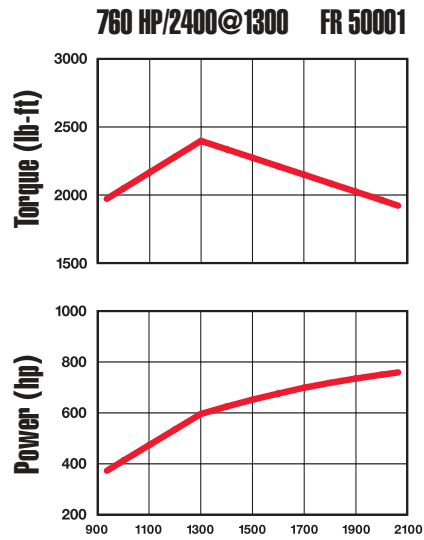
A \$300 deductible applies per service visit after the expiration of the base warranty.

Every Question, Answered.

- MiningGateway.com – The latest Cummins mining information and current product upgrade data is available 24/7 at this web site.
- Service Network – Cummins engines are backed by the strength of Cummins global network of over 5,500 service locations worldwide.
- Customer Assistance Center – For technical assistance, service locations and product literature, call 1-800-DIESELS (1-800-343-7357).
- Cummins PowerMaster – E-mail the experts for timely answers to Cummins-related questions at powermaster@cummins.com.
- Cummins Online Registration – Register all your Cummins engines quickly and easily at www.everytime.cummins.com to ensure quality parts and service for your engine.



TORQUE AND POWER CURVES.



Cummins is a pioneer in product improvement. Thus specifications may change without notice. Illustrations may include optional equipment.



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