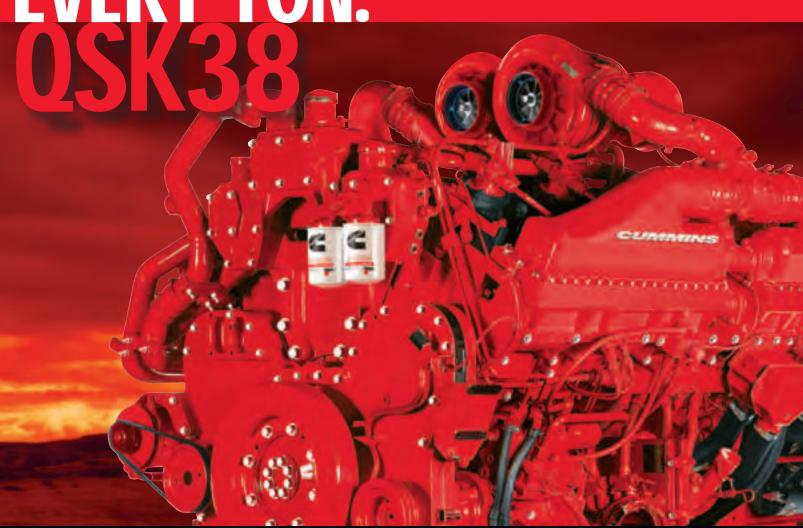


EVERY TON.



EMISSIONS-CERTIFIED ENGINES FOR MINING APPLICATIONS

FOR MINING APPLICATIONS.

QSK38

Performance.

Developed from the robust K1500E, the QSK38 is designed to survive the toughest mining applications such as the 176 short ton (160 tonne) class excavators and large wheel loaders. The QSK38 features the Cummins Modular Common Rail (MCR) fuel system that maintains constant fuel injection pressure at all engine speeds - realizing greater application flexibility and precision by controlling both injection rates and timing. Multiple injection events during each power stroke yield smoother, more consistent power at every rpm, with an 18% faster load acceptance and 50% improved cold start than the K1500E. Single-stage turbocharging delivers reliable performance up to altitudes of 10,500 feet (3,200 m) without power derate. The QSK38 with the MCR system has significantly reduced noise emissions (80% lower at idle) and engine vibration than its predecessor, resulting in a safer and more comfortable work environment. Durability is excellent, with a conservative rating of 625,000 gallons-to-overhaul (2,365,882 liters).

Cummins analysis-led computer modeling has designed piston combustion bowl geometry which allows the QSK38 to reduce NOx by 40% and particulate matter by 60%, achieving U.S. EPA Tier 2 emissions levels in-cylinder with minimal impact to fuel consumption.



Ratings

| ENGINE MODEL | | ADVERTISED HP (KW) @ RPM | PEAK TORQUE LB-FT (N•M) @ RPM | RATING TYPE |
|-----------------|------|-----------------------------|----------------------------------|----------------|
| QSK38 | 1080 | 1086 (810) @ 1800 | 3591 (4869) @ 1350 | Continuous |
| QSK38 | 1260 | 1260 (940) @ 1800 | 3861 (5235) @ 1400 | Continuous |

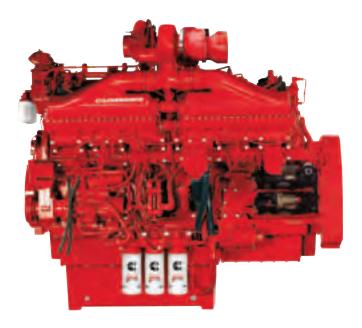
Additional ratings may be available. Check with your Cummins distributor or dealer.

Specifications

| ENGINE TYPE | 60° VEE 12-CYLINDER | | |
|---------------------|------------------------------|-----------------|--|
| ASPIRATION | TURBOCHARGED AND AFTERCOOLED | | |
| DISPLACEMENT | 2,307 CU IN | 37.8 LITERS | |
| BORE AND STROKE | 6.25 IN X 6.25 IN | 159 MM X 159 MM | |
| OIL SYSTEM CAPACITY | 49 U.S. GAL | 186 LITERS | |
| COOLANT CAPACITY | 29.5 U.S. GAL | 112 LITERS | |
| LENGTH | 87 IN | 2209 MM | |
| WIDTH | 57 IN | 1452 MM | |
| HEIGHT | 73 IN | 1846 MM | |
| DRY WEIGHT | 8,716 LB | 3,958 KG | |
| WET WEIGHT | 9,039 LB | 4,100 KG | |
| | | | |

Features And Benefits.

- Advanced Modular Common Rail (MCR) fuel injection system generates clean, quiet and efficient power.
- State-of-the-art combustion control system features enhanced electronics integrated with upgraded sensors and powerful new Electronic Control Modules (ECM) for peak performance at high altitudes and under every load condition.
- Single-stage turbocharging for easy servicing and weight savings. Designed and built by Cummins Turbo Technologies, they feature a titanium impeller and watercooled bearing housings for long-term reliability, and a larger compressor to provide higher airflows for maximum power and long life.
- Ferrous Cast Ductile (FCD) iron pistons provide increased strength and durability to handle increased cylinder pressures for longer life-to-overhaul.
- Piston-cooling nozzles direct a cooling stream of oil beneath each piston crown and bowl rim for long life with increased reliability.



- Revised combustion bowl geometry allows the QSK38 to reach certified emissions levels in-cylinder.
- Two-stage Cummins oil filter, also available as Fleetguard,® combines full-flow and bypass filtration to effectively remove harmful sludge and up to three times as many contaminants to reduce engine wear.
- Wires are safely enclosed inside a foam-filled extruded aluminum channel that is completely sealed from the external environment to prevent chafing and corrosion damage. DIN-style connections have a locking feature to ensure a firm connection and protect against pin fretting damage.
- Prelub system distributes oil to rifles and friction surfaces before cranking can occur, greatly extending life-to-rebuild.
- Longer service intervals are achieved with optional Centriguard[™] centrifuge filters, the CENTINEL[™] continuous oil replacement system and the self-cleaning ELIMINATOR[™] full-flow/bypass filtration 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 QSK38, 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 QSK38 and all our advanced technology for mining applications, see your local Cummins distributor.





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