



EMISSIONS-CERTIFIED ENGINES FOR MINING APPLICATIONS

FOR MINING APPLICATIONS.



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

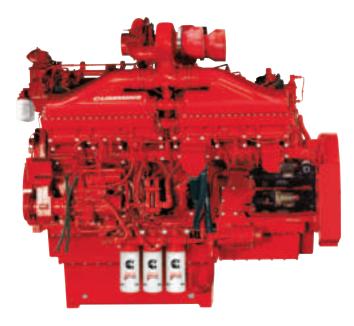
Additional ratings may be available. Check with your Cummins distributor or dealer.

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 CentriguardTM centrifuge filters, the CENTINELTM continuous oil replacement system and the self-cleaning ELIMINATORTM 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 highhorsepower-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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