



Strength, evolved

QSK78 Tier 4 engine for mining applications



The QSK78. Because evolution makes great, better.

Evolution. Continuous improvement. These are the forces that have shaped the QSK78 Tier 4. We've taken the QSK78 to new levels with a whole suite of smart design and technology upgrades. That means stronger capabilities and an even more robust design, to give you the best of both worlds – increased productivity and massive reliability in the toughest conditions, with next-generation efficiency that meets the latest emissions regulations.

Serious strength

Modern engine and turbo charging design

Leads to improved transient response.

Modular Common Rail Fuel System (MCRS)

Provides precise control of the fuel ejection event that results in lower noise, vibration and smoke, and optimized fuel economy.

Forged high-strength steel crankshaft

Lowers noise and vibration for operators delivering maximum performance and durability.

Dual viscous dampers

Reduce gear train wear, leading to longer life to overhaul (LTO).

The QSK78 incorporates the best features of our legendary design, including full-authority electronic controls to achieve exceptional combustion efficiency.



Unbeatable cost-per-ton

ELIMINATOR™ self-cleaning filtration system

Combines full-flow and bypass filters with an oil pressure-powered centrifuge; this system extends oil drain intervals and reduces consumable waste, while improving cost of production (COP).

Advanced Selective Catalytic Reduction (SCR) Technology

Allows the engine to meet global emissions regulations without increasing displacement, heat rejection or significantly changing the engine footprint or ratings. By using SCR technology, we're able to protect engine performance and power density, equating to best in class COP.

NanoNet® Advanced Media Technology

Filters out the smallest impurities that impede optimal engine performance, extending maintenance intervals and keeping your engine running longer. Extended service intervals mean less downtime for routine maintenance and more uptime for profitable productivity.

Bring optimized maintenance schedules and advanced combustion efficiency together, and the result is a game-changer – an engine with the lowest cost-per-ton of any engine in its class.

Data is powerful too

Through Cummins PrevenTech® Mining, we can empower you with innovative digital solutions for remote engine monitoring, prognostics, and customer alert creation and notifications, which improve productivity, reduce costs, and optimize maintenance and servicing.



Service and support: We've got your back

Global support network

Distributor branches in over 190 countries to support your parts and service needs, no matter where your equipment is located.

Cummins Care

Our unique solutions center with experts who have specialized skill sets, experience, and in-depth knowledge, to help you problem-solve fast and assist you with your service and support needs.

Best warranty in the industry

QSK78 engines are backed by the best warranty in the industry, with full coverage for unlimited hours during the first year, extending through two years or 2,000 hours, whichever occurs first.

Major-components coverage continues through the third year or 10,000 hours, whichever occurs first. Extended protection plans are available.

QuickServe™ Online Mobile

With Cummins, one of the most comprehensive and powerful parts and service tools in the industry is all yours.

Breaking new ground with Planet 2050

In 2014, Cummins adopted its first comprehensive sustainability plan. Planet 2050 builds on this with 2050 aims and incremental 2030 goals. One of those goals is to partner with customers to reduce greenhouse gas (GHG) emissions from products in the field by 55 million metric tons. This is accomplished by improving the efficiency of our products.

For more information on Planet 2050, visit cummins.com.



Ratings

Engine model	Advertised HP (kW) @ RPM	Peak torque LB - FT (N•M) @ RPM
QSK78 3500	3500 (2610) @ 1900	10,157 (13,771) @ 1500

Specifications

Engine type	18-cylinder	
Aspiration	Two-stage turbocharged, intercooled and aftercooled	
Displacement	4,735 CU IN	77.6 LITERS
Bore and stroke	6.69 IN x 7.48 IN	170 MM X 190 MM
Oil system capacity	76-86 U.S. GAL	287-327 LITERS
Coolant capacity	175 U.S. QT	166 LITERS
Length	135.9 IN	3,453 MM
Width	70.6 IN	1,794 MM
Height	103.1 IN	2,618 MM
Dry weight	26,506 LB	12,023 KG
Wet weight	27,137 LB	12,309 KG



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