QSK50 T3

Locomotive Power Module

CLEAN DIESEL LOCOMOTIVE POWER

The Cummins QSK50 Tier 3 Power Module is designed for ease of installation into multiple locomotive models. We pre-build the entire unit, including the engine, alternator, air intake, exhaust and air compressor drive, on a base skid. New cooling cores will also be provided to install in the existing cooling hatch.

Then we work with the locomotive manufacturer or rebuilder on any modifications to the frame and/or hatch as well as electronic wiring and controls. Installation and service manuals will also be provided to guide the customer.

This packaged unit is EPA Tier 3 Switch Locomotive certified and delivers 2,130 HP at 1800 rpm. This engine is engineered, built and tested to deliver exceptional fuel economy, performance and reliability with reduced maintenance costs for decades of operation.

The Power Module is equipped with a Kato dual-bearing alternator rated at 1600 kW of traction power and 250 kW of 120v/3-phase companion power. If required the alternator can be configured to meet the needs of your specific locomotive application.

The Cummins Tier 3 Locomotive Power Module provides reliability with a positive impact on the environment.

Specifications	
Horsepower	2,130 bhp
Governed speed	1,800 rpm
Low idle speed	750 rpm
Traction power	1,600 kW
Traction voltage	750 VDC
Traction current (cont. / int.)	4,400 amps / 6,600 amps
Companion alt	250 kW, 360 kVA
Weight	~40,000 lbs
Length	237 in
Width	69 in
Height	107 in
Coolant capacity	169 gallons
Lube oil capacity	70 gallons
Maint. interval	1,500 hours

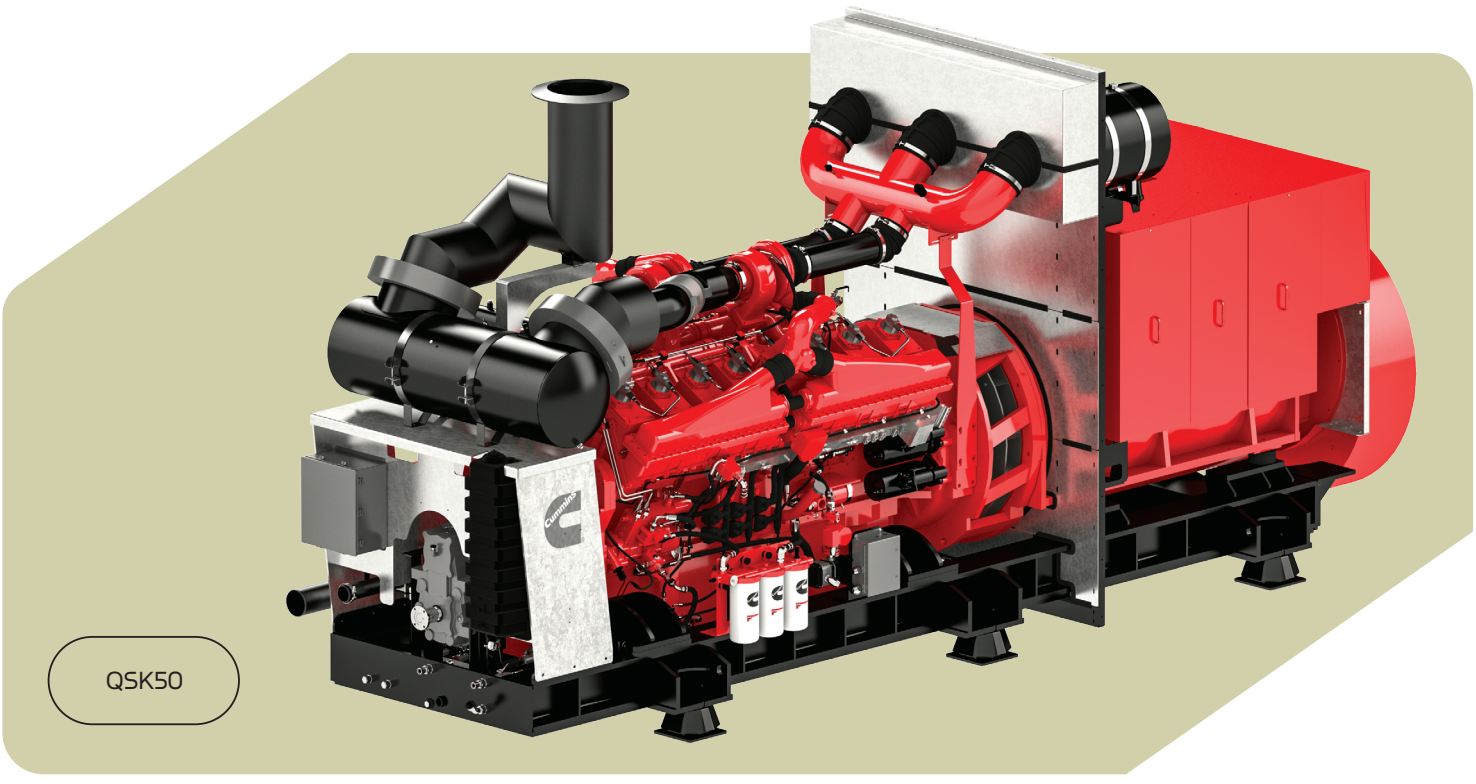
↓ 80%* **NOx**

↓ 80%* **PM**

↓ 90%* **Lube oil consumption**

↓ 20%* **Fuel consumption**

* When compared to Pre-Tier 0 Locomotives. Based on EPA Switch Locomotive Duty Cycle.



QSK50

STANDARD SPECIFICATIONS AND OPTIONS FOR LOCOMOTIVE POWER MODULE

System	Standard	Option
Engine	2,130 bhp (Intermittent) @ 1,800 RPM EPA Tier 3 Locomotive Switch certified 64VDC pre-lube pump	▪ 1,800 bhp ▪ 2,000 bhp
Alternator	Kato Dual-Bearing Slip ring brush type design Traction Alternator: ▪ 1,600 kW @ 1,800 RPM ▪ 750 Volts rectified DC output ▪ 4,400 Amps continuous / 6,600 Amps intermittent Companion Alternator Winding: ▪ 250 kW, 360 kVA, 0.80 lagging power factor ▪ 400 or 200 VAC, 3-phase at 1,800 rpm	
Mounting	Fabricated base frame for mounting engine and alternator with rubber isolators between base frame and locomotive frame	
Cooling	Replacement cooling cores to fit into existing cooling hatch ▪ Copper/brass mechanically bonded ▪ Split jacket water and aftercooler circuits ▪ Expansion tank with low coolant level sensor	Complete new cooling module
Air Intake	Fleetguard metal canister 2-stage air cleaners pulling air from clean air room ▪ Built-in clean air room wall	
Exhaust	Single industrial grade silencer w/exhaust stack out top of carbody Insulation blankets covering tubing and silencer	
Fuel	Three stage fuel filtration 64VDC electric transfer pump to pull fuel from tank	Active water separator and kidney loop
Lube Oil	Sub-base type full sump oil pan Centinel Oil Management system, including 7 gallon make-up tank Eliminator centrifuge oil filter	
Starters	Dual 64VDC starters	
Controls	TMV TECU Locomotive Control System	Not included; supplied by customer
Other	24VDC electrical system for engine including dual batteries	▪ Engine cold start aids ▪ Cummins FIT system

Contact your Locomotive Rebuilder or your local Cummins representative for pricing and more information.

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Bulletin 6502741 Produced in U.S.A. Rev. 9/24