



FOR INDUSTRIAL APPLICATIONS TIER 3/STAGE IIIA

FOR INDUSTRIAL APPLICATIONS.

QSM

Your business depends on having the power to meet every challenge. The QSM with Quantum System electronic controls provides highly productive power for equipment on the world's most demanding work sites. And the QSM is the first engine to be certified to EPA Tier 3 and Euro Stage IIIA levels. Cummins knows combustion and delivers a cost-effective solution utilizing our advanced "in-cylinder" technology.

Every day, QSM engines are put to the test in wheel loaders, excavators, haul trucks, 4WD tractors, reach stackers and more. And every day, they deliver superior performance that's the result of advanced combustion technology and our responsive wastegated turbocharger. Electronically controlled unit injectors with cam-driven rate shaping optimize both emissions and efficiency. The QSM is available in a wide range of ratings from 290-400 hp (216-298 kW).

Performance.

The QSM high-pressure injection system and electronic controls ensure clean, powerful and efficient operation every time. Our Electronic Control Module (ECM) continuously monitors data, optimizing the fuel-to-air mixture for combustion efficiency. This increases engine responsiveness, improves fuel economy and significantly reduces noise levels.

Versatility.

No matter what type of job you have to do – from agriculture to construction to a wide range of industrial applications – the QSM is designed to function as an integral part of your equipment. CELECT™ programmable features let you customize engine performance to equipment use. The ECM has the capacity and the connections to receive input from all your other vehicle systems and adjust engine performance to match.



Ratings

ENGINE MODEL	ADVERTISED HP (KW) @ RPM	PEAK HP (KW) @ RPM	PEAK TORQUE LB-FT (N•M) @ RPM
QSM 400*	400 (298) @ 2100	446 (333) @ 1800	1400 (1898) @ 1400
QSM 400*	400 (298) @ 2100	428 (319) @ 1900	1400 (1898) @ 1400
QSM 400	400 (298) @ 2100	403 (301) @ 1800	1400 (1898) @ 1400
QSM 400	400 (298) @ 1800	N/A	1400 (1898) @ 1400
QSM 375	375 (280) @ 2100	400 (298) @ 1800	1400 (1898) @ 1400
QSM 360	360 (269) @ 2100	385 (287) @ 1800	1350 (1830) @ 1400
QSM 360**	360 (269) @ 1800	N/A	1260 (1708) @ 1400
QSM 350	350 (261) @ 2100	385 (287) @ 1800	1310 (1776) @ 1400
QSM 350	350 (261) @ 2000	372 (278) @ 1800	1350 (1830) @ 1400
QSM 340**	340 (254) @ 1800	N/A	1260 (1708) @ 1400
QSM 335	335 (250) @ 2100	365 (272) @ 1800	1235 (1674) @ 1400
QSM 300	300 (224) @ 2100	N/A	1050 (1424) @ 1400
QSM 290	290 (216) @ 2100	320 (239) @ 1800	1090 (1478) @ 1400

^{*}Indicates a restricted rating.

Specifications

ENGINE TYPE	IN-LINE, 6-CYLINDER	
DISPLACEMENT	660 CU IN	10.8 L*
ADVERTISED HORSEPOWER	290-400 HP	216-298 KW
PEAK POWER	320-446** HP	239-333** KW
PEAK TORQUE	1050-1400 LB-FT	1424-1898 N•M
NOMINAL TORQUE RISE	40%	
BORE AND STROKE	4.92 IN X 5.79 IN	125 MM X 147 MM
ASPIRATION TURBOCI	HARGED AND CHARGE AIR C	OOLED
OIL SYSTEM CAPACITY	41 U.S. QT	39 L*
COOLANT CAPACITY	10 U.S. QT	9.5 L*
LENGTH	51.4 IN	1306 MM
WIDTH	36.0 IN	914 MM
HEIGHT	50.4 IN	1280 MM
WET WEIGHT	2,170 LB	984 KG

^{*}L = Liters/Litres

^{**}Indicates a continuous rating.

All ratings are intermittent unless otherwise noted.

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

^{**}Restricted rating

Features And Benefits.

The QSM Quantum System provides superior fuel economy with strong engine performance, engine protection and other programmable features. Components include:

- Holset HX55 Wastegated Turbo Designed for optimum boost, it improves throttle response across the operating range.
- Venturi[™] Oil Filter and Lube System 10-micron LF9001 filter from Fleetguard combines with a new lubrication system. Can double oil change intervals up to 700 hours in some applications.
- CELECT Electronic Engine Management Provides superior performance, fuel efficiency, diagnostics and prognostics using full-authority electronics. Its programmable features let you customize engine performance to equipment use.
- High-Capacity ECM New space-efficient Electronic Control Module packs ten times more memory and ten times more processing power.
- Sealed Sensors Fully sealed to resist water intrusion. Combined temperature and pressure sensors reduce inventory and simplify maintenance with increased reliability.
- Advanced Combustion Technology Optimized injector tips and a reshaped steel piston bowl improve fuel economy and emissions control with longer oil change intervals.
- Articulated Pistons and Liners Steel-topped pistons handle higher cylinder temperatures for improved fuel efficiency and emissions control. Patented mid-stop cylinder liners resist cavitation and extend life-to-overhaul.
- Auto-Tensioning Belt Drive Self-adjusting for optimum tension, which increases fan, alternator and fan belt life.
- Improved Camshaft Durability Exhaust valve lobes are designed to improve wear tolerance. The injector lobe profile has been revised to optimize injection.
- Rear Engine Power Take-Off (REPTO) Option Provides additional capacity for driving remote-mounted devices.



Maintenance Intervals.

The QSM is designed to deliver more time on the job and less time being serviced. Maintenance intervals have been made longer, and service has been made simpler.

For example: oil change intervals are double the previous standards in some applications.

QSM engines feature a Fleetguard® Venturi oil filter that, in combination with an improved lube system, increases oil flow, reduces lubrication delay at start-up and improves protection. This system allows for oil change intervals of up to 700 hours in some applications.

Every Installation.

Getting every installation right – the first time – is as important to Cummins as it is to you. PowerMatch and Advisor help ensure that we get it right, every time.

Cummins PowerMatch.

PowerMatch helps OEMs optimize engine performance so you can lower fuel consumption, increase operator satisfaction, improve equipment life and protect the customer's investment. PowerMatch tailors engine performance to specific equipment models and applications. Advanced electronics are used to enhance power curves and trim ratings, matching the job the equipment will be doing while taking into account variables such as work environment, load factors, ambient temperature and altitude.

PowerMatch can also be used to create a unique torque curve, set up alternate torque curves, alternate governor settings or set up engine protection features. Turn on the Boost Power feature, and the equipment user gets an extra burst of power needed to get through tough spots – but only for as long as needed – so fuel economy and durability are not compromised. Because PowerMatch allows for immediate field-testing of new calibrations, application engineers can quickly develop the optimum calibration for every customer.



Cummins Advisor.

Getting every installation right is what Cummins Advisor is all about. Advisor puts a virtual engineer on the OEM team, allowing the OEM to focus on



machine requirements instead of engine requirements.

This shortens engineering cycle times and cost. Cummins Advisor models equipment installation for exceptional productivity, reliability and durability.

After a comprehensive review of load factors, climates, duty cycle and equipment usage, Advisor recommends the best engine and rating match for the equipment and operating conditions. It then builds a virtual model of the intake, exhaust, cooling, fuel and mounting systems. When Advisor identifies an issue, it lists acceptable alternatives. This approach allows changes while the equipment design is still "on paper," ensuring optimum performance while minimizing costs – every time.



Every Part. Online.

QuickServe® Online (http://quickserve.cummins.com) gives you easy access to parts and service information. While there are part numbers for over eight million engines 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.

Warranty Coverage.

Cummins QSM gives you everything you need, with one of the simplest and most comprehensive plans anywhere. 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. Total hours are cumulative from the time the engine goes in service.

Encompass Extended Coverage.

Unlike plans offered by other diesel manufacturers, Encompass gives you a choice of plans that include parts only, parts and labor, or parts, labor and travel coverage. Encompass protection plans are available for your QSM engine with your choice of up to 5 years of extended coverage with unlimited hours. 5-year to 7-year coverage is available for up to 6,000 hours of operation.

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

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

A \$200 deductible applies per service visit after the expiration of the base warranty.

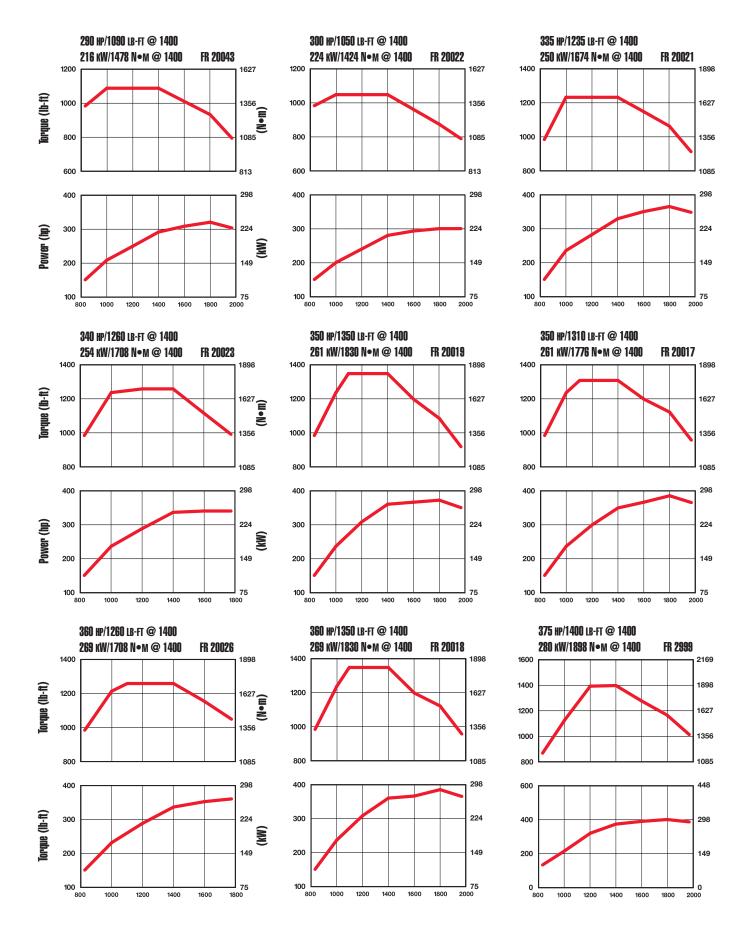


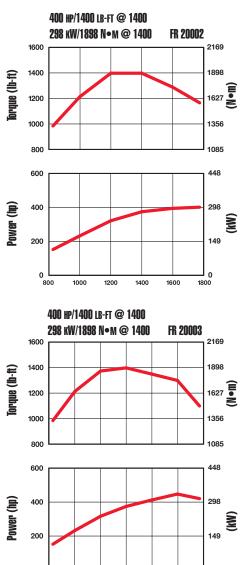
Every Question. Answered.

- 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). For customers in Europe, the Middle East and Africa, call +44 (0) 1327 886464 or e-mail to cabo.customerassistance@cummins.com.
- Cummins E-Mail For online assistance to Cumminsrelated questions, click on the Contact Us link in the header at everytime.cummins.com.
- Cummins Online Registration Register all your Cummins engines quickly and easily at everytime.cummins.com to ensure quality parts and service for your engine.

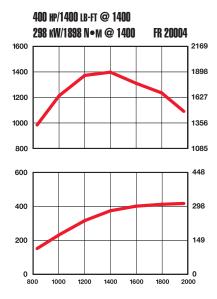


TOROUE AND POWER CURVES.













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