



EVERYTM RULE. REWRITTEN.

QSB3.3



**FOR INDUSTRIAL APPLICATIONS
TIER 3/STAGE IIIA**

FOR INDUSTRIAL APPLICATIONS.



Cummins new QSB3.3 doesn't just contradict conventional thinking about compact power – it rewrites the rules. The QSB3.3 delivers up to 110 horsepower (82 kW) in a much smaller and lighter package than any 4.0- to 4.5-liter engine. Plus, it has the inherent durability you've come to expect from larger Cummins engines.

With the QSB3.3, you get premium performance spanning the 80-110 hp (60-82 kW) range from a highly compact, economical engine. It combines the proven reliability of the B3.3 with the performance-enhancing capability of Cummins Quantum System electronic controls and a High Pressure Common Rail fuel system. Features such as auto-derate engine protection, rapid diagnostics, easier cold starts and faster load acceptance bring significant operating benefits. Just as important, the engine retains the fuel efficiency and minimal service requirements of the B3.3, offering the same low operating costs.

Not only does the QSB3.3 meet Tier 3/Stage IIIA emissions, it also sets new standards of engine sociability with exceptionally low noise and vibration. Cummins advanced in-cylinder combustion eliminates the need for complicated emissions solutions – and it is robust enough to operate safely on fuel with high sulfur content anywhere in the world.



Ratings

ENGINE MODEL	ADVERTISED HP (KW) @ RPM	PEAK TORQUE LB-FT (N•M) @ RPM
QSB3.3 110*	110 (82) @ 2400	304 (412) @ 1400
QSB3.3 99	99 (74) @ 2600	304 (412) @ 1400
QSB3.3 99	99 (74) @ 2200	304 (412) @ 1400
QSB3.3 85	85 (63) @ 2600	274 (371) @ 1400
QSB3.3 80	80 (60) @ 2200	274 (371) @ 1400

*Restricted rating.

All ratings are intermittent unless otherwise noted. Additional ratings may be available. Check with your Cummins distributor or dealer. All ratings are Tier 3 capable.

Specifications*

ADVERTISED HORSEPOWER	80-110 HP	60-82 KW
PEAK TORQUE	274-304 LB-FT	371-412 N•M
NUMBER OF CYLINDERS	4	
BORE AND STROKE	3.74 IN X 4.53 IN	95 MM X 115 MM
OIL SYSTEM CAPACITY	8.5-12.7 U.S. QT	8-12 L**
COOLANT SYSTEM CAPACITY***	4.9 U.S. QT	4.6 L**
ASPIRATION	CHARGE AIR COOLED	
LENGTH	27.7 IN	702 MM
WIDTH	24.3 IN	616 MM
HEIGHT	29.9 IN	760 MM
WEIGHT (DRY)	585 LB	265 KG

*No customer options

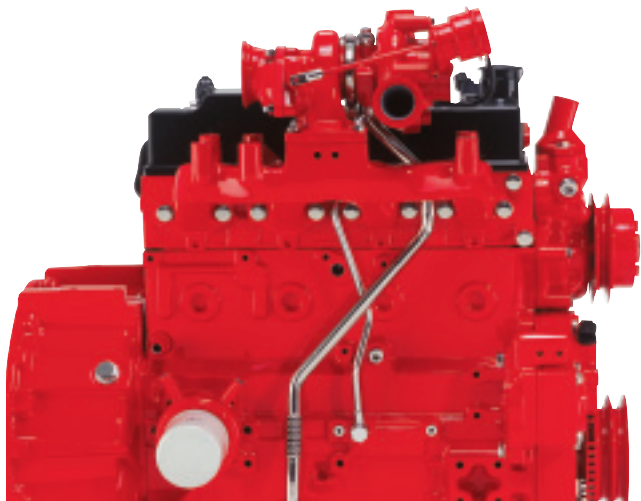
**L = Liters/Litres

***For engine only

Features And Benefits.

The advanced features of the QSB3.3 provide many benefits whether you are powering a skid steer loader, forklift, aerial work platform, mini-excavator, backhoe loader, compaction equipment, sweeper, commercial mower, genset or welder:

- High Pressure Common Rail Fuel System – Dramatically reduces engine noise while providing more responsive power and better fuel efficiency at every rpm. The fuel system is capable of delivering high injection pressure of 800-1100 bar (11,600-16,000 psi).
- In-Cylinder Combustion Technology – Meets Tier 3/ Stage IIIA emissions standards without external components; is compatible with high-sulfur fuels for worldwide use.
- Heavy-Duty Durability – The camshaft, crankshaft and rods are all made of forged-steel, and the pistons are a one-piece aluminum design for strength and durability.
- Full-Authority Electronic Controls – Optimize engine performance and provide seamless integration with other components. Include advanced diagnostics.
- Cast-Iron Cylinder Block – Parent bore design with deep skirts and structural ribs to increase stiffness and resist torsional stresses.
- Two-Valve Crossflow Cylinder Head – Designed to improve breathing and resist thermal fatigue.
- Simple Wastegated Turbocharger – Wastegated for better low-speed performance and high-speed boost.



Options.

The small footprint and compact size of the QSB3.3 make it an excellent fit for a wide variety of equipment.

Options for the QSB3.3 include:

- Fan height and ratio.
- SAE “A” PTO options.
- SAE #3 or #4 flywheel housings.
- Intake heater and other cold-start aids.
- One-side service capability.
- Hydraulic pump drive with your choice of tooth splines.
- Front or rear sump oil pan.
- And more.

See your local Cummins distributor or dealer for a complete listing.

Maintenance Intervals.

Minimum maintenance has been designed into every QSB3.3 engine, with oil changes at up to 500-hour/ 6-month intervals. To make service even easier, the lube filter, fuel filter, oil fill (top or side) and dipstick can all be located on the same side.

Cummins PowerMatch.

PowerMatch helps OEMs optimize engine performance to lower fuel consumption, increase operator satisfaction, improve equipment life and protect the customer's investment. Advanced electronics are used to enhance power curves and trim ratings, matching the duty cycle while taking into account 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.

Cummins Advisor.

Advisor recommends the best engine and rating match for the equipment and operating conditions based on load factors, climates, duty cycle and equipment usage. 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 allows changes while the equipment design is still “on paper,” ensuring optimum performance while minimizing costs.



Base Warranty.

QSB3.3 engines come with a full 2-year/2,000-hour warranty that covers all Cummins branded components, including electrics such as starters and alternators. Major components coverage continues into the third year, up to 3,000 hours of operation.



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.

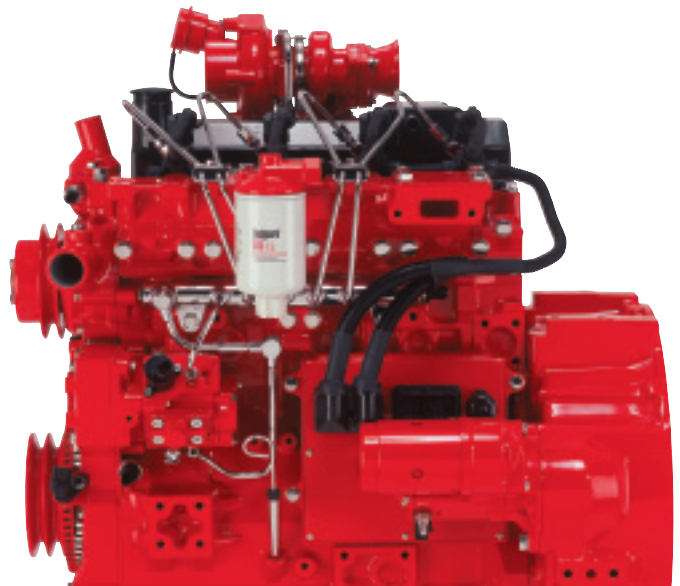
Step Three: Major components coverage including block, crankshaft, camshaft and rods on all products for the third year or up to 3,000 hours of operation. Total hours are cumulative from the time the engine goes in service.

Encompass Extended Coverage.

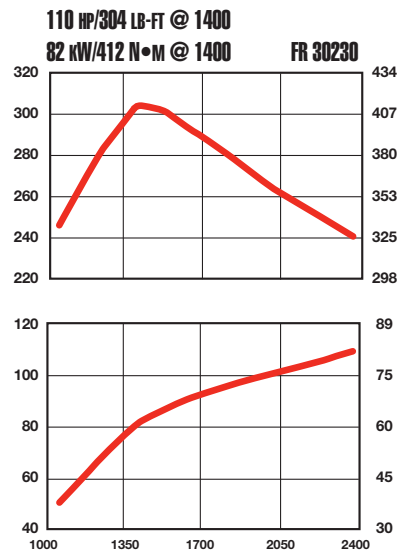
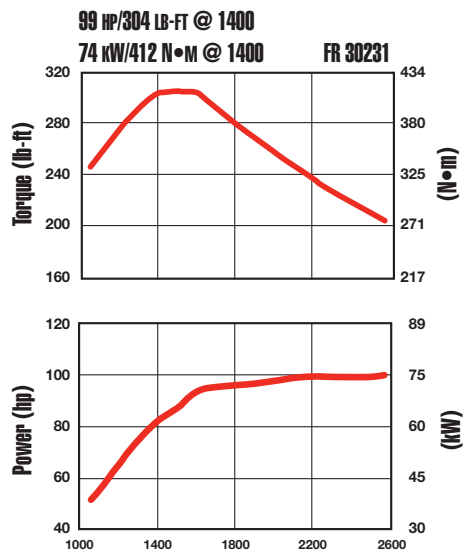
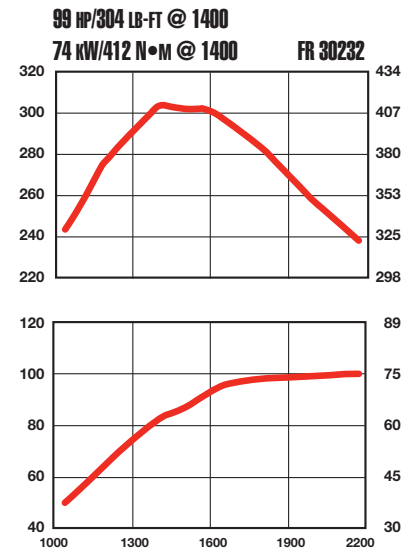
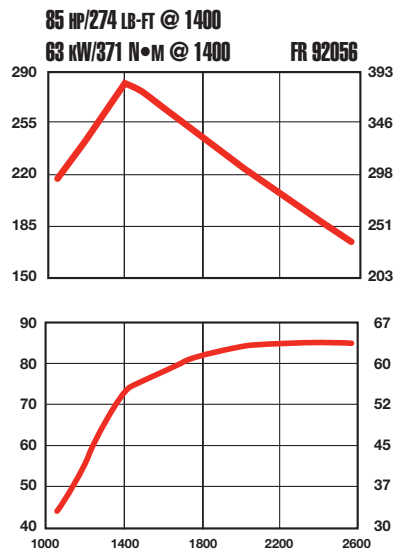
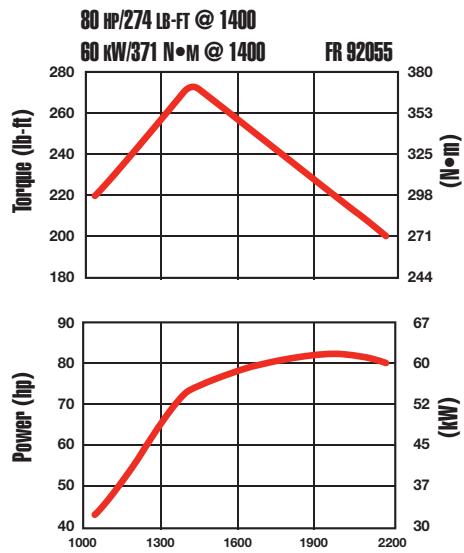
Encompass protection plans are available with your choice of 3-year/3,000-hour, 4-year/4,000-hour or 5-year/5,000-hour coverage options covering parts and labor. For additional details, please ask to see Bulletin 3624570.

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 the Customer Assistance Center on +44 (0) 1327 886464 or e-mail to cabo.customerassistance@cummins.com.
- Cummins E-Mail – For online assistance to Cummins-related 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.



TORQUE AND POWER CURVES.





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