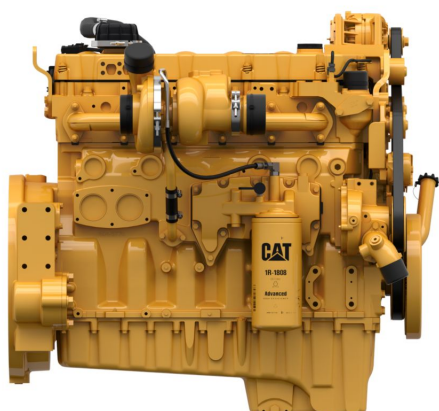




The Cat® C9.3B Industrial Diesel Engine is offered in ratings ranging from 230-310 kW (308-416 bhp) @ 1800-2200 rpm. These ratings meet China Nonroad Stage III, Brazil MAR-1, and UN R96 Stage IIIA emission standards. The C9.3B engines are ideal choices to power applications in agriculture, aircraft ground support, construction, forestry, general industrial, materialhandling, and mining.

Specifications

Power Rating		
Maximum Power	310 kW	416 HP
Maximum Torque	1810 Nm @ 1400 rpm	1335 lb-ft @ 1400 rpm
Rated Speed	1800-2200 rpm	
Minimum Power	230 kW	308 HP

Emission Standards	
Emissions	China Nonroad Stage III, Brazil MAR-1, UN ECE R96 Stage IIIA

General		
Engine Configuration	Inline 6, 4-Stroke-Cycle Diesel	
Bore	115 mm	4.5 in
Stroke	149 mm	5.9 in
Displacement	9.3 l	567.5 in ³
Compression Ratio	16.5:1	
Aspiration	Turbocharged Aftercooled (TA)	
Combustion System	Direct Injection	
Rotation from Flywheel End	Counterclockwise	
Aftertreatment	-	

Engine Dimensions - Approximate		
Length	1125 mm	44.3 in
Width	791 mm	31.1 in
Height	1068 mm	42 in
Weight - Net Dry - Basic Operating Engine Without Optional Attachments	865 kg	1907 lb

Benefits and Features

High Performance

The C9.3B delivers expanded capability with 19% more power and 16% more torque than the previous 8.8 liter platform for less regulated countries (comparison for IND-C rating).

Reliable, Quiet and Durable Power

The C9.3B engine leverages a core engine with over 200 million off-highway hours in the field and is manufactured in a world-class facility; assuring reliability, quiet operation and many hours of productive life.

Optimized Installation

- The C9.3B for LRC offers platform commonality with the C9.3B for highly regulated countries to reduce cost of installation and support a global customer base by sharing a common core engine, offering similar machine interfaces and controls architecture.
- High power density, up to 33.3 kW/L (44.7 hp/L) gives original equipment manufacturers (OEMs) the ability to downsize their engine installation without sacrificing performance.
- Fully configurable engine options and industrial power unit (IPU) available from factory to avoid significant design, validation, and manufacturing costs.

Low Cost Maintenance

- Worldwide service delivers ease of maintenance and simplifies the servicing routine.
- Standard service intervals of 500 hours under normal operating conditions.
- The S•O•SSM program is available from your Cat dealer to optimize oil change intervals.
- Ideal for high-hour applications over 10,000 hours.
 - Remote mount options for serviceable items such as oil and fuel filters.

Low Operating Costs

C9.3B development and calibration strategies have yielded significant improvements in fuel consumption, minimizing the total cost of ownership.

World-class Product Support Offered Through Global Cat Dealer Network

- Scheduled maintenance, including SOSSM sample
- Customer Support Agreements (CSA)
- Caterpillar Extended Service Coverage (ESC)
- Superior dealer service network
- Extended dealer service network through the Cat Industrial Service Distributor (ISD) program

Standard Equipment

Air Inlet System

- Turbocharged: system with front and rear exhaust configurations
- Air-to-Air Aftercooled

Control System

- Configurable software features
- Engine monitoring system SAE J1939 broadcast and control

- Electronic control system with single on-engine ECM
- Over-foam wiring harness
- Automatic altitude compensation

Cooling System

- Centrifugal water pump
- Guidance on cooling system design available through your dealer to ensure equipment reliability

Flywheels and Flywheel Housing

- Available SAE No. 1 and No. 2 flywheel/housings

Fuel System

- Electronic high pressure common rail
- Primary fuel filter
- Secondary and tertiary fuel filters
- Fuel transfer pump
- Electronic fuel priming

Lube System

- Open crankcase ventilation system (OCV) with fumes disposal (optional OCV filter system)
- Oil cooler
- Oil filler
- Lube oil filter
- Choice of front, rear or center sumps
- Oil dipstick
- Gear driven oil pump

General

- Vibration damper
- Lifting eyes
- Paint: Caterpillar yellow, with optional colors available at request

The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, ADEM, EUI, S•O•S, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.



280 bkW (375 bhp) @ 2200 rpm

Rating Type: IND-B RATING

Emissions: China Nonroad Stage III



Image shown may not reflect actual configuration

C9.3B
DITA
280 bkW (375 bhp) @ 2200 rpm

	Metric	English
General Engine		
Power Rating	280 kW	375 hp
Number of Cylinders	6	
Bore	115 mm	4.5 in
Stroke	149 mm	5.9 in
Displacement	9.3 L	566.7 cu in.
Compression Ratio	16.5 : 1	

RATING DEFINITIONS AND CONDITIONS

IND-B RATING:For service where power and/or speed are cyclic (time at full load not to exceed 80%).

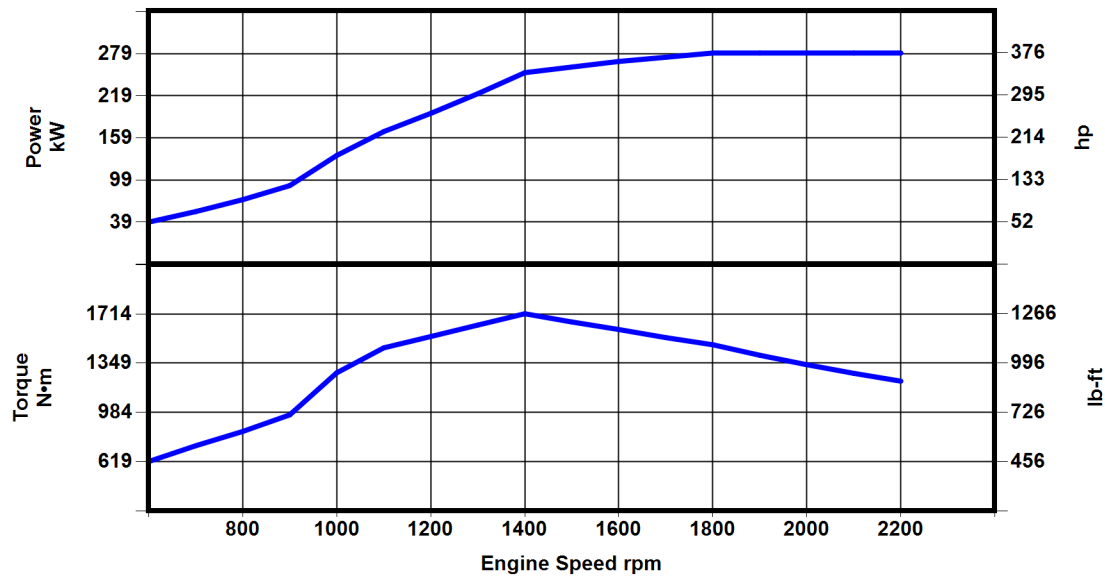
Diesel Engines – up to 7.1 liter All rating conditions are based on ISO/TR14396, inlet air standard conditions with a total barometric pressure of 100 kPa (29.5 in Hg), with a vapor pressure of 1 kPa (.295 in Hg), and 25°C (77°F). Performance measured using fuel to EPA specifications in 40 CFR Part 1065 and EU specifications in Directive 97/68/EC with a density of 0.845-0.850 kg/L @ 15°C (59°F) and fuel inlet temperature 40°C (104°F).

Diesel Engines – greater than 7.1 liter All rating conditions are based on SAE J1995, inlet air standard conditions of 99 kPa (29.31 in Hg) dry barometer and 25°C (77°F) temperature. Performance measured using a standard fuel with fuel gravity of 35° API having a lower heating value of 42,780 kJ/kg (18,390 btu/lb) when used at 29°C (84.2°F) with a density of 838.9 g/L.

280 kW (375 bhp) @ 2200 rpm

Rating Type: IND-B RATING

Emissions: China Nonroad Stage III



Engine Speed rpm	Engine Power kW	Engine Power bhp	Torque N·m	Torque lb-ft
2200	280	375	1215	896
2100	280	375	1273	939
2000	280	375	1337	986
1900	280	375	1407	1038
1800	280	375	1485	1096
1700	274	367	1538	1134
1600	268	359	1598	1179
1500	260	348	1654	1220
1400	252	337	1715	1265
1300	222	298	1631	1203
1200	194	261	1546	1141
1100	168	226	1462	1078
1000	134	179	1277	942
900	91	122	965	712
800	71	95	842	621
700	54	72	736	542
600	39	52	619	456

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