



C13 ACERT™ Industrial Engine

China Stage II

310-328 kW/415-440 bhp @ 1800-2100 rpm

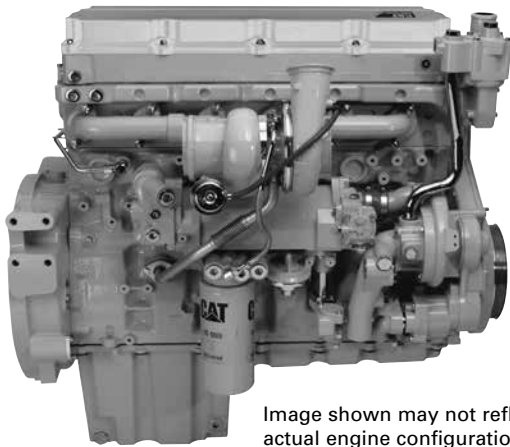


Image shown may not reflect actual engine configuration

CAT® ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle Diesel

Bore	130 mm (5.12 in)
Stroke	157 mm (6.18 in)
Displacement	12.5 L (763 in ³)
Aspiration	Turbocharged Aftercooled
Compression Ratio	17.3:1
Combustion System	Direct Injection
Rotation (from flywheel end) ...	Counterclockwise
Capacity for Liquids	
Cooling System	
(engine only)	14.2 L (3.8 U.S. gal)
Lube System (refill)	34 L (9 U.S. gal)
Engine Weight, Net Dry	
(approximate)	1138 kg (2509 lbs)

FEATURES

Emissions

Meets China Stage II, U.S. EPA Tier 2 Equivalent, EU Stage II Equivalent emission standards.

Reliable, Quiet, and Durable Power

World-class manufacturing capability and processes coupled with proven core engine designs assure reliability, quiet operation, and many hours of productive life.

High Performance

Simple and efficient turbocharger provides optimal air management and improved fuel efficiency.

Fuel Efficiency

Fuel consumption optimized to match operating cycles of a wide range of equipment and applications.

Fuel & Oil

Cat® engines are designed to accommodate B20 biofuel. Secondary and tertiary fuel filters provide improved fuel system durability. Your Cat dealer can provide more information regarding fuel and oil.

Broad Application Range

Industry-leading range of factory configurable ratings and options for agricultural, material handling, construction, mining, aircraft ground support, and other industrial applications.

Package Size

Exceptional power density enables standardization across numerous applications. Multiple installation options minimize total package size.

Quality

Every Cat engine is manufactured to stringent standards in order to assure customer satisfaction.

World-class Product Support Offered Through Global Cat Dealer Network

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

Web Site: For additional information on all your power requirements, visit www.cat-industrial.com.



C13 ACERT Industrial Engine

China Stage II
310-328 bkW/415-440 bhp @ 1800-2100 rpm

STANDARD ENGINE EQUIPMENT

Air Inlet System

Turbocharged Air-to-Air Aftercooled (ATAAC)

Control System

Electronic governing, PTO speed control
Programmable ratings
Cold mode start strategy
Automatic altitude compensation
Power compensation for fuel temperature
Programmable low and high idle and top engine limit
Electronic diagnostics and fault logging
Engine monitoring system
J1939 Broadcast (diagnostic and engine status)
ADEM™ A4

Cooling System

Thermostats and housing, vertical outlet
Jacket water pump, centrifugal
Water pump, inlet

Exhaust System

Exhaust manifold, dry
Front facing exhaust

Flywheels and Flywheel Housing

SAE No. 1 flywheel housing

Fuel System

MEUI™ injection
Primary fuel filter, water separator
Fuel filter, secondary (2 micron)
Fuel filter, tertiary (2 micron)
Fuel transfer pump
Fuel priming pump

Lube System

Crankcase breather
Oil cooler
Oil filler
Oil filter
Oil pan front sump
Oil dipstick
Oil pump (gear driven)

General

Paint, Caterpillar yellow
Vibration damper
Lifting eyes



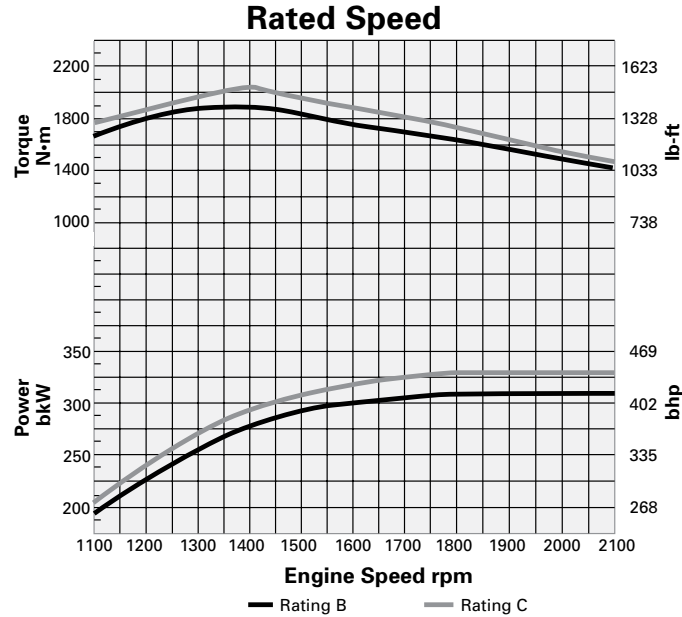
C13 ACERT Industrial Engine

China Stage II

310-328 bkW/415-440 bhp @ 1800-2100 rpm

PERFORMANCE DATA

Turbocharged Aftercooled — 1800-2100 rpm



Speed Range

Rating	Speed rpm	Peak Power bkW	Peak Power bhp	Speed rpm	Peak Torque N·m	Peak Torque lb-ft
B	2100	310	415	1400	1896	1399
C	2100	328	440	1400	2010	1482

RATING DEFINITIONS AND CONDITIONS

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

IND-C (Intermittent) is the horsepower and speed capability of the engine where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

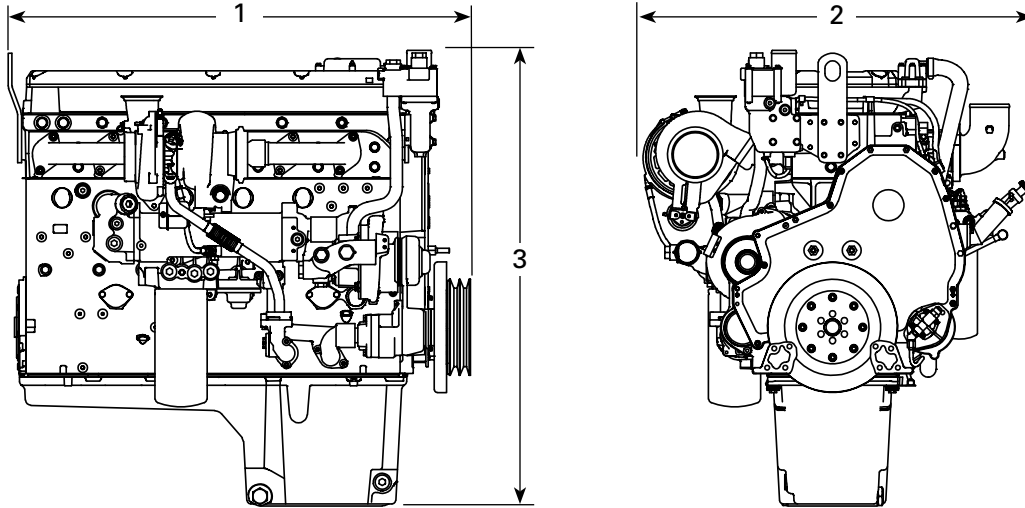
Rating Conditions are based on SAE J1995, inlet air standard conditions of 99 kPa (29.31 in Hg) dry barometer and 25°C (77°F) temperature. Performance measured using a standard fuel with fuel gravity of 35° API having a lower heating value of 42 780 kJ/kg (18,390 btu/lb) when used at 29°C (84.2°F) with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



C13 ACERT Industrial Engine

China Stage II
310-328 kW/415-440 bhp @ 1800-2100 rpm

DIMENSIONS



(1) Length	1295 mm (50.98 in)
(2) Width	1054 mm (41.5 in)
(3) Height	1186 mm (46.69 in)

Note: Final dimensions dependent on selected options.

Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, ACERT, S•O•S, MEUI, "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.