



**IMAGE NOT
AVAILABLE**

CAT® ENGINE SPECIFICATIONS

I-6, 4-Stroke-Cycle Diesel

Bore	105 mm (4.13 in)
Stroke	135 mm (5.3 in)
Displacement	7.01 L (427.7 in ³)
Aspiration	Turbocharged-Aftercooled
Compression Ratio	16.8:1
Combustion System	Direct Injection
Rotation (from flywheel end) ...	Counterclockwise
Cooling System	Liquid
Total Lubrication	
Capacity	13-16 L (3.4-4.2 U.S. gal)
Total Coolant Capacity	15.2 L (4 U.S. gal)
Dry Weight	506 kg (1115 lbs)

FEATURES

Emissions

Meets China Stage II, U.S. EPA Tier 3 equivalent, EU Stage IIIA 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. No additional fluids or additives are required, which lowers operating costs.

Fuel & Oil

Cat® engines are designed to accommodate B20 biofuel. 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, materials-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. Ideal for equipment with narrow engine compartments.

Low-Cost Maintenance

Worldwide service delivers ease of maintenance and simplifies the servicing routine. 500-hour oil change intervals enable low-cost maintenance. Many service items have a choice of location on either side of the engine to enable choice of service access. The S•O•SSM program is available from your Cat dealer to determine oil change intervals and provide optimal performance.

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•S 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

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

STANDARD ENGINE EQUIPMENT

Air Inlet

Standard air cleaners

Control System

Full electronic control system, all connectors and wiring looms waterproof and designed to withstand harsh off-highway environments, flexible and configurable software features and well supported SAE J1939 CAN bus enables highly integrated machines

Cooling System

Top tank temperature 108°C (226°F) as standard to minimize cooling pack size, 50:50 water glycol mix, detailed guidance on cooling system design and validation available to ensure machine reliability

Flywheels and Flywheel Housing

Wide choice of drivetrain interfaces, including SAE1, SAE2 or SAE3 configurations

Fuel System

Electronic high pressure common rail, ACERT™ Technology, innovative filter design to ensure maximum protection of the engine.

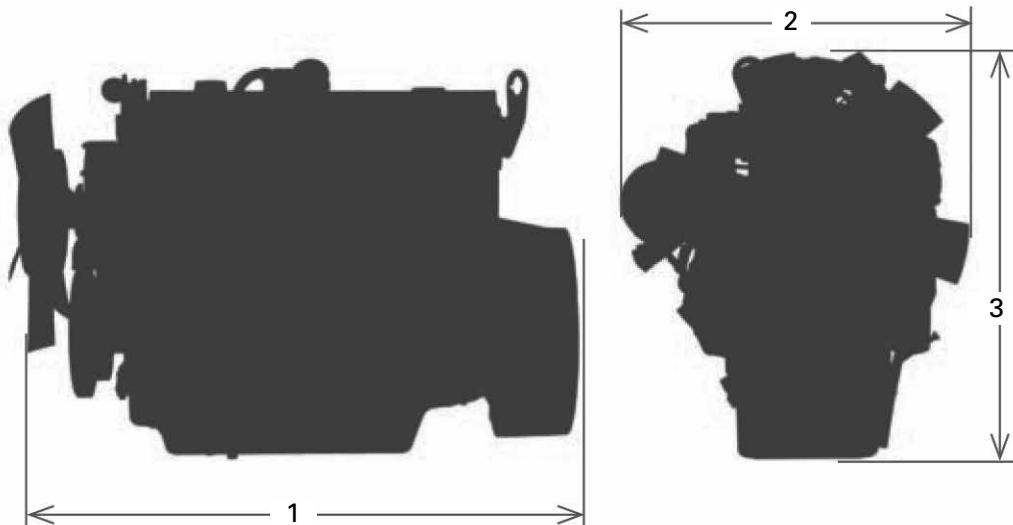
Lube System

Wide choice of sumps for different applications

Power Take Off

SAE A or SAE B flanges on left-hand side. Right-hand side twin PTO also available. Engine power can also be taken from the front of the engine on some applications, factory fitted compressors are also available.

DIMENSIONS



(1) Length – 1050 mm (36.5 in)

(2) Width – 668 mm (26.2 in)

(3) Height – 817 mm (32.2 in)

Note: Final dimensions dependent on selected options



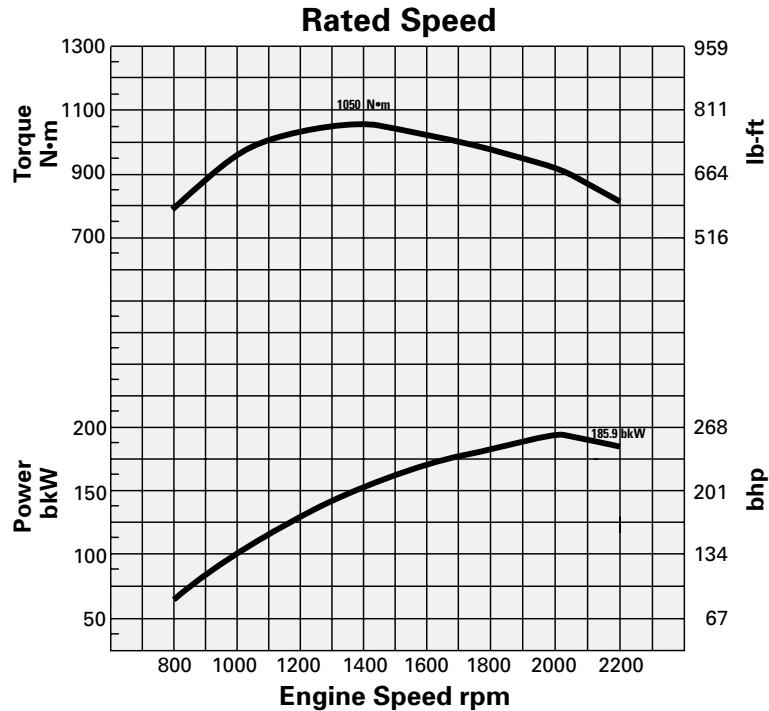
C7.1 ACERT™ Industrial Engine

China Stage II

116.5-205 bkW/156.2-274.9 bhp @ 2200 rpm

PERFORMANCE DATA

Turbocharged-Aftercooled — 2200 rpm



Speed Range

Rating	Speed rpm	Peak Power bkW	Peak Power bhp	Speed rpm	Peak Torque N·m	Peak Torque lb-ft
C	2200	116.5	156.2	1400	706	520.7
C	2200	129.0	173.9	1400	840	619.5
C	2200	129.0	173.9	1400	840	619.5
C	2200	151.0	202.5	1400	922	680.0
C	2200	159.0	213.0	1400	975	719.1
C	2200	168.0	225.3	1400	1028	758.2
C	2200	185.9*	249.4	1400	1050	774.4
C	2200	205.0	274.9	1400	1050	774.4

*Curve shown

RATING DEFINITIONS AND CONDITIONS

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%).

Additional ratings are available for specific customer requirements. Consult your Cat dealer.

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.

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, "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.