



Image shown may not reflect actual engine configuration

CAT® ENGINE SPECIFICATIONS

V-12, 4-Stroke-Cycle Diesel

Bore	137.2 mm (5.4 in.)
Stroke	152.4 mm (6.0 in.)
Displacement	27 L (1649.5 in ³)
Aspiration	Turbocharged Aftercooled
Compression Ratio	16:1
Combustion System	Direct Injection
Rotation (from flywheel end) ...	Counterclockwise
Capacity for Liquids	
Cooling System	67.9 L (71.7 U.S. qts.)
Lube Oil System (refill)	68 L (71.9 U.S. qts.)
Engine Weight, Net Dry	
(approximate)	3004 kg (6625 lbs.)

FEATURES

Emissions

Designed to meet 2011 EPA (U.S.) Tier 4 Interim emissions requirements.

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 side-mounted turbochargers — 1 per bank

Fuel Efficiency

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

Broad Application Range

Industry leading range of factory configurable ratings and options for agricultural, materials-handling, construction, mining, forestry, waste, and other industrial applications.

Package Size

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

Low-Cost Maintenance

Worldwide service availability improves ease of maintenance and simplifies the servicing routine. Service intervals at 250 hours are standard. 500-hour service interval is optional. No aftertreatment required.

Testing

Every Cat® engine is quality tested to ensure proper engine performance.

World-class Product Support Offered Through Global Cat Dealer Network

- Scheduled maintenance
- 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.

STANDARD ENGINE EQUIPMENT

Air Inlet System

Turbocharged air-to-air aftercooled

Control System

Electronic control system, over-foam wiring harness, automatic altitude compensation, power compensated for fuel temperature, configurable software features, engine monitoring system
SAE J1939 broadcast

Cooling System

Thermostats and housing, vertical outlet; jacket water pump, centrifugal; water pump, inlet

Exhaust System

Exhaust manifold, dry; optional exhaust outlet

Flywheels and Flywheel Housing

SAE No. 0 or SAE No. 1 flywheel housing

Fuel System

MEUI injection; fuel filters, secondary (2 micron high performance); fuel transfer pump; fuel priming pump, electric

Lube System

Crankcase breather, oil cooler, oil filler, oil filter, oil pan rear sump, oil dipstick, oil pump (gear driven)

Power Take Off

SAE A, B, C, D, E, or F drives available, engine power can also be taken from front of the engine on some applications

General

Paint: Cat yellow; vibration damper; lifting eyes

DIMENSIONS

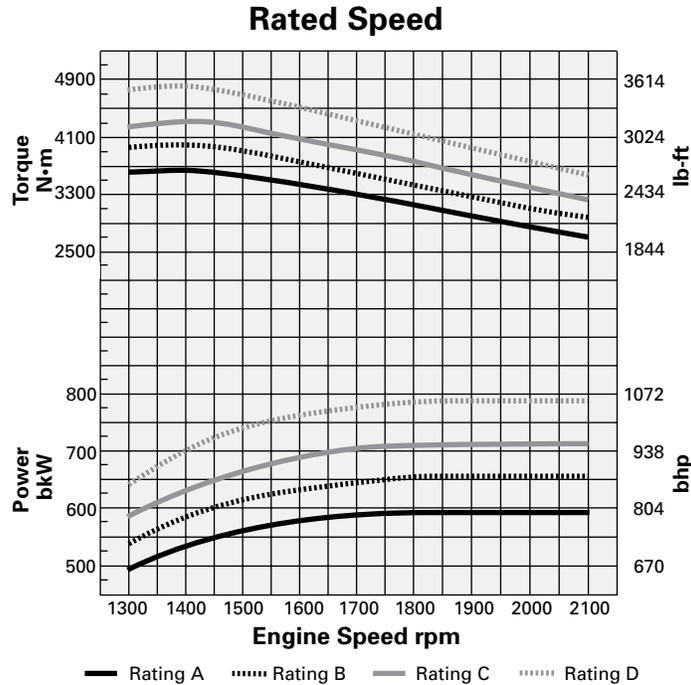
Dimension drawings not currently available.

(1) Length — 1874 mm (73.78 in.) (2) Width — 1600 mm (62.99 in.) (3) Height — 1370 mm (53.94 in.)

Note: Final dimensions dependent on selected options

PERFORMANCE DATA — PRELIMINARY

Turbocharged Aftercooled — 1800-2100 rpm



Peak Power and Torque

Rating	Speed rpm	Peak Power bkW	Peak Power bhp	Speed rpm	Peak Torque N·m	Peak Torque lb-ft
A	2100	597	800	1400	3657	2697
B	2100	653	875	1400	4000	2950
C	2100	709	950	1400	4341	3202
D	2100	783	1050	1400	4798	3539

RATING DEFINITIONS AND CONDITIONS

IND-A (Continuous) for heavy-duty service where the engine is operated at maximum power and speed up to 100% of the time without interruption or load cycling.

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%).

IND-D for service where maximum power is required for periodic overloads.

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

Engine Performance Diesel Engines — 7 liter and higher 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, ADEM, "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.