



C27 ACERT™ Industrial Engine

Tier 2
709 bkW/950 bhp @ 1800-2100 rpm

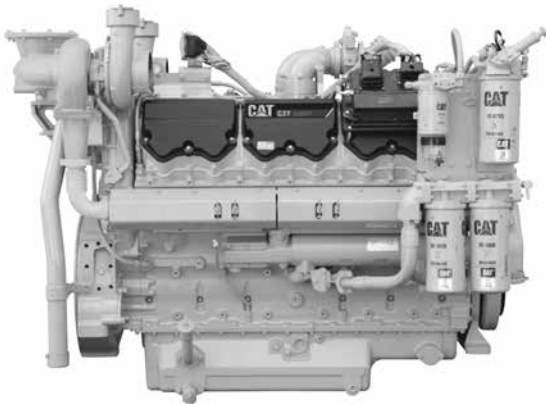


Image shown may not reflect
actual engine configuration

CAT® ENGINE SPECIFICATIONS

V-12, 4-Stroke-Cycle Diesel

Bore 137.2 mm (5.4 in)
Stroke 152.4 mm (6.0 in)
Displacement 27.03 L (1649.47 in³)
Aspiration Turbocharged Aftercooled
Compression Ratio..... 16.5:1
Rotation (from flywheel end) ... Counterclockwise
Engine Weight, Net Dry
(approximate)..... 2946 kg (6495 lbs)

FEATURES

Emissions

Meets U.S. EPA Tier 2 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 dual turbochargers — one per bank.

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. 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

Ideal for equipment with narrow engine compartments. 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)
- 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 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
Optional exhaust outlet

Flywheels and Flywheel Housing

SAE No. 1 flywheel housing

Fuel System

MEUI injection
Fuel filter, secondary (2 micron high performance)
Fuel transfer pump
Fuel priming pump
ACERT™ Technology

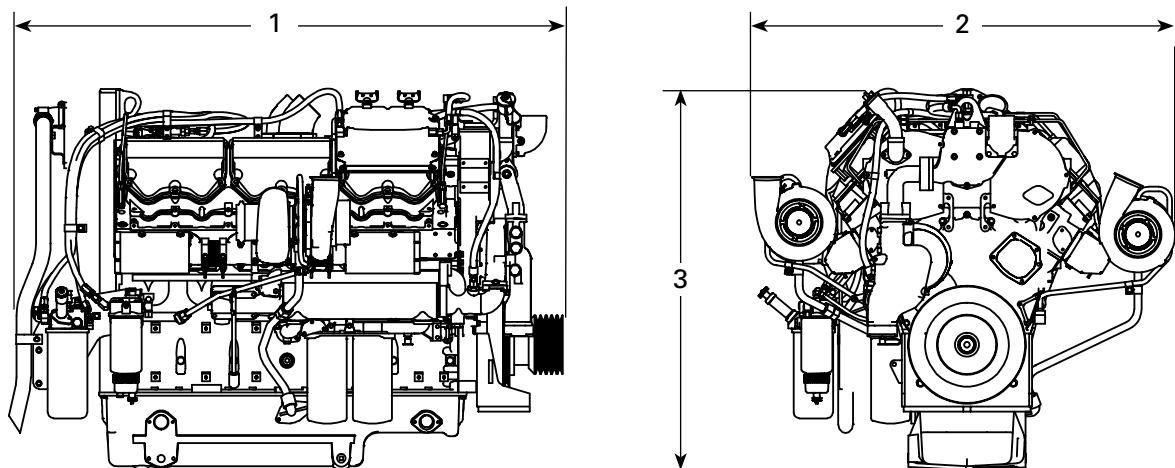
Lube System

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

DIMENSIONS



(1) Length	1917 mm (75.5 in)
(2) Width	1464 mm (57.6 in)
(3) Height	1321 mm (52 in)

Note: Final dimensions dependent on selected options.

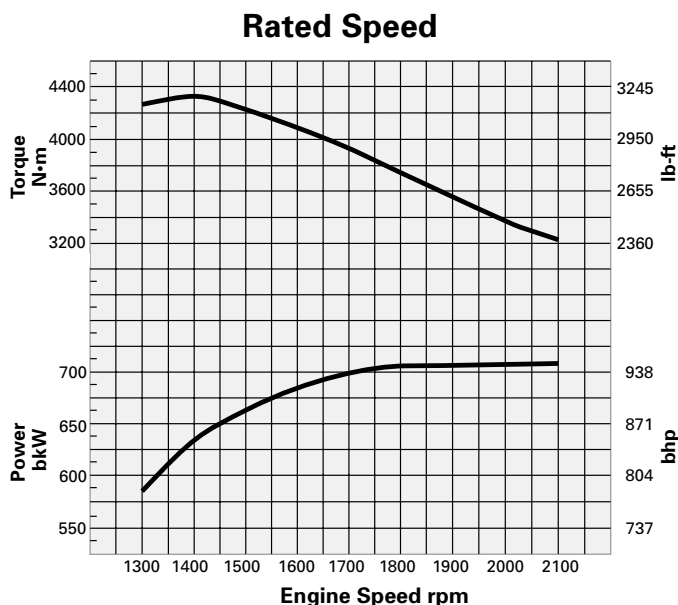


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PERFORMANCE DATA

IND-C (Intermittent) – DM96034-00



Speed Range

Rating	Speed rpm	Peak Power kW	Peak Power bhp	Speed rpm	Peak Torque N-m	Peak Torque lb-ft
C	2100	709	950	1400	4341	3202

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%).

Diesel Engines — 7 liter and higher

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.

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, 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.