



The new electronic Cat® C2.2 Industrial Diesel Engines, with common rail fuel system, deliver impressive performance throughout a wide speed range with exceptional power density. Ultracompact package size and extensive options make them ideal for agriculture, aerial lifts, compressors, construction, general industrial, irrigation equipment, material handling, mobile earthmoving equipment, mobile light towers, turf and landscaping, underground mining equipment, and welders.

Specifications

Power Rating		
Minimum Power	36.4 kW	48.8 BHP
Maximum Power	50 kW	67.1 BHP
Rated Speed	2800 rpm	

Emission Standards	
Emissions	U.S. EPA Tier 4 Final, EU Stage IIIB

General	
Engine Configuration	In-Line 4, 4-Stroke-Cycle Diesel
Bore	84 mm (3.3 in)
Stroke	100 mm (3.9 in)
Displacement	2.2 L (135 in ³)
Aspiration	Turbocharged (T) or Turbocharged-Aftercooled (TA)
Compression Ratio	18:1
Combustion System	Direct Injection
Rotation from Flywheel End	Counterclockwise
Cooling System - Capacity	4.3 L (4.5 qt)
Lube System - Refill	9.3 L (9.8 qt)

Engine Dimensions - Approximate	
Height	736 mm (28.9 in)
Length	764 mm (30.07 in)
Weight - Net Dry - Basic Operating Engine Without Optional Attachments	230 kg (507 lbs)
Width	545 mm (21.5 in)

Aftertreatment Dimensions - Approximate	
Diameter	155 mm (6.1 in)
Length	408.4 mm (16.07 in)
Weight	5.8 kg (12.79 lb)

Benefits and Features

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

Substantial torque rise delivers impressive performance throughout a wide speed range while maintaining low operating costs.

Fuel Efficiency

Fuel consumption optimized to match operating cycles of a wide range of equipment and applications while maintaining low operating costs.

Broad Application Range

Industry leading ratings and options for compact construction equipment, material handling, and other industrial applications. The engine is designed to require no special training or operation, which makes it particularly suitable for machines that are used in rental fleets.

Package Size

Ultra-compact package size and high power density ensures ease of installation. It also allows machine manufacturers to develop smaller machines, with low weight for transport, tight turning circles for productivity, and good sight lines for safety.

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

Standard Equipment

Control System

- Alternator 12 volt 85 amp
- Starter motor 12 volt
- Glow plug starting aid, delivers heat directly to cylinder for best starting performance in cold weather
- Electronic control unit - chassis mounted
- Flexible and configurable software features and well supported SAE J1939 CAN bus enables highly integrated machines
- Wiring harness connectors and sensors are waterproof and designed to withstand harsh off-highway environments

Flywheels and Flywheel Housing



- SAE No. 4 standard flywheel housing
- Choice of flywheel weight and bolting pattern to accommodate a range of industry-standard hydraulic pumps and transmissions

Fuel System

- 2000 bar high-pressure common rail system
- Proprietary fuel filters to ensure engine protection through correct service procedures, along with water-in-fuel detection, ensures maximum machine up-time for the operator

Lube System

- Alternative oil fillers
- Spin-on lube oil filter

Power Take Off (PTO)

- SAE A PTO drive

General

- Cast iron engine block
- Cast iron exhaust manifold
- Gradeability 35° continuous
- Paint: Cat yellow

U.S. EPA Tier 4 Final, EU Stage IIIB Aftertreatment/Clean Emissions Control Equipment

- Diesel Oxidation Catalyst (DOC)

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.