



The new electronic Cat® C1.7 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	29 kW	39 BHP
Maximum Power	29 kW	39 BHP
Rated Speed	2800 rpm	

Emission Standards	
Emissions	U.S. EPA Tier 4 Final, Japan 2014 (Tier 4 Final)

General	
Engine Configuration	In-Line 3, 4-Stroke-Cycle Diesel
Bore	84 mm (3.3 in)
Stroke	90 mm (3.5 in)
Displacement	1.7L (103.7 in ³)
Aspiration	Turbocharged (T)
Compression Ratio	18:1
Combustion System	Direct Injection
Rotation from Flywheel End	Counterclockwise
Cooling System - Capacity	2.8L (2.96 qt)
Lube System - Refill	3.6L (3.8 qt)

Engine Dimensions - Approximate	
Height	736 mm (28.9 in)
Length	640 mm (25.2 in)
Weight - Net Dry - Basic Operating Engine Without Optional Attachments	190 kg (419 lbs)
Width	545 mm (21.4 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 range of factory configurable ratings and options for agricultural, material handling, construction, mining, aircraft ground support, and other industrial applications.

Package Size

Ultra-compact package size ensures ease of installation as well as exceptional power density.

World-class Product Support Offered Through Global Cat Dealer Network

- Scheduled maintenance, including SOSSM 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

Tier 4 Final Aftertreatment Features

Regeneration Free. The Diesel Oxidation Catalyst (DOC) technology provides customers with an aftertreatment solution that is as compact as possible. The aftertreatment is regeneration-free, providing a seamless operation throughout the work cycle. **Mounting.** Mounted on-engine, as standard. This will provide the simplest installation and the lowest total cost for the equipment manufacturer. An off-engine option will be offered for some equipment.

Standard Equipment

Air Inlet System

- Standard air cleaner
- Turbocharger

Control System

- Alternator 12 volt 85 amp
- Starter motor 12 volt
- Glow plug starting aid

- Electronic control unit
- Flexible and configurable software features and well supported SAE J1939 CAN bus enables highly integrated machines
- All connectors and wiring harness are waterproof and designed to withstand harsh non-road environments
- Robust reliable sensors

Cooling System

- Belt-driven coolant pump
- Coolant temperature switch
- Choice of cooling fans
- Fan drive options

Flywheel & Flywheel Housing

- Flywheel and flywheel housing options

Fuel System

- Electronic 2000 bar common rail fuel system
- Spin-on fuel filter
- Simple pintle nozzle injectors

Lube System

- Spin on oil filter
- Lube oil pressure switch
- Sump options for various applications

Power Take Off (PTO)

- SAE A PTO drive

General

- Cast iron, engine block
- Cast iron exhaust manifold options
- Paint: Caterpillar yellow, with optional colors available at request
- Induction manifold options
- Engine mounting
- Block heater provision

U.S. EPA Tier 4 Final 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.