



The Cat® C7 ACERT™ Industrial Diesel Engine is offered in ratings ranging from 168-224 bkW (225-300 bhp) @ 1800 -2200 rpm. These ratings meet China Stage II, EPA Tier 3 equivalent, and EU Stage IIIA equivalent emission standards. Industries and applications powered by C7 ACERT engines include Agriculture, Ag Tractors, Aircraft Ground Support, Bore/Drill Rigs, Chippers/Grinders, Combines/Harvesters, Compactors/Rollers, Compressors, Construction, Cranes, Crushers, Feller Bunchers, Forestry, Forklifts, General Industrial, Hydraulic Power Units, Irrigation Equipment, Loaders/Forwarders, Material Handling, Mining, Mobile Earthmoving Equipment, Mobile Sweepers, Paving Equipment, Pumps, Skidders, Specialty Ag Equipment, Sprayers, Trenchers and Underground Mining Equipment.

**Specifications**

Power Rating		
Minimum Power	168 bkW	225 BHP
Maximum Power	224 bkW	300 BHP
Rated Speed	1800-2200 rpm	

Emission Standards	
Emissions	China Stage II, U.S. EPA Tier 3 Equivalent, EU Stage IIIA Equivalent

General	
Engine Configuration	Inline 6, 4-Stroke-Cycle Diesel
Bore	110 mm (4.33 in)
Stroke	127 mm (5.0 in)
Aspiration	Turbocharged Aftercooled (TA)
Displacement	7.2 L (442 in³)
Compression Ratio	16.2:1
Combustion System	Direct Injection
Rotation from Flywheel End	Counterclockwise

Engine Dimensions - Approximate	
Height	1032 mm (40.6 in)
Length	1053 mm (41.5 in)
Weight - Net Dry - Basic Operating Engine Without Optional Attachments	588 kg (1296 lb)
Width	758 mm (29.8 in)

## 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.

### 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

Exceptional power density enables standardization across numerous applications. Multiple installation options minimize total package size. Ideal for equipment with narrow engine compartments.

### 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

## Standard Equipment

### Air Inlet System

- Turbocharged
- Air-to-Air Aftercooled

### Control System

- Electronic governing, PTO speed control
- Programmable ratings
- Automatic altitude compensation
- Power compensation for fuel temperature
- Programmable low and high idle and total engine limit
- Electronic diagnostics and fault logging
- Engine monitoring system SAE J1939 broadcast and control
- ADEM™ A4 Electronic Control Unit (ECU)

### 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

- HEUI™ injection
- Fuel filter, secondary (2 micron)
- ACERT™ Technology
- Fuel transfer pump
- Fuel priming pump

### Lube System

- Crankcase breather
- Oil cooler
- Oil filler
- Lube oil filter
- Front sump oil pan
- Oil dipstick
- Gear driven oil pump

### General

- Vibration damper
- Lifting eyes
- Cold start capability to -20° C (-4° F)
- Paint: Caterpillar yellow, with optional colors available at request

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