



The Cat® C15 ACERT™ Industrial Diesel Engine is offered in ratings ranging from 328-444 bkW (440-595 bhp) @ 1800 -2100 rpm. These ratings meet China Stage II, U.S. EPA Tier 3 equivalent, and EU Stage IIIA equivalent emission standards. Industries and applications powered by C15 ACERT engines include Agriculture, Ag Tractors, Aircraft Ground Support, Bore/Drill Rigs, Chippers/Grinders, Combines/Harvesters, Compactors/Rollers, Compressors, Construction, Cranes, Crushers, Dredgers, Forestry, General Industrial, Hydraulic Power Units, Irrigation Equipment, Loaders/Forwarders, Material Handling, Mining, Mobile Earthmoving Equipment, Paving Equipment, Pumps, Shovels/Draglines, Surface Hauling Equipment and Trenchers.

# **Specifications**

Power Rating		
Minimum Power	328 bkW	440 BHP
Maximum Power	444 bkW	595 BHP
Rated Speed		1800-2100 rpm

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

General	
Engine Configuration	Inline 6, 4-Stroke-Cycle Diesel
Bore	137.2 mm (5.4 in)
Stroke	171.4 mm (6.75 in)
Aspiration	Turbocharged Aftercooled (TA)
Displacement	15.2 L (927.56 in³)
Compression Ratio	18.0:1
Combustion System	Direct Injection
Rotation from Flywheel End	Counterclockwise

Engine Dimensions - Approximate		
Height		1226 mm (48.3 in)
Height - Approximate	1226 mm	48.3 in
Length		1377 mm (54.2 in)
Length - Approximate	1377 mm	54.2 in
Weight - Net Dry - Basic Operating Engine Without Optional Attachments		1469 kg (3239 lb)

### Industrial



Width		926 mm (36.5 in)
Width - Approximate	918.6 mm	36.2 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

# Cat® C15 ACERT™ Industrial Diesel Engine

#### Industrial



· Optional exhaust outlet

# Flywheels and Flywheel Housing

· SAE No. 1 flywheel housing

# **Fuel System**

- MEUI injection
- Fuel filter, secondary (2 micron)
- Fuel filter, tertiary (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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C15 ACERT

354 bkW (475 bhp) @ 2100 rpm



Emissions: U.S. EPA Tier 3 Nonroad Equivalent Emission Rating Type: IND-B RATING Standards (Not Currently EPA Certified)

> C15 ACERT DITA 354 bkW (475 bhp) @ 2100 rpm



Image shown may not reflect actual configuration

	Metric	English		
General Engine				
Power Rating	354 kW	475 hp		
Number of Cylinders		6		
Bore	137 mm	5.4 in		
Stroke	171 mm	6.7 in		
Displacement	15.2 L	928.0 cu in.		
Compression Ratio	18.	18.0 : 1		

## **RATING DEFINITIONS AND CONDITIONS**

IND-B RATING:For service where power and/or speed are cyclic (time at full load not to exceed 80%).

Diesel Engines — up to 7.1 liter All rating conditions are based on ISO/TR14396, inlet air standard conditions with a total barometric pressure of 100 kPa (29.5 in Hg), with a vapor pressure of 1 kPa (.295 in Hg), and 25°C (77°F). Performance measured using fuel to EPA specifications in 40 CFR Part 1065 and EU specifications in Directive 97/68/EC with a density of 0.845-0.850 kg/L @ 15°C (59°F) and fuel inlet temperature 40°C (104°F).

Diesel Engines — greater than 7.1 liter 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.

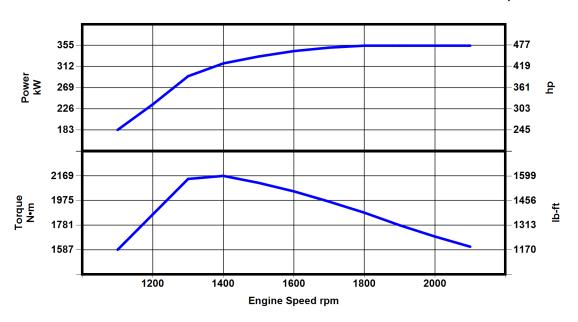


354 bkW (475 bhp) @ 2100 rpm



Rating Type: IND-B RATING

Emissions: U.S. EPA Tier 3 Nonroad Equivalent Emission Standards (Not Currently EPA Certified)



Engine Speed rpm	Engine Power bkW	Engine Power bhp	Torque N*m	Torque lb-ft
2100	354	475	1611	1188
2000	354	475	1691	1247
1900	354	475	1780	1313
1800	354	475	1879	1386
1700	350	469	1966	1450
1600	343	460	2047	1510
1500	332	445	2114	1559
1400	318	426	2169	1600
1300	292	392	2145	1582
1200	235	314	1866	1376
1100	183	245	1587	1170

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