



The Cat® C18 ACERT™ Industrial Power Unit is offered in ratings ranging from 429-470 bkW (575-630 bhp) @ 1800-2100 rpm. These ratings meet China Stage II, U.S. EPA Tier 3 equivalent and EU Stage IIIA equivalent or Noncertified emission standards. Conveniently pre-configured for a wide range of applications, the Cat® Industrial Power Unit is a complete power package containing a radiator, flywheel, alternator and alternator wiring completely preassembled for fast, straightforward installation in a number of OEM, customer and packager applications. These fuel efficient units are ready made for irrigation, industrial, mining and other pump applications.

Specifications

Power Rating		
Minimum Rating	429 bkW	575 BHP
Maximum Rating	470 bkW	630 BHP
Rated Speed		1800-2100

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

General		
Engine Configuration	Inline 6, 4-Stroke-Cycle Diesel	
Bore	145 mm (5.71 in)	
Stroke	183 mm (7.2 in)	
Displacement	18.1 L (1104.53 in³)	
Aspiration	Turbocharged Aftercooled (TA)	
Compression Ratio	16.3:1	
Rotation from Flywheel End	Counterclockwise	

Power Unit Dimensions - Approximate	
Height	1243 mm (48.9 in)
Length	1388 mm (54.6 in)
Weight - Net Dry - Standard Configuration Without Oil, Cooling, Clutch, Compressor, A/C	2197.1 kg (4843.7 lb)
Width	921 mm (36.3 in)

Benefits and Features

Reliable, Quiet and Durable Power

Cat®C18 ACERT™ Industrial Power Unit

Industrial



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 Aftercooled (429-470 bkW, 575-630 bhp)
- Twin Turbocharged Aftercooled (522-597 bkW, 700-800 bhp)
- · Air-to-Air Aftercooled

Charging System

· Charging alternator 24 volt, 50 amp

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

Cat®C18 ACERT™ Industrial Power Unit

Industrial



Fuel System

- MEUI 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

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.