



Cat C13 ACERT engines are the ideal solution for your demanding operations in the oilfield. Decades of field operation and intense research and development allow Cat C13 ACERT engines to deliver excellent performance with low operating costs and emissions. Equipment powered by C13 ACERT engines include workover rigs, pump skids, acidizing units, cementing units, blenders, and hydraulic power units. Cat engines are backed by the worldwide network of Cat dealers ready to support your operation with technical support, service, parts, and warranty. Cat C13 ACERT™ Industrial Diesel Engine. Ratings: 287-388 bkW (385-520 bhp) @ 1800-2100 rpm meet China Stage II, U.S. EPA Tier 3 equivalent or U.S. EPA Tier 2 equivalent, EU Stage IIIA equivalent or EU Stage II equivalent emission standards.

Specifications

General Specifications		
Maximum Rating	387 bkW	520 BHP
Displacement	12.5 l	760 in ³
Minimum Rating	287 bkW	385 BHP
Governor and Protection	Electronic (ADEM™ A3)	
RPM	2100 r/min	2100 r/min
Aspiration	Turbocharged-Aftercooled	
Flywheel and Flywheel Housing	SAE 1	
Flywheel Teeth	113	
Rotation from Flywheel End	Counterclockwise	
Stroke	157 mm	6.2 in
Bore	130 mm	5.1 in

Emissions	
Emissions	EPA and CARB Non-Road Mobile Tier 3, EU Stage IIIA

Dimensions		
Length	1201 mm	47.3 in
Width	1013 mm	39.9 in
Height	1186 mm	46.7 in
Weight	896 kg	1976 lb

Capacity for Liquids		
Lube Oil System - Refill	34 l	9 gal (US)
Cooling System	14.4 l	3.8 gal (US)

Benefits and Features

Custom Packaging

For any petroleum application, trust Caterpillar to meet your project needs with custom factory generator sets and mechanical packages. Cat engines, generators, controls, radiators, and transmissions can be custom designed and matched in collaboration with our local dealers to create unique solutions. Custom packages are globally supported and are covered by a one year warranty after startup.

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Full Range of Attachments

Large variety of factory-installed engine attachments reduces packaging time

Testing

Every engine is full-load tested to ensure proper engine performance.

Product Support Offered Through Global Cat Dealer

More than 2,200 dealer outlets - Cat factory-trained dealer technicians service every aspect of your petroleum engine - Cat parts and labor warranty - Preventive maintenance agreements available for repair-before-failure options - S•O•SSM program matches your oil and coolant samples against Caterpillar set standards to determine: - Internal engine component condition - Presence of unwanted fluids - Presence of combustion by-products - Site-specific oil change interval

Over 80 Years of Engine Manufacturing Experience

Ownership of these manufacturing processes enables Caterpillar to produce high quality, dependable products.

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Web Site

For all your petroleum power requirements, visit www.catoilandgasinfo.com.

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Standard Equipment

Air Inlet System

- Turbocharger, mid-mounted
- Air inlet elbow 90°, 104.5 mm (4.11" OD) hose connection

Control System

- Electronic governing, PTO speed control
- Programmable ratings
- Cold mode start strategy
- Automatic altitude compensation
- Power compensation for fuel temperature
- Programmable low and high idle and TEL
- Electronic diagnostics and fault logging
- Engine monitoring system – speed, temperature, pressure

- J1939 Broadcast – diagnostic and engine status

Cooling System

- Thermostats and housing
- Jacket water pump – gear-driven
- Front water pump inlet

Exhaust System

- Exhaust manifold – dry
- Front turbo exhaust

Flywheels and Flywheel Housings

- See Mandatory Options

Fuel System

- Electronic unit injector
- Fuel filter – secondary, mid-mount, (LH 2 micron high performance)
- Fuel transfer pump – front
- Fuel priming pump – LH mid-mount
- Fuel fitting – fuel return connection: straight No. 8, 5/8-18

Lube System

- Crankcase breather
- Oil cooler
- Oil filter – RH
- Oil pan – front sump, 40 L capacity
- Oil filler – LH front
- Oil dipstick – LH front
- Oil pump
- Oil valve sampling – RH rear engine side

Power Take-Offs

- Crankshaft pulley and damper – 250 mm (9.84 in), 2 grooves 22.3 mm (.87 in) width
- Hydraulic pump drive – SAE A, 11-tooth
- 1.41:1 drive ratio – counterclockwise rotation (45 lb-ft capacity)

General

- Vibration damper
- Paint – Cat yellow
- Lifting eyes
- Automatic variable timing, electronic
- Electronic installation kit (connectors, pins, sockets)
- Literature

Mandatory Options

- Flywheel housing or rear PTO

- Throttle position sensor
- Primary filter/water separator

Optional Equipment

Air Compressor

- Air compressors
- Air chambers
- Air compressor governors

Air Inlet System

- Air cleaners
- Precleaners
- Air lines
- Air inlet gasket

Belt-Driven Accessories

- Refrigerant compressor and mounting

Charging System

- Charging alternators
- Alternator mountings
- Alternator guard
- Alternator accessories

Control System

- Connection

Cooling System

- Radiator – installed
- Fan drive f/u/w Caterpillar installed radiator
- Fan drive pulleys f/u/w customer-supplied radiators
- Coolant conditioner
- Water lines – pump inlet
- Fan drive mountings
- Fan height instructions
- Fan adapters for suction fans and blower fans
- Suction fans and blower fans
- Coolant level sensor
- Aftercooler lines

Exhaust System

- Muffler
- Flexible fitting
- Elbows, flange, pipe, clamp

- Straight exhaust adapter

Fuel System

- Fuel lines for fuel filter
- Fuel cooler
- Fuel fitting – fuel return connection
- Flexible fuel lines

Instrumentation

- Gauges and instrument panels
- Voltmeters
- Gauge mounting
- Ammeter

Lube System

- Oil pan
- Oil pan drain
- Oil level gauges
- Oil filter – bypass and remote
- Lubricating oil
- Oil filler
- Fumes disposal

Mounting System

- Front and rear engine supports
- Structural steel base

Power Take-Offs

- Crankshaft pulleys
- Crankshaft pulley – stack-on
- Output flange
- Flywheel stub shaft
- Front stub shaft
- Hydraulic pump drive
- Hydraulic pumps – front and rear
- Enclosed clutch
- Clutch support

Protection System

- Air shutoff
- Air shutoff switch

Starting System

- Starting System
- Starting aids



- Battery sets – 24 Volt, dry
- Battery cable
- Battery rack

Transmission Arrangement

- Transmission cooler

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.