



Cat 3516 engines set the standard in the drilling industry. For many years the 3500 has been the preferred choice by drillers due to their high performance, durability, and reliability in the oilfield. The ideal application for the 3512 engine is mechanical drive for land drilling rigs. 3516 engines, with ratings: 1230 bkW (1649 bhp) @ 1200 rpm. Not emissions certified, available for non-regulated areas.

Specifications

| Engine Specifications | | |
|-------------------------------|--------------------------|----------------------|
| Maximum Rating | 1230 bkW | 1649 BHP |
| Emissions | Non-certified | |
| Displacement | 69 l | 4210 in ³ |
| Minimum Rating | 1230 bkW | 1649 BHP |
| Bore | 170 mm | 6.69 in |
| Stroke | 190 mm | 7.48 in |
| Rated Speed | 1200 r/min | 1200 r/min |
| Aspiration | Turbocharged-Aftercooled | |
| Governor and Protection | W3161 | |
| Engine Weight - Net Dry | 8659 kg | 19090 lb |
| Oil Change Interval | 500 | |
| Rotation from Flywheel End | Counterclockwise | |
| Flywheel and Flywheel Housing | SAE No. 00 | |
| Flywheel Teeth | 183 | |

Capacity for Liquids

| | | |
|--------------------------------------|-------|---------------|
| Minimum Cooling System - Engine Only | 233 l | 61.5 gal (US) |
|--------------------------------------|-------|---------------|

Dimensions

| | | |
|--------|---------|---------|
| Length | 3251 mm | 128 in |
| Width | 1701 mm | 67 in |
| Height | 2004 mm | 78.9 in |

Benefits and Features

Product Design

Developed specifically to meet the demands of oil and gas applications- Proven reliability and durability- Robust diesel strength design prolongs life and lowers owning and operating costs- Market-leading power density- Designed to perform in oilfield conditions, including high ambient and high altitude applications- Long overhaul life proven in oilfield applications- Core engine components designed for reconditioning and reuse at overhaul

Ease of Installation

Inner-outer base mounting configuration simplifies rig integration- Wide range of attachments enable configuration flexibility- Inner base three-point generator mounting maintains factory alignment- Single lifting point simplifies installation work

Engine Control and Protection

Woodward 3161 governor- E-stop pushbutton on instrument panel - Air shutoff and explosion relief valves available - Extra alarms, inputs, and outputs available

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.

Testing

Every Cat generator set is full-load tested to ensure proper engine performance.- Generator sets are assembled, tested, and validated as a package to ensure performance, reliability and durability.

Product Support Offered Through Global Cat Dealer Network

More than 2,200 dealer outlets- Cat factory-trained dealer technicians service every aspect of your Cat petroleum product- Worldwide parts availability, service, and 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.

Web Site

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

Standard Equipment

Air Inlet System

- Corrosion-resistant aftercooler core
- Regular duty air cleaner
- Service indicator

Control System

- Governor, Woodward 3161 – RH
- Pneumatic control
- Governor control - positive locking

Cooling System

- Thermostats and housing (dual outlet)
- Jacket water pump, gear driven

Exhaust System

- Dry exhaust manifold

- Exhaust flexible fitting, adapters, and flanges

Flywheel and Housing

- SAE No. 00 flywheel
- SAE No. 00 flywheel housing
- SAE standard rotation

Fuel System

- Fuel filter
- Fuel transfer pump
- Flexible fuel lines
- Fuel priming pump

Instrumentation

- Analog instrument gauges:

Lubrication System

- Crankcase breather
- Oil cooler
- Oil filter
- Shallow oil pan
- Oil drain extension, 2 in NPT female connection

Mounting System

- Rails, mounting, floor type

Power take-offs

- Accessory drive
- Front housing, two-sided

Protection System

- Manual shutoff control, LH
- Junction box
- Safety shutoff protection, energized to shutdown

Starting System

- Air starting motor
- Air silencer

General

- Paint - Cat yellow
- Vibration damper and guard
- Lifting eyes

Optional Equipment

Air Inlet System

- Heavy duty air cleaner

- Remote air inlet adapters

Control System

- Load sharing governor, 2301A
- Load sharing module
- Governor conversion to 0-200 mA direct rack control
- Local speed throttle control
- Throttle position sensors

Cooling System

- High gloss black folded core radiators and conventional core radiators
- Belt guard
- Blower fan
- Fan drive and fan pulley
- Radiator cover
- Water level switch gauge
- Air separator
- Coolant level sensors
- Connections

Exhaust System

- Exhaust elbows
- Exhaust mufflers

Fuel System

- Primary fuel filter

Generator and Attachments

- Low voltage extension box
- Potential and current transformers
- Air filter
- Cable access box
- Bearing RTDs

Instrumentation

- Customer management device
- Gauges and instrumentation panels
- Switches and contactors

Lubrication System

- Crankcase fumes disposal
- Oil pan accessories

Power Take-off

- Crankshaft pulley
- Front stub shaft



- Charging alternator
- Air compressor

Protection System

- Explosion relief valves (3)
- Shutoffs
- Switches and contactors

Starting System

- Manual air starter
- Air pressure regulator

General

- Flywheel guard

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