



The line of G3500B engines brings versatility, uptime, and low operating cost to your gas compression operation. They deliver the lowest engine-out emissions in the industry without sacrificing performance. Ideal applications for G3500B engines include gas lift, gas gathering, and wellhead gas compression. Cat G3508B gas engine. Ratings: 1029 bkW (1380 bhp) @ 1400 rpm are NSPS site compliant capable.

Specifications

Engine Specifications		
Minimum Rating	1029 bkW	1380 bhp
Maximum Rating	1029 bkW	1380 bhp
Emissions	NSPS Site Compliant Capable	
Displacement	69.3 L	4230 in3
Aspiration	Turbocharged-2 Stage Aftercooled	
Flywheel and Flywheel Housing	SAE No. 00	
Flywheel Teeth	183	
Weight (dry)	8401 kg	18520 lb
Oil Change Interval	1000 hr	
Ignition, Protection	ADEM™ A3	
Stroke	190 mm	7.5 in
Bore	170 mm	6.7 in

Capacity for Liquids		
Cooling System	221.5 L	58.5 gal
Lube Oil System (refill)	424 L	112 gal

Benefits and Features

Engine Design

Built on G3500 LE proven reliability and durability - Ability to burn a wide spectrum of gaseous fuels - Robust diesel strength design prolongs life and lowers owning and operating costs - Broad operating speed range at lower site air densities (high altitude/hot ambient temperatures) - Higher power density improves fleet management - Quality engine diagnostics - Detonation-sensitive timing control for individual cylinders

Ultra Lean Burn Technology (ULB)

ULB technology uses an advanced control system, a better turbo match, improved air and fuel mixing, and a more sophisticated combustion recipe to provide: - Lowest engine-out emissions - Highest fuel efficiency - Improved altitude and speed turndown - Stable load acceptance and load rejection

Emissions

Meets U.S. EPA Spark Ignited Stationary NSPS emissions for 2010 - Lean air/fuel mixture provides best available emissions and fuel efficiency for engines of this bore size

Advanced Digital Engine Management

ADEM A3 engine management system integrates speed control, air/fuel ratio control, and ignition/detonation controls into a complete engine management system. ADEM A3 has improved: user interface, display system, shutdown controls, and system diagnostics.

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.

Gas Engine Rating Pro

GERP is a PC-based program designed to provide site performance capabilities for Cat® natural gas engines for the gas compression industry. GERP provides engine data for your site's altitude, ambient temperature, fuel, engine coolant heat rejection, performance data, installation drawings, spec sheets, and pump curves.

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 repairbefore- 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

Over 60 years of natural gas engine production Ownership of these manufacturing processes enables Caterpillar to produce high quality, dependable products - Cast engine blocks, heads, cylinder liners, and flywheel housings

- Machine critical components
- Assemble complete engine

Web Site

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

Standard Equipment

Air Inlet System

- Axial flow air cleaners
- Service indicator
- Cleanable

Cooling System

- Two-stage charge air cooling:
- Engine cooling and charge air cooling thermostats

Exhaust System

- Dry exhaust manifolds and turbocharger housings

Flywheels and Housings

- SAE 00 flywheel
- SAE 00 flywheel housing

- SAE standard rotation

Fuel System

- Electronic fuel metering valve
- Requires 7-50 psig gas supply
- Gas pressure regulator
- Gas shutoff valve

Instrumentation

- Remote-mounted Advisor control panel
- Interconnect harness

Lube System

- Top-mounted crankcase breathers
- Oil cooler
- Oil filter and oil sampling valve
- Drain valve
- Turbo oil accumulator
- API B16.3 approved gas/air-driven pre-lube system

Torsional Vibration Analysis

- Caterpillar provided

Mounting

- Rails

Control Panels

- 4" LCD Advisor display panel
- Shipped loose

Starting System

- 90 psi TDI starter
- 150 psi TDI starter

Power Take-Offs

- Front housing, two sided
- Front lower LH accessory drive

Protection System — Display/Alarm/Shutdown

- Low oil pressure
- Oil filter differential pressure
- High fuel or oil temperature
- Engine oil to engine coolant
- Differential temperature
- High coolant temperature
- Engine speed
- Engine load

- Battery voltage
- Detonation
- Manifold air temperature
- Coolant JW inlet/outlet pressure
- Left turbo inlet temperature
- Right turbo inlet temperature
- Cylinder port temperature

Protection System — Display Only

- Service hours
- Oxygen level

General

- Paint — Cat yellow
- Dual 23" vibration damper with guard
- CSA Certification, Class 1 Division 2 Groups C and D

Optional Equipment

Air Inlet System

- Rectangular air inlet adapter
- Circular air inlet adapter

Charging System

- Battery Charger 20 amp

Connections

- Mechanical joint assembly
- Inlet connection

Exhaust System

- Flexible fittings available at first production build
- Elbows and mufflers

Instrumentation

- Optional interconnect harness

Lube System

- Shipped with lube oil

Mounting System

- Rails

Power Take-Offs

- Front stub shaft

Literature

- Options available

Packing



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