



Finning Power Systems
6735 - 11 Street N.E.
Calgary, Alberta, T2E 7H9
Telephone: (403)-295-5740
Fax: (403)-295-5725

Brett Mark
Major Account Manager
Direct Line: 403-516-2870
Fax: 403-295-5725
Cellular: 403-835-0748
bmark@finning.ca

Power Generation Enterprises, LLC

Attention: Joe Galindo

Quote #: 14CBM0016-03 Rev.2

Date: September 5, 2014

Delivery: Stock Engine – subject availability

Pricing Period: This quote is for engines delivered between July 1, 2014 and December 31, 2014

Quotation Expiration: October 5, 2014

Standard Consist for G3306B INL – 203BHP @ 1800RPM

NOTE

The G3306 and G3306B are spark ignited rich burn engines.

The G3306 is a mechanically-controlled engine.

The G3306B features the ADEM A4 control system providing integrated ignition, air/fuel ratio control, speed governing, protection, and engine control. A non-air/fuel ratio control version is available for export outside of the US.

AIR INLET SYSTEM

Air cleaner, intermediate duty, dry
Air cleaner rain cap (shipped loose)
Service indicator

CONTROL SYSTEM

G3306 - Governor, Hydra Mechanical

G3306B - ADEM A4

COOLING SYSTEM

Thermostats and housing, Full open temperature 97 C (207 F)
Jacket water pump, gear driven, centrifugal, non-self-priming
Aftercooler water pump, gear driven, centrifugal, non-self-priming (TA only)
Aftercooler core, for treated water (TA only)

EXHAUST SYSTEM

Exhaust manifolds, watercooled
Exhaust elbow, dry
TA - 127 mm (5 in)
NA - 102 mm (4 in)

G3306B - Three way catalyst

FLYWHEELS & FLYWHEEL HOUSINGS

Flywheel, SAE No. 1
Flywheel housing, SAE No. 1
SAE standard rotation

FUEL SYSTEM

Gas pressure regulator
TA - requires 82.7-172.4 kPa (12-25 psi) gas.
NA - requires 10.3-34.5 kPa (1.5-5 psi) gas.
Natural gas carburetor

G3306B - ADEM A4 air/fuel ratio control on specified models

IGNITION SYSTEM

G3306 - Altronic V ignition system
G3306B - ADEM A4 ignition

INSTRUMENTATION

G3306 - Service meter
G3306B - See optional attachments

LUBE SYSTEM

Crankcase breather, top mounted
Oil cooler
Oil filter
Oil pan, full sump
Oil filler and dipstick

MOUNTING SYSTEM

Engine supports.

PROTECTION SYSTEM

G3306 - see mandatory attachments

G3306B - ADEM A4 protection

The following include alarm and shutdown

- inlet manifold air temperature (TA engines only)
- inlet manifold air pressure
- oil pressure
- oil temperature
- coolant temperature
- engine speed (over speed)
- battery voltage
- catalyst inlet/outlet temperature (sensors shipped loose)

The following are display only

- service hours

GENERAL

Paint, Caterpillar Yellow
Crankshaft vibration damper and drive pulley
Lifting eyes

Note: "Stationary Use Only Label": Effective January 2004, the US EPA Nonroad Mobile SI rule restricts the use of SI gas engines in the United States. Caterpillar's Gas Engines are not certified for mobile applications within the US and are to be used in "stationary use only" applications. All gas engines will have this label attached regardless of the dealer placing the order. US EPA SI Stationary NSPS Regulations: (40CFR60 Subpart JJJJ):

The rule applies to newly built engines.

This standard regulates NO_x, CO, and VOC in United States for spark ignited natural gas engines. It is the customer's responsibility to coordinate and complete site emissions testing and submit for a US EPA certificate of compliance.]

Effective July 1, 2010, the US EPA will enforce the new Spark Ignited New Source Performance Standard (SI NSPS) for stationary engines rated equal to or above 500 bhp. Effective January 1, 2011, this standard will be required for engines rated below 500 bhp.

EPA Nonroad Mobile SI rule restricts the use of SI gas engines in the United States. Caterpillar's Gas Engines are not certified for mobile applications within the US and are to be used in "stationary use only" applications. All gas engines will have this label attached regardless of the dealer placing the order. "Stationary Use Only" label: Effective January 2004, the US EPA Non-road Mobile SI rule restricts the use of SI gas engines within the United States. Caterpillar's Gas Engines are not certified for mobile applications within the US and are to be used in stationary use only applications that must be installed a minimum of twelve consecutive months at a location.

US EPA SI Stationary NSPS non-air fuel ratio site compliant capable:

The as-shipped non-air fuel ratio-controlled engine is capable of site-compliance by the customer and will require customer-specified and supplied 3-way catalyst and air fuel ratio control.

This designation is used to describe rich burn catalyst emission ratings intended for use with 3-way catalysts. It is the customer's responsibility to coordinate and complete site emissions testing to demonstrate compliance to the NSPS.

Extended Description
<p>INDUSTRIAL APPLICATION</p> <p>CATALYST EMISSION LEVEL I GAS PETROLEUM ENGINE</p> <p>NOTE: The as-shipped engine is capable of NSPS site-compliance by the customer and will require customer-specified and supplied 3-way (or Non-Selective) Catalyst and air/fuel ratio control.</p>
<p>CSA CERTIFICATION</p> <p>TECHNICAL: Engines that are approved by the Canadian Standards Association (CSA). REQUIRES: Catalyst Emission Level AFR (0.5G) or Catalyst Emission Level AFR (1G)</p>
<p>203 BHP@1800 RPM (54 DEG AC)-B GAS PETROLEUM ENGINE</p>
<p>G3306B TA CUS-SUP AFRC-TWC CSA *** "STATIONARY USE ONLY" LABEL ***</p> <p>TECHNICAL: Non air fuel ratio, CSA. REQUIRES: 203 bhp @ 1800 rpm (54 deg AC) catalyst emission rating EMISS02.</p> <p>NOTE: The as-shipped engine is capable of NSPS site-compliance by the customer and will require customer-specified and supplied 3-way (or Non-Selective) Catalyst and air/fuel ratio control.</p>
<p>PETRO GAS COMPRESSION</p> <p>Gas engines used to drive compressors for the recovery, gathering, processing, storage, and transmission of field gas, associated gas, or processed gas. All products that come from the Gas Industrial price list.</p>
<p>GAS WELL HEAD</p> <p>Engine used as a driver for gas compression collecting gas from a single well.</p>
<p>COMPRESSOR</p> <p>An application in any business where the engine powers a compressor (gas, air, freon, etc.).</p>
<p>BELT TIGHTENER</p> <p>CANNOT BE USED WITH: Charging alternator.</p>
<p>GAS VALVE - ETR 24V GAS PETROLEUM ENGINE</p> <p>Shipped loose. TECHNICAL: Energized to run. Maximum gas pressure 25 psi. 38.1 mm (1.5 in) pipe size. CANNOT BE USE WITH: Self Powered Shutoff REQUIRES: G3306B engines, or G3306 engine</p>
<p>CUSTOMER SUPPLIED AIR/GAS STARTER</p>
<p>FRONT STUB SHAFT</p> <p>Consult TMI for torque capability. TECHNICAL: Length, including flange, 189 mm (7.44 in), shaft diameter 69.812/69.837 mm (2.7485/2.7495 in), key 15.88 x 15.88 mm (0.625 x 0.625 in). CANNOT BE USED WITH: Caterpillar installed radiators.</p>
<p>AUXILIARY DRIVE PULLEY-2 GRV GAS PETROLEUM ENGINE</p> <p>Shipped loose. Includes pulley with 2 grooves, groove width 17.53 mm (.69 in). TECHNICAL: 190.5 mm (7.5 in) O.D. Operates from front of standard crankshaft pulley. Maximum load 11 kW (15 hp).</p>
<p>TVA NOT PERFORMED BY CAT</p>

Price: US \$ 42,201.00

Notes:

1. Price quoted in US funds.
2. This quotation is valid for 30 days from the date hereof.
3. Finning [Canada] Terms & Conditions will apply – Copy available upon request.
4. This proposal is based on our interpretation of your requirements. Only the equipment listed will be supplied at the price quoted. In the event of changes, addition or deletion, the price will be adjusted accordingly.
5. Warranty Certificate enclosed with engine delivery.
6. Equipment E.X.W., Finning (Canada) Calgary, Alberta
7. Pricing is based on units delivered and invoiced within the dates stated above. Units shipped after these dates are subject to a price adjustment.
8. Delivery is estimated and subject to revision. Engines are to be shipped and invoiced within 5 business days of arriving at Finning (Canada).

Thank you for the opportunity to quote on this project.