

Product Specifications For G3516H



Generator Set Specifications

Continuous Rating	2027 / 2007 ekW @ 1.0pf
Fuel Type	Natural Gas, Hydrogen Blend (up to 25%)
Maximum Electrical Efficiency	45.30%
Frequency	50 / 60 Hz
RPM	1500 rpm

Engine Specifications

Engine Model	G3516H
Displacement	4765 in ³
Aspiration	TA
Bore	6.7 in
Stroke	8.5 in
Compression Ratio	12.1
Fuel System	Natural Gas

Generator Set Dimensions

Length	291 in
Width	84 in
Height	95 in
Dry Weight - Genset	40384 lb

G3516H Standard Equipment

Control Panels

EMCP4.3

Air Inlet

Package Mounted Air Cleaner with service indicator
Two-element single-stage air cleaner with enclosure and service indicator

Cooling

Jacket water and SCAC driven thermostats
ANSI Class 150/DN custom flange connections for JW inlet and outlet
Engine driven water pumps for jacket water and after cooler
2nd stage SCAC-Cat Flange

Exhaust

Center section cooled turbocharger with Cat flanged outlet
Individual exhaust port and turbocharger outlet wired to integrated temperature sensing module (ITSM) with GCEM providing alarms and shutdowns
Dry exhaust manifolds, insulated and shielded
Cat-flanged face outlet on turbocharger

Fuel System

Throttle plate, 24V DC actuator, controlled by GECM
Electronic fuel metering valve
Fuel system is sized for 31.5 to 47.2 MJ/NM³ dry pipeline natural gas with pressure of 10.2 to 34.5KPa to the engine fuel control valve

Ignition System

Electronic Ignition System (controlled by ADEM A4)
Individual Cylinder Detonation Sensitive Timing (DST)

Generator

Permanent Magnet Excitation
Anti-condensation space heater
Winding temperature detectors
SR5
Reactive Droop
Caterpillar's Digital Voltage Regulator (CDVR) with 3-phase sensing and KVAR/PF control

General

Crankshaft vibration damper and guard
Paint - Caterpillar Yellow except rails and radiators gloss black
RH Service
Parts book
Operation and maintenance manuals

Governing System

ADEM A4 4-20mA (0-5V) Speed Input

Starting/Charging

24V starting motors

G3516H Optional Equipment

Air Inlet

Mounting brackets and piping
Air cleaner with precleaner
Heavy Duty air cleaner with precleaner

Circuit Breakers

No UV trip or package mounted CB Wiring
Frame Mounting
MP-Frame 3 Pole Bottom Cable Entry or MP- Frame 6 Pole Bottom Cable Entry
4000A, 3-Pole IEC Rated
2500/3000/3200A or 4000/5000A Neutral Current Transformer Automatic Selection
Lower & Upper Covers, Extension Box Roof Cover
Busbar Mounting
4000A, 3-Pole UL Rated

Control Panels

Remote monitoring software
Discrete I/O Module, 12 Digital Inputs, 8 'Form C' Relay
Remote RS485, 32-light Annunciator
Cat Connect: Ethernet, Satellite, Cell Telematics
Cross-Current Compensation Current Transformer-- 8.7/15 kV Classes
RTD Module
Local/Remote PC Monitoring
16 Point/32 Light Annunciator with NFPA99-110/CSA282 Configuration
Remote Monitoring & Control
Synchronizing module
Local alarm module

Cooling

Jacket water coolant heater
Inlet/Outlet connections

Exhaust

Flange
Muffler and spark-arresting muffler with ANSI companion flanges
Elbow

Generator

Manual voltage control
Generator air filter
Low voltage extension box
Medium and high voltage generators and attachment
Cable access box
Bearing temperature detectors

Starting/Charging

24V Battery Charger
60A, 24V charging alternator (requires engine driven pumps)

General

US AID emblem
Special paint order
Battery disconnect switch
Digital diagnostic tool
Tool set
Battery with cables and rack (shipped loose)

Grid Code Compliance

60 Hz: USA
50 Hz: Germany, Great Britain, Belgium, Romania, Italy, Ireland, Poland, Netherlands, Spain, France, and European Standard