

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	78 l
Aspiration	TA
Bore	170 mm
Stroke	215 mm
Compression Ratio	12.1
Fuel System	Natural Gas

Generator Set Dimensions

Length	7395 mm
Width	2139 mm
Height	2402 mm
Dry Weight - Genset	18315 kg

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