PRODUCT SPECIFICATIONS FOR G3512 1000 EKW

GENERATOR SET SPECIFICATIONS

Gas Standby Rating	1000 ekW @ 0.8pf
Fuel Type	Natural Gas
Emissions/Fuel Strategy	U.S. EPA Certified for Non-Emergency Stationary Genset
RPM	1800 rpm
Frequency	60 Hz
Compression Ratio	9.7
Displacement	3173 in^3

ENGINE SPECIFICATIONS

Engine Model	G3512
Displacement	3173 in^3
Aspiration	TA
Bore	6.7 in
Stroke	7.5 in

GENERATOR SET DIMENSIONS

Length	205.7 in
Width	90 in
Height	99.4 in
Weight	27500 lb

G3512 1000 EKW STANDARD EQUIPMENT

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AIR INLET

Two-element single-stage air cleaner with enclosure and service indicator

Dual air cleaners, 1 per side, with service indicator

CONTROL PANEL

EMCP 4.3

COOLING SYSTEM

Engine driven pumps for jacket water and separate circuit aftercooler

COOLING

Package mounted radiator

Jacket water and SCAC engine-driven pumps

Jacket water and SCAC thermostats

LH or RG connections when radiator is not selected

EXHAUST

Dry exhaust manifolds, insulated and shielded

Individual exhaust port and turbocharger outlet wired to integrated temperature sensing module (ITSM) with GCEM providing alarms and shutdowns

Cat-flanged face outlet on turbocharger

FUEL

NOx sensor based air-fuel-ratio control

Pipeline Natural Gas: 800-1000 BTU/scf and 70-100 Methane Number

Gas Train: NFPA37 and CSA B149.3

0.5 to 5 psi engine fuel inlet pressure

FUEL SYSTEM

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

Engine-installed electronic control valve

Throttle plate, 24V DC actuator, controlled by GECM

24V DC energized-to-run (ETR) gas shutoff valve

Gas pressure regulator

GENERAL

- Operation and maintenance manuals
- Paint- Caterpillar Yellow except rails and radiators gloss black
- Parts book
- “Stationary Use Only” Label in Correspondence with EPA Nonroad Mobile SI rule
- RH Service
- Crankshaft vibration damper and guard

LUBRICATION

- Cartridge style oil filter
- Gear type lube oil pump

STARTING/CHARGING

- Jacket water heater
- Battery with cables and rack (shipped loose)
- Electric Starter
- Batteries with rack and cables
- 24V DC starting motors

GENERATOR

- NEMA Class H insulation
- Permanent Magnet Excitiation
- SR5
- Anti-condensation space heater
- Caterpillar's Digital Voltage Regulator (CDVR) including reactive droop capability, 3-phase voltage sensing, KVAR/PF modes, RFI suppression, and a min/max exciter
- Winding temperature detectors

IGNITION SYSTEM

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

GOVERNING

ADEM A4 speed governor with 4 to 20ma (0V to 5V) speed input

G3512 1000 EKW OPTIONAL EQUIPMENT

AIR INLET

Mounting brackets and piping

Air cleaner with precleaner

CONTROL PANEL

Local PC monitoring

Engine failure relay

Remote PC monitoring

Local alarm module

Remote annunciator

COOLING

Remote radiator for JW and SCAC circuits, level switch included but not wired

Inlet/Outlet connections

Coolant level drain line with valves, fan with guard

CIRCUIT BREAKERS

2000A 3 Pole, UL-100% Rated Masterpact Circuit Breakers

Frame mounting

S LSI, G LSIG, P LSIG-P, 4th Digit Type

Right, left, rear mounted

1600A, 2000A 3 Pole, UL-100% Rated R-Frame Circuit Breakers

100% rated, 3-pole (UL/CSA/IEC) 5th Digit Rating

3-pole (IEC 947-2 rated)

1200A, 3 Pole, UL-100% Rated P-Frame Circuit Breakers

EXHAUST

305 mm (12 in.) flange

Flexible fittings

18, 25 dBA Attenuation

305 mm (12 in.) muffler

305mm (12 in) spark arresting muffler

305 mm (12in.) elbow

FUEL SYSTEM

3, 0-100 kPag, 4-20mA gas train pressure sensors

GENERAL

US AID emblem

Special paint order

Digital diagnostic tool

Tool set

GENERATOR

Generator air filter

European bus bars

Low voltage extension box

Cable access box

Bearing temperature detectors

STARTING/CHARGING

20A, 24VDC battery charger

24V starting motors

45A, 24V charging alternator (requires engine driven pumps)