# PRODUCT SPECIFICATIONS FOR G3512 750 EKW

GENERATOR SET SPECIFICATIONS	
Gas Standby Rating	750 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
Displacement	3173 in³
ENGINE SPECIFICATIONS	
Engine Model	G3512
Displacement	3173 in <sup>3</sup>
Aspiration	TA
Bore	6.7 in
Stroke	7.5 in
Governor Type	ADEM A4
GENERATOR SET DIMENSIONS	
Length	205.7 in
Width	90 in
Height	99.4 in
Weight	27500 lb

### G3512 /50 EKW STANDARD EQUIPMENT

### AIR INLET

Dual air cleaners, 1 per side, with service indicator

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

#### **CONTROL PANEL**

**EMCP 4.3** 

### COOLING

Engine driven pumps for jacket water and separate circuit aftercooler

Jacket water and SCAC engine-driven pumps

Jacket water and SCAC thermostats

LH or RG connections when radiator is not selected

Package mounted radiator

#### **FUEL**

NOx sensor based air-fuel-ratio control

0.5 to 5 psi engine fuel inlet pressure

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

Gas Train: NFPA37 and CSA B149.3

### **EXHAUST**

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**

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

Throttle plate, 24V DC actuator, controlled by GECM

Engine-installed electronic control valve

Gas pressure regulator

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

### **GENERAL**

Crankshaft vibration damper and guard

Operation and maintenance manuals

Parts book

Paint- Caterpillar Yellow except rails and radiators gloss black

RH Service

### LUBRICATION

Gear type lube oil pump

Cartridge style oil filter

### **GENERATOR**

Anti-condensation space heater

Winding temperature detectors

**NEMA Class H insulation** 

SR5

Permanent Magnet Excitiation

Caterpillar's Digital Voltage Regulator (CDVR) including reactive droop capability, 3-phase voltage sensing, KVAR/PF modes, RFI suppression, and a min/max exciter

#### **GOVERNING SYSTEM**

ADEM A4

### **IGNITION SYSTEM**

Individual Cylinder Detonation Sensitive Timing (DST)

Electronic Ignition System (controlled by ADEM A4)

### GOVERNING

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

### STARTING/CHARGING

24V DC starting motors

Batteries with rack and cables

Electric Starter

## G3512 750 EKW OPTIONAL EQUIPMENT

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Mounting brackets and piping

Air cleaner with precleaner

### CIRCUIT BREAKERS

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

Right, left, rear mounted

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

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

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

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

3-pole (IEC 947-2 rated)

Frame mounting

#### **CONTROL PANEL**

Remote annunciator

Local alarm module

Local PC monitoring

Engine failure relay

Remote PC monitoring

### COOLING

Coolant level drain line with valves, fan with guard

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

Inlet/Outlet connections

### **EXHAUST**

305 mm (12in.) elbow

18, 25 dBA Attenuation

Flexible fittings

305 mm (12 in.) muffler

305mm (12 in) spark arresting muffler

20E mm /10 in \ flance

### **FUEL SYSTEM**

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

### **GENERAL**

Special paint order

US AID emblem

Tool set

Digital diagnostic tool

### **GENERATOR**

Cable access box

Generator air filter

European bus bars

Low voltage extension box

Bearing temperature detectors

### STARTING/CHARGING

20A, 24VDC battery charger

Battery with cables and rack (shipped ;ppse\_

Jacket water heater

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