# Exclusively from your Caterpillar® dealer



# **STANDBY 125-150 kW PRIME 114-134 kW**

#### 60 Hz

Model	Standby — kW (kVA)	Prime — kW (kVA)		
	Natural Gas	Natural Gas		
G125G1	125 (156.3)	114 (142.5)		
G150G1	150 (187.5)	134.4 (168)		

#### **FEATURES**

#### **GENERATOR SET**

- Complete system designed and built at ISO 9001 certified facilities
- Factory tested to design specifications at full load conditions

#### **ENGINE**

- · Governor, Isochronous electronic
- · Electrical system, 12 VDC
- · Cartridge type filters
- · Battery, rack, and cables
- · Coolant and lube oil drains piped to edge of base

#### **GENERATOR**

- · Insulation system, class H
- Drip proof generator air intake (NEMA 2, IP23)
- Electrical design in accordance with BS5000 Part 99, IEC60034-1, EN61000-6, NEMA MG-1.33

#### **AUTOMATIC VOLTAGE REGULATOR**

- Voltage within  $\pm$  0.5% 3 Phase at steady state from no load to full load
- · Provides fast recovery from transient load changes

#### **COOLING SYSTEM**

- Radiator and cooling fan complete with protective guards
- Standard ambient temperatures up to 131° F (55° C)

#### **MOUNTING ARRANGEMENT**

- Heavy-duty fabricated steel base with lifting points
- · Anti-vibration pads to ensure vibration isolation
- · Complete OSHA guarding
- Stub-up pipe ready for connection to silencer pipework
- · Sound attenuated enclosures are available
- Flexible fuel lines to base with NPT connections

#### **CIRCUIT BREAKER**

- UL/CSA listed
- · 3-pole with solid neutral
- · NEMA 1 steel enclosure, vibration isolated
- · Electrical stub-up area directly below circuit breaker

#### **CONTROL SYSTEM**

- EMCP3.1 Control Panel
- Vibration isolated NEMA 1 enclosure with lockable hinged door
- · AC and DC wiring harnesses

#### **EQUIPMENT FINISH**

- All electroplated hardware
- Anticorrosive protection prior to painting
- High gloss polyurethane paint for durability and scuff resistance

#### **QUALITY STANDARDS**

BS4999, BS5000, BS5514, EN61000-6,
 NEMA MG-1.33, NFPA 110 (with optional equipment)

#### **DOCUMENTATION**

- · Operation and maintenance manuals provided
- · Wiring diagrams included

#### WARRANTY

· All equipment carries full manufacturer's warranty

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#### **OPTIONAL EQUIPMENT\***

#### **ENCLOSURE**

- · SA enclosure (includes internal silencer system)
- · Weatherproof enclosure CAWB
- · Panel viewing window
- · External emergency stop pushbutton

#### SILENCER SYSTEM — OPEN UNIT

- · Level 1 silencer
- · Level 2 silencer
- · Level 3 silencer
- · Mounting kit
- · Through-wall installation kits

#### **ENGINE**

- · Battery heater
- · Lube oil drain pump
- · Lube oil sump heater

#### CIRCUIT BREAKER

- · Auxiliary contacts
- · Shunt trip (100+ amp breakers)

## **GENERATOR**

- · Anti-condensation heater
- AREP excitation system
- · Generator upgrade 1 size
- · Permanent magnet generator

#### **COOLING SYSTEM**

- · Coolant heater
- · Low coolant temperature alarm
- · Low coolant level shutdown
- · Radiator transition flange

#### **MOUNTING ACCESSORIES**

· Seismic (Zone 4) vibration isolators

#### **CONTROL SYSTEM**

- Control Panel Removal, AC and DC wiring harnesses terminated in sockets
- · EMCP3.2 Control Panel

#### **FUEL SYSTEM**

· Low gas pressure alarm

#### **REMOTE ANNUNCIATORS**

• EMCP3 remote annunciator panel (supplied loose)

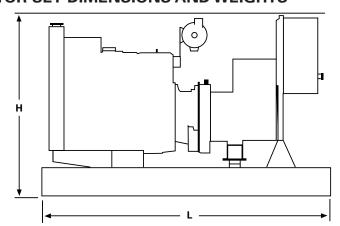
#### **MISCELLANEOUS ACCESSORIES**

- Toolkit
- · Additional operator's manual pack
- · Special enclosure color
- · UL listing / CSA certification
- French or Spanish Language labels

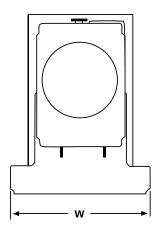
#### **EXTENDED SERVICE CONTRACTS**

• Extended Service Coverage available

#### **GENERATOR SET DIMENSIONS AND WEIGHTS**



Model	Length in (mm)	Width in (mm)	Height in (mm)	Weight lbs (kg)**	
G125G1	102.5 (2604)	43.3 (1100)	57.1 (1449)	3027 (1373)	
G150G1	102.5 (2604)	43.6 (1107)	59.8 (1519)	3395 (1540)	



**NOTE:** General configuration not to be used for installation. See specific dimensional drawings for detail.

<sup>\*</sup>Some options may not be available on all models. Not all options are listed.

<sup>\*\*</sup>Includes oil and coolant

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#### **SPECIFICATIONS**



#### **GENERATOR**

- GENERATOR
Voltage Regulation
Frequency ±0.25% for constant load, no load to full load
Waveform Distortion
Telephone Influence Factor TIF <50
per NEMA MG 1-32.11
Telephone Harmonic Factor THF <2%
Stator Winding
Type Brushless, self excited, self-regulated,
drip proof, 4-pole, sealed bearing,
direct coupled by flexible disk,
12 reconnectable leads
Insulation Class H per NEMA MG1-1.66
Temperature Rise Within Class H limits
Overspeed Capability
Available Voltages
120/240, 127/220, 120/208, 347/600
Deration Please consult factory
for available outputs
Ratings At 77° F (25° C), 500 ft. (152.4 m),
40% humidity,
0.8 pf



Manufacturer
Aspiration Turbocharged G150G1
Aspiration Turbocharged, AA Charge Cooled Cylinder Configuration V8 Displacement — cu in (L)
Governor         Type
Max Power at Rated rpm — hp (kW)
Standby       210 (156)         Prime       189 (141)         BMEP — psi (kPa)
Standby       186 (1285)         Prime       168 (1157)
G150G1       241 (177)         Standby       241 (177)         Prime       217 (159)
BMEP — psi (kPa)       211 (1457)         Prime.       190 (1309)



### CONTROL PANEL

NEMA 1 steel enclosure with lockable hinged door Vibration isolated mounted Autostart control panel Single location customer connector point Electrical stub-up area directly below control panel

#### **RATING DEFINITIONS**

**Standby** — Applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these ratings. The generator is peak rated (as defined in ISO8528-3).

**Prime** — Applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and the generator set can supply 10 percent overload power for 1 hour in 12 hours.

Consult your Olympian representative for more information.

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# **OLYMPIAN**<sup>™</sup>

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G125G1 (3-Phase)

Materials and specifications are subject to change without notice.

3123G1 (3-Filase)		Materials and specifications are subject to change without notice.  Natural Gas			
Generator Set Technical Data — 1800 rpm/6	50 Hz	Standby	Prime		
Power Rating	kW (kVA)	125.0 (156.3)	114.0 (142.5)		
Lubricating System Type: Full Pressure Oil Filter: Spin-On, Full Flow Oil Type Required: API CF-4 Total Oil Capacity Oil Pan	U.S. gal (L) U.S. gal (L)	2.25 (8.5) 2.13 (8.0)	2.25 (8.5) 2.13 (8.0)		
Fuel System Generator Set Fuel Consumption 100% Load 75% Load 50% Load	Cfh (m³/hr) Cfh (m³/hr) Cfh (m³/hr)	1508 (42.7) 1138 (32.2) 779 (22.1)	1375 (38.9) 1042 (29.5) 715 (20.3)		
Engine Electrical System Ignition System: Electronic, Distributorless Voltage/Ground: 12/Negative Battery Charging Generator Ampere Rating	Amps	70	70		
Cooling System Water Pump Type: Centrifugal Radiator System Capacity Incl. Engine Maximum Coolant Static Head Coolant Flow Rate Minimum Water Temperature to Engine Temperature Rise Across Engine (Air) Heat Rejected to Coolant at Rated Power Total Heat Radiated to Room at Rated Power Radiator Fan Load	U.S. gal (L) Ft H <sub>2</sub> O (m H <sub>2</sub> O) U.S. gal/hr (L/min) °F (°C) °F (°C) Btu/min (kW) Btu/min (kW) Hp (kW)	9.8 (37.1) 17.0 (5.18) 2214 (139.7) 158 (70) 14.0 (8.0) 7734 (136) 2673 (47) 7.0 (5.2)	9.8 (37.1) 17.0 (5.18) 2214 (139.7) 158 (70) 14.0 (8.0) 7245 (127.4) 2502 (44) 7.0 (5.2)		
Air Requirements Combustion Air Flow Maximum Air Cleaner Restriction Radiator Cooling Air (zero restriction) Generator Cooling Air Allowable Air Flow Restriction (After radiator) Cooling Airflow (@ rated speed) Rate with restriction	Cfm (m³/min) In H2O (kPa) Cfm (m³/min) Cfm (m³/min) In H2O (kPa) Cfm (m³/min)	272 (7.7) 20.0 (5.0) 7345 (208) 932 (26.4) 0.5 (0.125) 6533 (185)	242 (6.8) 20.0 (5.0) 7345 (208) 932 (26.4) 0.5 (0.125) 6533 (185)		
Exhaust System  Maximum Allowable Backpressure Exhaust Flow at Rated kW Exhaust Temperature at Rated kW — Dry Exhaust	In Hg (kPa) Cfm (m³/min) °F (°C)	2.0 (6.8) 780 (22.1) 1184 (640)	2.0 (6.8) 692 (19.6) 1156 (624)		
Generator Set Noise Rating* (Without Attenuation) at 3 ft (1 m)	dB(A)	91.5	91.5		

Generator Technical	Data	277/480V	120/240V	120/208V	266/460V	127/220V
Motor Starting Capa (30% Voltage Dip)	ability: (kVA) Self Excited PMG/AREP Excited	360 469	283 370	283 370	335 437	311 406
Full Load Efficiencies:	Standby Prime	92.7 92.8	92.3 92.5	92.3 92.5	92.6 92.7	92.6 92.7
Reactances (per unit):  Reactances shown are applicable to the standby rating	X <sub>d</sub> X' <sub>d</sub> X" <sub>d</sub> X <sub>q</sub> X" <sub>q</sub> X <sub>2</sub> X <sub>0</sub>	2.75 0.10 0.057 1.65 0.068 0.063 0.004	3.66 0.13 0.076 2.19 0.090 0.083 0.006	3.66 0.13 0.076 2.19 0.090 0.083 0.006	2.99 0.10 0.062 1.79 0.074 0.068 0.005	3.27 0.11 0.068 1.96 0.080 0.075 0.005
Time Constants:		t' <sub>d</sub> 100 m:	s	t" <sub>d</sub> 10 ms 2	t'do 865 ms	t <sub>a</sub> 15 ms

<sup>\*</sup> dB(A) levels are for guidance only