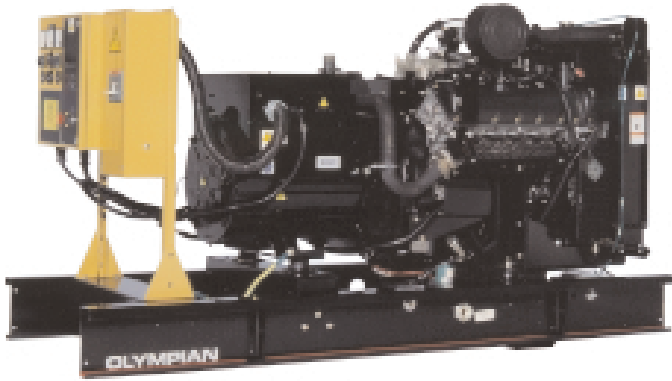


Exclusively from your Caterpillar® dealer



**STANDBY 125-150 kVA**  
**PRIME 110-125 kVA**  
 50Hz  
 60Hz

## Output Ratings

Generating Set Model	G125G1		
	Prime*	Nat Gas	Standby*
380-415V, 50Hz	110 kVA 88.0 kW		125 kVA 100 kW
480V, 60Hz	125 kVA 100 kW		150 kVA 120 kW

\* Refer to ratings definitions on page 5. Ratings at 0.8 pf

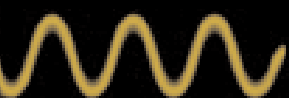
## Overview

Engine Make & Model	GM Vortec 8.1L turbo	
Alternator Model	LL3014F	
Base Frame Type	Heavy Duty Fabricated Steel	
Circuit Breaker Type / Rating	3 Pole MCCB	
Frequency	50 Hz	60 Hz
Engine Speed	1500	1800
Fuel Consumption m <sup>3</sup> /hr (cfh) NG	39.6 (1400)	46.8 (1651)

## Weight kg (lbs)

## Dimensions mm (in)

Wet (+ lube oil and coolant)	1373 (3027)	Length	2600 (96.0)
		Width	1100 (44.0)
		Height	1450 (58.0)



## Engine Technical Data

Physical Data		Air System	50 Hz	60 Hz	
Manufacturer:	General Motors	Air filter Type:	Replaceable Element		
Model:	Vortec 8.1L turbo	Combustion Air Flow Natural Gas:			
No. of Cylinders/Alignment:	V8	m <sup>3</sup> /min (cfm)			
Cycle:	4 Stroke	- Standby:	6.4 (226)	7.7 (272)	
Induction:	Turbocharged	- Prime:	5.7 (201)	6.8 (240)	
Cooling Method:	Water	Max. Combustion Air Intake Restriction:			
Governing Type:	Electronic	kPa (in H <sub>2</sub> O)	2.5 (10.1)	2.5 (10.1)	
Class:	ISO 8528 G2	Radiator Cooling Airflow:			
Compression Ratio:	9.1:1	m <sup>3</sup> /min (cfm)	175 (6180)	208 (7345)	
Displacement: L (cu.in):	8.1 (496)	External Restriction to Cooling Airflow:			
Bore/Stroke: mm (in)	108 (4.25) / 111 (4.37)	Pa (in Wg)	125 (0.5)	125 (0.5)	
Engine Electrical System:					
-Voltage/Ground	12/Negative				
-Battery Charger Amps	70				
Weight: kg (lbs) - (incl. lube oil)	1373 (3027)				
Performance	50 Hz	60 Hz	Cooling System	50 Hz	60Hz
Engine Speed: rpm	1500	1800	Cooling System Capacity:		
Gross Engine Power: kW (hp)			L (US Gal)	37.1 (9.8)	37.1 (9.8)
- Standby:	118 (158)	146 (195)	Water Pump Type:	Centrifugal	
- Prime:	105 (141)	130 (174)	Heat Rejected to Water & Lube Oil: kW (Btu/min)		
BMEP: kPa (psi)			- Standby:	113 (6426)	136 (7734)
- Standby:	1165 (169)	1202 (174)	- Prime:	106 (6027)	127 (7245)
- Prime:	1037 (151)	1070 (155)	Heat Radiation to Room kW (Btu/min)		
			- Standby:	41.0 (2331)	47.0 (2673)
			- Prime:	36.7 (2087)	44.0 (2502)
			Radiator Fan Load: kW (hp)		
				3.0 (4.0)	5.2 (7.0)
Lubrication System					
Oil Filter Type:	Spin-On, Full Flow				
Total Oil Capacity L (US Gal)	8.5 (2.3)				
Oil Pan L (US Gal):	8.0 (2.1)				
Oil Type:	API CF-4				
Cooling Method	Water				



## Alternator Performance Data

	50 Hz				60 Hz				
<b>Data Item</b>	415/240	400/230	380/220	220/127	480/227	380/220	240/120	230/115	220/127
		230/115	220/110		240/139	220/110	208/120		440/254
		200/115							
<b>Motor Starting Capability* kVA</b>	329	309	283	362	360	241	283	264	311
<b>Short Circuit Capacity** %</b>	300	300	300	300	300	300	300	300	300
<b>Reactances: Per Unit</b>									
<b>X<sub>d</sub></b>	2.64	2.84	3.15	2.18	2.63	4.2	3.5	3.79	3.13
<b>X'<sub>d</sub></b>	0.10	0.10	0.12	0.07	0.10	0.15	0.13	0.14	0.12
<b>X''<sub>d</sub></b>	0.058	0.063	0.069	0.04	0.058	0.092	0.077	0.083	0.069

Reactances shown are applicable to prime ratings

\* Based on 30% voltage dip. Improved motor starting is available with optional AREP excitation

\*\* With optional AREP excitation

## Technical Data

3 Phase Ratings and Performance at 50 Hz, 1500 RPM

3 Phase Ratings and Performance at 60 Hz, 1800 RPM

Voltage	Model: G125G1 Prime		Model: G125G1 Standby		Voltage	Model: G125G1 Prime		Model: G125G1 Standby	
	kVA	kW	kVA	kW		kVA	kW	kVA	kW
415/240	110.0	88.0	125.0	100.0	480/277	125.0	100.0	150.0	120.0
400/230	110.0	88.0	125.0	100.0	440/254	125.0	100.0	150.0	120.0
380/220	110.0	88.0	125.0	100.0	380/220	125.0	100.0	150.0	120.0
230/115	110.0	88.0	125.0	100.0	240/139	125.0	100.0	150.0	120.0
220/127	110.0	88.0	125.0	100.0	240/120	125.0	100.0	150.0	120.0
220/110	110.0	88.0	125.0	100.0	230/115	125.0	100.0	150.0	120.0
200/115	110.0	88.0	125.0	100.0	220/127	125.0	100.0	150.0	120.0
					220/110	125.0	100.0	150.0	120.0
					208/120	125.0	100.0	150.0	120.0

## Definitions

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### Standby Rating

These ratings are 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 alternator on this model is peak continuous rated (as defined in ISO8528-3).

### Standby Rating

These ratings are 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 this model can supply 10% overload power for 1 hour in 12 hours.

### Standard Reference Conditions

Ratings in accordance with ISO8528. All engine performance data based on the above mentioned maximum continuous ratings.

Fuel Consumption data assumes complete combustion of LPG fuel with a calorific value of 95MJ/m<sup>3</sup> and of Natural gas with a calorific value of 34.4MJ/m<sup>3</sup>.

## General Data

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### Documents

A full set of operation and maintenance manuals, circuit wiring diagrams, and commissioning/fault finding instruction leaflets.

### Generating Set Standards

The equipment meets the following standards: BS5000, ISO 8528, ISO 3046, IEC 60034, VDE 0530.

### Warranty

All equipment carries full manufacturer's warranty. Extended warranty terms available. For details on warranty cover please contact your local dealer.

Energy Power Systems Australia Pty Ltd  
ABN 80 055 274 514

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