



# **GUARDIAN® SERIES Residential Standby Generator Sets Air-Cooled Gas Engine**

Standby Power Rating

G007232-0 (Aluminum - Bisque) - 8 kVA 50 Hz

#### **INCLUDES:**

- True Power™ Electrical Technology
- Two-line multilingual digital LCD Evolution™ controller (English/Spanish/French/Portguese)
- Standard Wi-Fi™ connectivity
- Electronic governor
- System status & maintenance interval LED indicators
- Sound attenuated enclosure
- Flexible fuel line connector
- Natural gas or LP gas operation
- 5 Year limited warranty
- Listed and labeled by the Southwest Research Institute allowing installation as close as 457 mm (18 in) to a structure.\*
  - \*Must be located away from doors, windows, and fresh air intakes and in accordance with local codes.

https://assets.swri.org/library/DirectoryOfListedProducts/ ConstructionIndustry/973 DoC 204 13204-01-01 Rev9.pdf





### **FEATURES**

- INNOVATIVE ENGINE DESIGN & RIGOROUS TESTING are at the heart of Generac's success in providing the most reliable generator sets possible. Generac's G-Force engine lineup offers added peace of mind and reliability for when it's needed most. G-Force series engines are purpose built and designed to handle the rigors of extended run times in high temperatures and extreme operating conditions.
- TRUE POWER™ ELECTRICAL TECHNOLOGY: Superior harmonics and sine wave form produce less than 5% Total Harmonic Distortion for utility quality power. This allows confident operation of sensitive electronic equipment and micro-chip based appliances, such as variable speed HVAC systems.
- MOBILE LINK® CONNECTIVITY: FREE with select Guardian Series Home standby generator sets, Mobile Link Wi-Fi allows users to monitor the status of the generator set from anywhere in the world using a smartphone, tablet, or PC. Easily access information such as the current operating status and maintenance alerts. Users can connect an account to an authorized service dealer for fast, friendly, and proactive service. With Mobile Link, users are taken care of before the next power outage.
- SOLID-STATE, FREQUENCY COMPENSATED VOLTAGE REGULATION: This state-of-the-art power maximizing regulation system is standard on all Generac models. It provides optimized FAST RESPONSE to changing load conditions and MAXIMUM MOTOR STARTING CAPABILITY by electronically torque-matching the surge loads to the engine. Digital voltage regulation at  $\pm 1\%$ .
- **TEST CRITERIA:** 0
  - PROTOTYPE TESTED

SYSTEM TORSIONAL TESTED

- **NEMA MG1-22 EVALUATION** MOTOR STARTING ABILITY
- SINGLE SOURCE SERVICE RESPONSE from Generac's extensive dealer network provides parts and service know-how for the entire unit, from the engine to the smallest electronic component.













# **Features and Benefits**

8 kVA

•	Generac G- Force design	Maximizes engine "breathing" for increased fuel efficiency. Plateau honed cylinder walls and plasma moly rings help the engine run cooler, reducing oil consumption resulting in longer engine life.
•	"Spiny-lok" cast iron cylinder walls	Rigid construction and added durability provide long engine life.
•	Electronic ignition/spark advance	These features combine to assure smooth, quick starting every time.
•	Full pressure lubrication system	Pressurized lubrication to all vital bearings means better performance, less maintenance, and longer engine life. Now featuring up to a 2 year/200 hour oil change interval.
•	Low oil pressure shutdown system	Shutdown protection prevents catastrophic engine damage due to low oil.
•	High temperature shutdown	Prevents damage due to overheating.

#### Generator

•	Revolving field	Allows for a smaller, light weight unit that operates 25% more efficiently than a revolving armature generator.
•	Skewed stator	Produces a smooth output waveform for compatibility with electronic equipment.
•	Displaced phase excitation	Maximizes motor starting capability.
•	Automatic voltage regulation	Regulates the output voltage to $\pm 1\%$ , preventing damaging voltage spikes.
•	True Power Technology	Less than 5% total harmonic distortion (THD).

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olution™ Controls	
AUTO/MANUAL/OFF illuminated buttons	Selects the operating mode and provides easy, at-a-glance status indication in any condition.
Sealed, raised buttons	Smooth, weather-resistant user interface for programming and operations.
Utility voltage sensing	Constantly monitors utility voltage; defaults 156 V dropout, 190 V pick up.
Utility interrupt delay	Prevents nuisance start-ups of the engine; adjustable 2–1500 seconds from factory default setting of 5 seconds by a qualified dealer.
Voltage selection options	Output voltage is selectable through the controller from 220 V, 230 V, or 240 V.
Engine warm-up	Verifies engine is ready to assume the load, setpoint approximately 5 seconds.
Engine cool-down	Allows engine to cool prior to shutdown, setpoint approximately 1 minute.
Programmable seven day exercise	Operates engine to prevent oil seal drying and damage between power outages by running the generator set for 5 minutes every other week. Also offers a selectable setting for Weekly, Bi-Weekly, or Monthly operation providing flexibility and potentially lower fuel costs to the owner.
Smart battery charger	Delivers charge to the battery only when needed at varying rates depending on outdoor air temperature. Compatible with lead acid and AGM-style batteries.
Main line circuit breaker	Protects generator set from overload.
Electronic governor	Maintains constant 50 Hz frequency.
	AUTO/MANUAL/OFF illuminated buttons Sealed, raised buttons Utility voltage sensing Utility interrupt delay  Voltage selection options Engine warm-up Engine cool-down Programmable seven day exercise  Smart battery charger  Main line circuit breaker

#### Unit

•	SAE weather protective enclosure	Sound attenuated enclosures ensure quiet operation and protection against mother nature, withstanding winds up to 241 km/h (150 mph). Hinged key locking roof panel for security. Lift-out front for easy access to all routine maintenance items. Electrostatically applied textured epoxy paint for added durability.
•	Enclosed critical grade muffler	Quiet, critical grade muffler is mounted inside the unit to prevent injuries.
•	Small, compact, attractive	Makes for an easy, eye appealing installation, as close as 457 mm (18 in) away from a building.

### Installation System

•	35.6 cm (14 in) flexible fuel line connector	Listed ANSI Z21.75/CSA 6.27 outdoor appliance connector for the required connection to the gas supply piping.
•	Integral sediment trap	Meets IFGC and NFPA 54 installation requirements.

### Connectivity\*

Col	inectivity*	
•	Ability to view generator set status	Monitor the generator set with a smartphone, tablet, or computer at any time via the Mobile Link application for complete peace of mind.
•	Ability to view generator set Exercise/Run and Total Hours	Review the generator set's complete protection profile for exercise hours and total hours.
•	Ability to view generator set maintenance information	Provides maintenance information for the specific model generator set when scheduled maintenance is due.
•	Monthly report with previous month's activity	Detailed monthly reports provide historical generator set information.
•	Ability to view generator set battery information	Built in battery diagnostics displaying current state of the battery.
•	Weather information	Provides detailed local ambient weather conditions for generator set location.

<sup>\*</sup>Where supported



# 8 kVA Specifications

Generator Set	
Model	G007232-0
Rated maximum power capacity—LP (ESP)	8,000 VA*
Rated maximum power capacity—NG (ESP)	7,000 VA*
Rated voltage	220
Rated maximum continuous load current – 220 volts (LP / NG)	36.4 / 31.8
Main line circuit breaker	40 amp
Phase	1
Number of rotor poles	2
Rated AC frequency	50 Hz
Power factor	1.0
Battery requirement (not included)	12 volts, Group 26R 540 CCA Minimum or Group 35 AGM 650 CCA Minimum
Unit weight (kg / lb)	155 / 341
Dimensions (L x W x H) cm / in	121.9 x 63.5 x 73.7 / 48 x 25 x 29
Sound output in dB(A) at 7m (23 ft) with generator set operating at normal load**	62
Sound output in dB(A) at 7m (23 ft) with generator set in Quiet-Test™ low-speed exercise mode**	54
Guaranteed sound power level	95 dB(A)
Exercise duration	5 min
Engine	
Engine type	GENERAC G-FORCE 500 SERIES
Number of cylinders	2

Number of cylinders 530 cc Displacement Cylinder block Aluminum w/ cast iron sleeve Valve arrangement Overhead valve Ignition system Solid-state w/ magneto Governor system Electronic Compression ratio 9.5:1 Starter 12 VDC Oil capacity including filter 1.6 L / 1.7 qt Operating rpm 3,000 Fuel consumption Natural gas m<sup>3</sup>/hr (ft<sup>3</sup>/hr) 2.21 (78) 3.62 (128) 1/2 Load Full Load Liquid propane L/hr (gal/hr) [m<sup>3</sup>/h LPG] 3.29 (0.87) [0.89] 1/2 Load 6.16 (1.63) [1.68]

Note: Fuel pipe must be sized for full load. Required fuel pressure to generator fuel inlet at all load ranges—0.87–1.74 kPa (3.5–7.0 in water column) for NG, 2.49–2.99 kPa (10–12 in water column) for LP gas.

Outputs are based upon values @ 1,000 BTU per ft<sup>3</sup> with NG and 2500 BTU per ft<sup>3</sup> with LP

@ 37.26 Megajoules per m<sup>3</sup> with NG and 93.15 Megajoules per m<sup>3</sup> with LP

#### Controls

Two-line plain text multilingual LCD	Simple user interface for ease of operation.
Mode buttons: AUTO	Automatic start on utility failure. 7 day exerciser.
MANUAL	Start with starter control, unit stays on. If utility fails, transfer to load takes place.
OFF	Stops unit. Power is removed. Control and charger still operate.
Ready to Run/Maintenance messages	Standard
Engine Run Hours indication	Standard
Programmable start delay between 2–1500 seconds	Standard (programmable by dealer only)
Utility Voltage Loss/Return to Utility adjustable (brownout setting)	From 140-156 V/175-198 V
Future Set Capable Exerciser/Exercise Set Error warning	Standard
Run/Alarm/Maintenance logs	50 events each
Engine start sequence	Cyclic cranking: 16 sec on, 7 rest (90 sec maximum duration).
Starter lock-out	Starter cannot re-engage until 5 sec after engine has stopped.
Smart battery charger	Standard
Charger Fault/Missing AC warning	Standard
Low Battery/Battery Problem Protection and Battery Condition indication	Standard
Automatic Voltage Regulation with Over and Under Voltage Protection	Standard
Under-Frequency/Overload/Stepper Overcurrent Protection	Standard
Safety Fused/Fuse Problem Protection	Standard
Automatic Low Oil Pressure/High Oil Temperature Shutdown	Standard
Overcrank/Overspeed (@ 72 Hz)/rpm Sense Loss Shutdown	Standard
High Engine Temperature Shutdown	Standard
Internal Fault/Incorrect Wiring protection	Standard
Common external fault capability	Standard
Field upgradable firmware	Standard

Rating definitions — Optional Standby: Applicable for supplying backup power for the duration of the utility power outage with correct maintenance performed. No overload capability is available for this rating. (All ratings in accordance with BS5514, IS03046, and DIN6271).

<sup>\*</sup>Maximum kilovolt amps and current are subject to and limited by such factors as fuel BTU/Megajoule content, ambient temperature, altitude, engine power and condition, etc. Maximum power decreases approximately 3.5% for each 1,000 ft (304.8 m) above sea level and approximately 1% for each 10 °F (6 °C) above 60 °F (16 °C). \*\*Sound levels are taken from the front of the generator. Sound levels taken from other sides of the generator may be higher depending on installation parameters.

8 kVA

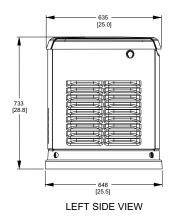


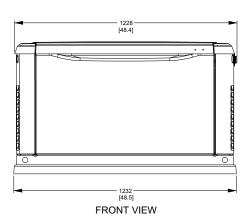
## **Available Accessories**

Model #	Product	Description
G007101-0	Battery Pad Warmer	The pad warmer rests under the battery. Recommended for use if the temperature regularly falls below -18 $^{\circ}$ C (0 $^{\circ}$ F). (Not necessary for use with AGM-style batteries).
G007102-0	Oil Warmer	Oil warmer slips directly over the oil filter. Recommended for use if the temperature regularly falls below -18 $^{\circ}$ C (0 $^{\circ}$ F).
G007027-0	Fascia Base Wrap Kit	The fascia base wrap snaps together around the bottom of new air-cooled generator sets. This offers a sleek, contoured appearance as well as offering protection from rodents and insects by covering the lifting holes located in the base.
G005703-0	Touch-Up Paint Kit	If the generator set enclosure is scratched or damaged, it is important to touch-up the paint to protect from future corrosion. The touch-up paint kit includes the necessary paint to correctly maintain or touch-up a generator set enclosure.
G006483-0	Scheduled Maintenance Kit	Generac's scheduled maintenance kit provides all the items necessary to perform complete routine maintenance on a Generac automatic standby generator set (oil not included).
G007000-0 (50 amp) G007006-0 (100 amp)	Smart Management Module	Smart Management Modules (SMM) are used to optimize the performance of a standby generator set. They manage large electrical loads upon startup and shed them to aid in recovery when overloaded. In many cases, using SMM's can reduce the overall size and cost of the system.

## **Dimensions & UPCs**

Model	UPC
G007232-0	696471082715





Dimensions shown are approximate. See installation manual for exact dimensions. DO NOT USE THESE DIMENSIONS FOR INSTALLATION PURPOSES.

