

GENERAC®

8/10/13 kVA

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

8/10/13 kVA

1 of 4

INCLUDES:

- True Power™ Electrical Technology
- Two-line multilingual digital LCD Evolution™ controller
- 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/](https://assets.swri.org/library/DirectoryOfListedProducts/ConstructionIndustry/973_DoC_204_13204-01-01_Rev9.pdf)

[ConstructionIndustry/973_DoC_204_13204-01-01_Rev9.pdf](https://assets.swri.org/library/DirectoryOfListedProducts/ConstructionIndustry/973_DoC_204_13204-01-01_Rev9.pdf)

Standby Power Rating

G007144-0 (Aluminum - Bisque) - 8 kVA 50 Hz

G007145-0 (Aluminum - Bisque) - 10 kVA 50 Hz

G007146-0 (Aluminum - Bisque) - 13 kVA 50 Hz



QUIET-TEST™



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:**
 - ✓ **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.

THE GENERAC
PROMISE



* Assembled in the USA using domestic and foreign parts.

8/10/13 kVA

Features and Benefits

Engine

- Generac G- Force design
- “Spiny-lok” cast iron cylinder walls
- Electronic ignition/spark advance
- Full pressure lubrication system
- Low oil pressure shutdown system
- High temperature shutdown

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.

Rigid construction and added durability provide long engine life.

These features combine to assure smooth, quick starting every time.

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.

Shutdown protection prevents catastrophic engine damage due to low oil.

Prevents damage due to overheating.

Generator

- Revolving field
- Skewed stator
- Displaced phase excitation
- Automatic voltage regulation
- True Power Technology

Allows for a smaller, light weight unit that operates 25% more efficiently than a revolving armature generator.

Produces a smooth output waveform for compatibility with electronic equipment.

Maximizes motor starting capability.

Regulates the output voltage to $\pm 1\%$, preventing damaging voltage spikes.

Less than 5% total harmonic distortion (THD).

Evolution™ Controls

- 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
- Electronic governor

Selects the operating mode and provides easy, at-a-glance status indication in any condition.

Smooth, weather-resistant user interface for programming and operations.

Constantly monitors utility voltage; defaults 156 V dropout, 190 V pick up.

Prevents nuisance start-ups of the engine; adjustable 2–1500 seconds from factory default setting of 5 seconds by a qualified dealer.

Output voltage is selectable through the controller from 220 V, 230 V, or 240 V.

Verifies engine is ready to assume the load, setpoint approximately 5 seconds.

Allows engine to cool prior to shutdown, setpoint approximately 1 minute.

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.

Delivers charge to the battery only when needed at varying rates depending on outdoor air temperature. Compatible with lead acid and AGM-style batteries.

Protects generator set from overload.

Maintains constant 50 Hz frequency.

Unit

- SAE weather protective enclosure
- Enclosed critical grade muffler
- Small, compact, attractive

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.

Quiet, critical grade muffler is mounted inside the unit to prevent injuries.

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
- Integral sediment trap

Listed ANSI Z21.75/CSA 6.27 outdoor appliance connector for the required connection to the gas supply piping.

Meets IFGC and NFPA 54 installation requirements.

Connectivity*

- Ability to view generator set status
- Ability to view generator set Exercise/Run and Total Hours
- Ability to view generator set maintenance information
- Monthly report with previous month's activity
- Ability to view generator set battery information
- Weather information

Monitor the generator set with a smartphone, tablet, or computer at any time via the Mobile Link application for complete peace of mind.

Review the generator set's complete protection profile for exercise hours and total hours.

Provides maintenance information for the specific model generator set when scheduled maintenance is due.

Detailed monthly reports provide historical generator set information.

Built in battery diagnostics displaying current state of the battery.

Provides detailed local ambient weather conditions for generator set location.

*Where supported

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Specifications

Generator Set

Model	G007144-0 (8 kVA)	G007145-0 (10 kVA)	G007146-0 (13 kVA)
Rated maximum power capacity—LP (ESP)	8,000 VA*	10,000 VA*	13,000 VA*
Rated maximum power capacity—NG (ESP)	7,000 VA*	10,000 VA*	13,000 VA*
Rated voltage	220		
Rated maximum continuous load current – 220 volts (LP / NG)	36.4 / 31.8	45.5 / 45.5	59.1 / 59.1
Main line circuit breaker	40 amp	50 amp	63 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	176 / 389	193 / 425
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	63	63
Sound output in dB(A) at 7m (23 ft) with generator set in Quiet-Test™ low-speed exercise mode**	54	54	54
Guaranteed sound power level	95 dB(A)	95 dB(A)	96 dB(A)
Exercise duration	5 min		

Engine

Engine type	GENERAC G-FORCE 500 SERIES	GENERAC G-FORCE 1000 SERIES
Number of cylinders	2	
Displacement	530 cc	999 cc
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	1.8 L / 1.9 qt
Operating rpm	3,000	
Fuel consumption		
Natural gas	m³/hr (ft³/hr)	
1/2 Load	2.21 (78)	3.51 (124)
Full Load	3.62 (128)	5.30 (187)
Liquid propane	L/hr (gal/hr) [m³/h LPG]	
1/2 Load	3.29 (0.87) [0.89]	4.79 (1.26) [1.30]
Full Load	6.16 (1.63) [1.68]	7.62 (2.01) [2.07]
		5.58 (1.47) [1.52]
		8.86 (2.34) [2.41]

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 ft³ with NG and 2500 BTU per ft³ with LP
 @ 37.26 Megajoules per m³ with NG and 93.15 Megajoules per m³ 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

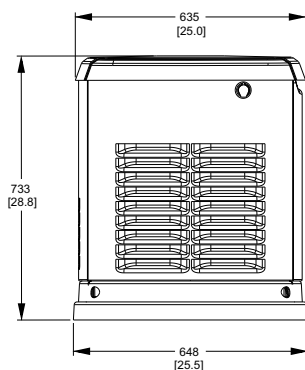
**Sound levels are taken from the front of the generator set. Sound levels taken from other sides of the generator set may be higher depending on installation parameters. Rating definitions - Standby: Applicable for supplying emergency power for the duration of the mains (utility) power outage. No overload capability is available for this rating. (All ratings in accordance with BS5514, ISO3046 and DIN6271). * 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 304.8 m (1,000 ft) above sea level; and also will decrease approximately 1% for each 6 °C (10 °F) above 16 °C (60 °F).

8/10/13 kVA**Available Accessories**

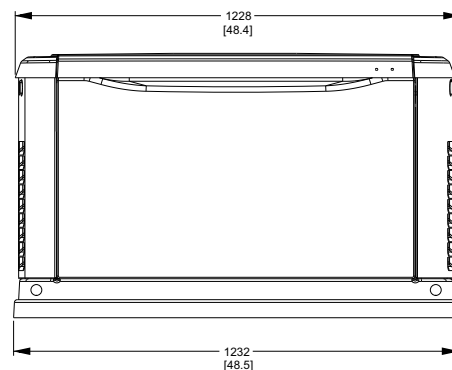
Model #	Product	Description
G007101-0	Battery Pad Warmer	The pad warmer rests under the battery. Recommended for use if the temperature regularly falls below -18 °C (0 °F). (Not necessary for use with AGM-style batteries).
G007102-0	Oil Warmer	Oil warmer slips directly over the oil filter. Recommended for use if the temperature regularly falls below -18 °C (0 °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 - 8 kVA G006485-0 - 10/13 kVA	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
G007144-0	696471073270
G007145-0	696471073287
G007146-0	696471073294



LEFT SIDE VIEW



FRONT VIEW

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