## **GENERAC**

# GUARDIAN® SERIES Residential Standby Generators Air-Cooled Gas Engine

## INCLUDES:

True Power™ Electrical Technology

8/10/13 kVA

- Two Line LCD Multilingual Digital Evolution™ Controller (English/Spanish/ French/Portuguese)
- Electronic Governor
- System Status & Maintenance Interval LED Indicators
- Sound Attenuated Enclosure
- Flexible Fuel Line Connector
- Standard Wi-Fi<sup>™</sup> Remote Monitoring
- Direct-To-Dirt Composite Mounting Pad
- Natural Gas or LP Gas Operation
- 5 Year Limited Warranty
- Compatible with RTSI Transfer Switches Only
- Australian C-tick approved
- Listed and Labeled by the Southwest Research Institute allowing installation as close as 18" (457 mm) 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 Rev8.pdf

### Standby Power Rating

Model G007047-1 (Aluminum - Bisque) - 8 kVA 50 Hz Model G007048-1 (Aluminum - Bisque) - 10 kVA 50 Hz Model G007049-1 (Aluminum - Bisque) - 13 kVA 50 Hz









## **FEATURES**

- INNOVATIVE ENGINE DESIGN & RIGOROUS TESTING are at the heart of Generac's success in providing the most reliable generators possible. Generac's G-Force engine lineup offers added peace of mind and reliability for when you need it the most. The G-Force series engines are purpose built and designed to handle the rigors of extended run times in high temperatures and extreme operating conditions.
- O TEST CRITERIA:
  - ✓ PROTOTYPE TESTED✓ SYSTEM TORSIONAL TESTED
- ✓ NEMA MG1-22 EVALUATION MOTOR STARTING ABILITY
- MOBILE LINK™ REMOTE MONITORING: FREE with every Guardian Series Home standby generator. Allows you to monitor the status of your generator from anywhere in the world using a smartphone, tablet, or PC. Easily access information such as the current operating status and maintenance alerts. Connect your account to your authorized service dealer for fast, friendly and proactive service. With Mobile Link, you are taken care of before the next power outage.
- O 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 ±1%.
- 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.
- 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.















## features and benefits

8/10/13 kVA

• Generac G-Force design Maximizes engine "breathing" for increased fuel efficiency. Plateau honed cylinder walls and plasma moly rings helps 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 ±1% prevents damaging voltage spikes.

True Power Technology Less than 5% total harmonic distortion (THD).

#### **Evolution™ Controls**

Smart battery charger

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 the factory default setting of 5 seconds

by a qualified dealer.

Engine warm-up Ensures 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 for 5 minutes every other week.

Also offers a selectable setting for 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.

■ Main line circuit breaker Protects generator from overload.

Electronic governor
 Maintains constant 50 Hz frequency.

#### Unit

SAE weather protective enclosure
 Sound attenuated enclosures ensure quiet operation and protection against mother nature, withstanding winds up to 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 18" away from a building.

#### **Installation System**

• 1 ft (305 mm) flexible fuel line connector Absorbs any generator vibration when connected to rigid pipe.

Direct-to-dirt composite mounting pad
 Complex lattice design prevents settling or sinking of the generator system.

Integral sediment trap
 Prevents particles and moisture from entering the fuel regulator and engine, prolonging engine life.

#### **Remote Monitoring**

Ability to view generator status
 Monitor your generator via your smartphone, tablet, or computer at any time via the Mobile Link application for complete peace of

Ability to view generator Exercise/Run Review the generator's complete protection profile for exercise hours and total hours

and Total Hours

Ability to view generator maintenance
 Provides maintenance information for your specific model generator when scheduled maintenance is due information

• Monthly report with previous month's activity. Detailed monthly reports provide historical generator information

Ability to view generator battery information
 Built in battery diagnostics displaying current state of the battery

Weather information
 Provides detailed local ambient weather conditions for generator location

## 8/10/13 kVA

Two-Line Plain Text Multilingual LCD Display

## specifications

**GENERAC** 

Generator				
Model		G007047-1 (8 kVA)	G007048-1 (10 kVA)	G007049-1 (13 kVA)
Rated Maximum Continuous Power Capacity (LP)		8,000 VA*	10,000 VA*	13,000 VA*
Rated Maximum Continuous Power Capacity (NG)		7,000 VA*	10,000 VA*	13,000 VA*
Rated Voltage		220	220	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	1	1
Number of Rotor Poles		2	2	2
Rated AC Frequency		50 Hz	50 Hz	50 Hz
Power Factor		1.0	1.0	1.0
Battery Requirement (not included	l)	12 Volts, Group 26R	540 CCA Minimum or Group 35AGM	650 CCA Minimum
Unit Weight (lb/kg)		341/155	389/176	425/193
Dimensions (L x W x H) in/mm			48 x 25 x 29/1218 x 638 x 732	
Sound output in dB(A) at 23 ft (7 m) with generator operating at normal load**		62	64	64
Sound output in dB(A) at 23 ft (7	m) with generator exercising five minutes at low speed **	54	55	55
Engine				
Type of Engine		GENERAC G-FORCE 500 SERIES	GENERAC G-FORCE 1000 SERIES	GENERAC G-FORCE 1000 SERIES
Number of Cylinders		2	2	2
Displacement		530 cc	999 cc	999 cc
Cylinder Block			Aluminum w/ Cast Iron Sleeve	
Valve Arrangement		Overhead Valve	Overhead Valve	Overhead Valve
Ignition System		Solid-state w/ Magneto	Solid-state w/ Magneto	Solid-state w/ Magneto
Governor System		Electronic	Electronic	Electronic
Compression Ratio		9.5:1	9.5:1	9.5:1
Starter		12 VDC	12 VDC	12 VDC
Oil Capacity Including Filter		1.7 qt/1.6 L	1.9 qt/1.8 L	1.9 qt/1.8 L
Operating rpm		3,000	3,000	3,000
Fuel Consumption	40 m ( 0 m )			
Natural Gas	ft³/hr (m³/hr)			
	1/2 Load	93 (2.63)	126 (3.57)	150 (4.25)
Linuid Danner	Full Load	153 (4.33)	204 (5.78)	231 (6.54)
Liquid Propane	ft <sup>3</sup> /hr (gal/hr) [l/hr]			_, ,, ,,, ,_
	1/2 Load	35 (0.96) [3.62]	45 (1.24) [4.70]	51 (1.40) [5.29]
	Full Load	56 (1.55) [5.87]]	70 (1.91) [7.24]	80 (2.20) [8.32]

Note: Fuel pipe must be sized for full load. Required fuel pressure to generator fuel inlet at all load ranges - 3.5-7" water column (7-13 mm mercury) for natural gas, 10-12" water column (19-22 mm mercury) for LP gas.

Simple user interface for ease of operation.

Outputs are based upon values @ 1000 BTU per cubic feet with NG and 2500 BTU per cubic feet with LP

@ 37.26 Megajoules per cubic meter with NG and 93.15 Megajoules per cubic meter with LP

Mode Buttons:Auto	Automatic Start on Utility failure. Programmable exercise.	
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

 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

<sup>\*\*</sup>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. Rating definitions - Standby: Applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. (All ratings in accordance with BS5514, IS03046 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 about 3.5 percent for each 1,000 feet (304.8 meters) above sea level; and also will decrease about 1 percent for each 6 °C (10 °F) above 16 °C (60 °F).

8/10/13 kVA

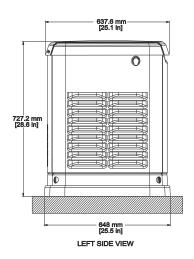


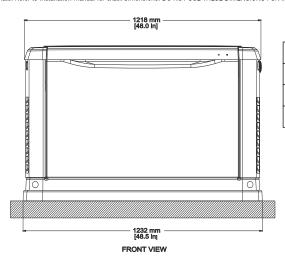
## available accessories

Model #	Product	Description
G007101-0	Battery Pad Warmer	The pad warmer rests under the battery. Recommended for use if the temperature regularly falls below $0^{\circ}F$ . (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 $0^{\circ}F$ .
G007027-0	Fascia Base Wrap Kit	The fascia base wrap snaps together around the bottom of the new air cooled generators. 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	Paint Kit	If the generator enclosure is scratched or damaged, it is important to touch-up the paint to protect from future corrosion. The paint kit includes the necessary paint to properly maintain or touch-up a generator enclosure.
G006483-0 - 8 kVA G006485-0 - 10 & 13 kVA	Scheduled Maintenance Kit	Generac's scheduled maintenance kits provide all the hardware necessary to perform complete routine maintenance on a Generac automatic standby generator.

## dimensions & UPCs

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





Model	UPC
G007047-1	696471070477
G007048-1	696471070484
G007049-1	696471070491

