



# GENERAC® GUARDIAN® SERIES STANDBY GENERATORS - PREPACKAGED

## 17 kW

### Air-Cooled Gas Engine Generator Sets

Standby Power Rating

Model 005873-1 (Steel - Bisque) - 17 kW 60Hz

#### INCLUDES:

- True Power® Electrical Technology
- Two Line LCD Tri-lingual Digital Nexus™ Controller
- 16 Circuit EZ Switch™ with Built-In Priority Load Center
- Electronic Governor
- Pre-wired External Connection Box
- External Main Circuit Breaker, System Status & Maintenance Interval LED Indicators and GFCI Duplex Outlet
- Sound Attenuated Enclosure
- Flexible Fuel Line Connector
- Composite Mounting Pad
- Pre-wired conduits
- Natural Gas or LP Gas Operation
- 3 Year Limited Warranty
- UL 2200 Listed



QUIET-TEST™

## FEATURES

- **INNOVATIVE DESIGN & PROTOTYPE TESTING** are key components of GENERAC'S success in "IMPROVING POWER BY DESIGN." But it doesn't stop there. Total commitment to component testing, reliability testing, environmental testing, destruction and life testing, plus testing to applicable CSA, NEMA, EGSA, and other standards, allows you to choose GENERAC POWER SYSTEMS with the confidence that these systems will provide superior performance.
- **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.
- **TEST CRITERIA:**
  - ✓ **PROTOTYPE TESTED**
  - ✓ **SYSTEM TORSIONAL TESTED**
  - ✓ **NEMA MG1-22 EVALUATION**
  - ✓ **MOTOR STARTING ABILITY**
- **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. An unequalled ±1% voltage regulation.
- **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.
- **GENERAC TRANSFER SWITCHES.** Long life and reliability are synonymous with GENERAC POWER SYSTEMS. One reason for this confidence is that the GENERAC product line includes its own transfer systems and controls for total system compatibility.



# FEATURES

## Generac® Guardian® Series Standby Generator - 17 kW

ENGINE	<ul style="list-style-type: none"> <li>•Generac (OHVI) Design</li> </ul>	Maximizes engine “breathing” for increased fuel efficiency. Plateau honed cylinder walls and plasma moly rings help engine run cooler, reducing oil consumption. Because heat is the primary cause of engine wear, the OHVI has a significantly longer life than competitive engines.
	<ul style="list-style-type: none"> <li>•"Spiny-lok" cast iron cylinder walls</li> </ul>	Rigid construction and added durability provide long engine life.
	<ul style="list-style-type: none"> <li>•Electronic ignition/spark advance</li> </ul>	These features combine to assure smooth, quick starting every time.
	<ul style="list-style-type: none"> <li>•Full pressure lubrication system</li> </ul>	Superior lubrication to all vital bearings means better performance, less maintenance and significantly longer engine life. Now featuring a 2 year/200 hour oil change interval.
	<ul style="list-style-type: none"> <li>•Low oil pressure shutdown system</li> <li>•High temperature shutdown</li> </ul>	Superior shutdown protection prevents catastrophic engine damage due to low oil. Prevents damage due to overheating.
GENERATOR	<ul style="list-style-type: none"> <li>•Revolving field</li> </ul>	Allows for smaller, light weight unit that operates 25% more efficiently than a revolving armature generator.
	<ul style="list-style-type: none"> <li>•Skewed stator</li> <li>•Displaced phase excitation</li> <li>•Automatic voltage regulation</li> <li>•UL 2200 Listed</li> </ul>	Produces a smooth output waveform for compatibility with electronic equipment. Maximizes motor starting capability. Regulates the output voltage to $\pm 1\%$ prevents damaging voltage spikes. For your safety
TRANSFER SWITCH	<ul style="list-style-type: none"> <li>•Fully Automatic</li> </ul>	Transfers your vital electrical loads to the energized source of power.
	<ul style="list-style-type: none"> <li>•Pre-wired, color coded conduits</li> <li>•Remote Mounting</li> <li>•UL Listed</li> </ul>	Ensures the easiest, trouble free installation. Mounts near your existing distribution panel for simple, low cost installation. For your safety
NEXUS™ CONTROLS	<ul style="list-style-type: none"> <li>•Manual/Auto/Off switch</li> </ul>	Selects the operating mode.
	<ul style="list-style-type: none"> <li>•Utility voltage sensing</li> </ul>	Constantly monitors utility voltage, setpoints 60% dropout, 80% pick-up, of standard voltage.
	<ul style="list-style-type: none"> <li>•Generator voltage sensing</li> </ul>	Constantly monitors generator voltage to ensure the cleanest power delivered to the home.
	<ul style="list-style-type: none"> <li>•Utility interrupt delay</li> </ul>	Prevents nuisance start-ups of the engine, adjustable 10-30 seconds.
	<ul style="list-style-type: none"> <li>•Engine warm-up</li> </ul>	Ensures engine is ready to assume the load, setpoint approximately 5 seconds.
	<ul style="list-style-type: none"> <li>•Engine cool-down</li> </ul>	Allows engine to cool prior to shutdown, setpoint approximately 1 minute.
	<ul style="list-style-type: none"> <li>•Programmable seven day exerciser</li> </ul>	Operates engine to prevent oil seal drying and damage between power outages by running the generator for 12 minutes every week.
	<ul style="list-style-type: none"> <li>•Smart battery charger</li> </ul>	Delivers charge to the battery only when needed at varying rates depending on outdoor air temperature.
	<ul style="list-style-type: none"> <li>•Main Line Circuit Breaker</li> </ul>	Protects generator from overload.
	<ul style="list-style-type: none"> <li>•Electronic governor</li> </ul>	Maintains constant 60 Hz frequency.
UNIT	<ul style="list-style-type: none"> <li>•Weather protective enclosure</li> </ul>	Ensures protection against mother nature. 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.
	<ul style="list-style-type: none"> <li>•Enclosed critical grade muffler</li> </ul>	Quiet, critical grade muffler is mounted inside the unit to prevent injuries.
	<ul style="list-style-type: none"> <li>•Small, compact, attractive</li> </ul>	Makes for an easy, eye appealing installation.
	<ul style="list-style-type: none"> <li>•SAE</li> </ul>	Sound attenuated enclosure ensures quiet operation
INSTALLATION SYSTEM	<ul style="list-style-type: none"> <li>•Pre-wired External Connection Box</li> <li>•1' Flexible Fuel Line Connector</li> <li>•Composite Mounting Pad</li> <li>•Pre-wired conduits</li> <li>•UL Listed wire nuts</li> </ul>	Easy Installation - Virtually all hardware included, plus step-by-step photographed Installation Guide.

GENERATOR		Model 005873-1 (17 kW)
Rated Maximum Continuous Power Capacity (LP)		17,000 Watts*
Rated Maximum Continuous Power Capacity (NG)		16,000 Watts*
Rated Voltage		240
Rated Maximum Continuous Load Current – 240 Volts		70.8 LP/66.6 NG
Total Harmonic Distortion		Less than 5%
Main Line Circuit Breaker		65 Amp
Phase		1
Number of Rotor Poles		2
Rated AC Frequency		60Hz
Power Factor		1
Battery Requirement (not included)		Group 26R 12 Volts and 525 Cold-cranking Amperes Minimum
Unit Weight		455/210.9
Dimensions (L" x W" x H")		48 x 25 x 29 (1218 x 638 x 732)
Sound output in dB(A) at 23 ft. with generator operating at normal load		66
Sound output in dB(A) at 23 ft. with generator in Quiet-Test™ low speed exercise mode		60
ENGINE		Model 005873-1 (17 kW)
Type of Engine		GENERAC OHVI V-TWIN
Number of Cylinders		2
Displacement		992cc
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		Approx. 1.9 Qts./1.8L
Operating RPM		3,600
Fuel Consumption		
Natural Gas	cu.ft./hr.	
	1/2 Load	
	Full Load	183
Liquid Propane	ft <sup>3</sup> /hr (gal/hr)	261
	1/2 Load	59 (1.61) [6.09]
	Full Load	94 (2.57) [9.73]
Required fuel pressure to generator fuel inlet at all load ranges - 5 to 7 inches of water column for natural gas, 10 to 12 inches of water column for LP gas For Btu content, multiply ft <sup>3</sup> /hr x 2520 (LP) or ft <sup>3</sup> /hr x 1000 (NG)		
CONTROLS		
2-Line Plain Text LCD Display		Simple user interface for ease of operation
Mode Switch		
-Auto		Automatic Start on Utility failure. 7 day exerciser
-Off		Stops unit. Power is removed. Control and charger still operate.
-Manual/Test (start)		Start with starter control, unit stays on. If utility fails, transfer to load takes place.
Programmable start delay between 10-30 seconds		Standard
Engine Start Sequence		Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration)
Engine Warm-up		5 seconds
Engine Cool-Down		1 minute
Starter Lock-out		Starter cannot re-engage until 5 sec. after engine has stopped.
Smart Battery Charger		Standard
Automatic Voltage Regulation with Over and Under Voltage Protection		Standard
Automatic Low Oil Pressure Shutdown		Standard
Overspeed Shutdown		Standard, 72Hz
High Temperature Shutdown		Standard
Overcrank Protection		Standard
Safety Fuse		Standard
Failure to Transfer Protection		Standard
Low Battery Protection		Standard
50 Event Run Log		Standard
Future Set Capable Exerciser		Standard
Incorrect Wiring Protection		Standard
Internal Fault Protection		Standard
Common External Fault Capability		Standard

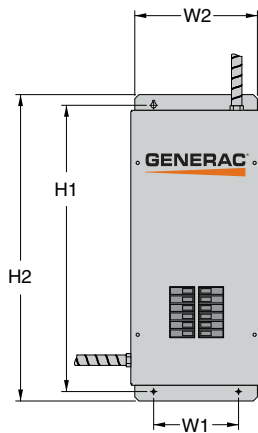
Rating definitions - Standby: Applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. (All ratings in accordance with BS5514, ISO3046 and DIN6271). \* Maximum wattage and current are subject to and limited by such factors as fuel Btu content, ambient temperature, altitude, engine power and condition, etc. Maximum power decreases about 3.5 percent for each 1,000 feet above sea level.

# Generac® Guardian® Series Standby Generator - 17 kW

EZ SWITCH™ & LOAD CENTER		Model 005873-1 (17 kW)
No. of Poles		2
Current Rating (amps)		100
Voltage Rating (VAC)		250
Utility Voltage Monitor (fixed)		
-Pick-up		80%
-Dropout		60%
Return to Utility		approx. 15 sec.
Exerciser weekly for 12 minutes		Standard
UL Listed		Standard
Dimensions (H" x W" x D") Inches(mm)		26.5 x 12.5 x 7 (658 x 308 x 172)
Total of Pre-wired Circuits		16
No. 15A 120V		5
No. 20A 120V		5
No. 20A 240V		1
No. 40A 240V		1
No. 50A 240V		1
Circuit Breaker Protected		
Available RMS Symmetrical Fault Current @ 250 Volts		10,000

## EZ Switch™ Features

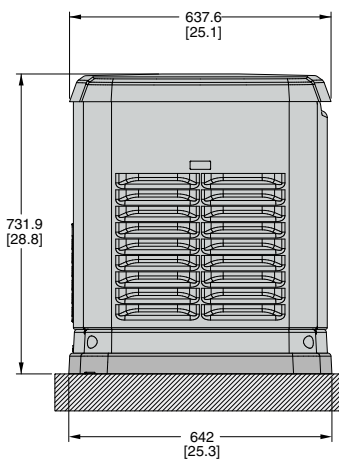
- Electrically operated, mechanically-held contacts for fast, positive connections.
- Rated for all classes of load, 100% equipment rated, both inductive and resistive.
- 2 pole, 250 VAC contactors.
- 160 millisecond transfer time.
- Dual coil design.
- Main contacts are silver plated or silver alloy to resist welding and sticking.
- NEMA 1 (indoor rated) enclosure is standard on the 100 amp switch.
- Pre-wired 30 foot (9.1 meter) whip to connect to the pre-wired external connection box.
- Pre-wired 2 foot (0.61 meter) whip, color coded to connect into the existing electrical panel.



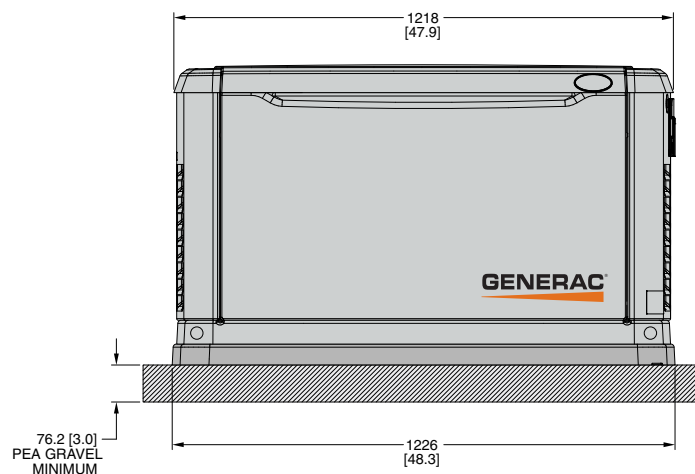
Mechanical Dimensions (in inches)						
Current Rating	No. of Poles	Height		Width		Depth
		H1	H2	W1	W2	
100 UL Listed	2	26.5 in	29.25 in	8.14 in	12.5 in	7
		673mm	743mm	207mm	317.5mm	

Terminal Wire Ranges			
ATS Rated Amps	Switch Terminal	Neutral Lug/Stud	Ground Lug
100A 2-Pole UL	1 x 1/0-12	1 x 3/8-16 Stud	1 x 2/0-14

Design and specifications subject to change without notice. Dimensions shown are approximate. Contact your Generac dealer for certified drawings. DO NOT USE THESE DIMENSIONS FOR INSTALLATION PURPOSES.



LEFT SIDE VIEW



FRONT VIEW

## AVAILABLE ACCESSORIES

Model #	Product	Description
5819	26R Wet Cell Battery	Every standby generator requires a battery to start the system. Generac offers the recommended 26R wet cell battery for use with all air-cooled standby product.
5947	Cold Weather Kit	If the temperature regularly falls below 32° F, install a cold weather kit to maintain optimal battery temperature. Kit consists of battery warmer with thermostat built into the wrap.
5839	Fascia Base Wrap Kit	The fascia base wrap snaps together around the bottom 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.
5703	Paint Kit	Bisque Kit
5664	Scheduled Maintenance Kit	Generac's scheduled maintenance kits provide all the hardware necessary to perform complete routine maintenance on a Generac automatic standby generator.
5928	Nexus Wireless Remote	Completely wireless and battery powered, Generac's Nexus wireless remote monitor provides you with instant status information without ever leaving the house.
5951	Advanced Nexus Wireless Remote	Remotely control generator functions with the advanced model's LCD display. In addition to remote testing of the generator, set the exercise cycle and maintenance interval reminders