

# **GENERAC<sup>®</sup> GUARDIAN<sup>®</sup> SERIES STANDBY GENERATORS - PREPACKAGED**

## Air-Cooled Gas Engine Generator Sets

#### **INCLUDES:**

- True Power® Electrical Technology
- Two Line LCD Tri-lingual Digital Nexus<sup>™</sup> Controller
- 16 Circuit EZ Switch<sup>™</sup> 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

### **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<sup>®</sup> 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.

#### O TEST CRITERIA:

- PROTOTYPE TESTED
- SYSTEM TORSIONAL TESTED

✓ NEMA MG1-22 EVALUATION
 ✓ MOTOR STARTING ABILITY

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

7 kW



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- 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**<sup>®</sup> Guardian<sup>®</sup> Series Standby Generator - 17 kW

	•Generac (OHVI) Design	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.		
ENGINE	• "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	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> <li>Low oil pressure shutdown system</li> </ul>	Superior shutdown protection prevents catastrophic engine damage due to low oil.		
	<ul> <li>High temperature shutdown</li> </ul>	Prevents damage due to overheating.		
œ	<ul> <li>Revolving field</li> </ul>	Allows for smaller, light weight unit that operates 25% more efficiently than a revolving armature generator.		
GENERATOR	<ul> <li>Skewed stator</li> </ul>	Produces a smooth output waveform for compatibility with electronic equipment.		
ER/	<ul> <li>Displaced phase excitation</li> </ul>	Maximizes motor starting capability.		
C EN	<ul> <li>Automatic voltage regulation</li> </ul>	Regulates the output voltage to $\pm 1\%$ prevents damaging voltage spikes.		
	•UL 2200 Listed	For your safety		
<u> </u>	•Fully Automatic	Transfers your vital electrical loads to the energized source of power.		
TRANSFER Switch	<ul> <li>Pre-wired, color coded conduits</li> </ul>	Ensures the easiest, trouble free installation.		
	Remote Mounting	Mounts near your existing distribution panel for simple, low cost installation.		
F	• UL Listed	For your safety		
	<ul> <li>Manual/Auto/Off switch</li> </ul>	Selects the operating mode.		
	• Utility voltage sensing	Constantly monitors utility voltage, setpoints 60% dropout, 80% pick-up, of standard voltage.		
	Generator voltage sensing	Constantly monitors generator voltage to ensure the cleanest power delivered to the home.		
ROLS	•Utility interrupt delay	Prevents nuisance start-ups of the engine, adjustable 10-30 seconds.		
INO	•Engine warm-up	Ensures engine is ready to assume the load, setpoint approximately 5 seconds.		
ت ع	•Engine cool-down	Allows engine to cool prior to shutdown, setpoint approximately 1 minute.		
NEXUS ** CONTROLS	Programmable seven day exerciser	Operates engine to prevent oil seal drying and damage between power outages by running the generator for 12 minutes every week.		
Z	•Smart battery charger	Delivers charge to the battery only when needed at varying rates depending on outdoor air temperature.		
	Main Line Circuit Breaker	Protects generator from overload.		
	•Electronic governor	Maintains constant 60 Hz frequency.		
	Weather protective enclosure	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.		
UNIT	<ul> <li>Enclosed critical grade muffler</li> </ul>	Quiet, critical grade muffler is mounted inside the unit to prevent injuries.		
5	•Small, compact, attractive	Makes for an easy, eye appealing installation.		
	045			
	• SAE	Sound attenuated enclosure ensures quiet operation		
	Pre-wired External Connection Box     1' Elevible Evel Line Connector			
TEN	<ul> <li>1' Flexible Fuel Line Connector</li> <li>Composite Mounting Pad</li> </ul>	Easy Installation - Virtually all hardware included, plus step-by-step photographed Installation Guide.		
TAL	Pre-wired conduits			
INSTALLATION System	•UL Listed wire nuts			
	L			

#### **SPECIFICATIONS**

### GENERAC

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 1			
Phase	2			
Number of Rotor Poles				
Rated AC Frequency	60Hz			
Power Factor				
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 $^{\scriptscriptstyle\rm TM}$ 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			
	5,000			
Fuel Consumption				
Natural Gas cu.ft./hr.				
1/2 Load	183			
Full Load	261			
Liquid Propane ft <sup>3</sup> /hr (gal/hr)				
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 c For Btu content, multiply $ft^3/hr \ x \ 2520 \ (LP)$ or $ft^3/hr \ x \ 1000 \ (NG)$	olumn for natural gas, 10 to 12 inches of water column for LP gas			
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.			
	Ctandard			
Programmable start delay between 10-30 seconds	Standard			
Engine Start Sequence	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration)			
Engine Start Sequence Engine Warm-up	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds			
Engine Start Sequence Engine Warm-up Engine Cool-Down	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute			
Engine Start Sequence Engine Warm-up Engine Cool-Down Starter Lock-out	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute Starter cannot re-engage until 5 sec. after engine has stopped.			
Engine Start Sequence Engine Warm-up Engine Cool-Down Starter Lock-out Smart Battery Charger	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute Starter cannot re-engage until 5 sec. after engine has stopped. Standard			
Engine Start Sequence Engine Warm-up Engine Cool-Down Starter Lock-out Smart Battery Charger Automatic Voltage Regulation with Over and Under Voltage Protection	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute Starter cannot re-engage until 5 sec. after engine has stopped. Standard Standard			
Engine Start Sequence Engine Warm-up Engine Cool-Down Starter Lock-out Smart Battery Charger Automatic Voltage Regulation with Over and Under Voltage Protection Automatic Low Oil Pressure Shutdown	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute Starter cannot re-engage until 5 sec. after engine has stopped. Standard Standard Standard Standard			
Engine Start Sequence Engine Warm-up Engine Cool-Down Starter Lock-out Smart Battery Charger Automatic Voltage Regulation with Over and Under Voltage Protection Automatic Low Oil Pressure Shutdown Overspeed Shutdown	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute Starter cannot re-engage until 5 sec. after engine has stopped. Standard Standard Standard Standard Standard, 72Hz			
Engine Start Sequence Engine Warm-up Engine Cool-Down Starter Lock-out Smart Battery Charger Automatic Voltage Regulation with Over and Under Voltage Protection Automatic Low Oil Pressure Shutdown Overspeed Shutdown High Temperature Shutdown	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute Starter cannot re-engage until 5 sec. after engine has stopped. Standard Standard Standard Standard			
Engine Start Sequence Engine Warm-up Engine Cool-Down Starter Lock-out Smart Battery Charger Automatic Voltage Regulation with Over and Under Voltage Protection Automatic Low Oil Pressure Shutdown Overspeed Shutdown High Temperature Shutdown Overcrank Protection	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute Starter cannot re-engage until 5 sec. after engine has stopped. Standard Standard Standard Standard Standard Standard Standard Standard Standard			
Engine Start Sequence Engine Warm-up Engine Cool-Down Starter Lock-out Smart Battery Charger Automatic Voltage Regulation with Over and Under Voltage Protection Automatic Low Oil Pressure Shutdown Overspeed Shutdown High Temperature Shutdown Overcrank Protection Safety Fuse	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute Starter cannot re-engage until 5 sec. after engine has stopped. Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard			
Engine Start Sequence Engine Warm-up Engine Cool-Down Starter Lock-out Smart Battery Charger Automatic Voltage Regulation with Over and Under Voltage Protection Automatic Low Oil Pressure Shutdown Overspeed Shutdown High Temperature Shutdown Overcrank Protection Safety Fuse Failure to Transfer Protection	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute Starter cannot re-engage until 5 sec. after engine has stopped. Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard			
Engine Start Sequence Engine Warm-up Engine Cool-Down Starter Lock-out Smart Battery Charger Automatic Voltage Regulation with Over and Under Voltage Protection Automatic Low Oil Pressure Shutdown Overspeed Shutdown High Temperature Shutdown Overcrank Protection Safety Fuse Failure to Transfer Protection	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute Starter cannot re-engage until 5 sec. after engine has stopped. Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard			
Engine Start Sequence Engine Warm-up Engine Cool-Down Starter Lock-out Smart Battery Charger Automatic Voltage Regulation with Over and Under Voltage Protection Automatic Low Oil Pressure Shutdown Overspeed Shutdown High Temperature Shutdown Overcrank Protection Safety Fuse	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute Starter cannot re-engage until 5 sec. after engine has stopped. Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard			
Engine Start Sequence Engine Warm-up Engine Cool-Down Starter Lock-out Smart Battery Charger Automatic Voltage Regulation with Over and Under Voltage Protection Automatic Low Oil Pressure Shutdown Overspeed Shutdown Overcrank Protection Safety Fuse Failure to Transfer Protection Low Battery Protection	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute Starter cannot re-engage until 5 sec. after engine has stopped. Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard			
Engine Start Sequence Engine Warm-up Engine Cool-Down Starter Lock-out Smart Battery Charger Automatic Voltage Regulation with Over and Under Voltage Protection Automatic Low Oil Pressure Shutdown Overspeed Shutdown Oversreak Protection Safety Fuse Failure to Transfer Protection Low Battery Protection 50 Event Run Log	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute Starter cannot re-engage until 5 sec. after engine has stopped. Standard			
Engine Start Sequence Engine Warm-up Engine Cool-Down Starter Lock-out Starter Lock-out Automatic Voltage Regulation with Over and Under Voltage Protection Automatic Low Oil Pressure Shutdown Overspeed Shutdown Overspeed Shutdown High Temperature Shutdown Overcrank Protection Safety Fuse Failure to Transfer Protection Low Battery Protection 50 Event Run Log Future Set Capable Exerciser	Cyclic cranking: 16 sec. on, 7 rest (90 sec. maximum duration) 5 seconds 1 minute Starter cannot re-engage until 5 sec. after engine has stopped. Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard 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.

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)	200
-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.

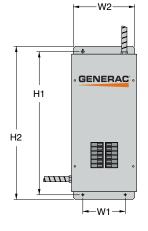
• Dual coil design.

• 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.

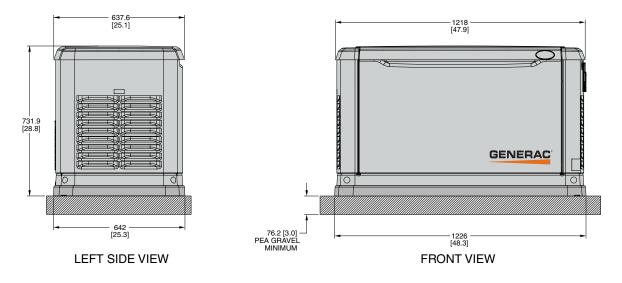
• Pre-wired 30 foot (9.1 meter) whip to connect to the pre-wired external connection box.

• Pre-wired 2 foot (0.61 meter) whip, color coded to connect into the existing electrical panel.



Mechanical Dimensions (in inches)								
Current	No. of	Height		Width		Depth		
Rating	Poles	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	178mm		
Terminal Wire Ranges								
ATS Rated Amps	Sw	Switch Terminal		Neutral Lug/Stud		Ground Lug		
100A 2-Pole UL		1 x 1/0-12 1 x 3		/8-16 Stud	1 x 1	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.



#### **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 excercise cycle and maintenance interval reminders

