



GENERAC® GUARDIAN® SERIES STANDBY GENERATORS

20 kW

Air-Cooled Gas Engine Generator Sets

Standby Power Rating

Model 005887-1 (Aluminum - Gray) - 20 kW 60Hz

INCLUDES:

- True Power® Electrical Technology
- Two Line LCD Tri-lingual Digital Nexus™ Controller
- Electronic Governor
- External Main Circuit Breaker, System Status & Maintenance Interval LED Indicators and GFCI Duplex Outlet
- Sound Attenuated Enclosure
- Flexible Fuel Line Connector
- Composite Mounting Pad
- Base Fascia
- 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
 - ✓ NEMA MG1-22 EVALUATION
 - ✓ SYSTEM TORSIONAL TESTED
 - ✓ 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 $\pm 1\%$ 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.

GENERAC®





ARK

Generator Services

1925 Longmire Drive
Bldg #3
Conroe, TX 77304

936-441-4275 Conroe
888-592-2559 Toll Free

arkgenerator.com

Customer Name **Bob Woodall** Phone Number **281-655-1128**

Address _____

TMEL #13093

City _____ Zip _____

TECL #19700

Date

6/13/2013

Residential Calculation (Optional Stand by Generator) Single Dwelling

| As per the NEC 2008 Section 220.82 | Voltage Or Watts | Amps or VA | # Of Appliances | Notes | NEC 702.5 (2) (b) Load Shed | Demand |
|---|------------------|------------|-----------------|---------------|-----------------------------|-----------|
| Service Amps | 150 | | | | | |
| Square Footage | 4035 | 2.2 | 1 | | | 8,877 VA |
| Laundry | 1500 | 1 | 1 | | | 1,500 VA |
| Appliances | 750 | 1 | 1 | | | 750 VA |
| Microwave | 1700 | 1 | 1 | | | 1,700 VA |
| Kitchen (Small App) Min 2 | 1500 | 20 | 2 | | | 3,000 VA |
| Dish Washer | 120 | 10 | 1 | | | 1,200 VA |
| Disposal | 120 | 6 | 1 | | | 720 VA |
| Electric Dryer | 5000 | 1 | 0 | | Load Shed | 0 VA |
| Cooktop | 4500 | 1 | 0 | Gas appliance | | 0 VA |
| Oven | 5000 | 1 | 0 | | Load Shed | 0 VA |
| Range | 8000 | 1 | 0 | | | 0 VA |
| Swimming Pool | 240 | | See table below | | | 2,880 VA |
| Aerobic system | 120 | 12 | 0 | | | 0 VA |
| Water Well | 240 | 12 | 0 | | | 0 VA |
| Water Heater | 4500 | 1 | 0 | Gas appliance | | 0 VA |
| Total | | | | | | 20,627 VA |
| 10KW @ 100% | | | | | | 10,000 VA |
| Difference | | | | | | 10,627 VA |
| Balance @ 40% | | | | | | 4,251 VA |
| Total | | | | | | 14,251 VA |
| A/C #1 | 240 | 17 | 1 | | | 4,080 VA |
| A/C #2 | 240 | 15 | 0 | | Load shed | 0 VA |
| A/C #3 | 240 | 0 | 0 | | | 0 VA |
| A/C #4 | 240 | 0 | 0 | | | 0 VA |
| Electric Heater | | 65% | 0 | Gas | | 0 VA |
| Electric Heater | | 65% | 0 | | | 0 VA |
| Electric Heater | | 65% | 0 | | | 0 VA |
| ***** Total of A/C or Heating Load | | | | | | 4,080 VA |
| ***** Total Appliance, Lighting, Receptical | | | | | | 14,251 VA |
| ***** Total of All Loads | | | | | | 18,331 VA |
| ***** Minimum Generator Size (KW) | | | | | | 18 KW |
| ***** Total Amps required by generator | | | | | | 76 |

Optional Calculation is derived from 2011 National Electrical Code Article's, 220.82(B) (1), (2), (3) Article's, 220.82 , C

| Pool Equipment | Voltage | Amps | Total Amps or VA |
|--------------------------|---------|------|------------------|
| Sub Panel | 240 | | |
| Blower | 120 | 0 | 0 |
| Pump 1 | 240 | 12 | 2880 |
| Pump 2 | 240 | 0 | 0 |
| Pump 3 | 240 | 0 | 0 |
| Pump 4 | 120 | 0 | 0 |
| Pump 5 | 120 | 0 | 0 |
| Total (Pool Only) | | | 2880 |

Load Shed Pool

TECL 19700 "Regulated by The Texas Department of Licensing and Regulation, P.O. Box 12157, Austin, Texas 78711
1-800-803-9202, 512-463-6599; website: license.state.tx.us/complaints"