

GENERAC®**20 kW 3-Phase****GENERAC AIR-COOLED STANDBY GENERATOR****Air-Cooled Residential Standby Generator**

1 of 6

INCLUDES:

- Cellular connectivity standard, with Wi-Fi™ and Bluetooth™ capabilities
- Electronic fuel and ignition control (EFIC)
- Hydraulic lifters
- Smart Exercise Technology
- True Power™ Electrical Technology
- Power Zone™ 200 Controller
- Oil level sensor
- Electronic governor
- System status & maintenance interval LED indicators
- Sound attenuated enclosure
- Natural gas or LP gas operation
- 5 Year limited warranty, generator and transfer switch
- Listed and labeled by the Southwest Research Institute allowing installation as close as 18 in (457 mm) to a structure.*

**Must be located away from doors, windows, and fresh air intakes and in accordance with local codes.*

STANDBY POWER RATING

G007271-0 (Aluminum-Metro Gray) - 20kW 3Ph 60 Hz

**QUIET TEST™**

NOTE: Generator is certified for use in the US and Canada.

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 it's needed 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.
- **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.
- **TEST CRITERIA:**
 - ✓ **PROTOTYPE TESTED**
 - ✓ **SYSTEM TORSIONAL TESTED**
 - ✓ **NEMA MG1-22 EVALUATION**
 - ✓ **MOTOR STARTING ABILITY**
- **MOBILE LINK® CONNECTIVITY:** Standard with the Generac Air-Cooled Standby Generator home standby generators, Mobile Link Cellular allows users to monitor the status of their generator from anywhere using a smartphone, tablet, or PC. Easily access real-time operating status, maintenance alerts, and generator readiness. Users can also connect their account to an authorized service dealer for proactive support and streamlined service. With Mobile Link, users can see their generator is ready before the next power outage.
- **SOLID-STATE 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 $\pm 1\%$.
- **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 is offered with its own transfer systems and controls for total system compatibility.

THE
GENERAC
PROMISE



GENERAC
Mobile Link™

* Assembled in the USA using domestic and foreign parts.

Features and Benefits

Engine

- Electronic fuel and ignition control - EFIC
Improves generator performance by automatically adjusting for the changing environment. Improves fuel efficiency and reduces emissions on average.
- Hydraulic lifters
Automatically maintains optimal valve spacing. No more manually adjusting valves required.
- Generac G-Force design
Maximizes engine "breathing" for increased fuel efficiency. Plateau honed cylinder walls and plasma moly rings help the engine run cooler, reducing oil consumption and supporting longer engine life.
- Cast iron cylinder walls
Rigid construction and added durability help prolong engine life.
- Full pressure lubrication system
Pressurized lubrication to all vital bearings facilitates better performance, less maintenance, and longer engine life. Featuring up to a 2 year/200 hour oil change interval.
- Low oil pressure shutdown system
Shutdown protection helps to prevent catastrophic engine damage due to low oil.
- Oil level sensor
Continuously monitors and reports engine oil levels.
- High temperature shutdown
Helps prevent damage due to overheating.
- Electronic governor
Maintains constant 60 Hz frequency.

Generator

- Revolving field
Allows for a smaller, light weight unit which 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
Regulating output voltage to $\pm 1\%$ prevents damaging voltage spikes.

Power Zone Controls

- AUTO/MANUAL/OFF/SERVICE buttons with LED indicators
Select 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.
- External LED indicators
Adjustable brightness LED indicators to communicate system status and maintenance intervals.
- Smart Exercise
Allows the system to skip its scheduled exercise if the generator ran for more than 5 consecutive minutes within the 72 hours prior to a scheduled exercise event, allowing for fuel cost savings to the owner.
- Utility voltage sensing
Monitors utility voltage, with adjustable dropout (75-80%) and pickup (84-89%) of nominal voltage.
- Generator voltage sensing
Monitors generator voltage to verify the cleanest power delivered to the home.
- Utility interrupt delay
Prevents nuisance start-ups of the engine, adjustable 2–1,500 seconds from the factory default setting of 10 seconds by a qualified dealer.
- Engine warm-up
Verifies engine is ready to assume the load. Adjustable 0–60 seconds by a qualified dealer (factory default setting 5 seconds).
- Engine cool-down
Allows engine to cool prior to shutdown. Adjustable 60–1,500 seconds by a qualified dealer (factory default setting 60 seconds).
- Programmable exercise
Operates engine to prevent oil seal drying and damage between power outages by running the generator for 5 minutes every week. Also offers a selectable setting for weekly, bi-weekly, or monthly operation with an adjustable run time from 5 to 20 minutes, and an option for a low speed engine rpm, providing flexibility and potentially lower fuel costs to the owner.
- Smart battery charger
Delivers charge to the battery only when needed at varying rates depending on outdoor air temperature. Compatible with AGM-style batteries.
- Generator emergency shutdown
A recessed button on the outside of the enclosure for emergency personnel to use to perform an emergency shutdown of the generator.

Unit

● SAE weather protective enclosure	Sound attenuated enclosure provides quiet operation and weather protection, withstanding winds up to 150 mph (241 km/h). 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 muffler	Quiet muffler is mounted inside the unit.
● Small, compact, attractive	Makes for an easy, aesthetically pleasing installation, as close as 18 in (457 mm) away from a structure. Must be located away from doors, windows, and fresh air intakes and in accordance with local codes.
● Main line circuit breaker	Protects generator from overload and provides overcurrent protection for the generator feeder conductors.
● Listed to UL 2200	For your safety.

Installation System

● 14 in (35.6 cm) flexible fuel line connector	Listed ANSI Z21.75/CSA 6.27 outdoor appliance connector for the required connection to the gas supply piping.
● Integral sediment trap	Meets IFGC and NFPA 54 installation requirements.

Connectivity

● Generator status	Monitor the generator with a smartphone, tablet, or computer at any time via the Mobile Link application for complete peace of mind. Generator status can also be displayed on certain ecobee Smart Thermostat models.
● Exercise/Run and Total Hours	Review the generator's complete protection profile for exercise hours and total hours.
● Maintenance information	Provides maintenance information for the specific model generator when scheduled maintenance is due.
● Monthly report with previous month's activity	Detailed monthly reports provide historical generator information.
● Battery information	Built in battery diagnostics displaying current state of the battery.
● Weather information	Provides detailed local ambient weather conditions for generator location.
● Configurable exercise and duration	Select Low Speed Exercise, Smart Exercise, or Transfer on Exercise options. Adjust generator to exercise for 5–20 minutes (5 minute default).
● Installation and service application	Generator installers and service technicians must use the Field Pro mobile application when installing or servicing the generator.

Generator

Model	20 kW 3-Phase
Maximum power capacity (LP)	20 kW*
Maximum power capacity (NG)	20 kW*
Rated voltage	208
Rated maximum load current – 208 Volts (LP / NG)	69.4 / 69.4
Total Harmonic Distortion	Less than 5%
Main line circuit breaker	80 amp
Phase	3
Number of rotor poles	2
Rated AC frequency	60 Hz
Power factor	0.8
Battery requirement (not included)	12 volts, AGM Powersport Battery Group BTX30L 400CCA minimum
Unit weight (lb / kg)	472 / 214
Dimensions (L x W x H) in / cm	46.4 x 26.3 x 30.7 / 117.9 x 66.8 x 77.9
Sound output in dB(A) at 23 ft (7 m) with generator operating at normal load**	67
Sound output in dB(A) at 23 ft (7 m) with generator in Quiet-Test™ low-speed exercise mode **	55
Exercise duration	Adjustable 5 - 20 min (5 min factory default)

Engine

Engine type	GENERAC G-Force 1000 Series	
Number of cylinders	2	
Displacement	997cc	
Cylinder block	Aluminum w/ cast iron sleeve	
Valve arrangement	Overhead valve	
Lifter type	Hydraulic	
Ignition system	Solid-state	
Governor system	Electronic	
Compression ratio	10.1:1	
Starter	12 VDC	
Oil capacity including filter	Approx. 2.2 qt / 2.1 L	
Operating rpm	3,600	
Fuel consumption		
Natural Gas	ft ³ /hr (m ³ /hr)	
	1/2 Load	189 (5.35)
	Full Load	290 (8.21)
Liquid Propane	ft ³ /hr (gal/hr) [L/hr]	
	1/2 Load	72.4 (1.99) [7.53]
	Full Load	123.6 (3.4) [12.86]

Fuel pipe must be sized for full load. Required fuel pressure to generator fuel inlet at all load ranges - 3.5–7 in water column (0.87–1.74 kPa) for NG, 10–12 in water column (2.49–2.99 kPa) for LP gas. For BTU content, multiply ft³/hr x 2,500 (LP) or ft³/hr x 1,000 (NG). For Megajoule content, multiply m³/hr x 93.15 (LP) or m³/hr x 37.26 (NG).

**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, ISO3046 and DIN6271). * Maximum kilovolt amps and current are subject to and limited by such factors as fuel BTU/megajoule content, ambient temperature, humidity, barometric pressure, altitude, engine power and condition, etc. Maximum power decreases approximately 3.5% for each 1,000 ft (304.8 m) above sea level; and also will decrease approximately 1% for each 10 °F (6 °C) above 60 °F (16 °C).

Controls

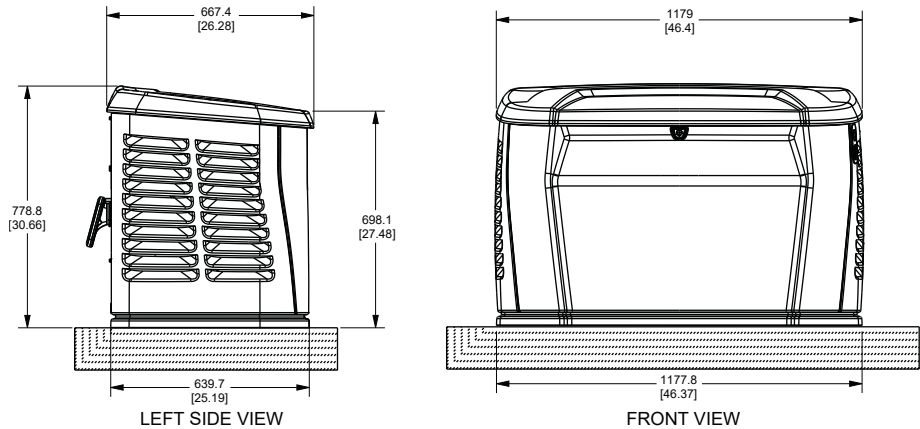
Mode buttons: AUTO	Automatic start on utility failure. Programmable exerciser.
MANUAL	Start with starter control, unit stays on. If utility fails, transfer to load takes place.
OFF	Stops unit. Generator will not automatically start on utility failure. Control and charger still operate if utility is available.
SERVICE	For diagnostic personnel use to prevent remote commands for safe interaction, and prevent nuisance Mobile Link notifications during diagnostic testing.
Ready to Run/Maintenance messages	Standard
Engine Run Hours indication	Standard
Programmable start delay between 2–1,500 seconds	Standard (programmable by dealer only).
Utility nominal voltage setting	Adjustable to greater than or less than 10% of 208V, (90–110%, default 100%).
Utility Voltage Loss/Return to Utility adjustable (brownout setting)	Adjustable against nominal voltage setting, 75–80% dropout / 84–89% pickup.
Future Set Capable Exerciser/Exercise Set Error warning	Standard
Run/Alarm/Maintenance logs	50 events each.
Engine start sequence	Cyclic cranking: Engine cranks a maximum of five times at factory set intervals and durations.
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
Automatically upgradable firmware via Cellular or Wi-Fi	Standard

Available Accessories

Model #	Product	Description
A0010137451 / A0010137452	AGM Group BTX30L Battery	Every standby generator requires a battery to start the system. Generac offers the recommended battery for use with Air-Cooled Standby Generators.
G007211-0	Battery Heater	The battery heater wraps around the battery. Recommended for use if temperature regularly falls below 32 °F (0 °C).
G007102-1	Oil Heater	Oil heater slips directly over the oil filter. Recommended for use if temperature regularly falls below 32 °F (0 °C).
G007103-2	Breather Heater	Breather heater is for use in extreme cold weather applications where heavy icing occurs. Recommended for use if the temperature regularly falls below 0 °F (-18 °C).
G009918-0 - Metro Gray	Touch-Up Paint Kit	If the generator 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 enclosure.
G007216-0	Scheduled Maintenance Kit	Generac's scheduled maintenance kit provides all the items necessary to perform complete routine maintenance on an air-cooled standby generator (oil not included).
G007009-0	LTE LP Tank Fuel Level Monitor	The LTE enabled LP tank fuel level monitor provides constant monitoring of the connected LP fuel tank. Monitoring the LP tank's fuel level is an important step in verifying the generator is ready to run during an unexpected power failure. Status alerts are available through a free application to notify users when the LP tank is in need of a refill.

Dimensions & UPCs

Model	UPC
G007271-0	696471104141



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