

# GENERAC® GUARDIAN® SERIES STANDBY GENERATORS

**25 kW** 

#### **INCLUDES:**

- Generac Naturally Aspirated Gaseous Fueled 1.6L Engine
- Two Line LCD Tri-lingual Digital Nexus™ Controller
- Isochronous Electronic Governor
- Sound Attenuated Enclosure
- Closed Coolant Recovery System
- Smart Battery Charger
- UV/Ozone Resistant Hoses
- ±1% Voltage Regulation
- Natural Gas or LP Operation
- 2 Year Limited Warranty
- UL 2200 Listed

## Liquid-Cooled Engine Generator Sets

Standby Power Rating

Model QT025 (Bisque) - 25 kW 60Hz









Meets EPA Emission Regulations CA/MA emissions Compliant

### **FEATURES**

- O 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.
- O TEST CRITERIA:
  - ✓ PROTOTYPE TESTED
- ✓ NEMA MG1-22 EVALUATION
- ✓ SYSTEM TORSIONAL TESTED
- **✓ MOTOR STARTING ABILITY**

- 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. 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.



#### **GENERATOR SPECIFICATIONS**

TYPE	Synchronous
ROTOR INSULATION	Class F
STATOR INSULATION	Class F
TELEPHONE INTERFERENCE FACTOR (TIF)	< 50
ALTERNATOR OUTPUT LEADS 3 PHASE	4 wire
BEARINGS	Sealed Ball
COUPLING	Flexible Disc
LOAD CAPACITY (STANDBY RATING)	25 kW
EXCITATION SYSTEM	Direct

#### **VOLTAGE REGULATION**

TYPE	Electronic
SENSING	Single Phase
REGULATION	± 1%

#### **GENERATOR FEATURES**

Revolving field heavy duty generator Directly connected to the engine Operating temperature rise 120°C above a 40°C ambient Insulation is Class H rated at 150°C rise All models are fully prototyped tested

#### **ENCLOSURE FEATURES**

Galvanized steel weather protective enclosure	Ensures protection against mother nature. 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.
SAE	Sound attenuated enclosure ensures quiet operation.

#### **ENGINE SPECIFICATIONS**

MAKE	Generac
MODEL	In line
CYLINDERS	4
DISPLACEMENT	1.6 Liter
BORE	3.15
STROKE	3.15
COMPRESSION RATIO	9.75:1
INTAKE AIR SYSTEM	Naturally Aspirated
LIFTER TYPE	Hydraulic

#### **GOVERNOR SPECIFICATIONS**

TYPE	Electronic
FREQUENCY REGULATION	Isochronous
STEADY STATE REGULATION	± 0.25%

#### **ENGINE LUBRICATION SYSTEM**

OIL PUMP	Gear
OIL FILTER	Full flow spin-on cartridge
CRANKCASE CAPACITY	4 Quarts

#### **ENGINE COOLING SYSTEM**

TYPE	Closed
WATER PUMP	Belt driven
FAN SPEED	2250
FAN DIAMETER	15 inches
FAN MODE	Pusher

#### **FUEL SYSTEM**

FUEL TYPE	Natural gas, propane vapor
CARBURETOR	Down Draft
SECONDARY FUEL REGULATOR	Standard
FUEL SHUT OFF SOLENOID	Standard
OPERATING FUEL PRESSURE	5" - 14" H <sub>2</sub> 0

#### **ELECTRICAL SYSTEM**

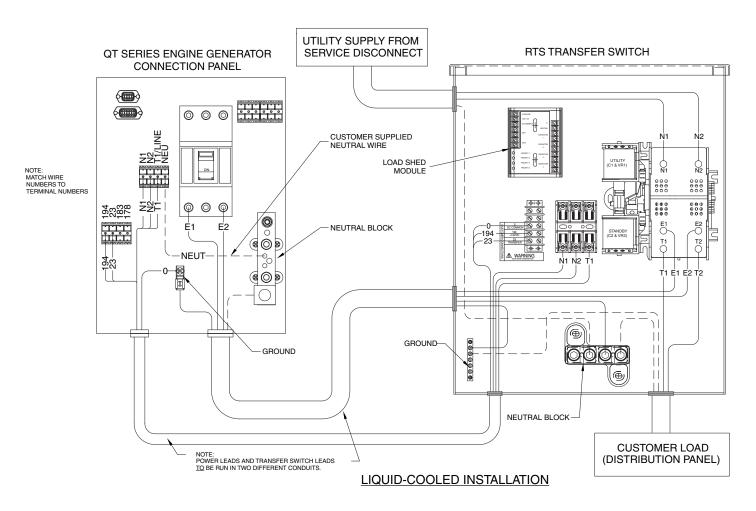
BATTERY CHARGE ALTERNATOR	12V 30 Amp
STATIC BATTERY CHARGER	2 Amp
RECOMMENDED BATTERY	Group 26, 525CCA
SYSTEM VOLTAGE	12 Volts

## **Generac®** Guardian® Series Standby Generator - 25 kW



	OPERAT	ING DATA			
KW RATING (LP/NG)			25/	25	
ENGINE SIZE	SIZE		1.6 Liter 4 cyl. inline		
GENERATOR OUTPUT VOLTAGE/KW - 60Hz		KW	AMP	CB Size	
120/240V, 1-phase, 1.0 pf 120/208V, 3-phase, 0.8 pf 120/240V, 3-phase, 0.8 pf		25 104 125 25 87 100 25 75 90		)	
ENGINE FUEL CONSUMPTION (Natural Gas)  Exercise cycle	(Propane)	Natural Gas         Propane           (ft³/hr.)         (gal/hr.)           60         0.7		ane ft <sup>3</sup> /hr 24	
25% of rated load 50% of rated load 75% of rated load 100% of rated load*		120 220 310		1.3 2.4 3.4 4.3	48 87 123 155
For Btu content, multiply ft³/hr x 2520 (LP) or ft³/hr x	000 (NG)				
ENGINE COOLING					
Air flow (inlet air including alternator and combu System coolant capacity Heat rejection to coolant Max. operating air temp. on radiator Max. ambient temperature	stion air) ft³/min. US gal. BTU/hr. °C (°F) °C (°F)	1,800 2.0 112,000 60 (150) 50 (140)			
COMBUSTION AIR REQUIREMENTS	<u>'</u>				
Flow at rated power 60 Hz	cfm	90			
SOUND EMISSIONS IN DBA	<u>'</u>				
Exercising at 7 meters Normal operation at 7 meters			6 7		
EXHAUST					
Exhaust flow at rated output 60 Hz Exhaust temp. at muffler outlet	cfm °F	249 1015			
ENGINE PARAMETERS					
Rated synchronous RPM	60 Hz	3600			
POWER ADJUSTMENT FOR AMBIENT COND	ITIONS				
Temperature Deration  3% for every 10 °C above - °C  1.65% for every 10 °F above - °F  Altitude Deration  1% for every 100 m above - m  3% for every 1000 ft. above - ft.			2 7		
			18 60		

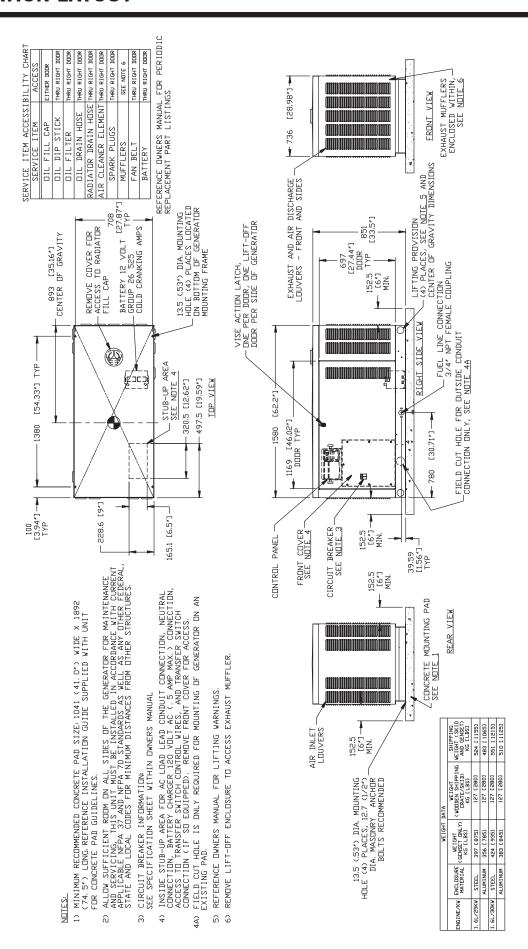
<sup>\*</sup> Refer to "Emissions Data Sheets" for maximum fuel flow for EPA and SCAQMD permitting purposes.



#### **NEXUS™ CONTROL FEATURES**

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 Fused	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		
Governor Failure Protection	Standard		

<sup>\*</sup>Single and three phase connections may vary, refer to the owner's manual for specific connection information.



Model #	Product	Description
5629	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.
5615	Extreme Cold Weather Kit	Recommended where the temperature regularly falls below 32° F for extended periods of time. For liquid cooled units only.
5651	Base Plug Kit	Add base plugs to the base of the generator to keep out debris.
5703	Paint Kit	Bisque Kit
5655	Scheduled Maintenance Kit	The Liquid-Cooled Scheduled Maintenance Kits offer all the hardware necessary to perform a complete maintenance on Generac liquidcooled generators.
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.
5937	DLM Load Control Module (50 Amps)	DLM Modules are used in conjunction with the Nexus Smart Switch to increase its load management capabilities. It gives the Nexus Smart Switch additional load management flexibility not found in any other transfer switch.

