

# **GENERAC®** QUIETSOURCE® SERIES STANDBY GENERATORS

# **36 kW**

## Liquid-Cooled Engine Generator Sets

### **INCLUDES:**

- Generac Turbocharged/Aftercooled Gaseous Fueled 2.4L Engine
- Two Line LCD Tri-lingual Digital Nexus<sup>™</sup> 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

Standby Power Rating Model QT036 (Gray) - 36 kW 60Hz



Meets EPA Emission Regulations Not for sale in CA/MA

### **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.

#### O 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.



#### **GENERATOR SPECIFICATIONS**

ТҮРЕ	Synchronous
ROTOR INSULATION	Class H
STATOR INSULATION	Class H
TELEPHONE INTERFERENCE FACTOR (TIF)	<50
ALTERNATOR OUTPUT LEADS 3 PHASE	4 wire
BEARINGS	Sealed Ball
COUPLING	Flexible Disc
LOAD CAPACITY (STANDBY RATING)	36 kW
EXCITATION SYSTEM	Direct

#### **VOLTAGE REGULATION**

ТҮРЕ	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**

Aluminum 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	Inline 4
CYLINDERS	4
DISPLACEMENT	2.4 Liter
BORE	3.41
STROKE	3.94
COMPRESSION RATIO	9.5:1
INTAKE AIR SYSTEM	Turbocharged/Aftercooled
LIFTER TYPE	Hydraulic

#### **GOVERNOR SPECIFICATIONS**

ТҮРЕ	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**

ТҮРЕ	Closed
WATER PUMP	Belt driven
FAN SPEED	1500
FAN DIAMETER	22 inches
FAN MODE	Puller

#### **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**<sup>®</sup> QuietSource<sup>®</sup> Series Standby Generator - 36 kW

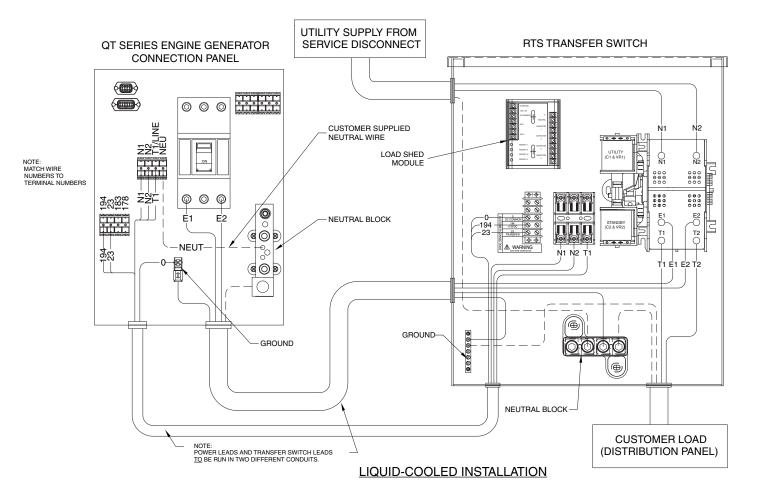
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	OPER	ATING DATA	1			
KW RATING (LP/NG)		36/35				
ENGINE SIZE		2.4 Liter Inline 4				
GENERATOR OUTPUT VOLTAGE/KW - 6	OHz	kW LPG	AMP	kW Nat. Gas	AMP	CB Size (Both)
120/240V, 1-phase, 1.0 pf 120/208V, 3-phase, 0.8 pf 120/240V, 3-phase, 0.8 pf 277/480V, 3-phase, 0.8 pf		36 36 36 36	150 125 108 54	35 35 35 35 35	146 121 105 52	175 150 125 60
ENGINE FUEL CONSUMPTION (Natural	Gas) (Propane)	Natura			Propane	
Exercise cycle 25% of rated load 50% of rated load 75% of rated load 100% of rated load*		(ft <sup>3</sup> /hr.) 48 156 282 392 503		(gal/hr.) 0.5 1.7 3.1 4.3 5.5	cu ft/hr 19 62 112 156 200	
For Btu content, multiply ft³/hr x 2520 (LP) or ft	/hr x 1000 (NG)					
ENGINE COOLING						
Air flow (inlet air including alternator and constraints) System coolant capacity Heat rejection to coolant Max. operating air temp. on radiator Max. ambient temperature	ombustion air) ft³/min. US gal. BTU/hr. °C (°F) °C (°F)	2,200 2.5 145,000 60 (150) 50 (140)				
COMBUSTION AIR REQUIREMENTS						
Flow at rated power 60 Hz	cfm			106		
SOUND EMISSIONS IN DBA		L				
Exercising at 7 meters Normal operation at 7 meters		58 64				
EXHAUST						
Exhaust flow at rated output 60 Hz Exhaust temp. at muffler outlet	cfm °F	300 1075				
ENGINE PARAMETERS						
Rated synchronous RPM	60 Hz			1800		
POWER ADJUSTMENT FOR AMBIENT (	CONDITIONS	l				
	3% for every 10 °C above - °C 65% for every 10 °F above - °F	25 77 915 3000				
Altitude Deration	1% for every 100 m above - m 3% for every 1000 ft. above - ft.					

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

RATING: All three phases units are rated at 0.8 power factor. All single phase units are rated at 1.0 power factor. STANDBY RATING: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046-1. Design and specifications are subject to change without notice.

KW rating is based on LPG Fuel and may derate with natural gas.



#### **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

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

## **INSTALLATION LAYOUT**

SERVICE ITEM ACCESSIBILITY CHART       SERVICE ITEM ACCESSIBILITY CHART       01L FILL CAP     ETHMER JOOR       01L DIP STICK     Have Rish JOOR       01L DIP STICK     Have LET JOOR       01L DIP STICK     Have LET JOOR       01L DIP STICK     Have LET JOOR       5 [7 3/47]     SPARK PLOGS       5 85.5     BATTERY       5 86.5     BATTERY       9 1/47]     REFERENCE DWERS MANJAL FOR PERIDIC       REFERENCE DWERS MANJAL FOR PERIDIC     REFERENCE DWERS MANJAL FOR PERIDIC       100     REFERENCE DWERS MANJAL FOR PERIDIC       147     DOR       147     DOR       147     DOR       147     DOR       147     DOR	Image: Constraint of the second se
REMOVE COVER FOR ACCESS TO RADIATOR FILL CAP GRANTER CENTER OF CENTER OF CENTER OF CENTER OF TS556 (29 3/4') 191 115'1 1	FRONT COVER FRONT COVER SEE NOTE 4 CIRCUIT BREAKER CIRCUIT BREAKER CIRCUIT BREAKER CIRCUIT BREAKER SEE NOTE 3 SEE SEE NOTE 3 SEE SEE NOTE 3 SEE SEE SEE NOTE 3 SEE SEE SEE SEE SEE SEE SEE SEE SEE SEE
<ul> <li>13.5 [17/32'] DIA, MDUNTING HOLE (4) PLACES LIDGATED BIDITIOM DF GENERATIR MULTING FRAME MULTING FRAME MULTING FRAME MULTING FRAME MULTING FRAME MULTING FRAME MULTING FRAME MULTING MULTING FRAME MULTING MULTIN</li></ul>	EXHAUST AND AIR DISCHARGE EXHAUST NUFFLER LUOVERS - FRONT AND SIDES 135. L17/32'1 DIA. MOUNTING 135. L17/32'1 DIA. MOUNTING HOLE (4) PLACES, L27 (1/2*) DIA. PLACES, L27 (1/2*

### **AVAILABLE ACCESSORIES**

Model #	Product	Description
5630	Cold Weather Kit	If the temperature regularly falls below $32^\circ$ F, install a cold weather kit to maintain optimal battery temperature. Kit consists of battery warmer with thermostat built into the wrap.
5616	Extreme Cold Weather Kit	Recommended where the temperature regularly falls below $32^\circ$ 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.
5704	Paint Kit	Medium Grey Kit
5984	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.

