GENERAC® STANDBY GENERATORS

80 kW

Liquid-Cooled Engine Generator Sets

Standby Power Rating

Model QT080 (Bisque) - 80 kW 60Hz

INCLUDES:

- Generac Naturally Aspirated Gaseous Fueled 4.6L Engine
- Two Line LCD Tri-lingual Digital Nexus™ Controller
- Isochronous Electronic Governor
- 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

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GOOD HOUSEKEEPING Since 1909

QUIET TEST™

Meets 2010 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.

- **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.

GENERAC®

Application & Engineering Data QT080

GENERATOR SPECIFICATIONS

TYPE	Synchronous
ROTOR INSULATION	Class H
STATOR INSULATION	Class H
TELEPHONE INTERFERENCE FACTOR (TIF)	<50
ALTERNATOR OUTPUT LEADS 3-PHASE/1-PHASE	6/4 wire
BEARINGS	Sealed Ball
COUPLING	Flexible Disc
LOAD CAPACITY (STANDBY RATING)	80 kW
EXCITATION SYSTEM	Brushless

VOLTAGE REGULATION

TYPE	Full Digital
SENSING	Three 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 F rated at 130 °C rise
All models are fully prototyped tested

ENCLOSURE FEATURES

Aluminum all weather protective enclosure options available	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	V-type
CYLINDERS	8
DISPLACEMENT	4.6 Liter
BORE	3.55
STROKE	3.54
COMPRESSION RATIO	9.4:1
INTAKE AIR SYSTEM	Naturally Aspirated
VALVE SEATS	Hardened
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	6 Quarts

ENGINE COOLING SYSTEM

TYPE	Closed
WATER PUMP	Belt driven
FAN SPEED	1600
FAN DIAMETER	26 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	11" - 14" H_2O

ELECTRICAL SYSTEM

BATTERY CHARGE ALTERNATOR	12V 30 Amp
SMART BATTERY CHARGER	12V, 2 Amp
RECOMMENDED BATTERY	Group 24F, 12V, 525CCA
SYSTEM VOLTAGE	12 Volts

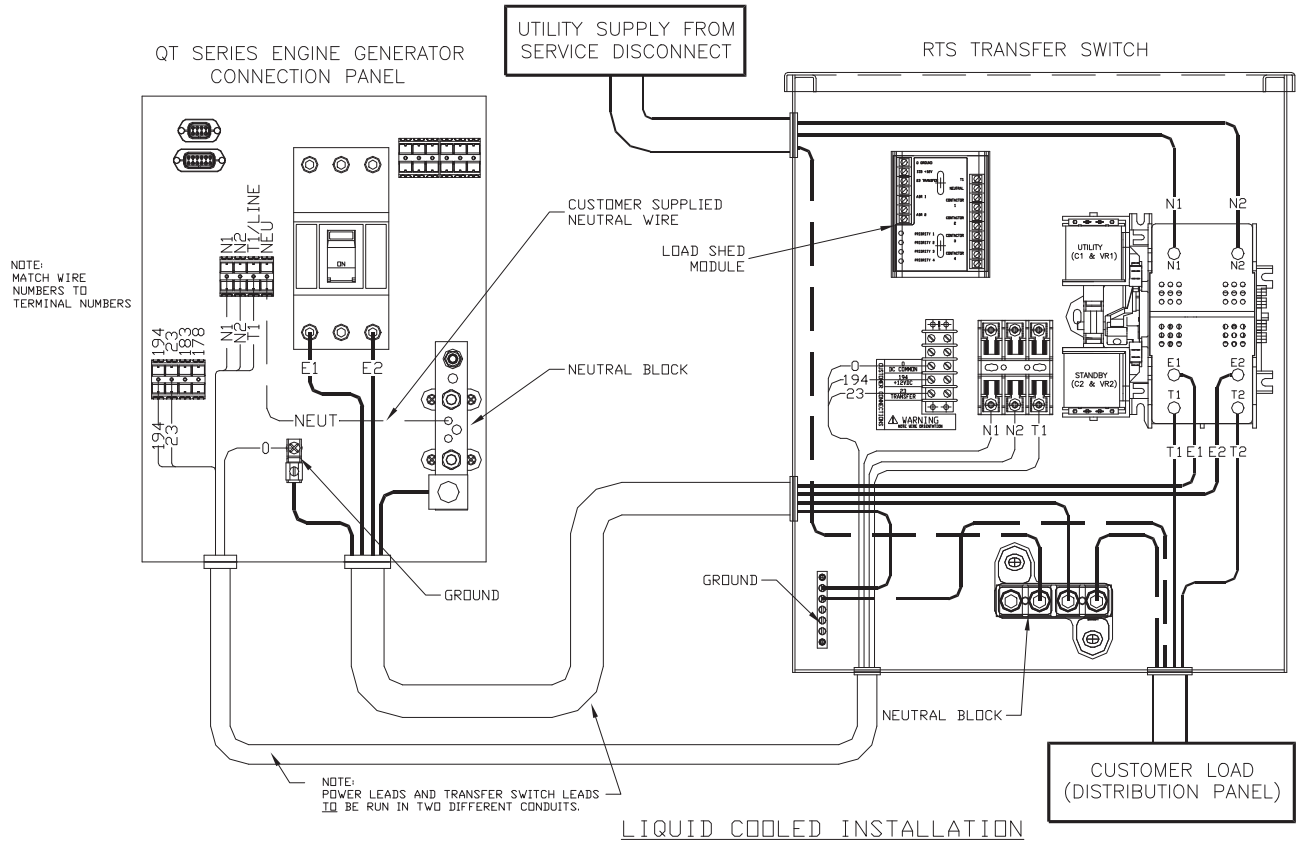
Rating definitions - Standby: Applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. (All ratings in accordance with BS5514, ISO3046 and DIN6271). (All ratings in accordance with BS5514, ISO3046, ISO8528, SAE J1349 and DIN6271).

Generac® Standby Generator - 80 kW

GENERAC

OPERATING DATA				
KW RATING (LP/NG)		80		
ENGINE SIZE		4.6 Liter V-8		
GENERATOR OUTPUT VOLTAGE/KW - 60Hz		**KW**	**AMP**	**CB Size**
120/240V, 1-phase, 1.0 pf		77	320	400
120/208V, 3-phase, 0.8 pf		80	278	300
120/240V, 3-phase, 0.8 pf		80	249	300
277/480V, 3-phase, 0.8 pf		80	120	150
GENERATOR LOCKED ROTOR KVA AVAILABLE @ VOLTAGE DIP OF 35%				
Single phase or 208-240 3-phase		160		
480V 3-phase		185		
ENGINE FUEL CONSUMPTION (Natural Gas) (Propane)		**Natural Gas** (ft^3/hr.)	**Propane** (gal/hr.)	cu ft/hr
Exercise cycle		131	1.45	53
25% of rated load		312	3.45	126
50% of rated load		600	6.64	241
75% of rated load		835	9.25	336
100% of rated load		1154	12.78	465
For Btu content, multiply ft^3/hr x 2520 (LP) or ft^3/hr x 1000 (NG)				
ENGINE COOLING				
Air flow (inlet air including alternator and combustion air)	ft^3/min.	5300		
System coolant capacity	US gal.	4.0		
Heat rejection to coolant	BTU/hr.	316,000		
Max. operating air temp. on radiator	°C (°F)	60 (150)		
Max. ambient temperature	°C (°F)	50 (140)		
COMBUSTION AIR REQUIREMENTS				
Flow at rated power 60 Hz	cfm	250		
SOUND EMISSIONS IN DBA				
Exercising at 7 meters		64		
Normal operation at 7 meters		74		
EXHAUST				
Exhaust flow at rated output 60 Hz	cfm	720		
Exhaust temp. at muffler outlet	°C (°F)	449 (840)		
ENGINE PARAMETERS				
Rated synchronous RPM	60 Hz	3600		
POWER ADJUSTMENT FOR AMBIENT CONDITIONS				
Temperature Deration				
3% for every 10 °C above - °C		25		
1.65% for every 10 °F above - °F		77		
Altitude Deration				
1% for every 100 m above - m		183		
3% for every 1000 ft. above - ft.		600		

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.



CIRCUIT BREAKER WIRE AND CONDUIT SIZE

kW	VOLTS	CB AMPS	LUG SIZE
80	240 1 Ø	400	(1) 600 mcm to #4 or (2) 1/0 to 250 mcm to 1/0
80	240 3 Ø	300	(1) 600 mcm to #4 or (2) 1/0 to 250 mcm to 1/0
80	208 3 Ø	300	(1) 600 mcm to #4 or (2) 1/0 to 250 mcm to 1/0
80	480 3 Ø	150	#6 to 300 mcm

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.**