QT025

Liquid Cooled Gas Engine Generator Sets

Standby Power Rating 25 kW 60 Hz



GENERAC 1.6L ENGINE

Naturally Aspirated Gaseous Fueled Meets 2009 EPA Emission Regulations

STANDARD EQUIPMENT

- · All input connections in one single area
- High coolant temperature shutdown
- · Low oil pressure shutdown
- · Low coolant level automatic shutdown
- Overspeed automatic shutdown
- Crank timer
- · Exercise timer
- · Oil drain extension
- · Cool flow radiator
- Closed coolant recovery system
- UV/Ozone resistant hoses
- Watertight state of the art electrical connectors

- Mainline circuit breaker
- · Radiator drain extension
- Battery charge alternator
- · 2 Amp static battery charger
- Battery cables
- Battery rack
- Fan and belt guards
- · Isochronous governor

FEATURES

- Innovative design and fully prototype tested
- UL2200 Listed
- Solid state frequency compensated voltage regulator
- Dynamic and static battery charger
- Sound attenuated acoustically designed enclosure
- · Quiet test for low noise level exercise
- Acoustically designed engine cooling system
- · High flow low noise factory engineered exhaust system
- State of the art digital control system with R100 digital control panel
- Watertight electrical connectors
- · Rodent proof construction
- High efficiency, low distortion Generac designed alternator
- · Vibration isolated from mounting base
- Matching Generac transfer switches engineered and tested to work as a system
- · All components easily accessible for maintenance
- Electrostatically applied powder paint



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GENERATOR SPECIFICATIONS

TYPE	Synchronous
ROTOR INSULATION	Class F
STATOR INSULATION	Class F
TOTAL HARMONIC DISTORTION	<5%
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

NOTE: Generator rating and performance in accordance with ISO8528-5, BS5514, SAE J1349, ISO3046, and DIN6271 standards.

VOLTAGE REGULATOR

TYPE	Electronic
SENSING	Single Phase
REGULATION	•
FEATURES	
	Adjustable Voltage and Gain
	I ED Indicators

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

CONTROL PANEL FEATURES

☐ SEVEN LED INDICATOR LIGHTS ☐ ADDITIONAL FUNCTIONS

- System ready
- · Low fuel pressure
- Low battery
- · Low oil pressure
- High coolant temp/low coolant temp
- Overspeed
- Overcrank

- Utility sensing
- · Delay on utility failure for engine start
- Engine warm-up before transfer
- · Delay to retransfer to utility
- Engine cooldown timer
- · Exerciser not set

■ INTERNAL FUNCTIONS:

- 3 position switch (auto, off and manual)
- 2 wire start for any transfer switch
- Communicates with the Generac RTS transfer switch
- Built-in 7 day exerciser
- Selectable engine speed at exercise
- · Governor controller is built into the master control board
- Temperature range -40 °C to 70 °C

ENGINE SPECIFICATIONS

MAKE	Generac
MODEL	In line
CYLINDERS	4
DISPLACEMENT	1.6 Liter
BORE	3.15
STROKE	3.13
COMPRESSION RATIO	9.75:1
INTAKE AIR SYSTEM	
VALVE SEATS	Replaceable
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	2550
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 ₂ O

ELECTRICAL SYSTEM

BATTERY CHARGE ALTERNATOR	12V 30 Amp
STATIC BATTERY CHARGER	2 Amp
RECOMMENDED BATTERY	Group 26, 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 and DIN6271).



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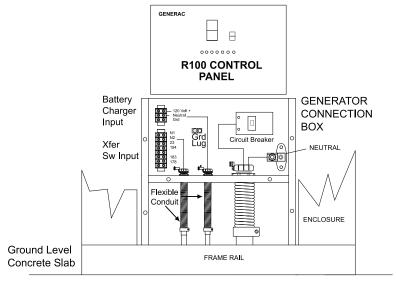
<u>OPEF</u>	<u> PATIN</u>	<u> </u>	DATA

W RATING DATA	QT025 25		
ENGINE SIZE	1.6 Liter 4 cyl. inline		
GENERATOR OUTPUT VOLTAGE/KW - 60Hz 120/240V, 1-phase, 1.0 pf 120/208V, 3-phase, 0.8 pf 120/240V, 3-phase, 0.8 pf	KW 25 25 25	AMP 104 87 75	CB Size 125 100 90
GENERATOR LOCKED ROTOR KVA AVAILABLE @ VOLTAGE DIP OF 35% Single phase or 208/240 3-phase	34		
ENGINE FUEL CONSUMPTION (Natural Gas) (Propane) Exercise cycle 25% of rated load 50% of rated load 75% of rated load 100% of rated load	Natural Gas (ft³/hr.) 60 161 253 345 437	(gal/hr.) 0.65 1.76 2.77 3.79 4.81	ropane cu ft/hr 24 64 101 138 175
ENGINE COOLING Air flow (inlet air including alternator and combustion air) ft³/min. System coolant capacity US gal. Heat rejection to coolant BTU/hr. Max. operating air temp. on radiator °C (°F) Max. ambient temperature °C (°F)	1,528 2.0 110,000 60 (150) 50 (140)		
COMBUSTION AIR REQUIREMENTS Flow at rated power 60 Hz cfm		90	
SOUND EMISSIONS IN DBA Exercising at 7 meters Normal operation at 7 meters	62 74		
EXHAUST Exhaust flow at rated output 60 Hz cfm Exhaust temp. at muffler outlet °F	249 1015		
ENGINE PARAMETERS Rated synchronous RPM 60 Hz HP at rated KW 60 Hz		3600 45	
POWER ADJUSTMENT FOR AMBIENT CONDITIONS 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.	25 77 183 600		

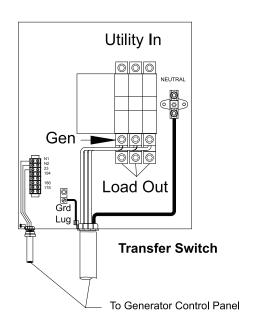
RATING: All three phases units are rated at 0.8 power factor. All single phase units are rated at 1.0 power factor. STANDBY RATING: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is 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.

C1 Enclosure 18, 20, 25, 30 kW 1.6 Liter QT



Installation Drawing Ref. No. 0G5116



CIRCUIT BREAKER SIZE

<u>KW</u>	<u>VOLTS</u> /	<u>AMPS</u>	<u>LUG SIZE</u>
25	240 1ø	125	#2 to 1/0
25	208 3ø	100	#4 to 1/0
25	240 3Ø	90	#10 to 1/0

INSTALLATION LAYOUT

