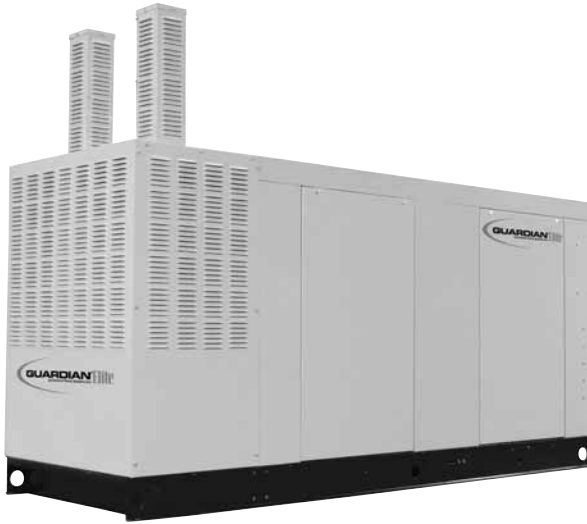


Standby Power Rating

100 kW 60 Hz

Liquid Cooled Gas Engine Generator Sets



Quiet-Test Mode
For Low Noise Exercise
- 61 dB(A) at 23 feet

GENERAC 6.8L ENGINE

Naturally Aspirated
Gaseous Fueled

UL 2200 Listed

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
- Adjustable cranking timer
- Adjustable 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
- Oil drain extension to frame rail
- Radiator drain extension
- Battery charge alternator
- 2 Amp static battery charger
- Battery and battery cables
- Battery rack
- Fan and belt guards
- Isochronous governor

FEATURES

- Innovative design and fully prototype tested
- UL2200 Listed
- Solid state frequency compensated digital 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
- Built-in kW, kVAR and power factor meters
- 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
- H-100 microprocessor control panel



APPLICATION & ENGINEERING DATA

100 kW

GENERATOR SPECIFICATIONS

TYPE	Synchronous
ROTOR INSULATION	Class H
STATOR INSULATION	Class H
TOTAL HARMONIC DISTORTION	<3.5%
TELEPHONE INTERFERENCE FACTOR (TIF)	<50
ALTERNATOR OUTPUT LEADS 3 PHASE	4 wire
BEARINGS	Sealed Ball
COUPLING	Gear Drive
LOAD CAPACITY (STANDBY RATING)	100 kW
EXCITATION SYSTEM	Brushless

NOTE: Emergency loading in compliance with NFPA 99, NFPA 110, paragraph 5-13.2.6. Generator rating and performance in accordance with ISO8528-5, BS5514, SAE J1349, ISO3046, and DIN6271 standards.

VOLTAGE REGULATOR

TYPE	Full Digital
SENSING	3 Phase
REGULATION	± 1/4%
FEATURES	Built into H-100 Control Panel V/F Adjustable Adjustable Voltage and Gain

GENERATOR FEATURES

- Revolving field heavy duty generator
- Quiet drive coupling
- Operating temperature rise 120 °C above a 40 °C ambient
- Insulation is Class H rated at 150 °C rise
- All prototype models have passed three phase short circuit testing

CONTROL PANEL FEATURES

- TWO FOUR LINE LCD DISPLAYS READ:

Voltage (all phases)	Current (all phases)
Power factor	kW
kVAR	Transfer switch status
Engine speed	Low fuel pressure
Run hours	Service reminders
Fault history	Oil pressure
Coolant temperature	Time and date
Low oil pressure shutdown	High coolant temperature shutdown
Oversvoltage	Overspeed
Low coolant level	Low coolant level
Not in auto position (flashing light)	
- INTERNAL FUNCTIONS:
 - I²T function for alternator protection from line to neutral and line to line short circuits
 - Emergency stop
 - Programmable auto crank function
 - 2 wire start for any transfer switch
 - Communicates with the Generac HTS transfer switch
 - Built-in 7 day exerciser
 - Adjustable engine speed at exerciser
 - RS232 port for GenLink® control
 - RS485 port remote communication
 - Canbus addressable
 - Governor controller and voltage regulator are built into the master control board
 - Temperature range -40 °C to 70 °C

ENGINE SPECIFICATIONS

MAKE	Generac
MODEL	V Type
CYLINDERS	10
DISPLACEMENT	6.8 Liter
BORE	3.55
STROKE	4.17
COMPRESSION RATIO	9:1
INTAKE AIR SYSTEM	Naturally Aspirated
VALVE SEATS	Hardened
LIFTER TYPE	Hydraulic

GOVERNOR SPECIFICATIONS

TYPE	Electronic
FREQUENCY REGULATION	± 1%
STEADY STATE REGULATION	± 1/2%
ADJUSTMENTS	
Speed	Yes
Droop	Yes

ENGINE LUBRICATION SYSTEM

OIL PUMP	Gear
OIL FILTER	Full flow cartridge
CRANKCASE CAPACITY	5 Quarts

ENGINE COOLING SYSTEM

TYPE	Closed
WATER PUMP	Belt driven
FAN SPEED	1850
FAN DIAMETER	26 inches
FAN MODE	Puller

FUEL SYSTEM

FUEL TYPE	Natural gas
CARBURETOR	Down Draft
SECONDARY FUEL REGULATOR	Standard
FUEL SHUT OFF SOLENOID	Standard
OPERATING FUEL PRESSURE5" - 14" H ₂ O

ELECTRICAL SYSTEM

BATTERY CHARGE ALTERNATOR	12V 30 Amp
STATIC BATTERY CHARGER	12V 2 Amp
RECOMMENDED BATTERY	24F 625CCA
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).

100 kW

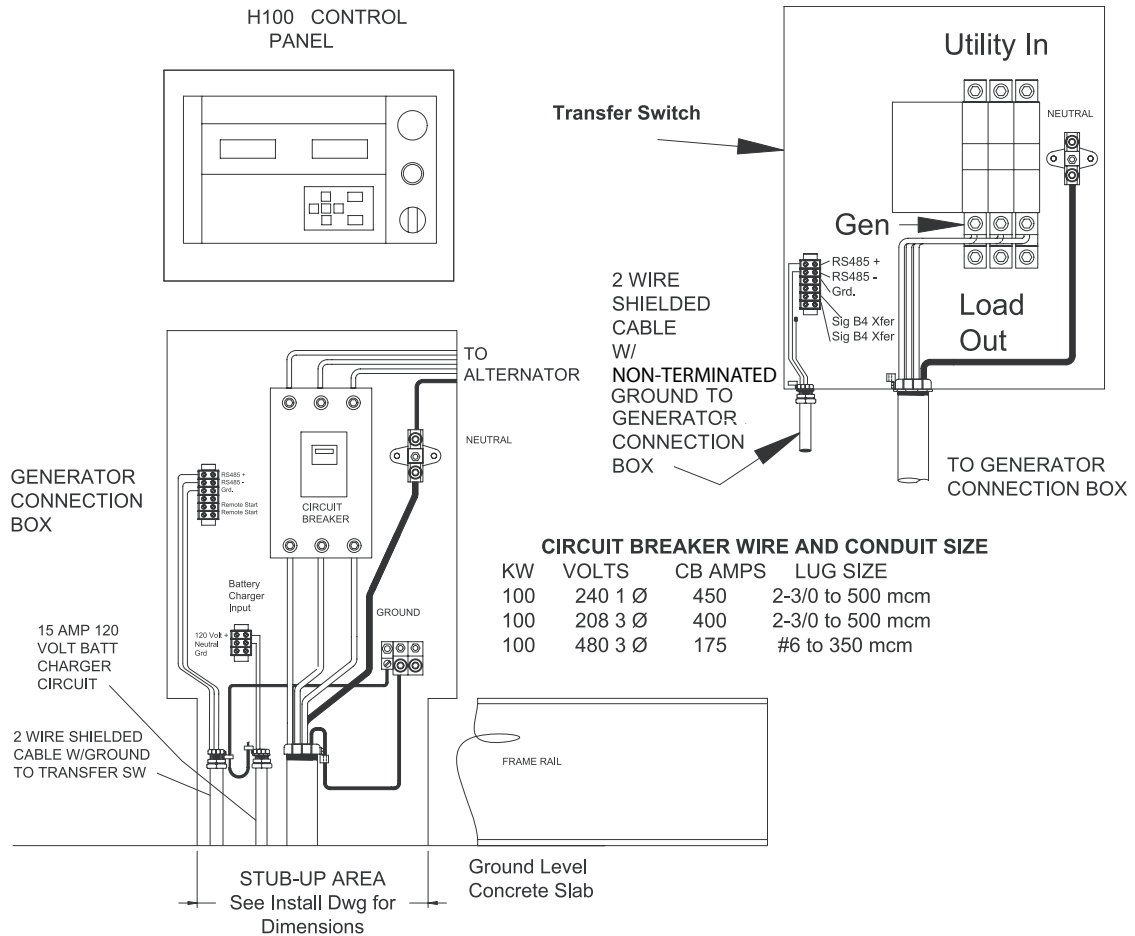
OPERATING DATA

		COMMERCIAL 100 kW		
KW RATING		100		
ENGINE SIZE		6.8 Liter V-10		
GENERATOR OUTPUT VOLTAGE/KW - 60Hz		KW	AMP	CB Size
120/240V, 1-phase, 1.0 pf		100	417	450
120/208V, 3-phase, 3.0 pf		100	347	400
277/480V, 3-phase, 3.0 pf		100	150	175
GENERATOR LOCKED ROTOR KVA AVAILABLE @ VOLTAGE DIP OF 35%				
Single phase or 208 3-phase		200		
480V 3-phase		240		
ENGINE FUEL CONSUMPTION (Natural Gas)				
Exercise cycle		ft ³ /hr.	300	
25% of rated load		ft ³ /hr.	371	
50% of rated load		ft ³ /hr.	713	
75% of rated load		ft ³ /hr.	991	
100% of rated load		ft ³ /hr.	1260	
ENGINE COOLING				
Air flow (inlet air including alternator and combustion air)		ft ³ /min	6500	
Coolant capacity		US gal.	4.5	
Heat rejection to coolant		BTU/hr.	348,000	
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	262	
SOUND EMISSIONS IN DBA				
Exercising at 7 meters		61		
Full load at 7 meters		74		
EXHAUST				
Exhaust flow at rated output 60 Hz		cfm	438	
Exhaust temp. at muffler outlet		°F	925	
ENGINE PARAMETERS				
Rated synchronous RPM		60 Hz	2300	
HP at rated KW		60 Hz	155	
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		182		
3% for every 1000 ft. above - ft.		600		

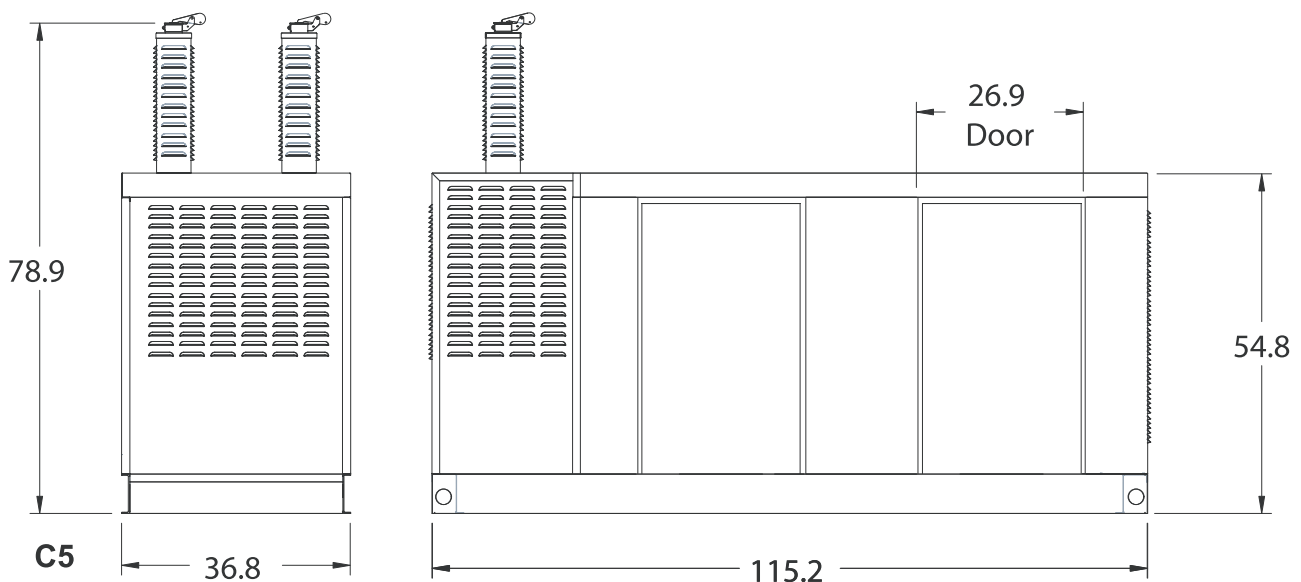
RATING: All three phases units are rated at 0.8 power factor. All single phase units are rated at 1.0 power factor. STANDBY RATING: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is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

INTERCONNECTIONS

100 kW



INSTALLATION LAYOUT



UNIT WEIGHT 2705 LBS.

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