

Standby Power Rating

20 kW 60 Hz

Liquid Cooled
Gas Engine
Generator Sets

Model Numbers:

05210 (Tan - Steel)

05210T (Tan - Steel)

05211 (Gray - Aluminum)



Whisper-Test™

Low Noise Exercise
- 62 dB(A) at 23 feet

UL 2200 Listed

Power Matched

GENERAC 1.5L ENGINE

Naturally Aspirated

2 Year Limited Warranty

Model 5210T is equipped with a
100 amp NEMA 3R Transfer Switch.
Transfer Switches are available for
Models 5210 and 5211.

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
- 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
- UV/Ozone resistant hoses

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
- Whisper-Test™ Mode for low noise level exercise
- Acoustically designed engine cooling system
- High flow low noise factory engineered exhaust system
- State of the art R100 digital control system
- 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

GUARDIAN by Generac Power Systems, Inc.
QUIETSOURCE™

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)	20 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	± 1%
FEATURES	V/F Adjustable Adjustable Voltage and Gain LED 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
 - System ready
 - Low fuel pressure
 - Low battery
 - Low oil pressure
 - High coolant temp/low coolant temp
 - Overspeed
 - Overcrank
- ADDITIONAL FUNCTIONS
 - 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	1.5 Liter
BORE	2.97
STROKE	3.23
COMPRESSION RATIO	9.4:1
INTAKE AIR SYSTEM	Naturally Aspirated
VALVE SEATS	Replaceable
LIFTER TYPE	Hydraulic

GOVERNOR SPECIFICATIONS

TYPE	Electronic
FREQUENCY REGULATION	Isochronous
STEADY STATE REGULATION	± 0.25
ADJUSTMENTS	
Speed	Yes
Droop	Yes

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: 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. Maximum wattage and current are subject to and limited by such factors as fuel Btu content, ambient temperature, altitude, engine power and condition, etc.

STANDBY 20kW



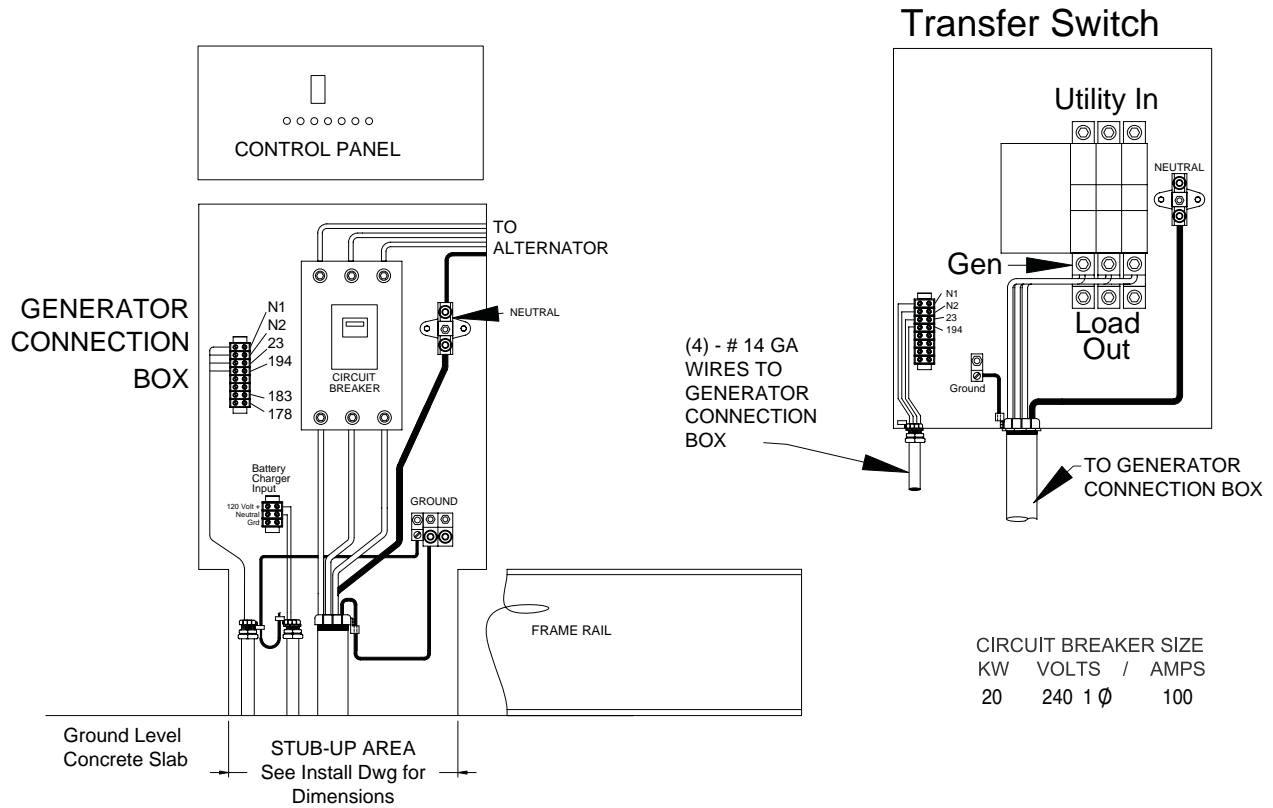
OPERATING DATA

		STANDBY 20 kW				
GENERATOR OUTPUT VOLTAGE/KW - 60Hz 120/240V, 1-phase, 1.0 pf		NG/LP	Rated AMP	CB Size		
		20	83.3	100		
MOTORSTARTING Maximum at 35% instantaneous voltage dip with standard alternator; 60 Hz			34			
FUEL – Natural Gas and LP Vapor Only Fuel consumption – 60 Hz N.G. ft. ³ /hr. LP ft. ³ /hr.(gal./hr.- for reference only)	<u>Exercise Cycle</u>	<u>25% Load</u>	<u>50% Load</u>	<u>75% Load</u>	<u>100% Load</u>	
	60	124	188	250	315	
	24 (.65)	49.1 (1.35)	74.6 (2.05)	99.3 (2.73)	125.2 (3.44)	
COOLING Coolant capacity System lit.(US gal.) Engine lit.(US gal.) Radiator lit.(US gal.) Coolant flow/min. 60 Hz lit.(US gal.) Heat rejection to coolant 60 Hz BTU/hr. Cooling air flow 60 Hz m ³ /min. (cfm)			7.5 (2.0) 0.9 (0.25) 6.6 (1.75) 40.0 (10.6) 110,000 43 (1528)			
COMBUSTION AIR REQUIREMENTS Flow at rated power 60 Hz m ³ /min. (cfm)			2.0 (70)			
EXHAUST Exhaust flow at rated output 60 Hz m ³ /min. (cfm) Max. recommended back pressure Kpa (Hg) Exhaust temp. at rated output °C (°F) Exhaust outlet size N.P.T. (female)			5.0 (177) 5.0 (1.5") 488 (910) 1.5"			
ENGINE Rated at RPM 60 Hz HP at rated KW 60 Hz Piston speed 60 Hz m/min. (ft./min.) BMEP (PSI) 60 Hz			3600 34.8 590 (1937) 78			
POWER ADJUSTMENT FOR AMBIENT CONDITIONS Temperature -1.65% for every 10°F above - °F Altitude -3% for every 1000 ft. above - ft.			77 600			
SOUND OUTPUT In dB(A) at 23 feet with generator operating at full load In dB(A) at 23 feet with generator operating at exercise			75 62			

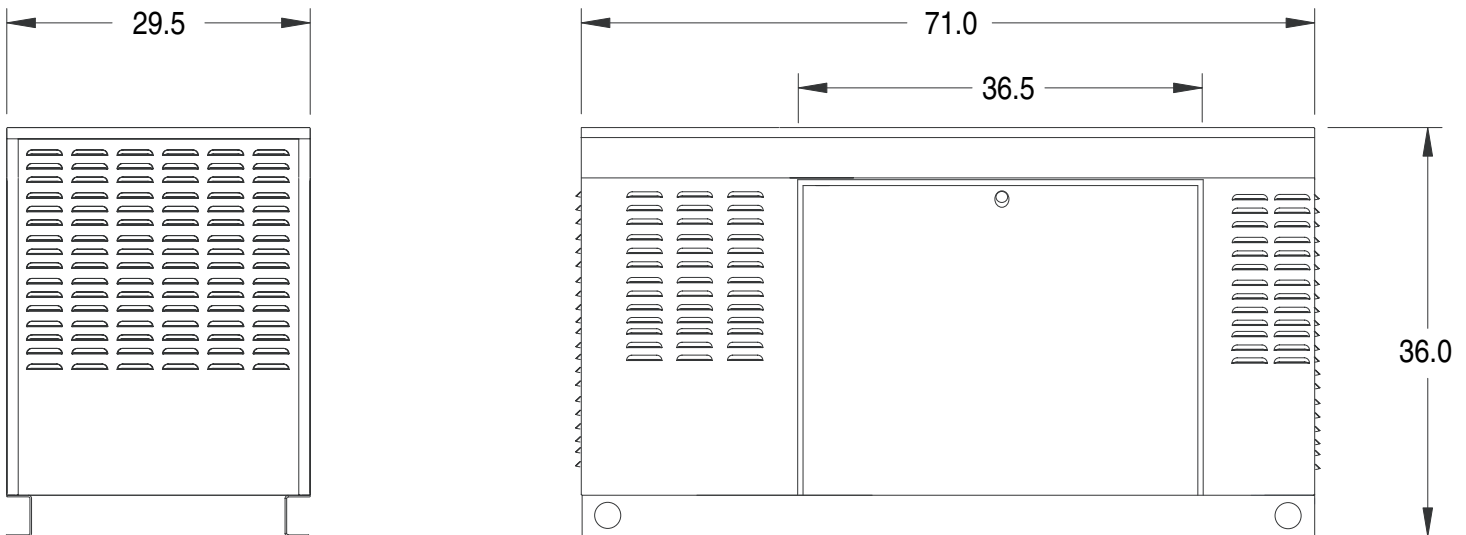
TRANSFER SWITCH SPECIFICATIONS (If so equipped)		
No. of Poles		2
Current Rating (amps)		100
Voltage Rating (VAC)		250
Utility Voltage Monitor (fixed)		
Pick-up		80%
Enclosure - NEMA 3R		Standard
Dropout		60%
Return to Utility		1 minute
Exerciser 15 minutes weekly		Standard
UL Listed		Standard
Dimensions (H" x W" x D")		20 x 15 x 7
Weight		35 lbs.

INTERCONNECTIONS

STANDBY 20 kW



INSTALLATION LAYOUT



UNIT WEIGHT: Steel 1020 lbs., Aluminum 930 lbs.

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