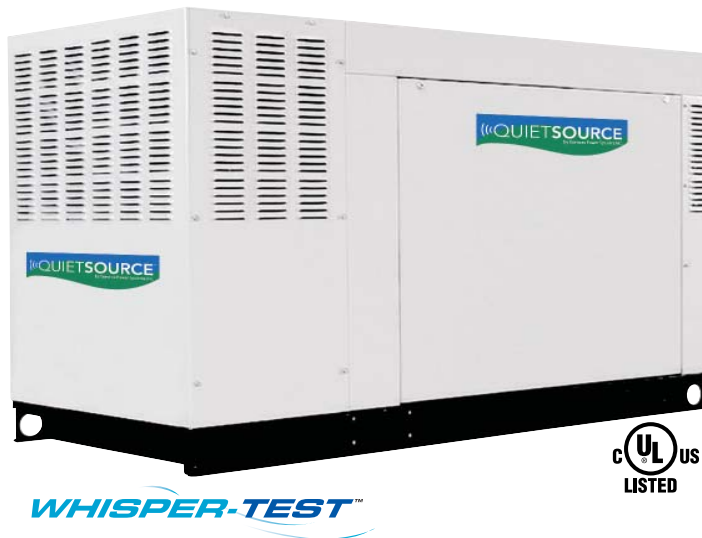


Standby Power Rating

45 kW 60 Hz

Liquid Cooled
Gas Engine
Generator Sets

Model Number: 05421 (Gray - Aluminum)



Whisper-Test™
Low Speed Exercise
60 dB(A) at 23 feet

GENERAC 4.2L ENGINE

Naturally Aspirated
Gaseous Fueled

UL 2200 Listed

Transfer Switches sold separately

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 rack and battery cables
- Fan and belt guards
- Isochronous governor
- Flex fuel line pigtail

FEATURES

- Innovative design and fully prototype tested
- UL 2200 Listed
- Solid state frequency compensated voltage regulator
- Dynamic and static battery charger
- Sound attenuated acoustically designed enclosure
- *Whisper-Test™* feature 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 R-Series 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



APPLICATION & ENGINEERING DATA



Standby 45 kW

GENERATOR SPECIFICATIONS

TYPE	Synchronous
ROTOR INSULATION.....	Class H
STATOR INSULATION.....	Class H
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).....	35 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 25 °C ambient
- Insulation is Class H rated at 150 °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
- 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
- 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

ENGINE SPECIFICATIONS

MAKE	Generac
MODEL.....	V-6
CYLINDERS.....	6
DISPLACEMENT.....	4.2 Liter
BORE	3.81
STROKE.....	3.8
COMPRESSION RATIO.....	9.4:1
INTAKE AIR SYSTEM.....	Naturally Aspirated
VALVE SEATS	Precision ground and hardened
LIFTER TYPE.....	Roller, Hydraulic

GOVERNOR SPECIFICATIONS

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

ENGINE LUBRICATION SYSTEM

OIL PUMP	Gear
OIL FILTER.....	Full flow spin-on cartridge
CRANKCASE CAPACITY.....	5 Quarts

ENGINE COOLING SYSTEM

TYPE	Pressurized Closed
WATER PUMP FLOW.....	10.8 gal/min
FAN SPEED	1300
FAN DIAMETER.....	22 inches
FAN MODE.....	Puller

FUEL SYSTEM

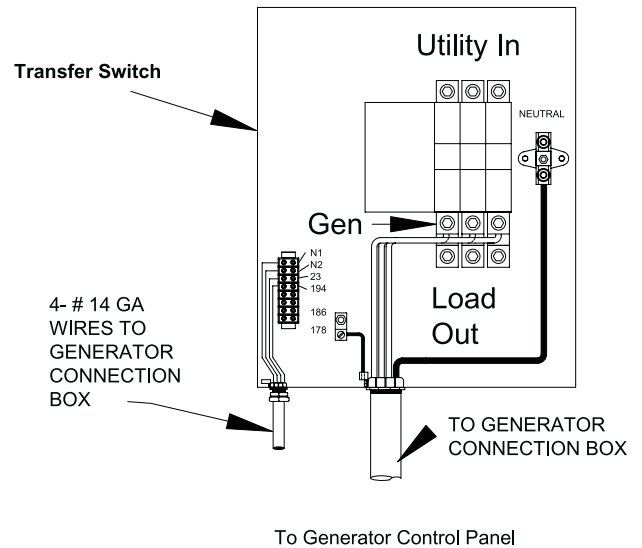
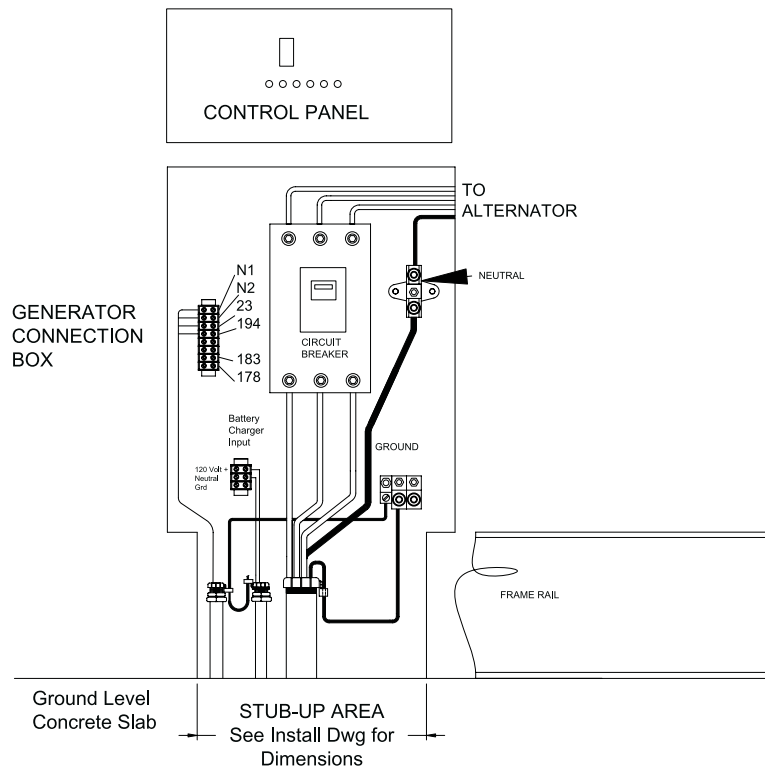
FUEL TYPE.....	Natural gas, propane vapor
CARBURETOR.....	Down Draft
SECONDARY FUEL REGULATOR.....	Standard
FUEL SHUT OFF SOLENOID	Standard
OPERATING FUEL PRESSURE.....	5" - 14" H ₂ O

ELECTRICAL SYSTEM

BATTERY CHARGE ALTERNATOR.....	12V 30 Amp
STATIC BATTERY CHARGER	2 Amp
RECOMMENDED BATTERY	Group 26, 525 CCA
SYSTEM VOLTAGE.....	12 Volts

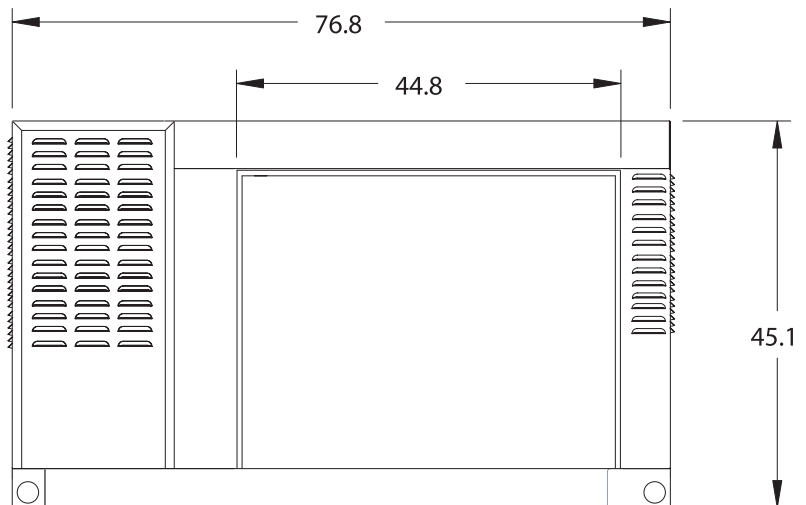
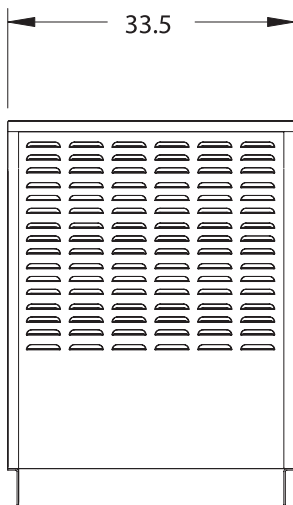
INTERCONNECTIONS

Standby 45 kW



CIRCUIT BREAKER SIZE			
KW	VOLTS	AMPS	LUG SIZE
45	240 1 Ø	200	#6 to 300 mcm

INSTALLATION LAYOUT



UNIT WEIGHT: Aluminum 1703 lbs.

GENERAC® POWER SYSTEMS, INC. • P.O. BOX 297 • WHITEWATER, WI 53190
 WEBSITE: www.guardiangenerators.com