

McWright, LLC.

Date: January 22, 2025 Job: Ebenezer Rd Fire Rescue Station #17 Address: 573 Ebenezer Rd Rincon, GA 31326 Owner: Effingham County Board of Commissioners

Change Order Proposal #1- Add Genset

Reference: Owner's Request

Scope of Work: Includes all labor, material, and equipment Note Genset has 14 week lead time. If genset can be approved and ordered by Feb 14th, no extension of time will be requested.

Location of genset is TBD but needs to be within 50 feet of the proposed service location

<u>Propoane tank, lines, and connection to genset is not included and should be picked up by</u> the county's propane provider.

- Spec sheets for proposed genset are attached
- Delete MTS called out on plans and replace with ATS
- Furnish and install generator
- Wire Genset at location no more than 50 feet from ATS
- Furnish and install remote annunciator
- Provide all wiring to genset including block heater and controls
- Provide Factory Startup and Owner's training
- Provide 6" concrete pad and up to 6 bollards at gen set

Exclusion: Propane pit and tank by owner. Gas line and connections by others.

Total Add Price-\$72,885.00 Total Add day(s)- 0

Matthew McMillian McWright, LLC

McWright LLC					PO Box 903 Boanire, G/ www.mcw	A 31005 rightconstruction.com		
Project:	Ebenezer Rd Fire Rescue Station #17					0		
COR #:	1							
Date:	1/22/2025							
Description:	Add Genset							
Architect:	DPR							
				-	-			
	Des	scription		Subcontracto	or	Notes		Price
Purchase of the genset- 33,009 + tax				McWright LLC			\$	35,650.00
	Des	scription		Subcontracto	or	Notes		Price
form and pour steel bollards	r 6" pad for gense to protect gen se	et. Furnish and ir et or propane tar	nstall up to 6 qty nk	McWright LLC			\$	8,000.00
	Des	scription		Subcontracto	pr	Notes	Price	
unload gen se ATS, block hea	Des et and install. Insta ater and remote a	scription all all component annuinciator	ts inlcuding wiring,	Subcontracto Savannah Contracting	or Group	Notes	Price \$	18,958.05
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Quote Date:January 17, 2025Valid Until:March 17, 2025





Project Reference: Generac SG060 Natural Gas Generator (400A SER ATS) Proposal

We are pleased to offer the following quote for the above project for a price of: **<u>\$33,009.00</u>** (excludes tax)

<u>Quantity 1 - Generac Industrial gaseous engine-driven generator, 4.5L in-line 4 cylinder engine, consisting of the following features and accessories:</u>

- Stationary Emergency-Standby rated
- 60 kW rating, wired for 120/208 VAC three phase, 60 Hz
- Permanent Magnet Excitation
- MLCB, 80% rated thermal-magnetic
 - 250 Amp
 - Natural Gas fuel system
- Standard Weather Protective Enclosure, Steel
 - Industrial Grey Baked-On Powder Coat Finish
- EPA Certified
- cETLus
- Power Zone Pro Digital Control Panel for Single Generators
 - Meets NFPA 99 and 110 requirements
 - o IEC801 (Radiated Emissions, Susceptibility, and Surge Immunity)
 - 4.3" Resistive Color Touchscreen
 - Webserver (via Power Zone Gateway using ethernet)
 - IP65 (front)
 - Auto/Manual/Off key switch, Alarm Indication, Not in Auto Indication, audible alarm, emergency stop switch
 - Dual Core Digital Microprocessor
 - RS485, Ethernet and CANbus ports
 - o Service reminders, trending, fault history (alarm log)
 - I2T function for full generator protection
 - Selectable low-speed exercise
 - 2-wire start controls for any 2-wire transfer switch

21 Light Remote Annunciator and Flush Kit

Remote Emergency Stop Break Glass

- 110 AH, 925 CCA Group 31 Battery, with rack, installed
- Block Heater, 1500 watt
- Std Heavy Duty Air Cleaner
- Battery Charger, 10 Amp, NFPA 110 compliant, installed
- 120V GFCI and 240V Outlet
- Alternator Tropical Coating
- Engine Run Relay, 10 Amp
- Flex Fuel Hose, shipped loose
- Critical Grade Silencer
- Std set of 3 Manuals
- 5-Year Comprehensive Warranty
- SG0060GG264.5S18TPYYA

Quantity 1 - TX Series Automatic Transfer Switch consisting of the following features and accessories:

- 400 Amp, 3 pole, 120/208 VAC three phase, 60 Hz, with 2-Wire Start Circuit
 - Utility Voltage Sensing Controls:

- Adjustable Drop-out and Pick-up
- Adjustable Utility Interrupt Delay
- Adjustable Logic Controls: 0
 - Minimum Standby Voltage
 - Minimum Standby Frequency
 - **Engine Warmup**
 - Return to Utility
 - Engine Cooldown .
 - Transfer on Exercise
- 3 Owner's Manuals
- Double Set of Form C Aux Cont
- **IBC Seismic Certified**
- Specific Breaker •
- Withstand and Close-On Rating 65kA Specific Breaker
- Enclosure Heater
- UL Listed 1008 by ETL
- Controller and Circuit Breaker Covers, Padlockable, Black •
- **NEMA 3R Enclosure**
- **Service Entrance Rated**
- Specific Breaker
- In Phase Only Transfer
- Standard two year basic warranty
- TX301NS0400G3CH

Quantity 1 - Freight (offloading not included)

Quantity 1 - System Start Up Service:

Standard NFPA 110 Startup with 4 Hour Load Bank Test Included Only: NETA, infrared scanning, leak test, etc. to be performed by others

Total Price: \$33,009.00 (excludes tax)

Notes:

Estimated Delivery:

Generator: 12-14 weeks

- ATS: 9-11 weeks 0
- Pricing Includes LTL. Additional cost will be applied for dedicated truck, liftgate, short bed, etc. 0
- Equipment will ship as it becomes available. Transfer switches and docking stations cannot be stored. Generators can be held by the shipper for 90 days before storage fees will be applied.
- FOB: Jobsite (offloading not included)
- Quote does not include installation, taxes, offloading, fuel or extended piping/wiring

Terms and Conditions:

- Net 30 days, subject to review and approval by our Credit Dept.
- Payment obligations are not dependent or contingent upon the manner in which purchaser may receive payment from others. No retainage against this order will be permitted unless agreed to ahead of time.
- Warranty is invalid without factory start up.
 - Startup will be done during normal business hours (single trip). \geq
 - Warranty begins on date of final startup. Startup must be performed within one year of shipment. \triangleright Additional costs will be required after one year to extend factory warranty.
 - > Additional charges will be applied to startups requested on weekends or off normal business hours, as well for additional trip(s) post startup. Please note additional charges will also be applied if ESSE is called out to perform startup and the generator is not completely installed per our pre-startup checklist.

Thank you for the opportunity,

Mark Mullis South GA Sales Manager Mobile: 912-663-3394 mark.mullis@essellc.com

<u>Acceptance of Quote</u>: Prior to ordering equipment or services, we require this proposal to be signed and returned as a confirmation of the above terms and conditions.

Customer Signature

Purchase Order Number



QUOTE #25-01S21A Ebeneezer Fire Station #17 Generator Change Order

Original Estimate Date: 1-21-2025

Thank you for the opportunity to provide pricing for the following scope of work.

SCOPE:

Furnish necessary materials, tools and labor to install the generator and transfer switch per submittals.

Parts/Equipment/Labor included in price for:

- 1. Generator purchase, offload, and setting
- 2. Install automatic transfer switch in place of manual transfer switch
- 3. Install remote annunciator panel
- 4. Provide and install all associated conduit, wiring, controls, block heaters, etc. for generator assembly and ATS

Price does not include:

- 1. Items not explicitly listed on plans as it pertains to the electrical scope
- 2. Gas design, supply, or connection.

Any deficiencies outside of what is explicitly listed are not included.

Total Price:	\$59,823.05
Manual transfer switch credit	(\$4,100.00)
Labor:	\$12,172.05
Parts and install materials:	\$9,386.00
Offload and set generator:	\$1,500.00
10% Generator "mark-up"	\$3,715.00
Generator, remote annunciator panel, and transfer switch:	\$37,150.00 (Cost of generator)

** No additional cost added to install ATS as the MTS was included in original project pricing

Michael D "Sonny" McMahon II Savannah Contracting Group, Inc. admin@SavannahContractingGroup.com

SG060 | 4.5L | 60 kW INDUSTRIAL SPARK-IGNITED GENERATOR SET

EPA Certified Stationary



DEMAND RESPONSE READY

Standby Power Rating 60 kW, 75 kVA, 60 Hz

Demand Response Rating 60 kW, 75 kVA, 60 Hz



Image used for illustration purposes only

Codes and Standards

Not all codes and standards apply to all configurations. Contact factory for details.



ICC-ES AC-156 (2012)

Powering Ahead

Generac ensures superior quality by designing and manufacturing most of its generator components, such as alternators, enclosures, control systems and communications software. Generac also makes its own spark-ignited engines, and you'll find them on every Generac gaseous-fueled generator. We engineer and manufacture them from the block up — all at our facilities throughout Wisconsin. Applying natural gas and LP-fueled engines to generators requires advanced engineering expertise to ensure reliability, durability and necessary performance. By designing specifically for these dry, hotter-burning fuels, the engines last longer and require less maintenance. Building our own engines also means we control every step of the supply chain and delivery process, so you benefit from single-source responsibility.

Plus, Generac Industrial Power's distribution network provides all parts and service so you don't have to deal with third-party suppliers. It all leads to a positive owner experience and higher confidence level. Generac spark-ignited engines give you more options in commercial and industrial generator applications as well as extended run time from utility-supplied natural gas.

STANDARD FEATURES

ENGINE SYSTEM

- Oil Drain Extension
- Air Cleaner
- Level 1 Fan and Belt Guards (Open Set Only)
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Critical Silencer
- Oil Temperature Sender with Alarm
- Air Filter Restriction Indicator

FUEL SYSTEM

- NPT Fuel Connection on Frame
- Primary and Secondary Fuel Shutoff

COOLING SYSTEM

- Closed Coolant Recovery System
- UV/Ozone Resistant Hoses
- Factory-Installed Radiator
- 50/50 Ethylene Glycol Antifreeze
- Radiator Drain Extension

ELECTRICAL SYSTEM

- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- Class H Insulation Material
- 2/3 Pitch
- Skewed Stator
- Brushless Excitation
- Sealed Bearing
- Full Load Capacity Alternator

DEMAND RESPONSE READY

INDUSTRIAL

GENERATOR SET

GENERAC

- Internal Genset Vibration Isolation
- Separation of Circuits High/Low Voltage
- Separation of Circuits Multiple Breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby and Demand Response Rated Units)

ENCLOSURE (If Selected)

- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuated Enclosures)
- Gasketed Doors
- Upward Facing Discharge Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat[™] Textured Polyester Powder Coat Paint

CONTROL SYSTEM



Power Zone[®] Pro Controller

- NFPA 110 Level 1 Compliant
- Engine Protective Functions
- Alternator Protective Functions
- Digital Engine Governor Control
- Digital Voltage Regulator
- Multiple Programmable Inputs and Outputs
- Remote Display Capability
- Remote Communication via Modbus[®] RTU, Modbus TCP/IP, and Ethernet 10/100
- · Alarm and Event Logging with Real Time Stamping

- Expandable Analog and Digital Inputs and Outputs
- Remote Wireless Software Update Capable
- Wi-Fi[®], Bluetooth[®], BMS, and Remote Telemetry
- Built-In Programmable Logic Eliminates the Need for
- External Controllers Under Most Conditions
 Programmable I/O Channel Properties
- Built-In Diagnostics

Alarms and Warnings

- High/Low Oil Pressure
- High/Low Coolant Level
- High/Low Coolant Temperature
- Sender/Sensor Failure
- High/Low Oil Temperature
- Over Total kW
- Over/Under Speed
- Over/Under Voltage
- Over/Under Frequency
- Over Current
- High/Low Battery Voltage
- Battery Charger Current
- Phase to Phase and Phase to Neutral Short Circuits (I²T Algorithm)

4.3 Inch Color Touch Screen Display

- Resistive Color Touch Screen
- Easily Identifiable Icons
- Multi-Lingual
- On Screen Editable Parameters
- Key Function Monitoring
- Three Phase Voltage, Amperage, kW, kVA, and kVAr
- Selectable Line to Line or Line to
- Neutral Measurements
- Frequency
- Engine Speed
- Engine Coolant Temperature
- Engine Oil Pressure
- Engine Oil Temperature
- Battery Voltage

Diagnostics

- Hourmeter
- Warning and Alarm Indication

Maintenance Events/Information

SPEC SHEET

CONFIGURABLE OPTIONS

ENGINE SYSTEM

- Heater with Shutoff Valves
- Engine Coolant Heater
- Oil Heater
- Level 1 Fan and Belt Guards (Enclosed Units Only)
- Radiator Duct Adapter (Open Set Only)
- Heavy Duty Air Cleaner
- Two-Stage Heavy Duty Air Cleaner

FUEL SYSTEM

○ NPT Flexible Fuel Line

ELECTRICAL SYSTEM

- O 10A UL Listed Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating

CIRCUIT BREAKER OPTIONS

- O Main Line Circuit Breaker
- O 2nd Main Line Circuit Breaker
- O 3rd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

ENGINEERED OPTIONS

CONTROL SYSTEM

- Spare Inputs (x4) / Outputs (x4)
- Battery Disconnect Switch

GENERATOR SET

- Extended Factory Testing (3-Phase Only)
- 8 Position Load Center

ENCLOSURE

- Level 0 Sound Attenuated
- Level 1 Sound Attenuated
- Level 2 Sound Attenuated
- Level 2 Sound Attenuated with Motorized Dampers
- Steel Enclosure
- $\,\circ\,$ Aluminum Enclosure
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- AC/DC Enclosure Lighting Kit
- Enclosure Heaters (with Motorized Dampers Only)
- Door Open Alarm Horn

DEMAND RESPONSE READY

CONTROL SYSTEM

- NFPA 110 Compliant 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- $\circ~$ Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- 10A Engine Run Relay
- Ground Fault Annunciator
- 120V GFCI and 240V Outlets
- 100 dB Alarm Horn
- Damper Alarm Contacts (with Motorized Dampers Only)
- Wi-Fi Extension Kit

WARRANTY (Standby Gensets Only)

- 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- 5 Year Extended Limited Warranty
- O 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

- **GENERATOR SET**
- Special Testing
- Battery Box



APPLICATION AND ENGINEERING DATA

DEMAND RESPONSE READY

INDUSTRIAL

OWER

ENGINE SPECIFICATIONS

General

Make	Generac
Cylinder #	4
Туре	In-Line
Displacement - in ³ (L)	275.0 (4.5)
Bore - in (mm)	4.5 (114.3)
Stroke - in (mm)	4.25 (107.95)
Compression Ratio	9.1:1
Intake Air Method	Turbocharged
Number of Main Bearings	5
Connecting Rods	Forged Steel, Fractured Split, Bushingless
Cylinder Head	Cast Iron
Cylinder Liners	Cast Iron
Ignition	Coil Near Plug Solid State Inductive
Piston Type	Cast Aluminum Flat Top
Crankshaft Type	Forged Steel
Lifter Type	Hydraulic
Intake Valve Material	Stainless Steel
Exhaust Valve Material	Stainless Steel
Hardened Valve Seats	High Steel Iron Alloy

Electronic

±0.25%

Oil Pump Type Gear Driven Oil Filter Type Full-Flow Spin-On Cartridge Crankcase Capacity - qt (L) 21 (20) Cooling System Cooling System Type Pressurized Closed Pusher Fan Type 2,100 Fan Speed - RPM Fan Diameter - in (mm) 22 (533) Fuel System Fuel Type Natural Gas, Propane Fuel Injection Electronic Fuel Shut Off Generac Operating Fuel Pressure (NG) 5 - 14 (1.2 - 3.5) - in H₂O (kPa) Operating Fuel Pressure (LP) 7 - 14 (1.7 - 3.5) - in H₂O (kPa) **Engine Electrical System** 17.11. 10100

GENERAC

Lubrication System

System voltage	IZ VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Frequency Regulation (Steady State)

Engine Governing

Governor

Standard Model	K0060124Y21		
Poles	4		
Field Type	Revolving		
Insulation Class - Rotor	Н		
Insulation Class - Stator	Н		
Total Harmonic Distortion	<5% (3-Phase Only)		
Telephone Interference Factor (TIF)	<50		

Standard Excitation	Synchronous Brushless	
Bearings	Sealed Ball	
Coupling	Direct via Flexible Disc	
Prototype Short Circuit Test	Yes	
Voltage Regulator Type	Full Digital	
Number of Sensed Phases	All	
Regulation Accuracy (Steady State)	±0.25%	

OPERATING DATA

DEMAND RESPONSE READY

INDUSTRIAL

GENERAC

POWER RATINGS

	Star	ndby
Single-Phase 120/240 VAC @1.0pf	60 kW/60 kVA	Amps: 250
Three-Phase 120/208 VAC @0.8pf	60 kW/75 kVA	Amps: 208
Three-Phase 120/240 VAC @0.8pf	60 kW/75 kVA	Amps: 181
Three-Phase 277/480 VAC @0.8pf	60 kW/75 kVA	Amps: 90
Three-Phase 346/600 VAC @0.8pf	60 kW/75 kVA	Amps: 72

MOTOR STARTING CAPABILITIES (skVA)

skVA vs. Voltage Dip					
120/240 VAC 1Ø	30%	277/480 VAC 3Ø	30%	208/240 VAC 3Ø	30%
A0060044N21	40	K0060124Y21	124	K0060124Y21	95
A0100044N21	67	K0100124Y21	227	K0100124Y21	171

FUEL CONSUMPTION RATES*

Natural Gas	Natural Gas – scfh (m³/hr)		– scfh (m³/hr)	Propane Liquid – gph (Lph)		
Percent Load	Standby	Percent Load	Standby	Percent Load	Standby	
25%	231 (6.5)	25%	64 (1.8)	25%	2.2 (8.3)	
50%	413 (11.7)	50%	152 (4.3)	50%	4.4 (16.6)	
75%	601 (17.0)	75%	232 (6.6)	75%	6.6 (24.9)	
100%	795 (22.5)	100%	306 (8.7)	100%	8.8 (33.2)	

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby
Air Flow (Fan Air Flow Across Radiator) - Open Set	cfm (m ³ /min)	4,343 (123)
Coolant Flow	gpm (Lpm)	24 (90)
Coolant System Capacity	gal (L)	9 (34)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)	See Bulletin No.	0199270SSD
Maximum Additional Radiator Backpressure	in H ₂ O (kPa)	0.5 (0.12)

COMBUSTION AIR REQUIREMENTS

				Standby		
		Flow at Rated Power -	· cfm (m³/min)	136 (3.9)		
ENGINE			EXHAUST			
		Standby				Standby
Rated Engine Speed	RPM	1,800	Exhaust Flo	w (Rated Output)	cfm (m ³ /min)	331 (9.0)
Horsepower at Rated kW**	hp	98	Maximum / (Post Silen	Additional Exhaust Backpressure cer)	inHg (kPa)	0.75 (2.54)
Piston Speed	ft/min (m/min)	1,275 (389)	Exhaust Te	mperature (Rated Output)	°F (°C)	1,338 (726)
BMEP	psi (kPa)	162 (1,119)				

** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions.

Please contact a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, and DIN6271 standards. Standby - See Bulletin 0187500SSB

Demand Response - See Bulletin 10000018250

DIMENSIONS AND WEIGHTS*

H 0
H U U W



* All measurements are approximate and for estimation purposes only.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

DEMAND RESPONSE READY

OPEN SET

L x W x H - in (mm)	92.9 (2,360) x 39.9 (1,014) x 46.0 (1,170)
Weight - Ibs (kg)	1,923 - 2,094 (872 - 950)

LEVEL 0 SOUND ATTENUATED ENCLOSURE

L x W x H - in (mm)	120.8 (3,068) x 40.5 (1,028) x 69.0 (1,754)
Weight - Ibs (kg)	Steel: 2,662 - 2,834 (1,207 - 1,286) Aluminum: 2,310 - 2,483 (1,048 - 1,126)

LEVEL 1 SOUND ATTENUATED ENCLOSURE

L x W x H - in (mm)	120.8 (3,068) x 40.5 (1,028) x 69.0 (1,754)						
Weight - Ibs (kg)	Steel: 2,753 - 2,925 (1,249 - 1,327) Aluminum: 2,401 - 2,573 (1,089 - 1,167)						

LEVEL 2 SOUND ATTENUATED ENCLOSURE

L x W x H - in (mm)	120.8 (3,068) x 40.5 (1,028) x 69.0 (1,754)
Weight - Ibs (kg)	Steel: 2,831 - 3,003 (1,284 - 1,362) Aluminum: 2,458 - 2,630 (1,115 - 1,193)

TX301 Series Transfer Switch

100 – 400 Amps

Contactor Type · Open and Delayed Transition · Service Entrance Rated

- Automatic Transfer Switch
- 100 400 A, up to 480 VAC, 50/60 Hz, 100% Current Rated
- ٠ Single or Three Phase
- 2.3 or 4 Poles
- NEMA 1 or 3R
- Open and Inphase or Open with Delayed Transition
- ETL Listed to UL 1008
- High Withstand and Closing Ratings



GENERAC

INDUSTRIAL

Image used for illustration purposes only

Codes and Standards



ETL Listed

NFPA 70, 99, 110



NEC 700, 701, 702, 708

OSHPD and Seismic Certified CBC 2019, CBC 2016, IBC 2018, IBC 2015. pd IBC 2012, IBC 2009, ASCE 7-10, ASCE 7-16, ICC-ES AC-156

Description

Generac's contactor type transfer switches are double-break robust switch construction with inherent interlocks to ensure safe positive transfer between power sources. The contacts are silver composite for long life, resisting pitting or burning. The switches are rated for full load transfers in mission critical, emergency, legally required, and optional power systems.

The microprocessor based controller provides the customers with the flexibility to program a comprehensive group of set points to match the application needs. The controller has two programmable inputs and one programmable output as standard and is available with optional expansion boards for up to four programmable inputs and outputs. The LCD displays real time and historical information with time-stamped events. The integrated plant exerciser can be configured in off, daily, day of week, biweekly, and monthly intervals with user selectable run time. Standard features of the controller include three phase sensing on both sources, phase unbalance, phase reversal, load shed, emergency inhibit, and communications.

TX301 Series Transfer Switch

100 – 400 Amps

Contactor Type · Open and Delayed Transition · Service Entrance Rated

STANDARD FEATURES

GENERAL

- Small Footprint, Results in Easy Mounting and Installation for Reduced Time and Costs
- Cable Entry is Top or Bottom (400A Units are Bottom Only)
- Double-Throw, Stored Energy Transfer Mechanism
- Can be Electrically Isolated while Energized
- Graphical LCD-Based Display for Programming, System Diagnostics and Help Menu Display Mimic
- Diagram with Source Available and Connected LED Indicator
- Method of Transfer: Open with Inphase Transition
- Mechanically Interlocked to Prevent Connection of Both Sources Modbus[®] RTU Communications
- TXC 100 Controller
- Operating Temperature -4 ° to 158 °F (-20 ° to 70 °C)
- Removable Top and Bottom Plates for Ease of Entry Voltage Agnostic*
- High Withstand and Closing Ratings
- Heater Kit Standard on All 3R Enclosures
- Auxiliary Output Includes: Two Wire Start, Signal Before Transfer, Fault, and a Programmable Relay Output
- Auxiliary Input Includes: Permissive Inputs (24 VDČ)
- **General Alarm Indication**
- 2 Year Standard Warranty
- IBC 2018, 2015, 2012, 2009

- **VOLTAGE AND FREQUENCY SENSING**
- Three Phase Under and Over Voltage Sensing on Normal and Emergency Sources
- Under and Over Frequency Sensing on Normal and Emergency
- Selectable Settings: Single or Three Phase Voltage Sensing on Normal, Emergency and Load
- 50 or 60 Hz
- Phase Sequence Sensing for Phase Sensitive Loads

Start Circuit

- 2-Wire Start
- 3-Wire Start From C Contact for Circuit Monitoring

Digital Outputs

- Signal Before Transfer (Elevator)
- General Alarm

Digital Inputs

- Emergency Inhibit (Permissive & Load Shed)
- Go to Emergency
- Manual Generator Retransfer

CONTROLS

GENERAC

- Front Programmable Control Reduces PPE Needs • and Arc Flash Hazard
- Built in Battery Backup Increases Switch Reliability and Reduces Switch Transition Time to Alternate Source
- Battery Backup Able to Power the Controller for up to 60 Minutes in the Event of No Source Availability
- Accessible USB Port for Easy Data Downloads, Firmware Updates without Requiring PPE, Reducing the Risk of Arc Flash
- All Amp Nodes Offered with Delayed Transition
- Heater Programmable through Control for Desired Temperature and Humidity Settings
- Front Accessible Customer Connections •
- Time-Stamped Event History Log
- Programmable Exerciser Daily, Weekly, Bi-Weekly, Monthly

* 480 V 3-Wire Systems Must be Specified at Time of Ordering for Transformer Kit to be Included

CONFIGRUABLE OPTIONS

- Chicago Code Kit
- 3R Padlockable Cover for Controller (Standard on 3R Enclosure)
- 3R Padlockable Cover for Service Entrance Breaker (Standard on 3R Enclosures)
- CTs for Integrated Metering
- Generator Battery Backup for Controller
- Heater Option for Temperature and Humidity Control (Standard on 3R Enclosure)
- Time Delay in Neutral Transition (TDN), or Inphase with a Default to Time Delay in Neutral Transfer
- Expandable Input/Output Board Module Includes: 4 Relay Outputs and 4 Optically Isolated Inputs
- IBC Seismic Certified/Seismic Rated

- 2 Year Extended Limited Warranty
- 5 Year Basic Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty

10 Year Extended Limited Warranty

Engineered Options

- Transient Voltage Surge Suppressor (TVSS)
- Manual Generator Retransfer Switch
- Go to Emergency Switch

Conversion Kits

- 480 V Transformer Kit for 3-Wire Systems
- NEMA Type 1 to 3R Kit

2 of 3

INDUSTRIAL

TX301 Series Transfer Switch

100 - 400 Amps

Contactor Type · Open and Delayed Transition · Service Entrance Rated

UNIT DIMENSIONS*



Service Entrance Rated, Contactor Type, Open and Delayed Transition, 100 - 400 A

		_	_	_	_		in (r	nm)		_	_	_	_	_			Cu/Al		_	lbs (kg)
Description	A (Height)	B (Height)	C (Width)	D (Depth)	E (Dim)	F (Dim)	G (Dim)	H (Dim)	J (Dim)	K (Dim)	L (Dim)	M (Dim)	N (Dim)	P (Dim)	Normal 75 °C Wire	Standby Source 75 °C Wire	Load 75 °C Wire	Neutral Connection	Ground Connection	Weight
100A SER NEMA 1	51.4 (1,305)	47.5 (1,206)	21.4 (544)	12.0 (305)	9.5 (242)	10.6 (268)	38.3 (973)	3.7 (93)	5.1 (129)	1.5 (38)	1.7 (44)	10.1 (257)	5.8 (148)	4.8 (122)	(1) 3/0 - 6	(1) 2/0 - 14	(1) 2/0 - 14	(5) 2/0 - 14	(6) 2/0 - 14	154.3 (70)
100A SER NEMA 3R	51.4 (1,305)	47.5 (1,206)	21.4 (544)	14.1 (358)	9.5 (242)	10.6 (268)	38.3 (973)	3.7 (93)	5.1 (129)	1.5 (38)	1.7 (44)	10.1 (257)	5.8 (148)	4.8 (122)	(1) 3/0 - 6	(1) 2/0 - 14	(1) 2/0 - 14	(5) 2/0 - 14	(6) 2/0 - 14	158.7 (72)
150A SER NEMA 1	51.4 (1,305)	47.5 (1,206)	21.4 (544)	12.0 (305)	9.5 (242)	10.6 (268)	38.3 (973)	3.7 (93)	5.1 (129)	1.5 (38)	1.7 (44)	10.1 (257)	5.8 (148)	4.8 (122)	(1) 250 - 6	(1) 250 - 6	(1) 250 - 6	(5) 350 - 6	(5) 350 - 6	165.3 (75)
150A SER NEMA 3R	51.4 (1,305)	47.5 (1,206)	21.4 (544)	14.1 (358)	9.5 (242)	10.6 (268)	38.3 (973)	3.7 (93)	5.1 (129)	1.5 (38)	1.7 (44)	10.1 (257)	5.8 (148)	4.8 (122)	(1) 250 - 6	(1) 250 - 6	(1) 250 - 6	(5) 350 - 6	(5) 350 - 6	169.8 (77)
200A SER NEMA 1	51.4 (1,305)	47.5 (1,206)	21.4 (544)	12.0 (305)	9.5 (242)	10.6 (268)	38.3 (973)	3.7 (93)	5.1 (129)	1.5 (38)	1.7 (44)	10.1 (257)	5.8 (148)	4.8 (122)	(1) 250 - 6	(1) 250 - 6	(1) 250 - 6	(5) 350 - 6	(5) 350 - 6	165.3 (75)
200A SER NEMA 3R	51.4 (1,305)	47.5 (1,206)	21.4 (544)	14.1 (358)	9.5 (242)	10.6 (268)	38.3 (973)	3.7 (93)	5.1 (129)	1.5 (38)	1.7 (44)	10.1 (257)	5.8 (148)	4.8 (122)	(1) 250 - 6	(1) 250 - 6	(1) 250 - 6	(5) 350 - 6	(5) 350 - 6	169.8 (77)
300A SER NEMA 1	51.4 (1,305)	47.5 (1,206)	34.4 (874)	12.0 (305)	10.0 (255)	11.8 (300)	9.1 (231)	22.8 (579)	7.2 (183)	1.8 (46)	2.3 (59)	8.7 (222)	6.5 (166)	3.3 (84)	(2) 600 - 2/0	(1) 600 - 4 or (2) 250 - 1/0	(1) 600 - 4 or (2) 250 - 1/0	(5) 600 MCM - 4 or (10) 250 MCM - 1/0	(5) 350 - 6	260.1 (118)
300A SER NEMA 3R	51.4 (1,305)	47.5 (1,206)	34.4 (874)	14.1 (358)	10.0 (255)	11.8 (300)	9.1 (231)	22.8 (579)	7.2 (183)	1.8 (46)	2.3 (59)	8.7 (222)	6.5 (166)	3.3 (84)	(2) 600 - 2/0	(1) 600 - 4 or (2) 250 - 1/0	(1) 600 - 4 or (2) 250 - 1/0	(5) 600 MCM - 4 or (10) 250 MCM - 1/0	(5) 350 - 6	264.6 (120)
400A SER NEMA 1	51.4 (1,305)	47.5 (1,206)	34.4 (874)	12.0 (305)	10.0 (255)	11.8 (300)	9.1 (231)	22.8 (579)	7.2 (183)	1.8 (46)	2.3 (59)	8.7 (222)	6.5 (166)	3.3 (84)	(2) 600 - 2/0	(1) 600 - 4 or (2) 250 - 1/0	(1) 600 - 4 or (2) 250 - 1/0	(5) 600 MCM - 4 or (10) 250 MCM - 1/0	(5) 350 - 6	260.1 (118)
400A SER NEMA 3R	51.4 (1,305)	47.5 (1,206)	34.4 (874)	14.1 (358)	10.0 (255)	11.8 (300)	9.1 (231)	22.8 (579)	7.2 (183)	1.8 (46)	2.3 (59)	8.7 (222)	6.5 (166)	3.3 (84)	(2) 600 - 2/0	(1) 600 - 4 or (2) 250 - 1/0	(1) 600 - 4 or (2) 250 - 1/0	(5) 600 MCM - 4 or (10) 250 MCM - 1/0	(5) 350 - 6	264.6 (120)

UL 1008 Withstand and Closing Ratings

			- 5 -
Ampere Rating	Specific Breaker (kA)**	Service Entrance (kA)	Fuse Rating (Class J)
100	35	35	200 kA
150	42	42	200 kA
200	42	42	200 kA
300	65	65	200 kA
400	65	65	200 kA

* All measurements are approximate and for estimation purposes only. Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings. ** See Specific Breaker List available on GENconnect.

