



Texas Association of School Boards

BUYBOARD Quotation



Quote Date	October 8, 2015	Quote Request No	
Quotation To		Contract No	415-12
Buying Agency	Panola County	Vendor ID	837
Contact	Sidney Burns	<b>Waukesha-Pearce Industries Inc.</b>	
Phone	903-693-0321	Generator Division	
Fax		Contact	Dan Jobe
Email	Sidney.Burns@co.panola.tx.us	Phone	214-649-8146
		Fax	
		Email	jobedan@wpi.com

Pricing Based On Manufacturer's Price List Dated	Nov 2013	Contract Discount	20 0%
		Factor	80 0%

**A. Base Unit:**

Brand	Model No.	Description	List Price	Net Price
Generac	SD080	80 kW Diesel Engine Generator	\$ 29,458.44	\$ 23,566.75

Includes All Standard equipment & attachments as listed in attached brochures and delivery to your facility.

**B. Factory options and attachments INSTALLED**

Sales Code	Description	List Price	Net Price
	All equipment is 120/208 volt 3 phase		\$ -
DW-48-3	Double Wall 305 Gallon Subbase diesel fuel tank	\$ 2,403.75	\$ 1,923.00
			\$ -
SAE-1	Level 1 Sound Enclosure	\$ 3,490.00	\$ 2,792.00
ATS-300-3	300 Amp Automatic Transfer Switch	\$ 3,226.61	\$ 2,581.29
			\$ -
	NFPA options(RAP & REPO)	Incl	\$ -
			\$ -
Sub Total			\$ 7,296.29

**C. Non-Factory options and attachments INSTALLED**

Sales Code	Description	Net Price
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
		\$ -
Sub Total		\$ -

**D. Other applicable charges. Allowances, Trade-Ins, Special Discounts, etc.**

Description	Net Price
Freight to job site	\$ 1,550 00
Equipment start up and testing	\$ 1,200 00
Special discount	\$ (4,265 00)
Off loading, fuel and installation provided by others	\$ -
Sub Total	\$ (1,515 00)

**TOTAL PURCHASE PRICE: \$ 29,348.04**

Delivery Est 6-7 weeks ARO

**Pricing valid for sixty (60) days from this date. Orders after that period must be re-quoted.**

Transmit copy of quotation with purchase order issued to WPI to  
Texas Association of School Boards, BuyBoard, PO Box 400, Austin, TX 78764-0400 email. buyboard@tasb.org

*LeeAnn Jones*



## WAUKESHA-PEARCE INDUSTRIES, INC.

214-649-8146 | 877-853-6201 F

Date October 8, 2015

Quote Number: 100815-001-DBJ

Reference: Panola County Sheriff

The following quotation is per your request and is based upon your requirements.

Description
80kw Diesel Generator & 300 amp ATS

**Plus any required taxes.**

### **Generac Standby Engine Generator – 120/208V, 3 Phase**

#### ENGINE

80KW Diesel - 4 5L, 6 cylinder  
 Air cleaner and oil filter with internal bypass  
 Oil and antifreeze  
 Vibration isolators between engine/alternator and base frame  
 Electronic isochronous governor  
 Fuel filter and water separator

#### CONTROL & MONITORING SYSTEMS- H-100 Control Panel

- NFPA Level 2 compliant, Temperature Range -40° to 70° C
- Digital microprocessor
  - Two 4 line x 20 displays, full system status, 3 phase sensing voltage regulator, RS232, RS485 and Canbus remote ports, water proof connections, all engine sensors are 4-20 ma for minimal interference, built in PLC
- Transfer switch function monitoring and control
  - Monitors utility voltage, Monitors generator voltage, Timer for line interrupt delay, Timer for engine warmup, Timer for minimum engine run time, Timer for return to utility position, Timer for engine cooldown, Built in exerciser timer (7 day), Additional 2 wire start controls for any 2 wire transfer switch
- Engine function monitoring and control.
  - Full range stand-by operation: Programmable auto crank, Emergency Stop, On Off Manual Switch
  - Full system status 3 phase AC volts, 3 phase amps, kW, Power factor,

Reactive power, Oil pressure, Water temperature, Water level, Oil Temperature (optional), Fuel pressure, Engine speed, Battery voltage, Alternator frequency, Time, Date, Transfer switch status, Run hours, Service reminders, Trending, Fault history (alarm log), I2t function for full generator protection, Built in PLC for special applications, Not in Auto flashing light, Audible alarm for fault condition, Isochronous governor, Selectable Low speed exercise, Digital voltage regulator with 3 phase sensing (3 phase units)  
 Shutdowns Overvoltage, Overspeed, Low oil pressure, High coolant temperature, Low coolant level

**ALTERNATOR**

Brushless excitation  
 Tropical coating

**CIRCUIT PROTECTION**

80kw - 300 amp main circuit breaker

**COOLING SYSTEM**

Engine mounted radiator  
 Coolant heater  
 Air duct adapter

**EXHAUST SYSTEM**

Standard Flex exhaust  
 Critical rated exhaust silencer

**STARTING SYSTEM**

Lead acid starting battery with rack  
 10 amp battery charger  
 Battery charging alternator  
 Battery cables & tray

**FUEL TANK – Diesel**

80KW – 36" Base Tank – 305 Gallon (Approx. 48.4 hours @ 100% load)  
 Fuel level indicating gauge  
 Double Wall – UL approved  
 Emergency Vent

**ENCLOSURE**

Level 1 Sound Attenuated weather protective enclosure w/integral critical grade muffler and a baked, powder paint finish

**WARRANTY**

2 year

**SYSTEM**

EPA Certified engine  
 UL2200

Remote Annunciator Panel

Remote Emergency Power Off switch

**300 AMP Generac Automatic Transfer Switch**

One automatic transfer switch consisting of the following typecode and components:

- GTS030
- Rated at 300 amps, 3 Pole construction  
 Operating at 60 HZ, 120/208 Volts 3 phase
- NEMA 3R Enclosure
- Standard set of 3 manuals
- UL 1008 listed
- 2 Year warranty

**Standard Clarifications:**

Freight & Start-Up included

Sales Tax is NOT Included

All Fuel to be provided by others.

Jobsite Offloading/Setting is to be done by others

Installation & External Wiring is to be done by others.

External Plumbing & Primary Gas Pressure Reducing Regulator by Others.

This bid assumes that all work will be done during Normal Business Hours (M-F 8-5)

Manufacturers' standard literature is available.

Manufacturers' standard factory & field testing is available.

This quotation is subject to WPI Terms & Conditions

Quotation is valid for 30 days

**Taxable customers are subject to 2% Diesel Surcharge Tax on diesel units 50 HP and up.**

Best Regards,

Dan Jobe

Sales Representative

Standby Power Systems

**Waukesha-Pearce Industries**

903-686-0780

877-853-6201

214-649-8146

jobedan@wpi.com

Direct Dial

Fax

Mobile

*Waukesha-Pearce Industries, Inc. (WPI)  
Standard Terms and Conditions of Sale*

**1. Acceptance**

All quotations offered by WPI are subject to acceptance within thirty (30) days from the quoted date.

**2. Payment Terms**

Subject to WPI Credit Department approval, WPI's payment terms are Net-30 Days from date of invoice. On any GE Waukesha Gas Engines or WPI fabricated products quoted at \$150,000 or more, WPI requires progress payments with the following milestone achievements:

20% upon submittal of drawings

20% upon completion of skid fabrication

50% upon receipt of major components (engine(s), pump(s) generator(s) & switchgear)

10% (or full balance) 30 days from date of final invoice

**3. Cancellation or Termination**

The Buyer, only upon payment of reasonable cancellation charges related to expenses already incurred and/or commitments made by WPI, may cancel any order placed with WPI. Cancellation charges on GE Waukesha Engines are 100% after the engine order is placed with GE Waukesha. Cancellations charges for completed fabrication projects are 100%. No termination by Buyer for default shall be effective unless and until WPI shall have failed to correct such alleged fault within sixty (60) days after receipt by WPI of written notice specifying such default. WPI further reserves the right to fabricate ahead of the shipping schedule whenever it is deemed necessary and upon notification to Buyer. Such advance fabrication shall not void Buyer's responsibility for cancellation charges.

**4. Alterations**

No alterations in specifications, either for total quantity, delivery, mechanical, electrical or other details may be made without written consent of WPI and readjustment of price and estimated delivery.

**5. Taxes**

In addition to the prices stated in the quote, Buyer shall reimburse WPI for any excise, sales or use tax incident to this transaction for which WPI may be liable or compelled to collect.

**6. Shipping Dates**

Any shipment date provided in the quote is approximate and is estimated based on the advised lead-times provided by the manufacturer(s) of the equipment quoted. Upon receipt of a Purchase Order from Buyer, along with complete specifications and drawings approval, if require, and after receipt of WPI's Purchase Order to the manufacturer the estimated delivery will again be advised by the manufacturer to WPI and WPI will update Buyer on the new estimated delivery. WPI shall not be liable for any loss or damage for delay or non-delivery due to the acts of civil or military authority, acts of the Buyer or by reason of Force Majeure, which shall be deemed to mean all other causes whatsoever not reasonably within the control of WPI, including, but not limited to Acts of God, war, riots or insurrection, blockades, embargoes, sabotage, epidemics, fires, strikes, lockouts or other industrial disturbances, delays of carriers, the inability to secure materials, labor shortages or manufacturing delays. Any delay resulting from any such cause shall extend shipping dates correspondingly. WPI shall in no event be liable for any special, direct or indirect or consequential damages arising from delay(s) irrespective of the reason.

**7. Indemnity**

Buyer agrees that it will indemnify and hold harmless WPI, its officers, agents and employees, from and against any and all claims, losses, damages, causes of action, suits and liabilities of every kind, including all expenses of litigation, court costs and attorney's fees, forfeiture of an oil, gas or mineral lease, damage to a producing reservoir or lease operations of lost production, arising out of, or in any way connected with the failure of, or the operation of the equipment sold by WPI, unless WPI is proven in court to be 100% solely negligence in its responsibilities.

**8. Consequential Damages and Other Charges**

WPI will not be responsible or liable for any special, direct, indirect or consequential damages or for any operational interruptions or delays, production loss, or other damages or claims of whatever kind caused by or arising out of the fabrication, manufacture, sale, delivery, installation, use, breakage or performance of equipment sold or any part thereof, except only to the extent and in the manner set out in Item 12 below having to do with warranty.

**9. Performance Guarantee**

Performance is subject to manufacturer's guarantees for horsepower and capacities and is subject to de-rating for actual site conditions.

**10. Comments and Exceptions**

When Buyer's specifications are attached to or referenced in an invitation to quote, WPI makes a thorough and sincere effort to review these and provide a quote based on WPI's interpretation of the Buyer's specification. WPI's quote will clearly state what is included and what our interpretation is of Buyer's requirements. It is the Buyer's responsibility to review WPI's quote carefully and advise WPI of any discrepancies between Buyer's specification and WPI's quote. WPI's quote constitutes WPI's total offer and only those items; procedures, scope and content clearly stated in the quote are included and WPI makes no guarantee that the products quoted will meet the Buyer's specifications.

**11. Structural, Current-Pulsation, Vibration, Torsional, Transport Studies**

When requested by the Buyer, WPI will arrange for a third party analysis of the quoted fabricated equipment systems or components. Any changes or modifications to the original design, which result from these analyses are considered outside the scope of the original quote and will be charged at WPI's published rates for engineering, material, labor and necessary

supervision in effect at that time.

#### **12. Warranty**

WPI warrants that the equipment of its own fabrication shall be free from defects in design, material, workmanship and title, under normal use, service, and operating conditions, for the period of one (1) year from date of start-up or commissioning or eighteen (18) months from date of shipment. WPI's exclusive remedy for breach of this warranty shall be repair or replacement of any defective parts packaged by WPI, F.O.B. Houston, Texas. Accessories or equipment furnished by WPI, but manufactured by others, shall carry that manufacturer's warranty, which will be passed-on to Buyer. WPI shall not be liable for any repairs, replacements, or adjustments to the equipment or any costs of labor performed by the Buyer or others without WPI's prior written approval. WPI will serve the Buyer by acting as Buyer's representative in regard to warranty claims for items not manufactured by WPI. However, warranty in all cases is limited to the manufacturers' warranty. Any part(s) found to be defective will be replaced no charge subject to each manufacturers' respective warranty policy, which WPI will administer. Any part(s) replaced that are not subsequently found to be defective by the manufacturer will be charged to the Buyer. Warranty labor for replacement or repair is on site only. Buyer is responsible for travel time, transportation and expenses to and from the closest WPI location to the location of the subjected equipment. Should WPI travel to the location and find that the cause is not warrantable, all expenses incurred by WPI, to include labor, will be billed to the Buyer. WPI will not be responsible for crane, barge, or special transportation charges associated with warranty repairs.

#### **13. Literature**

WPI will provide upon request the manufacturers standard literature. This includes Spec Sheets, Bill of Materials, Drawings, Operation and Maintenance Manuals and/or Factory Test Reports. WPI takes exception to all specification requirements & requests for non-standard factory literature.

#### **14. Hours of Operation**

This bid assumes all work will be done during normal business hours. Normal hours of operation for WPI are 8 am – 5 pm Monday-Friday. Any work performed outside of the normal operating hours will be billed at 1.5 times our current labor rate.

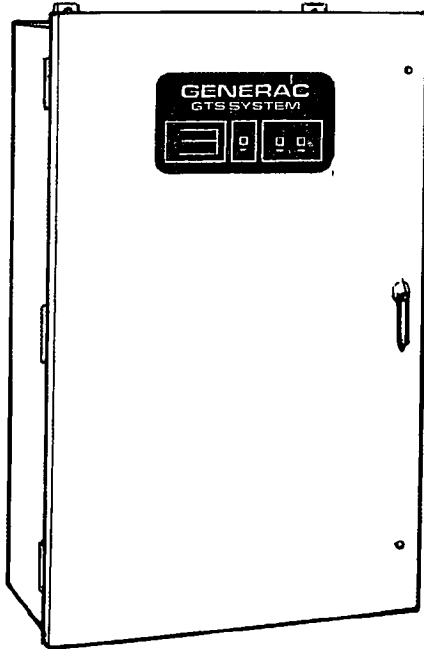
#### **15. Start-Up**

When factory start-up services and field testing are included as part of a quoted package it is understood that the equipment will be made available by the buyer for WPI to perform the factory services within six (6) months of shipment. Additional charges may be required for factory services performed beyond the six (6) month window.



**100 - 400 Amps,  
600 VAC**

## Automatic Transfer Switches



- Standard time delay neutral will reduce switchover problems.
- Logic control with inphase monitor regulates switch functions and allows adjustable switch settings with LED indicators.
- Control switches located on the front of the door for ease of operation.
- All switches are UL 1008 listed and CSA certified.
- Electrically-operated, mechanically-held and interlocked main contacts with break before make design for fast, positive connections.
- Rated for all classes of load, 100% equipment rated, both inductive and resistive with no derations.
- 2, 3, and 4 Pole 600 VAC contactors.
- 160 millisecond transfer time.

### Standard Features

- Single coil design, electrically operated and mechanically held
- Programmable exerciser
- Main contacts are silver alloy to resist welding and sticking
- Conformal coating protects all printed circuit boards
- Indicating LED's for switch position—Normal, Emergency, and Standby Operating
- NEMA 1 enclosure with hinged door and key-locking handle
- Three-position switch—Fast Test, Auto, Normal Test
- Arc chutes on main contacts

### Optional Accessories

- NEMA 12 enclosure
- NEMA 3R enclosure
- NEMA 4 & 4X enclosure
- Exterior AC meter package
- Controls accessible through door in door design on NEMA type 3R and 4 enclosures – key lock provided on access door
- 4-pole design for neutral isolation
- Single or double sets of auxiliary contacts
- Preferred source selector switch
- Manual 3 position selector switch
- Remote automatic control circuit
- Signal before transfer contacts
- Return to normal timer bypass



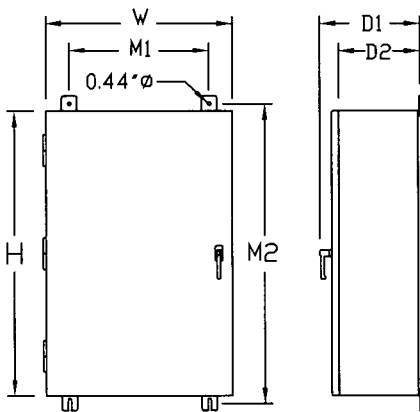
## GTS Control Systems

UTILITY VOLTAGE		LOGIC CONTROL w / Inphase Monitor
Dropout .....		75-95% (Adj)
Pickup .....		85-95% (Adj)
Line Interrupt .....		0 1-10 Sec (Adj)
Engine Minimum Run .....		5-30 Min (Adj)
Engine Warmup .....		5 Sec -3 Min (Adj)
Return to Utility .....		1-30 Min. (Adj.)
Engine Cooldown .....		1-30 Min. (Adj.)
Standby Voltage .....		85-95% (Adj)
Standby Frequency .....		80-90% (Adj.)
Time Delay Neutral .....		0 1-10 Sec (Adj)
Transfer on Exercise .....		On/Off Switch
Warmup Timer Bypass .....		On/Off Switch
Time Delay Neutral Bypass .....		On/Off Switch
Inphase Monitor .....		On/Off Switch

### Withstand Current - 600 Volt GTS Series

GTS Rated Amps	100	150	200	300	400
<b>FUSE PROTECTED</b>					
Maximum RMS Symmetrical Fault Current – Amps	200,000	200,000	200,000	200,000	200,000
Maximum Fuse Size – Amps	200	400	400	600	600
Fuse Class	J,T	J,T	J,T	J,T	J,T
<b>CIRCUIT BREAKER PROTECTED (See separate sheet for specific circuit breakers)</b>					
Maximum RMS Symmetrical Fault Current – Amps	14,000	25,000	25,000	35,000	35,000
Protective Device Continuous Rating (Max) – Amps	150	300	300	600	600

- Tested in accordance with the withstand and closing requirements of UL 1008 and CSA Standards
- Current ratings are listed @ 480 VAC



### Unit Dimensions

GTS Rated Amps	Voltage	Enclosure Height	Enclosure Width	Wall Mount Bolt Pattern		Enclosure Depth		Weight (lbs.)
		H	W	M1	M2	D1	D2	
100	All	36	24	18	37.5	12.7	10	180
150-200	120/240	36	24	18	37.5	12.7	10	185
150-200	120/208	36	24	18	37.5	12.7	10	185
150-200	277/480	48*	30*	24	49.5	14.8	12	265
150-200	600	48*	30*	24	49.5	14.8	12	265
300-400	120/240	36	24	18	37.5	12.7	10	245
300-400	120/208	36	24	18	37.5	12.7	10	245
300-400	277/480	48*	30*	24	49.5	14.8	12	325
300-400	600	48*	30*	24	49.5	14.8	12	325

\* Note On NEMA 1 enclosures only, door overlaps enclosure – door dimensions are 48 8 H X 30 8 W All dimensions in inches

### Terminal Lug Wire Ranges

GTS RATED AMPS	CONTACTOR TERMINALS (1 LUG PER POLE) LUG WIRE RANGE	NEUTRAL BAR*		GROUND LUG (1 PROVIDED) LUG WIRE RANGE
		# LUGS	LUG WIRE RANGE	
100	2/0 – 14 AWG	4	2/0 – 14 AWG	2/0 – 14 AWG
150	400MCM – 4 AWG	4	350MCM – 6 AWG	350MCM – 6 AWG
200	400MCM – 4 AWG	4	350MCM – 6 AWG	350MCM – 6 AWG
300	600MCM – 4 AWG	4	600MCM – 4 AWG	350MCM – 6 AWG
	or 2 – [250MCM – 1/0 AWG]		[250MCM – 1/0 AWG]**	350MCM – 6 AWG
400	600MCM – 4 AWG	4	600MCM – 4 AWG	350MCM – 6 AWG
	or 2 – [250MCM – 1/0 AWG]		[250MCM – 1/0 AWG]**	

\* Not included in GTS with switched neutral \*\* Allowable wire range in brackets is for 2 wires per lug

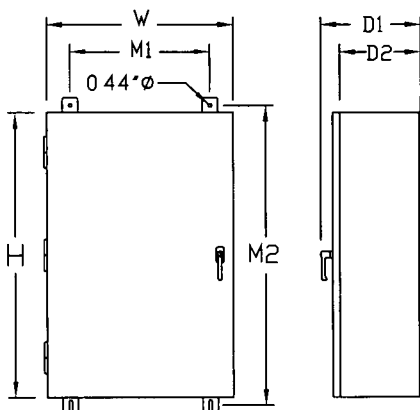
## GTS Control Systems

UTILITY VOLTAGE		LOGIC CONTROL w / Inphase Monitor
Dropout	.....	75-95% (Adj.)
Pickup	.....	85-95% (Adj.)
Line Interrupt	.....	0.1-10 Sec. (Adj.)
Engine Minimum Run	.....	5-30 Min (Adj.)
Engine Warmup	.....	5 Sec.-3 Min. (Adj.)
Return to Utility	.....	1-30 Min (Adj.)
Engine Cooldown	.....	1-30 Min (Adj.)
Standby Voltage	.....	85-95% (Adj.)
Standby Frequency	.....	80-90% (Adj.)
Time Delay Neutral	.....	0 1-10 Sec (Adj.)
Transfer on Exercise	.....	On/Off Switch
Warmup Timer Bypass	.....	On/Off Switch
Time Delay Neutral Bypass	.....	On/Off Switch
Inphase Monitor	.....	On/Off Switch

### Withstand Current - 600 Volt GTS Series

GTS Rated Amps	100	150	200	300	400
<b>FUSE PROTECTED</b>					
Maximum RMS Symmetrical Fault Current – Amps	200,000	200,000	200,000	200,000	200,000
Maximum Fuse Size – Amps	200	400	400	600	600
Fuse Class	J,T	J,T	J,T	J,T	J,T
<b>CIRCUIT BREAKER PROTECTED (See separate sheet for specific circuit breakers)</b>					
Maximum RMS Symmetrical Fault Current – Amps	14,000	25,000	25,000	35,000	35,000
Protective Device Continuous Rating (Max) – Amps	150	300	300	600	600

- Tested in accordance with the withstand and closing requirements of UL 1008 and CSA Standards
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150-200	120/240	36	24	18	37.5	12.7	10	185
150-200	120/208	36	24	18	37.5	12.7	10	185
150-200	277/480	48*	30*	24	49.5	14.8	12	265
150-200	600	48*	30*	24	49.5	14.8	12	265
300-400	120/240	36	24	18	37.5	12.7	10	245
300-400	120/208	36	24	18	37.5	12.7	10	245
300-400	277/480	48*	30*	24	49.5	14.8	12	325
300-400	600	48*	30*	24	49.5	14.8	12	325

\* Note On NEMA 1 enclosures only, door overlaps enclosure – door dimensions are 48 8 H X 30 8 W All dimensions in inches

### Terminal Lug Wire Ranges

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		# LUGS	LUG WIRE RANGE	
100	2/0 – 14 AWG	4	2/0 – 14 AWG	2/0 – 14 AWG
150	400MCM – 4 AWG	4	350MCM – 6 AWG	350MCM – 6 AWG
200	400MCM – 4 AWG	4	350MCM – 6 AWG	350MCM – 6 AWG
300	600MCM – 4 AWG or 2 – [250MCM – 1/0 AWG]	4	600MCM – 4 AWG [250MCM – 1/0 AWG]**	350MCM – 6 AWG 350MCM – 6 AWG
400	600MCM – 4 AWG or 2 – [250MCM – 1/0 AWG]	4	600MCM – 4 AWG [250MCM – 1/0 AWG]**	350MCM – 6 AWG

\* Not included in GTS with switched neutral \*\* Allowable wire range in brackets is for 2 wires per lug.

**SD080****Industrial Diesel Generator Set**

EPA Certified Stationary Emergency

**4.5L****SD080 80 kW**

1 of 6

Standby Power Rating  
**80 kW 100 kVA 60 Hz**

Prime Power Rating\*  
**72 kW 90 kVA 60 Hz**

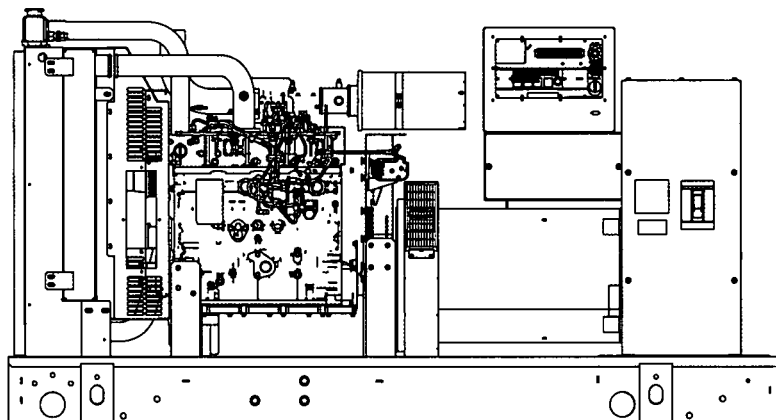


Image used for illustration purposes only

\*EPA Certified Prime ratings are not available in the U.S. or its Territories

## Codes and Standards

Generac products are designed to the following standards



UL2200, UL508, UL142, UL498



NFPA70, 99, 110, 37



NEC700, 701, 702, 708



ISO9001, 8528, 3046, 7637, Pluses #2b, 4



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62 41

American National Standards Institute

IBC 2009, CBC 2010, IBC 2012, ASCE 7-05,  
ASCE 7-10, ICC-ES AC-156 (2012)

## Powering Ahead

For over 50 years, Generac has led the industry with innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac's gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial application under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

## SD080

### Standard Features

#### ENGINE SYSTEM

##### General

- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel flexible exhaust connection
- Critical Exhaust Silencer (enclosed only)
- Factory Filled Oil
- Radiator Duct Adapter (open set only)

##### Fuel System

- Fuel lockoff solenoid
- Primary fuel filter

##### Cooling System

- Closed Coolant Recovery System
- UV/Ozone resistant hoses
- Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene glycol antifreeze
- 120 VAC Coolant Heater

##### Engine Electrical System

- Battery charging alternator
- Battery cables
- Battery tray
- Solenoid activated starter motor
- Rubber-booted engine electrical connections

#### ALTERNATOR SYSTEM

- UL2200 GENprotect™
- 12 leads (3-phase, non 600 V)
- Class H insulation material
- Vented rotor
- 2/3 pitch
- Skewed stator
- Auxiliary voltage regulator power winding
- Amortisseur winding
- Brushless Excitation
- Sealed Bearings
- Automated manufacturing (winding, insertion, lacing, varnishing)
- Rotor dynamically spin balanced (get tolerance)
- Full load capacity alternator
- Protective thermal switch

#### GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Silencer Heat Shield
- Wrapped Exhaust Piping
- Silencer housed in discharge hood (enclosed only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Limited Warranty (Prime rated units)
- Silencer mounted in the discharge hood (enclosed only)

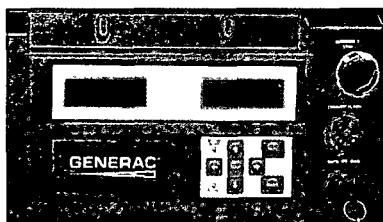
#### ENCLOSURE (if selected)

- Rust-proof fasteners with nylon washers to protect finish
- High performance sound-absorbing material
- Gasketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

#### TANKS (if selected)

- UL 142
- Double wall
- Vents
- Sloped top
- Sloped bottom
- Factory pressure tested (2 psi)
- Rupture basin alarm
- Fuel level
- Check valve in supply and return lines
- Rhino Coat™ - Textured polyester powder coat
- Stainless hardware

#### CONTROL SYSTEM



##### Control Panel

- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)
- Power Factor
- kW Hours, Total & Last Run

- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus protocol
- Predictive Maintenance algorithm
- Sealed Boards
- Password parameter adjustment protection
- Single point ground
- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display

##### Alarms

- Oil Pressure (Pre-programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed Shutdown)
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & warnings
- Alarms and warnings spelled out (no alarm codes)

**SD080****Configurable Options****ENGINE SYSTEM**

- General
- Oil Make-Up System
  - Oil Heater
  - Industrial Exhaust Silencer

- Fuel System
- Flexible fuel lines
  - Primary fuel filter

- Engine Electrical System
- 10A UL battery charger
  - 2 5A UL battery charger
  - Battery Warmer

**ALTERNATOR SYSTEM**

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical coating
- Permanent Magnet Excitation

**CIRCUIT BREAKER OPTIONS**

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

**GENERATOR SET**

- Gen-Link Communications Software (English Only)
- IBC Seismic Certification
- 8 Load Position Load Center
- 2 Year Extended Warranty
- 5 Year Warranty
- 5 Year Extended Warranty

**ENCLOSURE**

- Weather Protected
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Steel Enclosure
- Aluminum Enclosure
- 150 MPH Wind Kit
- 12 VDC Enclosure Lighting Kit
- 120 VAC Enclosure Lighting Kit
- AC/DC Enclosure Lighting Kit
- Door Alarm Switch

**TANKS (Size on last page)**

- Electrical Fuel Level
- Mechanical Fuel Level
- 8" Vent Extension
- 13" Vent Extension
- 19" Vent Extension

**CONTROL SYSTEM**

- 21-Light Remote Annunciator
- Remote Relay Panel (8 or 16)
- Oil Temperature Sender with Indication Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- Remote Communication - Modem
- Remote Communication - Ethernet
- 10A Run Relay
- Ground fault indication and protection functions

**Engineered Options****ENGINE SYSTEM**

- Coolant heater ball valves
- Block Heaters
- Fluid containment pans

**CONTROL SYSTEM**

- Spare inputs (x4) / outputs (x4) - H Panel Only
- Battery Disconnect Switch

**ALTERNATOR SYSTEM**

- 3rd Breaker System

**GENERATOR SET**

- Special Testing

**ENCLOSURE**

- Motorized Dampers
- Door switched for intrusion alert
- Enclosure ambient heaters

**TANKS**

- Overfill protection valve
- UL2085 Tank
- ULC S-601 Tank
- Stainless Steel Tank
- Special Fuel Tanks (MIDEQ and FL DEP/DERM, etc )
- Vent Extensions

**Rating Definitions**

**Standby** – Applicable for a varying emergency load for the duration of a utility power outage with no overload capability

**Prime** – Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications

Power ratings in accordance with ISO 8528-1, Second Edition dated 2005-06-01, definitions for Prime Power (PRP) and Emergency Standby Power (ESP)

## SD080

## application and engineering data

**ENGINE SPECIFICATIONS****General**

Make	Generac
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	4
Type	In-Line
Displacement - L (cu in)	4.5 (274.6)
Bore - mm (in)	105 (4.1)
Stroke - mm (in)	132 (5.2)
Compression Ratio	17.5:1
Intake Air Method	Turbocharged
Cylinder Head Type	2 Valve
Piston Type	Aluminum
Crankshaft Type	Forged Steel

**Engine Governing**

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	± 0.25%

**Lubrication System**

Oil Pump Type	Gear
Oil Filter Type	Full Flow
Crankcase Capacity - L (qts)	13.6 (14.4)

**Cooling System**

Cooling System Type	Closed
Water Pump Flow	Belt Driven Centrifugal
Fan Type	Pusher
Fan Speed (rpm)	2538
Fan Diameter mm (in)	660.4 (26)
Coolant Heater Wattage	1500
Coolant Heater Standard Voltage	120 V/240 V

**Fuel System**

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specifications	ASTM
Fuel Filtering (microns)	5
Fuel Inject Pump	Stanadyne
Fuel Pump Type	Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Line - mm (in)	12.7 (0.5) NPT
Fuel Return Line - mm (in)	12.7 (0.5) NPT

**Engine Electrical System**

System Voltage	12 VDC
Battery Charging Alternator	20 A
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

**ALTERNATOR SPECIFICATIONS**

Standard Model	390
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	< 3%
Telephone Interference Factor (TIF)	< 50
Standard Excitation	Synchronous Brushless
Bearings	One-Pre Lubed & Sealed
Coupling	Direct, Flexible Disc
Load Capacity - Standby	100%
Prototype Short Circuit Test	Yes

Voltage Regulator Type	Digital
Number of Sensed Phases	3
Regulation Accuracy (Steady State)	± 0.25%

**SD080**

**operating data**

**POWER RATINGS**

Single-Phase 120/240 VAC @1 0pf  
 Three-Phase 120/208 VAC @0 8pf  
 Three-Phase 120/240 VAC @0 8pf  
 Three-Phase 277/480 VAC @0 8pf  
 Three-Phase 346/600 VAC @0 8pf

Standby		
80 kW	Amps	333
80 kW	Amps	378
80 kW	Amps	241
80 kW	Amps	120
80 kW	Amps	96

**STARTING CAPABILITIES (sKVA)**

**sKVA vs. Voltage Dip**

Alternator	kW	480 VAC						208/240 VAC					
		10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	80	59	88	117	147	176	205	44	66	88	110	132	154
Upsize 1	100	79	118	157	197	236	200	59	89	118	148	177	206
Upsize 2	125	116	174	232	293	348	406	87	131	174	218	261	305

**FUEL CONSUMPTION RATES\***

Fuel Pump Lift - ft (m)	3 (1)
Total Fuel Pump Flow (Combustion + Return)	13.6 gph

Diesel - gph (lph)	
Percent Load	gph (lph)
25%	2.1 (7.9)
50%	3.7 (14.0)
75%	5.2 (19.7)
100%	6.3 (23.8)

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

**COOLING**

Standby		
Coolant Flow per Minute	gpm (lpm)	32.7 (123.8)
Coolant System Capacity	gal (L)	4.5 (17.44)
Heat Rejection to Coolant	BTU/hr	232,270
Inlet Air	cfm (m <sup>3</sup> /hr)	6360 (180)
Max. Operating Radiator Air Temp	F° (C°)	122 (50)
Max. Ambient Temperature (before derate)	F° (C°)	104 (40)
Maximum Radiator Backpressure	in H <sub>2</sub> O	0.5

**COMBUSTION AIR REQUIREMENTS**

Flow at Rated Power	cfm (m <sup>3</sup> /min)	306 (8.67)
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**ENGINE**

Standby		
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	131
Piston Speed	ft/min (m/min)	1559 (475)
BMEP	psi	210

**EXHAUST**

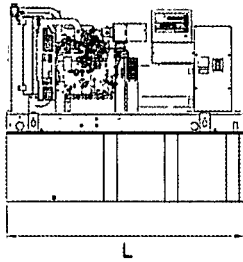
Standby		
Exhaust Flow (Rated Output)	cfm (m <sup>3</sup> /min)	790 (22.4)
Max. Backpressure (Post Silencer)	inHg (Kpa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	887 (475)
Exhaust Outlet Size (Open Set)	mm (in)	76.2 (3.0)

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

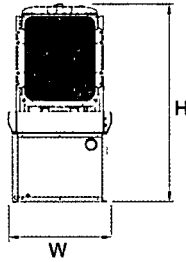
Deration - Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

**SD080**

**dimensions and weights\***



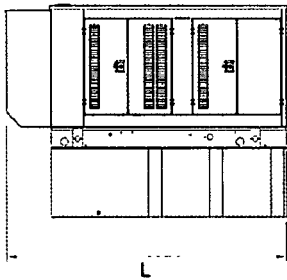
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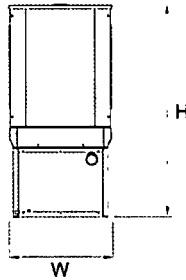
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**OPEN SET**

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Tank & Open Set	
			Steel	Aluminum
NO TANK	-	93 (2362 2) x 40 (1016) x 49 (1244 6)	2425 (1100)	
13	79 (299)	93 (2362 2) x 40 (1016) x 62 (1574 8)	2947 (1201)	
30	189 (715 4)	93 (2362 2) x 40 (1016) x 74 (1879 6)	3183 (1444)	
48	300 (1135 6)	93 (2362 2) x 40 (1016) x 86 (2184 4)	3407 (1545)	
56	350 (1325)	110 (2794) x 40 (1016) x 86 (2184 4)	NA	
81	510 (1930 5)	117 (2971 8) x 47 (1193 8) x 86 (2184 4)	3790 (1719)	
93	589 (2229 6)	128 (3251 2) x 49 (1244 6) x 86 (2184 4)	4269 (1936)	



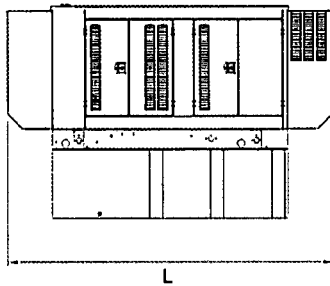
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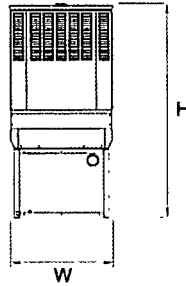
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**STANDARD ENCLOSURE**

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	112 (2844 8) x 41 (1041 4) x 56 (1422 4)	425 (193)	155 (70)
13	79 (299)	112 (2844 8) x 41 (1041 4) x 69 (1752 6)		
30	189 (715 4)	112 (2844 8) x 41 (1041 4) x 81 (2057 4)		
48	300 (1135 6)	112 (2844 8) x 41 (1041 4) x 93 (2362 2)		
56	350 (1325)	112 (2844 8) x 41 (1041 4) x 93 (2362 2)		
81	510 (1930 5)	117 (2971 8) x 47 (1193 8) x 93 (2362 2)		
93	589 (2229 6)	128 (3251 2) x 49 (1244 6) x 93 (2362 2)		



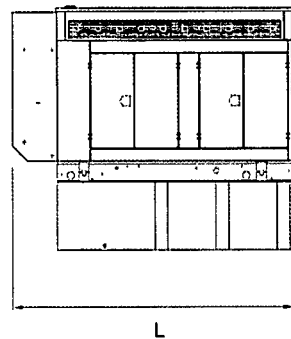
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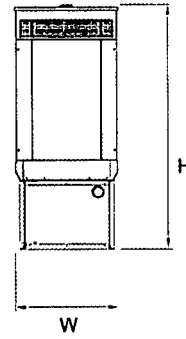
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**LEVEL 1 ACOUSTIC ENCLOSURE**

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	130 (3302) x 41 (1041 4) x 56 (1422 4)	450 (204)	285 (129)
13	79 (299)	130 (3302) x 41 (1041 4) x 69 (1752 6)		
30	189 (715 4)	130 (3302) x 41 (1041 4) x 81 (2057 4)		
48	300 (1135 6)	130 (3302) x 41 (1041 4) x 93 (2362 2)		
56	350 (1325)	130 (3302) x 41 (1041 4) x 93 (2362 2)		
81	510 (1930 5)	130 (3302) x 47 (1193 8) x 93 (2362 2)		
93	589 (2229 6)	130 (3302) x 49 (1244 6) x 93 (2362 2)		



L



W

**LEVEL 2 ACOUSTIC ENCLOSURE**

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	112 (2844 8) x 41 (1041 4) x 69 (1752 6)	625 (284)	395 (180)
13	79 (299)	112 (2844 8) x 41 (1041 4) x 82 (2082 8)		
30	189 (715 4)	112 (2844 8) x 41 (1041 4) x 94 (2387 6)		
48	300 (1135 6)	112 (2844 8) x 41 (1041 4) x 106 (2692 4)		
56	350 (1325)	112 (2844 8) x 41 (1041 4) x 106 (2692 4)		
81	510 (1930 5)	117 (2971 8) x 47 (1193 8) x 106 (2692 4)		
93	589 (2229 6)	128 (3251 2) x 49 (1244 6) x 106 (2692 4)		

\*All measurements are approximate and for estimation purposes only Sound dBA can be found on the sound data sheet Enclosure Only weight is added to Tank & Open Set weight to determine total weight

Specification characteristics may change without notice Dimensions and weights are for preliminary purposes only Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings