



Request for Bids
Backup Generator and Electrical Switchgear
for Serna Center
Bid #0825-0817

Responses Due: July 27, 2023

No later than 11:00:00 AM

Sacramento City Unified School District
Contracts Department
5735 47th Ave.
Sacramento, CA. 95824



Sacramento City Unified School District

Contracts Department

5735 47th Ave,
Sacramento, CA 95824
T: 916-643-9465

Bidder Information Sheet

**If you downloaded this Bid from our website,
email this sheet to Purchasing Services to be
added to our bidders list.**

Attention: Tina Alvarez Bevens, Contract Analyst
Email: tina-alvarez-bevens@scusd.edu

Re: BID #0825-0817 Backup Generator and Electrical Switchgear for Serna Center

Sacramento City Unified School District Bids/Proposals are available on-line. It is the responsibility of Respondents to email this sheet to Purchasing Services to ensure firm is added to Bidders list to receive Addenda to this Bid.

Name: _____

Title: _____

Organization: _____

Street Address: _____

City: _____

State/Zip Code: _____

Work Phone: _____

Fax: _____

Email: _____

**Sacramento City Unified School District
Request for Bids #0825-0817
Backup Generator and Electrical Switchgear for Serna Center**

NOTICE TO BIDDERS

The Sacramento City Unified School District (“District”) is requesting Bids from companies, corporations, qualified persons or organizations (“Vendors”) to supply Generators and Electrical Switchgear for The Serna Center, District Office.

The Request for Bids, which includes instructions for its completion, is enclosed for your consideration. Respondents to this Bid shall submit a completed sealed bid package. Respondents must mail or deliver one (1) unbound original, two (2) bound copies and a PDF version on a flash drive of requested materials to:

**Sacramento City Unified School District
Attn: Contracts Department
5735 47th Avenue
Sacramento, CA. 95824
RE: BID 0825-0817**

ALL RESPONSES ARE DUE JULY 27, 2023 BY 11:00:00 A.M.

Oral, telegraphic, facsimile, telephone or email Bid Packets will not be accepted. Bid Packets received after this date and time will not be accepted and returned unopened. The District reserves the right to waive any informalities or irregularities in the Bid Packet. The District also reserves the right to reject any and all Bid Packets and to negotiate contract terms with one or more Respondents.

Addenda

The District may modify the Bid, any of the submittal dates, or any of its contents or attachments, prior to the date fixed for submission of bid by issuance of addendum to all parties who have been furnished the Bid. Addenda will be number consecutively.

All Respondents shall acknowledge receipt of amendments in its proposal.

The successful bidder will be required to certify that it either meets the Disabled Veterans Business Enterprise (“DVBE”) goal of three percent (3%) participation or made a good faith effort to solicit DVBE participation if it is awarded the contract.

If you have any questions regarding this Bid, please email Tina Alvarez Bevens, Contract Analyst at tina-alvarez-bevens@scusd.edu and cc: Robert Aldama, Purchasing Manager II At Robert-aldama@scusd.edu

**Sacramento City Unified School District
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**Sacramento City Unified School District
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Backup Generator and Electrical Switchgear for Serna Center**

BID SCHEDULE SUMMARY

DATE	ACTION ITEM	TIME
June 30, 2023	Publish and advertise Bid 0825-0817	
July 17, 2023	Last day to receive written questions from Respondents	2:00 pm
July 24, 2023	Last day for District to issue addenda to answer questions / clarifications	2:00 pm
July 27, 2023	Deadline for submissions in response to Bid 0825-0817	11:00:00 am
August 1, 2023	Notice of Intent to Award / Regrets	
August 17, 2023	Anticipated Board of Education approval of Award	

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**Sacramento City Unified School District
Request for Bids #0825-0817
Backup Generator and Electrical Switchgear for Serna Center**

INTRODUCTION

The Sacramento City Unified School District (“District”) is a California public school district serving approximately 40,000 students on 75 campuses, spanning 70 square miles. The purpose of this Bid, is to solicit proposals from Vendors that can supply the District with the equipment necessary to install a gas-fired backup generator and electrical switchgear at the District’s main office. The District intends to select one vendor through this bid process that is believed to be able to provide the best value to the District.

SCOPE OF SUPPLY

Quantity (2) Two - Generac MG400 MPS (OR EQUAL) Industrial gaseous engine-driven generator, turbocharged/after-cooled 12 cylinder 21.9L engine, consisting of the following features and accessories:

- Stationary Emergency-Standby rated
- 400 kW Rating, wired for 277/480 VAC three phase, 60 Hz
- Power Manager Digital Control Platform configured for Generac Modular Power System's Paralleling Controller (PM-PC)
 - 32 bit microprocessor structured with: real-time clock, 47 inputs, 32 outputs, 2 - RS232 ports, 2 - RS485 ports, RJ45 modem port, CANbus port
 - +/-1.0% digital voltage regulator with: 3 phase RMS sensing, soft-start voltage ramping - adjustable, loss of sensing protection - adjustable, negative power limit - adjustable, Hi/Lo voltage limit - adjustable, V/F slope and gain - adjustable, fault protection, encapsulated and sealed
 - 0.25% digital frequency regulation with: soft-start ramping - adjustable, gain - adjustable, overshoot limit - adjustable
 - On-board PLC for customer configuration with: 24 digital inputs, 43 analog inputs, 24 digital open-collector outputs - 30 vdc, 16 timers, 16 counters
 - Programmable touch screen engine control and monitoring module with: Auto/Manual/Off key switch, Alarm LED, Not in Auto LED, audible alarm, emergency stop switch, 30-page readout including: Oil Pressure and optional Oil Temp, Coolant Temp and Level, Fuel Level (where applicable), Engine Speed, DC Battery Voltage, Run-time Hours, Generator Voltages, Amps, Frequency, Power, Power Factor, Alarm Status: Low or High AC Voltage, Low or High Battery Voltage, Low or High Frequency, Pre-low or Low Oil Pressure, Pre-high or High Oil Temp (optional), Low Water Level and Temp, Pre-high or High Engine Temp, High, Low, and Critical-low Fuel Level (where applicable), Over-crank, Over and Under Speed, Unit Not in Automatic

**Sacramento City Unified School District
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Backup Generator and Electrical Switchgear for Serna Center**

- Level 1 Acoustic Enclosure, Steel



- Industrial Grey Baked-On Powder Coat Finish
- Average Sound Level, 82 dBA at 23 ft
- UL2200
- EPA Certified
- SCAQMD
- Power Zone Digital Control Panel for Single or MPS Generators
 - Meets NFPA 99 and 110 requirements
 - Temp Range -40 to 70 degrees C
 - Humidity 2 – 95% (Non Condensing)
 - UL6200
 - C-ETL-US
 - CE
 - FCC
 - IEC801 (Radiated Emissions, Susceptibility, and Surge Immunity)
 - 7" Resistive Color Touchscreen
 - Built-in Webserver
 - 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
 - Sensors: Oil Pressure, optional Oil Temp, Coolant Temp and Level, Fuel Level/Pressure (where applicable), Engine Speed, DC Battery Voltage, Run-time Hours, Generator Voltages, Amps, Frequency, Power, Power Factor
 - Alarm Status: Low or High AC Voltage, Low or High Battery Voltage, Low or High Frequency, Pre-low or Low Oil Pressure, Pre-high or High Oil Temp (optional), Low Water Level and Temp, Pre-high or High Engine Temp, High, Low, and Critical-low Fuel Level/Pressure (where applicable), Over-crank, Over and Under Speed, Unit Not in Automatic
 - Programmable I/O
 - Built-in PLC for special applications
 - Engine function monitoring and control:
 - Full range standby operation; programmable auto crank, Emergency Stop, Auto-Off-Manual switch
 - Isochronous Governor
 - 0.25% digital frequency regulation with: soft-start ramping - adjustable, gain - adjustable, overshoot limit - adjustable
 - 3 Phase RMS Voltage Sensing
 - +/-0.5% digital voltage regulation with: soft-start voltage ramping - adjustable, loss of sensing protection - adjustable, negative power limit - adjustable, Hi/Lo voltage limit - adjustable, V/F slope and gain - adjustable, fault protection
 - Service reminders, trending, fault history (alarm log)

**Sacramento City Unified School District
Request for Bids #0825-0817
Backup Generator and Electrical Switchgear for Serna Center**

- I2T function for full generator protection
- Selectable low-speed exercise
- 2 and 3-wire start controls for any industrial grade transfer switch
- Remote Emergency Stop Switch, Surface-Mount, shipped loose
- Natural Gas fuel system
- 225 AH, 1155 CCA Group 8D Batteries, with rack, installed
- Air Filter Restriction Ind
- Battery Charger, 10 Amp, NFPA 110 compliant, installed
- Coolant Heater, 2500W, 240VAC
- 12 Position 1PH Load Center
- 120V GFCI and 240V Outlet
- Crankcase Oil Heater
- Engine Run Relay
- Flex Fuel Line
- Ground Fault Annunciator
- Oil Temp Sender
- MLCB, 100% rated LSI electronic trip
 - 700 Amp
- 3 Owner's Manuals
- Standard Two-Year Limited Warranty
- MG0400KG30219N18PPSYE

Quantity (1) One – Power Zone Permissive/Load Shed Controller, NEMA 3R

Quantity (1) One – Connection Box, 4500A

Designation: 1200A Main Swbd

Quantity (1) One Square D Custom Swbd-QED-2 Switchboard (OR EQUAL)

Square D Custom Swbd
Designed and Tested in accordance with:
UL 891/NATIONAL ELECTRIC CODE/NEMA PB-2
System Voltage - 480Y/277V 3Ph 4W 60Hz
System Ampacity - 1200A
Source Description - Single Main
Bussing - Aluminum Plated w/Tin and Copper
Plated w/Silver
Neutral Bus - 100%
Max Available Fault Current (RMS) - 65kA
Enclosure - Type 1
Accessibility: Front Only
Rodent Barrier
Exterior Paint Color - ANSI 49
Ground Lug provided for each device
Aluminum Ground Bus
ASCO Controller with 07ATS - Auto Transfer
Switch 1200 Amp, Switched Neutral
Emergency Cable Entrance - Top
Seismic Qualified
Special: (2) Per Lineup - load bus to 1600a
for PV sourc - - TAG # TR-109751-1

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
BID #0825-0817 Backup Generator and Electrical Switchgear for Serna Center

Published: June 30, 2023
July 06, 2023

Sacramento City Unified School District
Request for Bids #0825-0817
Backup Generator and Electrical Switchgear for Serna Center

Dimensions

1 - 42" Wide Section(s)
1 - 30" Wide Section(s)
1 - 48" Wide Section(s)
2 - 36" Wide Section(s)
5 - 36" Deep Enclosure(s)
Dimensions: 192.00" W X 36" Max D X 91.5" H
Approximate Weight: 4721.00 lbs / 2141.45 kgs

Suitable for Use As Service Entrance
Entry Point: Left of Lineup, Through the Bottom
Connection Type: Cable
Reverse Feed
Hot Sequence Utility: Sacramento S.M.U.D (CA)
Standard Door Pattern 15in Blank Top, 15in MS Btm
Mains

1 - 1200AS/1200AT 480V 80% Rated 65 kA 3 Pole
UL, Fixed Mounted Electronic Trip
Circuit Breaker: Type PJ
Power Trip Unit, Long Time, Short Time,
Instantaneous, Ground Fault
Padlock Attachment
Energy Reduction Maintenance Switch

Feeders

3 - 400AS/300AT 480V 80% Rated 65 kA 3 Pole
UL, Group Mounted Electronic Trip
Circuit Breaker: Type LJ
Standard Trip Unit, Long Time,
Instantaneous
2 - 400AS/350AT 480V 80% Rated 65 kA 3 Pole
UL, Group Mounted Electronic Trip
Circuit Breaker: Type LJ
Standard Trip Unit, Long Time,
Instantaneous
3 - 100AT 480V 80% Rated 65 kA 3 Pole UL,
Group Mounted Thermal Magnetic Circuit
Breaker: Type BJ
1 - 600AS/600AT 480V 80% Rated 65 kA 3 Pole
UL, Group Mounted Electronic Trip
Circuit Breaker: Type LJ
Standard Trip Unit, Long Time,
Instantaneous
1 - 700AT 480V 80% Rated 65 kA 3 Pole UL,
Group Mounted Basic Electronic Trip
Circuit Breaker: Type MJ
1 - 250AT 480V 80% Rated 65 kA 3 Pole UL,
Group Mounted Thermal Magnetic Circuit
Breaker: Type JJ
1 - 110AT 480V 80% Rated 65 kA 3 Pole UL,
Group Mounted Thermal Magnetic Circuit
Breaker: Type BJ
2 - 50AT 480V 80% Rated 65 kA 3 Pole UL,
Group Mounted Thermal Magnetic Circuit
Breaker: Type BJ
1 - 150AT 480V 80% Rated 65 kA 3 Pole UL,
Group Mounted Thermal Magnetic Circuit
Breaker: Type HJ
1 - 225AT 480V 80% Rated 65 kA 3 Pole UL,
Group Mounted Thermal Magnetic Circuit
Breaker: Type JJ

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT
BID #0825-0817 Backup Generator and Electrical Switchgear for Serna Center

Published: June 30, 2023
July 06, 2023

Sacramento City Unified School District
Request for Bids #0825-0817
Backup Generator and Electrical Switchgear for Serna Center

1 - 60AT 480V 80% Rated 65 kA 3 Pole UL,
Group Mounted Thermal Magnetic Circuit
Breaker: Type BJ
2 - 100AT 480V 80% Rated 65 kA 3 Pole UL,
Group Mounted Thermal Magnetic Circuit
Breaker: Type BJ
Device Designation: Shunt Trip
Shunt Trip - 120Vac
3 - 90AT 480V 80% Rated 65 kA 3 Pole UL,
Group Mounted Thermal Magnetic Circuit
Breaker: Type BJ

SCOPE CLARIFICATIONS

- Equipment only, no installation, fueling or termination of connections
- Bid price shall include freight to site: Sacramento City USD
5735 47th Ave. Sacramento, CA. 95824
- The District shall agree to pay **no more than 10% deposit at the time of order**, then **balance invoiced at shipment with NET 30 terms**
- Equipment offloading shall be arranged by the District
- Include estimated lead time from factory upon receipt of awarded purchase order.
- Enclosure color: Industrial grey (Factory)
- **Alternate Mfg./Models:** The District shall have sole discretion if alternate models and specifications are determined "Equal". If an alternate manufacturer and model is proposed, include all specifications and schematics with bid submission.

BID OPENING

- Bids will be opened at or after the time indicated that responses are due. The District Office will **NOT** be open to bidders or their representatives.
- Bidders shall be clearly written and without erasure or deletions. The District reserves the right to reject any bid containing erasures, deletions, or illegible contents.
- Bidders must complete and submit the following documents with Bid submission:
 - Non-Collusion Declaration
 - Literature and Specifications
 - Lead Times

AWARD OF CONTRACT

The District shall award the Contract, if it awards at all, to the lowest responsive, responsible Bidder based on the criteria as indicated in the Notice to Bidders. In the event two or more responsible Bidders submit identical bids, the District shall select the Bidder whom to award the Contract by lot.

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- Should the awarded Bidder terminate the Contract as a result of a notice of postponement, the District shall have the authority to award the Contract to the next lowest responsive, responsible Bidder.

It is the policy of the District that no qualified person shall be excluded from participating in, be denied the benefits of, or otherwise be subjected to discrimination in any consideration leading to the award of contract, based on race, color, gender, sexual orientation, political affiliation, age, ancestry, religion, marital status, national origin, medical condition or disability. The Successful Bidder and its subcontractors shall comply with applicable federal and state laws, including, but not limited to the California Fair Employment and Housing Act, beginning with Government Code section 12900, and Labor Code section 1735.

Questions, Interpretations, or Clarifications

Questions related to this bid shall be submitted in writing and emailed to Tina Alvarez Bevens, Contract Analyst at tina-alvarez-bevens@scusd.edu and cc: Robert Aldama, Purchasing Manager II at Robert-aldama@scusd.edu

Specify "Question-Bid 0825-0817 in the subject line. Responses to all questions received will be posted on the District's website, <https://www.scusd.edu/construction-projects-bids>, as an addendum, no later than Monday, July 24, 2023.

Bidders are responsible for checking the website periodically for any updates or revisions to the Bid

BID PROTEST

Any bid protest by any bidder regarding any other bid must be submitted in writing to the District, before 5:00 p.m. of the **THIRD (3rd)** business day following the Notice of Intent to Award Contract is posted.

- a. Only a Bidder who has actually submitted a bid, and who could be awarded the contract if the bid protest is upheld, is eligible to submit bid protests.
- b. A bid protest must contain a complete statement of any and all bases for the protest and all supporting documentation. Materials submitted after the bid protest deadline will not be considered.
- c. The protest must include the name, address and telephone number of the person representing the protesting party.
- d. The District's Purchasing Manager shall have (5) days after receipt of protest to respond to Protestants.

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**Sacramento City Unified School District
Request for Bids #0825-0817
Backup Generator and Electrical Switchgear for Serna Center**

BID FORM AND PROPOSAL

To: Sacramento City Unified School District ("District")

From: _____

(Formal Name of Bidder)

The undersigned declares that the Notice to Bidders have been read, and agrees and proposes to furnish all equipment in accordance with the terms and conditions of the Scope of Supply and Specifications of Bid No. 0825-0817 for the following project known as:

Backup Generator and Electrical Switchgear for Serna Center

Will accept deposit of 10% at the time of order, then balance invoiced with Net 30 terms payment for proposed total amount:

Quantity (2) Generac MG400 MPS Generator (Or Equal) \$ _____
Options: Generac Level 1 Acoustic Enclosure, Steel
12-position load center
Quantity (1) Power Zone Permissive/Load Shed Controller, NEMA 3R
Quantity (1) Connection Box, 4500A

Quantity (1) Square D Custom Swbd-QED-2 Switchboard (Or Equal) \$ _____

(Do not include Sales Tax in Unit Cost)

TOTAL BID AMOUNT \$ _____

Lead Times:

**Sacramento City Unified School District
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Backup Generator and Electrical Switchgear for Serna Center**

**NON-COLLUSION DECLARATION
TO BE EXECUTED BY AND SUBMITTED WITH BID**

I, _____, declare that I am the party making the foregoing proposal, that the proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the proposal is genuine and not collusive or sham; that the proponent has not directly or indirectly induced or solicited any other proponent to put in a false or sham proposal and has not directly or indirectly colluded, conspired, connived, or agreed with any proponent or anyone else to put in a sham proposal, or that anyone shall refrain from responding; that the proponent has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix any overhead, profit, or cost element of the proposal price, or of that of any other proponent, or to secure any advantage against the public body awarding the Contract of anyone interested in proposed Contract; that all statements contained in the proposal are true, and, further, that the proponent has not, directly or indirectly, submitted his or her proposal price of any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, Bid depository, or to any member or agent thereof to effectuate a collusive or sham Bid.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Date

Name of Vendor

Printed name of Authorized Company Representative

Signature of Authorized Company Representative

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GENERAL TERMS AND CONDITIONS

Bids/Proposals: To receive consideration, Bids/Proposals shall be made in accordance with the following terms:

1. **THE BID** – All items on the form should be stated in figures, and signatures of all individuals must be in long hand. The completed form should be without interlineations, alterations, or erasures. Unsigned bids will not be accepted. **Return one (1) un-bound original and two (2) bound and signed complete set, one (1) PDF version on flash drive, sealed in an envelope with the Bid number and name of Bid listed on the outside.**
2. **“FAX” BIDS** – Facsimile copies of bids will not be accepted for formal advertised bids.
3. **DEFINITIONS** – Responsible; a bidding party possessing the skill, judgment, integrity and financial ability necessary to timely perform and complete the contract being bid. Responsive; a bid which meets all of the specifications set forth in the request for bids.
4. **NAME AND NATURE OF BIDDER’S LEGAL ENTITY** – The bidder(s) shall specify in the bid and in the bond, if furnished as a guarantee, the name and nature of its legal entity and any fictitious name under which it does any business covered by the bond. The bid shall be signed under the correct firm name by an authorized officer.
5. **WITHDRAWAL OF BID** – Bid proposals may be withdrawn by the bidders prior to the time fixed for the opening of bids, but may not be withdrawn for a period of ninety (90) days after the opening of bids. A successful bidder shall not be relieved of the bid submitted without the District’s consent or bidder’s recourse to Public Contract Code Sections 5100 et. seq.
6. **ASSIGNMENT OF CONTRACT OR PURCHASE ORDER** – The bidder(s) shall not assign or transfer by operation of law or otherwise any or all of its rights, burdens, duties or obligations without the prior written consent of the surety on the bond, if any, and the District.
7. **BID NEGOTIATIONS** – A bid response to any specific item of this bid with terms such as “negotiable”, “will negotiate” or of similar intent, will be considered as non-responsive to the specific item.
8. **PRICES** – Prices should be typed and shown as instructed on the bid form for each item, in the amount of quantity specified in the bid form. Taxes shall not be included. Errors may be crossed off and corrections made prior to bid opening only, and must be initialed in ink by the person signing the bid or bidder’s authorized representative. If during the contract period there should be a decrease in prices of the items bid, a corresponding

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decrease in prices on the balance of the deliveries shall be made to the District for as long as the lower prices are in effect, but at no time shall the prices charged the District exceed the prices bid. The District shall be given the benefit of any lower prices which may, for comparable quality and delivery be given by the contractor to any other school district or any other state, county, municipal or local governmental agency in Sacramento County for products listed herein.

9. **TAXES** – Taxes shall not be included in unit prices. The District will pay only the State Sales and Use Tax; however, California Use Tax will be paid to out-of-state vendors only when their permit number is shown on both their bid and invoices. The successful bidder(s) shall list separately any taxes payable by the District and shall certify on the invoices that Federal Excise Tax is not included in the prices listed thereon. Federal Excise Tax is not applicable, as school districts are exempt therefrom. The District, upon request, shall furnish the contractor such Federal Tax Exemption Certificates as may be required.

10. **PERFORMANCE GUARANTEE** – The successful bidder(s) may be required to provide a performance guarantee. Such requirement shall be at the discretion of the District's Manager of Purchasing Services. A continuous performance bond in the amount of 100% of the total amount of the award executed by an admitted surety in the State of California and satisfactory to the District and filed with the Manager of Purchasing Services is the preferred form of performance guarantee. Said bond, if required, shall be furnished within ten (10) calendar days from the date of Notice of Award. Failure to promptly submit a performance guarantee when requested may result in the rejection of an otherwise acceptable low bid.

11. **BRAND NAME AND NUMBER** – The bidder(s) shall state the brand name and number in the column provided. If none is indicated, it shall be understood that the bidder is quoting on the exact brand name and number specified in the bid form. Should any item for which bids are requested be patented, or otherwise protected or designated by the particular name of the maker and the bidder desires to bid on an item of equal character and quality, he may offer such substitute item by clearly indicating that such substitution is intended and specify the brand. Such substitution shall be accepted only if deemed by the Manager of Purchasing Services to be equal in all respects to that specified. If samples are requested by the Manager of Purchasing Services for this determination, they shall be submitted in accordance with Paragraph 12, except that they may be submitted after the bid opening.

12. **SAMPLES** – Samples shall be furnished free of cost to the District after the bid opening. If requested, they are to be sent within seven (7) days to Purchasing Services, 5735 47th Avenue, Sacramento California, 95824, unless otherwise specified. The District reserves the right to reject the bid of any bidder failing to submit samples as requested. Samples must be plainly marked with name of bidder, bid number and date of the bid opening. Samples of the successful bidder(s) may be retained for comparison with deliveries. Bidder(s) may pick up samples (if not destroyed by test) on notice from the Manager of Purchasing Services. If not picked up within fifteen (15) calendar days after date of such

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notice, samples may be disposed of by the District. Bidder(s) (or their agent) hereby assume all risks of loss or damage to samples whatever the cause.

13. **QUANTITY AND QUALITY OF MATERIALS OR SERVICES** – The successful bidder(s) shall furnish and deliver the quantities designated in the bid or purchase order. All materials, supplies or services furnished under the contract shall be in accordance with the bid specifications and the District's sample or the sample furnished by the bidder(s) and accepted by the District. Materials or supplies which, in the opinion of the Manager of Purchasing Services, are not in accordance and conformity with said specifications and samples shall be rejected and removed from the District premises at the bidder's expense. When a sample is taken from a shipment and sent to a laboratory for testing and the test shows that the sample does not comply with the bid specifications, the cost of such test shall be paid by the bidder(s). In bidding, the bidder(s) certifies that all materials conform to all applicable requirements of CAL OSHA and all other requirements of law. All items of equipment and individual components, where applicable standards have been established, shall be listed by the Underwriter Laboratories, Inc., and bear the UL label.
14. **DISTRICT REQUIREMENTS** – The quantity shown is the estimate of consumption for the contract period. The needs of the District may be substantially more or less than such referenced quantities. The articles, supplies or services listed in the bid and required during the contract period shall be ordered and purchased from the successful bidder(s) during such period. The District shall have the right to issue purchase orders up to and including the last day of the contract period even though the time provided for delivery may extend beyond such period. The District reserves the right to acquire from other sources during the life of the contract such items as may be required for testing, evaluation or experimental purposes, or for special programs of an emergency nature, and purchases made by individual schools.
15. **ACCEPTANCE OR REJECTION OF BIDS** – The District may purchase an individual item or combination of items, whichever is in the best interest of the District, provided also that bidder(s) may specify that the District's acceptance of one item shall be contingent upon the District's acceptance of one or more additional items submitted in the same bid. Bids shall remain open and valid and subject to acceptance for ninety (90) calendar days after the bid opening.
16. **BID EXCEPTIONS** – All exceptions which are taken in response to this bid must be stated clearly. The taking of bid exceptions or providing false, incomplete or unresponsive statements may result in the disqualification of the bid. Allowance of exceptions will be determined by the governing board whose decisions shall be final. Any bid exceptions or additional conditions requested after bid closure, which are not detailed within the bid response, may result in disqualification of the bid. No oral or telegraphic modification of any bid submitted will be considered.
17. **AWARDS** – The District reserves the right of determination that items bid meet or do not meet bid specifications. Further, the Board of Education reserves the right to accept or reject any or all bids and to waive any informality in the bidding.

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18. **EXECUTION OF CONTRACT** – Issuance of a Purchase Order shall be evidence the contractual agreement between the bidder(s) and the District and the bidder’s acceptance of these Bid Instructions and Conditions.
19. **DELIVERY** – Time and manner of delivery are essential factors in proper performance under the contract. Unless otherwise specified, the successful bidder(s) shall be responsible for delivery and shall pay all costs, including drayage, freight and packing for delivery to locations in the District as may be specified in the bid form. Each item shall be securely and properly packed and clearly marked as to contents. All items purchased for delivery by truck or freight line shall be palletized. The preferred pallet size should be 48” long by 40” wide. All shipments shall be accompanied by a packing slip and the District purchase order number shall appear on all cases and packages.
20. **MATERIAL SAFETY DATA SHEETS** – For all products requiring a Material Safety Data Sheet – The District requires that a Material Safety Data Sheet accompany all orders at the time of delivery.
21. **DEFAULT BY CONTRACTOR** – The District shall hold the bidder(s) responsible for any damage which may be sustained because of failure or neglect to comply with any terms or conditions listed herein. It is specifically provided and agreed that time shall be of the essence in meeting the contract delivery requirements. If the successful bidder(s) fails or neglects to furnish or deliver any of the materials, supplies or services listed herein at the prices named and at the time and place herein stated or otherwise fails or neglects to comply with the terms of the bid, the District may, upon written notice to the bidder, cancel the contract/purchase order in its entirety or cancel or rescind any or all items affected by such default, and may, whether or not the contract is cancelled in whole or in part, purchase the materials, supplies or services elsewhere without further notice to the bidder. The prices paid by the District at the time such purchases are made shall be considered the prevailing market price. Any extra cost incurred by such default may be collected by the District from the bidder, or deducted from any funds due the bidder.
22. **INSURANCE** – The successful bidder(s) shall maintain insurance adequate to protect him from claims under Workers’ Compensation Laws and from claims for damages for personal injury, including death and damage to property, which may arise from bidder’s operations under the contract. Also, the bidder may be required to file proof of such insurance, naming Sacramento City Unified School District as an additional insured by separate endorsement as follows: The bidder is required to provide proof of insurance to the Governing Board of a comprehensive general liability insurance policy providing occurrence based coverage to be in effect during the term of the contract. Bodily Injury shall be \$1,000,000, combined single limit or \$1,000,000 per person, \$1,000,000 per accident. Property Damage shall be \$500,000 per loss. Failure to furnish such evidence and insurance, if required, may be considered default by the bidder(s).
23. **INVOICES AND PAYMENTS** – Unless otherwise specified, the successful bidder(s) shall render invoices in duplicate for materials delivered or services performed under the

Sacramento City Unified School District
Request for Bids #0825-0817
Backup Generator and Electrical Switchgear for Serna Center

contract, to the: Sacramento Unified School District, Accounting Services Department, 5735 47th Avenue, Sacramento, California, 95824. Invoices shall be submitted under the same firm name as shown on the bid. The successful bidder(s) shall list separately any taxes PAYABLE BY THE District and shall certify on the invoices that Federal Excise Tax is not included in the prices listed thereon. The District shall make payment for materials, supplies, or services furnished under the contract within **NET 30** terms after acceptance thereof and approval of the invoices by the authorized District Representative.

24. **AMERICAN MADE PRODUCTS** – In compliance with Sections 4300 to 4305 of the California Government Code and the William F Gooding Child Nutrition Reauthorization Act of 1998, Section 204(d); 7 CFR Sections 210.21(d) and 220.16(d), only materials produced or manufactured in the United States will be procured by the District, except for those which fall within the purview of Sections 4301, 4302 and 4303.5. In compliance with Code Sections 4330 to 4334 inclusive California products shall receive preference over materials made elsewhere. If a bidder is proposing an article of foreign make, the fact must be stated in his bid.

25. **MISCELLANEOUS PROVISIONS:**

A. Assignment of Contracts – The Contractor shall not assign or transfer by operation of law or otherwise any or all of its rights, burdens, duties or obligations without the prior written consent of the surety on the performance bond (if one is required) and of the District.

B. Binding Effect – This Agreement shall inure to the benefit of and shall be binding upon the Contractor and District and their respective successors and assigns.

C. Severability – If any provisions of this agreement shall be held invalid or unenforceable by a court of competent jurisdiction, such holding shall not invalidate or render unenforceable any other provisions hereof.

D. Amendments – The terms of this Agreement shall not be waived, altered, modified, supplemented or amended in any manner whatsoever except by written agreement signed by the parties.

E. Entire Agreement – This Bid and all attachments thereto constitutes the entire agreement between the parties. There are no understandings, agreements, representations or warranties, express or implied, not specified in the Agreement. Bidder, by the execution of his/her signature on the Bid Form acknowledges that he/she has and read this Agreement, understands it, and agrees to be bound by its terms and conditions.

F. Force Majeure Clause – The parties to the contract shall be excused from performance thereunder during the time and to the extent that they are prevented from obtaining, delivering or performing by act of God, fire, strike, loss or shortage of transportation facilities, lockout, or commandeering of materials, products, plants or facilities by the government, when satisfactory evidence thereof is presented to the other

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party, provided that it is satisfactorily established that the nonperformance is not due to the fault or neglect of the party not performing.

G. Hold Harmless Clause – The successful bidder agrees to indemnify, defend and save harmless Sacramento City Unified School District, its governing board, related divisions and entities, officers, agents, and employees from and against any and all claims, demands, losses, defense costs, or liability of any kind or nature which the District, its officers, agents, and employees may sustain or injure or which may be imposed upon them for injury to or death of persons, or damage to property as a result of, arising out of, or in any manner connected with the bidder or bidder's agents, employees or subcontractor's performance under the terms of this contract, expecting only liability arising out of the sole negligence of the District.

H. Prevailing Law – In the event of any conflict or ambiguity between these instructions and state or federal law or regulations, the latter shall prevail. Additionally, all equipment to be supplied or services to be performed under the bid proposal shall conform to all applicable requirements of local, state and federal law.

I. Governing Law and Venue – In the event of litigation, the bid documents, specifications and related matters shall be governed by and construed only in accordance with the laws of the State of California. Venue shall only be with the appropriate state or federal court located in Sacramento County.

J. Permits and Licenses – The successful bidder(s) and all of his employees or agents shall secure and maintain in force such licenses and permits as are required by law, in connection with the furnishing of materials, articles or services herein listed. All operations and materials shall be in accordance with law.

K. Toll Charges – If it is necessary that the District place toll or long distance telephone calls in connection with this contract (for complaints, adjustments, shortages, failure to deliver, etc.), the successful bidder shall accept charges for such calls on a reverse charge basis.

L. Contract Documents – The complete contract includes the following documents: The advertisement for bids, the bid instructions and conditions, specifications and drawings, if any, the bid and its acceptance by the District, the purchase order, and all amendments thereto. All of these documents shall be interpreted to include all provisions of the other documents as though fully set out therein.

M. Independent Contractor – While engaged in carrying out and complying with terms and conditions of the contract, the bidder agrees by his/her signature on the Bid Form that he/she is an independent contractor and not an officer, employee or agent of the District.

N. Anti-discrimination – It is the policy of the Sacramento City Unified School District Board of Education, that in connection with all work performed under Purchasing Contracts there shall be no discrimination against any prospective or active employee engaged in the work because of sexual orientation, physical and mental disability, medical conditions, marital status, age, pregnancy, veteran status, gender, race, color, ancestry,

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national origin, sex, or religious creed. Therefore, the bidder agrees to comply with applicable Federal and California laws including, but not limited to, the California Fair Employment and Housing Act. In addition, the successful bidder(s) agrees to require like compliance by all subcontractors employed on the work by him.

O. Termination Without Cause – This Agreement may be terminated by the District upon giving thirty days' advance written notice of an intention to terminate.

P. Product Shortages – If the successful bidder is unable to supply any product listed herein, the District may purchase such product at a fair market value from another source. The difference in cost and all delivery charges shall be the responsibility of the supplier listed on the original contract agreement.

MG400 | 21.9L | 400 kW
INDUSTRIAL SPARK-IGNITED GENERATOR SET
 EPA Certified Stationary Emergency and Non-Emergency

DEMAND RESPONSE READY

Standby Power Rating

400 kW, 500 kVA, 60 Hz

Demand Response Rating

400 kW, 500 kVA, 60 Hz

Prime Power Rating

360 kW, 450 kVA, 60 Hz

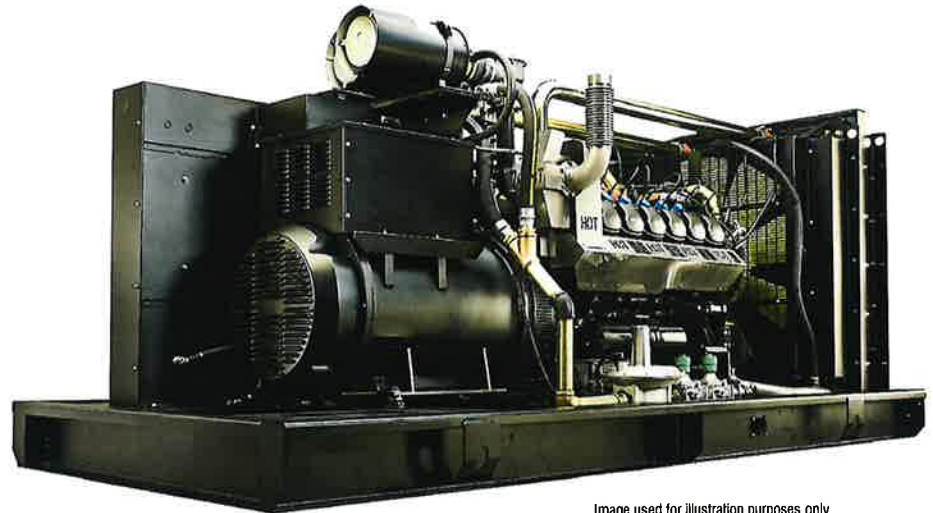


Image used for illustration purposes only



Codes and Standards

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



UL2200, UL6200, UL1236, UL489



CSA C22.2, B149



BS5514 and DIN 6271



SAE J1349



NFPA 37, 70, 99, 110



NEC700, 701, 702, 708



ISO 3046, 7637, 8528, 9001



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41



IBC 2009, CBC 2010, IBC 2012,
 ASCE 7-05, ASCE 7-10, 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.

MG400 | 21.9L | 400 kW
INDUSTRIAL SPARK-IGNITED GENERATOR SET
 EPA Certified Stationary Emergency and Non-Emergency

STANDARD FEATURES

DEMAND RESPONSE READY

ENGINE SYSTEM

- Oil Drain Extension
- Air Cleaner
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Engine Coolant Heater
- Radiator Duct Adapter (Open Set Only)
- Critical Silencer

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
- Permanent Magnet Excitation
- Sealed Bearing
- Amortisseur Winding
- Full Load Capacity Alternator

GENERATOR SET

- 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)
- 1 Year Limited Warranty (Prime Rated Units)
- Silencer Mounted in the Discharge Hood (Enclosed Units Only)

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 Hood (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ - Textured Polyester Powder Coat Paint

CONTROL SYSTEM



Power Zone® Pro Sync Controller

Program Functions

- 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
- Ethernet Based Communications Between Generators
- Programmable I/O Channel Properties
- Built-In Diagnostics

Protections

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

7 Inch Color Touch Screen Display

- Resistive Color Touch Screen
- Sunlight Readable (1400 NITS)
- 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
- Hourmeter
- Warning and Alarm Indication
- Diagnostics
- Maintenance Events/Information

PARALLELING CONTROLS

- Auto-Synchronization Process
- Isochronous Load Sharing
- Reverse Power Protection

- Maximum Power Protection
- Electrically Operated, Mechanically Held Paralleling Switch
- Sync Check System
- Independent On-Board Paralleling

- Optional Programmable Logic Full Auto Back-Up Controls (PLS)
- Shunt Trip and Auxiliary Contact

MG400 | 21.9L | 400 kW
INDUSTRIAL SPARK-IGNITED GENERATOR SET
EPA Certified Stationary Emergency and Non-Emergency

CONFIGURABLE OPTIONS

DEMAND RESPONSE READY

ENGINE SYSTEM

- Baseframe Cover/Rodent Guard
- Oil Heater
- Air Filter Restriction Indicator
- Radiator Stone Guard (Open Set Only)
- Level 1 Fan and Belt Guards (Enclosed Units Only)

FUEL SYSTEM

- NPT Flexible Fuel Line

ELECTRICAL SYSTEM

- 10A UL Listed Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating

CIRCUIT BREAKER OPTIONS

- Main Line Circuit Breaker
- Electronic Trip Breakers

GENERATOR SET

- Demand Response Rating
- Extended Factory Testing (3-Phase Only)
- 12 Position Load Center**

ENCLOSURE

- Weather Protected Enclosure
- Level 1 Sound Attenuated**
- Level 2 Sound Attenuated
- Level 2 Sound Attenuated with Motorized Dampers
- Level 3 Sound Attenuated (Steel Only)
- Steel Enclosure**
- Aluminum Enclosure
- Damper Alarm (Motorized Dampers Only)
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- AC/DC Enclosure Lighting Kit
- Enclosure Heaters (Motorized Dampers Only)
- Door Open Alarm Switch

CONTROL SYSTEM

- 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)
- 10A Engine Run Relay
- Ground Fault Annunciator
- 100 dB Alarm Horn
- 120V GFCI and 240V Outlets

WARRANTY (Standby Gensets Only)

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

ENGINEERED OPTIONS

ENGINE SYSTEM

- Coolant Heater Ball Valves
- Fluid Containment Pans

CONTROL SYSTEM

- Battery Disconnect Switch

GENERATOR SET

- Special Testing
- Battery Box

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APPLICATION AND ENGINEERING DATA

DEMAND RESPONSE READY

ENGINE SPECIFICATIONS

General

Make	Generac
Cylinder #	12
Type	V12
Displacement - In ³ (L)	1,336.4 (21.9)
Bore - in (mm)	5.03 (128)
Stroke - in (mm)	5.60 (142)
Compression Ratio	10.0:1
Intake Air Method	Turbocharged/Aftercooled
Number of Main Bearings	7
Connecting Rods	Steel Alloy
Cylinder Head	Cast Iron
Cylinder Liners	Cast Steel Alloy
Ignition	Electronic
Piston Type	Cast Aluminum Alloy
Crankshaft Type	Steel
Lifter Type	Solid
Intake Valve Material	High Temp Steel Alloy
Exhaust Valve Material	High Temp Steel Alloy
Hardened Valve Seats	Proprietary Alloy

Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	±0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full-Flow Spin-On Cartridge
Crankcase Capacity - qt (L)	31.7 (30)

Cooling System

Cooling System Type	Pressurized Closed Recovery
Fan Type	Pusher
Fan Speed - RPM	1,404
Fan Diameter - in (mm)	44 (1,118)

Fuel System

Fuel Type	Natural Gas
Carburetor	Down Draft
Secondary Fuel Regulator	Standard
Fuel Shut Off Solenoid	Standard
Operating Fuel Pressure - in H ₂ O (kPa)	11 - 14 (2.7 - 3.5)
Optional Operating Fuel Pressure - in H ₂ O (kPa)	7 - 11 (1.7 - 2.7)

Engine Electrical System

System Voltage	24 VDC
Battery Charger Alternator	57 A
Battery Size	See Battery Index 0161970SBY
Battery Voltage	(2) - 12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	K0400124Y21
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5% (3-Phase)
Telephone Interference Factor (TIF)	<52

Standard Excitation	Permanent Magnet
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%

MG400 | 21.9L | 400 kW
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OPERATING DATA

DEMAND RESPONSE READY

POWER RATINGS - NATURAL GAS

	Standby/Demand Response		Prime	
Three-Phase 277/480 VAC @0.8pf	400 kW/500 kVA	Amps: 602	360 kW/450 kVA	Amps: 542
Three-Phase 346/600 VAC @0.8pf	400 kW/500 kVA	Amps: 482	360 kW/450 kVA	Amps: 434

MOTOR STARTING CAPABILITIES (skVA)

skVA vs. Voltage Dip

Model	skVA
277/480 VAC	30%
K0400124Y21	953
K0500124Y23	1,020
K0600124Y23	1,560

FUEL CONSUMPTION RATES*

Natural Gas – scfh (m³/hr)

Percent Load	Standby/Demand Response	Prime
25%	1,680 (47.6)	1,620 (45.9)
50%	2,640 (74.8)	2,460 (69.7)
75%	3,600 (101.9)	3,300 (93.4)
100%	4,620 (130.8)	4,200 (118.9)

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

COOLING

		Standby/Demand Response	Prime
Air Flow (Fan Air Flow Across Radiator)	scfm (m³/min)	28,004 (793)	28,004 (793)
Coolant Flow	gpm (Lpm)	211 (799)	211 (799)
Coolant System Capacity	gal (L)	15.5 (58.7)	15.5 (58.7)
Maximum Operating Ambient Temperature	°F (°C)	122 (50)	122 (50)
Maximum Operating Ambient Temperature (Before Derate)		See Bulletin No. 0199270SSD	
Maximum Radiator Backpressure	in H ₂ O (kPa)	0.5 (0.12)	0.5 (0.12)

COMBUSTION AIR REQUIREMENTS

	Standby/Demand Response	Prime
Flow at Rated Power scfm (m³/min)	731 (20.7)	666 (18.9)

ENGINE

		Standby/Demand Response	Prime
Rated Engine Speed	RPM	1,800	1,800
Horsepower at Rated kW**	hp	589	530
Piston Speed	ft/min (m/min)	1,680 (512)	1,680 (512)
BMEP	psi (kPa)	194 (1,338)	175 (1,204)

EXHAUST

		Standby/Demand Response	Prime
Exhaust Flow (Rated Output)	scfm (m³/min)	2,378 (67.3)	2,142 (60.7)
Max. Backpressure (Post Silencer)	inHg (kPa)	0.75 (2.54)	0.75 (2.54)
Exhaust Temp (Rated Output - Post Silencer)	°F (°C)	1,297 (702.8)	1,277 (691.7)

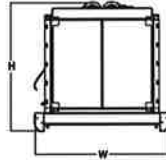
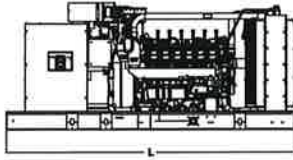
** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

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
 Prime - See Bulletin 0187510SSB

MG400 | 21.9L | 400 kW
INDUSTRIAL SPARK-IGNITED GENERATOR SET
 EPA Certified Stationary Emergency and Non-Emergency

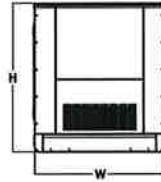
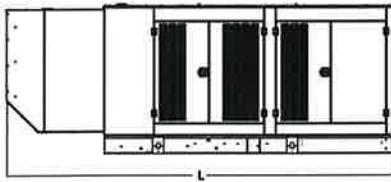
DIMENSIONS AND WEIGHTS*

DEMAND RESPONSE READY



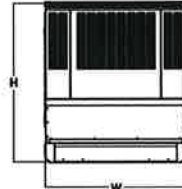
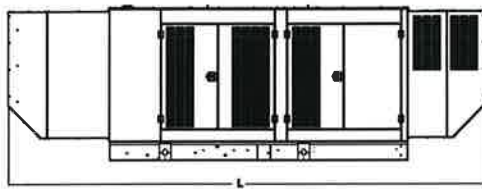
OPEN SET (Includes Exhaust Flex)

L x W x H - in (mm)	154.4 (3,922) x 71.0 (1,803) x 66.5 (1,689)
Weight - lbs (kg)	7,286 - 8,650 (3,304 - 3,923)



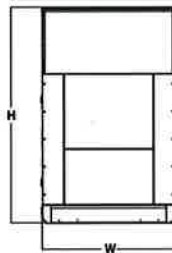
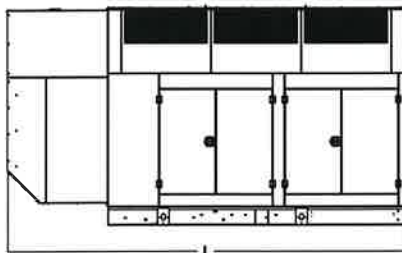
WEATHER PROTECTED ENCLOSURE

L x W x H - in (mm)	207.4 (5,268) x 71.0 (1,803) x 80.0 (2,032)
Weight - lbs (kg)	Steel: 9,490 - 10,840 (4,304 - 4,916) Aluminum: 8,404 - 9,753 (3,811 - 4,423)



LEVEL 1 SOUND ATTENUATED ENCLOSURE

L x W x H - in (mm)	247.5 (6,287) x 71.0 (1,803) x 80.0 (2,032)
Weight - lbs (kg)	Steel: 10,498 - 11,847 (4,761 - 5,373) Aluminum: 8,818 - 10,185 (3,999 - 4,619)



LEVEL 2 SOUND ATTENUATED ENCLOSURE

L x W x H - in (mm)	207.4 (5,268) x 71.0 (1,803) x 114.1 (2,898)
Weight - lbs (kg)	Steel: 10,836 - 12,185 (4,914 - 5,526) Aluminum: 8,963 - 10,330 (4,065 - 4,685)



LEVEL 3 SOUND ATTENUATED ENCLOSURE

L x W x H - in (mm)	232.0 (5,893) x 76.9 (1,953) x 129.2 (3,282)
Weight - lbs (kg)	13,224 - 14,285 (5,997 - 6,478)

* All measurements are approximate and for estimation purposes only.

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings.

DESCRIPTION	BY	DATE	REV	DATE	REV	DATE	REV

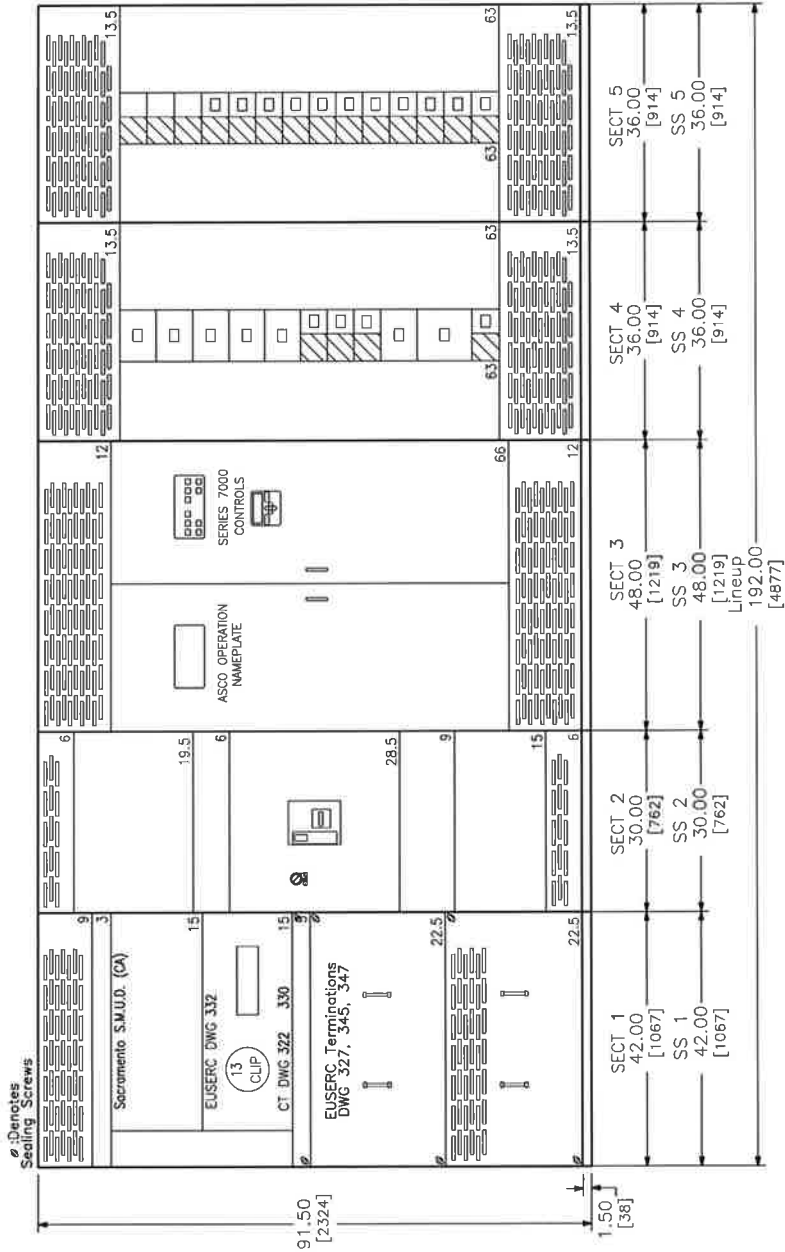
T-bus
19.5 in

T-bus
19.5 in

T-bus
27.0 in

T-bus
19.5 in

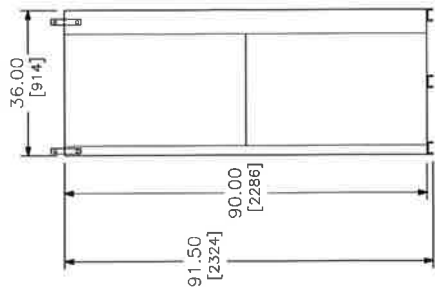
T-bus
19.5 in



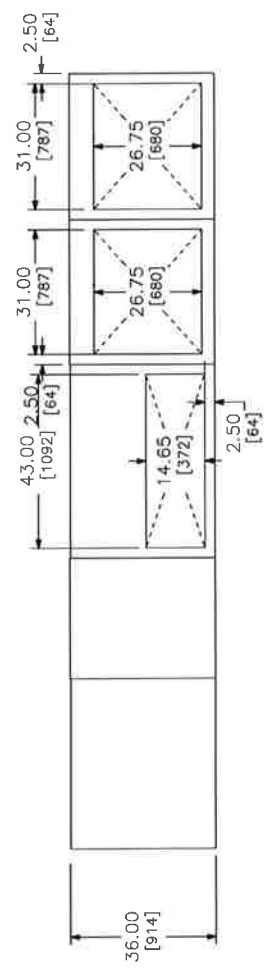
DUAL DIMENSIONS: INCHES MILLIMETERS

JOB NAME: District Office Standby Generator	EQUIPMENT DESIGNATION: 1200A Main Swbd Alt
JOB LOCATION: (02C)	EQUIPMENT TYPE: QED-2 Switchboard
DRAWN BY: (02C)	DRAWING TYPE: ELEVATION VIEW
DATE: May 22, 2023	SCALE: 1/8" = 1'-0"
DRAWING STATUS: QUOTE	DWG# FO-4136228-119326764-01
NOT FOR CONSTRUCTION	PG. 1 OF 3

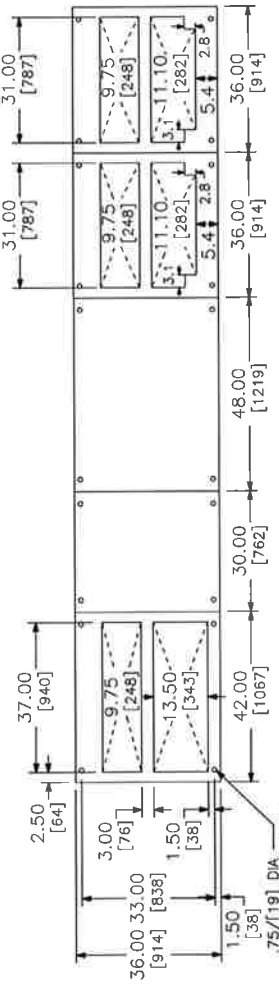
DESCRIPTION	BY	DATE	REV	DATE	DESCRIPTION



LEFT SIDE VIEW



TOP VIEW - FRONT



FLOOR PLAN - FRONT

NOTE: ALL DEVICES REQUIRING DRILLING OR INSERTION IN MOUNTING PAD SUCH AS CONDUIT, ANCHORING STUDS, SLEEVE INSERTS, ETC. SHOULD BE INSTALLED BEFORE SETTING EQUIPMENT IN PLACE.

DUAL DIMENSIONS: INCHES / MILLIMETERS

JOB NAME:	District Office Standby Generator
JOB LOCATION:	(02C)
ENGINEER:	May 22, 2023
DRAWING STATUS:	QUOTE
EQUIPMENT DESIGNATION:	1200A Main Swbd AH
EQUIPMENT TYPE:	QED-2 Switchboard
DRAWING TYPE:	SIDE, TOP VIEW & FLOOR PLAN
SHAPE:	SQUARE
DATE:	May 22, 2023
ENGINEER:	ENG# FO-4136228-119326764-01

DESCRIPTION	BY	DATE							

SWITCHBOARD GENERAL NOTES

PRODUCT DESCRIPTION & RATINGS

Power System Data

480Y/277V 3Ph 4W 60Hz / 3 Phase Wye
 Solidly Grounded
 System Short Circuit Current Rating: 65kA RMS
 Incoming Section 1 Cable Through the Bottom Left of Lineup

Bus System Data

1600A Tin/Aluminum & Silver/Copper Main Bus
 (2) .25x2.00 IN/6x51 mm Al Bus Bar Per Phase/Neutral
 (1) .25x1.50 IN/6x38 mm Al Ground Bus

Enclosure Data

Type 1 Free Standing
 Exterior Paint Color: ANSI 49
 Front Accessibility Only Required
 Handling: Rollers & Lifting Assemblies
 Rodent barriers
 Base channels cannot be removed from EUSERC switchboard line-ups
 Utility sealing hardware installed for unmetered bus compartments

Estimated Shipping Weight

Shipping Split 1 889.00 lbs / 403.25 kgs
 Shipping Split 2 585.00 lbs / 265.36 kgs
 Shipping Split 3 1438.00 lbs / 652.28 kgs
 Shipping Split 4 967.00 lbs / 438.63 kgs
 Shipping Split 5 842.00 lbs / 381.93 kgs
 Complete Lineup 4721.00 lbs / 2141.45 kgs

Code Standards

U.L. Deadfront and suitable for use as Service Entrance
 when not more than six (6) disconnecting means are provided.
 Section 3 built to UL1008 standards

Rating Nameplates

ST1- Deadfront - Section Bus 1200A
 ST2- Service Entrance - Section Bus 1200A
 ST3- Deadfront - Section Bus 1200A
 ST4- Deadfront - Section Bus 1200A
 ST5- Deadfront - Section Bus 1200A

PRODUCT INFORMATION

Wiring

All wiring to be Machine Tool Wire type

Instruction Bulletins

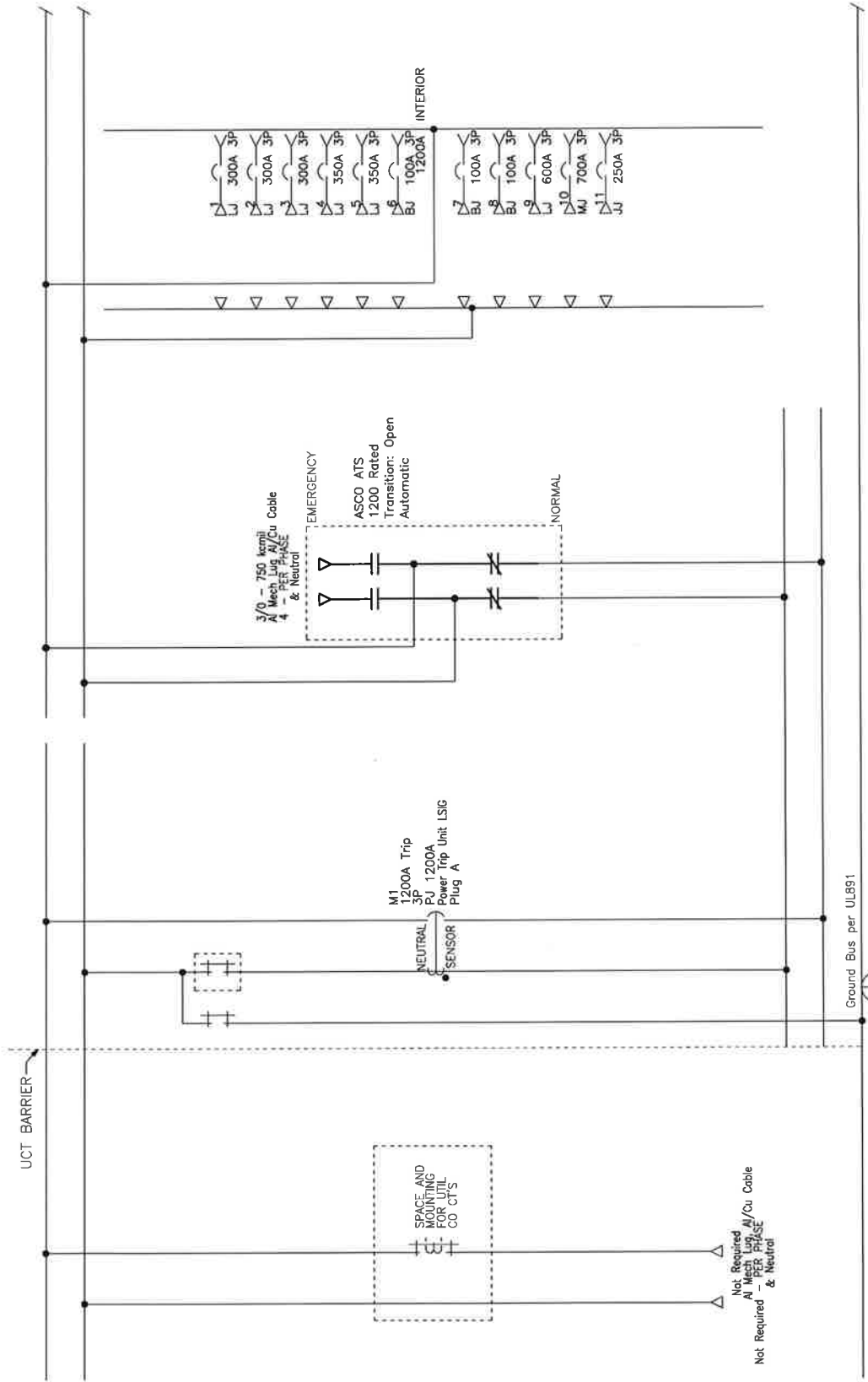
Reference 80043-055 For Handling, Installation,
 Anchoring, Inspection And Maintenance Information

Product Accessories/Options

ASCO Controller with Open Transition
 - Automatic Transfer
 - Emergency Cable Entrance: Top
 - Switched Neutral
 Seismic Qualified
 24V Trip Unit Display Power
 Locally Mounted ERMS Switch

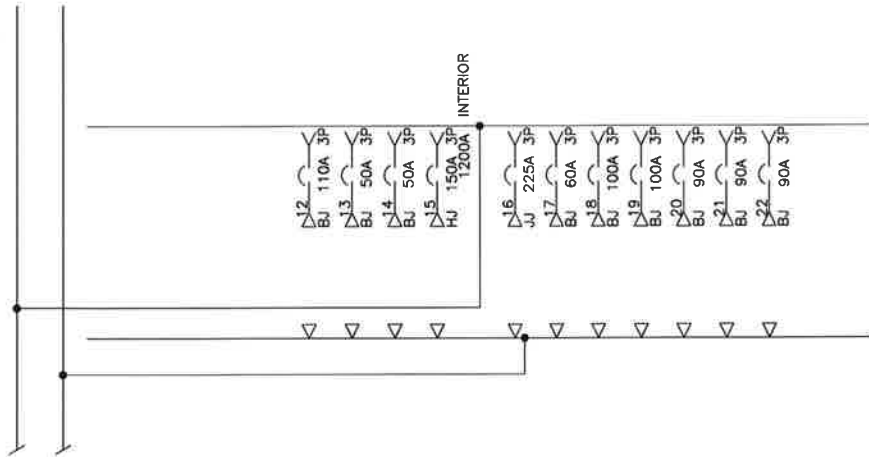
JOB NAME:	District Office Standby Generator	EQUIPMENT DESIGNATION:	1200A Main Swbd Alt
JOB LOCATION:		EQUIPMENT TYPE:	QED-2 Switchboard
DRAWN BY:	(O2C)	DRAWING TYPE:	GENERAL NOTES
ENGR:		SQUARE D by Schneider Electric	
DATE:	May 22 2023		
DRAWING STATUS:	QUOTE	NOT FOR CONSTRUCTION	DWG# FQ-4136228-119326764-01 PG 3 OF 3 R

DESCRIPTION	BY	DATE



SECTION 1	SECTION 2	SECTION 3	SECTION 4
		JOB NAME: District Office Standby Generator	EQUIPMENT DESIGNATION: 1200A Main Swbd At
		DRAWN BY: (02C)	EQUIPMENT TYPE: QED-2 Switchboard
		DATE: May 27 2023	DRAWING TYPE: ONE LINE
		DRAWING STATUS: QUOTE	SIGNATURE: [Signature]
			DWG# 00-4136228-119326764-01 PG 1 OF 3

DESCRIPTION		BY	DATE



SECTION 5

JOB NAME:	District Office Standby Generator	EQUIPMENT DESIGNATION:	1200A Main Swbd Alt
JOB LOCATION:	(02C)	EQUIPMENT TYPE:	GED-2 Switchboard
DRAWN BY:		DRAWING TYPE:	ONE LINE
ENGR:			SQUARE
DATE:	May 22, 2023		
DRAWING STATUS:	QUOTE	DWG#	00-4156228-119328764-01
			PG 2 OF 3

DESCRIPTION		BY	DATE								

POWER STYLE QED-2 SWITCHBOARD

TKT NO	IMD /GMD CONFIG	DEVICE/FRAME RATING	TRIP AMP	FUSE/TRIP	#P	DESIGNATION	N/P	LUG/WIRE INFORMATION			ACCESSORIES / NOTES					
								QTY	PHASE	WIRE RANGE		QTY	NEUT WIRE RANGE			
UCT		1200A				Sacramento S.M.U.D. (CA)	No	4	3/0	750	kcmlil	4	3/0	750	kcmlil	
M1	FIX	PJ 1200A Pkg A	1200A	P-LSIG	3P		No	4	3/0	750	kcmlil					GF PLA ERMS, TU
ATS	FIX	ASCO MS H FRAME 1200A			4P		No	4	3/0	750	kcmlil	4	3/0	750	kcmlil	
1	6 in	LJ 40A	300A	S-LI	3P		No	2	3/0	250	kcmlil	2	3/0	250	kcmlil	
2	6 in	LJ 40A	300A	S-LI	3P		No	2	3/0	250	kcmlil	2	3/0	250	kcmlil	
3	6 in	LJ 40A	300A	S-LI	3P		No	2	3/0	250	kcmlil	2	3/0	250	kcmlil	
4	6 in	LJ 40A	350A	S-LI	3P		No	2	3/0	250	kcmlil	2	3/0	250	kcmlil	
5	6 in	LJ 40A	350A	S-LI	3P		No	2	3/0	250	kcmlil	2	3/0	250	kcmlil	
6	4.5 in	BJ	100A		3P		No	1	#14	1/0	AWG	1	#14	1/0	AWG	
7	4.5 in	BJ	100A		3P		No	1	#14	1/0	AWG	1	#14	1/0	AWG	
8	4.5 in	BJ	100A		3P		No	1	#14	1/0	AWG	1	#14	1/0	AWG	
9	6 in	LJ 600A	600A	S-LI	3P		No	2	4/0	500	kcmlil	2	4/0	500	kcmlil	
10	9 in	WJ	700A		3P		No	3	3/0	500	kcmlil	3	3/0	500	kcmlil	
11	4.5 in	WJ	250A		3P		No	1	3/0	350	kcmlil	1	3/0	350	kcmlil	
12	4.5 in	BJ	110A		3P		No	1	#14	2/0	AWG	1	#14	2/0	AWG	
13	4.5 in	BJ	50A		3P		No	1	#14	1/0	AWG	1	#14	1/0	AWG	
14	4.5 in	BJ	50A		3P		No	1	#14	1/0	AWG	1	#14	1/0	AWG	
15	4.5 in	HJ	150A		3P		No	1	#6	3/0	AWG	1	#6	3/0	AWG	
16	4.5 in	WJ	225A		3P		No	1	3/0	350	kcmlil	1	3/0	350	kcmlil	
17	4.5 in	BJ	60A		3P		No	1	#14	1/0	AWG	1	#14	1/0	AWG	WX1
18	4.5 in	BJ	100A		3P	Shunt Trip	No	1	#14	1/0	AWG	1	#14	1/0	AWG	WX1
19	4.5 in	BJ	100A		3P	Shunt Trip	No	1	#14	1/0	AWG	1	#14	1/0	AWG	
20	4.5 in	BJ	90A		3P		No	1	#14	1/0	AWG	1	#14	1/0	AWG	
21	4.5 in	BJ	90A		3P		No	1	#14	1/0	AWG	1	#14	1/0	AWG	
22	4.5 in	BJ	90A		3P		No	1	#14	1/0	AWG	1	#14	1/0	AWG	

LEGEND

ERMS	Energy Reduction Maintenance S
GF	Ground Fault
MX1	Shunt Trip
PLA	Podlock Attachment-Fixed
TU	24V Trip Unit Display Power

JOB NAME:	District Office Standby Generator
JOB LOCATION:	
DRAWN BY:	(02C)
DATE:	May 22, 2023
DRAWING STATUS:	QUOTE
EQUIPMENT DESIGNATION:	1200A Main Swdbd AH
EQUIPMENT TYPE:	QED-2 Switchboard
DRAWING TYPE:	SCHEDULE
SCALE:	AS SHOWN
DWG#	00-4136228-119326764-01
PG	3 OF 3

Square D QED-2 Low Voltage Switchboards

A tradition of distinction, with a mission to
innovate solutions for tomorrow



Life Is 

SQUARE D™

by Schneider Electric

A Tradition of Distinction

Square D QED-2 Low Voltage Custom Switchboards

Square D™ QED-2 Switchboards set the standard for system solutions of today and those of tomorrow by delivering on higher expectations and standards. Square D Switchboards have been setting the standards for electrical distribution systems due to their trusted durable construction and continuous innovative progression that keeps Square D one step ahead of all others. This progression includes integrating power metering and communications capabilities providing direct access to energy management at main and feeder level. This allows for flexibility in developing simple or complex monitoring solutions, as well as future expansion. Square D Low Voltage Custom Switchboards are designed to distribute electrical power and provide a reduced footprint without compromising performance or versatility.

A Solid Foundation
Square D Switchboard ratings offer a robust solution through 5,000 A and 200 kA. Higher feeder ampacities are available with individually mounted branch devices up to 4,000 A.

Innovative but Familiar
The Quick Connect capability allows for a simple and seamless connection when installing. Even though Square D Switchboards continue to become more innovative, the quality and familiarity of the equipment leads the industry.

Energy Reduction Maintenance
An ERMS switch helps meet the NEC 240.87 code for arc flash energy reduction, improving worker safety by modifying the trip curve. A "Maintenance Mode" switch is mounted on the switchboard.

Industry Leading Compact Footprint
Square D Switchboards were designed with the customer in mind. They provide front accessibility that aids in reducing footprint as well as provides convenient access for maintenance.



Smart Systems Communications
The Smart Systems solution provides Ethernet-networked metering and status data from Square D switchboards and electrical equipment. MasterPac™ and PowerPac™ circuit breakers with MicrologiC™ trip units offer energy and power quality metering capabilities integrated into the trip units. Combined with Smart Systems communications, circuit breakers can be networked, monitored and controlled remotely, revealing opportunities to reduce downtime and monitor energy use for savings in electric system operating costs.

Accelerated Engineering
Meet tighter project schedules with AE Standard Switchboards. It's the faster, better way to order, and options such as the ERMS switch are added easily through Accelerated Engineering.

Designed with the Customer in Mind
Square D Switchboards allow for custom engineering for each line-up such as Main-Tie-Mains, Automatic Transfers, Commercial Multi-Metering, and reduced height configurations.



Efficient Distribution
The I-Line™ distribution section is unique — and popular — for its enhanced safety and ease of installation. The I-Line offers jaw-type connections which provide a firmer, more secure grip on the bus bar under high-level fault conditions for improved uptime. Distribution sections are available in single or double row construction allowing an increased power density in a compact footprint.

A Mission of Innovative Solutions

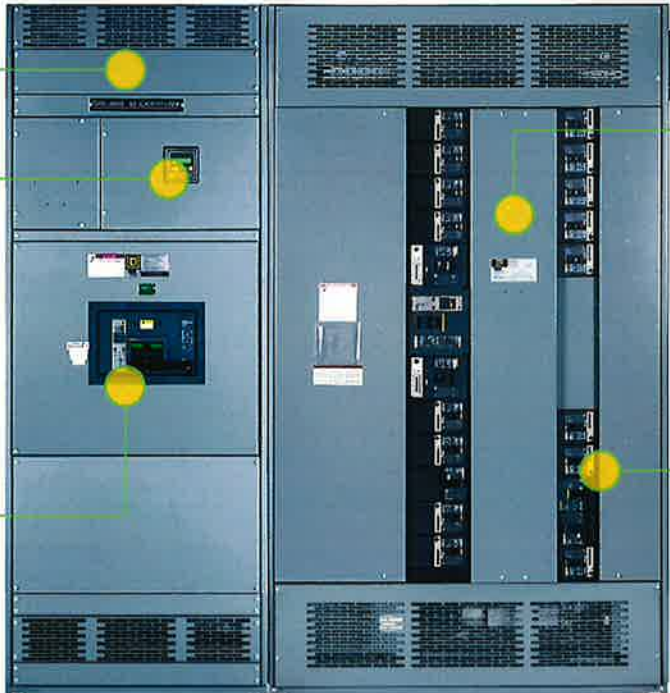
QED-2 Accelerated Engineering Standard Switchboards

To better meet our customer's tight schedules, our Square D QED-2 Standard Switchboard is available with Accelerated Engineering, which brings together standard designs for the most frequently requested ratings and options. With Accelerated Engineered Switchboards, on-demand approval drawings and an auto release of the equipment will allow you to stay competitive by simplifying the order process and offering a reduction in ship time. This means the customer will receive their switchboard 2 weeks faster. This allows for a quicker project turnaround for all parties involved, providing a competitive advantage in the industry.

★ Faster Project Turnaround

Accelerated Engineering Standard Switchboards offer a more responsive, faster and more flexible solution.

- On-demand factory approval drawings
- Auto release of Equipment to manufacturing
- Select designs with premier 4-week lead time
- 24/7 services support
- Customer-focused order process
- Customizable options available



Enclosure Options
Switchboard enclosures are available as Indoor NEMA Type 1 or Outdoor NEMA Type 3R construction.

Standard Solution without the Compromise
Surge Protection
Internally mounted SurgeLogic™ surge protective devices in mains section or I-Line interior.
Metering Options
PowerLogic™ Power Meters are available to monitor at main or feeder level.

On-Demand Robust Solution
Accelerated Engineering Standard Switchboards provide expedited manufacturing and delivery time without sacrificing the robustness of the solution needed. The maximum rating for these standard switchboards is through 4000 A and 100 kAIC.

Unrestricted Branch Mounting*
The unique design of the I-Line single or double row distribution section allows branch circuit breakers the flexibility to mount a 15 A circuit breaker next to a 1,200 A circuit breaker. This presents the opportunity for more effective use of space.
A screwdriver is the only tool you need to install these breakers, which saves valuable installation time.
* Space for high-level communications will need to be taken into account.

Metering Down to 15 Amps
PowerPact™ with Micrologic trip units offer the capability to meter energy down to 15 A. Standard trip units provide convenient, local data access through a high visibility front display.