



STATE OF NORTH CAROLINA

Division of Purchase and Contract

**Invitation for Bid #: 201500371
Generator**

March 23, 2015

Bid Opening Date: April 15, 2015

At 2:00 PM ET

Direct all inquiries concerning this IFB to:

Grant F. Braley
Strategic Sourcing Specialist
E-Mail: grant.braley@doa.nc.gov
Phone (919) 807-4519



STATE OF NORTH CAROLINA

Invitation for Bids

201500371

For internal State agency processing, including tabulation of bids in the Interactive Purchasing System (IPS), please provide your company's Federal Employer Identification Number or alternate identification number (e.g. Social Security Number). Pursuant to North Carolina General Statute 132-1.10(b) this identification number shall not be released to the public. This page will be removed and shredded, or otherwise kept confidential, before the procurement file is made available for public inspection.

This page is to be filled out and returned with your bid.
Failure to do so may subject your bid to rejection.

ID Number:

27-1358599

Federal ID Number or Social Security Number

Palmer Consulting Group, LLC

Vendor Name



**STATE OF NORTH CAROLINA
Division of Purchase and Contract**

Refer ALL Inquiries regarding this IFB to:

Grant F. Braley
Strategic Sourcing Specialist
Phone: (919) 807-4519
E-mail: grant.braley@doa.nc.gov

Invitation for Bids # 201500371

Bids will be publicly opened: April 15, 2015

Contract Type: Open Market Solicitation

Issue Date: March 23, 2015

Commodity: Generator

CC: 285-39

Using Agency: CC-Nash Community College

EXECUTION

In compliance with this Invitation for Bid, and subject to all the conditions herein, the undersigned Vendor offers and agrees to furnish and deliver any or all items upon which prices are bid, at the prices set opposite each item within the time specified herein. By executing this bid, the undersigned Vendor certifies that this bid is submitted competitively and without collusion (G.S. 143-54), that none of its officers, directors, or owners of an unincorporated business entity has been convicted of any violations of Chapter 78A of the General Statutes, the Securities Act of 1933, or the Securities Exchange Act of 1934 (G.S. 143-59.2), and that it is not an ineligible Vendor as set forth in G.S. 143-59.1. False certification is a Class 1 felony. Furthermore by executing this bid, the undersigned certifies to the best of Vendor's knowledge and belief, that it and its principals are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal or State department or agency. As required by G.S. §143-48.5, the undersigned Vendor certifies that it, and each of its sub-Contractors for any Contract awarded as a result of this IFB, complies with the requirements of Article 2 of Chapter 64 of the NC General Statutes, including the requirement for each employer with more than 25 employees in North Carolina to verify the work authorization of its employees through the federal E-Verify system. G.S. 133-32 and Executive Order 24 (2009) prohibit the offer to, or acceptance by, any State Employee associated with the preparing plans, specifications, estimates for public Contract; or awarding or administering public Contracts; or inspecting or supervising delivery of the public Contract of any gift from anyone with a Contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

Failure to execute/sign bid prior to submittal shall render bid invalid and it WILL BE REJECTED. Late bids cannot be accepted.

VENDOR: <u>PALMER CONSTRUCTION</u>		
STREET ADDRESS: <u>3675 ALAMANCE ROAD</u>		P.O. BOX: _____ ZIP: _____
CITY & STATE & ZIP: <u>BRALINGTON, NC 27215</u>		TELEPHONE NUMBER: <u>336 270 4529</u> TOLL FREE TEL. NO: _____
PRINCIPAL PLACE OF BUSINESS ADDRESS IF DIFFERENT FROM ABOVE (SEE INSTRUCTIONS TO VENDORS ITEM #11): _____		
PRINT NAME & TITLE OF PERSON SIGNING ON BEHALF OF VENDOR: <u>DANIEL SOUTHWELL Sales Manager</u>		FAX NUMBER: <u>866 297 4488</u>
VENDOR'S AUTHORIZED SIGNATURE: <u>[Signature]</u>	DATE: <u>4/3/15</u>	E-MAIL: <u>DAN@PALMERCONSTRUCTION.COM</u>

Offer valid for at least 60 days from date of bid opening, unless otherwise stated here: 60 days. After this time, any withdrawal of offer shall be made in writing, effective upon receipt by the agency issuing this IFB.

ACCEPTANCE OF BID

If any or all parts of this bid are accepted by the State of North Carolina, an authorized representative of the Division of Purchase and Contract shall affix his/her signature hereto and this document and all provisions of this Invitation for Bid along with the Vendor bid response and the written results of any negotiations shall then constitute the written agreement between the parties. A copy of this acceptance will be forwarded to the successful Vendor(s).

FOR STATE USE ONLY: Offer accepted and Contract awarded this ____ day of _____, 20____, as indicated on the attached certification, by _____
(Authorized Representative of the Division of Purchase & Contract).

5.1 DEVIATIONS.....14

5.1 CERTIFICATION AND SAFETY LABELS.....14

5.2 AUTHORIZED RESELLER15

ATTACHMENT A: PRICING FORM.....16

ATTACHMENT B: LOCATION OF WORKERS UTILIZED BY VENDOR.....17

ATTACHMENT C: DESCRIPTION OF EXECUTIVE ORDER #50 AND CERTIFICATION18

ATTACHMENT D: INSTRUCTIONS TO VENDORS22

ATTACHMENT E: NORTH CAROLINA GENERAL CONTRACT TERMS AND CONDITIONS25

ATTACHMENT F: CERTIFICATION OF FINANCIAL CONDITION.....29

1.0 PURPOSE AND BACKGROUND

The purpose of this solicitation is to obtain pricing and award a contract for the purchase of a **Generator & Automatic Transfer Switch** for Nash Community College. Bids shall be submitted in accordance with the terms and conditions of this IFB and any addenda issued hereto.

2.0 GENERAL INFORMATION

2.1 INVITATION FOR BIDS DOCUMENT

The IFB is comprised of the base IFB document, any attachments, and any addenda released before Contract award. All attachments and addenda released for this IFB in advance of any Contract award are incorporated herein by reference.

2.2 E-PROCUREMENT SOLICITATION

ATTENTION: This is an E-Procurement solicitation. See paragraph #18 of Attachment E: North Carolina General Contract Terms and Conditions.

The Terms and Conditions made part of this solicitation contain language necessary for North Carolina's Statewide E-Procurement Services. It is the Vendor's responsibility to read these terms and conditions carefully and to consider them in preparing the offer. By execution of its bid, Vendor agrees to and acknowledges acceptance of all terms and conditions, including those related to E-Procurement usage. General information on the E-Procurement Services can be found at: <http://eprocurment.nc.gov/>.

2.3 IFB SCHEDULE

The table below shows the *intended* schedule for this IFB. The Contract Lead will make every effort to adhere to this schedule.

Action	Responsibility	Date and Time
Issue IFB	State	March 23, 2015
Mandatory Site Visit/Pre-Bid Conference	State	April 2, 2015; 10:00 AM
Submit Written Questions	Vendors	April 7, 2015
Provide Response to Questions	State	April 9, 2015
Submit Bids	Vendors	April 15, 2015

2.4 MANDATORY SITE VISIT/PRE-BID CONFERENCE

Date: April 6, 2015

Time: 10:00 AM Eastern Time

Instructions:

It shall be **MANDATORY** that each Vendor representative be present for a pre-bid site on April 2, 2015. Attendees must meet promptly at 10:00 AM Eastern Time at Nash Community College, Business & Industry Building, Receptionist Desk, 522 North Old Carriage Road, Rocky Mount NC 27804. All attendees must sign in upon arrival. **LATE ARRIVALS WILL NOT BE ALLOWED TO SIGN IN, NOR SHALL THEIR BID BE CONSIDERED.** Late arrivals may be excluded from the meeting room until all on-time attendees have completed sign-in and the sign-in sheet secured. Once the sign-in process is complete, all other persons wishing to attend may do so to the extent that space and circumstances allow.

The purpose of this visit is for all prospective Vendors to apprise themselves with the conditions and requirements which will affect the performance of the work called for by this Invitation for Bids. Vendors must stay for the duration of the site visit. No allowances will be made for unreported conditions that a prudent Vendor would recognize as affecting the work called for or implied by this bid.

Vendors are cautioned that any information released to attendees during the site visit, other than that involving the physical aspects of the facility referenced above, and which conflicts with, supersedes, or adds to requirements in this Invitation for Bid, must be confirmed by written addendum before it can be considered to be a part of this bid.

2.5 BID QUESTIONS

- **Purpose:** Upon review of the IFB documents, Vendors may have questions to clarify or interpret the IFB in order to submit the best bid possible. To accommodate the Bid Questions process, Vendors shall submit any such questions by the above due date.
- **Instructions:** Written questions shall be e-mailed to grant.braley@doa.nc.gov by the date and time specified above. Vendors should enter "IFB #201500371 – Questions" as the subject for the email. Questions submittals should include a reference to the applicable IFB section and be submitted in a format shown below:

Reference	Vendor Question
IFB Section, Page Number	Vendor question...?

Questions received prior to the submission deadline date, the State's response, and any additional terms deemed necessary by the State will be posted in the form of an addendum to the Interactive Purchasing System (IPS), <http://www.ips.state.nc.us>, and shall become an Addendum to this IFB. No information, instruction or advice provided orally or informally by any State personnel, whether made in response to a question or otherwise in connection with this IFB, shall be considered authoritative or binding. Vendors shall be entitled to rely *only* on written material contained in an Addendum to this IFB.

2.6 BID SUBMITTAL

- **Instructions:** Sealed bids, subject to the conditions made a part hereof and the receipt requirements described below, shall be received at the address indicated in the table below for furnishing and delivering those items as described herein. Refer to Section 2.6 BID CONTENTS for details on required content of submitted bids

MAILING ADDRESS FOR DELIVERY OF BID VIA U.S. POSTAL SERVICE	OFFICE ADDRESS FOR DELIVERY BY ANY OTHER MEANS, SPECIAL DELIVERY, OVERNIGHT DELIVERY, OR BY ANY OTHER CARRIER
BID NUMBER: 201500371 NC Department of Administration Division of Purchase and Contract 1305 Mail Service Center Raleigh NC 27699-1305	BID NUMBER: 201500371 NC Department of Administration Division of Purchase and Contract 116 West Jones Street, Room 4062, 4 th Floor Raleigh NC 27603-8002

IMPORTANT NOTE: It is the responsibility of the Vendor to have the bid physically in this Office by the specified time and date of opening, regardless of the method of delivery. **This is an absolute requirement.** The time of delivery will be marked on each bid when received, and any bid received after the bid submission deadline will not be accepted or evaluated. Sealed bids, subject to the conditions made a part hereof, will be received at the address indicated in the table in this Section, for furnishing and delivering the commodity as described herein.

All risk of late arrival due to unanticipated delay—whether delivered by hand, U.S. Postal Service, courier or other delivery service or method—is entirely on the Vendor. Note that the U.S. Postal Service generally does not deliver mail to the street address above, but to the State's Mail Service Center. Vendors are cautioned that bids sent via U.S. Mail, including Express Mail, may not be delivered by the Mail Service Center to the agency's purchasing office on the due date in time to meet the bid deadline. All Vendors are urged to take the possibility of delay into account when submitting a bid.

Vendors shall deliver one (1) **signed, original executed** bid response and one (1) **electronic copy** (on CD, DVD or flash drive) of its bid to the address identified in the table in this Section. Include only bids in response to this IFB in a sealed package. Address package and insert bid number as shown in the table in this Section. The electronic files shall not be password-protected, shall be in .PDF or .XLS format, and shall be capable of being copied to other media including readable in Microsoft Word and/or Microsoft Excel.

Bids shall be marked on the outside of the sealed envelope with the Vendor's name, Bid number and date and time of opening. If Vendor is submitting more than one bid, each bid shall be submitted in separate sealed envelopes and marked accordingly. For delivery purposes, separate sealed bids from a single Vendor may be included in the same outer package.

Attempts to submit a Bid via facsimile (FAX) machine, telephone or electronic means, including but not limited to e-mail, in response to this Invitation for Bids will not be accepted. Bids are subject to rejection unless submitted with the information above included on the outside the sealed bid package.

Critical updated information may be included in Addenda to this IFB. It is important that all Vendors proposing on this IFB periodically check the State's IPS website for any Addenda that may be issued prior to the bid opening date. All Vendors shall be deemed to have read and understood all information in this IFB and all Addenda thereto.

Contact with anyone working for or with the State regarding this IFB other than the State Contract Lead named on the face page of this IFB in the manner specified by this IFB shall constitute grounds for rejection of said Vendor's offer, at the State's election.

2.7 BID CONTENTS

For each of Vendor's bid, Vendors shall populate all attachments of this IFB that require the Vendor to provide information and include an authorized signature where requested, as outlined below. Vendor IFB responses shall include the following items and they should be arranged in the following order:

- a) Completed and signed version of EXECUTION PAGE, and signed receipt pages of any addenda released in conjunction with this IFB
- b) Completed version of ATTACHMENT A: PRICING FORM
- c) Completed version of ATTACHMENT B: LOCATION OF WORKERS UTILIZED BY VENDOR
- d) Completed and signed version of ATTACHMENT C: DESCRIPTION OF EXECUTIVE ORDER #50 form that confirms that a price match opportunity is requested
- e) ATTACHMENT D: INSTRUCTIONS TO VENDORS
- f) ATTACHMENT E: NORTH CAROLINA GENERAL CONTRACT TERMS AND CONDITIONS
- g) Completed and signed version of ATTACHMENT F: CERTIFICATION OF FINANCIAL CONDITION

2.8 DEFINITIONS, ACRONYMS, AND ABBREVIATIONS

- a) **BAFO:** Best and Final Offer, submitted by a vendor to alter its initial bid, made in response to a request by the issuing agency.
- b) **BUYER:** The employee of the State or Other Eligible Entity that places an order with the Vendor.
- c) **E-PROCUREMENT SERVICES:** The program, system, and associated services through which the State conducts electronic procurement.
- d) **FOB-DESTINATION:** Title changes hand from Vendor to purchaser at the destination point of the shipment; Vendor owns commodity in transit and files any claims, and Vendor pays all freight and any related transportation charges. A solicitation may request Vendors to separately identify freight charges in their bid, but no amount or charge not included as part of the total bid price will be paid.

- e) **IFB:** Invitation for Bids.
- f) **ON-TIME DELIVERY:** The delivery of all items within a single order to the receiving point designated by the ordering entity within the delivery time required.
- g) **QUALIFIED BID:** A responsive bid submitted by a responsible Vendor.
- h) **STATE:** The State of North Carolina, including any of its sub-units recognized under North Carolina law.
- i) **STATE AGENCY:** Any of the more than 400 sub-units within the executive branch of the State, including its departments, boards, commissions of higher education and other institutions.
- j) **VENDOR:** Supplier, bidder, proposer, company, firm, corporation, partnership, individual or other entity submitting a response to an Invitation for Bids.

2.9 NOTICE TO VENDORS REGARDING TERMS AND CONDITIONS

It shall be the Vendor's responsibility to read the Instructions, the State's terms and conditions, all relevant exhibits and attachments, and any other components made a part of this IFB, and comply with all requirements and specifications herein. Vendors also are responsible for obtaining and complying with all Addenda and other changes that may be issued in connection with this IFB.

If Vendors have questions, issues, or exceptions regarding any term, condition, instruction or other component within this IFB, those must be submitted as questions in accordance with Section 2.4 BID QUESTIONS. If the State determines that any changes will be made as a result of the points raised, then such decisions will be communicated in the form of an IFB addendum. The State may also elect to leave open the possibility for later negotiation of specific components of the Contract that have been addressed during the question and answer period. Other than through this process, the State will reject and shall not be required to evaluate or consider any additional or modified terms and conditions or Instructions to Vendor submitted with Vendor's response. This applies to any language appearing in or attached to the document as part of the Vendor's response that purports to vary any terms and conditions or Vendors' instructions herein or to render the bid non-binding or subject to further negotiation. **By execution and delivery of a bid in response to this Invitation for Bids, Vendor agrees that any additional or modified terms and conditions, including Instructions to Vendors, whether submitted purposely or inadvertently, or any purported condition to the offer shall have no force or effect, and will be disregarded. Noncompliance with, or any attempt to alter or delete, this paragraph shall constitute sufficient grounds to reject Vendor's bid.**

If a Vendor desires modification of the terms and conditions of this solicitation, it is urged and cautioned to inquire during the question period, in accordance with the instructions in Section 2.4 BID QUESTIONS, about whether a specific, proposed modification is acceptable to or will be considered by the State. Identification of objections or exceptions to the State's terms and conditions in the bid shall not be allowed and shall have no effect. By executing and submitting its bid in response to this IFB, Vendor understands and agrees that the State may exercise its discretion not to consider any and all proposed modifications a Vendor may request.

3.0 METHOD OF AWARD AND BID EVALUATION PROCESS

3.1 METHOD OF AWARD

All qualified bids will be evaluated and award or awards will be based on lowest responsive bid meeting specifications.

While the intent of this IFB is to award a Contract to single vendor for all line items, the State reserves the right to make separate awards to different Vendors for one or more line items, to not award one or more line items or to cancel this IFB in its entirety without awarding a Contract, if it is considered to be most advantageous to the State to do so.

If a Vendor selected for award is determined by the State to be a non-resident of North Carolina, all responsive bids will be reviewed to determine if any of them were submitted by a North Carolina resident Vendor who requested an opportunity to match the price of the winning bid, pursuant to Executive Order #50 and G.S. 143-59 (for more information, please refer to ATTACHMENT C: DESCRIPTION OF EXECUTIVE ORDER #50 AND CERTIFICATION. If such bid(s) are identified, the State will then determine whether any such bid falls within the price-match range, and, if so, make a Contract award in accordance with the process that implements G.S. 143-59 and Executive Order #50.

The status of a Vendor's e-Procurement Services account(s) that is in arrears by 91 days or more at the time of bid opening shall be considered a relevant factor in determining whether to award a Contract under this IFB.

3.2 PERFORMANCE OUTSIDE THE UNITED STATES

Vendor shall complete ATTACHMENT B: LOCATION OF WORKERS UTILIZED BY VENDOR. In addition to any other evaluation criteria identified in this IFB, the State may, for purposes of evaluating proposed or actual contract performance outside of the United States, also consider how that performance may affect the following factors to ensure that any award will be in the best interest of the State:

- a) Total cost to the State
- b) Level of quality provided by the Vendor
- c) Process and performance capability across multiple jurisdictions
- d) Protection of the State's information and intellectual property
- e) Availability of pertinent skills
- f) Ability to understand the State's business requirements and internal operational culture
- g) Particular risk factors such as the security of the State's information technology
- h) Relations with citizens and employees
- i) Contract enforcement jurisdictional issues

3.3 BID EVALUATION PROCESS

1. Bids are requested for the items as specified, or item(s) equivalent in design, function and performance. The State reserves the right to reject any bid on the basis of fit, form and function as well as cost. All information furnished on this bid may be used as a factor in determining the award of this contract.
2. At that date and time specified as the bid opening, the package containing the bids from each responding firm will be opened publicly and the name of the Vendor and the price(s) bid announced.
3. The State shall review all Vendor responses to this IFB to confirm that they meet the specifications and requirements of the IFB. The State reserves the right to waive any minor informality or technicality in bids received.
4. For all responses that pass the initial review process, the State will review and assess the Vendors' pricing. The State may request additional formal responses or submissions from any or all Vendors for the purpose of clarification or to amplify the materials presented in any part of the bid. Vendors are cautioned, however, that the State is not required to request clarification, and often does not. Therefore, all bids should be complete and reflect the most favorable terms available from the Vendor. Prices bid cannot be altered or modified as part of a clarification.
5. Bids will be evaluated, based on the award criteria identified in Section 3.1 METHOD OF AWARD.

Upon completion of all evaluations, the State will make Award(s) based on the evaluation and post the award(s) to IPS under the IFB number for this solicitation.

Award of a Contract to one Vendor does not mean that the other bids lacked merit, but that, all factors considered, the selected bid was deemed most advantageous and represented the best value to the State.

Vendors are cautioned that this is an invitation for bids, not a request or an offer to contract, and the State reserves the unqualified right to reject any and all offers at any time if such rejection is deemed to be in the best interest of the State.

NOTE: During the evaluation period and prior to award, all information concerning the bid and evaluation is confidential, and possession of the bids and accompanying information is limited to personnel of the issuing agency and any third parties involved in this procurement process, and to the committee responsible for participating in the evaluation. Any attempt on behalf of a Vendor to gain such confidential information, or to influence the evaluation process (e.g., contact anyone involved in the evaluation, criticize another Vendor, offer any benefit or information not contained in the bid) in any way is a violation of North Carolina purchasing law and regulations and shall constitute sufficient grounds for disqualification of Vendor's offer from further evaluation or consideration in the discretion of the State.

4.0 REQUIREMENTS

This Section lists the requirements related to this IFB. By submitting a bid the Vendor agrees to meet all stated requirements in this Section as well as any other specifications, requirements and terms and conditions stated in this IFB. If a Vendor is unclear about a requirement or specification or believes a change to a requirement would allow for the State to receive a better bid, the Vendor is urged and cautioned to submit these items in the form of a question during the question and answer period.

4.1 PRICING

Bid price shall include all applicable charges for delivery fully assembled and ready for use. Vendor shall not add to the Bid price or invoice for surcharges or handling, administrative or other similar fees not specifically provided for in this IFB. Complete ATTACHMENT A: PRICING FORM and include with Bid.

4.2 TRANSPORTATION AND IDENTIFICATION

The Vendor shall deliver **Free-On-Board (FOB) Destination** to any location within the State of North Carolina. When an order is placed using a purchase order, the purchase order number shall be shown on all packages and shipping manifests to ensure proper identification and payment of invoices. If an order is placed without using a purchase order, such as via phone, the Buyer's name shall be show on all packages. A complete packing list shall accompany each shipment. Vendors shall not ship any products until they have received an order.

4.3 DELIVERY/INSTALLATION/SET-UP/START-UP

The Vendor shall deliver **Free-On-Board (FOB) Destination** to the following location(s): Nash Community College, 522 North Old Carriage Road, Rocky Mount, NC 27804.

Successful Bidder must complete delivery/installation/set-up **within ninety (90) consecutive calendar days** after receipt of purchase order. Promptness of delivery/installation/set-up shall be used as a factor in the award criteria.

Delivery/Installation/Set-Up will be made from Randolph, N.C. (city, state) within 80 consecutive calendar days after receipt of purchase order.

Delivery shall not be considered to have occurred until installation has been completed. Upon completion of the installation, the Vendor shall remove and properly dispose of all waste and debris from the installation site. The Vendor shall be responsible for leaving the installation area clean and ready to use.

It shall be the responsibility of the Contractor to make all arrangements for delivery, unloading, receiving and storing materials on site during installation. The Owner will not assume responsibility for receiving these materials. The Contractor shall check with the Owner and make necessary arrangements for security and storage space on site during installation.

The bid price shall be for complete installation ready for Owner's use, and shall include all applicable freight and installation charges; extra charges will not be allowed. All items must be assembled and set-in place, ready for use. All crating and other debris must be removed from the premises. Use of State's dumpsters will not be allowed.

Start-up is required. System to include all wiring associated with the generator system including conduit, wire, switch gear, control wire, etc. from the generator to the UPS and off-loading of equipment from delivering carrier/truck/conveyance,

4.4 INSPECTION OF JOB SITE

My signature on this solicitation constitutes certification that I have inspected the job site and am aware of the conditions under which the work must be accomplished. Claims, as a result of failure to inspect the job site, will not be considered by the State.

4.5 WORK SITE DAMAGES

Any damage to existing utilities, equipment or finished surfaces resulting from the performance of this contract shall be repaired to the State's satisfaction at the Contractor's sole expense.

4.6 SUBCONTRACTORS

No portion of the work shall be subcontracted without prior written consent of the State. In the event that the Contractor desires to subcontract some part of the work specified herein, the Contractor shall furnish with their bid the names, qualifications, and experience of their proposed subcontractors. The Contractor shall, however, remain fully liable and responsible for the work done by its subcontractor(s) and shall assure compliance with all the requirements and specifications of the contract.

4.7 QUALITY ACCEPTANCE INSPECTION

Upon delivery of the commodity and/or completion of the project (whichever is applicable) the contractor must request a Quality Acceptance Inspection. Such requests must be forwarded (in writing) to the Division of Purchase and Contract, Attn: Quality Acceptance Inspections, 1305 Mail Service Center, Raleigh, NC 27699-1305; Fax # (919) 807-4511; or e-mail to P&C.inspections@doa.nc.gov. The information that must be provided is a copy of the **Purchase Order** and a copy of the **bid or quote**.

INVOICES WILL NOT BE PAID BY THE USING AGENCY UNTIL A QA INSPECTION OCCURRED AND THE ITEM ACCEPTED.

4.8 FINAL INSPECTION

At the conclusion of the inspection, the Contractor shall demonstrate to the Authorized Owners Representative that the work is fully operational and in compliance with the contract specifications and codes. Any deficiencies shall be promptly and permanently corrected by the Contractor at the Contractor's sole expense prior to final acceptance of the work.

4.9 DESCRIPTIVE LITERATURE

Each bid must be accompanied by complete descriptive literature, specifications, certifications, and any other pertinent data necessary for thorough evaluation of the item(s) bid. Failure to include such information shall be a sufficient basis for rejection of the bid.

4.10 SUITABILITY FOR INTENDED USE

Bidders are requested to offer only comparable equipment which will provide the equivalent capabilities, features and diversity called for herein. The State reserves the right to evaluate all bids for suitability for the required use and to award the one best meeting requirements and considered to be in the State's best interest.

4.11 MAKE AND MODEL

Manufacturer's name & model/catalog numbers used are for the sole purpose of identification and to establish general quality level desired. Such references are not intended to be restrictive and comparable products of other manufacturers will be considered. However, bidders are cautioned that any deviation from specifications must be pointed out in their bid.

4.12 SERVICE UPON DELIVERY

Units shall be complete, serviced and ready for operation when delivered.

4.13 PRODUCT RECALL

Vendor expressly assumes full responsibility for prompt notification to the Buyer listed on the face of this IFB of any product recall in accordance with the applicable state or federal regulations. The Vendor shall support the State, as necessary, to promptly replace any such products, at no cost to the State.

4.14 HAZARDOUS SUBSTANCE AND/OR OIL SPILLS

Contractors hired by the end user shall be responsible for any costs (direct or indirect) associated with damage and/or cleanup of a hazardous substance and/or oil spill caused by the Contractor or their agent. This responsibility shall extend to freight carriers who were hired by the Contractor to deliver the commodity or service to the end user. While on end user premises, the Contractor shall comply with all local, State and Federal requirements for the proper handling of hazardous substances and/or oil.

For the purpose of this section, hazardous substances shall be defined as any substance, other than oil, which when discharged in any quantity may present an imminent and substantial danger to the public health, welfare AND/OR environment. Oil shall be defined as any oil of any kind and in any form, including but specifically not limited to petroleum, crude oil, diesel oil, fuel oil, gasoline, lubrication oil, oil refuse, oil mixed with other waste, oil sludge, petroleum related products or by-products, and all other liquid hydrocarbons, regardless of specific gravity, whether singly or in combination with other substances. In addition, the Contractor agrees to indemnify and hold the end user harmless against all claims, liabilities and costs, including attorney's fees, incurred in the defense of any claim brought against the end user resulting from such as spill.

4.15 REFERENCES

The State may request references where your company has supplied equipment similar to that proposed: The State reserves the right to require upon its request a list of users of the exact model of equipment bid. The State may contact these users to determine quality level of the offered equipment. Such information may be considered in the evaluation of the bid.

4.16 WARRANTY

Vendor warrants that all equipment furnished under this IFB will be new, of good material and workmanship. The warranty will be for a **minimum period of two (2) years from date equipment is put into operation**. Such warranty shall cover the cost of all defective parts replacement, labor, freight, and technicians travel at no additional cost to the State.

The report of a problem does not presuppose that every call must result in an "on-site" visit for service/repair. The Vendor and/or service sub-contractor shall utilize best efforts to resolve problems in a timely fashion through the use of acceptable servicing methods to include, but not limited to, verbal problem analysis and remote diagnosis. The warranty requirement does not impose any additional duty on the State to make other than normal and good faith problem resolution efforts or expenditures of time. Vendor is responsible for sub-contractor compliance with warranty terms.

Vendor is authorized by manufacturer to repair equipment offered during the warranty period? YES NO

Will the bidder provide warranty service? YES NO, a third party will perform warranty service

Contact information for warranty service provider:

Company Name: Palmer Construction

Company Address: 3679 ALAMANCE Rd Durham, NC 27205

Contact Person (name): Clyde CHAVIN / Service Mgr.

Contact Person (phone number): 252.642.9576

Contact Person (email): Clyde@PalmerConstruction.com

4.17 MANUALS

Unless otherwise stated, the vendor shall provide **one (1) copy of the operators manual, one (1) copy of the parts manual, and one (1) copy of the service manual** for the specified piece of equipment and any or all dealer installed accessories at no additional charge to the end-user.

4.18 SUSTAINABILITY

According to the NC General Statute 143-58.2, it is the policy of this State to encourage and promote the purchase of products with recycled content and to purchase items that are reusable, refillable, repairable, more durable and less toxic to the extent that the purchase or use is practicable and cost effective.

Do the items offered have any recycled content? YES NO

If yes, what is the post-consumer recycled content? _____ %

What is the total recycled content? 0 % *NEW*

4.19 INVOICES

Vendor shall invoice the Ordering Entity. The standard format for invoicing shall be Single Invoices meaning that the Vendor shall provide the Buyer with an invoice for each order. Invoices must include detailed line item information to allow Buyer to verify pricing at point of receipt matches the correct price from the original date of order. At a minimum, the following fields must be included on all invoices:

- Vendor's Billing Address, Vendor's Federal ID Number, NC Vendor ID Number, Customer Account Number, NC Contract Number, Order Date, Buyers Order Number, Manufacturer Part Numbers, Vendor Part Numbers, Item Descriptions, Price, Quantity, and Unit of Measure

4.20 TRAINING

Once delivery is complete, the successful Vendor shall provide a qualified representative to instruct **two (2) owners' operators** in the proper operation, safety issues, routine maintenance, troubleshooting and service for a **minimum of four (4) hours**. Training shall be coordinated with the using agency.

5.0 PRODUCT SPECIFICATIONS

5.1 GENERAL SPECIFICATIONS

The attached specifications and requirements are drawn around equipment which the State has evaluated and determined that the size, construction, design layout, special features and performance are necessary. Bidders are requested to offer only comparable units which will provide the features and performance needed and implied. **Other substantially equivalent models meeting or exceeding specifications may be considered.**

Item 1: Industrial gas engine driven generator, 9.0I V-8 engine

Requirement	Bidder's Response
Fuel system - Natural gas	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Stationary Emergency-Standby rated	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
150 kW Rating, synchronous alternator, wired for 277/480 VAC 3 Phase, 60 HZ	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Permanent magnet excitation	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
H-100 Control Panel. <i>See attached Controller</i>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
Meets NFPA 99 and 110 requirements	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Temp Range -40 to 70 degrees C	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Digital microprocessor:	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Two 4 line x 20 displays, full system status	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
3 phase sensing, +/-0.25% digital voltage regulation	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
RS232, RS485 and Canbus remote ports	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

Requirement	Bidder's Response
Waterproof connections	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
All engine sensors are 4-20 ma for minimal interference	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Programmable I/O	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Built-in PLC for special applications	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Engine function monitoring and control:	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Full range standby operation; Programmable auto crank, Emergency Stop, Auto-Off-Manual switch	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Full system status on all AC output and engine function parameters	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Service reminders, trending, fault history (alarm log)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
I2T function for full generator protection	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Selectable low-speed exercise	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Electronic governor Frequency regulation, isochronous Steady state regulation +/-0.25%	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
200A UL CB, 80% Rated Thermal/Mag, LH	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Standard weather protective enclosure	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Industrial Grey enclosure, powder paint finish	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
110AH, 925 CCA, group 31	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
battery w/rack-installed	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
10AMP battery charger-installed	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Battery charging alternator	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Battery cables	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Battery tray	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Fuel shut-off solenoid valve	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Solenoid activated starter motor	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Air cleaner and oil filler with internal bypass	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Oil and antifreeze	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Oil and radiator drain extensions	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Vibration isolators between engine/alternator and base frame	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Standard flex exhaust	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Air duct adapter	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Block Heater 1500W	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Standard set of 3 manuals	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Listed to standard UL2200	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Flex fuel line	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
EPA Certified	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
SCAQMD Compliant	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

Item 2: Automatic Transfer Switch

Requirement	Bidder's Response
Rated at 200 amps, 3 Pole construction <i>(option offered)</i>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Operating at 60 HZ, 480 Volts 3 phase, with RS-485 communications link to generator set-mounted controller for switch operation	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Double set of auxiliary contacts	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Standard set of 3 manuals	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
NEMA 1 Enclosure	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
UL 1008 listed	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

5.1 DEVIATIONS

Any deviations from the *Specifications/Requirements* herein must be clearly described by the Bidder. Otherwise, it will be considered that items offered by the Bidder are in strict compliance with the *Specifications/Requirements*, and the successful Bidder will be held responsible to supply conforming goods. Deviations must be explained in detail below or on an attached sheet. However, no implication is made or intended by the State that any deviation will be acceptable.

Item 1

Kohler Decision-Maker 3000 Controller

Item 2

5.1 CERTIFICATION AND SAFETY LABELS

PRODUCT SAFETY LISTING: All manufactured items and/or fabricated assemblies subject to operation under pressure, operation by connection to an electric source, or operation involving a connection to a manufactured, natural, or LP gas source shall be constructed and approved in a manner acceptable to the appropriate state inspector which customarily requires the label or re-examination listing or identification marking of the appropriate safety standard organization; such as the American Society of Mechanical Engineers for pressure vessels; the Underwriters Laboratories and /or National Electrical Manufacturers' Association for electrically operated assemblies; or the American Gas Association for gas operated assemblies, where such approvals of listings have been established for the type of device offered and furnished. Further, all items furnished shall meet all requirements of the Occupational Safety and Health Act (OSHA), and state and federal requirements relating to clean air and water pollution. Having the appropriate certification or safety label affixed to any device delivered pursuant to this solicitation, under the conditions described above, is a material condition of any contract awarded as a result of this solicitation. All costs for product and industry certifications and listings required to supply conforming products to the State as described in this IFB are the sole responsibility of the Vendor. The certification or safety label shall be affixed and be visible on the OUTSIDE of the all products that require a certification or safety label in order to pass the State Quality Acceptance Inspection.

ISO 9001
KOHLER
POWER SYSTEMS
NATIONALLY REGISTERED



Decision-Maker® 3000

Kohler® Decision-Maker® 3000 Controller

General Description and Function

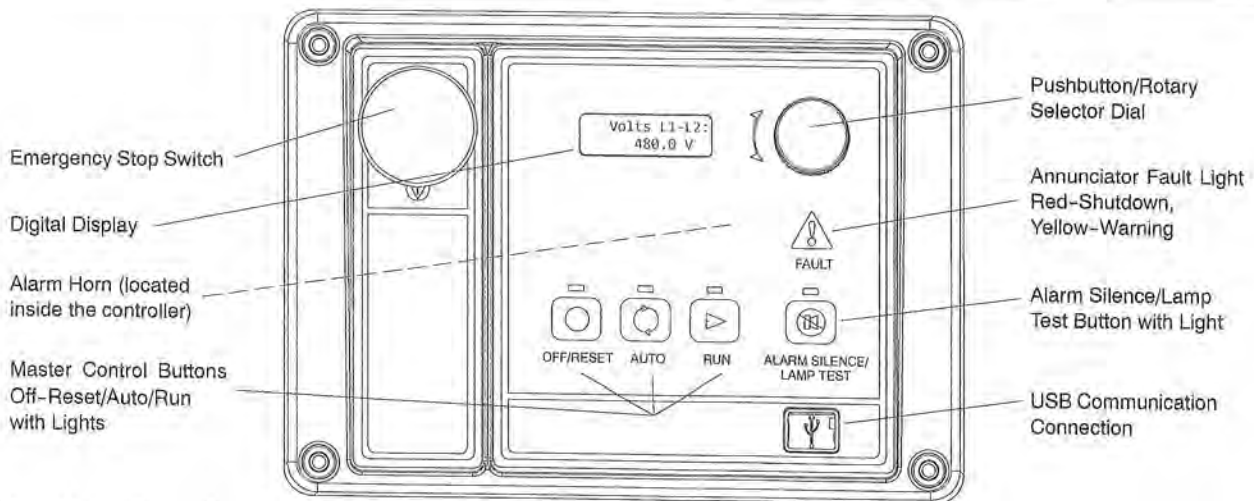
The Decision-Maker® 3000 generator set controller provides advanced control, system monitoring, and system diagnostics for optimum performance.

The Decision-Maker® 3000 controller meets NFPA 110, Level 1 when equipped with the necessary accessories and installed per NFPA standards.

The Decision-Maker® 3000 controller uses a patented hybrid voltage regulator and unique software logic to manage alternator thermal overload protection features normally requiring additional hardware. Additional features include:

- A digital display and pushbutton/rotary selector dial provide easy local access to data.
- Measurements selectable in metric or English units.
- The controller can communicate directly with a personal computer via a network or serial configuration using SiteTech™ or Monitor III software.
- The controller supports Modbus® protocol. Use with serial bus or Ethernet networks.
- Scrolling display shows critical data at a glance.
- Digital display of power metering (kW and kVA).
- Integrated hybrid voltage regulator providing $\pm 0.5\%$ regulation.
- Built-in alternator thermal overload protection.

Modbus® is a registered trademark of Schneider Electric.



User Interface Controls and Components

- Emergency stop switch
- Backlit LCD digital display with two lines of 12 characters (see *User Interface Displays* for menus)
- Alarm horn indicates generator set shutdown and warning faults
- Environmentally sealed generator set shutdown and warning faults buttons with lights
 - Off/Reset (red)
 - Auto (green)
 - Run (yellow)
- Pushbutton/rotary selector dial for menu navigation
 - Rotate dial to access main menus
 - Push dial and rotate to access sub menus
 - Press dial for 3 seconds to return to top of main menu
- Annunciator fault light
 - System shutdown (red)
 - System warning (yellow)
- Alarm silence/lamp test button
 - Alarm silence
 - Lamp test
- USB and RS-485 connections
 - Allows software upgrades
 - Provides access for diagnostics
 - PC communication using SiteTech™ or Monitor III software
- Dedicated user inputs
 - Remote emergency stop switch
 - Remote 2-wire start for transfer switch
 - Auxiliary shutdown
- Integrated hybrid voltage regulator
- Auto-resettable circuit protection mounted on circuit board.
- One relay output standard. Optional five relay output available.
- One analog and three digital inputs standard. Optional two inputs available.

NFPA 110 Requirements

In order to meet NFPA 110, Level 1 requirements, the generator set controller monitors the engine/generator functions/faults shown below.

- Engine functions:
 - Overcrank
 - Low coolant temperature warning
 - High coolant temperature warning
 - High coolant temperature shutdown
 - Low oil pressure shutdown
 - Low oil pressure warning
 - High engine speed
 - Low fuel (level or pressure) *
 - Low coolant level
 - EPS supplying load
 - High battery voltage
 - Low battery voltage
 - General functions:
 - Master switch not in auto
 - Battery charger fault *
 - Lamp test
 - Contacts for local and remote common alarm
 - Audible alarm silence button
 - Remote emergency stop *
- * Function requires optional input sensors or kits and is engine dependent, see Controller Displays as Provided by the Engine ECM.

User Interface Displays

The listing below has ● denoting main menus and ○ denoting sub-menus.

- Overview
 - Software version
 - Active shutdowns and warnings (if any are present)
 - Engine run time, total hours
 - Average voltage line-to-line
 - Frequency
 - Average current
 - Coolant temperature
 - Fuel level or pressure *
 - Oil pressure
 - Battery voltage
 - Engine Metering
 - Engine speed
 - Oil pressure
 - Coolant temperature
 - Battery voltage
 - Generator Metering
 - Total power, VA
 - Total power, W
 - Rated power, %
 - Voltage, L-L and L-N for all phases
 - Current, L1, L2, L3
 - Frequency
 - GenSet Information
 - Generator set model number
 - Generator set serial number
 - Controller serial number
 - GenSet Run Time
 - Engine run time, total hours
 - Engine loaded, hours
 - Number of engine starts
 - Total energy, kWh
 - GenSet System
 - System voltage
 - System frequency, 50 or 60 Hz
 - System phase, single or three (wye or delta)
 - Power rating, kW
 - Amp rating
 - Power type, standby or prime
 - Measurement units, metric or English (user selectable)
 - Alarm silence, always or auto only (NFPA 110)
 - Manual speed adjust *
 - GenSet Calibration
 - Voltage, L-L and L-N for all phases
 - Current, L1, L2, L3
 - Reset calibration
 - Voltage Regulation
 - Adjust voltage, ±10%
 - Digital Inputs
 - Input settings and status
 - Digital Outputs
 - Output settings and status
 - Analog Inputs
 - Input settings and status
 - Event Log
 - Event history (stores up to 1000 system events)
 - Selector Switch (requires initial activation by SiteTech™)
- * Function requires optional input sensors or kits and is engine dependent, see Controller Displays as Provided by the Engine ECM.

Controller Features

- **AC Output Voltage Regulator Adjustment.** The voltage adjustment provides a maximum of $\pm 10\%$ of the system voltage.
- **Alarm Silence.** The controller can be set up to silence the alarm horn only when in the AUTO mode for NFPA-110 application or Always for user convenience.
- **Alternator Protection.** The controller provides generator set overload and short circuit protection matched to each alternator for the particular voltage/phase configuration.
- **Automatic Restart.** The controller automatic restart feature initiates the start routine and recrank after a failed start attempt.
- **Common Failure Relay.** This relay is integrated on the controller circuit board. Contacts are rated 2 amps at 32 VDC or 0.5 amp at 120 VAC.
- **Communication.** Controller communication is available.
- **Cyclic Cranking.** The controller has programmable cyclic cranking.
- **ECM Diagnostics.** The controller displays engine ECM fault code descriptions to help in engine troubleshooting.
- **Engine Start Aid.** The starting aid feature provides control for an optional engine starting aid.
- **Event Logging.** The controller keeps a record (up to 1000 entries) for warning and shutdown faults. This fault information becomes a stored record of system events and can be reset.
- **Historical Data Logging.** Total number of generator set successful starts is recorded and displayed.
- **Integrated Hybrid Voltage Regulator.** The voltage regulator provides $\pm 0.5\%$ no-load to full-load regulation with three-phase sensing.
- **Lamp Test.** Press the alarm silence/lamp test button to verify functionality of the indicator lights.
- **LCD Display.** Adjustable contrast for improving visibility.
- **Measurement Units.** The controller provides selection of English or metric displays.
- **Power Metering.** Controller digital display provides kW and kVA.
- **Programming Access (USB).** Provides software upgrades and diagnostics.
- **Remote Reset.** The remote reset function resets faults and allows restarting of the generator set without going to the master control switch off/reset position.
- **RSA II Remote Monitoring Panel.** The controller is compatible with the Kohler® Remote Serial Annunciator (RSA II).
- **Run Time Hourmeter.** The generator set run time is displayed.
- **Time Delay Engine Cooldown (TDEC).** The TDEC provides a time delay before the generator set shuts down.
- **Time Delay Engine Start (TDES).** The TDES provides a time delay before the generator set starts.
- **Voltage Selection Menu.** This menu provides the capability of quickly switching controller voltage calibrations. Requires initial activation using SiteTech™ software. **NOTE:** Generator set output leads require voltage reconnection.

Controller Functions

The following chart shows which functions cause a warning or shutdown. All functions are available as relay outputs.

Warning causes the fault light to show yellow and sounds the alarm horn signaling an impending problem.

Shutdown causes the fault light to show red, sounds the alarm horn, and stops the generator set.

	Warning Function	Shutdown Function
Engine Functions		
Critically high fuel level *	○	
ECM communication loss		●
ECM diagnostics	●	●
Engine over speed		●†
Engine start aid active		
Engine under speed		●
Fuel tank leak *	○	○
High battery voltage	●	
High coolant temperature	●	●†
High fuel level *	○	
Low battery voltage	●	
Low coolant level		●
Low coolant temperature	●	
Low cranking voltage	●	
Low engine oil level *	○	○
Low fuel level (diesel models) *	○	○
Low fuel pressure (gas models) *	○	
Low oil pressure	●	●†
No coolant temperature signal		●
No oil pressure signal		●
Overcrank		●†
Speed sensor fault	●	
General Functions		
Alarm horn silenced		
Analog inputs	○	○
Battery charger fault *	●	
Chicago code active *		
Common fault (includes †)		●
Common warning	●	
Digital inputs	○	○
Emergency stop		●†
Engine cooldown (delay) active		
Engine start delay active		
Engine started		
Engine stopped		
EPS supplying load		
Generator running		
Input/output communication loss	●	
Internal failure		●
Master switch not in auto	●	
NFPA 110 alarm active		
Remote start		
System ready		
Generator Functions		
AC sensing loss	●	●
Alternator protection		●
Ground fault input *	●	
kW overload		●
Locked rotor		●
Overfrequency		●
Overvoltage (each phase)		●
Underfrequency		●
Undervoltage (each phase)		●

● Standard functions

○ Available user functions

* Function requires optional input sensors or kits and is engine dependent, see Controller Displays as Provided by the Engine ECM.

† Items included with common fault shutdown

Controller Displays as Provided by the Engine ECM (availability subject to change by the engine manufacturer)						
Display	GM/PSI	Doosan	John Deere (JDEC)	Volvo (EMS II)	Volvo (EDC III)	DD/MTU (ADEC)
Ambient temperature		X				
Charge air pressure	X	X		X	X	X
Charge air temperature	X	X	X	X	X	
Coolant level				X	X	
Coolant pressure				X	X	X
Coolant temperature	X	X	X	X	X	
Crankcase pressure				X	X	X
ECM battery voltage	X	X				X
ECM fault codes	X	X	X	X	X	X
ECM serial number						X
Engine model number			X			X
Engine serial number			X			X
Engine speed	X	X	X		X	X
Fuel pressure				X	X	X
Fuel rate	X	X	X	X	X	X
Fuel temperature			X	X	X	X
Oil level					X	X
Oil pressure	X	X	X	X	X	X
Oil temperature				X	X	X
Trip fuel				X	X	X

Controller Specifications

Decision-Maker® 3000—Software Version 3.11 or higher

- Power source with circuit protection: 12- or 24-volt DC
- Power drain: 200 milliamps
- Humidity range: 5% to 95% noncondensing
- Operating temperature range: -40°C to +70°C (-40°F to +158°F)
- Storage temperature range: -40°C to +85°C (-40°F to +185°F)
- Standards:
 - CE Directive
 - NFPA 99
 - NFPA 110, Level 1
 - CSA 282-09
 - UL 508
 - ASTM B117 (salt spray test)
- Panel dimensions—W x H, 229 x 160 mm (9.0 x 6.3 in.)

Communication and PC Software Available Options

Refer to G6-76 Monitor III Software and the communication literature for additional communication and PC software information including Modbus® communication.

- Monitor III Software for Monitoring and Control (Windows®-based user interface)**
- Converter, Modbus®/Ethernet.** Supports a power system using controllers accessed via the Ethernet. Converter is supplied with an IP address by the site administrator. Refer to G6-79 for converter details.
- Converter, RS-232/RS-485.** Supports a power system using controllers accessed via a serial (RS-232) connection.

Availability is subject to change without notice. Kohler Co. reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. Contact your local Kohler® generator set distributor for availability.

Decision-Maker® 3000 Available Options

- Float/Equalize Battery Charger** available with 6 or 10 amp DC volt output. The 10 amp models are available with and without NFPA alarm to signal a battery charger fault.
- Manual Speed Adjust** available for applications using closed transition ATS.
- Prime Power Switch** prevents battery drain during generator set non-operation periods and when the generator set battery cannot be maintained by an AC battery charger.
- Remote Emergency Stop Switch** available as a wall mounted panel to remotely shut down the generator set.
- Remote Monitoring Panel.** The Kohler® Remote Serial Annunciator (RSA) enables the operator to monitor the status of the generator set from a remote location, which may be required for NFPA 99 and NFPA 110 installations.
- Run Relay** provides a relay indicating that the generator set is running.
- Shunt Trip Wiring** provides relay outputs to trip a shunt trip circuit breaker and to signal the common fault shutdowns. Contacts rated at 10 amps at 28 VDC or 120VAC.
- Two Input/Five Output Module** provides a generator set mounted panel with two inputs and five relay outputs.

Modbus® is a registered trademark of Schneider Electric.

Windows® is a registered trademark of Microsoft Corporation.

DISTRIBUTED BY:

Bid Number: 201500371

Vendor: Palmer Construction

5.2 AUTHORIZED RESELLER

The Vendor shall be authorized by the manufacturer to resell the products and/or maintenance offered in this IFB. The Vendor should provide a signed statement from the manufacturer confirming authorization with their bid response. Failure to provide the statement shall constitute sufficient grounds for rejection of Vendor's offer, in the discretion of the State.

Authorized: YES NO

Attached Manufacturer's Authority: YES NO

Attachments to this IFB begin on the next page.

ATTACHMENT A: PRICING FORM

FURNISH AND DELIVER:

ITEM #	QTY.	UOM	DESCRIPTION	UNIT PRICE	EXTENDED PRICE
1	1	Each	Generator MFG: <u>Kohler Power</u> Model #: <u>150 RE26E</u>	36,440 ⁰⁰	
2	1	Each	Automatic Transfer Switch MFG: <u>Kohler Power</u> Model #: <u>K55-AMTA-02005</u>	2,520 ⁰⁰	
3	1	Each	Installation & Set-up	14,445 ⁰⁰	
4	1	Each	Training	1,200 ⁰⁰	

TOTAL EXTENDED PRICE: \$ 54,645⁰⁰

RECYCLED CONTENT:

If the products offered herein contain any recycled content, indicate the material and content percentage:

Material: NSW Percentage %: 0

ATTACHMENT B: LOCATION OF WORKERS UTILIZED BY VENDOR

In accordance with NC General Statute §143-59.4, the Vendor shall detail the location(s) at which performance will occur, as well as the manner in which it intends to utilize resources or workers outside of the United States in the performance of this Contract. The State will evaluate the additional risks, costs, and other factors associated with such utilization prior to making an award. Please complete items a, b, and c below.

a) Will any work under this Contract be performed outside the United States? YES NO

If the Vendor answered "YES" above, Vendor must complete items 1 and 2 below:

1. List the location(s) outside the United States where work under this Contract will be performed by the Vendor, any sub-Contractors, employees, or other persons performing work under the Contract:

2. Describe the corporate structure and location of corporate employees and activities of the Vendor, its affiliates or any other sub-Contractors that will perform work outside the U.S.:

b) The Vendor agrees to provide notice, in writing to the State, of the relocation of the Vendor, employees of the Vendor, sub-Contractors of the Vendor, or other persons performing services under the Contract outside of the United States YES NO

NOTE: All Vendor or sub-Contractor personnel providing call or contact center services to the State of North Carolina under the Contract shall disclose to inbound callers the location from which the call or contact center services are being provided.

c) Identify all U.S. locations at which performance will occur:

This Space is Intentionally Left Blank

ATTACHMENT C: DESCRIPTION OF EXECUTIVE ORDER #50 AND CERTIFICATION**NORTH CAROLINA RESIDENT VENDORS TAKE NOTE:**

Pursuant to North Carolina General Statute §143-59 and Executive Order No. 50 (issued February 17, 2010, entitled "Enhanced Purchasing Opportunities for North Carolina Businesses"), a North Carolina resident Vendor may receive an opportunity to obtain an award by agreeing to match the final price(s) of the lowest Vendor on a Contract for the purchase of goods, if that lowest price is offered by a non-North Carolina resident Vendor. This opportunity arises when a North Carolina resident Vendor offers a price that is the lowest among all bids by qualified in-State resident Vendors and also is within five percent (5%) or \$10,000 (whichever is less) of the non-resident Vendor's overall lowest price. This price-match opportunity applies to a Contract awarded under this solicitation.

G.S. §143-59(c) (1) defines a "resident Vendor" as a "Vendor that has paid unemployment taxes or income taxes in this State and whose principal place of business is located in this State." All other Vendors are considered to be non-resident Vendors. G.S. §143-59(c)(3) defines a "principal place of business" as the "principal place from which the trade or business of the Vendor is directed or managed." This refers to overall operations for the entire business entity, not merely a division or office location.

In order to qualify for this preference, a resident Vendor shall: (1) request the price-match opportunity by marking the appropriate checkbox, below; (2) provide all information requested; and (3) complete and sign the "Resident Vendor's Certification for Price-Matching Preference under Executive Order #50" (hereinafter the "Certification") included at the end of this Section. The Certification may not be submitted after the public opening of the bids. By executing the Certification, the Vendor affirms that the information provided is accurate and agrees to provide any additional information or documentation requested by the State to confirm the above certifications and statements within five (5) business days of request (including but not limited to income tax or unemployment tax returns, reports and/or filings (annual and/or quarterly); banking statements or financial/accounting statements reflecting Vendor's payment of income taxes or unemployment taxes to the State of North Carolina and such other information regarding Vendor's management or directors of its business or trade of its principal place of business).

Requesting a price-match opportunity below does not require any resident Vendor to match the lowest price in the event a Vendor qualifies for receiving the opportunity.

The State will evaluate the bids in accordance with the award criteria stated in this IFB to determine the lowest Vendor meeting the requirements of the IFB without regard to any Vendor's residency. If the Vendor with the lowest price is a North Carolina resident Vendor, then no consideration of the price-matching procedure is necessary. If the lowest bid by a Vendor meeting all requirements was submitted by a non-resident Vendor and there are no North Carolina resident Vendors that submitted a price bid that was within 5% or \$10,000 of the non-resident Vendor's price, then none of the North Carolina resident Vendors qualify for the price-matching preference and no review of a resident Vendor's Certification is required.

If the lowest price bid by a Vendor meeting requirements was submitted by a non-resident Vendor and there are one or more North Carolina resident Vendors that submitted a price bid that was within 5% or \$10,000 of the non-resident Vendor's price, then the State will determine if the Vendor has requested a price-matching opportunity, review the Certification(s) of the resident Vendor(s) to determine whether the resident Vendors have properly executed the Certification and ensure that the information and documentation provided in or with the Certification or otherwise submitted to the State supports the resident Vendor(s) qualification to exercise the price-match opportunity. The State may seek clarification of the Certification and/or information in a resident Vendor's Certification and request additional information and documentation, if needed. If any resident Vendor's award is challenged in a bid protest, based on the accuracy of that Vendor's claim of qualification for the price-matching, the resident Vendor shall provide additional information and/or documents to the State within five (5) business days of receiving a request from the State for such information and/or documentation, or its award shall be subject to cancellation.

Pursuant to G.S. §132-1.1, §105-259(b) and Paragraph 14 of the Instructions to Vendors, the State is prohibited from making public disclosure of the Vendor's tax information and documents submitted (subject to those exceptions set out in G.S. 105-259(b)) and the State shall preserve the confidentiality of the tax information and/or documents received in response to a request for clarification or to resolve a bid protest challenging a resident Vendor's qualification for the

price-matching preference in accordance with applicable law. In order to further preserve the confidentiality of any Vendor's tax information and documentation provided to the State, the Vendor shall comply with Paragraph 14 of the Instructions to Vendors and mark "CONFIDENTIAL" at the top and bottom of each page of such information and documentation. After review of all relevant material, the State shall include in its recommendation for award a finding that the North Carolina resident Vendor(s) is or is not qualified for the price-matching opportunity.

If more than one North Carolina resident Vendor qualifies for the price-matching opportunity, then the State will prioritize the qualified North Carolina resident Vendors according to their price bid scores, from highest to lowest, so that the qualified North Carolina resident Vendor that scored the highest price score receives the first opportunity to match the bid price of the lowest non-resident Vendor that met all IFB requirements. If the lowest qualified North Carolina resident Vendor that met all IFB requirements declines to accept Contract award, then the Contract will be offered to the next lowest qualified North Carolina resident Vendor meeting all IFB requirements and continue in this manner until either a qualified North Carolina resident Vendor accepts the Contract award or the award is made to a non-resident Vendor if no qualified North Carolina resident Vendor agrees to match the lowest price bid.

If two resident Vendors qualify for the price-matching opportunity, and both score the same on price, then the State may: (1) consider the information provided in those Vendors' Certifications or publicly available information to determine with which Vendor the Contract award would have a greater impact of stimulating or sustaining the North Carolina economy and/or is most likely to create or save jobs (e.g., if the choice is between a resident broker and a resident manufacturer of the subject goods, then the Contract will be awarded to the resident manufacturer); (2) consider the unemployment rates in the municipality or county where each Vendor's principal place of business is located; (3) seek clarification from the Vendors to ascertain the impact on their respective businesses if offered the award of the Contract; or (4) utilize any other approved method of deciding between equal bids.

If a resident Vendor requests and qualifies for the price-matching preference, the resident Vendor will be notified of its opportunity to agree to match the lowest price and receive Contract award, and it will have two (2) business days from the date and time of such notification to indicate its response, either agreeing or declining to match the lowest responsible non-resident Vendor's price and receive the Contract award based on that price match.

If at any time during or after the procurement process (including but not limited to clarifications and resolution of bid protests) the State determines that: any certifications or information in the Certification is false substantially inaccurate, materially misleading or that the Vendor failed to provide, within the specified time period, any additional information requested, then the State may:

- (1) Cancel any award, Contract and/or purchase order that was awarded to such Vendor based on the price-matching preference, and the resident Vendor shall be liable for all costs incurred as a result of the cancellation, including any increased costs the State may incur as a result of awarding the Contract to another Vendor;
- (2) Bar the Vendor from all price-matching opportunities in future State procurements for a period of time not to exceed three (3) years, exclusive of any debarment period;
- (3) Take action against the Vendor under the False Claims Act, §G.S. 1-605 through §1-617, inclusive, for submitting a false Certification for the price-matching preference under Executive Order #50 (including but not limited to treble damages and civil penalties); and/or
- (4) Debar Vendor from doing business with the State of North Carolina for a period of time not to exceed three years, as determined by the State. Any such debarment period shall not begin to run until all damages, costs and penalties as may be assessed against such Vendor have been fully paid.

ALL VENDORS (BOTH RESIDENT AND NONRESIDENT) SHOULD ANSWER THE FOLLOWING QUESTIONS:

1. Vendor is a resident of North Carolina as defined in G.S. §143-59? YES NO

2. Resident Vendor requests a price-matching opportunity? YES NO

The following Sections shall be completed if a resident Vendor is requesting a price-matching opportunity:

a) PART I – EO50

Please check the applicable boxes below, in order to be considered for the price-matching preference under Executive Order #50 and G.S. §143-59(c)(1).

I hereby certify that the Vendor paid unemployment taxes to the State of North Carolina for the most recent quarter or annually, and has specifically done so for the last such payment period.

I hereby certify that the Vendor paid income taxes to the State of North Carolina each calendar quarter, or otherwise annually, and has specifically done so for the last such payment period.

b) PART II – EO50

1. I hereby certify that the Vendor's principal place of business is located in North Carolina.

A. **Business Type** (Please check the applicable box):

- Corporation (all types) LLC
- Limited Liability Company
- General Partnership
- Limited Partnership
- Limited Liability Partnership
- Sole Proprietorship
- Individual
- Unincorporated Association
- Other: _____

B. Provide address of principal place of business:

3273 ALABAMA ROAD
 Street Address (no P.O. Box number)

Burlington, NC 27215
 City, State, Zip Code

Is the above address the location of Vendor's headquarters? YES NO

If Vendor has a public website, provide the link/address: www.palmerconstruction.com

C. **ATTACH A COPY OF VENDOR'S MOST RECENT FILINGS WITH THE NORTH CAROLINA SECRETARY OF STATE** (such as Vendor's Certificate of Authority, Annual Report or such other filing that discloses a North Carolina business address for the Vendor).

OR (check the box below)

Vendor certifies that its business is **not** required to make filings with the North Carolina Secretary of State.

EMPLOYER'S QUARTERLY TAX AND WAGE REPORT

YOU CAN FILE THIS REPORT
 ONLINE AT WWW.NCESC.COM

QUARTER ENDING

12/31/14

DUE DATE

01/31/15

ACCOUNT NUMBER

05-23-920

PLEASE TYPE THIS REPORT

PALMER CONSULTING GROUP LLC
 3673 ALAMANCE ROAD

 BURLINGTON NC 27215

TAX RATE 2.256 %

QTR/YR

4/2014

1. NUMBER OF COVERED
 WORKERS WHO WORKED
 DURING OR RECEIVED PAY
 FOR THE PAYROLL PERIOD
 WHICH INCLUDES THE 12TH
 OF THE MONTH

1ST MONTH	2ND MONTH	3RD MONTH
6	0	7

2. WAGES PAID THIS QUARTER
 SUBJECT TO THE LAW

91821.23

3. LESS EXCESS WAGES

58969.71

4. WAGES SUBJECT TO TAX

32851.52

5. TAX DUE FOR THIS QUARTER

741.13

6. INTEREST

7. PENALTY — LATE FILING

8. PENALTY LATE PAYMENT

9. AMOUNT OF REMITTANCE

PAYABLE TO:
 DIVISION OF EMPLOYMENT SECURITY

741.13

CK AMOUNT		DATE	COLL	INITIAL
R/CK	LFP.W	LPP.W		

CHECK THIS BOX IF THE ADDRESS HAS CHANGED

FOR WAGES PAID EFFECTIVE 01-01-2005:

THE TAX RATE IS A COMPOSITE OF THE UI AND STATE
 RESERVE TAX. ONLY THE UI PORTION IS CERTIFIABLE
 FOR FUTA PURPOSES AND FOR USE IN FUTURE TAX
 RATE CALCULATIONS.

RESIDENT VENDOR'S CERTIFICATION FOR PRICE-MATCHING OPPORTUNITY

UNDER EXECUTIVE ORDER #50

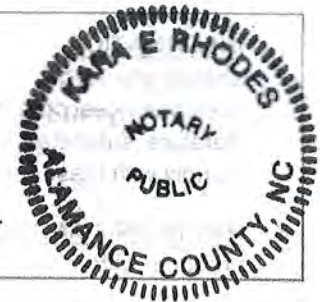
NOTICE: The Price-Matching Opportunity will only be given to Vendors that fully complete this affidavit (i.e., all information must be provided, all supporting documents must be attached, the affidavit must be signed by an authorized representative of the Vendor and the affidavit must be notarized) and demonstrate their qualifications for the Price-Matching Preference through the certification and information provided in this affidavit and any other required information.

Affidavit of Palmer Construction (name of resident Vendor, hereinafter the "Vendor").

The undersigned hereby certifies that he or she has read this certification, that all information provided in Part I and Part II, above, is true and accurate, and that he or she is an officer, member, partner, owner or such managing employee of the Vendor (the "Authorized Representative") that is authorized to execute this affidavit and to bind the Vendor to the certifications, statements and agreements herein.

Name of Authorized Representative: Daniel Southworth
Signature: [Signature]
Title: Sales Manager
Date: 4/9/15

NOTARY:
State of North Carolina, County of Alamance
Subscribed and sworn to before me this 9 day of April 20 15
Notary Public: Kara E Rhodes My commission expires 12/9/2015
Kara E Rhodes



This Space is Intentionally Left Blank

ATTACHMENT D: INSTRUCTIONS TO VENDORS

1. **READ, REVIEW AND COMPLY:** It shall be the Vendor's responsibility to read this entire document, review all enclosures and attachments, and any addenda thereto, and comply with all requirements specified herein, regardless of whether appearing in these Instructions to Vendors or elsewhere in this IFB document.
2. **LATE BIDS:** Late bids, regardless of cause, will not be opened or considered, and will automatically be disqualified from further consideration. It shall be the Vendor's sole responsibility to ensure delivery at the designated office by the designated time.
3. **ACCEPTANCE AND REJECTION:** The State reserves the right to reject any and all bids, to waive any informality in bids and, unless otherwise specified by the Vendor, to accept any item in the bid. If either a unit price or an extended price is obviously in error and the other is obviously correct, the incorrect price will be disregarded.
4. **BASIS FOR REJECTION:** Pursuant to 01 NCAC 05B .0501, the State reserves the right to reject any and all offers, in whole or in part, by deeming the offer unsatisfactory as to quality or quantity, delivery, price or service offered, non-compliance with the requirements or intent of this solicitation, lack of competitiveness, error(s) in specifications or indications that revision would be advantageous to the State, cancellation or other changes in the intended project or any other determination that the proposed requirement is no longer needed, limitation or lack of available funds, circumstances that prevent determination of the best offer, or any other determination that rejection would be in the best interest of the State.
5. **EXECUTION:** Failure to sign the Execution page (page 3 of the IFB) in the indicated space will render bid non-responsive and it shall be rejected.
6. **ORDER OF PRECEDENCE:** In cases of conflict between specific provisions in this solicitation, the order of precedence shall be (high to low) (1) any special terms and conditions specific to this IFB, including any negotiated terms; (2) specifications in Sections 2, 4, and 5 of this IFB; (3) North Carolina General Contract Terms and Conditions in ATTACHMENT E: NORTH CAROLINA GENERAL CONTRACT TERMS AND CONDITIONS; (4) Instructions in ATTACHMENT D: INSTRUCTIONS TO VENDORS; and (5) Vendor's Bid.
7. **INFORMATION AND DESCRIPTIVE LITERATURE:** Vendor shall furnish all information requested and in the spaces provided in this document. Further, if required elsewhere in this bid, each Vendor must submit with their bid sketches, descriptive literature and/or complete specifications covering the products offered. Reference to literature submitted with a previous bid or available elsewhere will not satisfy this provision. Bids that do not comply with these requirements shall constitute sufficient grounds to reject the bid.
8. **RECYCLING AND SOURCE REDUCTION:** It is the policy of the State to encourage and promote the purchase of products with recycled content to the extent economically practicable, and to purchase items which are reusable, refillable, repairable, more durable and less toxic to the extent that the purchase or use is practicable and cost-effective. We also encourage and promote using minimal packaging and the use of recycled/recyclable products in the packaging of commodities purchased. However, no sacrifice in quality of packaging will be acceptable. The company remains responsible for providing packaging that will adequately protect the commodity and contain it for its intended use. Companies are strongly urged to bring to the attention of purchasers those products or packaging they offer which have recycled content and that are recyclable.
9. **SUSTAINABILITY:** To support the sustainability efforts of the State of North Carolina we solicit your cooperation in this effort. Pursuant to Executive Order 156 (1999), it is desirable that all responses meet the following:
 - All copies of the bid are printed double sided.
 - All submittals and copies are printed on recycled paper with a minimum post-consumer content of 30%.
 - Unless absolutely necessary, all bids and copies should minimize or eliminate use of non-recyclable or non-reusable materials such as plastic report covers, plastic dividers, vinyl sleeves, and GBC binding. Three-ringed binders, glued materials, paper clips, and staples are acceptable.
 - Materials should be submitted in a format which allows for easy removal, filing and/or recycling of paper and binder materials. Use of oversized paper is strongly discouraged unless necessary for clarity or legibility.

10. **HISTORICALLY UNDERUTILIZED BUSINESSES:** Pursuant to General Statute §143-48 and Executive Order 150 (1999), the State invites and encourages participation in this procurement process by businesses owned by minorities, women, disabled, disabled business enterprises and non-profit work centers for the blind and severely disabled.
11. **RECIPROCAL PREFERENCE:** G.S. §143-59 establishes a reciprocal preference requirement to discourage other states from favoring their own resident Vendors by applying percentage increases to any bid by a North Carolina resident Vendor. The "Principal Place of Business" is defined as the principal place from which the trade or business of the Vendor is directed or managed.
12. **CONFIDENTIAL INFORMATION:** To the extent permitted by applicable statutes and rules, the State will maintain confidential trade secrets that the Vendor does not wish disclosed. As a condition to confidential treatment, each page containing trade secret information shall be identified in boldface at the top and bottom as "CONFIDENTIAL" by the Vendor, with specific trade secret information enclosed in boxes or similar indication. Cost information shall not be deemed confidential under any circumstances. Regardless of what a Vendor may label as a trade secret, the determination whether it is or is not entitled to protection will be determined in accordance with G.S. §132-1.2. Any material labeled as confidential constitutes a representation by the Vendor that it has made a reasonable effort in good faith to determine that such material is, in fact, a trade secret under G.S. §132-1.2. Vendors are urged and cautioned to limit the marking of information as a trade secret or as confidential so far as is possible.
13. **PROTEST PROCEDURES:** When a Vendor wishes to protest a Contract awarded by the Secretary of Administration or by an agency in an awarded amount of at least \$25,000 resulting from this solicitation, the Vendor shall submit a written request addressed to the State Purchasing Officer at Purchase and Contract, 1305 Mail Service Center, Raleigh, NC 27699-1305. This request shall be received in the Division of Purchase and Contract within thirty (30) consecutive calendar days from the date of the Contract award. Protest letters shall contain specific grounds and reasons for the protest, how the protesting party was harmed by the award made and any documentation providing support for the protesting party's claims. **Note:** Contract award notices are sent only to the Vendor actually awarded the Contract, and not to every person or firm responding to a solicitation. Bid status and Award notices are posted on the Internet at <https://www.ips.state.nc.us/ips/>. All protests will be handled pursuant to the North Carolina Administrative Code, Title 1, Department of Administration, Chapter 5, Purchase and Contract, Section 5B. 1519 (01 NCAC 05B .1519).
- If a ground of a protest is based on a challenge to the qualification of a North Carolina resident Vendor to be awarded a Contract pursuant to Executive Order #50 (price-matching opportunity), the State Purchasing Officer or procurement officer may request the North Carolina resident Vendor to produce documentation substantiating the North Carolina resident Vendor's qualification for the subject preference. These documents should be requested and received prior to any decision on whether to deny or grant a protest meeting. As provided herein, the North Carolina resident Vendor is required to produce to the State the requested documentation within five (5) business days of the State's request and failure to produce the documents within that time period may result in the cancellation of the Contract. Also note that any tax, financial, accounting or banking documents the North Carolina resident Vendor submits to the State in connection with the resolution of a protest shall not be disclosed to the protester pursuant to G.S. §132-1.1 and §105-259(b) and the State shall preserve the confidentiality of such documents
14. **MISCELLANEOUS:** Masculine pronouns shall be read to include feminine pronouns, and the singular of any word or phrase shall be read to include the plural and vice versa.
15. **COMMUNICATIONS BY VENDORS:** In submitting its bid, the Vendor agrees not to discuss or otherwise reveal the contents of its bid to any source, government or private, outside of the using or issuing agency until after the award of the Contract or cancellation of this IFB. All Vendors are forbidden from having any communications with the using or issuing agency, or any other representative of the State concerning the solicitation, during the evaluation of the bids (i.e., after the public opening of the bids and before the award of the Contract), unless the State directly contacts the Vendor(s) for purposes of seeking clarification or another reason permitted by the solicitation. A Vendor shall not: (a) transmit to the issuing and/or using agency any information commenting on the ability or qualifications of any other Vendor to provide the advertised good, equipment, commodity; (b) identify defects, errors and/or omissions in any other Vendor's bid and/or prices at any time during the procurement process; and/or (c) engage in or attempt any other communication or conduct that could influence the evaluation and/or award of the Contract that is the subject of this IFB. Vendors not in compliance with this provision may be disqualified, at the option of the State, from the Contract award. Only those communications with the using agency or issuing agency authorized by this IFB are permitted.

16. **INFORMAL COMMENTS:** The State shall not be bound by informal explanations, instructions or information given at any time by anyone on behalf of the State during the competitive process or after award. The State is bound only by information provided in this IFB and in formal Addenda issued through IPS.
17. **TABULATIONS:** Bid tabulations can be electronically retrieved at the Interactive Purchasing System (IPS), <https://www.ips.state.nc.us/ips/BidNumberSearch>. Click on the IPS BIDS icon, click on Search for Bid, enter the bid number, and then search. Tabulations will normally be available at this web site not later than one working day after the bid opening. Lengthy or complex tabulations may be summarized, with other details not made available on IPS, and requests for additional details or information concerning such tabulations cannot be honored.
18. **VENDOR REGISTRATION AND SOLICITATION NOTIFICATION SYSTEM:** Vendor Link NC allows Vendors to electronically register free with the State to receive electronic notification of current procurement opportunities for goods and services of potential interests to them available on the Interactive Purchasing System, as well as notifications of status changes to those solicitations. Online registration and other purchasing information is available at the following website <http://www.pandc.nc.gov/>.
19. **WITHDRAWAL OF BID:** a bid may be withdrawn only in writing and actually received by the office issuing the IFB prior to the time for the opening of bids identified on the cover page of this IFB (or such later date included in an Addendum to the IFB). A withdrawal request must be on Vendor's letterhead and signed by an official of the Vendor authorized to make such request. Any withdrawal request made after the opening of bids shall be allowed only for good cause shown and in the sole discretion of the Division of Purchase and Contract.
20. **COST FOR BID PREPARATION:** Any costs incurred by Vendor in preparing or submitting bids are the Vendor's sole responsibility; the State of North Carolina will not reimburse any Vendor for any costs incurred prior to award.
21. **VENDOR'S REPRESENTATIVE:** Each Vendor shall submit with its bid the name, address, and telephone number of the person(s) with authority to bind the firm and answer questions or provide clarification concerning the firm's bid.
22. **INSPECTION AT VENDOR'S SITE:** The State reserves the right to inspect, at a reasonable time, the equipment/item, plant or other facilities of a prospective Vendor prior to Contract award, and during the Contract term as necessary for the State determination that such equipment/item, plant or other facilities conform with the specifications/requirements and are adequate and suitable for the proper and effective performance of the Contract.

This Space is Intentionally Left Blank

ATTACHMENT E: NORTH CAROLINA GENERAL CONTRACT TERMS AND CONDITIONS

1. **DEFAULT AND PERFORMANCE BOND:** If, through any cause, Vendor shall fail to fulfill in timely and proper manner the obligations under this agreement, the State shall have the right to terminate this contract by giving written notice to the Vendor and specifying the effective date thereof. In case of default by the Vendor for any reason, the State may procure substitute goods from other sources and hold the Vendor responsible for any excess cost occasioned thereby. The State reserves the right to require at any time a performance bond or other acceptable alternative guarantees from a successful Vendor without expense to the State.

The Vendor shall be in default, if its Certification submitted for a price-matching preference under Executive Order #50 and G.S. §143-59 was false and/or contained materially misleading or inaccurate information, and/or Vendor failed to provide information and documentation requested by the State to substantiate Vendor's Certification.

In addition, in the event of default by the Vendor under this Contract, the State may immediately cease doing business with the Vendor, immediately terminate for cause all existing Contracts the State has with the Vendor, and debar the Vendor from doing future business with the State. The State may take action against the Vendor under the False Claims Act, G.S. §1-605 through §1-617, inclusive, for submitting a false Certification for the price-matching preference under Executive Order #50 (including but not limited to treble damages and civil penalties).

Upon the Vendor filing a petition for bankruptcy or the entering of a judgment of bankruptcy by or against the Vendor, the State may immediately terminate, for cause, this Contract and all other existing Contracts the Vendor has with the State, and debar the Vendor from doing future business with the State.

2. **GOVERNMENTAL RESTRICTIONS:** In the event any Governmental restrictions are imposed which necessitate alteration of the material, quality, workmanship or performance of the items offered prior to their delivery, it shall be the responsibility of the Vendor to notify, in writing, the issuing purchasing office at once, indicating the specific regulation which required such alterations. The State reserves the right to accept any such alterations, including any price adjustments occasioned thereby, or to cancel the Contract.
3. **AVAILABILITY OF FUNDS:** Any and all payments to the Vendor are dependent upon and subject to the availability of funds to the agency for the purpose set forth in this agreement.
4. **TAXES:** Any applicable taxes shall be invoiced as a separate item.
- a. G.S. §143-59.1 bars the Secretary of Administration from entering into Contracts with Vendors if the Vendor or its affiliates meet one of the conditions of G. S. §105-164.8(b) and refuses to collect use tax on sales of tangible personal property to purchasers in North Carolina. Conditions under G. S. §105-164.8(b) include: (1) Maintenance of a retail establishment or office, (2) Presence of representatives in the State that solicit sales or transact business on behalf of the Vendor and (3) Systematic exploitation of the market by media-assisted, media-facilitated, or media-solicited means. By execution of the bid document the Vendor certifies that it and all of its affiliates, (if it has affiliates), collect(s) the appropriate taxes.
 - b. All agencies participating in this Contract are exempt from Federal Taxes, such as excise and transportation. Exemption forms submitted by the Vendor will be executed and returned by the using agency.
 - c. Prices offered are not to include any personal property taxes, nor any sales or use tax (or fees) unless required by the North Carolina Department of Revenue.
5. **SITUS:** The place of this Contract, its situs and forum, shall be North Carolina, where all matters, whether sounding in Contract or tort, relating to its validity, construction, interpretation and enforcement shall be determined.
6. **GOVERNING LAWS:** This Contract is made under and shall be governed and construed in accordance with the laws of the State of North Carolina, without regard to its conflict of laws rules.

- 7. **PAYMENT TERMS:** Payment terms are Net not later than 30 days after receipt of correct invoice or acceptance of goods, whichever is later. The using agency is responsible for all payments to the Vendor under the Contract. Payment by some agencies may be made by procurement card, if the Vendor accepts that card (Visa, MasterCard, etc.) from other customers, and it shall be accepted by the Vendor for payment under the same terms and conditions as any other method of payment accepted by the Vendor. If payment is made by procurement card, then payment may be processed immediately by the Vendor.
- 8. **AFFIRMATIVE ACTION:** The Vendor will take affirmative action in complying with all Federal and State requirements concerning fair employment and employment of people with disabilities, and concerning the treatment of all employees without regard to discrimination by reason of race, color, religion, sex, national origin or disability.
- 9. **CONDITION AND PACKAGING:** Unless otherwise provided by special terms and conditions or specifications, it is understood and agreed that any item offered or shipped has not been sold or used for any purpose and shall be in first class condition. All containers/packaging shall be suitable for handling, storage or shipment.
- 10. **STANDARDS:** All manufactured items and/or fabricated assemblies subject to operation under pressure, operation by connection to an electric source, or operation involving a connection to a manufactured, natural, or LP gas source shall be constructed and approved in a manner acceptable to the appropriate state inspector which customarily requires the label or re-examination listing or identification marking of the appropriate safety standard organization; such as the American Society of Mechanical Engineers for pressure vessels; the Underwriters Laboratories and /or National Electrical Manufacturers' Association for electrically operated assemblies; or the American Gas Association for gas operated assemblies, where such approvals of listings have been established for the type of device offered and furnished. Further, all items furnished shall meet all requirements of the Occupational Safety and Health Act (OSHA), and state and federal requirements relating to clean air and water pollution.

The complete product(s) offered herein, and NOT merely its component parts or subsystems, must comply with the above requirement for safety listing. Having the appropriate certification or safety label affixed to any device delivered pursuant to this solicitation, under the conditions described above, is a material condition of any contract awarded as a result of this solicitation. All costs for product and industry certifications and listings, and any other actions required to supply conforming products to the State as described in this IFB, are the sole responsibility of the Vendor. The certification or safety label shall be affixed and be visible on the OUTSIDE of the all products that require a certification or safety label in order to pass the State Quality Acceptance Inspection.

- 11. **INTELLECTUAL PROPERTY INDEMNITY:** Vendor shall hold and save the State, its officers, agents and employees, harmless from liability of any kind, including costs and expenses, resulting from infringement of the rights of any third party in any copyrighted material, patented or unpatented invention, articles, device or appliance delivered in connection with this contract.
- 12. **ADVERTISING:** Vendor agrees not to use the existence of this Contract or the name of the State of North Carolina as part of any commercial advertising or marketing of products or services. A Vendor may inquire whether the State is willing to act as a reference by providing factual information directly to other prospective customers.
- 13. **ACCESS TO PERSONS AND RECORDS:** During and after the term hereof, the State Auditor and any using agency's internal auditors shall have access to persons and records related to this Contract to verify accounts and data affecting fees or performance under the Contract, as provided in G. S. §143-49(9).
- 14. **ASSIGNMENT:** No assignment of the Vendor's obligations or the Vendor's right to receive payment hereunder shall be permitted.

However, upon written request approved by the issuing purchasing authority and solely as a convenience to the Vendor, the State may:

- a. Forward the Vendor's payment check directly to any person or entity designated by the Vendor, and
- b. Include any person or entity designated by Vendor as a joint payee on the Vendor's payment check.

In no event shall such approval and action obligate the State to anyone other than the Vendor and the Vendor shall remain responsible for fulfillment of all Contract obligations. Upon advance written request, the State may, in its unfettered discretion, approve an assignment to the surviving entity of a merger, acquisition or corporate reorganization, if made as part of the transfer of all or substantially all of the Vendor's assets. Any purported assignment made in violation of this provision shall be void and a material breach of this Contract.

15. INSURANCE:

COVERAGE - During the term of the Contract, the Vendor at its sole cost and expense shall provide commercial insurance of such type and with such terms and limits as may be reasonably associated with the Contract. As a minimum, the Vendor shall provide and maintain the following coverage and limits:

a. **Worker's Compensation** - The Vendor shall provide and maintain Worker's Compensation Insurance, as required by the laws of North Carolina, as well as employer's liability coverage with minimum limits of \$500,000.00, covering all of Vendor's employees who are engaged in any work under the Contract. If any work is sublet, the Vendor shall require the sub-Contractor to provide the same coverage for any of his employees engaged in any work under the Contract.

b. **Commercial General Liability** - General Liability Coverage on a Comprehensive Broad Form on an occurrence basis in the minimum amount of \$500,000.00 Combined Single Limit. (Defense cost shall be in excess of the limit of liability.)

c. **Automobile** - Automobile Liability Insurance, to include liability coverage, covering all owned, hired and non-owned vehicles, used in connection with the Contract. The minimum combined single limit shall be \$150,000.00 bodily injury and property damage; \$150,000.00 uninsured/under insured motorist; and \$2,500.00 medical payment.

REQUIREMENTS - Providing and maintaining adequate insurance coverage is a material obligation of the Vendor and is of the essence of this Contract. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The Vendor shall at all times comply with the terms of such insurance policies, and all requirements of the insurer under any such insurance policies, except as they may conflict with existing North Carolina laws or this Contract. The limits of coverage under each insurance policy maintained by the Vendor shall not be interpreted as limiting the Vendor's liability and obligations under the Contract.

16. GENERAL INDEMNITY: The Vendor shall hold and save the State, its officers, agents, and employees, harmless from liability of any kind, including all claims and losses accruing or resulting to any other person, firm, or corporation furnishing or supplying work, services, materials, or supplies in connection with the performance of this Contract, and from any and all claims and losses accruing or resulting to any person, firm, or corporation that may be injured or damaged by the Vendor in the performance of this Contract and that are attributable to the negligence or intentionally tortious acts of the Vendor provided that the Vendor is notified in writing within 30 days that the State has knowledge of such claims. The Vendor represents and warrants that it shall make no claim of any kind or nature against the State's agents who are involved in the delivery or processing of Vendor goods to the State. The representation and warranty in the preceding sentence shall survive the termination or expiration of this Contract.

17. ELECTRONIC PROCUREMENT: (a) Purchasing shall be conducted through the Statewide E-Procurement Service. The State's third party agent shall serve as the Supplier Manager for this E-Procurement Service. The Vendor shall register for the Statewide E-Procurement Service within two (2) business days of notification of award in order to receive an electronic purchase order resulting from award of this contract.

(b) **THE SUCCESSFUL BIDDER(S) SHALL PAY A TRANSACTION FEE OF 1.75% (.0175) ON THE TOTAL DOLLAR AMOUNT (EXCLUDING SALES TAXES) OF GOODS INCLUDED ON EACH PURCHASE ORDER ISSUED THROUGH THE STATEWIDE E-PROCUREMENT SERVICE.** This applies to all purchase orders, regardless of the quantity or dollar amount of the purchase order. The transaction fee shall not be stated or included as a separate item on the invoice. There are no additional fees or charges to the Vendor for the services rendered by the Supplier Manager under this contract. Vendor will receive a credit for transaction fees they paid for the purchase of any item(s) if an item(s) is returned through no fault of the Vendor. Transaction fees are non-refundable when an item is rejected and returned, or declined, due to the Vendor's failure to perform or comply with specifications or requirements of the contract.

(c) Vendor or its Authorized Reseller, as applicable, will be invoiced monthly for the State's transaction fee by the Supplier Manager. The transaction fee shall be based on a) purchase activity for the prior month, or b) purchases for which the supplier invoice has been paid. Unless Supplier Manager receives written notice from the Vendor identifying with specificity any errors in an invoice for the transaction fee within thirty (30) days of the receipt of invoice, such invoice shall be deemed to be correct and Vendor shall have waived its right to later dispute the accuracy and completeness of the invoice. Payment of the transaction fee by the Vendor is due to the account designated by the State within thirty (30) days after receipt of the invoice for the transaction fee. If payment of the transaction fee is not received by the State within this payment period, it shall be considered a material breach of contract. Pursuant to North Carolina General Statute §147-86.23, the Service will charge interest and late payment penalties on past due balances. Interest shall be charged at the rate set by the Secretary of Revenue pursuant to N.C.G.S. §105-241.21 as of the date the balances are past due. The late-payment penalty will be ten percent (10%) of the account receivable. Within thirty (30) days of the receipt of invoice, Vendor may dispute in writing the accuracy of an invoice. No interest shall be charged on disputed and overdue amounts to the extent the State agrees to reduce or adjust the amount in dispute. The Supplier Manager shall provide, whenever reasonably requested by the Vendor in writing (including electronic documents), supporting documentation from the E-Procurement Service that accounts for the amount of the invoice.

(d) The Supplier Manager will capture the order from the State approved user, including the shipping and payment information, and submit the order in accordance with the E-Procurement Service. Subsequently, the Supplier Manager will send those orders to the appropriate Vendor on State Contract. The State or State-approved user, not the Supplier Manager, shall be responsible for the solicitation, bids received, evaluation of bids received, award of contract, and the payment for goods delivered.

(e) Vendor agrees at all times to maintain the confidentiality of its user name and password for the Statewide E-Procurement Services. If Vendor is a corporation, partnership or other legal entity, then the Vendor may authorize its employees to use its password. Vendor shall be responsible for all activity and all charges by such employees. Vendor agrees not to permit a third party to use the Statewide E-Procurement Services through its account. If there is a breach of security through the Vendor's account, Vendor shall immediately change its password and notify the Supplier Manager of the security breach by e-mail. Vendor shall cooperate with the State and the Supplier Manager to mitigate and correct any security breach.

VENDOR IS AND SHALL REMAIN RESPONSIBLE FOR PAYING THE TRANSACTION FEE ON BEHALF OF ANY SUB-CONTRACTOR OR DEALER INVOLVED IN PERFORMANCE UNDER THIS CONTRACT IN THE EVENT THAT SUCH SUB-CONTRACTOR OR DEALER DEFAULTS ON PAYMENT.

19. **COMPLIANCE WITH LAWS:** Vendor shall comply with all laws, ordinances, codes, rules, regulations, and licensing requirements that are applicable to the conduct of its business and performance in accordance with this contract, including those of federal, state, and local agencies having jurisdiction and/or authority.
20. **ENTIRE AGREEMENT:** This IFB and any documents incorporated specifically by reference represent the entire agreement between the parties and supersede all prior oral or written statements or agreements. This IFB, any Addenda hereto, and the Vendor's bid are incorporated herein by reference as though set forth verbatim.

All promises, requirements, terms, conditions, provisions, representations, guarantees, and warranties contained herein shall survive the contract expiration or termination date unless specifically provided otherwise herein, or unless superseded by applicable Federal or State statutes of limitation.
21. **AMENDMENTS:** This contract may be amended only by written amendments duly executed by the State and the Vendor. The NC Division of Purchase and Contract shall give prior approval to any amendment to a contract awarded through that office.
22. **WAIVER:** The failure to enforce or the waiver by the State of any right or of breach or default on one occasion or instance shall not constitute the waiver of such right, breach or default on any subsequent occasion or instance.
23. **FORCE MAJEURE:** Neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations as a result of events beyond its reasonable control, including without limitation, fire, power failures, any act of war, hostile foreign action, nuclear explosion, riot, strikes or failures or refusals to perform under subcontracts, civil insurrection, earthquake, hurricane, tornado, or other catastrophic natural event or act of God.

ATTACHMENT F: CERTIFICATION OF FINANCIAL CONDITION

Name of Vendor: Palmer Construction

The undersigned hereby certifies that: [check all applicable boxes]

- The Vendor is in sound financial condition and received an unqualified audit opinion for the latest audit of its financial statements.
Date of latest audit: n/p
- The Vendor has no outstanding liabilities to the Internal Revenue Service or other government entities.
- The Vendor is not the subject of any current litigation or findings of noncompliance under federal or state law.
- The Vendor has not been the subject of any past litigation or findings of any past litigation or findings of noncompliance under federal or state law that may impact in any way its ability to fulfill the requirements of this Contract.
- He or she is authorized to make the foregoing statements on behalf of the Vendor.

If any one or more of the foregoing boxes is NOT checked, Vendor shall explain the reason in the space below:

[Signature] 4/9/18
 Signature Date
Daniel Smithkott Sales Manager
 Printed Name Title

[This Certification Must Be Signed By the Same Individual Who Signed the Bid Execution Page.]



Visit us at KohlerPower.com

To: State of North Carolina / Bid # 201500371
Nash College
522 N Old Carriage Road
Rocky Mount, NC 27804

From: Dan Southcott
Palmer Generator, Inc.
3673 Alamance Road
Burlington, NC 27215

P:

F:

Ref: 150 Kw Natural Gas Generator

P: 336-270-4824 x 1
dan@palmergenerator.com

GENERATOR SET

Kohler Model: 150REZGC

This gas generator set equipped with a 4S12X alternator operating at 277/480 volts is rated for 150 kW/188 kVA.

Output amperage: 226

Configuration

Qty	Description
1	150REZGC Generator Set
1	150REZGC, Single Fuel, EPA
1	Nameplate Rating, Standby 130 Degree
1	Decal, UL2200 Listing (Gas)
1	Voltage, 60Hz, 277/480V, 3Ph, 4W, 0.8PF
1	Unit Mtd. Radiator Cooling
1	Skid & Mounting
1	Air Intake, Standard Duty
1	Fuel Code, Natural Gas
1	Control & Harness, Dec3000
1	Accessory Inner Panel
1	Alt & Mtg, 4S12X (SAE 11.5, No. 3)
1	Block Heater Assy.
1	Battery, 1/12V, 650CCA, Wet
1	Batt Chgr, Float, 90-120V, 12V-6A
1	Run Relay, 12V
1	Breaker 1 Right Components
1	Controller, DEC3000 800A, 3Ph
1	Additional Gas Solenoid Valve
1	Air Cleaner Restriction Ind
1	Coolant in Genset 6 gals.
1	Skid Extension
1	Flexible Fuel Line (Nat/LP)
1	Warranty, 2 Year Standby
1	Weather Enclosure, Steel
1	LCB, 200A, JDP, Therm Mag, 80%
1	Mtg, LCB J-Frame, 175-225A 3-Pole, 4S

- 1 Covers, 4S J-Box H/J-Frame LCB
- 1 Neutral, 600A 4S
- 1 Decals, Bonding & Phasing
- 1 Rodent Guards
- 1 RSA Power Supply Option
- 1 RSA III, Annunciator only

AUTOMATIC TRANSFER SWITCH

3 Pole, 4 Wire, Solid Neutral, 0200 Amps, Kohler Specific Breaker rated Standard automatic transfer switch, Model KSS-AMTA-0200S, rated 480V, 60 Hz, complete with all standard equipment and housed in a NEMA Type 1 enclosure.

Configuration

Qty	Description
1	KSS-AMTA-0200S
1	Warranty, 2 Year Standard
1	Programmable Input/Output Module
1	Input/Output Mounting Module Assembly

Electrical installation : conduit, wiring, cable, labor, connections \$ 11,745.00

OFFER TOTAL SELL PRICE: \$54,645.00 GREY ENCLOSURE

Price does not include any applicable fuel or taxes. Delivery Freight included in Pricing

OFFER ACCEPTANCE

I hereby authorize Palmer Generator Co to use this form as a bona fide purchase order of the equipment shown on Offer Number: 0026135805 , which clearly establishes definite price and specifications of material ordered. The person signing is doing so according to the terms and conditions.

Proposed by:

Company: Palmer Generator, Co

Print Name: Dan Southcott

Title: Industrial Sales Dept.

Signature: 

Date: 3/9/15

Accepted by:

Company: _____

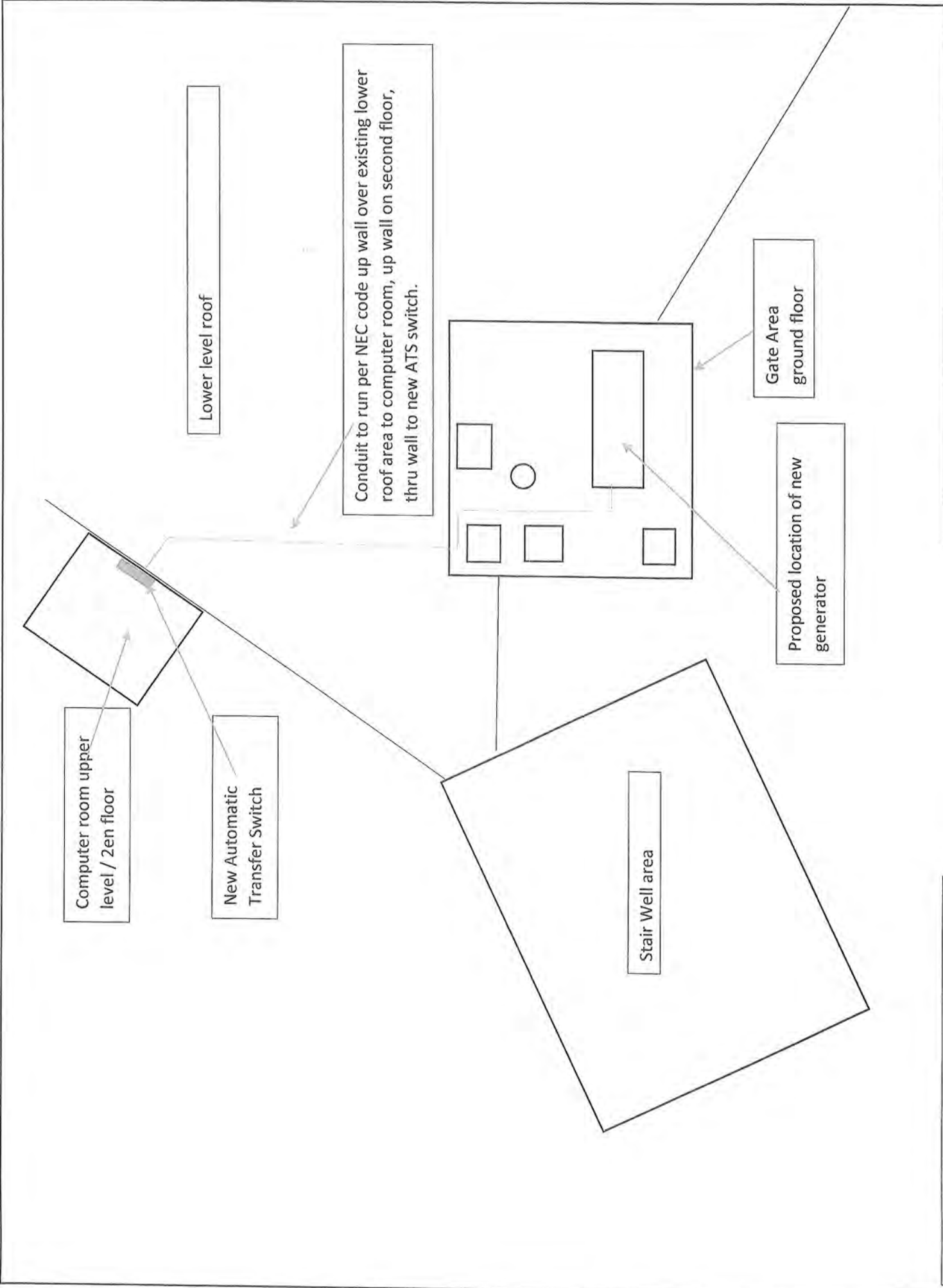
Print Name: _____

Title: _____

Signature: _____

Date: _____

PO Number: _____



Computer room upper level / 2en floor

New Automatic Transfer Switch

Lower level roof

Conduit to run per NEC code up wall over existing lower roof area to computer room, up wall on second floor, thru wall to new ATS switch.

Stair Well area

Gate Area ground floor

Proposed location of new generator

Not to scale drawing / reference only

Nash College, 522 N Old Carriage road, Rocky Mount, NC 27804

Model: **150REZGC**

KOHLER Power Systems

208-600 V

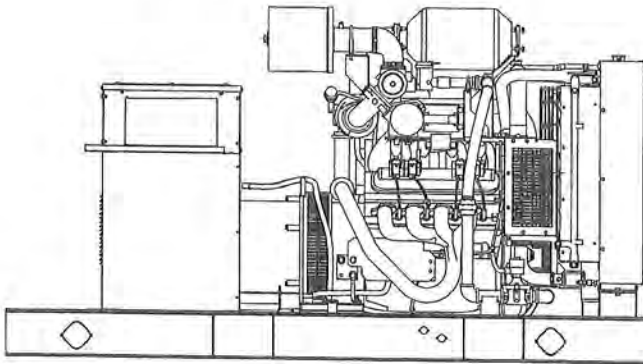
Gas



**EPA-Certified for Stationary
Emergency Applications**

Ratings Range

		60 Hz	
Standby:	kW	106-150	
	kVA	106-188	



Standard Features

- Kohler Co. provides one-source responsibility for the generating system and accessories.
- The generator set and its components are prototype-tested, factory-built, and production-tested.
- The 60 Hz generator set offers a UL 2200 listing.
- At 60 Hz, the generator set accepts rated load in one step.
- The 60 Hz generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
- A one-year limited warranty covers all systems and components. Two- and five-year extended warranties are also available.
- Alternator features:
 - The unique Fast-Response™ X excitation system delivers excellent voltage response and short-circuit capability using a rare-earth, permanent magnet (PM)-excited alternator.
 - The brushless, rotating-field alternator has broadrange reconnectability.
- Other features:
 - Kohler designed controllers for guaranteed system integration and remote communication. See Controllers on page 3.
 - The electronic, isochronous governor incorporates an integrated drive-by-wire throttle body actuator delivering precise frequency regulation.

Generator Set Ratings

Alternator	Voltage	Ph	Hz	Natural Gas 130°C Rise		LP Gas 130°C Rise	
				Standby Rating kW/kVA	Amps	Standby Rating kW/kVA	Amps
4R13X	120/208	3	60	137/171	475	137/171	475
	127/220	3	60	143/179	469	137/171	449
	120/240	3	60	137/171	412	137/171	412
	120/240	1	60	107/107	446	107/107	446
	139/240	3	60	150/188	454	137/171	412
	220/380	3	60	124/155	235	124/155	234
	277/480	3	60	150/188	226	137/171	206
4S12X	120/208	3	60	150/188	520	137/171	475
	127/220	3	60	150/188	492	137/171	449
	120/240	3	60	150/188	451	137/171	412
	120/240	1	60	106/106	442	106/106	442
	139/240	3	60	150/188	451	137/171	412
	220/380	3	60	140/175	266	137/171	260
	277/480	3	60	150/188	226	137/171	206
4S13X	347/600	3	60	150/188	180	137/171	164
	120/208	3	60	150/188	520	139/174	482
	127/220	3	60	150/188	492	139/174	456
	120/240	3	60	150/188	451	139/174	418
	120/240	1	60	113/113	471	113/113	471
	139/240	3	60	150/188	451	139/174	418
	220/380	3	60	150/188	285	139/174	264
4T13X	277/480	3	60	150/188	226	139/174	209
	347/600	3	60	150/188	180	139/174	167
	120/240	1	60	144/144	600	134/134	557

RATINGS: All three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 power factor. **Standby Ratings:** The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. **Prime Power Ratings:** At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528-1 and ISO-3046-1. For limited running time and continuous ratings, consult the factory. Obtain technical information bulletin (TIB-101) for ratings guidelines, complete ratings definitions, and site condition derates. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. For dual fuel engines, use the LP gas ratings for both the primary and secondary fuels.

Alternator Specifications

Specifications	Alternator
Manufacturer	Kohler
Type	4-Pole, Rotating-Field
Exciter type	Brushless, Rare-Earth Permanent Magnet
Leads: quantity, type	
4RX, 4SX	12, Reconnectable
4TX	4, 110-120/220-240
Voltage regulator	Solid State, Volts/Hz
Insulation:	NEMA MG1
Material	Class H
Temperature rise	130°C, Standby
Bearing: quantity, type	1, Sealed
Coupling	Flexible Disc
Amortisseur windings	Full
Voltage regulation, no-load to full-load	Controller Dependent
One-step load acceptance	100% of Rating
Unbalanced load capability	100% of Rated Standby Current
Peak motor starting kVA:	(35% dip for voltages below)
480 V 4R13X (12 lead)	540 (60 Hz)
480 V 4S12X (12 lead)	480 (60 Hz)
480 V 4S13X (12 lead)	570 (60 Hz)
240 V 4T13X (4 lead)	440 (60 Hz)

- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field.
- Self-ventilated and dripproof construction.
- Vacuum-impregnated windings with fungus-resistant epoxy varnish for dependability and long life.
- Superior voltage waveform from a two-thirds pitch stator and skewed rotor.

Application Data

Engine

Engine Specifications	PSI
Manufacturer	Industrial, 8.8 L, 4-Cycle, Turbocharged and Charge Cooled
Engine: model, type	V-8
Cylinder arrangement	8.8 (537)
Displacement, L (cu. in.)	110 x 114 (4.35 x 4.5)
Bore and stroke, mm (in.)	10.1:1
Compression ratio	411 (1350)
Piston speed, m/min. (ft./min.)	5, Bi-Metal Steel and Aluminum
Main bearings: quantity, type	1800
Rated rpm	193 (259)
Max. power at rated rpm (NG), kW (HP)	169 (227)
Max. power at rated rpm (LPG), kW (HP)	Cast Iron
Cylinder head material	Flat Top, Hypereutectic Cast Alum.
Piston type and material	Forged Steel, Induction Hardened, Tangential Fillet
Crankshaft material	Int.-A193 Exh. Inconel
Valve (exhaust) material	Electronic
Governor type	Isochronous
Frequency regulation, no-load to full-load	±0.5%
Frequency regulation, steady state	Fixed
Frequency	Dry
Air cleaner type, all models	

Exhaust

Exhaust System	Dry
Exhaust manifold type	27.5 (971)
Exhaust flow at rated kW, m ³ /min. (cfm)	649 (1200)
Exhaust temperature at rated kW, dry exhaust, °C (°F)	
Maximum allowable back pressure, kPa (in. Hg)	10.2 (3.0)
Exhaust outlet size at engine hookup, mm (in.)	Flanged Outlet at Catalyst see ADV drawing

Engine Electrical

Engine Electrical System	
Ignition system	Individual Coil Near Plug Ignition
Battery charging alternator:	
Ground (negative/positive)	Negative
Volts (DC)	12
Ampere rating	70
Starter motor rated voltage (DC)	12
Battery, recommended cold cranking amps (CCA):	
Qty., rating for -18°C (0°F)	1, 630
Battery voltage (DC)	12

Fuel

Fuel System		
Fuel type	Natural Gas, LP Gas, or Dual Fuel	
Fuel supply line inlet	1.5 NPTF	
Natural gas fuel supply pressure, kPa (in. H ₂ O)	1.74-2.74 (7-11)	
LPG vapor withdrawal fuel supply pressure, kPa (in. H ₂ O)	1.24-2.74 (5-11)	
Dual fuel engine, LPG vapor withdrawal fuel supply pressure, kPa (in. H ₂ O)	1.24 (5)	
Fuel Composition Limits *		
Methane, % by volume	Nat. Gas	LP Gas
Ethane, % by volume	90 min.	1.2 max.
Propane, % by volume	4.0 max.	10 max.
Propene, % by volume	1.0 max.	96 max.
C ₄ and higher, % by volume	0.1 max.	3 max.
Sulfur, ppm mass	0.3 max.	3 max.
Lower heating value, MJ/m ³ (Btu/ft ³), min.	25 max.	
	33.2 (890)	78.8 (2116)

* Fuels with other compositions may be acceptable. If your fuel is outside the listed specifications, contact your local distributor for further analysis and advice.

Application Data

Lubrication

Lubricating System

Type	Full Pressure
Oil pan capacity, L (qt.)	8.0 (8.5)
Oil pan capacity with filter, L (qt.)	8.5 (9.0)
Oil filter: quantity, type	1, Cartridge

Cooling

Radiator System

Ambient temperature, °C (°F) *	50 (122)
Engine jacket water capacity, L (gal.)	13.4 (3.54)
Radiator system capacity, including engine, L (gal.)	25.5 (5.61)
Engine jacket water flow, Lpm (gpm)	125 (33)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	88.2 (5021)
Heat rejected to charge cooling air at rated kW, dry exhaust, kW (Btu/min.)	11.3 (642)
Heat rejected to engine oil at rated kW, dry exhaust, kW (Btu/min.)	1.4 (81)
Water pump type	Centrifugal
Fan diameter, including blades, mm (in.)	711 (28.0)
Fan, kWm (HP)	18.7 (25)
Max. restriction of cooling air, intake and discharge side of radiator, kPa (in. H ₂ O)	0.125 (0.5)

* Enclosure with enclosed silencer reduces ambient temperature capability by 5°C (9°F).

Operation Requirements

Air Requirements

Radiator-cooled cooling air, m ³ /min. (scfm) †	340 (12000)
Combustion air, m ³ /min. (cfm)	8.9 (314)
Heat rejected to ambient air:	
Engine, kW (Btu/min.)	24.9 (1476)
Alternator, kW (Btu/min.)	15.7 (893)

† Air density = 1.20 kg/m³ (0.075 lbm/ft³)

Fuel Consumption ‡

Natural Gas, m ³ /hr. (cfh) at % load	Standby Ratings
100%	55.7 (1965)
75%	43.3 (1529)
50%	31.2 (1102)
25%	19.5 (688)
0%	8.1 (286)

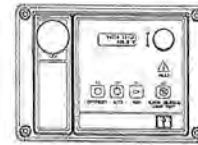
LP Gas, m ³ /hr. (cfh) at % load	Standby Ratings
100%	20.2 (713)
75%	15.5 (547)
50%	11.3 (399)
25%	7.2 (254)
0%	4.6 (164)

‡ Nominal fuel rating: Natural gas, 37 MJ/m³ (1000 Btu/ft.³)
LP vapor, 93 MJ/m³ (2500 Btu/ft.³)

LP vapor conversion factors:

8.58 ft.³ = 1 lb.
0.535 m³ = 1 kg.
36.39 ft.³ = 1 gal

Controllers

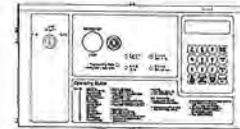


Decision-Maker® 3000 Controller

Provides advanced control, system monitoring, and system diagnostics for optimum performance and compatibility.

- Digital display and menu control provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or serial configuration
- Controller supports Modbus® protocol
- Integrated hybrid voltage regulator with ±0.5% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-100 for additional controller features and accessories.



Decision-Maker® 550 Controller

Provides advanced control, system monitoring, and system diagnostics with remote monitoring capabilities.

- Digital display and keypad provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or modem configuration
- Controller supports Modbus® protocol
- Integrated voltage regulator with ±0.25% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-46 for additional controller features and accessories.



Decision-Maker® 6000 Paralleling Controller

Provides advanced control, system monitoring, and system diagnostics with remote monitoring capabilities for paralleling multiple generator sets.

- Paralleling capability with first-on logic, synchronizer, kW and kVAR load sharing, and protective relays
- Digital display and keypad provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or modem configuration
- Controller supports Modbus® protocol
- Integrated voltage regulator with ±0.25% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-107 for additional controller features and accessories.

Standard Features

- Alternator Protection
- Battery Rack and Cables
- Customer Connection
(Standard with Decision-Maker® 6000 controller only)
- Electronic, Isochronous Governor
- Gas Fuel System (includes fuel mixer, electronic secondary gas regulator, gas solenoid valve, and flexible fuel line between the engine and the skid-mounted fuel system components)
- Integral Vibration Isolation
- Local Emergency Stop Switch
- Oil Drain Extension
- Operation and Installation Literature
- Three-Way Exhaust Catalyst

Available Options

Approvals and Listings

- CSA Approval
- IBC Seismic Certification
- UL 2200 Listing

Enclosed Unit

- Sound Enclosure (with enclosed critical silencer)
- Weather Enclosure (with enclosed critical silencer)

Open Unit

- Exhaust Silencer, Critical (kit: PA-324470)
- Flexible Exhaust Connector, Stainless Steel

Fuel System

- Dual Fuel NG/LPG (automatic changeover)
- Flexible Fuel Line
(required when the generator set skid is spring mounted)
- Gas Filter
- LP Liquid Withdrawal (vaporizer)
- Secondary Gas Solenoid Valve

Controller

- Common Fault Relay
- Communication Products and PC Software
- Customer Connection
(Decision-Maker® 550 and 6000 controllers only)
- Dry Contact (isolated alarm)
(Decision-Maker® 550 and 6000 controllers only)
- Input/Output Module (Decision-Maker® 3000 controller only)
- Remote Annunciator Panel
- Remote Audiovisual Alarm Panel
(Decision-Maker® 550 and 6000 controllers only)
- Remote Emergency Stop
- Run Relay

Cooling System

- Block Heater, 1800 W, 110-120 V
- Block Heater, 2000 W, 190-240 V
(recommended for ambient temperatures below 10°C (50°F))
- Radiator Duct Flange

Electrical System

- Alternator Strip Heater
- Battery
- Battery Charger, Equalize/Float Type
- Battery Heater
- Line Circuit Breaker (NEMA1 enclosure)
- Line Circuit Breaker with Shunt Trip (NEMA1 enclosure)

Miscellaneous

- Air Cleaner Restrictor Indicator
- Certified Test Report
- Crankcase Ventilation (CCV) Heater
[recommended for ambient temperatures below 0°C (32°F)]
- Engine Fluids Added
- Rated Power Factor Testing
- Rodent Guards

Literature

- General Maintenance
- NFPA 110
- Overhaul
- Production

Warranty

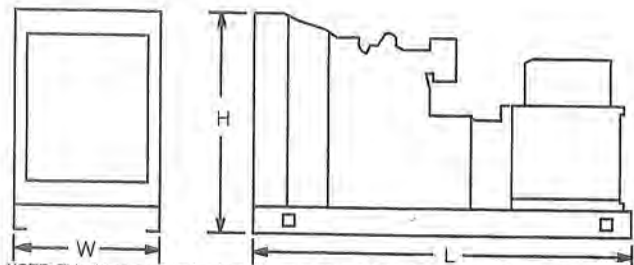
- 2-Year Basic
- 5-Year Basic
- 5-Year Comprehensive

Other Options

-
-
-
-
-
-
-
-

Dimensions and Weights

Overall Size, L x W x H, mm (in.): 2800 x 1120 x 1538
 (110.2 x 44.1 x 60.6)
 Weight (radiator model), wet, kg (lb.): 1440 (3175)



NOTE: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

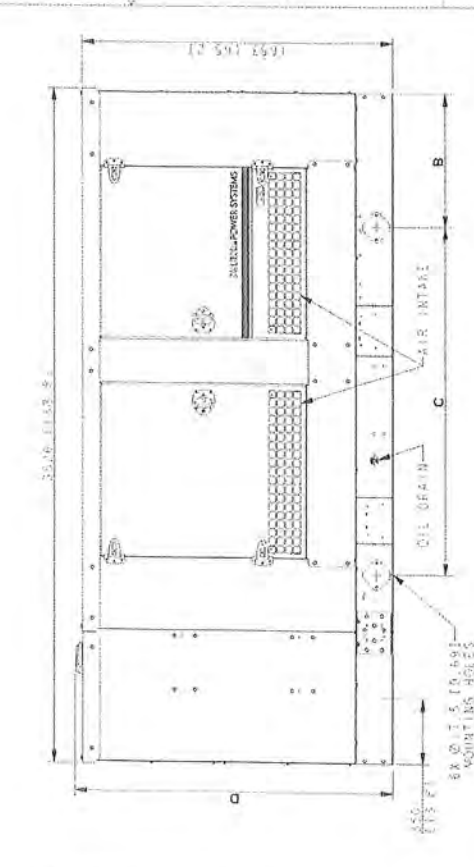
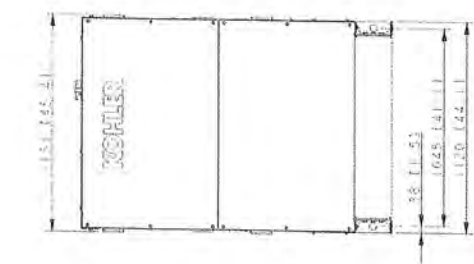
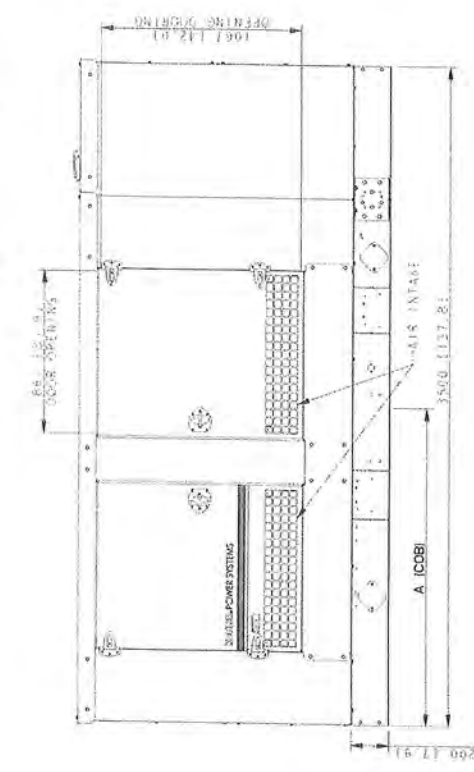
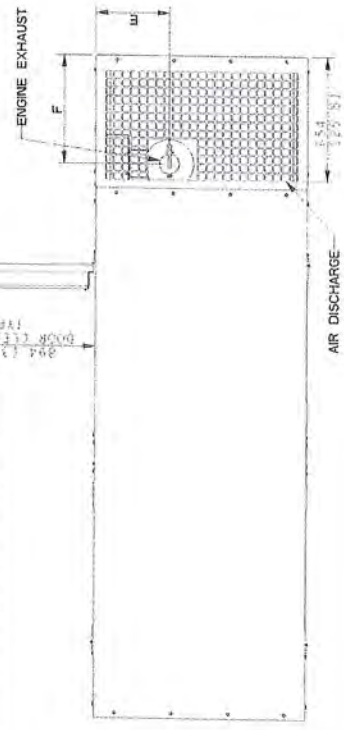
DISTRIBUTED BY:

KOHLER CO. CONFIDENTIAL INFORMATION

DIM	100	125	150
A (COB)	167.1 (43.2)	166.7 (42.2)	185.7 (47.1)
B	208.1 (52.7)	200.1 (50.8)	233.1 (59.1)
C	381.0 (96.8)	381.0 (96.8)	423.1 (107.4)
D	178.4 (45.3)	172.1 (43.7)	182.8 (46.4)
E	269.1 (68.4)	259.1 (65.8)	296.6 (75.3)
F	571.1 (145.1)	534.2 (136.7)	530.1 (135.1)

MODEL	ALTERNATOR		ENCLOSURE ONLY		MODEL	ALTERNATOR		ENCLOSURE ONLY	
	GENSET WGT (WET) W/ ENCL	RC	LBS	KG		GENSET WGT (WET) W/ ENCL	RC	LBS	KG
100	STEEL WEATHER	527	3358	774	375	4R9X/4T9X	527	3358	774
	STEEL SOUND	527	3358	774	370	4R9X/4T9X	527	3358	774
	ALUM. SOUND	375	3032	227	309	4R9X/4T9X	375	3032	227
125	STEEL WEATHER	591	3508	774	325	4R12X	591	3508	774
	STEEL SOUND	591	3508	774	325	4R12X	591	3508	774
	ALUM. SOUND	444	3181	227	309	4R12X	444	3181	227
150	STEEL WEATHER	1727	3754	842	825	4R15X/4T15X	1727	3754	842
	STEEL SOUND	1727	3754	842	825	4R15X/4T15X	1727	3754	842
	ALUM. SOUND	1536	3430	227	800	4R15X/4T15X	1536	3430	227

MODEL	ALTERNATOR		ENCLOSURE ONLY		MODEL	ALTERNATOR		ENCLOSURE ONLY	
	GENSET WGT (WET) W/ ENCL	RC	LBS	KG		GENSET WGT (WET) W/ ENCL	RC	LBS	KG
100	STEEL WEATHER	742	3947	874	825	4R15X/4T15X	742	3947	874
	STEEL SOUND	742	3947	874	825	4R15X/4T15X	742	3947	874
	ALUM. SOUND	593	3517	227	500	4R15X/4T15X	593	3517	227
125	STEEL WEATHER	885	4155	795	870	4R15X/4T15X	885	4155	795
	STEEL SOUND	885	4155	795	870	4R15X/4T15X	885	4155	795
	ALUM. SOUND	717	3755	227	500	4R15X/4T15X	717	3755	227
150	STEEL WEATHER	1776	3919	874	825	4R15X/4T15X	1776	3919	874
	STEEL SOUND	1776	3919	874	825	4R15X/4T15X	1776	3919	874
	ALUM. SOUND	1798	3963	333	810	4R15X/4T15X	1798	3963	333

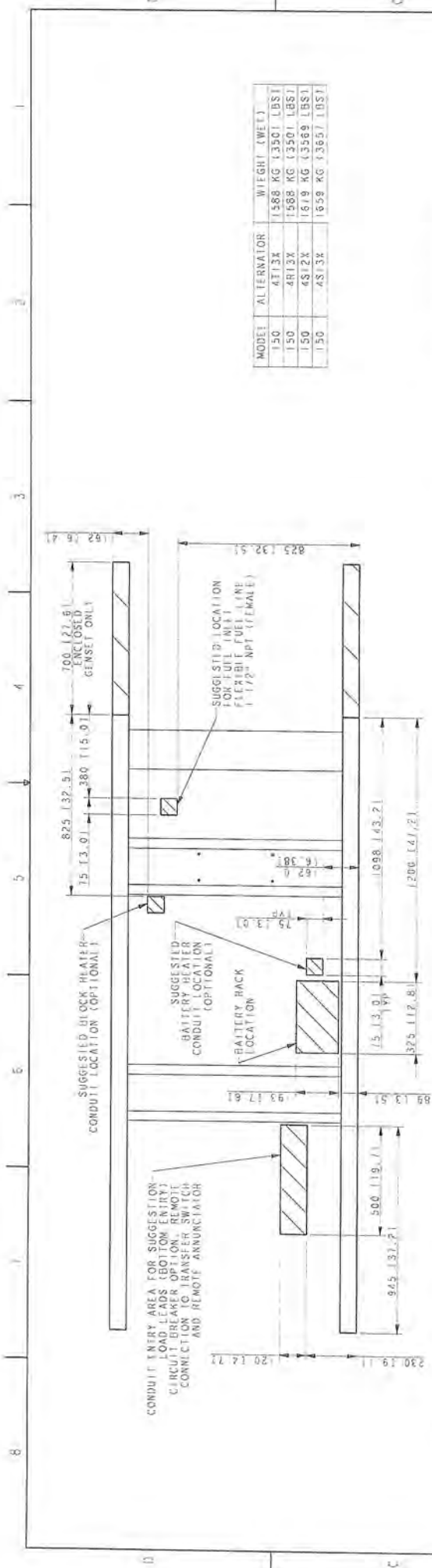


DIMENSIONS IN μ ARE IN ENGLISH EQUIVALENTS.

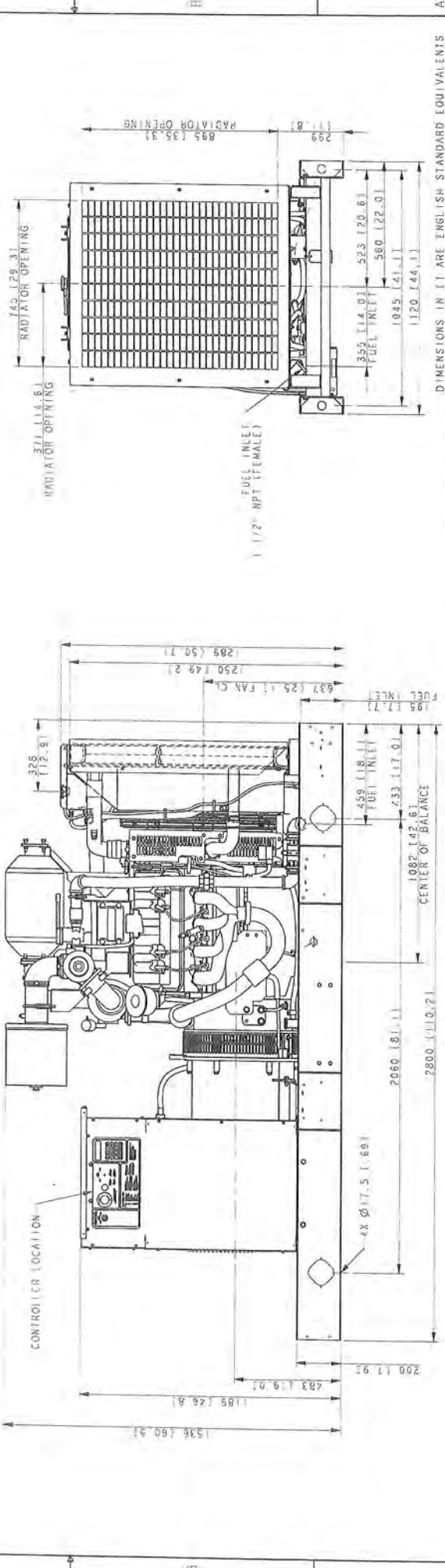
REV.	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
1	10-25-11	AW	NEW DRAWING	10-23-11	AW	REVISED

REV.	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
1	10-25-11	AW	NEW DRAWING	10-23-11	AW	REVISED

100 MODEL 166X/4T9X/4E13X
 125 MODEL 166X/4E13X/4T13X
 150 MODEL 2512X/4R15X/5E13X/4T15X
 RECONNECTABLE
 IMPROVED MOTOR STARTING
 450V ALTERNATORS
 2.8L GM



MODEL	ALTERNATOR	WEIGHT (WET)
150	4T13K	1588 KG (3501 LBS)
150	4R13K	1588 KG (3501 LBS)
150	4S12K	1679 KG (3699 LBS)
150	4S13K	1659 KG (3657 LBS)



REVISIONS

REV#	DATE	BY	DESCRIPTION	REV#	DATE	BY	DESCRIPTION
A	8-15-11	184-47	459 (18.1) FUEL INLET WAS 424 (16.7)				
B	2-22-12	184-11	171 FUEL INLET WAS 167 (6.6) FUEL INLET FUEL INLET 192728-31				
C	6-4-13	1538	100.6 DIM REMOVED (CT199561)				

APPROVALS

DESIGNED BY	DATE	CHECKED BY	DATE
KRI	3-2-11	KRI	3-2-11
KRI	3-2-11	KRI	3-2-11

COHLES CO. METRIC PROE
 POWER SYSTEMS, COHLES, WI 53944 U.S.A.
 PROPERTY AND NOT BE USED EXCEPT BY THE COHLES COMPANY OR ITS SERVISES OR BY ANY OTHER PERSONS WITHOUT THE WRITTEN PERMISSION OF COHLES COMPANY.

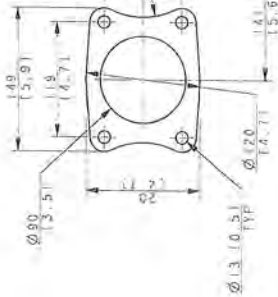
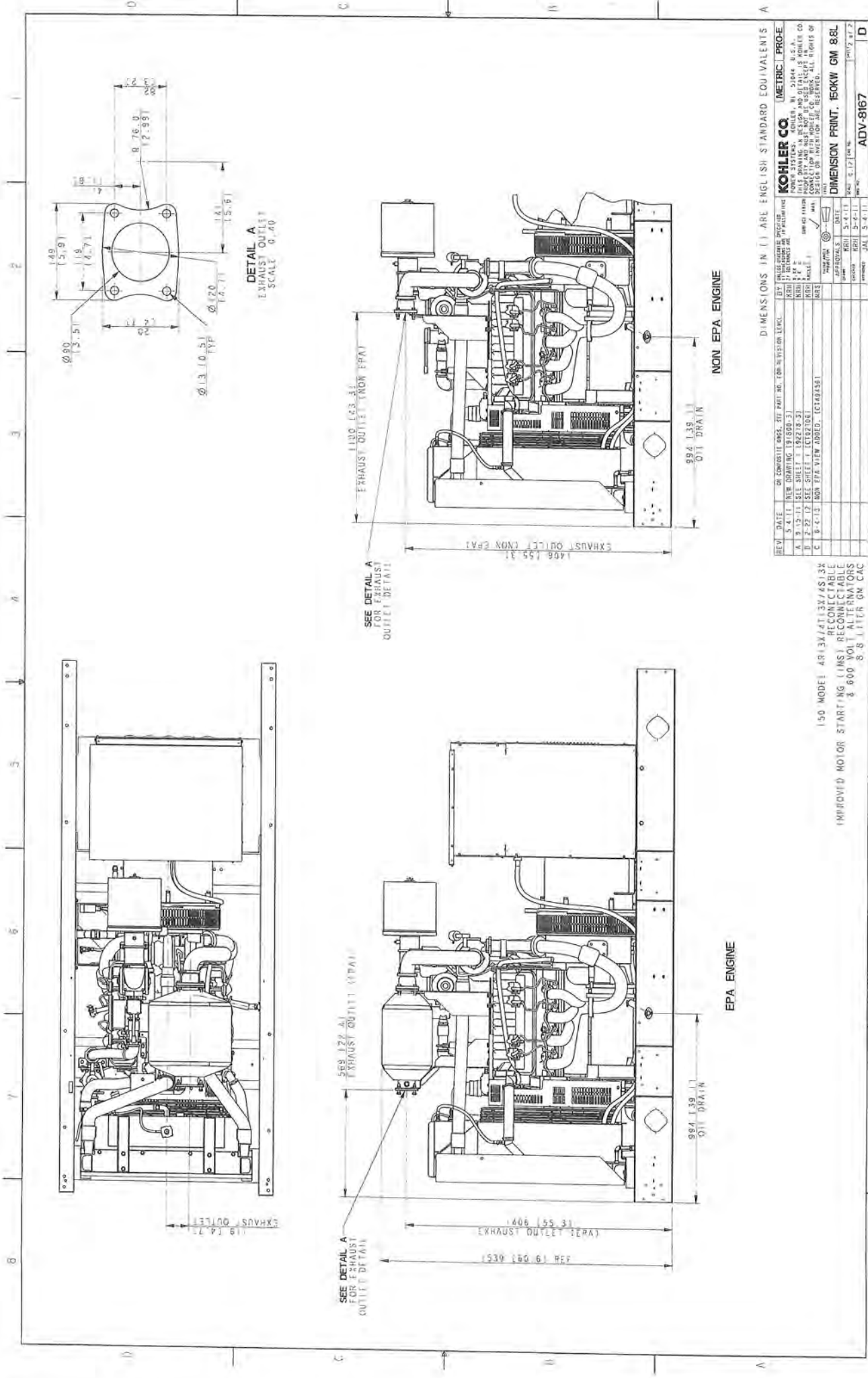
DIMENSION PRINT, 150KW GM 88L

ADV-8167

EPA ENGINE SHOWN

150 MODEL 4T13K/4T13R/4S13K
 IMPROVED MOIUCH STARTING (IMS) RECONNECTABLE
 & 600 VOL. ALTERNATORS
 8.3 LITER GM CAC

DIMENSIONS IN [] ARE ENGLISH STANDARD EQUIVALENTS



DETAIL A
EXHAUST OUTLET
SCALE: 0.40

SEE DETAIL A
FOR EXHAUST
OUTLET DETAIL

SEE DETAIL A
FOR EXHAUST
OUTLET DETAIL

NON-EPA ENGINE

EPA ENGINE

DIMENSIONS IN () ARE ENGLISH STANDARD EQUIVALENTS

REV	DATE	BY	DESCRIPTION	APP'D	DATE
1	5-4-11	NEW	STARTING (IMS) RECONNECTABLE & 600 VOLT ALTERNATORS 8.8 LITER GM CAC		
2	5-4-11	REV	IMPROVED MOTOR STARTING (IMS) RECONNECTABLE & 600 VOLT ALTERNATORS 8.8 LITER GM CAC		
3	5-4-11	REV	150 MODEL 4R13X/AT13V/AS13V		
4	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
5	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
6	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
7	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
8	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
9	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
10	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
11	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
12	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
13	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
14	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
15	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
16	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
17	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
18	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
19	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
20	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
21	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
22	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
23	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
24	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
25	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
26	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
27	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
28	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
29	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
30	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
31	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
32	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
33	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
34	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
35	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
36	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
37	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
38	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
39	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
40	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
41	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
42	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
43	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
44	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
45	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
46	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
47	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
48	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
49	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
50	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
51	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
52	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
53	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
54	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
55	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
56	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
57	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
58	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
59	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
60	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
61	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
62	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
63	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
64	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
65	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
66	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
67	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
68	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
69	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
70	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
71	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
72	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
73	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
74	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
75	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
76	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
77	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
78	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
79	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
80	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
81	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
82	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
83	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
84	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
85	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
86	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
87	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
88	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
89	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
90	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
91	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
92	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
93	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
94	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
95	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
96	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
97	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
98	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
99	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		
100	5-4-11	REV	NON-EPA VIEW ADDED (C1101456)		

POWER SYSTEMS, KOHLER IN 5304 U.S. PAT. CO. PROPERTY AND NOT BE USED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF KOHLER IN 5304 U.S. PAT. CO. DIMENSION PRINT, 160KW GM 8.8L ADV-8167

KOHLER Power Systems

Automatic Transfer Switches Standard Specific-Breaker Rated

9001
S KOHLER
 POWER SYSTEMS
 NATIONALLY REGISTERED



Transfer Switch Standard Features

- UL 1008 listed at 208-480 VAC file #E58962 (automatic), #E86894 (nonautomatic)
- CSA certification available
- IBC seismic certification available
- Standard-transition operation
- Silver tungsten alloy contacts on 400-600 amp models
- Solid or switched neutral
- Available with either automatic or non-automatic control (non-automatic control requires the Decision-Maker® MPAC 1200 controller)
- Available in 2, 3, or 4 pole configurations
- High withstand/closing ratings, for use with specific breakers only
- Electrically operated, mechanically held mechanism
- Double-throw, mechanically interlocked design (break-before-make power contacts)
- Enclosed arc chambers with arc chutes
- Front-accessible contacts for easy inspection
- Main shaft auxiliary position-indicating contacts (see page 3 for contact ratings)
- Standard one-year limited warranty. Extended limited warranties are available.

Available Controllers

- Decision-Maker® MPAC 750
- Decision-Maker® MPAC 1200

Ratings

Model	Current	Voltage, Frequency
KSS	40-600 amps	208-600 VAC, 50/60 Hz
	800-1000 amps	208-480 VAC, 50/60 Hz

Available Automatic Transfer Switch Controllers

Select one of the following controllers for your automatic transfer switch.

Decision-Maker® MPAC 750 Controller



- Test pushbutton
- Exercise pushbutton
- LED indicators: Source available, transfer switch position, service required (fault), and "not in auto"
- Programmable voltage pickup and dropout settings
- Programmable time delays
- Seven day generator exerciser
- Two programmable inputs and two programmable outputs
- Modbus communication standard
- RS-485 communication standard
- Ethernet communication optional

For more information about Decision-Maker® MPAC 750 features and functions, see specification sheet G11-126.

Decision-Maker® MPAC 1200 Controller



- LCD display, 4 lines x 20 characters, backlit
- Complete programming and viewing capability at the door using the keypad and LCD display
- LED indicators: Source available, transfer switch position, service required (fault), and "not in auto"
- Programmable voltage and frequency pickup and dropout settings
- Programmable time delays
- Programmable generator exerciser
- Time-based load control
- Two programmable inputs and two programmable outputs
- Up to four I/O extension modules available
- Modbus communication standard
- RS-485 communication standard
- Ethernet communication optional

For more information about Decision-Maker® MPAC 1200 features and functions, see specification sheet G11-127.

Codes and Standards

The ATS meets or exceeds the requirements of the following specifications:

- Underwriters Laboratories UL 1008, Standard for Automatic Transfer Switches for Use in Emergency Standby Systems file #E58962 (automatic), #E86894 (nonautomatic)
- CSA C22.2 No. 178 certification available, file #LR58301
- NFPA 70, National Electrical Code
- NFPA 99, Essential Electrical Systems for Health Care Facilities
- NFPA 110, Emergency and Standby Power Systems
- IEEE Standard 446, IEEE Recommended Practice for Emergency and Standby Power Systems for Commercial and Industrial Applications
- NEMA Standard ICS 10-2005, Electromechanical AC Transfer Switch Equipment
- EN61000-4-4 Fast Transient Immunity Severity Level 4
- IEC 60947-6-1, Low Voltage Switchgear and Control Gear; Multifunction Equipment; Automatic Transfer Switching Equipment
- EN61000-4-5 Surge Immunity Class 4 (voltage sensing and programmable inputs only)
- IEC Specifications for EMI/EMC Immunity:
 - CISPR 11, Radiated Emissions
 - IEC 1000-4-2, Electrostatic Discharge
 - IEC 1000-4-3, Radiated Electromagnetic Fields
 - IEC 1000-4-4, Electrical Fast Transients (Bursts)
 - IEC 1000-4-5, Surge Voltage
 - IEC 1000-4-6, Conducted RF Disturbances
 - IEC 1000-4-8, Magnetic Fields
 - IEC 1000-4-11, Voltage Dips and Interruptions
- IEEE 472 (ANSI C37.90A) Ring Wave Test
- Seismic certification in accordance with the International Building Code is available. (Accessory kit is required for seismic certification.)
 - IBC 2000, referencing ASCE 7-98 and ICC AC-156
 - IBC 2003, referencing ASCE 7-02 and ICC AC-156
 - IBC 2006, referencing ASCE 7-05 and ICC AC-156
 - IBC 2009, referencing ASCE 7-05 and ICC AC-156
 - IBC 2012, referencing ASCE 7-10 and ICC AC-156

Application Data

Environmental Specifications	
Operating Temperature	-20°C to 70°C (-4°F to 158°F)
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Humidity	5% to 95% noncondensing

UL-Listed Solderless Screw-Type Terminals for External Power Connections				
Model	Switch Rating, Amps	Range of Wire Sizes, Copper or Aluminum*		
		Normal, Emergency, and Load	Neutral	Ground
KSS	40-150	(1) #8 to 3/0 AWG †	(3) #6 - 3/0 AWG	(3) #6 - 3/0 AWG
	200-225	(1) #6 AWG to 250 KCMIL †	(3) #4 - 600 KCMIL or (6) 1/0 - 250 KCMIL	
	260	(1) #6 AWG to 350 KCMIL †		
	400	(1) #4 AWG to 600 KCMIL † or (2) #1/0 AWG to 250 KCMIL †	(3) #4 - 600 KCMIL or (6) 1/0 - 250 KCMIL	(3) #4 - 600 KCMIL or (6) 1/0 - 250 KCMIL
	600	(2) #2 AWG to 600 KCMIL †		
	800	(2) #1/0 AWG to 750 KCMIL	(12) #2 - 600 KCMIL	
	1000	(4) #2 AWG to 600 KCMIL		

* Use 60°C minimum wire for #14 to #1 AWG. Use 75°C minimum wire for 1/0 AWG and larger.
† Use copper wire only.

Contact Ratings				
	Resistive Load	Inductive Load	Motor Load	
			NC	NO
Engine Start Contacts	2 A @ 30 VDC	N/A	N/A	N/A
Auxiliary Contacts, (40-600A) ‡	15 A @ 250 VAC	N/A	N/A	N/A
Auxiliary Contacts, (800-1000A) ‡	15 A @ 480 VAC	15 A @ 250 VAC; 6 A @ 500 VAC	5 A @ 125 VAC; 3 A @ 250 VAC; 1.5 A @ 500 VAC	2.5 A @ 125 VAC; 1.5 A @ 250 VAC; 0.75 A @ 500 VAC

‡ Auxiliary position-indicating contacts, one set Normal and one set Emergency

Weights and Dimensions

Weights and dimensions are shown for transfer switches in NEMA type 1 and type 3R enclosures, and open units. Consult the factory for open units and other enclosures.

Note: Weights and dimensions are provided for reference only and should not be used for planning installation. See your local distributor for submittal drawings.

Amps	NEMA Type	Dimensions mm (in.)			Weight kg (lb.)		
		Height	Width	Depth §	2-Pole	3-Pole	4-Pole
40-225	1, 3R	791 (31.1)	450 (17.7)	316 (12.5)	28 (62)	30 (65)	31 (68)
260-400	1, 3R	1223 (48.1)	560 (22.0)	362 (14.3)	52 (115)	56 (123)	59 (131)
600	1, 3R	1702 (67.0)	610 (24.0)	514 (20.2)	179 (395)	183 (403)	186 (410)
800	1, 3R	1932 (76.1)	864 (34.0)	515 (20.3)	N/A	226 (498)	236 (520)
1000	1, 3R	1932 (76.1)	864 (34.0)	515 (20.3)	N/A	231 (509)	241 (531)

§ Allow enough room to fully open the door for inspection and service per NEC and local codes. The NEMA type 3R enclosures have a security cover on the controller that extends 54 mm (2.1 in.) beyond the door.

Withstand and Close-On Ratings (WCR) Ratings Summary

The transfer switch is rated for use on a circuit capable of delivering not more than the RMS symmetrical Amperes listed at the specified maximum voltage below, but no greater than the interrupting capacity of the selected circuit breaker or fuse. Circuit breakers and fuses are supplied by the customer.

Certified Withstand Current Ratings in RMS Symmetrical Amperes (480 V maximum) †											
Switch Rating, Amps	With Current-Limiting Fuses				Specific Coordinated Breaker Rating, (see the following tables)			Any Breaker Ratings **			
	Fuse Class	Fuse Size, Max Amps	Maximum Circuit Amps		Maximum Voltage	Maximum Circuit Amps		Maximum Voltage	Maximum Circuit Amps		Time Duration, Seconds Max.
			480 VAC	600 VAC		480 VAC	600 VAC		480 VAC	600 VAC	
40-150	J	400	200,000	200,000	600 V	30,000	22,000	600 V	10,000	10,000	0.025
200-225	J	400	200,000	N/A	600 V	30,000	22,000	600 V	10,000	10,000	
260	N/A	N/A	N/A	N/A	480 V	35,000	N/A	N/A	N/A	N/A	
400	J	600	200,000	200,000	600 V	50,000	42,000	600 V	35,000	35,000	0.050
	RK5 RK1	600	100,000	N/A		50,000	42,000	N/A	N/A	N/A	
600	N/A	N/A	N/A	N/A	600 V	50,000	42,000	N/A	N/A	N/A	N/A
800	L	3000	200,000	N/A	480 V	65,000	N/A	N/A	N/A	N/A	N/A
1000	L	4000		N/A							

† All values are available symmetrical RMS Amperes and tested in accordance with the withstand/closing requirements of UL 1008.
 ** Applicable to breakers with instantaneous trip elements.

Ratings with Specific Manufacturers' Circuit Breakers

Withstand and close-on ratings (WCR) in RMS symmetrical Amperes for specific manufacturers' circuit breakers.

Switch Rating, Amps	Molded-Case Circuit Breakers				
	Voltage, Max.	WCR, Amps RMS	Manufacturer	Type	Max. Size, Amps
40 80 100 150 200 225	480	30,000	Eaton	FCL	100
				JGS, JGH, JGC, JGU, JGX, JBD, JD, HJD, JDC, LCL, LCLA	250
				LDC, CLDC, KDB, KD, HKD, KDC, LD, CLD, HLD, CHLD	400
			ITE/Siemens	CED6, HED4, HED6	125
				CFD6, FD6A, FXD6, HFD6, HFXD6, HHFD6, HHFXD6	250
				CJD6	400
			General Electric	SEL, SEP, THLC1	150
				THLC2	225
				SFH, SFL, SFP	250
			Schneider	SGH, SGL, SGP, FGN, FGH, FGL, FGP	400
				HG, HJ, HL, HR	150
				JJ, JL, JR	250
	600	22,000	Eaton	LG, LJ, LL, LR	400
				JGS, JGH, JGC, JGU, JGX, JDB, JD, HJD, JDC, LCL, LCLA	250
				LDC, CLDC, KDB, KD, HKD, KDC, LD, CLD, HLD, CHLD	400
			ITE/Siemens	CED6, HED4, HED6	125
CFD6, FD6, FXD6, HFD6, HFXD6, HHFD6, HHFXD6				250	
SEL, SEP, THLC1				150	
General Electric			THLC2	225	
			SFH, SFL, SFP	250	
			SGH, SGL, SGP, FGN, FGH, FGL, FGP	400	

Switch Rating, Amps	Molded-Case Circuit Breakers				
	Voltage, Max.	WCR, Amps RMS	Manufacturer	Type	Max. Size, Amps
260	480	35,000	Eaton	JGS, JGH, JGC, JGU, JGX, JDB, JD, HJD, JDC, LCL, LCLA	250
				LDC, CLDC, LD, CLD, HLD, CHLD, KDB, KD, HKD, KDC	400
			ITE/Siemens	CED6, HED4, HHED6	125
				CFD6, FD6, FXD6, HFD6, HFXD6, HHFD6, HHFXD6	250
			General Electric	SEL, SEP, THLC1	150
				THLC2	225
				SFH, SFL, SFP	250
				SGH	350
			Schneider	SGH, SGL, SGP, FGN, FGH, FGL, FGP	400
				HG, HJ, HL, HR	150
				JJ, JL, JR	250
400	480	50,000	Eaton	HJD, JDC, JGC, JGH, JGU, JGX	250
				CHLD4, CLD, HLD4, CLDC, LDC, KDC, HKD, CHMDL4, CMDL4	400
				CHLD6, HDL6, CHMDL6, CMDL6, CLDC, CLD6, LDC6, CLDC6	600
				CHMDL8, HMDL8, MDL8, CMDL8	800
			ITE/Siemens	CFD6, HFD6, HFXD6, HHFD6, HHFXD6	250
			General Electric	SFL, SFP	250
			FGL, FGP	600	
			Schneider	LJ, LL, LR	600
			600	42,000	Eaton
	CLDC4, KDC, LDC4	400			
	CLDC6, LDC6, NB Tri-Pac	600			
	NB Tri-Pac	800			
	ITE/Siemens	CFD6			250
		CJD6, SCLD6			400
		CLD6, HHL6, HHLXD6, SCLD6			600
	General Electric	CMD6, HMD6, HMXD6, SCMD6, SHMD6			800
		THLC1			150
		FGL4, FGP4, THLC4, TLB4	400		
SGL, SGP, FGL6, FGP6		600			
Schneider	SKL8, SKP8	800			
			JL, JR	250	