

**Delgado Community College
Purchasing Department
501 City Park Avenue, Bldg 37
New Orleans, LA 70119
(504) 762-3027**

Invitation to Bid

**Bid Name:
R0031063 –Process Learning System
(Electricity Training System/Portable AC Variable Frequency Drives)**

**Due by & to be opened on:
May 4, 2026 at 2:00PM CST**

**Contact Person:
Adrienne Harris
Assistant Director of Purchasing
(504) 762-3028**

Name of Company

Address

City, State, Zip

Phone Number

Fax Number

Email

Signature of Company Representative

Name (Printed) & Title of Company Representative

*** This form must be completed and submitted with your bid*

I. GENERAL INFORMATION

1. Any questions regarding this Invitation to Bid shall be in writing and shall be addressed to Adrienne Harris at the following address:

Delgado Community College
O'Keefe Administration Building
501 City Park Avenue, Building 37
New Orleans, La 70114-6222
Email: aharri@dcc.edu
Fax: (504) 762-3089

Any additional information resulting from such inquiries shall be distributed to all bidders via addenda. The College will not be responsible for any other explanation of the documents.

Sealed bids may be submitted by mail or in person. Faxed or emailed Bids not accepted. Mailed bids and hand carried bids shall go to the address in item #1. If hand carried, do not leave on the counter unattended. Bids are to be delivered directly to the Purchasing Office where they will be time stamped. The bid name and number must be on the outside of the packaging, including any express mail packaging. Please note that express mail or USPS carriers may not deliver directly to 501 City Park Avenue or to the Purchasing Office. The bidder/proposer is solely responsible for ensuring that its courier service provider makes inside deliveries directly in the Purchasing Office. All Bids must be time stamped by the Purchasing Office by the due date and time regardless of delivery method.

3. Each bidder is solely responsible for the accuracy and completeness of its bid. Errors or omissions may be grounds for rejection, or may be interpreted in favor of the College.

4. Each bidder is solely responsible for the timely delivery of its bid. Delgado Community College will not be responsible for any delays in the delivery of bids, whether delayed in the mail, or for any reason whatsoever.

5. Only the issue of a purchase order or a signed acceptance of a proposal constitutes acceptance on the part of the College.

6. Assuming there is no prompt payment discount provision, payment will be made within 30 days from receipt of products in satisfactory condition, or within 30 days from receipt of invoice, whichever is later.

7. Proposer or bidder, contractor, etc. certifies, by signing and submitting a proposal for \$25,000 or more, that their company, any subcontractors, or principals are not suspended or debarred by the General Services Administration (GSA) in accordance with the requirements in OMB Circular A-133. (A list of parties who have been suspended or debarred can be viewed via the internet at www.epls.gov.)

II. BID FORM

R0031063 –Process Learning System (Electricity Training System/Portable AC Variable Frequency Drives)

SCOPE OF WORK:

Delgado Community College is seeking bids from qualified vendors to provide Electricity Training System/Portable AC Variable Frequency Drives for our Business and Technology Department, 615 City Park Avenue New Orleans, LA 70119.

MATERIALS REQUESTED:

No.	Qty	UOM	Item & Model/Part No	Model/Brand Bid	Unit Price	Total Price	Delivery ETA
1)	1	EA	<p>Basic Electricity Training System Plus:</p> <ul style="list-style-type: none"> • Requires 115V/60Hz Ph Power <p>Should include:</p> <ul style="list-style-type: none"> • (1) 400-001 Digital Multimeter • (1) 400-113 Oscilloscope • (1) 600-102 Sweep/Function Generator <p>Part No: 400-PAC</p>				
2)	2	EA	<p>Portable AC Variable Frequency Drives Troubleshooting Learning System:</p> <ul style="list-style-type: none"> • Requires 120V/60Hz/1Ph and PC (see amatrol.com/support) <p>Should include:</p> <ul style="list-style-type: none"> • (1) Portable Console • (1) AB PowerFlex 525 Drive, Interface, Test Panel • (1) 3-Phase Motor, Flywheel, Test Panel • (1) Speed Command Input Voltmeter • (1) Speed Command Potentiometer • (1) PLC Discrete I/O Interface • (1) Standard Banana Lead Set • (1) Fault Insertion System and Software • (1) M11135 / M11153 Student Curriculum Interactive PC-Based 				

No.	Qty	UOM	Item & Model/Part No	Model/Brand Bid	Unit Price	Total Price	Delivery ETA
			Multimedia • (1) C11135 / C11153 Instructor's Guides • (1) K11135 / K11153 Instructor's Resource Print CD's • (1) H11135 / H11153 Student Reference Guides Part No: 990-DVR1F				
3)	1	LOT	Installation Labor				
4)	1	LOT	Freight/Delivery/Shipping/ETC.				

****Must be equivalent of exceed Model 400-PAC/990-DRV1F ****
****All equipment/items must be new – if not bids will not be accepted****

TOTAL AMOUNT BID FOR ALL WORK CONTAINED IN BID: _____

Addendum No: _____	Dated: _____	Addendum No: _____	Dated: _____
Addendum No: _____	Dated: _____		

Bidder declares and represents that he; a) has carefully examined the Bidding Documents, b) has a clear understanding of the Bidding Documents, c) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, d) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services under this contract, all in accordance with the Bidding Documents as prepared by the College Purchasing Office and Facility Services.

By signing below, the Vendor/Contractor agrees that he/she complies with all bid requirements and special conditions as stated in the bid and has reviewed and received any and all addenda if applicable.

Signature _____

Title _____

Company _____

***** Bid must be submitted on this form***

III. INSTRUCTIONS & REQUIREMENT

ADDENDA:

Any questions arising from the specifications or the pre-bid conference must be addressed in writing to the individual indicated in Section I, General Information, and will be answered via an Addendum. All questions must be submitted no later than **Tuesday, April 28th, 2025 by 12:00PM CST.**

A final 48-hour period after the issuance of the Addendum will be granted for questions which are directly related only to the answers provided in the Addendum.

Any interpretation, correction or change of the Bidding Documents will be made by addendum. Interpretations, corrections or changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon such interpretations, corrections and changes. The Bidder must acknowledge all issued addenda in the space provided on the Bid Form. Failure to acknowledge addenda will render the bid informal and will cause its rejection.

Bid Documents and Addenda may be downloaded from

<https://wwwcfprd.doa.louisiana.gov/osp/lapac/dspBid.cfm?search=department&term=39>

BID SUBMITTAL:

Bids must be sealed with the **Bidder's name, license number along with the name and number of the bid clearly written on the front of the envelope or package** and are to be delivered to the person and location in Section I, General Information by the date and time stated on the title page. Faxed or emailed bids are not acceptable. If shipping via express mail, all information as listed above must be on the outside of the shipping packaging. Bids received without this information or after the due date and time will be automatically disqualified.

In accordance with R.S. 37:2163A, Contractors' License number in the appropriate classification(s) must appear on the bid envelope submitted on all projects in the amount of \$50,000 or more (and \$1.00 or more if hazardous materials are involved).

Bids must be submitted on the forms furnished for this purpose and must be filled out in ink or typewritten and signed in ink. Do not erase, correct, or write over any prices or figures necessary for this proposal. If any corrections are necessary, each must be initialed by bidder. Failure to comply with the above requirements will cause your bid to be disqualified.

Effective August 15, 1997, in accordance with L.R.S. 39:1594 (Act 121), the person signing the bid must be:

- a) A current corporate officer, partnership member or other individual specifically authorized to submit a bid as reflected in the appropriate records on file with the Secretary of State; or
- b) An individual authorized to bind the vendor as reflected by an accompanying corporate resolution, certificate, or affidavit.

By signing the bid, the bidder certifies compliance with the above.

BIDS SUBMITTED ARE SUBJECT TO PROVISIONS OF THE LAWS OF THE STATE OF LOUISIANA INCLUDING BUT NOT LIMITED TO L.R.S. 39:1551-1736; PURCHASING RULES AND REGULATIONS; EXECUTIVE ORDERS; STANDARD TERMS AND CONDITIONS; SPECIAL TERMS AND CONDITIONS; AND SPECIFICATIONS LISTED IN THIS SOLICITATION.

MODIFICATION OR WITHDRAWAL OF BID:

A bid may not be modified, withdrawn, or canceled by the Bidder for a period of thirty (30) calendar days for the period following the time and bid date designated for the receipt of bids, and Bidder so agrees in submitting his bid, except in accordance with R.S. 39:1594, F.

Prior to the time and date designated for receipt of bids, bids submitted early may be modified or withdrawn only by notice to Delgado Community College Purchasing Office at the place and prior to the time designated for receipt of bids.

Withdrawn bids may be resubmitted up to the time designated for the receipt of bids provided that they are then fully in conformance with these Instructions to Bidders.

BIDDER REPRESENTATION:

By signing and submitting a bid, Bidder acknowledges that he/she has visited the site, read and understands the Bidding Documents and his bid is made in accordance therewith.

The Bidder is advised to carefully consider all College physical features and activities and occupancies by faculty, staff and students, and to plan activities so as not to disrupt the normal operations and activities of the College except as expressly permitted by the College in writing. The Bidder shall be especially aware of existing electric, gas, water, telephone and/or other utilities and facilities which may be in the way of or adjacent to the Work, and shall take appropriate action to protect these utilities during the Work.

Every effort has been made to accurately show all pertinent surface and subsurface features accurately. For self-assurance, the Bidder may examine available drawings and documents related to College premises. Such examinations may be made only in the offices of the College Facility Services as part of the Non-Mandatory Pre-Bid Conference.

The Bidder agrees that his/her bid is based solely upon the materials, systems and equipment described in the Bidding Documents as advertised and as modified by addenda. The bid submitted is not based on any verbal instructions contrary to the Bidding Documents and addenda.

END OF SECTION III

IV. TERMS AND CONDITIONS

GENERAL TERMS & CONDITIONS:

- A response to a bid invitation is our only indication of your interest in college business. Failure to respond to six (6) consecutive bid invitations may cause your name to be removed from the bidders' list.
- Bid openings are public and are subject to any in place Executive Order, revised statute or College protocol as it pertains to any safety or illness risks.
- No information will be given out as to opinions concerning the ultimate outcome while consideration of the award is in progress.
- Effective September 1, 1991, in accordance with Act 1029 of the 1991 Regular Legislative Session, Delgado Community College will not be responsible for any sales tax, either state or local.
- Bids submitted are governed and subject to provisions of the laws of the State of Louisiana including but not limited to L.R.S. 39:1551-1736; Purchasing Rules and Regulations; Executive Orders; Standard Terms and Conditions; and Specifications listed in this solicitation
- Delgado Community College reserves the right to reject any and all bids and to waive any informality.
- It shall be distinctly agreed and understood that the price quoted must be a firm price for the duration of the Contract, and not subject to change at time of the shipment of goods or delivery of services.
- All shipping, handling, materials, labor or any other charges necessary to compete this job must be included in amount bid. Items not listed but necessary for completion of the job shall be furnished as part of the bid. Additional costs disclosed later will be at the expense of the vendor.
- All deliveries shall be made FOB Destination to the College unless otherwise specified by the College. All freight charges are to be included in the unit price. The College will not be responsible for freight charges not clearly stated as a part of this bid.
- The College reserves the right to award the above items separately, grouped, or on an all-or-none basis, and to reject any or all bids and to waive any informalities including technicalities in specifications that preclude competition.
- The College shall have the right to reject any or all bids not accompanied by any data required by the Bidding Documents or a bid in any way incomplete or irregular.
- The Bid will be awarded on the basis of the lowest total cost as determined by the College.
- List of distributors: The Vendor signing the bid shall be designated as the Prime Vendor on any contract/agreement resulting from this bid. If additional Vendors are authorized to receive orders or perform work for services covered under this proposal, the Vendor must submit, with bid, a list of those additional authorized distributors or subcontractors.
- Bidder must be a Louisiana licensed contractor who is licensed to perform the work as outlined in the

solicitation. The Bidder must be fully qualified under any State or local licensing law for Contractors in effect at the time and at the location of the work before submitting his bid. The Contractor shall be responsible for determining that all of his Sub-bidders or prospective Subcontractors are duly licensed in accordance with law.

- Bidder must be able to provide a project timeline for any work if requested by Delgado Community College
- If item(s) or services bid do not fully comply with specifications, including brand and/or product number or work, bidder must state in what respect the item(s)/services or work deviate. Failure to note exceptions on the bid form will not relieve the successful bidder from supplying the actual products or services requested.
- It shall be the sole responsibility of the Vendor to prove equivalency. Vendor shall submit with the bid all illustrations, descriptive literature, and specifications necessary to determine equivalency. Failure to do so may eliminate your bid from consideration. The decision of the College as to equivalency shall be final.
- If a vendor wishes to submit an alternate bid in addition to the brand/model requested, he or she may submit one (1) alternate bid. The alternate bid must be a separate submission, must be clearly marked as an alternate, and must include all applicable forms (i.e., jobsite visit). In addition, a separate, signed cover sheet must be submitted with the alternate.
- No addenda will be issued within a period of seventy-two (72) hours prior to the date set for the receipt of bids except an Addendum, if necessary, postponing the date of receipt of bids or cancelling the request for bids.
- The above quantities are estimated to be the amounts needed. In the event a greater or lesser quantity is needed, the right is reserved by the College to increase or decrease the amount at the unit price stated in the bid.
- In the event a greater quantity is needed, the right is reserved by the College to increase the amount, at the unit price stated in the bid, for three (3) months from the date of award.
- If the Vendor fails to make delivery within a satisfactory time as determined by the College, the College reserves the right to cancel the item and to purchase it elsewhere, charging the increase in price and cost of handling, if any, to the Vendor making the original unsatisfactory or late delivery.
- Discounts for less than 1% and for less than thirty (30) days will not be considered in making awards.
- It shall be specifically agreed and understood that the Bidders may attend the Bid opening. They shall, whenever any award is considered, furnish specific samples for examination upon request by the College. It shall also be specifically agreed and understood that the decision of the College shall be final.
- No information will be given out as to opinions concerning the ultimate outcome while consideration of the award is in progress.
- The college reserves the right to cancel this contract upon thirty (30) days written notice for failure of the Vendor to deliver on time, for delivery of unsatisfactory merchandise, or for any unsatisfactory performance by the Vendor as determined by the College.
- Successful bidder will be responsible for the unloading and placing of equipment and/or supplies in the location designated by the College.

- List of distributors: The Vendor signing the bid shall be designated as the Prime Vendor on any contract/agreement resulting from this bid. If additional Vendors are authorized to receive orders for items covered under this proposal, the Vendor must submit, with bid, a list of those additional authorized distributors.
- Final Clean-Up: Before this project is acceptable and complete, Vendor shall clean up and remove from the premises all debris resulting from his work, and shall see to it that all the work area is left in good order, clean, and materials properly installed.

INSURANCE:

Vendor compliance with the attached insurance and indemnification requirements and as specified in the Bid Specifications is mandatory. A completed copy of the **indemnification agreement** (*Attachment A*) must be submitted with the bid. Failure to do so will result in immediate disqualification of the bid.

Upon award, a certificate of insurance delineating Delgado Community College as the certificate holder with all endorsements noted must be submitted to the Purchasing Department. Certificates must be received within (10) business days from the notice of award. Failure to provide the above timely will cause the award to be rescinded and the Contract will be awarded to the next low Bidder.

Insurance must be in effect at all times for the duration of the Contract.

TERMINATION OF AGREEMENT:

- **Termination of this agreement for cause** – DCC may terminate this agreement for cause based upon the failure of Contractor to comply with the terms and/or conditions of the Agreement, or failure to fulfill its performance obligations pursuant to this agreement, provided that DCC shall give the Contractor written notice specifying the Contractor’s failure. If within thirty (30) days after receipt of such notice, the Contractor shall not have corrected such failure or, in the case of failure which cannot be corrected in thirty (30) days, have begun in good faith to correct such failure and thereafter proceeded diligently to complete such correction, then DCC may, at its option, place the Contractor in default and the Agreement shall terminate on the date specified in such notice.

The Contractor may exercise any rights available to it under Louisiana law to terminate for cause upon the failure of DCC to comply with the terms and conditions of this agreement, provided that the Contractor shall give DCC written notice specifying the DCC’s failure and a reasonable opportunity for DCC to cure the defect.

- **Termination for non-appropriation of funds** - The continuance of this contract is contingent upon the appropriation of funds to fulfill the requirements of the contract by the legislature. If the legislature fails to appropriate sufficient monies to provide for the continuation of the contract, or if such appropriation is reduced by the veto of the Governor or by any means provided in the appropriations act or Title 39 of the Louisiana Revised Statutes of 1950 to prevent the total appropriation for the year from exceeding revenues for that year, or for any other lawful purpose, and the effect of such reduction is to provide insufficient monies for the continuation of the contract, the contract shall terminate on the date of the beginning of the first fiscal year for which funds are not appropriated.

- **Termination for Convenience** - The College may terminate the Contract at any time by giving thirty (30) days written notice to the Contractor. The Contractor shall be entitled to payment for work performed (monthly charges to be prorated) to the extent work has been performed satisfactorily. If, for any reason, the Contractor desires to terminate the Contract, he may do so upon giving written notice of sixty (60) days to the College. Contractor shall perform all work satisfactorily as contracted until the determined termination date
- **Cancellation Conditions** - In any of the following cases, the College shall have the right to immediately cancel the contract agreement due to:
The interruption of operation in any of the contacted facilities or the College beyond its control; failure of the Contractor to maintain a satisfactory performance bond or adequate insurance coverage; wherever the contractor is guilty of misrepresentation; wherever the contract agreement was obtained by fraud, collusion, conspiracy, or other unlawful means, or the contract agreement conflicts with any statutory and constitutional provision of the State of Louisiana or the United States. In case of default by the Contractor, the College reserves the right to purchase any or all items or services in default on open market, charging the Contractor with any excessive costs. Until these excessive costs are paid to the College, the Contractor shall not do business with the College again.
- **Implementation of Termination** - The Contractor shall terminate all work under the Contract to the extent and on the date specified in the Notice of Termination or reduction of work and until such date shall, continue to perform all work required in the specification and be compensated for such work. In the event of termination or reduction in the scope of work by the College, the College shall pay the Contractor for all work satisfactorily performed up to the effective date of termination or reduction in the scope of work, in accordance with the prices included in Contractor's bid less all partial payments made on account prior to the effective date of termination or reduction in the scope of work. Upon termination as above, the Contract Administrator shall make final determination of the amount due the Contractor for work performed.

DISCRIMINATORY PRACTICES:

Delgado Community College of the State of Louisiana is an equal opportunity employer and looks to its contractors, subcontractors, vendors, and suppliers to take affirmative action to affect this commitment in its operations. Both the College and the bidder shall abide by the requirements of Title VII of the Civil Rights Act of 1964, and shall not discriminate against employees or applicants due to race, color, religion, sex, handicap or national origin. Furthermore, both parties shall take affirmative action to provide for positive posture in employing and upgrading persons without regard to race, color, religion, sex, handicap, or national origin, and shall take affirmative action as provided in the Vietnam Era Veteran's Readjustment Act of 1974. Both parties shall abide by the requirements of Title VI of the Civil Rights Act of 1964 and the Vocational Rehabilitation Act of 1974 to ensure that services are delivered without discrimination due to race, color national origin or handicap. Both parties shall comply with the requirements of the Americans with Disabilities Act of 1990 which bans discrimination in employment or in delivery of services on the basis of sexual orientation.

END OF SECTION IV

V. INSURANCE REQUIREMENTS FOR VENDORS

The Contractor/Vendor shall purchase and maintain for the duration of the contract/work insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor/Vendor, its agents, representatives, employees or subcontractors.

A. MINIMUM SCOPE AND LIMITS OF INSURANCE

1. Workers Compensation

Workers Compensation insurance shall be in compliance with the Workers Compensations law of the State of Louisiana. Employers Liability is included with a minimum limit of \$500,000 per accident/per disaster/per employee. If work is to be performed over water and involves maritime exposure, applicable LHWCA, Jones Act, or other maritime law coverage shall be included and the Employers Liability increased to a minimum of \$1,000,000.

2. Commercial General Liability

Commercial General Liability insurance, including Personal and Advertising Injury Liability, shall have a minimum limit per occurrence of \$1,000,000 and a minimum general aggregate of \$2,000,000. The Insurance Services office (ISO) Commercial General Liability occurrence coverage form CG 00 01 (current form approved for use in Louisiana), or equivalent, is to be used in the policy. Claims made form is unacceptable.

3. Automobile Liability

Automobile Liability Insurance shall have a minimum combined single limit per occurrence of \$1,000,000. ISO form number CA 00 01 (current form approved for use in Louisiana), or equivalent, is to be used in the policy. This insurance shall include third-party bodily injury and property damage liability for owned, hired and non-owned automobiles.

B. DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions must be declared to and accepted by the Agency. The Contractor/Vendor shall be responsible for all deductibles and self-insured retentions.

C. OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain the following provisions:

1. General Liability and Automobile Liability Coverage's
 - a. The Agency, its officers, agents, employees and volunteers shall be named as an additional insured as regards to negligence by the contractor/vendor. ISO Form CG 20 10 (current form approved for use on Louisiana), or equivalent, is to be used when applicable. The coverage shall contain no special limitations on the scope of protection to the Agency.
 - b. The Contractor's/Vendor's insurance shall be primary as respects to the Agency, its officers, agents, employees and volunteers. Any insurance or self-insurance maintained by the Agency shall be excess and non-contributory of the Contractor's insurance.
 - c. The Contractor's/Vendor's insurance shall apply separately to each insured against whom claim is made or suit brought, except with respect to the policy limits.

2. Workers Compensation and Employers Liability Coverage

The insurer shall agree to waive all rights of subrogation against the Agency, its officers, agents, employees and volunteers for losses arising from work performed by the Contractor for the Agency.

3. All Coverages

- a. Coverage/Vendor shall not be cancelled, suspended, or violated by either party (the Contractor/Vendor or the insurer) or reduced in coverage or in limits except after 30 days written notice has been given to the Agency. Ten- day written notice of cancellation is acceptable for non-payment of premium. Notifications shall comply with the standard cancellation provisions in the Contractor's/Vendor's policy.
- b. Neither the acceptance of the completed work nor the payment thereof shall release the Contractor/Vendor from the obligations of the insurance requirements or the indemnification agreement.
- c. The insurance companies issuing the policies shall have no recourse against the Agency for payment of premiums or for assessments under any form of the policies.
- d. Any failure of the Contractor/Vendor to comply with reporting provisions of the policy shall not affect coverage provided to the Agency, its officers, agents, employees and volunteers.

D. ACCEPTABILITY OF INSURERS

All required insurance shall be provided by a company or companies lawfully authorized to do business in the jurisdiction in which the Project is located. Insurance shall be placed with insurers with an A.M. Best's rating of **A-: VI or higher**. This rating requirement may be waived for workers compensations only.

If at any time an insurer issuing any such policy does not meet the minimum A.M Best rating, the Contractor/Vendor shall obtain a policy with an insurer that meets the A.M Best rating and shall submit another Certificate of Insurance as required in the contract.

E. VERIFICATION OF COVERAGE

Contractor/Vendor shall furnish the Agency with Certificates of Insurance reflecting proof of required coverage. The Certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The Certificates are to be received and approved by the Agency before work commences and upon any contract renewal thereafter.

In addition to the Certificates, Contractor/Vendor shall submit the declarations page and cancellation provision endorsement for each insurance policy. The Agency reserves the right to request complete certified copies of all required insurance policies at any time.

Upon failure of the Contractor/Vendor to furnish, deliver and maintain such insurance as above provided, this contract, at the election of the Agency, may be suspended, discontinued or terminated. Failure of the Contractor/Vendor to purchase and/or maintain any required insurance shall not relieve the Contractor/Vendor from any liability or indemnification under the contract.

F. SUBCONTRACTORS

Contractor/Vendor shall include all subcontractors and as insureds under its policies OR shall be responsible for verifying and maintaining the Certificates provided by each subcontractor. Subcontractors shall be subject to all of the requirements stated herein. The Agency reserves the right to request copies of subcontractor's Certificates at any time.

G. WORKERS COMPENSATION INDEMNITY

In the event the Contractor/Vendor is not required to provide or elects not to provide workers compensation coverage, the parties hereby agree that Contractor/Vendor, its owners, agents and employees will have no cause of action against, and it will not assert

a claim against the State of Louisiana, its departments, agencies, agents and employer, whether pursuant to the Louisiana Workers Compensation Act, or otherwise under any

H. INDEMNIFICATION/HOLD HARMLESS AGREEMENT

Contractor/Vendor agrees to protect, defend, indemnify, save and hold harmless, the State of Louisiana, all State Departments, Agencies, Boards and Commissions, its officers, agents servants, employees and volunteers, from and against any and all claims, damages, expenses, and liability arising out of injury or death to any person or the damage, loss or destruction of any property which may occur, or in any way grow out of, any act or omission of the Contractor/Vendor, its agents, servants, and employees, or any and all costs, expenses and/or attorney fees incurred by the Contractor/Vendor as a result of any claims, demands, suits or causes of action, except those claims, demands suits, or causes of action arising out of the negligence of the State of Louisiana, all State Departments, Agencies, Boards, Commissions, its officers, agents, servants, employees and volunteers.

Contractor/Vendor agrees to investigate, handle, respond to, provide defense for and defend any such claims, demands, suits, or causes of action at its sole expense and agrees to bear all other costs and expenses related thereto, even if the claims, demands, suits, or causes of action are groundless, false or fraudulent.

END OF SECTION V

Modular Basic Electricity Training System Plus



Model: 400-PAC

DAC Worldwide's Basic Electricity Training System Plus (400-PAC) examines basic AC and DC electrical principles. Learners will explore how electricity is used for power and control in various sectors, including industrial, commercial and residential applications. The training covers industry-relevant skills, such as installing, operating, and troubleshooting AC and DC electrical circuits in a variety of applications.

This basic electrical training system includes voltage regulators, resistors, capacitors, inductors, toggle switches, indicator lamps, and much more. Learners will use these components to study topics such as voltage measurement, resistor circuits, power supply filters, and troubleshooting. This system utilizes industry-grade components, providing durability to stand up to frequent use, and to aide learners in becoming better prepared for the tasks they will encounter on the job.

The package includes the #400 Basic Electricity Training System, the #410-001 Standard Patch Cord Set, the #600-102 Sweep/Function Generator, and a #400-113 Oscilloscope.

Practice Hands-On Electrical Skills for Various Applications

This Basic Electricity Training System features a durable, flexible system mount, including a steel modular panel and rack/frame system, instrumentation, and component mounting surface. It includes a built-in circuit breaker and internal power supply and transformer, which creates working voltages of 24VAC/24VDC, as well as individual application panel assemblies and solderless, breadboard panels. Learners will use these components to practice hands-on skills, such as operating a clipper circuit, calculating voltage in an AC circuit, operating the full-wave bridge rectifier, using a potentiometer, and troubleshooting a DC voltage using a voltmeter.

In addition, the training system comes with instructor fault switches, allowing students to practice real-time troubleshooting skills, as well as over-sized primary components, which improves durability and provides protection from over-current accidents.

Hands-On Exercises and Learning Activities Lead to Realistic Results

DAC Worldwide's Basic Electricity Training System also features exercises and learning activities that focus more on results and less on secondary academic background information. This comprehensive training system offers more than 40 hours of instruction in basic electrical principles, circuits, and components, including topics on terminology, circuit design, component examination and testing, and background theory. The integrated course includes 43 activities, all of which include background information on the topic, hands-on experiments, and related review questions.

Student Training Manual and Textbook

A copy of this course's Student Training Manual and Textbook are available with the training system. Sourced from the Exercises and Learning Activities, the Student Training Manual takes the technical content contained in the learning objectives, and combines it into one perfectly-bound book. The textbook, called *Electricity & Electronics*, presents clear objectives and performance standards for learners. If you would like to inquire about purchasing additional Student Training Manual or Textbooks for your program, please contact your local DAC Worldwide Representative for more information.

FEATURES & SPECIFICATIONS

- Modular panel and rack/frame system facilitating alternate module locations and allowing for system expansion in the future
- Each component panel assembly includes: a 1/8" aluminum panel face; epoxy silk-screened component nomenclature and symbols; riveted, 16-gauge, formed-steel enclosures; powder coating and instructor fault switches
- Provision for mounting of system on standard DAC mounting structures, or any standard 19" rack system
- On-board circuit breaker, internal power supply, and transformer, creating working voltages of 24VAC center tapped, or 24VDC
- Primary electrical components over-sized to improve durability and provide protection from over-current accidents
- Crating for shipment via motor freight

Package Includes:

- #400-000 - Basic Electricity Training System
- #410-001 - Digital Multimeter
- #600-102 - Sweep/Function Generator
- #400-113 - Oscilloscope

PRODUCT DIMENSIONS

DISCLAIMER: Product Dimensions are approximate. Shipping Dimensions and Weights are for directional use only and may change based on manufacturer variables. For the most accurate Shipping Dimensions and Weights, please contact the manufacturer.

- **Product Dimensions**

(L x W x H)

18 1/8in. x 14in. x 17 1/2in. (460 x 355 x 444 mm)

25 lbs. (12 kg) approximate

UTILITIES

110/220 VAC, 50/60 Hz

ACCESSORIES

- **Loose component kit including:** (2) bar magnets, (1) component storage magnetic reed switch, (1) nail, (1) spool of bell wire, (1) sealed box of iron filings, (1) D cell holder, (1) compass, (1) 6" acrylic rod, (1) rubbing cloth, (1) 6" wood dowel, (1) solderless breadboard (2" x 3"), (2) NPN transistors, (2) PNP Transistors, and (10) assorted resistors
- **Banana plug patch cords**
- **Use/Activity Guide**
- **Textbook, *Electricity & Electronics, 10th Edition (Gerrish, Dugger, & Roberts)***

OPTIONS

- #400-500 - Use/Activity Guide (additional copies)

COURSE CONTENT

Topics include:

- Introduction to the DAC #400 Electricity Fundamentals Trainer
- Use of Digital Multimeter
- Calculation and Measurement of Voltages in Series and Parallel
- Identification of Resistors Values Using the Resistor Color Code
- Calculation and Measurement of Resistance in Series
- Calculation and Measurement of Resistance in Parallel
- Calculation and Measurement of Resistance in Series-Parallel
- Calculation and Measurement of Voltages, Current, and Power in a Series DC Circuit
- Calculation and Measurement of Voltages, Currents, and Power in a Parallel DC Circuit
- Calculation and Measurement of Voltages, Currents, and Power in a Series-Parallel DC Circuit
- Use of a Potentiometer to Vary Circuit Voltage
- Use of a Rheostat to Vary circuit Current
- Troubleshooting a Series DC Circuit Using a Voltmeter
- Troubleshooting a Series-Parallel Circuit Using a Voltmeter
- Observation of Magnetic Lines of Force
- Observation of Induced Magnetism

- Use of the Function Generator
- Observation of the Voltage and Current in Inductive DC Circuits
- Determination and Observation of the Time Constant of an Inductive DC Circuit
- Observation of the Voltage and Current in Capacitive DC Circuits
- Determination and Observation of the Time Constant of Capacitive DC Circuits
- Calculation and Measurement of the AC Parameters
- Observation of the Voltage and Current in Resistive AC Circuits
- Observation of the Voltage and Current in AC Circuits with Resistance and Inductance
- Observation of the Voltage and Current in AC Circuits with Resistance and Capacitive
- Calculation and Measurement of the Voltages, Currents, and Power in Series RLC AC Circuits
- Calculation and Measurement of the Voltages, Currents, and Power in Parallel RLC AC Circuits
- Calculation and Measurement of the Voltages, Currents, and Power in Series-Parallel RLC AC Circuits
- Use of RC Circuits in Pulse Shaping
- Design and Operation of Series and Parallel Resonant Circuits
- Determination of the Turns-Ratio of a Transformer
- Plotting the Characteristic Curve of a Diode
- Operation of a Clipper Circuit
- Operation of a DC Resistor Circuit
- Operation of an Amplitude Discriminator Circuit
- Operation of a Half-Wave Rectifier
- Operation of a Full-Wave Rectifier
- Operation of the Full-Wave bridge Rectifier
- Use of the Power Supply Filter
- Observation and Calculation of Voltage Regulation
- Operation of the Voltage Doubler Circuit

****Must be equivalent of exceed Model 400-PAC ****

PORTABLE AC DRIVES TROUBLESHOOTING LEARNING SYSTEM 990-DRV1F

This learning system shall be designed to teach fundamentals of configuring and operating an AC Drive. It shall teach both basic and advanced applications using components like the Rockwell PowerFlex 4 variable frequency AC drive and a 3-phase AC motor throughout the curriculum. This product also features Fault Pro, Amatrol's electronic fault insertion program, that allows learners to practice fault troubleshooting skills. It shall include a mobile carrying case, workstation mounting panel, lead set, lockout/tagout, student curriculum, installation guide, and teacher's guide. The minimum requirements include:

Workstation

- (1) Mobile Carrying Case: 28.8" W x 20.1" H x 14.8" D
- (1) Workstation Mounted Panel

AC Drive

Rockwell PowerFlex 4

AC Motor

3-Phase AC Motor
Target Wheel Cover Assembly
Motor Operation Target Wheel

Potentiometer

Voltmeter (LED type)

Pushbuttons

- (1) Green
- (1) Red
- (1) Black
- (1) Red Mushroom E-Stop Pushbutton

Forward/Reverse Selector Switch

PLC/Manual Selector Switch

Indicator Lamps (2)

Lockout/Tagout

- (1) Padlock
- (1) Safety Lockout & Hasp

On/Off Switch with Circuit Breaker

Emergency Stop Circuit

Input/Output

Drive Input/Output Connection Breadboard
Programmable Controller Discrete IO Interface
Programmable Controller Analog IO Interface

Digital Tachometer Readout Display

Tachometer

Lead Set

(8) 12" White
(1) 12" Yellow
(9) 12" Blue

Power Cord with Plug-In Connector

FaultPro Computer-Based Troubleshooting Software

FaultPro, a Windows-based software program, shall be supplied and is designed to provide an on-line interface for student troubleshooting and data-base record keeping of student responses. This software package shall give teachers the ability to create custom templates for each troubleshooting exercise so students are presented with an appropriated troubleshooting experience for each lab activity. Faults can be added or deleted to each exercise as needed.

The software shall feature online student control of the troubleshooting activity. This will allow students to set up and perform their own troubleshooting exercises for both practice and testing sessions. The program shall allow the student to initiate faults by entering a specific fault or initiating an automatic mode where the computer automatically selects a fault.

The student shall be able to enter the solution on the computer and the computer will indicate if the solution is correct, track the time spent, and number of incorrect/correct solutions.

Student responses are automatically recorded in the student database and scored according to a rubric which can be customized by the teacher. The data recorded includes: faults mastered, total time spent on each fault, and the number of tries needed to master each fault. Class statistics can also be generated so that teachers can analyze the curriculum and student skills.

Reports shall be able to be generated by student or class to show tasks accomplished and grade.

Student Curriculum

The curriculum shall consist of one (1) course of four (4) interactive multimedia modules. The student curriculum shall contain at least 22 industry skills covering basic and advanced applications using components like a Rockwell PowerFlex 4 variable frequency AC drive and a 3-phase AC motor. Topics shall include: Introduction to Variable Frequency AC Drives, Two and Three-Wire Motor Control, Jogging

Control, Fault Diagnostics and Troubleshooting, Variable Frequency AC Drives – Speed and Torque Control, Acceleration, Deceleration, and Braking.

The student curriculum supplied shall be designed in a skill-based format that focuses on teaching industry-relevant tasks. This curriculum shall be designed for use in both self-directed student learning and group instruction formats. The objectives shall be accomplished by organizing the learning material into a series of multimedia modules, which are further subdivided into two or more segments per module. All learning materials needed shall be contained in the modules including text material, laboratory equipment activities, and any multimedia directions. No external text sources shall be required. The specific cognitive skills taught by each text passage shall be identified next to the passage. Each lab activity shall be identified by the industrial task taught. All activities shall be highly detailed with step-by-step instructions to facilitate a self-directed learning environment. A combination of step-by-step enabling activities and creative, problem-solving activities shall be provided. A self-review of five to ten questions shall be provided after each segment.

Instructor's Guide

The instructor's guide shall contain student data sheets, data sheet solutions, self-review answers, quizzes, quiz answers, student skill record sheets, and assessment directions. The student data sheets shall be designed with data collection blanks to permit students to record data without consuming the learning activity packets. A quiz shall be provided for each packet. A question shall be provided in each quiz for each cognitive objective taught and correlated as such. All tasks listed in the packet shall be listed on personalized student record sheets. Detailed instructions and any supplemental material shall be provided for the teacher to perform live assessment of each student.

Certification Alignment

The 990-DRV1F aligns with the SACA C-203 AC Variable Frequency Drive Systems 1 credential.

****Must be equivalent of exceed Model 990-DRV1F ****