



Republic of the Philippines
CAVITE STATE UNIVERSITY
Don Severino de las Alas Campus
Indang, Cavite, Philippines
☎ (046) 889-6373
www.cvsu.edu.ph

INVITATION TO SUBMIT QUOTATION
Supply, Delivery and Installation of AC Machine Trainer for CEIT - DCEEE

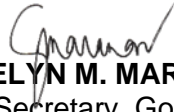
1. The Cavite State University (CvSU) invites interested firms/supplier to submit quotation for the project “**Supply, Delivery and Installation of AC Machine Trainer for CEIT - DCEEE**” with an Approved Budget for the Contract (ABC) of **Nine Hundred Seventy Thousand Pesos Only (PhP 970,000.00)**. Quotation received in excess of the ABC shall be automatically rejected at the opening.

Item No.	Unit	Description	Quantity	Unit Cost	Total Cost
1.	Lot	AC Machine Trainer with 5 Motors <ul style="list-style-type: none">● Power Supply Module (Three Phase Input)● Digital Power Analysis Meter Module● AC Drive Module 1 Phase (10-220 VAC)● DC Drive Module (Thyristorized 0-230VDC)● Variable DC Voltage Module (0-230VDC)● Variable AC Voltage Module Single Phase Output● Single Phase Resistive Lamp Load Module● Three Phase Resistive Lamp Load Module● DOL Starter Module● Pole Changing Controller Module (Please see attached specification)	1	970,000.00	970,000.00
TOTAL AMOUNT					970,000.00

2. Delivery Period: ____ calendar days from the receipt of P.O.
3. Price quotations must be valid for a period of sixty (60) calendar days from date of submission and shall include all taxes, duties and/or levies payable. Bidders shall also indicate the brand and model of the items being offered.
4. Warranty shall be for a period of six (6) months for supplies and materials. Warranty for equipment must not be less than one (1) year from the date of acceptance and shall be accompanied with Warranty Certificate.
5. The quotation must be submitted to the Procurement Office through mail, fax or email at the contact details listed below **on or before 5:00 PM of July 2, 2024**.

Address : Procurement Office, Administration Building
Cavite State University
Indang, Cavite
E-mail : procurementoffice@cvsu.edu.ph / rfqmain@cvsu.edu.ph
Telefax : (046) 889-6373

6. The CvSU reserves the right to reject any or all quotations and/or proposals and waive any formalities/informalities therein and to accept such bids it may consider as most advantageous to the agency and to the government. CvSU neither assumes any obligation for whatsoever losses that may be incurred in the preparation of bids, nor does it guarantee that an award will be made.



ROSELYN M. MARANAN

BAC Secretary, Goods and Consulting Services

AC Machine Trainer with 5 Motors

Specifications :

TECHNICAL SPECIFICATIONS:

- Power Supply Module (Three Phase Input)

Module 1

- 4 Pole MCB of 415V, 16A
- 3Phase Power Indication with R-Y-B Indicator
- Inbuilt Contactor 230V,50Hz/11VA Coil
- Emergency Stop for Emergency Conditions
- Digital Power Analysis Meter Module
- Provision to R-Y-B-N Output Distribution Points
- AC Drive Module 1 Phase(10-220 VAC)

Module: 2

- ✓ Single to Three Phase AC Drive
- ✓ IGBT Controlled AC Drive panel
- ✓ 1) Input voltage: 230 VAC. 50Hz
- ✓ 2) Output voltage: 3 phase 200 to 230 VAC
- ✓ 3) Range (Frequency Control): 0.1 Hz to 100 (400) Hz
- ✓ 4) Control Mode: Sine Wave PWM
- ✓ 5) Capacity:1HP (2HP optional)
- ✓ 6) With Reverse And Forward Direction
- ✓ 7) Mech: single width for 1/2 HP & double length for 2 HP
- DC Drive Module (Thyristorized 0-230 VDC)

Module-54

- ✓ SCR ACTUATOR (Variable DC Drive)

MODULE

- ✓ Full Bridge SCR Based 0-195V, 3A Cosine firing with Linear Characteristics
- ✓ Support Signal Conditioning Circuit for Speed, Torque in Kg. weight to output 0-2.5VDC.
- ✓ 2Nos. of these supplies required for DC Armature and DC Motor field.
- ✓ Digital Ammeter (DC For Shunt Motor for Field Current)
- Variable DC Voltage Module (0-230VDC)

Module: EMT-20

- ✓ DC Power Supply 0-230V,4A
- ✓ Controlled through 4A Auto Transformer
- Variable AC Voltage Module Single Phase Output
- ✓ AC Power Supply 0-230V,4A
- ✓ Controlled through 4A Auto Transformer
- Single Phase Resistive Lamp Load Module

Module:

- ✓ Single Phase Lamp Load 3 Bulbs x200W
- ✓ Switched Controlled
- ✓ Output through 4mm Shrouded Sockets

Module: EMT-4

- ✓ Bidirectional Multifunction
- ✓ 3 phase 3/4 wire, 415VAC, CT Input 5A
- ✓ LCD/LED display, Aux. supply 230V, 45-65Hz,5W
- ✓ Measure V. I., Hz, Pf, KVA, KW, KWH
- ✓ Provision to Operate meter on 230V AC

ELECTRICAL LAB INSTRUMENTS

- Three Phase Resistive Lamp Load Module

Module: EMT-10

- Three Phase Lamp Load 6 Bulbs x200W
- Switched Controlled
- Output through 4mm Shrouded Sockets
- DOL Starter Module

Module:

- Automatic DOL Starter With Connections Brought Out on the Panel
- R-Y-B-N for Input
- R-Y-B-N for Output
- Pole Changing Controller Module

Module:

- Pole Changing Controller With Connections Brought Out on the Panel
- R-Y-B-N for Input
- R-Y-B-N for Output

Power Supplies:

- DC Power Supply 0-230V AT 2A (Field)
- AC-DC Inbuilt Power Supply (0-230V,4A)
- AC-DC External Power Supply (0-230V,10A)
- Operated on Mains power 415V, 50Hz +10%

Digital/Analog Meters:

- Digital AC Voltmeter 2Nos. (0-300V AC)
- Digital DC Voltmeter 1Nos.(0-300VDC)
- Digital AC Ammeter 2Nos.(0-10A AC)
- Digital DC Ammeter 1Nos. (0-10A DC)
- Multi Function Meter 1Nos.

SALIENT FEATURES:

- Front panel built with high class insulated Glass Epoxy sheet with Sticker well printed circuits and symbols.
- The trainer is housed in Modular Based Rack Type Aluminum Extruded Metal cabinet.
- Detailed Instruction manual.
- Patch Cords 4mm (Heavy Duty-Safety Protected)
- High Voltage Test Points are Provided With 4mm Safety Sockets
- The trainer is housed in Metal cabinet.
- Protection with Emergency Stop.
- Short Circuit protection with the MCB.
- Size of the trainer set 48"x32" (Front View) and Complete Dimensions (52"x42")

List of Accessories Provided with Machine Trainer

1. AC MACHINE TRAINER CONTROL PANEL
2. 3 PHASE AUTO TRANSFORMER (VOLTAGE CONTROL)
3. AC-DC Power Supply (0-230V,5A)

4. AC MACHINES

- Three Phase Squirrel Cage Induction Motor
- Single Phase Induction Motor Capacitor Start
- AC-DC Universal Motor
- Slip Ring Motor
- DC Shunt Motor Coupled With AC Alternator

PACKING LIST:

ELECTRICAL LAB INSTRUMENTS

1. Induction Motor (3 Phase)

- Capacity : 1/2HP
- Cage : Steel Body
- RPM: 1500 Approx.
- Shaft : Single
- Current: 4 Amps Approx.
- Winding : Stator winding,
- Input Terminal : 3
- Termination: 4mm Safety Sockets
- Mounting : : Foot Mounted arrangement
- Power requirement : 415-440V AC , 50Hz, 3 Phase
- Motor is mounted on Loading arrangement consist of 2 dial type balance and a belt pulley arrangement.

2. AC Slip-Ring Induction Motor

- Capacity : 1/2HP
- Cage : Steel Body
- RPM : 1500 Approx.
- Shaft : Single,
- Current : 2 Amp Approx.
- Input Terminal : R1, R2, R3 and S1, S2, S3
- Power requirement : 415~440V AC , 50Hz, 3 Phase

3. SINGLE PHASE CAPACITOR START Induction Motor (1 Phase)

- Capacity : 1/2HP
- Cage : Steel Body
- RPM: 1500 Approx.
- Shaft : Single
- Current: 4 Amps Approx.
- Winding : Stator winding,
- Termination: 4mm Safety Sockets
- Mounting : : Foot Mounted arrangement
- Power requirement : 200-220V AC , 50/60Hz, 1 Phase

4. Universal Motor (1 Phase)

- Capacity : 1/2HP
- Cage : Steel Body
- RPM: 3000 Approx.
- Shaft : Single
- Current: 4 Amps Approx.
- Winding : Stator winding,

- Input Terminal : 2
- Mounting : : Foot Mounted arrangement
- Power requirement : 200-220V AC/DC , 50/60Hz, 1 Phase

ELECTRICAL LAB INSTRUMENTS

5. DC SHUNT MOTOR COUPLED WITH AC ALTERNATOR

MOTOR RATING:

- Dc Shunt Motor 1Hp Coupled With Ac Alternator 350VA

MOTOR SPECIFICATIONS:

- DC Shunt Motor 1.5HP
- Operating Voltage:230V
- Type: DC
- RPM: 1440 RPM.
- Wattage: 0.75W
- Terminations: 4 BTI 15 Terminals
- Shaft: Single
- Frame:132
- B3
- SPDP
- 1P23
- 1C01
- Solid Yoke Extension
- Fitted on Metal Base.

GENERATOR SPECIFICATIONS:

- AC Alternator 350W
- Operating Voltage:415V
- Type: AC
- RPM: 1440 RPM.
- Wattage: 350W
- Terminations: 5 BTI 15 Terminals
- Shaft: Single
- Frame:132
- B3
- SPDP
- 1P23
- 1C01
- Solid Yoke Extension
- Fitted on Metal Base.
- ROTOR RESISTANCE STARTER (3 PHASE)

Rotor Resistance Starter is a kind of full-line voltage providing equipment that is applied against several hydraulic motor terminals.

Features:

- Three phase starter
- Resistance Type
- High horse power motor

Specifications:

- Material: Copper

- Ampere: 5
 - Colour: Grey
- Application: Used for motor starter

ELECTRICAL LAB INSTRUMENTS

AC-DC POWER SUPPLY

• TECHNICAL SPECIFICATIONS:

Power Supplies:

- DC Power Supply 230V DC, 5A
- AC Power Supply 230V AC, 5A
- Operated on Mains power 230V, 50/60Hz +10%

Analog Meters:

- Voltmeter 250V (1Nos)
- Ammeter 5A (1Nos.)
- Technical specifications:

• Output voltage:

- 0-230VDC (ISOLATED)
- 0-230VAC (ISOLATED)

• Output current:

0-5ADC

0-5AAC

SALIENT FEATURES:

- Instruction manual.
- Connections are brought out through 4mm Colored BTI-15 Terminals.
- Power Supply is housed in Metal cabinet.
- Size of Power Supply is Approx 18"x12"
- Short Circuit Protection Through MC

THREE PHASE AUTO TRANSFORMER

• TECHNICAL SPECIFICATIONS:

Power Supplies:

- AC Power Supply 0-415V AT6A
- Operated on Mains power 415, 50/60Hz +10%

SALIENT FEATURES:

- Front panel built with high class insulated Bakelite sheet with Sticker well printed.
- Instruction manual.
- Winding Auto Transformer is Copper Wound.
- High Voltage Test Points are Provided With 4mm Safety Sockets/BTI-15 Terminals
- The trainer is housed in Metal cabinet.
- Short Circuit protection with the Fuse.
- Wheels are provided to move easily.
- Approx Weight of the Unit will be nearly 25Kgms.
- Size of the trainer set Approx 20"x12"

DIGITAL TACHOMETER NON CONTACT TYPE

Features:

- Speed Measure Range: 2.5 to 999.9 1000 to 99999; Resolution 0.1RPM/1RPM; Laser or photoelectric measure range 5 centimeter to 60

centimeter; Express Function: Display 5 digital LCD display the subtitles
10 meter; Maximum or minimum last data refer; Auto power off

- Standard Accessory: User's manual, gift box, portable paper boxes,
rubber contacts round
- Battery type AA1.5V×4