

DEPARTMENT OF ELECTRICAL ENGINEERING  
INDIAN INSTITUTE OF ENGINEERING SCIENCE AND TECHNOLOGY,  
SHIBPUR, HOWRAH-711 103.

No. 255(R)/2022/EE-3/21/(KM-M/C)  
Dated: 22/6/2022

From : The Head of the Department,  
Electrical Engineering,  
IEST, Shibpur, Howrah-711 103

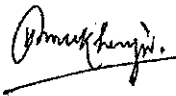
To : Enlisted vendors of the institute and other interested parties/ For Website Tender.

Dear Sir(s),

Sealed techno-commercial quotations mentioning technical specifications, validity, delivery date, price, warranty etc. are invited for supply of the following item(s) within 7 days from the date of publication of this notice in the institute website. The quotation should include 5% GST only as per institute rule, delivery charges, entry tax if any, etc. and should be addressed to the Head, Department of Electrical Engineering, Indian Institute of Engineering Science and Technology, Shibpur and should mention a firm delivery period. Preferences will be given to the suppliers who can supply ex-stock.

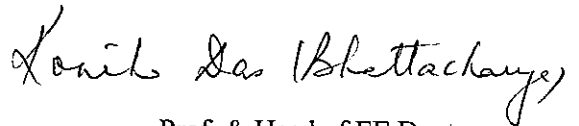
Any clarifications regarding specifications only may be obtained sending an e-mail with tender reference to [kmukherjee.ee@faculty.iests.ac.in](mailto:kmukherjee.ee@faculty.iests.ac.in) within 5 days after publication of the tender advertisement in the institute website.

The vendors, who are not enlisted in the Institute register, should submit the copies of their valid Trade License, PAN, latest Income Tax / Sales Tax Statement /Return, SSI/MSME certificate, GST certificate, if any etc. and any other commercial credentials. The institute shall provide the certificate for concessional GST rate (5%) along with the purchase order.



Signature of the indenting Officer/  
Concerned Faculty Member

Yours faithfully,



Prof. & Head of EE Dept.  
IEST, Shibpur, Howrah – 711 103

Purchase of various instruments for Electrical Machines laboratory, EE Dept., IEST Shibpur:

**Item 1:** Rhesostats as per following specifications:

- (a) Variable resistance  $25\Omega$ , 5A continuous, single tube, open, carbon brush contact, hexagonal porcelain type, Toshniwal/equivalent reputed make - 3 no.s
- (b) Variable resistance  $2\Omega$ , 10A continuous, single tube, open carbon brush contact, hexagonal porcelain type, Toshniwal/equivalent reputed make - 2 no.s

**Detailed desired specifications/requirement:**

The above should be rheostats and should follow the specifications given below:

- (i) 25 ohms, 5A continuous rating for item (a); 2 ohms, 11A continuous (at least) for item (b)
- (ii) Resistance wire should be wound on a SINGLE hexagonal steel tube, vitreous enamelled
- (iii) Wound tube should be fitted in two end castings with mounting holes, duly insulated with micanite cups.
- (iv) Brush should be of Copper graphite to provide lubrication and prevent wear and tear of wire.
- (v) Heat resistant compression springs to be used to ensure firm contact of Brush with the resistance winding.
- (vi) Winding should be covered with a perforated steel sheet enclosure with only the Slider Knob & two Insulated Banana plug Terminals accessible externally from all sides, except bottom, to ensure that the operator cannot come in contact with the slider bar/ winding to avoid shock hazard.
- (vii) The Rheostat should meet the requirements of IS:9051 in respect to
  - (a) Tolerance on resistance value : + 20% to -5%
  - (b) H.T. Test : 2kV for 1 minute
  - (c) Temperature rise : 375°C (mounted vertically)
  - (d) Maximum working voltage : 500 V
  - (e) Ambient room Temperature : 0 - 45°C
- (viii) Ratings in Amperes & ohms to be provided on a duly marked Nameplate affixed with Rivets to the Rheostat

Manufacturer of the rheostat should be reputed, who

- (a) have proved past experience of supplying to Government Educational Institutions / Public Sector Companies in the past 5 years as follows: a) One order of Rs 2.4 Lacs OR b) Two orders of Rs 2.0 Lacs OR c) Three orders of Rs 1.6 Lacs. **(Documents in support of this should be submitted with offer.)**
- (b) have an in-house NABL accredited Electrotechnical Laboratory with Traceable capabilities of measuring Resistance.
- (c) Manufacturer's test certificates have to be provided during supply of items.

**Warranty requirements: Minimum 1 year.**

*Techno-commercial evaluation will be made considering all the instruments of item-1 as a single combined group. The vendor, who will satisfy the technical requirements of all the sub-items and quotes the minimum total price for all the sub-items under (a), (b) and (c) of item-1 as a group will be considered as the lowest bidder. Quantity is representative and will be finalized based on funds available.*

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**Item 2:** Dry type transformers – 1 lot (containing 2 numbers) with the following specifications:

3-phase, 2 kVA (continuous), 50 Hz, Dyn11, 415V(L-L)/120V(L-L), Class F insulation, dry type, suitable for ambient temperature of 45 deg C maximum, AN cooling, with fixed rigid line and neutral terminals brought out and terminated on a Bakelite plate with terminal marking and rating plate, rugged wheel mounted, suitable for indoor use inside a laboratory environment, as per relevant IS. Full load voltage regulation at 0.8 pf lagging load should be below 7%.

Manufacturer's routine test certificate should be provided during supply of equipment. Power frequency HV test and temperature rise test will be performed by customer at his premises after supply of equipment and will be accepted based on test result performance.

**Notes:**

**(i) Make should be reputed**

**(ii) Manufacturer should have at least ISO 9000 series certification.**

*Techno-commercial evaluation will be made considering all the instruments of item-2 as another single group. The vendor, who will satisfy the technical requirements of item-2 as a group will be considered as the lowest bidder. Quantity is representative and will be finalized based on funds available.*

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