

**MAHARSHI DAYANAND UNIVERSITY ROHTAK**  
**NOTICE INVITING TENDER**

Sealed tenders are invited on behalf of the Registrar, M. D. University, Rohtak from the reputed manufacturer/authorized dealers/dealers for supplying of following material.

Sr. No.	Description	Approximate amount (Rs.)	Earnest money (Rs.)	Cost of tender form (Rs.)	Last date of sale of tender form	Last date of receipt of tender	Time limit
1.	Purchase of 200 KVA Out door transformer	12.00 lacs	24,000/-	1000/-	02.12.2010 (upto 1.00 PM)	02.12.2010 (Upto 3.00 P.M.)	20 days

**CONDITIONS**

1. D.N.I.T. and other terms and conditions can be seen in the office of undersigned on any working day during office hours.
2. The tenders will be opened on 02.12.2010 at 3.30 p.m. in the office of the Registrar, MDU, Rohtak in the presence of tenderers or their authorized representative who may like to be present at that time.
3. The earnest money should be in the shape of demand draft/deposit at call receipt on scheduled bank pledged to Executive Engineer, MDU, Rohtak payable at Rohtak.
4. The Engineer-in-charge shall have the right to reject any/all the tenders without cognizance reason.
5. In case tendering day happens to be a holiday, the tenders will be received / opened on next working day at the same time.
6. Rates be quoted F.O.R. Engineering Cell Store.
7. Notice inviting tender can be seen at web site [WWW.mdurohtak.com](http://WWW.mdurohtak.com)
8. The rates should be quoted strictly for the Makes mentioned in the DNIT.
9. All charges payable by the University should clearly be stated.
10. The tender received without earnest money, or after the due date, shall not be entertained.
11. Supplies shall be executed within the time specified in the supply order which may be extended by the XEN on the application of the supplier explaining reasons/circumstances due to which time limit could not be adhered to. In the event of the supplier failing to supply the material within time, he shall be liable to pay as compensation an amount equal to one percent or such small amount as the Registrar may decide on the said amount of the contract, for every day that the quantity remains incomplete, provided that the entire amount of compensation shall not exceed 10% of the total amount of contract. An appeal against these orders shall, however, lie with the Vice-Chancellor whose decision shall be final.

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12. In case, the agency/manufacture backs out of his contract, the earnest money deposited by him shall be forfeited besides any other action as may be considered necessary by the Vice-Chancellor.
13. The quantity of material/supplies shall be subject to increase or decrease on the tendered rates. The contractor/supplier shall not be entitled for any claim due to increase/decrease in quantities of material.
14. The acceptance of goods is subject to the approval of the Inspection Committee.
15. The rates accepted by the University shall be applicable upto 90 days and the supplier shall have to make supply during the period as and when required.
16. If the rates are approved by the DGS&D and other Central/State Agency, the same must be quoted and the copy of the rate contract be attached.
17. All disputes subject to Rohtak jurisdiction.

Executive Engineer

Endst. no. EE/2010/ 5155-95

Dated: 03 .11 .2010

A copy of the above is forwarded to the following for information and necessary action:

1. Superintending Engineer, PWD B&R Circle, Rohtak
2. Executive Engineer, PWD B&R (Medical College), Rohtak
3. Executive Engineer, KUK / HAU, Hisar / GJU, Hisar/ CDLU, Sirsa
4. Secretary to Vice-Chancellor (for kind information of Vice-Chancellor), MDUR
5. P.A. to Registrar (for kind information of Registrar),MDU, Rohtak
6. SDE(C-I, II, III) / SDE (E-I, II) / SDE (PH) / SDE (Horti.-I, II), MDU, Rohtak
7. Divisional Accountant / H.D.M., Engineering Cell, MDU, Rohtak
8. Notice Board
9. Contractor/Agency/Society:\_\_\_\_\_

Executive Engineer

Detail for the work "Purchase of 200 KVA out door transformer, MDU, Rohtak"

App. Amt. Rs. 12,00,000/-

Time Limit: 15 days

Sr. No. / HSR	Qty.	Description	Rate (Rs.)	Unit
I/N.S.	4 Nos.	<p>Supply of Kirloskar/Crompton Greaves make 200 KVA 11/0.433 KV out door step down transformer 3 phase 50 HZ (tapping range <math>\pm 5\%</math> in steps of 2.5% each) copper double wound transformer with first filling of oil conforming to ISI and with H.T. bushing and L.T. bushing complete in all respect.</p> <p>Accessories(to be supplied along with transformer):</p> <ol style="list-style-type: none"> <li>1. Name, Rating &amp; diagram plate = 1 no.</li> <li>2. Off circuit tap changing switch if not opted for OLTC = 1 no.</li> <li>3. Earthing terminals = 2 nos.</li> <li>4. Lifting lugs = 2 nos.</li> <li>5. Oil level indicator (flush tube) = 1 no.</li> <li>6. Oil drain valve with plug = 1 no.</li> <li>7. Oil filter valve with plug(on and above 160 KVA) = 1 no.</li> <li>8. Conservator with oil filling hole = 1 no.</li> <li>9. Thermometer pocket = 1 no.</li> <li>10. 4" dial type thermometer stem type and with MRP (if OTI not opted) = 1 no.</li> <li>11. Air release plug = 1 no.</li> <li>12. Silicagel breather = 1 no.</li> <li>13. Removable inspection opening (on and above 315 KVA) = 1 no.</li> <li>14. Explosion vent (if PRV not opted) = 1 no.</li> <li>15. Bidirectional C.I. rollers (on and above 1000 KVA) otherwise unidirectional (on and above 160 KVA) = 4 nos.</li> <li>16. Arching horn set (only for HV bore bushing type transformer) = 3 nos.</li> </ol>	Rate to be quoted by the agency/manufacturer	Each

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**Transformers Technical Specifications:**

<b><u>PARAMETERS</u></b>	<b><u>SPECIFICATIONS</u></b>
<ol style="list-style-type: none"> <li>1. Service</li> <li>2. KVA Rating               <ol style="list-style-type: none"> <li>a) HV Winding</li> <li>b) LV Winding</li> </ol> </li> <li>3. Rated Voltage: HV/LV Winding</li> <li>4. Rated Frequency</li> <li>5. Number of phases</li> <li>6. Connections HV/LV Winding</li> <li>7. Connection Symbol</li> <li>8. Tappings:               <ol style="list-style-type: none"> <li>a) Range</li> <li>b) No. of steps</li> <li>c) For high voltage variation or low voltage variation</li> </ol> </li> <li>9. <ol style="list-style-type: none"> <li>a) Reference ambient air temperature</li> <li>b) Maximum ambient air temperature</li> </ol> </li> <li>10. Type of cooling</li> <li>11. Maximum Temperature Rise               <ol style="list-style-type: none"> <li>a) Top oil (by Thermometer)</li> <li>b) Winding (By Resistance)</li> </ol> </li> <li>12. Component Losses               <ol style="list-style-type: none"> <li>a) No load losses at rated voltage and at rated frequency</li> <li>b) Load losses at rated current at principle tapping and at 75°C</li> <li>c) Total losses</li> </ol> </li> <li>13. Percentage impedance at 75°C at rated current and for the principle tapping (HV-LV)</li> <li>14. Reactance at rated current and rated frequency(HV-LV)</li> <li>15. Percentage No Load current at rated voltage and rated frequency</li> <li>16. Input to cooling plant</li> <li>17. Insulation level:</li> </ol>	<p>Outdoor type</p> <p>200 KVA (CU.Wound) 11/0.433 KV 50 Hz 3 Delta/Star Dyn 11</p> <p>±2.5% 5, including the Principle Tapping For High Voltage Variation</p> <p>75°C 50°C ONAN</p> <p>50°C 55°C</p> <p>550W 3300W 3850W</p> <p>4.5% 4.186%</p> <p>2.0%</p> <p>The Radiators are directly mounted on the transformer tank body</p>

A) Separate source power frequency voltage withstand	28.0 KV
I. HV Winding	3.0KV
II. LV Winding	
B) Induced over voltage withstand:	22 KV
I. HV Winding	866 V applied Across LV terminals
II. LV Winding	
C) Full wave lightning impulse withstand voltage:	75 KVP
I. HV Winding	NOT APPLICABLE
II. LV Winding	
18. A Efficiency at 75° and at U.P.F.	98.11%
a) At 100% full load	98.42%
b) At 75% full load	98.64%
c) At 50% full load	
B. Efficiency at 75° at 0.8 P.F.	87.65%
a) At 100% full load	98.03%
b) At 75% full load	98.31%
c) At 50% full load	40.82%
19. a) The load at which maximum efficiency occurs	98.67%
b) The value of maximum efficiency	
20. Regulation at full load at 75°	1.738%
a) At unity power factor	3.859%
b) At 0.8 power factor	Off circuit tap switch, provided on the HV winding, three phase, externally, hand operated, having tap position marking on the dial and capable to be locked in any particular tap position.
21. In case of off circuit voltage variation state whether: Off circuit tap switch, or off circuit links	
22. Terminal arrangement:	
a) High Voltage	
b) Low voltage	
c) Neutral	Outdoor Type, LV Bare Bushing, HV Bare Bushing
23. Approximate Masses:	
a) Core & winding (Assembly)	460 kg.
b) Tank with fittings & accessories	225 kg.
c) Oil weight	205 kg.
d) Total mass	890 kg.

24. Approximate quantity of oil required for first filling	240 liters
25. Approximate overall dimensions (LxBxH)	1150x1150x1450 (in mm)
26. Reference standard	IS:2026(Part I to Part IV), IS: 6600, IS: 3347, IS:2099, IS: 335 etc. and also conforming to the purchaser's specification, if any.

**Remarks:**

1. The above quoted electrical performance data are subject to tolerance as per ISS.
2. The weight, quantity and dimension figures are approximate and subject to  $\pm 10\%$  tolerance.