



TECHNICAL SPECIFICATION FOR AC VARIABLE TRANSFORMER SET

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- 1.0 **Equipment** : 37.5 kVA, 0-500 V, 75 A, AC Variable Transformer
- 2.0 **Introduction** : The Servo Motor controlled AC Variable Transformer is used for measurement of Impedance on up to 250 MW Generator rotor winding.
- 2.0 **Scope** : Supply of Servo motor controlled AC Variable Transformer along with servo motor and control panel.
- 3.0 **Technical Specifications :**
- 3.1 **Type** : Single Phase, unearthed.
- 3.2 **Output kVA** : 37.5 kVA
- 3.3 **Input voltage** : 50 Hz, 415 V +/- 10% (two terminals ie line to line voltage)
- 3.4 **Output voltage** : Variable 0-500 V AC
- 3.4 **Output current** : 75 A
- 3.5 **Servo Motor** : Servo Motor shall be fitted to the transformer for variation of the output voltage.
- 3.6 **Power supply to the Servo motor** : From one terminal of the input voltage and earth/neutral (230 V AC)
- 3.7 **Cooling media** : ONAN
(Oil quantity shall be specified by the supplier. Supply of oil is not in the scope of supplier.)
- 3.8 **Wheels** : Variable transformer shall be mounted with hard castled steel wheels for movement in the shop.
- 3.9 **Measuring transformer** : Shall be fitted at output side for measurement of output current 100 A/ 1 A Class 0.2 Accuracy.
CT shall be used for indication of current in the local control panel meter and also at remote accurate meter.
- 4.0 **Control panel** : Control panel shall be mounted on the transformer
- 4.1 **Mains supply ON** : MCB shall be provided
- 4.2 **ON/OFF** : Through ON/OFF Push button
- 4.3 **Indication** : LEDs shall be provided for the following
ON indication
OFF Indication

Date : 02.05.2005

Prepared by :

Approved by :



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4.4	Measurement	: Voltmeter of Cl 1 Accuracy for input voltage Voltmeter of Cl 1 Accuracy for output voltage Ammeter of Cl 1 accuracy for output current Provision shall be given for external measurement of output voltage and output current.
4.5	Local/Remote	: Selector switch shall be provided. Required wiring terminations shall be provided for remote connections.
5.0	Testing	: The total equipment supplied shall be tested at works. The equipment shall be offered for Witnessing the test. Test procedures, drawings shall be submitted at least 15 days in advance.
6.0	Dispatch	The equipment and accessories supplied shall be packed against mechanical damage during transport and storage and proper marking (BHEL Purchase Order details) shall mentioned on the consignment.
7.0	Commissioning	The equipment supplied shall be commissioned and demonstrated for proper Operation and functioning at BHEL works.
8.0	Documents	: 1. Test Certificates shall be supplied. 2. Three sets of O & M manuals are to be supplied.
9.0	Guarantee	: The entire supply shall be guaranteed for satisfactory performance and workmanship for a period of 18 months from date of commissioning.
10.0	General	: The bidder shall submit compliance statement basing on the Specifications. All other terms and conditions as per BHEL guidelines.

Date : 02.05.2005	Prepared by :	Approved by :
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