

West Central Railway



Office of the  
Sr. Material Manager  
Stores Depot, Diesel Shed  
New Katni Junction  
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Dated 08.01.2013

**TENDER SCHEDULE**

13/NPP/NS-1	Tender Date: 08.01.2013	Tender Due On: 31.01.2013
TENDER BOX TITLE: NORMAL		Closing at- 15:15 Hrs.

Tender No	Description	Quantity	FOR	Delivery Terms
53.12.5127 A	Millivolt Drop Test bench for testing bar to bar mV drop of commutator segments of Tr. Motor & Tr. Gen. armatures complete with 4 polar jig for testing Tr. Motor Armatures model C10400SE Input 400V 3 Phase AC 50Hz 12A Output 0-400A DC Ripple within 1% 10 V CONTINUOUS, AS PER SPECIFICATION ATTACHED.	1 NO	SMM/DSL/NKJ	WITHIN 60 DAYS

**Terms and Conditions:**

1. **Inspection by RITES.**
2. Firms are advised to drop their quotations in the **Tender Box labeled as NORMAL PURCHASE at SMM (D) NKJ's office.**
3. **Place Of Delivery: Receipt Section SMM(D) Diesel New Katni Junction**
4. Bill paying officer is Sr. DFM/JBP
5. No Excise Duty on freight element will be payable. Vendors must indicate freight element separately otherwise it will be assumed that vendors are absorbing the freight themselves.
6. Successful tenderer has to deposit 10% of Order value as security deposit before release of Purchase Order.
7. In cases of delays in contractual delivery, full LD will be levied as per conditions of contract and being a contractual provision no request for waiver of LD will be considered, notwithstanding any past instances of such waiver or less token LD.
8. Firm should quote taxes and excise duly clearly, failing which it will be presumed that same are included in rates and will be paid by firm.
9. The tenderers must quote Ex-works rate and FOR destination rate separately transportation by Rail/Road to each consignee, failing which their offer may be passed over.
10. In case rates quoted by firm are different in words and figures, the lower of the two shall be taken for all purpose during tender finalization, simultaneously keeping the right to pass over the tender.
11. Railway reserves the right to place the orders for part quantity on one or more sources and also to take delivery in installments.
12. **IRS conditions of contract with latest amendment will be applicable.**
13. Offer should be valid for a minimum period of 60 days.
14. Conditions of Advertised Tender on following sites are also applicable:  
[http://203.176.113.182/WCR/dept\\_stores\\_bulletin.jsp](http://203.176.113.182/WCR/dept_stores_bulletin.jsp) or  
[http://www.wcr.indianrailways.gov.in/view\\_section.jsp?lang=0&id=0,3,323,343](http://www.wcr.indianrailways.gov.in/view_section.jsp?lang=0&id=0,3,323,343)

**SMM (D) NKJ**

## ANNEXURE

### SPECIFICATION ATTACHED. TENDER NO 53.12.5127 A

#### MILLIVOLT DROP TEST BENCH

##### Detail Specification

Millivolt drop test kit comprises of the following:

- Control Panel
- Recto-Transformer Unit
- Six Polar Jigs to carry-out bar to bar MV

**Control Panel:** This comprises of AE Make 3 Phase Variable Transformer, 8A 400V, MECO/CABs make Digital Ammeter with external shunt 400A/75mV, 1% Accuracy MECO/CABs make Digital mV/Voltmeter(200mV/20V), 100000uF Capacitor bank. 400A Choke coil, for smoothening output DC current, Push button station for switching On/Off, Zero Interlock circuit, Electronic over load card with adjustable setting(SAROLA Make). Input protection through 16 Amps 3Ph MCB, Three phase indication, Micro-processor based Single phase and phase sequence preventor, Input & output terminals, 400A HRC fuses(GE/Alsthom/Simens) will remain installed in the control panel. The control panel will also be provided with 3Ph Plug –socket, interconnecting cable with termination for coupling with Recto Transformer. All power & control wiring with cable marker will remain installed in the control panel. The control panel will be provided with 4” cooling fan and internal illumination for maintenance work. All copper busbar to be used for output terminals in control panel will be 1.25” x 5/16” and 1.25” x 3/16” electrolytic grade duly tinned. Size of Control panel 25 x 22 x 26 inch(approx) and will be nicely painted with DA grey/Sky Blue colour.

**Recto Transformer Panel:** Panel consists of two step down Transformer 400/10V 3Ph 3kVA each having vector groups Dy11 and Yy0 and % Impedance nearer to 5%(approx) to restrict ripple output within 1% at load. Transformers will be made of CRGO core & Enamel or DCC copper winding of appropriate size as per manufacturing advantages. Two nos 3Ph full wave bridge rectifiers with 150Amps 400V Semikron/Ruttonsha Diodes mounted with K5 heat sinks complete with surge protection will remain installed in Recto-Transformer panel. The bridge Rectifiers will have HRC fuse (160A or similar) GE/Alsthom/Simens make at the input. The unit will be cooled with 4 Nos 4” fan mounted vertically. The unit will be provided with suitable 3Ph and single phase plug socket for coupling with control panel for variable 0-400V 3Ph AC and Fan supply. Fan supply indication with fuse will remain installed at the front panel of Recto-Transformer unit. The top portion of the panel will be provided with ventilating ducts covered with wire mesh for effective ventilation. Both Control & Recto-Transformer panel will be spray painted with DA Grey/Sky-blue colour. Copper busbar and flexible to be used in rectifier board will be electrolytic grade & duly tinned. Size of Recto Transformer panel will be 28 x 22 x 23 inch(approx).

##### Input/Output specification

Input 400V 3ph.4 wire 50 Hz 16 Amps AC

Output 0-10V, 400 Amps DC **Ripple within 1%**

##### Millivolt Jig

**4 Polar Jig for TM Armature testing** This will be round vertical Jig fitted with Copper/Brass current feeding Jigs at 4 equi-distant position. The current feeding brushes will operated on spring pressure to transfer test current to DC Motor armature without any flash mark on commutator surface or heating. OD & ID of the Jig will be designed to accommodate new as well as worn-out commutator diameters. The jig will be fitted with brass bolt & nut termination for coupling with control panel.

**10 Polar Jig for Traction Generator armature testing** This will be round vertical Jig fitted with Copper/Brass current feeding Jigs at 10 equi-distant position. The current feeding brushes will operated on spring pressure to transfer test current to DC Motor armature without any flash mark on commutator surface or heating. OD & ID of the Jig will be designed to accommodate new as well as worn-out commutator diameters. The jig will be fitted with brass bolt & nut termination for coupling with control panel

**Cable & Accessories** : 5m long Copper flexble cable with 96 sqmm size and 1100V Grade insulation will be provided with terminal sockets to feed test current to Tr.Motor armatures through 4polar Jig.  
Accessories will also include 5m long mV leads with suitable probes

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