Reqn. No. 62600835.dt.03.02.12; Qty – 01 No.

Description : 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, Digital Ammeter with external shunt 400A/75mV,1% Accuracy 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. 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/Siemens) 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 shall 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 should 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 should 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 should 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%.**

Contd....

निरंजन कस्तूरे
Niranjan Kasturey

अनूप सिंह यादव
Anoop Singh Yadav
वरिष्ठ सामग्री प्रबंधक/सामान्य एवं निर्माण
Senior Material Manager/G&C
प.म.रे., जबलपुर/W.C.R., JBP.

W.C.R.

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 positions. 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 should be designed to accommodate new as well as worn-out commutator diameters. The jig should 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 positions. 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 should be fitted with brass bolt & nut termination for coupling with control panel.

Cable & Accessories: 5m long Copper flexble cable with 96 sq. mm size and 1100V Grade insulation will be provided with terminal sockets to feed test current to Tr.Motor armatures through 4polar Jig.

Accessories should also include 5m long mV leads with suitable probes

06/02/2022

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SSE/MR(C&W)

W.C.R.

Annexure-II

To be submitted by the firm along with offer-

Tender specification as per Annexure-I	Specification quoted by the firm	Deviation if any with clarification

Signature of firm's