



<b>TYPE TEST REPORT</b>	Ref. BHEL:EPD/HV/2015-16 : 110 Date:05.02.2016 Page: 1 of 2
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1	Product	<b>400kV Single I Suspension insulator string with 1x23 units of 120kN Disc Insulator and hardware fittings suitable for Twin moose ACSR conductor.</b>
2	Drawing Reference	<b>Insulator : EL DG 3 980 14 02600/A0 Hardware: ASS-602</b>
3	Manufacturer	<b>Insulator : BHEL-EPD, Bengaluru Hardware:M/s ASBESCO (INDIA) PVT.LTD,KOLKATA</b>
4	Customer	<b>M/s TANTRANSCO Erection of 400kV Line (4Nos. Circuits on Multi circuit Towers) with Twin Moose Conductor from Proposed Karamadai 400kV SS to LILO of the 400kV MTPS Stage III – PGCIL Arasur Line in Coimbatore Region on Total Turnkey Basis.</b>
5	LOA reference	<b>CE/TR/CE/C/SE/C-II/EE/C/AEE/T-1825/NOA 2679/D.180/15, Dated 28.04.2015</b>
6	Test Performed	<b>MECHANICAL STRENGTH TEST</b>
7	Test Laboratory	<b>BHEL/EPD, Bangalore</b>
8	Test dates	<b>05.02.2016</b>
9	Reference Document	<b>M/s TANTRANSCO-Technical Specification</b>
10	Test Results	<b>Page 2</b>

Test Conducted by :

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Note: This report consists of 2 pages and 2 drawings.



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### **TEST RESULTS**

400kV Single 'I' Suspension string with 23 units of 120kN Disc Insulators and hardware fittings was assembled on 600kN capacity tensile testing machine. The string was subjected to tensile loading in the following sequence.

- Initially a tensile load of 80% of the specified minimum Electro mechanical strength of 120kN which is 96kN was applied in a time not exceeding two minutes. This load was held on the string for duration of 1 minute. At the end of this period the load was released and string could be easily dismantled. The Insulators and the hardware were visually examined. No visual deformation was observed and disassembly by hand is carried out.
- The string is reassembled and mounted in the testing machine and loaded up to 120kN which is its rated EMS load of the string in a time not exceeding two minutes.
- The load was further increased gradually up to 110% (132kN) of the rated EMS load and string withstood.

**Conclusion : The string meets the requirement of the specification**