

TECHNICAL SPECIFICATION FOR THE 33 KV METAL PARTS (B&S TYPE)

1. SCOPE:

The specification covers design, manufacture, testing at manufacturer's works before dispatch supply and delivery of Hardware fittings for 33 KV String Insulators as per the "Schedule of Requirements" attached.

2. Standards:-

The fittings shall confirm to the IS specification No. IS-2486- Part-I-1971 and IS-2486 Part-II-1989 and IS 2486- Part-III-1974 (the latest version there of) – These fittings shall suit the 33 kV String Insulators (B&S Type) covered in IS 731-1971(the latest versions there of) and IS-3188-1965(the latest version there of).

3. Design and type :-

The fittings shall be Ball and Socket type. The normal dimensions of ball shall be those shown against 16 mm and those of socket shall be shown against 16mm alternative(B) (Vide fig. 8 and 9 of IS-2486-part II-1989) respectively. The minimum failing load of the fittings shall not be less than 4590Kgs.

4. Materials:-

The components of the fitting shall be of materials specified in clause 5.1 of IS 2486-part-I-1971 (the latest issue). Fittings comprising tension clamps of Alluminium alloy shall be offered. The composition of Alluminium alloy may be declared giving references to the relevant IS. The exact weight of the clamp shall be mentioned.

5. Testing:-

Type Tests:- The following type test certificates showing the results of type tests done as per clause 5.3.1. of IS 2486 PartI-1971 (the latest issue) with the dimensional drawings shall invariably accompany the tender.

Tests to be conducted

1. Slip strength test
- 2.Mechanical tests
- 3.Verification of dimensions
- 4.Galvanizing test
- 5.Visual examination test.

b) The following tests shall be conducted on the fittings ordered in accordance with IS and Test Certificates shall be submitted in duplicate. The test samples shall be selected by the "EASTERN POWER DISTRIBUTION COMPANY OF A.P. LIMITED". Inspecting Officers in the event of inspection is done at the manufacturer's works.

b-i) Acceptance tests:-

As per Clause 5.3.2 of IS 2486 PartI-1971 (the latest issue) sampling should follow the procedure laid down in Appendix-A of IS 2486 – Part-I-1971 (the latest issue).

b-ii) Routine tests:-

As per clause 5.3.3 of IS 2486-Part I-1971 (the latest issue) on each and every fittings.

6) Packing:- For packing of fittings double gunny bags shall be employed. The gross weight of the packing shall not normally exceed 50 kgs. All nuts shall be hand tightened over the bolts and screwed up to the farthest point.

7) Guaranteed Technical particulars:-The technical particulars as specified in the IS shall be guaranteed and statements of guaranteed particulars shall be furnished along with tender in the form given in Annexure.

8) SAMPLES:-

Two samples of Hardware fittings for 33 kV String Insulators (B&S Type) shall be submitted along with the tender.

9) Embossing:- The samples shall be engraved with your trade mark.

10. All bids submitted will also include the following information:

- i. Copies of original documents defining the constitution or legal status, place of registration and principle place of business of the company or firm or partnership, etc.,
- ii. The bidder should furnish a brief write-up, backed with adequate data, explaining his available capacity and experience (both technical and commercial) for the manufacture and supply of the required equipment within the specified time of completion after meeting all their current commitments.
- iii. The bidder should clearly confirm that all the facilities exist in his factory for inspection and testing and these will be made available to the purchaser or his representative for inspection..
- iv. Reports on financial standing of the Bidder such as profit and loss statement, balance sheets and auditor's report for the past three years, bankers certificates etc.

GUARANTEED TECHNICAL PARTICULARS OF HARDWARE FITTINGS
SUITABLE FOR 33 KV STRING INSULATORS

| Sl.No. | Characteristic |
|---------------|--|
| 1 | Type of manufacture: The materials used for various components parts like cross arm straps, tension clamps, ball eye, rivet pin, security clip etc. should also be furnished. |
| 2 | Makers's name and company |
| 3 | Size of Ball and Socket |
| 4 | Type of galvanizing |
| 5 | Minimum failing load |
| 6 | Slip strength (KN) |
| 7 | Electrical resistance of fittings |
| 8 | Maximum size of conductor for which the fittings are suitable |
| 9 | Weight of the metal parts |
| 10 | Drawings to scale (drawings of all components parts as well as the assembly drawings) to be enclosed. |