

**WESTERN ELECTRICITY SUPPLY COMPANY OF ORISSA, WESCO**

<b>GUARANTEED TECHNICAL PARTICULARS</b>		<b>REQUIREMENTS</b>
<b>Sl. No.</b>	<b>Particulars</b>	<b>33 Kv, 400 Amps, H.G Fuse sets.</b>
1	Maker's name and Country of origin.	
2	Operating voltage.	33 Kv.
3	Number of Insulator per phase	4 Nos. 22 Kv/24 Kv post Insulators as per phase.
4	Rated normal current and normal frequency.	400 Amps., 50 Hz.
5	Vertical clearance from the top of Insulator cap to mounting channel	508mm (minimum)
6	Height of the riser for carrying the horns.	250mm from the cap (top) of Insulator.
7	<b>POST INSULATOR :</b>	
(a)	Name of the Manufacturer & Country of origin.	Insulators of Reputed make.
(b)	Type of Cementing.	Original Cemented.
(c)	1 minute power frequency withstand voltage (dry)	95 Kv
(d)	1 minute power frequency withstand voltage (wet)	75 Kv
(e)	Visible discharge voltage.	27 Kv (rms)
(f)	Dry flash over voltage.	95 Kv.
(g)	Power frequency puncture withstand voltage.	1.3 times the actual dry flash over voltage.
(h)	Creepage distance.	430mm (minimum). Actual creepage distance of the post Insulator for which type test has been conducted is to be supplied.
8	Impulse withstand voltage (1.2/50 microsecond wave) positive and negative polarity.	
(a)	Across the Isolating distance of fuse base..	195 Kv (peak)
(b)	To earth and between poles	170 Kv (peak)
9	One minute power frequency withstand voltage.	
(a)	Across the Isolating distance of fuse base..	100 Kv (rms)
(b)	To earth and between poles	75 Kv (rms)
10	1.2/50 microsecond wave impulse flash over voltage.	To be specified by the tenderer.
11	Details of Arcing Horns.	1' SWG (10 mm) copper rod silver plated provided with screwing arrangement on the fuse carrier made of copper casting for fixing fuse wire. (Total length-995mm). All the bolts, Nuts and Washers should be made out of Brass.
12	Riser Unit. (250mm height total).	(a) Riser cum Connector made out of copper casting (with minimum 95% copper composition having riser size (80mm height x 50mm width x 8mm thickness) and connector of size 80mm x 50mm x 8 mm) duly silver plated and machine finishing provided with 2 nos. 12mm dia, brass bolts and brass double nuts with flat brass washers and 2 nos. solderless bimetallic sockets per each connector suitable upto 80 sq. mm Conductor. The socket should be preferably of USHA MARTIN make having Catalogue No. VCEML : 1.3  (b) 170mm height G.I Riser made of 25mm nominal bore medium gauge G.I Pipe welded with 2 nos. of G.I Flat of 35mm x 5mm of both ends fixed with 10mm dia. Stainless steel bolts and nuts with flat and stainless steel spring washers.
13	Supporting Channel.	100 mm x 50 mm M.S Channel. (Galvanised)
14	Galvanisation	All ferrous parts shall be Hot-dipped galvanised as per IS : 2633/1972 & all non-ferrous parts shall be duely electroplated with silver. The pipe shall be galvanised as per IS : 4736 : 1968 (1st Revision, Amendment-1, Reaffirmed 1998)
15	Weight of each pole.	50 Kg. Approximately.
<b>N.B</b>	<b>I) Ferrous parts shall be duely galvaised as per IS:2629/1985 (1 st Revision), (Amendment-2) and non-ferrous parts shall be silver plated..</b>	
	<b>II) Certificate from a Government approved laboratory regarding composition of copper in electrolytic copper casting of materials should be submitted during inspection of materials at the cost of the tenderer.</b>	
	<b>III) Items not covered in the G.T.P, but relevant in Design, manufacturing, quality control &amp; testing of materials shall be governed by the relevant IS with latest Amendments.</b>	
	<b>IV) Type Test report from CPRI or accredited NABL laboratory should be furnished. Same for insulators is to also to be provided.</b>	