

Pannel Earthing Specification

S. N.	33/11 KV Power Transformer neutral / 11 kv switch Gear vcb/ 33 kv control relay panel GI Plate Earthing Item (4 nos)	Unit	Qty.
1	Galvanized plate Hot dip size 600x600x5 mm thickness approximately weight 21 kg	Kg	4
2	Galvanized pipe hot deep size 32 mm inner dia meter 5 mm thickness	Meter	12
3	Galvanized pipe hot deep size 20 mm inner dia meter thickness	Meter	12
4.	Galvanized strip size 25 x 6 mm	Kg	70
5.	MS Round Bar Size 32 mm	Kg	160
6	Wooden Charcoal	Kg	600
7	Ammonium Chloride (NH4 CL)	Kg	100
8	Miscellaneous items Pit Cover size 600x600 Pipe Funnel suitable for 42 mm outer dia pipe Red Bricks cement and sand	No No No Kg Kg	4 4 300 50 200
PART – B Scope of work details EXCHANGE EARTHING: - The contractor shall excavate a pit of size 1500 mm(Length)x1500mm(Breadth)x3000mm(Depth) , till moist soil is reached. At the bottom of the pit, an alternate layer of char coal / coke and NH4CL up to of 15 cm height shall be prepared. Then four galvanized iron (600mm x 600mm x 5 mm hot deep) plates as earth plates shall be vertically erected in diagonally. (See diagram at Annexure-VI (only Sampple). By using G.I. Strips, the earthing plate shall be taken up. These four G.I. Strips which interconnects the G.I Plates (1) The size of the GI (Hot deep) Plate should be (600 mm x 600mm x 5 mm hot deep)- 4nos. (2) G.I. Interconnection Strip of size 32MM width x 6 MM Thick – no (3) Now reinstatement of pit will be done for which following procedure shall be adopted Since char coal /coke and salt has been already put; a layer of black cotton soil earth shall be poured. This will followed by char coal / coke and salt Subsequently alternate layer of black cotton soil and char coal / coke and Salt Shall be poured to cover the electrodes / G.I. Plates (4) A funnel with GI pipe 32 mm will be put above the electrode till top plinth level to water the earth. The funnel should be fitted at the ground level with protective brick chamber having a lid(MS cover) 6mm thick of inner dimension of 9 inch x 9 inch. This is to be done for watering the earth pit. (5) A layer of charcoal, salt and of black cotton soil 15 cm shall be put above the Plate (6) Earth conductor should enter the premises through wall preferable at ground level. This should be led into exchange through G.I. pipe without bends and Kinks . Earth conductor then be taken on earth bar through a G.I. pipe upto Earth bar. (7) While the pit is dug and plates earth are erected, the work should be offered for inspection to SDO concerned for verification. After the earthing process is completed, the same should offered for Acceptance Testing. The Earth Resistance should be less than or 0.5 ohms under all conditions		Job	1