



PROJECT SPECIFICATION AND BILL OF QUANTITY

FOR:

SUPPLY VOLTAGE DETECTOR AND PORTABLE EARTHING CABLES



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1. INTRODUCTION

The purpose of this project is to provide a service to supply and deliver high voltage safety equipment/tools to PRASA regions.

2. DESCRIPTION OF WORKS/SCOPE OF WORKS

Supply and delivery HV Electrical safety tools/equipment to PRASA regions.

2.1 KZN Region Safety tools:

- 1) 8 x Voltage detectors for 3kV DC application in accordance with specification BBC2076 version 3.
- 2) 14 x portable earthing devices to be used to earth 3kV DC line.
 - Each portable earthing device shall consist of an insulated (Clear or translucent PVC) cable fitted clamps for the rail connection and clamps/hooks for overhead line connection.
 - The minimum cross section area of the earthing cable shall be at least 65mm² copper.
 - The length of each portable earthing cable shall be at least 15m each.
- 3) 7 x voltage detectors with a detection range from 6kV AC to 22kV AC.
- 4) 12 x Portable earthing devices for earthing the equipment: Ranging from 6kV AC to 22kV AC.
 - Each portable earthing device shall consist of an insulated (Clear or translucent PVC) cable fitted clamps for the rail connection and clamps/hooks for overhead line connection.
 - The minimum cross section area of the earthing cable shall be at least 50mm² copper.
 - The length of each portable earthing cable shall be at least 15m each.

2.2 Gauteng Region (for detail description of each item, refer to 2.1):

- 1) 5 x Voltage detector (Voltage detectors) for 3kV DC application in accordance with specification BBC2076 version 3.
- 2) 10 x portable earthing devices for 3kV DC line earthing in accordance with BBF3690
- 3) 6 x Voltage detector for a range from 6kV to 22kV AC.



4) 10 x Portable earthing devices for earthing the (6kV to 22kV) AC in accordance with BBF3690.

2.3 Western Cape Region:

1) 4 x Voltage detector for 3kV DC application in accordance with specification BBC2076, refer to section 2.1 above.

2) 3 x portable earthing devices for 3kV DC line earthing in accordance with BBF3690, refer to section 2.1 above.

3) 2 x Voltage detector with a detection range of 11kV AC to 33kV AC.

- The Voltage detector must be battery powered.

4) 4 x Portable earthing devices for earthing the (11kV to 33kV) AC in accordance with BBF3690.

- Each portable earthing device shall consist of an insulated (Clear or translucent PVC) cable fitted clamps for the rail connection and clamps/hooks for overhead line connection.
- The minimum cross section area of the earthing cable shall be at least 50mm² copper.
- The length of each portable earthing cable shall be at least 15m each.

3. DURATION

The project contract will be for 6 Month from the date of award. i.e., Tenderer having acknowledged the receipt of award letter.

4. GUARANTEE

4.1. Prasa Metrorail shall be formally invited to conduct tests and visually inspect the material before delivery for any defects or damages.

4.2. The material shall be subjected to a guarantee period of one year. The guarantee period shall commence the day it is formally handed over to and accepted by Metrorail.

4.3. Any defects that may become apparent during the guarantee period shall be rectified to the satisfaction of the client at no cost to PRASA.

4.4. Should the contractor fail to comply with the above, Prasa is entitled to take effective replacement of the defective material. The contractor must reimburse Prasa Metrorail the total cost for replacement of materials.



5. **PENALTY**

Should the Contractor fail to complete delivery on/before the stipulated completion dates, a penalty fee of R5000 per week will be charged.

6. **DELIVERY**

The safety tools shall be delivered as follows:

- The KZN safety tools shall be delivered in Durban PRASA Electrical Depot.
- The Gauteng safety tools shall be delivered in Pretoria PRASA Electrical Depot.
- The Western Cape Safety tools shall be delivered in Salt River PRASA Electrical Depot.

7. **BILL OF QUANTITIES**

Safety Tools			
Item	Qty	Rate	Total
Voltage detector for 3kV DC	17		
Portable earth device for use on 3kV DC	27		
Voltage detector for use on equipment using voltage ranging from 6kV AC to 22kV AC	13		
Voltage detector for use on equipment using voltage ranging from 11kV AC to 33kV AC	2		
Portable earth device for use on 6.6kV AC to 33kV AC	26		
		Total (Exc.)	
		VAT (15%)	
		Total	

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