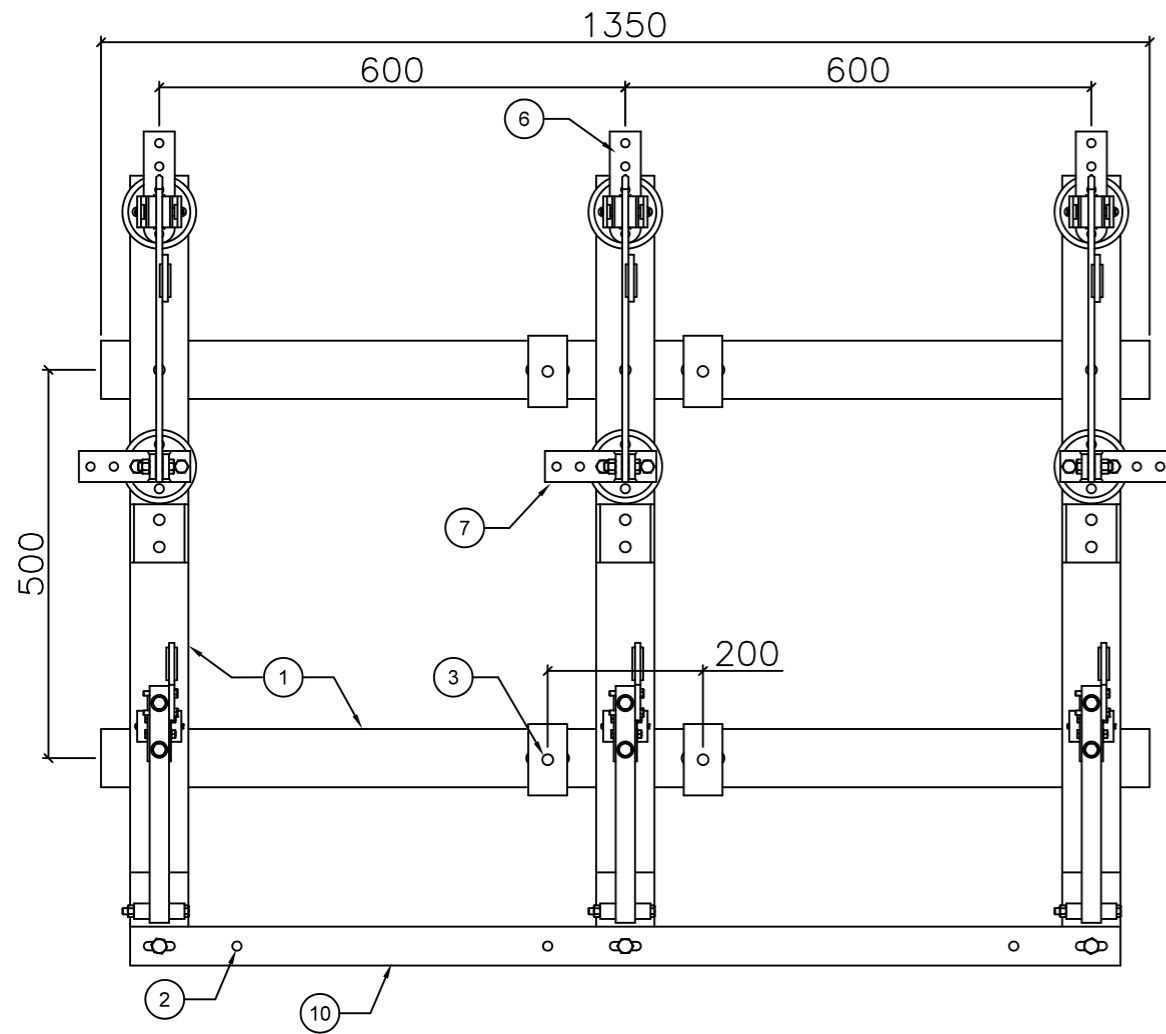
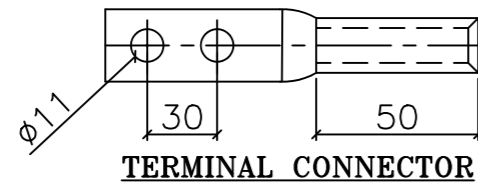


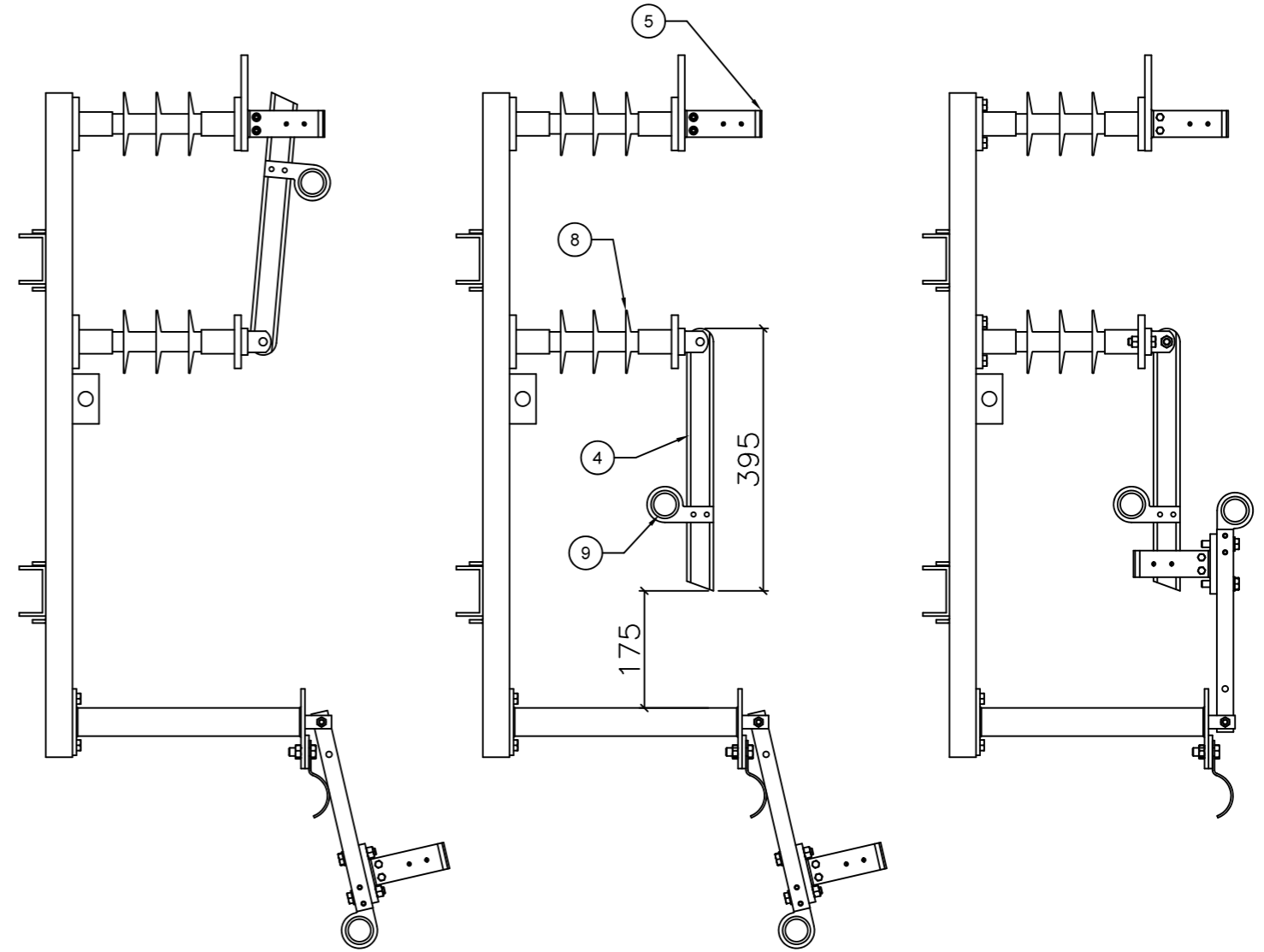
Drawing No: - GPRD - 39 Single Pole Mounted ABEB



TOP VIEW



TERMINAL CONNECTOR



**POSITION-1
(ON POSITION)**

**POSITION-2
(OFF POSITION)
SIDE VIEW**

**POSITION-3
(EARTH POSITION)**

10	GI Strip	1	50X6	MS	HDG
9	Operating Hook	6	-	Aluminium	-
8	11kV Post Insulator	6	254mm High	Polymeric	Min. 320mm CD
7	Outgoing Terminal	3	-	Copper Alloy	Tin Plated
6	Incoming Terminal	3	-	Copper Alloy	Tin Plated
5	Fix Contact	6	-	EC Copper	Tin Plated
4	Moving Contact	3	-	EC Copper	Tin Plated
3	Mounting	4	Ø18X55 Slot	-	-
2	Earthing Terminal	3	M10 BOLT	-	HDG
1	Mounting Channel	3	C 75X40X6	F.R.P	F.R.P (VINYLESTER)
No.	PART NAME	QTY	SIZE	MATERIAL	REMARKS

NOTES:

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTICED.
2. IN DIMS. TOLERANCE SHALL BE +5% ,MIN. 1 MM. (IF NOT MENTION IN TECH SPECIFICATION.)
3. ALL FERROUS MATERIALS SHOULD BE HOT DIP GALAVANIZED AS PER IS.
4. EARTH ELECTRODE SHOULD BE OF 50MM OD 3 MTR LONG CLASS B HOT DIP GALAVANIZED.
5. CONNECTING EARTH STRIP FROM SWITCH TO EARTH ELECTRODE SHOULD BE 40X3MM SIZE.

- All dimensions are to be read and not to be measured.
- In case of any discrepancy between GPRD cell - GUVNL, GOG Drgs. And other Drgs. Discrepancy should be brought to the notice of the GPRD before commencement of the work.
- In case of any ambiguities on site, the GPRD should be informed.
- It is must to inform and to have prior permission of GPRD before making any changes on site.
- Refer the latest revised drawing.

Project Name:
11kV ABEB SWITCH

Title:
**11 KV 600 Amp Air Break Switch
With Earth Blade Facility**

Drawing Prepared By:
Jignesh Borisagar


Checked By:
R D Patel

Approved By:
R B Patel

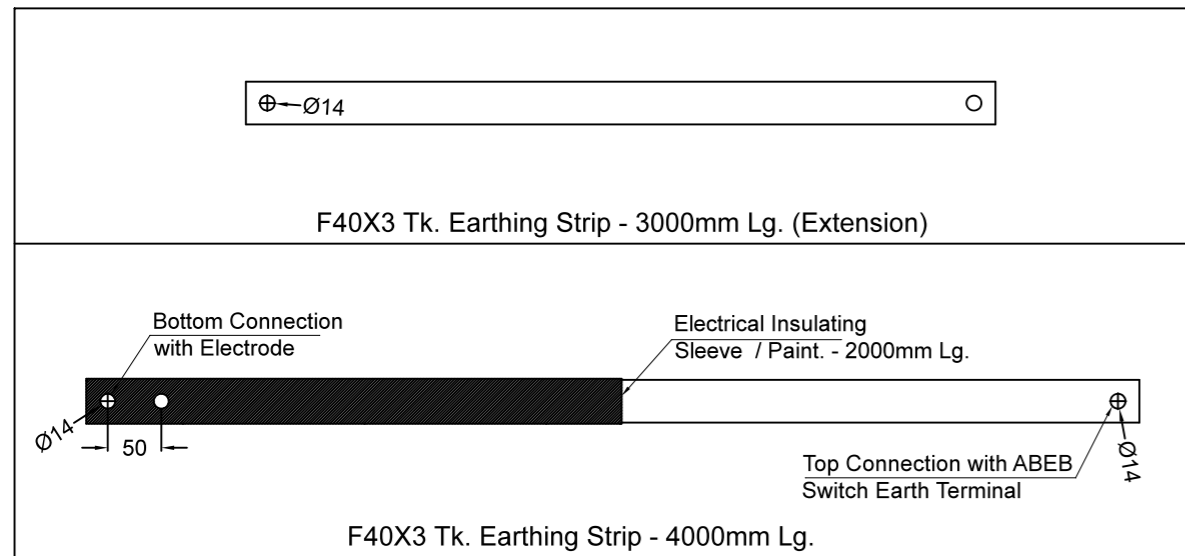
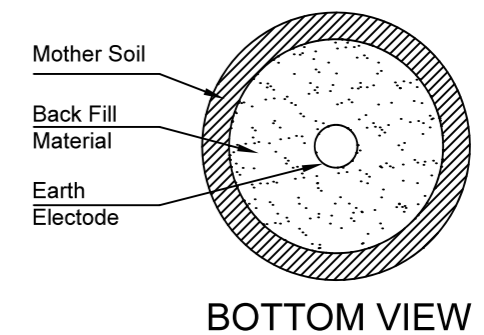
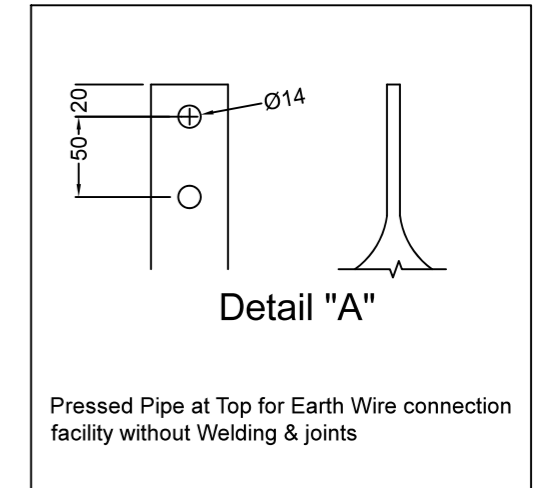
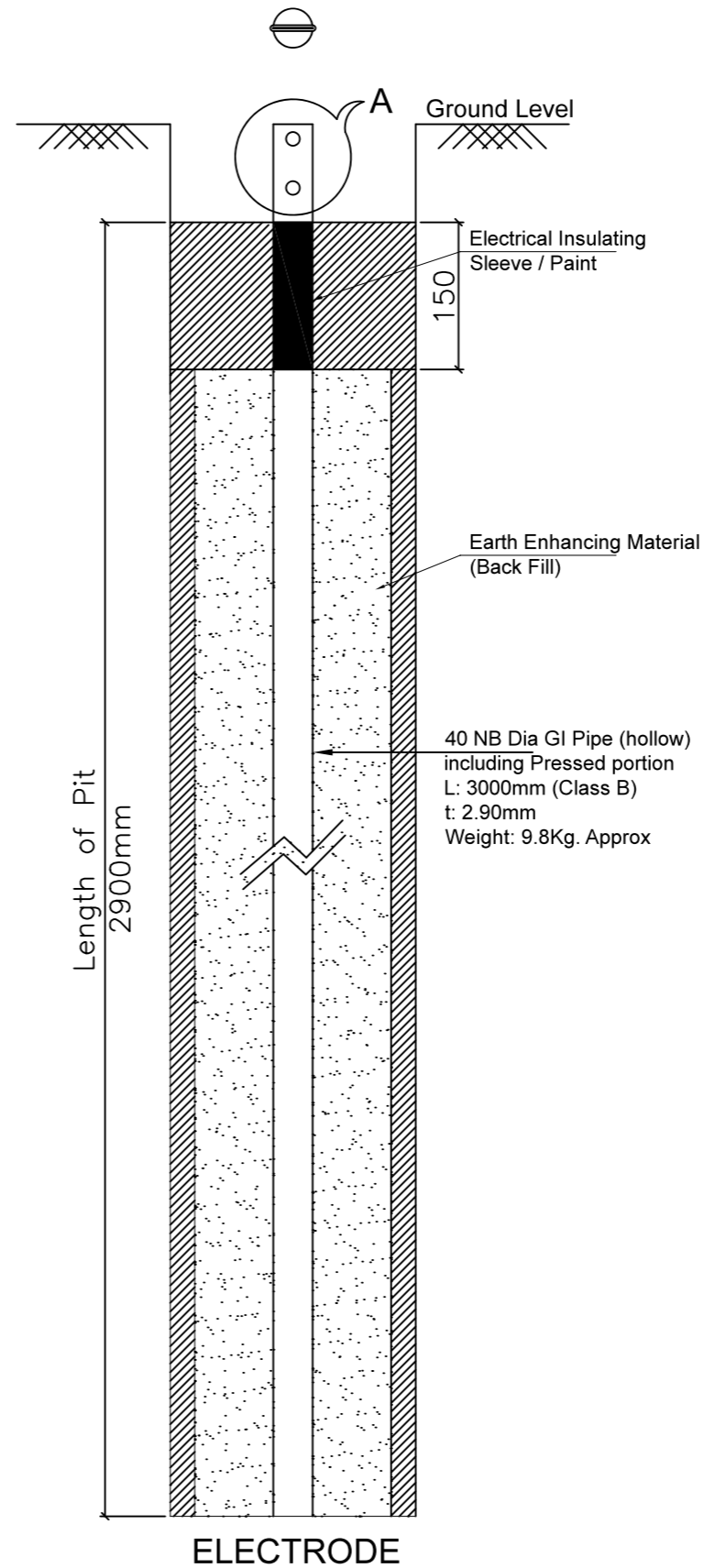
Research Proj. No:
RP 014 - 39.1 - GA

Date:
22.10.2019

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IIT Gandhinagar Research Park,
IIT Gandhinagar, Palaj, Gandhinagar**



Drawing No : GPRD - 13
Maintenance free Earthing for ABEB Switch Using GI Strip (40X3mm)



Bill of Material		
Sr No.	Item	Qty.
1	40NB Pipe 3000mm Lg. pipe Electrode	1 No.
2	F40X3 Tk - 3000mm Lg. Earthing Strip	1 No.
3	F40X3 Tk - 4000mm Lg. Earthing Strip	1 No.
4	M12X30mm Lg. Nut Bolt with 2 Plain Washer	5 Nos.
5	Back Filling Compound (Appx 25 Kg each Bag)	2 Bags.

NOTES:
 1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTICED.
 2. IN DIMS. & WEIGHT TOLERANCE SHALL BE $\pm 5\%$.
 3. ALL MATERIAL IS HOT DIP GALVANISED (86 Micron) AFTER FABRICATION.

- All dimensions are to be read and not to be measured.
- In case of any discrepancy between GPRD cell - GUVNL, GOG Drgs. And other Drgs. Discrepancy should be brought to the notice of the GPRD before commencement of the work.
- In case of any ambiguities on site, the GPRD should be informed.
- It is must to inform and to have prior permission of GPRD before making any changes on site.
- Refer the latest revised drawing.

Project Name:
EARTHING

Title:
Maintenance Free Earthing For ABEB Switch Using GI Strip

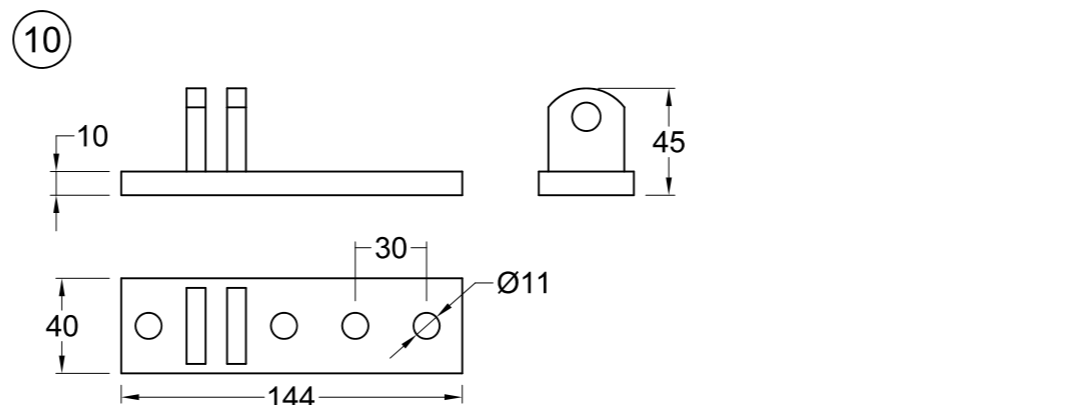
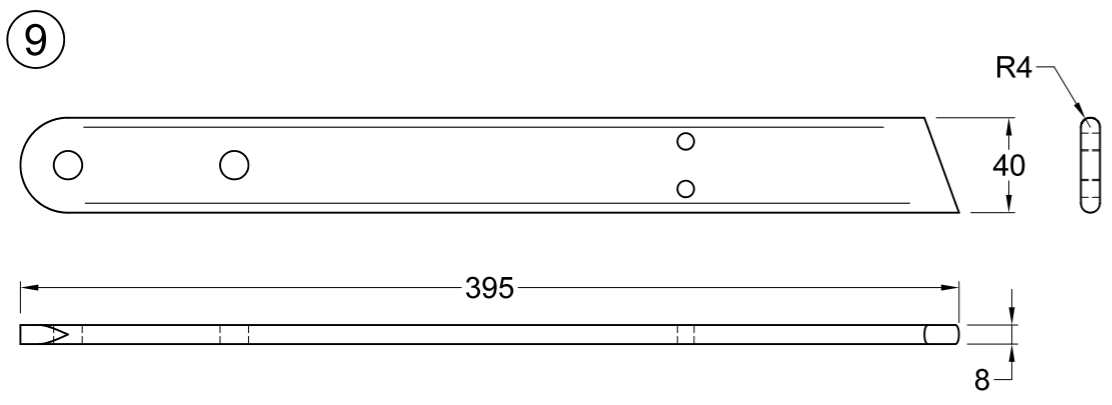
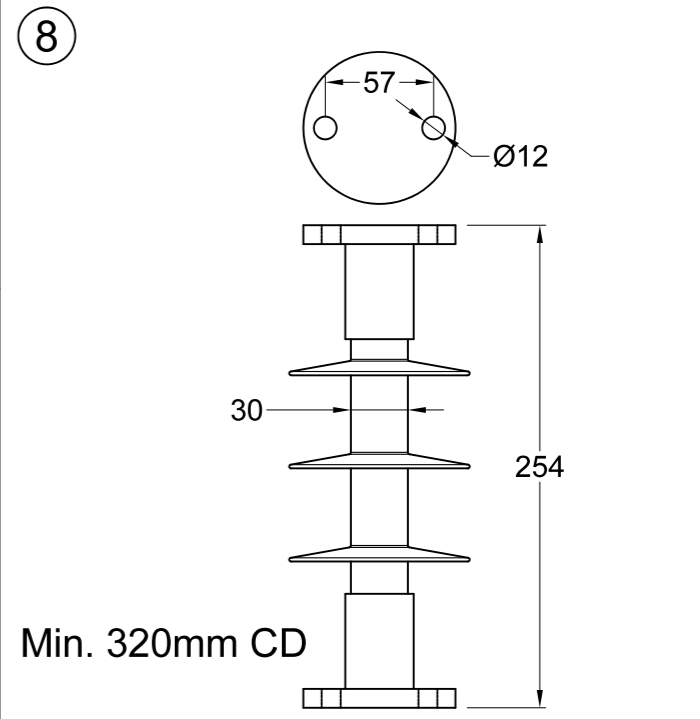
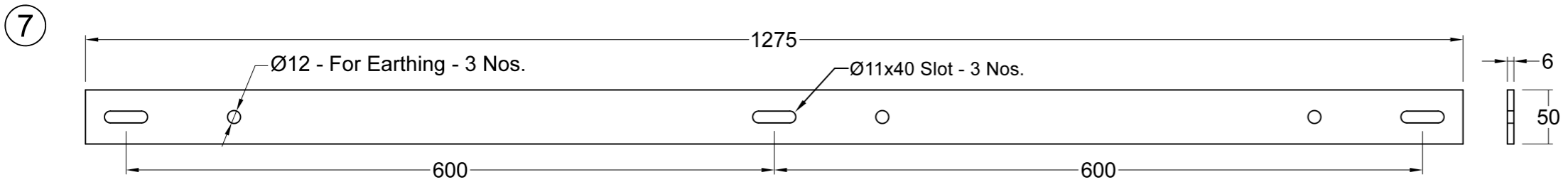
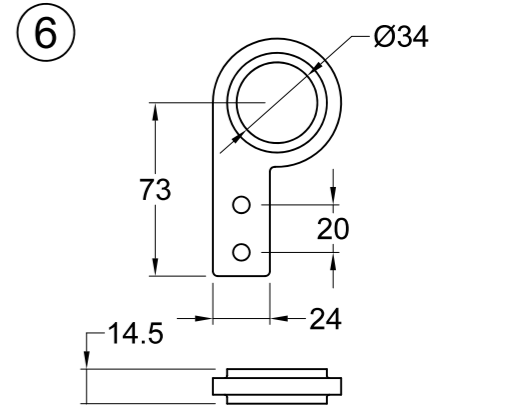
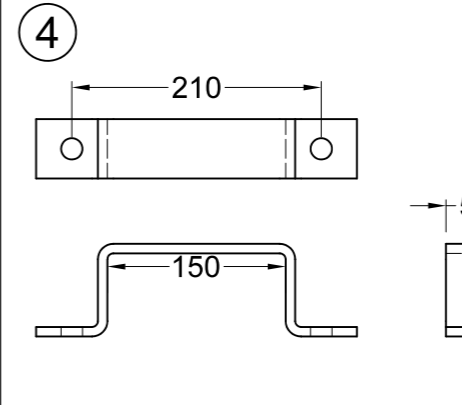
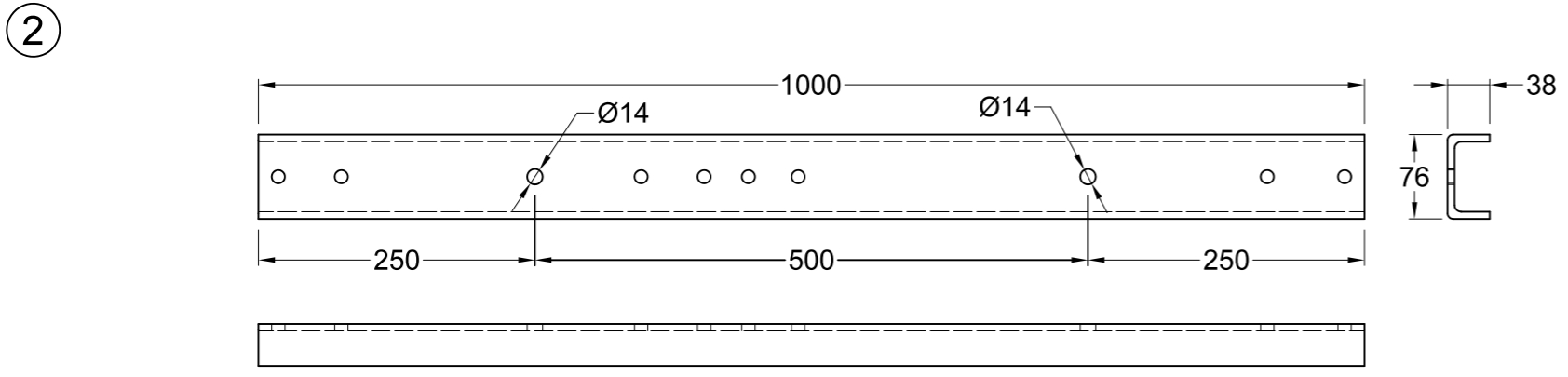
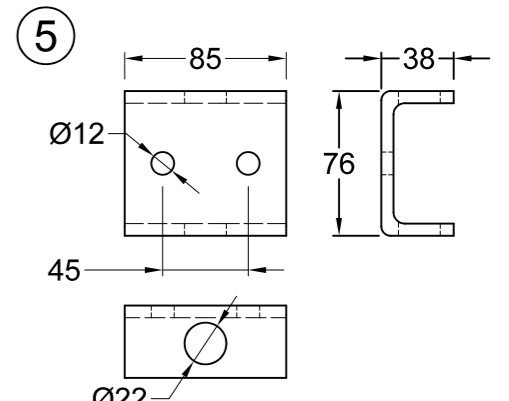
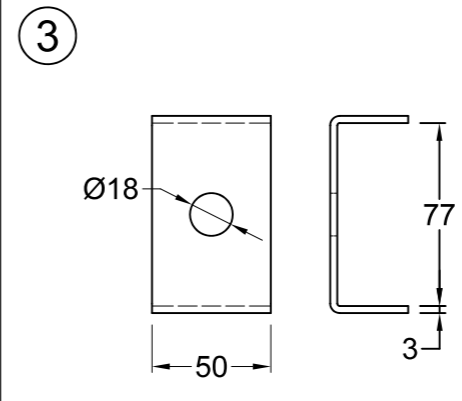
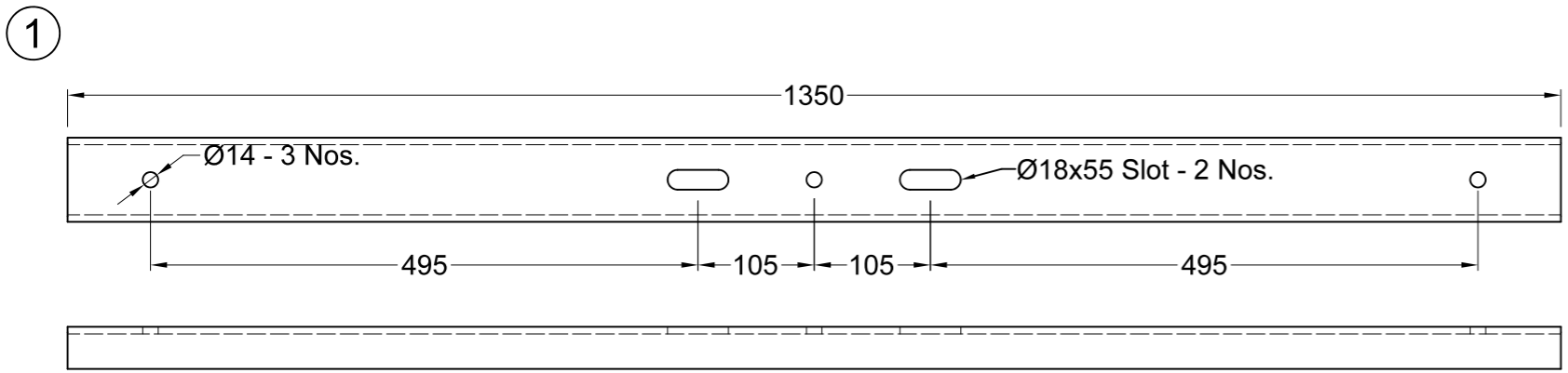
Drawing Prepared By:
J H Borisagar

Checked By:
R D Patel

Approved By:
R B Patel

Research Proj. No:
RP 014 - 39.2 - Earthing

Date:
10.10.2019



Sr	Parts	Size	Remarks	Qty	Sr	Parts	Size	Remarks	Qty
5	Pin Support Clamp	C 76x38x6.4	FRP	3	10	Moving Contact Base	40x10	Tinned Cu Alloy	3
4	Pole Mounting Clamp	F 50x8	MS HDG	2	9	Moving Contact	F 40x8	Tinned EC Cu	3
3	Mounting Support Clamp	F 50x3	MS HDG	4	8	11kV Post Insulator	As per Drg	Polymeric	6
2	Base Channel	C 76x38x6.4	FRP	3	7	Earth Shorting Strip	F 50x6	MS HDG	1
1	Mounting Channel	C 76x38x6.4	FRP	2	6	Operating Hook	As per Drg	Al Casting	6

Bill of Materials

NOTES:
 1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTICED.
 2. IN DIMENSION TOLERANCE SHALL BE +5%, MIN. 1mm.
 3. ALL CURRENT CARRYING PARTS TO BE TIN PLATED.
 4. ALL FERROUS PARTS TO BE HOT DIP GALVANIZED AS PER IS:4759-1996 Min 610gm/m²

11kV 600A ABEB Switch Parts Drawing

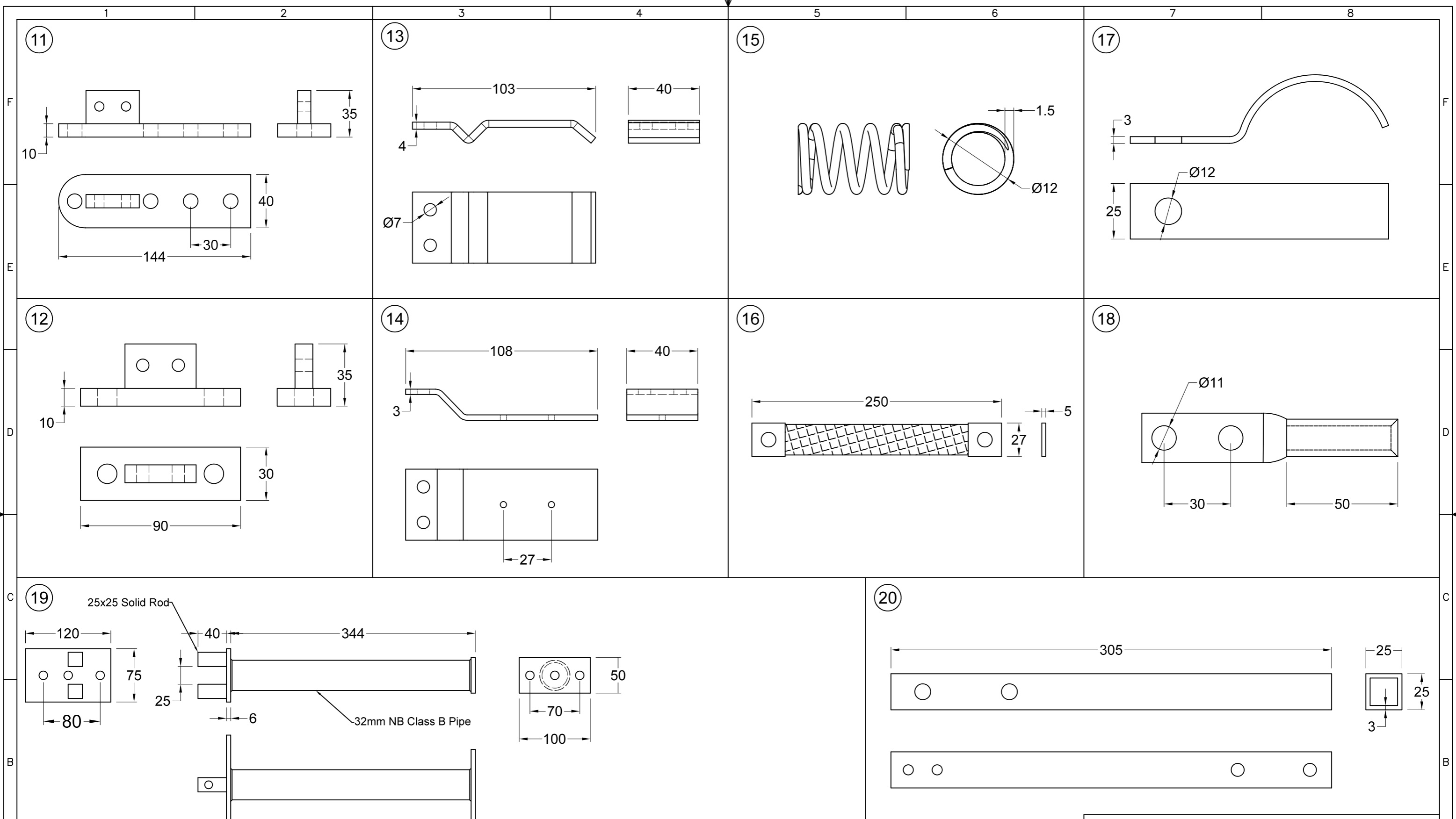
Research Proj. No: RP 014 - 39.3 - Part 1/3
 Date: 13-11-2019

Sheet:
1 of 3

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THIS DRAWING IS SUBJECT TO REVISION / UPDATE



Sr	Parts	Size	Remarks	Qty	Sr	Parts	Size	Remarks	Qty
15	Spring	As per Drg	Spring Steel	24	20	Earth Moving Sq. Pipe	25x25 Pipe	MS HDG	3
14	Fix Contact Guard	F 40x3	MS HDG	12	19	Earth Mounting Structure	As per Drg	MS HDG	3
13	Fix Contact	F 40x4	Tinned EC Cu	12	18	Lug	As per Drg	Aluminium	6
12	Earth Contact Base	30x10	Tinned Cu Alloy	3	17	Earth Limit Flat	F 25x3	MS HDG	3
11	Fix Contact Base	40x10	Tinned Cu Alloy	3	16	Flexible Braided Copper	As per Drg	Tinned Cu	6

Bill of Materials

CONTROLLED UNLESS OTHERWISE SPECIFIED THIS DRAWING IS SUBJECT TO REVISION / UPDATE

NOTES:

- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTICED.
- IN DIMENSION TOLERANCE SHALL BE +5%, MIN. 1mm.
- ALL CURRENT CARRYING PARTS TO BE TIN PLATED.
- ALL FERROUS PARTS TO BE HOT DIP GALVANIZED AS PER IS:4759-1996 Min 610gm/m²

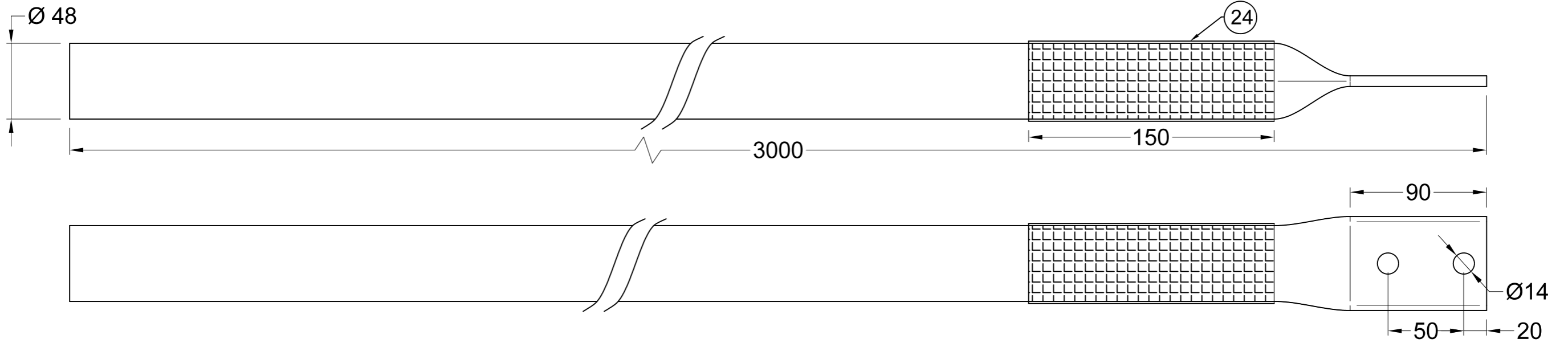
11kV 600A ABEB Switch Parts Drawing

Research Proj. No: RP 014 - 39.4 - Part 2/3 Sheet: **2 of 3**

Date: 13-11-2019

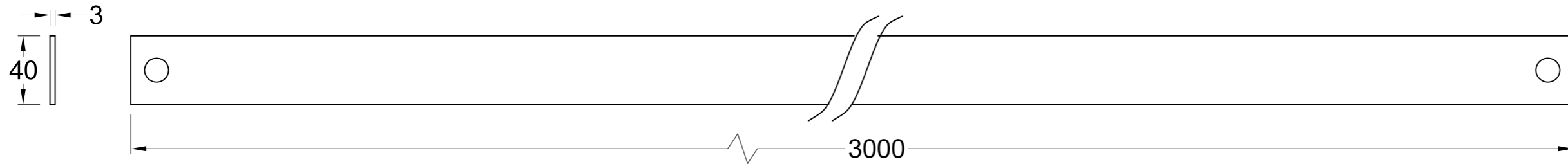
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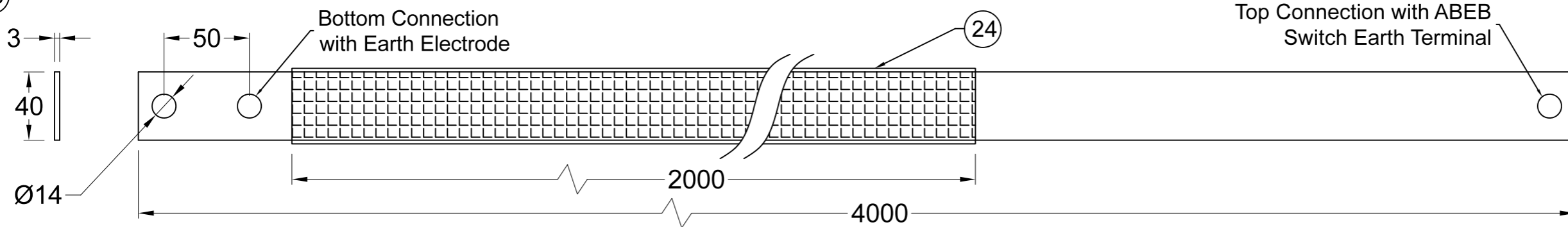


Pressed pipe at top for Earth Strip connection facility without welding and joints.

22



23



NOTES:

1. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE NOTICED.
2. IN DIMENSION TOLERANCE SHALL BE +5%, MIN. 1mm.
3. ALL CURRENT CARRYING PARTS TO BE TIN PLATED.
4. ALL FERROUS PARTS TO BE HOT DIP GALVANIZED AS PER IS:4759-1996 Min 610gm/m²

23	Earthing Strip - 4 Mtr	F 40x3	MS HDG	1	26	Nut & Bolt	M12x30	With 2 plain washer	5
22	Earthing Strip - 3 Mtr	F 40x3	MS HDG	1	25	Filling Compound	-	~25kg Bags	2
21	Earthing Electrode - Pipe Type	40 NB	MS HDG	1	24	Insulating Sleeve	As per Drg	Heat Shrinkable	-
Sr	Parts	Size	Remarks	Qty	Sr	Parts	Size	Remarks	Qty

Bill of Materials

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THIS DRAWING IS SUBJECT TO REVISION / UPDATE

11kV 600A ABEB Switch Parts Drawing

Research Proj. No: RP 014 - 39.5 - Part 3/3
Date: 13-11-2019

Sheet:
3 of 3



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