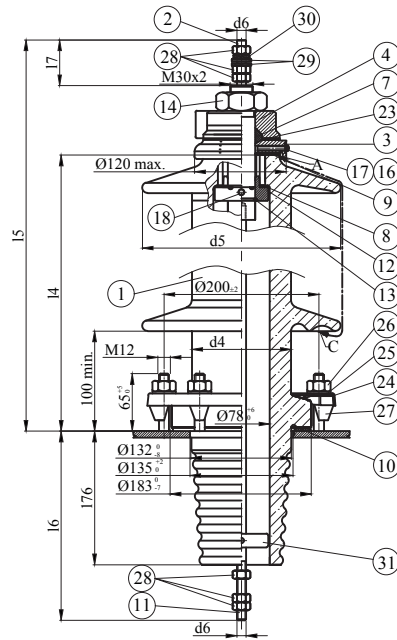


52 kV 250 A - 630 A
EN 50180 Outdoor Transformer Bushings



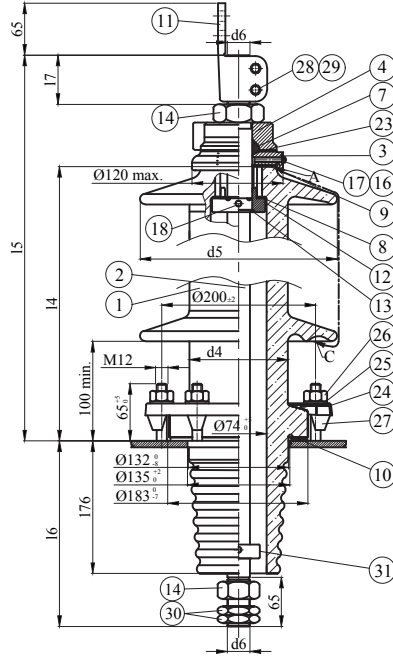
Insulation Levels acc. to IEC 60137:2017			
1	Highest Voltage (kV)	52	
2	Rated Current (A)	250	630
3	Lightning Impulse Withstand Voltage (BIL) (kV)	250	250
4	Power Frequency Withstand Voltage (kV)	dry 105 wet 95	dry 105 wet 95
6	Rated Thermal Short-time Current (2s) (kA)	4,42	11,14
7	Rated Dynamic Current (kA)	15,63	39,37
8	Minimum Cantilever Withstand Load (N)	1000	1000

***All dimensions are "mm"
n* 6 fixing studs steel M12x70 (not supplied with the kit) Bolt circle 200 mm

Type / Creepage Distance [mm]	Arcing Distance AC [mm]	14	15	16	17	d4 max	d5 max	d6
52 - 250 / P1 (Type 29) / 950	480	509	662	248	60	136	259	M12
52 - 630 / P1 (Type 29) / 950			687	273	85			M20
52 - 250 / P3 (Type 30) / 1350	480	509	662	248	60	136	259	M12
52 - 630 / P3 (Type 30) / 1350			687	273	85			M20
52 - 250 / P4 (Type 31) / 1655	520	554	707	248	60	136	259	M12
52 - 630 / P4 (Type 31) / 1655			732	273	85			M20

31	1	Polymeric Washer			
		Polymeric Washer (for 630A)			
30	1	Spring Washer M12	DIN 127		
		Spring Washer M20 (for 630A)			
29	2	Brass Washer M12	DIN 125		
		Brass Washer M20 (for 630A)			
28	6	Brass Nut M12	DIN 934		
		Brass Nut M20 (for 630A)			
27	6	Alu-Clamping	DIN 42538		
26	6	Nut M12	DIN 934		
25	6	Washer M12	DIN 125		
24	1	Fixing Ring	"D" DIN 42538		
23	1	Copper Snap Ring	"U" DIN 42533		
18	4	Setscrew	DIN 553 (M8x15)		
17	1	Washer	DIN 125		
16	1	Brass Screw	DIN 42533		
14	1	Brass Nut	M30x2 DIN 934-Ms		
13	1	Copper Ring	"S" DIN 42533		
12	1	Pressure Ring	"P" DIN 42534		
11	1	Brass Lower Bolt			
		Brass Lower Bolt (for 630A)			
10	1	Flange Gasket	"N" DIN 42533		
9	1	Plain Gasket	"M" DIN 42533		
8	1	Internal Gasket	"O" DIN 42533		
7	1	Sealing Ring Gasket	"J" DIN 42533		
4	1	Brass Disc	"F" DIN 42534		
3	1	Brass Cap	"E" DIN 42534		
2	1	Brass Upper Bolt			
		Copper Upper Bolt (for 630A)			
1	-	-	1	52 - 630 / P4	EN 50180
	-	-	1	52 - 250 / P4	
	-	1	-	52 - 630 / P3	
	-	1	-	52 - 250 / P3	
	1	-	-	52 - 630 / P1	
1	-	-	52 - 250 / P1		
POS.	Type 29	Type 30	Type 31	NAME OF THE MATERIAL	DESCRIPTION

52 kV 1250 A
EN 50180 Outdoor Transformer Bushings



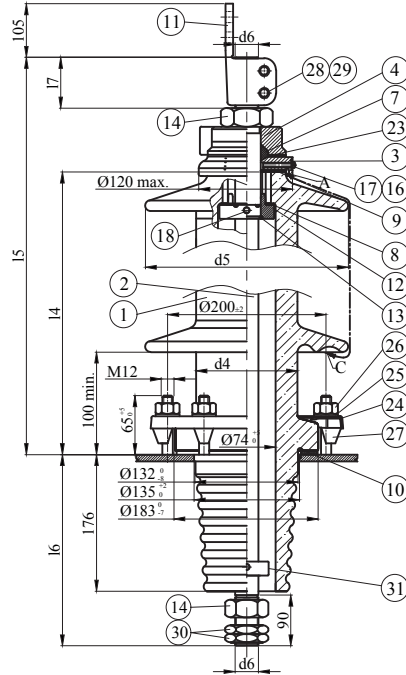
Insulation Levels acc. to IEC 60137:2017		
1	Highest Voltage (kV)	52
2	Rated Current (A)	1250
3	Lightning Impulse Withstand Voltage (BIL) (kV)	250
4	Power Frequency Withstand Voltage (kV)	dry 105 wet 95
6	Rated Thermal Short-time Current (2s) (kA)	17,68
7	Rated Dynamic Current (kA)	62,5
8	Minimum Cantilever Withstand Load (N)	1250

***All dimensions are "mm"
n* 6 fixing studs steel M12x70 (not supplied with the kit) Bolt circle 200 mm

Type / Creepage Distance [mm]	Arcing Distance AC [mm]	l4	l5	l6	l7	d4 max	d5 max	d6
52 - 1250 / P1 (Type 29) / 950	480	509	657	253	65	136	259	M30x2
52 - 1250 / P3 (Type 30) / 1350	480	509	657	253	65	136	259	
52 - 1250 / P4 (Type 31) / 1655	520	554	702	253	65	136	259	

31	1	Polymeric Washer			
30	2	Brass Lock Nut M30		DIN 936	
29	2	Screw M10x40		DIN 933	
28	2	Washer M10		DIN 125	
27	6	Alu-Clamping		DIN 42538	
26	6	Nut M12		DIN 934	
25	6	Washer M12		DIN 125	
24	1	Fixing Ring		"D" DIN 42538	
23	1	Copper Snap Ring		"U" DIN 42533	
18	4	Setscrew		DIN 553 (M8x15)	
17	1	Washer		DIN 125	
16	1	Brass Screw		DIN 42533	
14	2	Brass Nut		M30x2 DIN 934-MS	
13	1	Copper Ring		"S" DIN 42533	
12	1	Pressure Ring		"P" DIN 42534	
11	1	Brass Flag		DIN 43675-EP	
10	1	Flange Gasket		"N" DIN 42533	
9	1	Plain Gasket		"M" DIN 42533	
8	1	Internal Gasket		"O" DIN 42533	
7	1	Sealing Ring Gasket		"J" DIN 42533	
4	1	Brass Disc		"F" DIN 42534	
3	1	Brass Cap		"E" DIN 42534	
2	-	-	1	Connecting Bolt	52 - 1250 / P4
	-	1	-		52 - 1250 / P3
	1	-	-		52 - 1250 / P1
1	-	-	1	Porcelain	52 - 1250 / P4
	-	1	-		52 - 1250 / P3
	1	-	-		52 - 1250 / P1
POS.	Type 29	Type 30	Type 31	NAME OF THE MATERIAL	DESCRIPTION

52 kV 2000 A
EN 50180 Outdoor Transformer Bushings



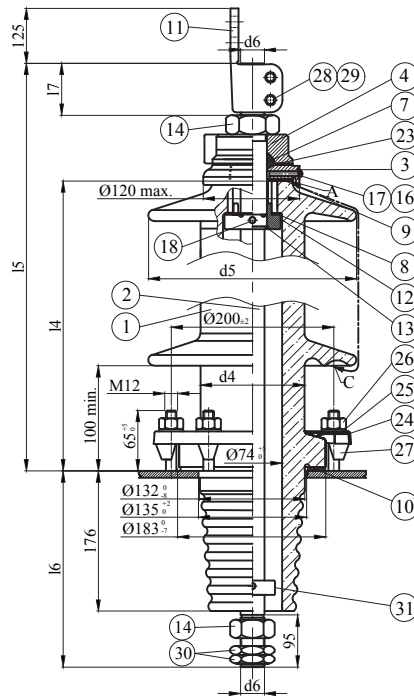
Insulation Levels acc. to IEC 60137:2017		
1	Highest Voltage (kV)	52
2	Rated Current (A)	2000
3	Lightning Impulse Withstand Voltage (BIL) (kV)	250
4	Power Frequency Withstand Voltage (kV)	dry 105 wet 95
6	Rated Thermal Short-time Current (2s) (kA)	35,36
7	Rated Dynamic Current (kA)	125
8	Minimum Cantilever Withstand Load (N)	2000

***All dimensions are "mm"
n° 6 fixing studs steel M12x70 (not supplied with the kit) Bolt circle 200 mm

Type / Creepage Distance [mm]	Arcing Distance AC [mm]	14	15	16	17	d4 max	d5 max	d6
52 - 2000 / P1 (Type 29) / 950	480	509	687	285	85	136	259	
52 - 2000 / P3 (Type 30) / 1350	480	509	687	285	85	136	259	M42x3
52 - 2000 / P4 (Type 31) / 1655	520	554	732	285	85	136	259	

31	1	Polymeric Washer			
30	2	Brass Lock Nut M42	DIN 936		
29	2	Screw M12x50	DIN 933		
28	2	Washer M12	DIN 125		
27	6	Alu-Clamping	DIN 42538		
26	6	Nut M12	DIN 934		
25	6	Washer M12	DIN 125		
24	1	Fixing Ring	"D" DIN 42538		
23	1	Copper Snap Ring	"U" DIN 42533		
18	4	Set Screw	DIN 553 (M8x15)		
17	1	Washer	DIN 125		
16	1	Brass Screw	DIN 42533		
14	2	Brass Nut	M42x3 DIN 934-MS		
13	1	Copper Ring	"S" DIN 42533		
12	1	Pressure Ring	"P" DIN 42533		
11	1	Brass Flag	DIN 43675-FP		
10	1	Flange Gasket	"N" DIN 42533		
9	1	Plain Gasket	"M" DIN 42533		
8	1	Internal Gasket	"O" DIN 42533		
7	1	Sealing Ring Gasket	"J" DIN 42533		
4	1	Brass Disc	"F" DIN 42533		
3	1	Brass Cap	"E" DIN 42533		
2	-	-	1	Connecting Bolt	52 - 2000 / P4
	-	1	-		52 - 2000 / P3
	1	-	-		52 - 2000 / P1
1	-	-	1	Porcelain	52 - 2000 / P4
	-	1	-		52 - 2000 / P3
	1	-	-		52 - 2000 / P1
POS.	Type 29	Type 30	Type 31	NAME OF THE MATERIAL	DESCRIPTION

52 kV 3150 A EN 50180 Outdoor Transformer Bushings



Insulation Levels acc. to IEC 60137:2017		
1	Highest Voltage (kV)	52
2	Rated Current (A)	3150
3	Lightning Impulse Withstand Voltage (BIL) (kV)	250
4	Power Frequency Withstand Voltage (kV)	dry 105 wet 95
6	Rated Thermal Short-time Current (2s) (kA)	55,68
7	Rated Dynamic Current (kA)	196,87
8	Minimum Cantilever Withstand Load (N)	3150

***All dimensions are "mm"
n° 6 fixing studs steel M12x70 (not supplied with the kit) Bolt circle 200 mm

Type / Creepage Distance [mm]	Arcing Distance AC [mm]	l4	l5	l6	l7	d4 max	d5 max	d6
52 - 3150 / P1 (Type 29) / 950	480	509	692	290	85	136	259	M48x3
52 - 3150 / P3 (Type 30) / 1350	480	509	692	290	85	136	259	
52 - 3150 / P4 (Type 31) / 1655	520	554	737	290	85	136	259	

31	1	Polymeric Washer			
30	2	Brass Lock Nut M48		DIN 936	
29	2	Screw M12x65		DIN 933	
28	2	Washer M12		DIN 125	
27	6	Alu-Clamping		DIN 42538	
26	6	Nut M12		DIN 934	
25	6	Washer M12		DIN 125	
24	1	Fixing Ring		"D" DIN 42538	
23	1	Copper Snap Ring		"U" DIN 42533	
18	4	Set Screw		DIN 553 (M8x15)	
17	1	Washer		DIN 125	
16	1	Brass Screw		DIN 42533	
14	2	Brass Nut		M48x3 DIN 934-MS	
13	1	Copper Ring		"S" DIN 42533	
12	1	Pressure Ring		"P" DIN 42533	
11	1	Brass Flag		DIN 43675-FP	
10	1	Flange Gasket		"N" DIN 42533	
9	1	Plain Gasket		"M" DIN 42533	
8	1	Internal Gasket		"O" DIN 42533	
7	1	Sealing Ring Gasket		"J" DIN 42533	
4	1	Brass Disc		"F" DIN 42533	
3	1	Brass Cap		"E" DIN 42533	
2	-	-	1	Connecting Bolt	52 - 3150 / P4
	-	1	-		52 - 3150 / P3
	1	-	-		52 - 3150 / P1
1	-	-	1	Porcelain	52 - 3150 / P4
	-	1	-		52 - 3150 / P3
	1	-	-		52 - 3150 / P1
POS.	Type 29	Type 30	Type 31	NAME OF THE MATERIAL	DESCRIPTION