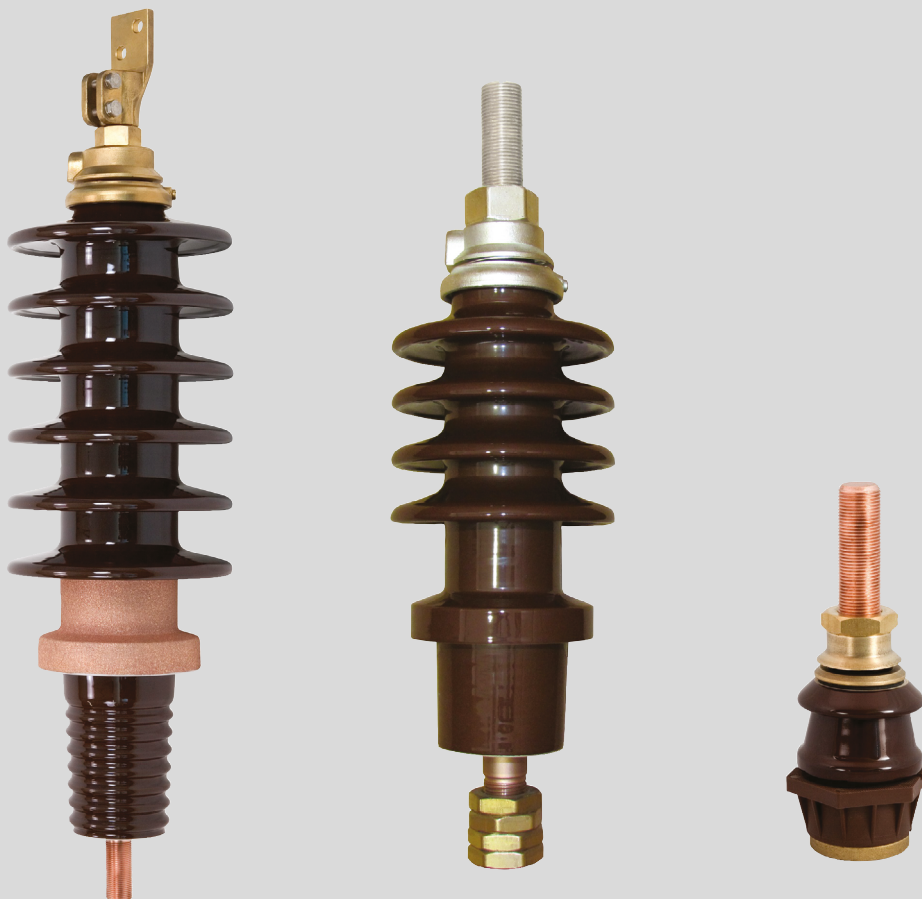


TECHNICAL GUIDE

Porcelain bushings (Medium/Low Voltage)



Content index

Technical data	4
Order sheet (Low voltage)	8
Order sheet (Medium voltage).....	9

Technical data

Type	Catalogue Reference	Standard	Rated current	Nominal Voltage	Dry lightning impulse voltage	Power frequency		Creepage distance (min) mm	Arcing Distance (min) mm	MIN Lee Protected Line mm	Category
			A	kV	kV	DRY kV	WET kV				
1/250 DIN	A1	DIN 42530	250	1	-	-	-	60	50	10	
3/250 DIN	A1	DIN 42539	250	3	40	14	10	120	100	16	
1/630 DIN	A1	DIN 42530	630	1	-	-	-	75	60	10	
3/630 DIN	A1	DIN 42539	630	3	40	14	10	120	100	16	
1/1000 DIN	A2	DIN 42530	1000	1	-	-	-	75	60	10	
3/1000 DIN	A2	DIN 42539	1000	3	40	14	10	125	100	16	
1/2000 DIN	A2	DIN 42530	2000	1	-	-	-	75	60	10	
3/2000 DIN	A2	DIN 42539	2000	3	40	14	10	125	100	18	
1/3150 DIN	A2	DIN 42530	3150	1	-	-	-	75	60	10	
3/3150 DIN	A2	DIN 42539	3150	3	40	14	10	125	100	18	
1/250-A	A3	EN 50386	250	1	20	10	10	55	-	-	LV - LOW VOLTAGE
1/250-B	A4	EN 50386	250	1	20	10	10	55	-	-	
1/630-A	A5	EN 50386	630	1	20	10	10	70	-	-	
1/630-B	A6	EN 50386	630	1	20	10	10	70	-	-	
1/1250-A	A7	EN 50386	1250	1	20	10	10	75	-	-	
1/1000-B	A8	EN50386	1000	1	20	10	10	75	-	-	
1/1250-B	A8	EN 50386	1250	1	20	10	10	75	-	-	
1/2000	A9	EN 50386	2000	1	20	10	10	75	-	-	
1/3150	A9	EN 50386	3150	1	20	10	10	75	-	-	
1/4000	A9	EN50386	4000	1	20	10	10	85	-	-	
1/5000	A9	EN 50386	5000	1	20	10	10	85	-	-	
3/4500	A10	COMEM	4500	3	40	14	10	140	107	20	
3/6500	A11	COMEM	6500	3	40	14	10	140	107	20	

Type	Catalogue Reference	Standard	Rated current	Nominal Voltage	Dry lightning impulse voltage	Power frequency		Creepage distance (min)	Arcing Distance (min)	Pollution level	Category
						DRY kV	WET kV				
			A	kV	kV			mm	mm		
12/250-P1	B5	EN 50180	250	12	75	30	28	192	145	P1	
12/250-P2	B5	EN 50180	250	12	75	30	28	240	145	P2	
12/250-P4	B5	EN 50180	250	12	75	30	28	372	260	P4	
24/250-P2	B5	EN 50180	250	24	125	55	50	480	260	P2	
24/250-P3	B5	EN 50180	250	24	125	55	50	600	315	P3	
24/250-P4	B5	EN 50180	250	24	125	55	50	744	465	P4	
36/250-P1	B5	EN 50180	250	36	170	77	70	576	315	P1	
36/250-P3	B5	EN 50180	250	36	170	77	70	900	465	P3	
36/250-P4	B5	EN 50180	250	36	170	77	70	1116	485	P4	
12/630-P3	B6	EN 50180	630	12	75	30	28	300	190	P3	
12/630-P4	B6	EN 50180	630	12	75	30	28	372	285	P4	
24/630-P2	B6	EN 50180	630	24	125	55	50	480	285	P2	
24/630-P4	B6	EN 50180	630	24	125	55	50	744	375	P4	
36/630-P2	B6	EN 50180	630	36	170	77	70	720	375	P2	
36/630-P4	B6	EN 50180	630	36	170	77	70	1116	475	P4	MV - MEDIUM VOLTAGE
12/1250-P4	B7	EN 50180	1250	12	75	30	28	372	215	P4	
24/1250-P3	B7	EN 50180	1250	24	125	55	50	600	280	P3	
24/1250-P4	B7	EN 50180	1250	24	125	55	50	744	385	P4	
36/1250-P3	B7	EN 50180	1250	36	170	77	70	900	385	P3	
36/1250-P4	B7	EN 50180	1250	36	170	77	70	1116	500	P4	
12/2000-P4	B7	EN 50180	2000	12	75	30	28	372	210	P4	
24/2000-P3	B7	EN 50180	2000	24	125	55	50	600	275	P3	
24/2000-P4	B7	EN 50180	2000	24	125	55	50	744	385	P4	
36/2000-P3	B7	EN 50180	2000	36	170	77	70	900	385	P3	
36/2000-P4	B7	EN 50180	2000	36	170	77	70	1116	495	P4	
12/3150-P4	B7	EN 50180	3150	12	75	30	28	372	210	P4	
24/3150-P3	B7	EN 50180	3150	24	125	55	50	600	275	P3	
24/3150-P4	B7	EN 50180	3150	24	125	55	50	744	385	P4	
36/3150-P3	B7	EN 50180	3150	36	170	77	70	900	385	P3	
36/3150-P4	B7	EN 50180	3150	36	170	77	70	1116	495	P4	

Technical data

Type	Catalogue Reference	Standard	Rated current	Nominal Voltage	Dry lightning impulse voltage	Power frequency		Creepage distance (min)	Arcing Distance (min)	Pollution level	Category
			A	kV	kV	DRY kV	WET kV	mm	mm		
52/1250-P1	B13	EN 50180	1250	52	250	105	95	832	480	P1	MV - MEDIUM VOLTAGE
52/2000-P1	B13	EN 50180	2000	52	250	105	95	832	480	P1	
52/3150-P1	B13	EN 50180	3150	52	250	105	95	832	480	P1	
52/1250-P3	B13	EN 50180	1250	52	250	105	95	1300	480	P3	
52/2000-P3	B13	EN 50180	2000	52	250	105	95	1300	480	P3	
52/3150-P3	B13	EN 50180	3150	52	250	105	95	1300	480	P3	
52/1250-P4	B13	EN 50180	1250	52	250	105	95	1612	520	P4	
52/2000-P4	B13	EN 50180	2000	52	250	105	95	1612	520	P4	
52/3150-P4	B13	EN 50180	3150	52	250	105	95	1612	520	P4	
24/5000-P2	B15	EN 50243	5000	24	125	55	50	480	270	P2	
24/8000-P2	B15	EN 50243	8000	24	125	55	50	480	270	P2	
24/5000-P4	B15	EN 50243	5000	24	125	55	50	744	380	P4	
24/8000-P4	B15	EN 50243	8000	24	125	55	50	744	380	P4	
36/5000-P2	B15	EN 50243	5000	36	170	77	70	720	380	P2	
36/8000-P2	B15	EN 50243	8000	36	170	77	70	720	380	P2	
36/5000-P3	B15	EN 50243	5000	36	170	77	70	900	370	P3	
36/8000-P3	B15	EN 50243	8000	36	170	77	70	900	370	P3	

Type	Catalogue Reference	Standard	Rated current	Nominal Voltage	Dry lightning impulse voltage	Power frequency		Creepage distance (min)	Arcing Distance (min)	MIN Lee Protected Line	Category
			A	kV	kV	DRY kV	WET kV	mm	mm	mm	
36/250	B8	COMEM	250	36	170	77	70	1320	-	-	MV - MEDIUM VOLTAGE
52/250	B9	COMEM	250	52	250	105	95	950	480	340	
52/630	B9	COMEM	630	52	250	105	95	950	480	340	
24/6300	B10	COMEM	6300	24	125	55	50	440	155	90	
12/4500	B11	COMEM	4500	12	75	30	28	295	85	48	
24/4500	B11	COMEM	4500	24	125	55	50	445	155	90	
36/4500	B11	COMEM	4500	36	170	77	70	635	220	168	
52/1000	B12	COMEM	1000	52	250	105	95	1430	480	340	
52/2000	B12	COMEM	2000	52	250	105	95	1430	480	340	
52/3150	B12	COMEM	3150	52	250	105	95	1430	480	340	

COMEM is an ISO 9001 system certified. Information subject to change without notice

Type	Catalogue Reference	Standard	Rated current	Nominal Voltage	Dry lightning impulse voltage	Power frequency		Creepage distance (min)	Arcing Distance (min)	MIN Lee Protected Line	Category
						DRY kV	WET kV				
			A	kV	kV			mm	mm	mm	
12/250 DIN	B1	DIN 42531	250	12	75	30	28	305	235	165	
24/250 DIN	B1	DIN 42531	250	24	125	55	50	450	310	212	
36/250 DIN	B1	DIN 42531	250	36	170	77	70	607	408	288	
12/630 DIN	B2	DIN 42532	630	12	75	30	28	305	230	165	
24/630 DIN	B2	DIN 42532	630	24	125	55	50	440	315	245	
36/630 DIN	B2	DIN 42532	630	36	170	77	70	662	418	332	
12/1000 DIN	B3	DIN 42533	1000	12	75	30	28	295	85	42	
24/1000 DIN	B3	DIN 42533	1000	24	125	55	50	445	155	90	
36/1000 DIN	B3	DIN 42533	1000	36	170	77	70	635	220	128	
12/2000 DIN	B3	DIN 42533	2000	12	75	30	28	295	85	48	
24/2000 DIN	B3	DIN 42533	2000	24	125	55	50	445	155	90	MV - MEDIUM VOLTAGE
36/2000 DIN	B3	DIN 42533	2000	36	170	77	70	635	220	168	
12/3150 DIN	B3	DIN 42533	3150	12	75	30	28	295	85	48	
24/3150 DIN	B3	DIN 42533	3150	24	125	55	50	445	155	90	
36/3150 DIN	B3	DIN 42533	3150	36	170	77	70	635	220	168	
52/1000 DIN	B4	DIN 42534	1000	52	250	105	95	950	480	340	
52/2000 DIN	B4	DIN 42534	2000	52	250	105	95	950	480	340	
52/3150 DIN	B4	DIN 42534	3150	52	250	105	95	950	480	340	
24/5000 DIN	B14	DIN 42541	5000	24	125	55	50	470	260	105	
24/8000 DIN	B14	DIN 42541	8000	36	125	55	50	470	260	105	
36/5000 DIN	B14	DIN 42541	5000	24	170	77	70	555	355	140	
36/8000 DIN	B14	DIN 42541	8000	36	170	77	70	555	355	140	

Order sheet (Low Voltage)

Date	
Rev.	
Customer reference	

Electrical features

Nominal voltage		kv
Rated current		A

Relevant standard

<input type="checkbox"/>	DIN
<input type="checkbox"/>	EN
<input type="checkbox"/>	Comem
<input type="checkbox"/>	Other

Active parts in air

<input type="checkbox"/>	Tinned 10 micron
<input type="checkbox"/>	Silver-plated 3 micron
<input type="checkbox"/>	Other

Catalogue page

--

Gasket

<input type="checkbox"/>	NBR
<input type="checkbox"/>	VITON
<input type="checkbox"/>	FVMQ (Fluorosilicon)
<input type="checkbox"/>	Special

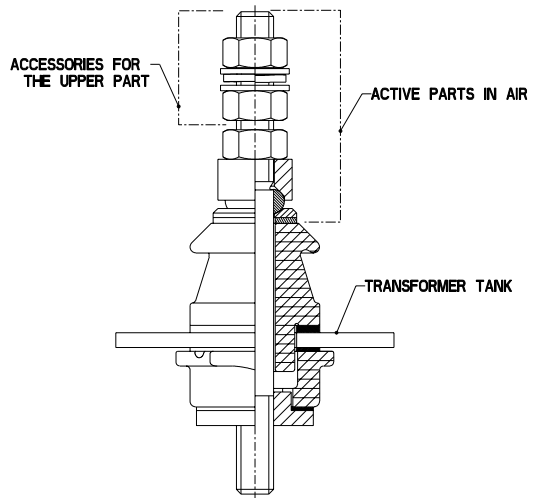
Terminal contact in the lower part **Notes**

<input type="checkbox"/>	Type A	
<input type="checkbox"/>	Type B ⁽¹⁾	
<input type="checkbox"/>	Customer drawing	

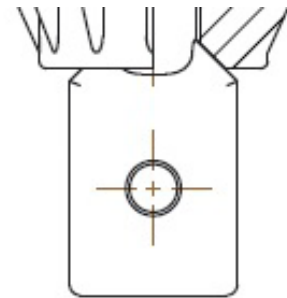
(1) According to EN standard type B is applied to:
 Brass bolt: 1kV/250A, 1kV/630A, 1kV/1000A, 1kV/1800A
 Copper bolt: 1kV/1250A, 1kV/2000A

Terminal contact in the upper part **Notes**

<input type="checkbox"/>	Type A	
<input type="checkbox"/>	Type B	
<input type="checkbox"/>	Customer drawing	
<input type="checkbox"/>	No need	



Type A



Type B

Notes (Construction details according to customer specifications):

Order sheet (Medium Voltage)

Date	
Rev.	
Customer reference	

Electrical features

Nominal voltage		kv
Rated current		A
Creepage distance		mm

Relevant standard

<input type="checkbox"/>	DIN
<input type="checkbox"/>	EN
<input type="checkbox"/>	Comem
<input type="checkbox"/>	Other

Active parts in air

<input type="checkbox"/>	Tinned 10 micron
<input type="checkbox"/>	Silver-plated 3 micron
<input type="checkbox"/>	Other

Fixing components

<input type="checkbox"/>	Galvanized
<input type="checkbox"/>	Stainless steel

Gasket ⁽¹⁾

<input type="checkbox"/>	NBR
<input type="checkbox"/>	VITON
<input type="checkbox"/>	FVMQ (Fluorosilicon)
<input type="checkbox"/>	Special

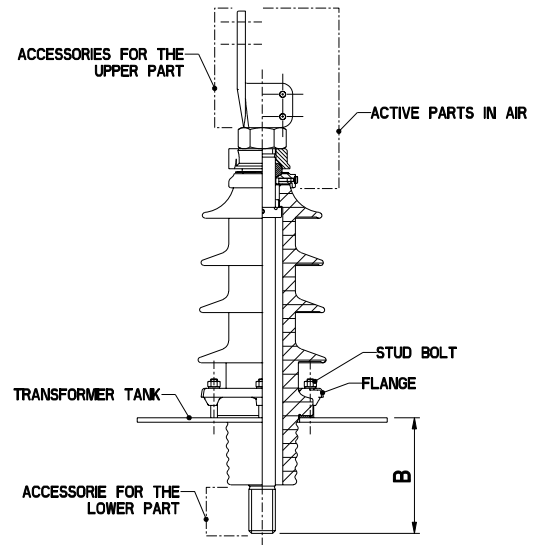
(1) The gasket between porcelain and tank will be always in rubber cork if not differently specified in the notes

Catalogue page

--

B Dimension (mm)

--



Flange

<input type="checkbox"/>	Aluminium
<input type="checkbox"/>	Galvanized

Arcing horns

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

Accessories for lower part

Notes

<input type="checkbox"/>	Flag	
<input type="checkbox"/>	Customer drawing	

Accessories for upper part

Notes

<input type="checkbox"/>	Flag	
<input type="checkbox"/>	Customer drawing	

Notes (Construction details according to customer specifications):

COMEM SpA

Localita' Signolo 22, S.R.11
36054 Montebello Vicentino
Vicenza - Italy
Tel +39 0444 449 311

www.comem.com

The data and illustrations are not binding. We reserve the right to modify the contents of this document without prior notice following the technical and product developments.

Copyright 2025 COMEM. All rights reserved

Technical guide-03-2025