

TYPE BP

The Southern States Type BP power fuse is available in voltage ratings from 7.2 kV to 69 kV and in continuous current ratings of 100 and 200 amperes. The BP will interrupt up to 934,000 kVA 3-phase symmetrical at 69 kV. It offers both reliability and economy where higher interrupting capacities are not required.

The BP will reliably interrupt fault currents from those just high enough to melt the fusible element to those up to full rated value of the unit. For a complete description of the operating principle, see Catalog Bulletin 900.

Economy is significant at the time of the original installation, and at the time of re-fusing. **To restore the fuse to service, you replace only the link.** Refer to the following chart to coordinate the application of the fuse kit with the fuse holder. Only those kit ratings shown below beside their corresponding fuse holder rating can be installed in those fuse holders:

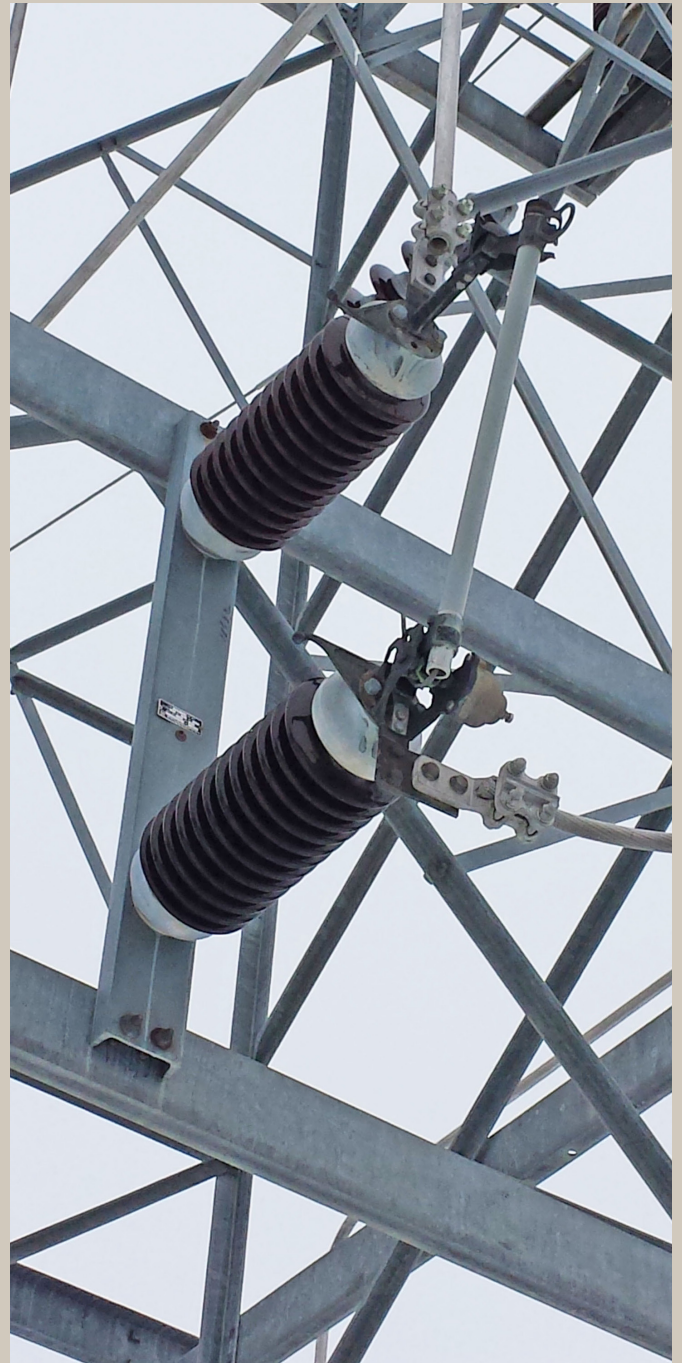
POWER FUSE KIT - POWER FUSE HOLDER COORDINATION CHART

Power Fuse Ratings (Amperes)	Fuse Holder Rating (Amperes)
3, 5, 7, 8, 10, 12.5, 15, 20, 30, 40, 50, 60, 65, 75, 80, 100	100
125, 150, & 200	200

The equipment described in this bulletin performs in accordance with NEMA standards publication SG2-1954, paragraphs SG2-5, SG2-5.10, and SG2-5.11.

Power Fuses

7.2 - 69 kV 100-200 AMPs



DESIGN OVERVIEW

1) The fuse holder is positively latched in the fuse mounting when the holder is in the closed position. Only when the fuse link is ruptured or when the sleet hood is raised will the fuse holder swing free. The holder will not open from jarring or vibration.

2) A self-locking hinge prevents the fuse holder from jumping out of the mounting when the fuse operates. The holder is positively locked into the fuse mounting until it swings to an inverted position.

3) All fuse tube are high strength fiberglass

4) The fuse holder swings to an inverted position when the link is blown. The advantages of the action are:

(1) An air gap is provided in the circuit, removing hazards to personnel or equipment from leakage currents flowing over the tube surface

(2) Prevention of charred fuse tubes due to leakage currents

(3) Positive indication of fuse operations

5) The snubber brings the opening fuse holder to a cushioned stop, eliminating shock on the holder and lower insulator units.

6) Fuses rated 46 kV and above are provided with an electrostatic shield to eliminate the harmful effects produced by corona. The shield, an integral part of the laminated fuse tube, prevents corona damage to the fuse link and fuse tube. See Southern States catalog bulletin 900 for a detailed description of this feature.

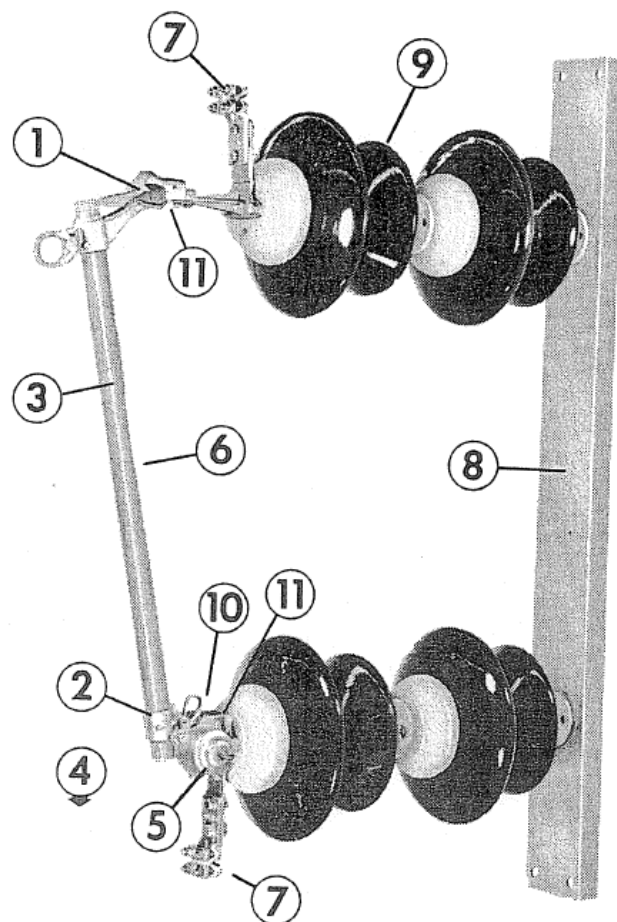
7) Terminal pads have two 9/16" holes on 1 3/4" centers. Terminal connectors in a wide range of sizes are available as an extra cost option.

8) The bases are standard galvanized steel channel. The standard base is supplied with mounting holes punched as shown on page 4.

9) Either cap and pin or post type NEMA insulators will be supplied as specified.

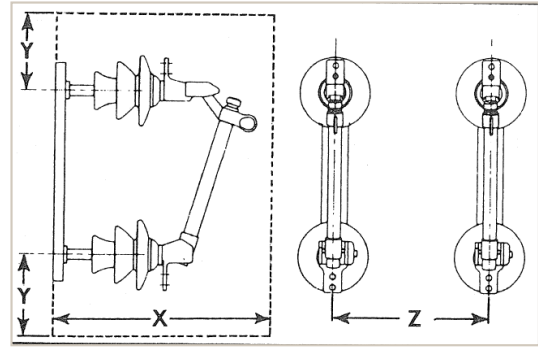
10) The fuse holder may be removed or installed with either a Southern States bayonet head hookstick or a conventional hookstick.

11) All BP power fuses have silver-to-silver contacts on both hinge and jaw for maximum reliability.



RECOMMENDED MOUNTING CLEARANCE

kV	INCHES			METERS		
	X	Y	Z	X	Y	Z
7.2	40	44	36	1.02	1.12	0.91
14.4	47	46	36	1.19	1.17	0.91
23	56	48	48	1.42	1.22	1.22
34.5	66	51	60	1.68	1.30	1.52
46	78	54	72	1.98	1.37	1.83
69	106	65	84	2.69	1.65	2.13



BP POWER FUSE SPECIFICATIONS & CATALOG NUMBERS

Type BP Power Fuses

Note: if there is a blank space under a specific speed and amperage rating this indicates that speed ratio, amperage rating combination is not available.

Style	RATING						CATALOG & PART NUMBERS		APPROXIMATE WEIGHTS			
	kV			Amps Max	INTERRUPTING CAPACITY							
	Nom.	Max Design	BIL		RMS Amps * Asymmetrical	KVA **	Complete Fuse Assembly	PART #	Lbs.	kg	Fuse Holder	kg
Vertical	7.2	8.25	95	100	12,500	101,500	BP-V-75-100-12.5	41150312	48	21.8	6	2.7
				200	12,500	101,500	BP-V-75-200-12.5	41150323	48	21.8	6	2.7
	14.4	15.5	110	100	12,500	203,000	BP-V-14-100-12.5	41150313	59	26.8	6	2.7
				200	12,500	203,000	BP-V-14-200-12.5	41150324	59	26.8	6	2.7
	23	25.8	150	100	10,000	249,000	BP-V-23-100-10	41150314	86	39	6	2.7
				200	10,000	249,000	BP-V-23-200-10	41150325	86	39	6	2.7
	34.5	38	200	100	8,000	297,000	BP-V-34-100-8	41150315	109	49.4	6	2.7
				200	8,000	297,000	BP-V-34-200-8	41150326	109	49.4	6	2.7
	46	48.3	250	100	8,000	398,000	BP-V-46-100-8	41150316	153	69.4	6	2.7
				200	12,500	622,500	BP-V-46-200-12.5	41150327	153	69.4	6	2.7
	69	72.5	350	100	12,500	934,000	BP-V-69-100-12.5	41150317	238	107.9	8	3.6
				200	12,500	934,000	BP-V-69-200-12.5	41150328	238	107.9	8	3.6

* To select fuse on this basis, multiply system steady state fault current by the appropriate asymmetry factor.

** Values shown are power interrupting ratings expressed on a three phase symmetrical basis assuming nominal system voltage and an asymmetry factor of 1.6 - Asymmetry factors vary with system characteristics but do not exceed 1.6

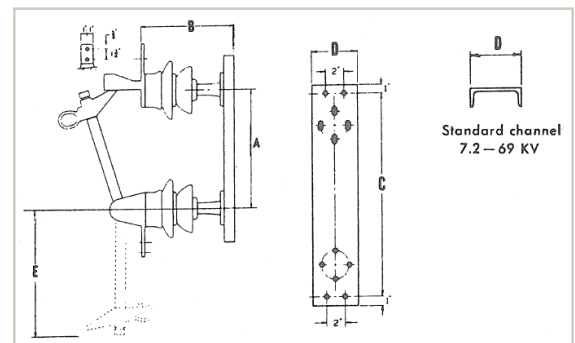
BP Catalog Number Selection Overview

Fuse Type	Orientation	Nom Voltage	Current	Int. Rating (kA Assym.)	Description
BP	V - Vertical	7.2 = 75	100 200	8 10 12.15	Blank = Complete Fuse H = Fuseholder ONLY LP = Live Parts ONLY
		14.4 = 14			
		23 = 23			
		34.5 = 34			
		46 = 46			
		69 = 69			

Please give the complete catalog number by preceding the catalog code number with the fuse kit type (speed ratio). For example: to order a 69 kV, 75 amp PF link, look under the 69 kV column across from the 75 amp rating. The code number is 69075. Prefix this number with PF, and your correct catalog number is PF69075.

STANDARD CHANNEL DIMENSIONS

kV	INCHES					METERS				
	A	B	C	D	E	A	B	C	D	E
7.2	13	9 ^{5/8}	18	4	14 ^{3/4}	.330	.244	.457	.102	.375
14.4	15	12 ^{1/8}	21	4	16 ^{3/4}	.381	.308	.533	.102	.425
23	18	14 ^{1/8}	24	4	19 ^{3/4}	.457	.359	.610	.102	.502
34.5	24	17 ^{1/4}	30	5	25 ^{3/4}	.610	.438	.762	.127	.764
46	30	20 ^{1/4}	36	5	31 ^{3/4}	.762	.514	.915	.127	.807
69	36	32	48	6	37 ^{3/4}	.915	.813	1.220	.152	.959



AVAILABLE FUSE KITS BY SPEED RATIO AND AMPERAGE FOR SOUTHERN STATES

Type BPA and HPA Power Fuses

Note: If there is a blank space under a specific speed and amperage rating this indicates that speed ratio, amperage rating combination is not available.

Catalog Number =

Speed Ratio	+	Voltage	+	Amperage (3 Digit #)
PF PM PX PE		PFA PMA PXA PEA		7.2 15 23 34 46
				69 115 138 161
				003 005 007 010 012.5
				015 020 025 030 040
				050 060 065 075 080
				100 125 150 200 250
				300 350 400

Example:
23 kV, 10A NEMA Standard Speed
= **PE23010**

Fuse Kit Types Available in Amp Ratings Shown				Catalog Code Numbers					
PF	PM	PX	PE	7.2 kV	14.4 kV	23 kV	34.5 kV	46 kV	69 kV
3	3	3	3	72003	15003	23003	34003	46003	69003
5	5	5	5	72005	15005	23005	34005	46005	69005
			7	72007	15007	23007	34007	46007	69007
	8	8		72008	15008	23008	34008	46008	69008
10	10	10	10	75010	15010	23010	34010	46010	69010
	12.5	12.5		72012.5	15012.5	23012.5	34012.5	46012.5	69012.5
15	15	15	15	72015	15015	23015	34015	46015	69015
20	20	20	20	72020	15020	23020	34020	46020	69020
	25	25	25	72025	15025	23025	34025	46025	69025
30	30	30	30	72030	15030	23030	34030	46030	69030
40	40	40	40	72040	15040	23040	34040	46040	69040
50	50	50	50	72050	15050	23050	34050	46050	69050
60	60	60		72060	15060	23060	34060	46060	69060
			65	72065	15065	23065	34065	46065	69065
75	75	75		72075	15075	23075	34075	46075	69075
			80	72080	15080	23080	34080	46080	69080
100	100	100	100	72100	15100	23100	34100	46100	69100
125	125	125	125	72125	15125	23125	34125	46125	69125
200	200	200	200	72200	15200	23200	34200	46200	69200
250	250	250		72250	15250	23250	34250	46250	69250
300	300	300		72300	15300	23300	34300	46300	69300
	350			72350	15350	23350	34350	46350	69350
	400			72400	15400	23400	34400	46400	69400

Fuse Kit Types Available in Amp Ratings Shown				Catalog Code Numbers		
PFA	PMA	PXA	PEA	115 kV	138 kV	161 kV
3	3	3	3	115003	138003	161003
5	5	5	5	115005	138005	161005
			7	115007	138007	161007
	8	8		115008	138008	161008
10	10	10	10	115010	138010	161010
	12.5	12.5		115012.5	138012.5	161012.5
15	15	15	15	115015	138015	161015
20	20	20	20	115020	138020	161020
	25	25	25	115025	138025	161025
30	30	30	30	115030	138030	161030
40	40	40	40	115040	138040	161040
50	50	50	50	115050	138050	161050
60	60	60		115060	138060	161060
			65	115065	138065	161065
75	75	75		115075	138075	161075
			80	115080	138080	161080
100	100	100	100	115100	138100	161100
125	125	125	125	115125	138125	161125
200	200	200	200	115200	138200	161200

■ = Not Available

PF and PFA = slow speed
PM and PMA = medium speed
PX and PXA = fast speed
PE and PEA = NEMA-EEI standard speed

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3, 5, 7, 8, 10, 12.5, 15, 20, 30, 40, 50, 60, 65, 75, 80, 100	100
125, 150, & 200	200
250 & 300	300
350 & 400	400