

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.

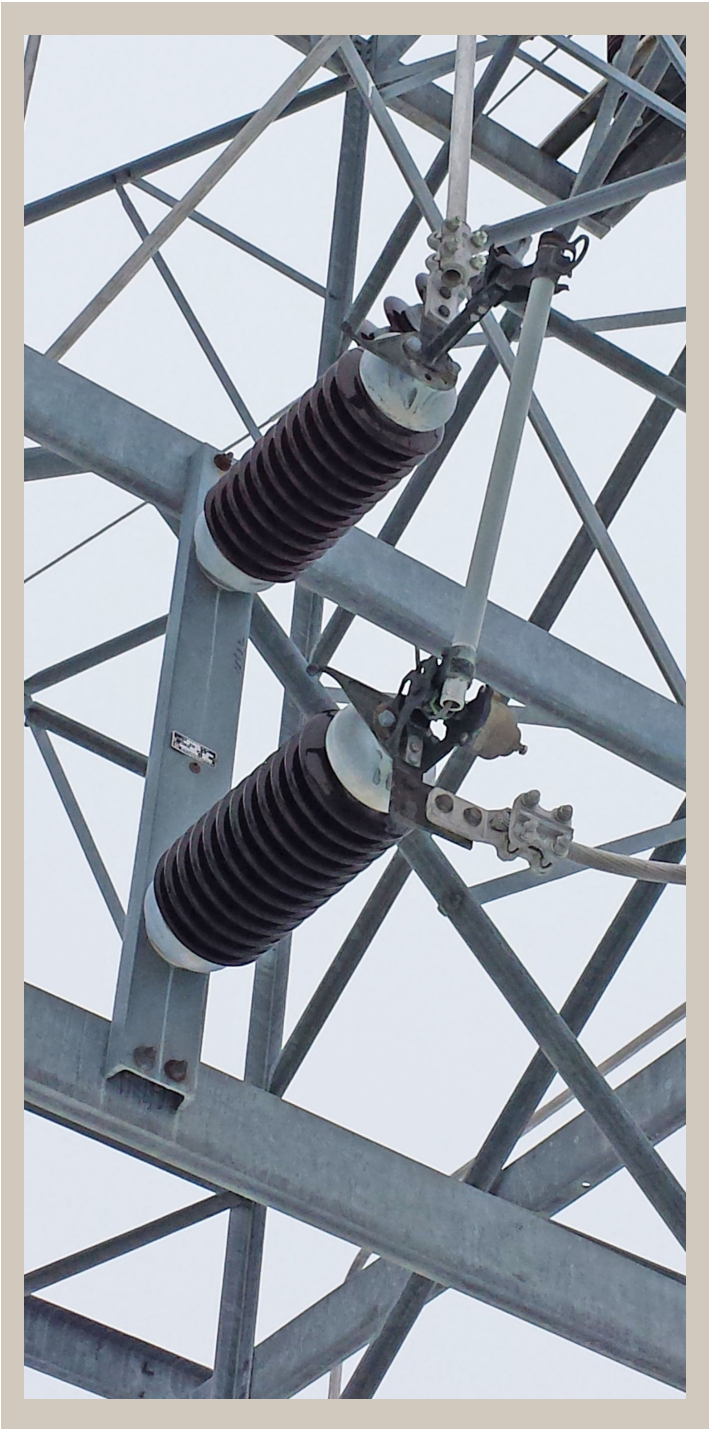
Economy is significant at the time of the original installation, and at the time of re-fusing. **To restore the fuse to service, you replace only the link.** Refer to the following chart to coordinate the application of the fuse kit with the fuse holder. Only those kit ratings shown below beside their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

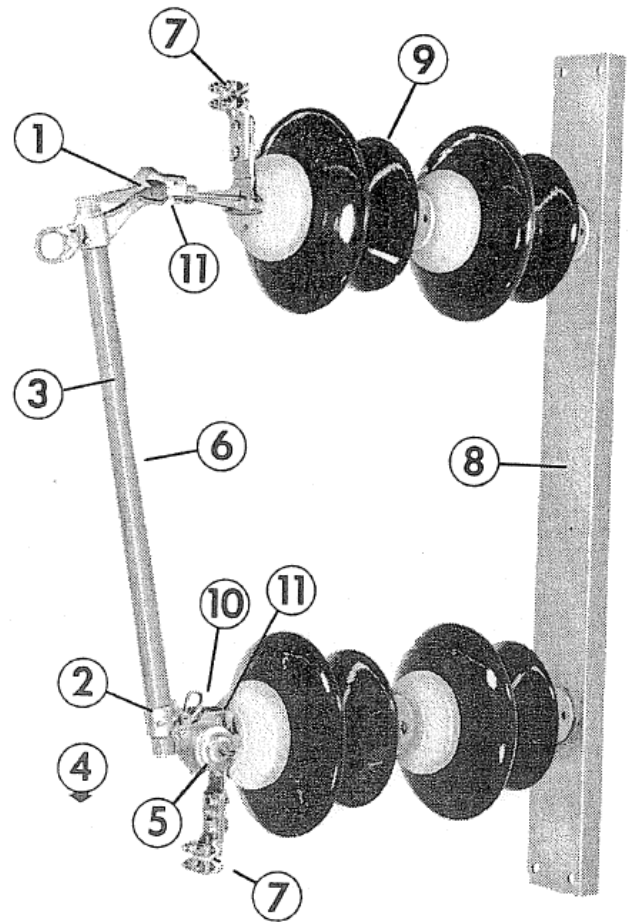
7) Terminal pads have two 9/16" holes on 1 3/4" centers. Terminal connectors in a wide range of sizes are available as an extra cost option.

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

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

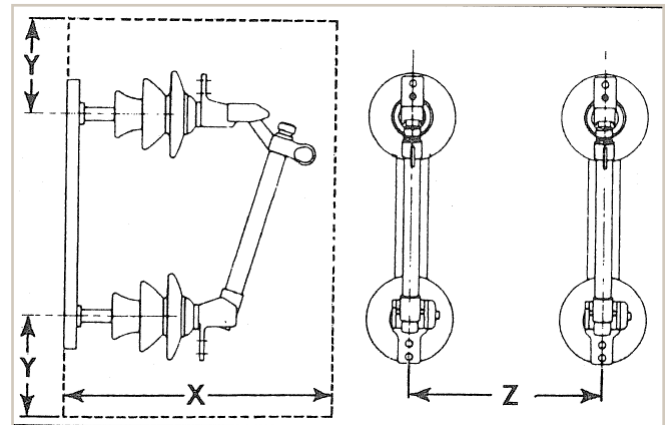
11) All BP power fuses have silver-to-silver contacts on both hinge and jaw for maximum reliability.

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



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 | | Complete Fuse Assembly | PART # | Lbs. | kg | Fuse Holder | kg |
| | Nom. | Max Design | BIL | | RMS Amps * Asymmetrical | KVA ** | | | | | | |
| 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 |

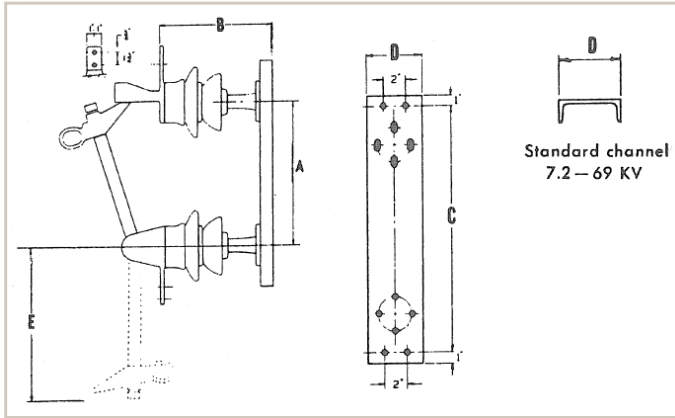
* To select fuse on this basis, multiply system steady state fault current by the appropriate asymmetry factor.

** 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

| 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.



| 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 |

FUSE KITS

The fuse kits listed here were specifically designed for Southern States power fuses, and no other links can be used in the Type BP. Time-current characteristic curves are available upon request.

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

| 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 |
| | | | 1 | 75001 | 15001 | 23001 | 34001 | 46001 | 69001 |
| 2 | 2 | | 2 | 75002 | 15002 | 23002 | 34002 | 46002 | 69002 |
| 3 | 3 | 3 | 3 | 75003 | 15003 | 23003 | 34003 | 46003 | 69003 |
| 5 | 5 | 5 | 5 | 75005 | 15005 | 23005 | 34005 | 46005 | 69005 |
| | | | 7 | 75007 | 15007 | 23007 | 34007 | 46007 | 69007 |
| | 8 | 8 | | 75008 | 15008 | 23008 | 34008 | 46008 | 69008 |
| 10 | 10 | 10 | 10 | 75010 | 15010 | 23010 | 34010 | 46010 | 69010 |
| | 12.5 | 12.5 | | 75012.5 | 15012.5 | 23012.5 | 34012.5 | 46012.5 | 69012.5 |
| 15 | 15 | 15 | 15 | 75015 | 15015 | 23015 | 34015 | 46015 | 69015 |
| 20 | 20 | 20 | 20 | 75020 | 15020 | 23020 | 34020 | 46020 | 69020 |
| | 25 | 25 | 25 | 75025 | 15025 | 23025 | 34025 | 46025 | 69025 |
| 30 | 30 | 30 | 30 | 75030 | 15030 | 23030 | 34030 | 46030 | 69030 |
| 40 | 40 | 40 | 40 | 75040 | 15040 | 23040 | 34040 | 46040 | 69040 |
| 50 | 50 | 50 | 50 | 75050 | 15050 | 23050 | 34050 | 46050 | 69050 |
| 60 | 60 | 60 | | 75060 | 15060 | 23060 | 34060 | 46060 | 69060 |
| | | | 65 | 75065 | 15065 | 23065 | 34065 | 46065 | 69065 |
| 75 | 75 | 75 | | 75075 | 15075 | 23075 | 34075 | 46075 | 69075 |
| | | | 80 | 75080 | 15080 | 23080 | 34080 | 46080 | 69080 |
| 100 | 100 | 100 | 100 | 75100 | 15100 | 23100 | 34100 | 46100 | 69100 |
| 125 | 125 | 125 | 125 | 75125 | 15125 | 23125 | 34125 | 46425 | 69125 |
| 200 | 200 | 200 | 200 | 75200 | 15200 | 23200 | 34200 | 46200 | 69200 |