

## American Fuses Cable Protectors CP & CPH



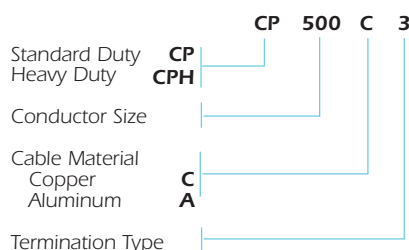
Ferraz Shawmut CP Cable Protectors are special purpose limiters which are crimped or bolted to cables to clear and isolate faults quickly, increasing the reliability of service entrance and distribution runs. They are current limiting with a 200,000A interrupting rating, yet will carry low cable overloads which are handled by standard protective devices. Cable Protectors are rated in terms of cable size and material (Al or Cu). Heavier duty CPH Cable Protectors are available on special order. Heat shrinkable (HS) tubing can be specified for field installation. Refer to the Application Information Section for more information.

### Reference Numbers

| Description |                            |             | Copper         |                  | Aluminium      |                  |
|-------------|----------------------------|-------------|----------------|------------------|----------------|------------------|
| Type        | Termination                | Cable size* | Catalog Number | Reference Number | Catalog Number | Reference Number |
| 1           | Cable to cable             | 2           | CP2C1          | E217814          | -              | -                |
|             |                            | 1/0         | CP1/0C1        | B200883          | -              | -                |
|             |                            | 2/0         | CP2/0C1        | A201940          | -              | -                |
|             |                            | 4/0         | CP4/0C1        | Y214243          | CP4/0A1        | N212716          |
|             |                            | 250kcmil    | CP250C1        | X213230          | CP250A1        | R211684          |
|             |                            | 350kcmil    | CP350C1        | W223096          | CP350A1        | C218847          |
|             |                            | 500kcmil    | CP500C1        | D200885          | CP500A1        | D218848          |
|             |                            | 750kcmil    | CP750C1        | M216280          | CP750A1        | A212198          |
| 3           | Cable to offset bus        | 2           | CP2C3          | Q218330          | -              | -                |
|             |                            | 1/0         | CP1/0C3        | N201423          | -              | -                |
|             |                            | 2/0         | CP2/0C3        | Y211161          | -              | -                |
|             |                            | 4/0         | CP4/0C3        | E215261          | CP4/0A3        | Y213231          |
|             |                            | 250kcmil    | CP250C3        | X214242          | CP250A3        | X212195          |
|             |                            | 350kcmil    | CP350C3        | P201424          | CP350A3        | R219366          |
|             |                            | 400kcmil    | CP400C3        | R218331          | -              | -                |
|             |                            | 500kcmil    | CP500C3        | T211686          | CP500A3        | S219367          |
| 750kcmil    | CP750C3                    | D217307     | CP750A3        | A214245          |                |                  |
| 5           | Straight bus to offset bus | 4/0         | CP4/0C5        | K216278          | CP4/0A5        | K216278          |
|             |                            | 250kcmil    | CP250C5        | Z214750          | CP250A5        | Z214750          |
|             |                            | 350kcmil    | CP350C5        | Z211162          | CP350A5        | Z211162          |
|             |                            | 500kcmil    | CP500C5        | Z214244          | CP500A5        | Z214244          |
|             |                            | 750kcmil    | CP750C5        | T218333          | CP750A5        | T218333          |
| 6           | Mole to cable              | 4/0         | CP4/0C6        | B217305          | CP4/0A6        | P213729          |
|             |                            | 250kcmil    | CP250C6        | E215767          | CP250A6        | M212715          |
|             |                            | 350kcmil    | CP350C6        | S211685          | CP350A6        | E222575          |
|             |                            | 500kcmil    | CP500C6        | F215262          | CP500A6        | F222576          |
|             |                            | 750kcmil    | CP750C6        | F218850          | CP750A6        | G215769          |
| 8           | Mole to offset bus         | 4/0         | CP4/0C8        | F217815          | CP4/0A8        | F217815          |
|             |                            | 250kcmil    | CP250C8        | K216784          | CP250A8        | K216784          |
|             |                            | 350kcmil    | CP350C8        | Y212196          | CP350A8        | Y212196          |
|             |                            | 500kcmil    | CP500C8        | L216279          | CP500A8        | L216279          |
|             |                            | 750kcmil    | CP750C8        | V219369          | CP750A8        | V219369          |

\* kcmil = MCM

### Catalog Numbering System



### Approvals

- Ferraz Shawmut Certified



### Features/Benefits

- Fiberglass bodies for dimensional stability in harsh environments
- Catalog number stamped into terminal for permanent identification
- Crimp terminals for aluminum cable include oxide inhibitor
- Molded rubber boots or heat shrinkable tubing available for insulation and protection

### Ratings

- Sizes: #2 to 750kcmil copper  
4/0 to 750kcmil aluminium  
600VAC, 200kA I.R.

# Special Purpose Fuses

## American Fuses Cable Protectors CP & CPH

### Type C1 - Dimensions

| Catalog Number | Reference Number | Cable* size | Dimensions-Inches (mm) |              |              |              |              |              |
|----------------|------------------|-------------|------------------------|--------------|--------------|--------------|--------------|--------------|
|                |                  |             | A                      | B            | D            | E            | J            | N            |
| CP2C1          | E217814          | #2          | 7.12<br>(180)          | 1.44<br>(37) | .42<br>(11)  | 1.75<br>(44) | 3.62<br>(92) | .31<br>(7.9) |
| CP1/OC1        | B200883          | 1/0         | 7.12<br>(180)          | 1.44<br>(37) | .52<br>(13)  | 1.75<br>(44) | 3.62<br>(92) | .39<br>(9.9) |
| CP2/OC1        | A201940          | 2/0         | 7.12<br>(180)          | 1.44<br>(37) | .56<br>(14)  | 1.75<br>(44) | 3.62<br>(92) | .44<br>(11)  |
| CP4/OC1        | Y214243          | 4/0         | 7.12<br>(180)          | 1.44<br>(37) | .68<br>(17)  | 1.75<br>(44) | 3.62<br>(92) | .55<br>(14)  |
| CP250C1        | X213230          | 250kcmil    | 7.38<br>(188)          | 1.44<br>(37) | .75<br>(19)  | 1.88<br>(48) | 3.62<br>(92) | .62<br>(16)  |
| CP350C1        | W223096          | 350kcmil    | 7.62<br>(194)          | 1.62<br>(41) | .88<br>(22)  | 2.00<br>(51) | 3.62<br>(92) | .71<br>(18)  |
| CP500C1        | D200885          | 500kcmil    | 9.38<br>(238)          | 1.88<br>(48) | 1.05<br>(27) | 2.88<br>(73) | 3.62<br>(92) | .85<br>(22)  |
| CP750C1        | M216280          | 750kcmil    | 9.51<br>(242)          | 2.50<br>(64) | 1.32<br>(34) | 2.88<br>(73) | 3.75<br>(95) | 1.06<br>(27) |

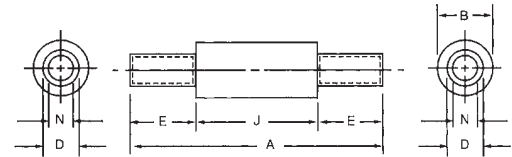
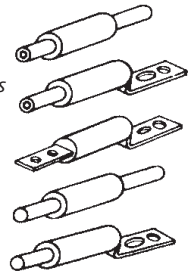
TYPE 1 - Cable to cable

TYPE 3 - Cable to offset bus

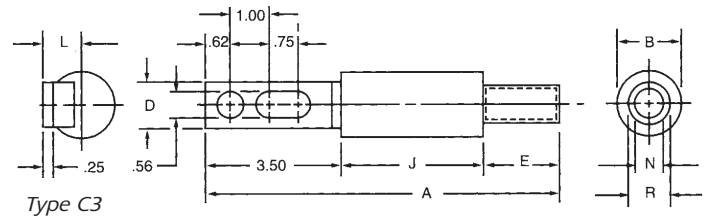
TYPE 5 - Bus to offset bus

TYPE 6 - Mole to cable

TYPE 8 - Mole to offset bus



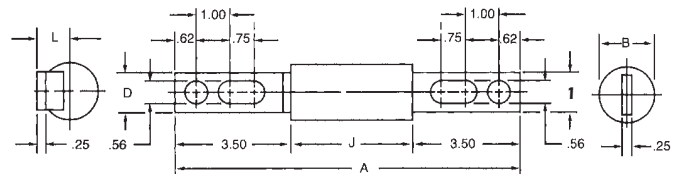
Type C1



Type C3

### Type C3 - Dimensions

| Catalog Number | Reference Number | Cable* size | Dimensions-Inches (mm) |           |           |           |           |           |           |           |
|----------------|------------------|-------------|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                |                  |             | A                      | B         | D         | E         | J         | L         | N         | R         |
| CP2C3          | Q218330          | #2          | 8.87 (225)             | 1.44 (37) | 1.12 (28) | 1.75 (44) | 3.62 (92) | .96 (24)  | .31 (7.9) | .42 (11)  |
| CP1/OC3        | N201423          | 1/0         | 8.87 (225)             | 1.44 (37) | 1.12 (28) | 1.75 (44) | 3.62 (92) | .96 (24)  | .39 (9.9) | .52 (13)  |
| CP2/OC3        | Y211161          | 2/0         | 8.87 (225)             | 1.44 (37) | 1.12 (28) | 1.75 (44) | 3.62 (92) | .96 (24)  | .44 (11)  | .56 (14)  |
| CP4/OC3        | E215261          | 4/0         | 8.87 (225)             | 1.44 (37) | 1.12 (28) | 1.75 (44) | 3.62 (92) | .96 (24)  | .55 (14)  | .68 (17)  |
| CP250C3        | X214242          | 250kcmil    | 9.00 (229)             | 1.44 (37) | 1.12 (28) | 1.88 (48) | 3.62 (92) | .96 (24)  | .62 (16)  | .75 (19)  |
| CP350C3        | P201424          | 350kcmil    | 9.12 (232)             | 1.62 (41) | 1.12 (28) | 2.00 (51) | 3.62 (92) | .96 (24)  | .71 (18)  | .88 (22)  |
| CP400C3        | R218331          | 400kcmil    | 9.12 (232)             | 1.62 (41) | 1.12 (28) | 2.00 (51) | 3.62 (92) | .96 (24)  | .75 (19)  | .88 (22)  |
| CP500C3        | T211686          | 500kcmil    | 10.00 (254)            | 1.88 (48) | 1.62 (41) | 2.88 (73) | 3.62 (92) | 1.19 (30) | .85 (22)  | 1.05 (27) |
| CP750C3        | D217307          | 750kcmil    | 10.13 (257)            | 2.50 (64) | 2.00 (51) | 2.88 (73) | 3.75 (95) | 1.31 (33) | 1.06 (27) | 1.32 (34) |



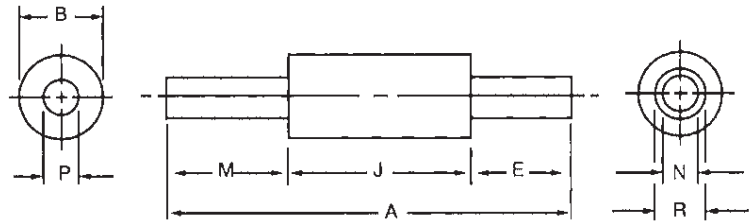
Type C5

### Type C5 - Dimensions

| Catalog Number | Reference Number | Cable* size | Dimensions-Inches (mm) |              |              |              |              |              |
|----------------|------------------|-------------|------------------------|--------------|--------------|--------------|--------------|--------------|
|                |                  |             | A                      | B            | D            | J            | L            | M            |
| CP4/OC5        | K216278          | 4/0         | 10.37<br>(263)         | 1.44<br>(37) | 1.12<br>(28) | 3.62<br>(92) | .96<br>(24)  | 1.12<br>(28) |
| CP250C5        | Z214750          | 250kcmil    | 10.37<br>(263)         | 1.44<br>(37) | 1.12<br>(28) | 3.62<br>(92) | .96<br>(24)  | 1.12<br>(28) |
| CP350C5        | Z211162          | 350kcmil    | 10.37<br>(263)         | 1.62<br>(41) | 1.12<br>(28) | 3.62<br>(92) | .96<br>(24)  | 1.12<br>(28) |
| CP500C5        | Z214244          | 500kcmil    | 10.37<br>(263)         | 1.88<br>(48) | 1.62<br>(41) | 3.62<br>(92) | 1.19<br>(30) | 1.50<br>(38) |
| CP750C5        | T218333          | 750kcmil    | 10.50<br>(267)         | 2.50<br>(64) | 2.00<br>(51) | 3.75<br>(95) | 1.31<br>(33) | 2.00<br>(51) |

\* kcmil = MCM

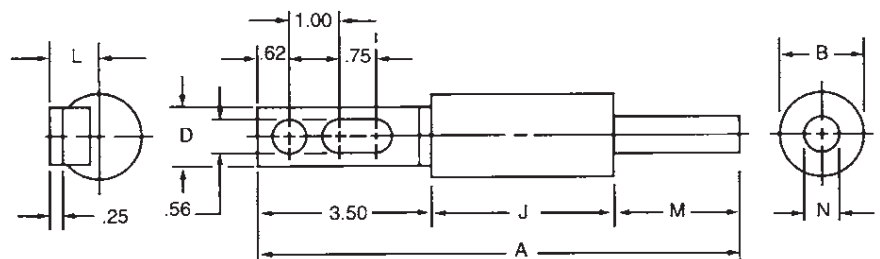
## American Fuses Cable Protectors CP & CPH



Type C6

### Type C6 - Dimensions

| Catalog Number | Reference Number | Cable* size | Dimensions-Inches (mm) |              |              |              |              |              |              |              |
|----------------|------------------|-------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                |                  |             | A                      | B            | E            | J            | M            | N            | P            | R            |
| CP4/OC6        | B217305          | 4/0         | 7.87<br>(200)          | 1.44<br>(37) | 1.75<br>(44) | 3.62<br>(92) | 2.50<br>(64) | .55<br>(14)  | .52<br>(13)  | .68<br>(17)  |
| CP250C6        | E215767          | 250kcmil    | 8.00<br>(203)          | 1.44<br>(37) | 1.88<br>(48) | 3.62<br>(92) | 2.50<br>(64) | .62<br>(16)  | .58<br>(14)  | .75<br>(19)  |
| CP350C6        | S211685          | 350kcmil    | 8.12<br>(206)          | 1.62<br>(41) | 2.00<br>(51) | 3.62<br>(92) | 2.50<br>(64) | .71<br>(18)  | .68<br>(17)  | .88<br>(22)  |
| CP500C6        | F215262          | 500kcmil    | 9.38<br>(238)          | 1.88<br>(48) | 2.88<br>(73) | 3.62<br>(92) | 2.88<br>(73) | .85<br>(22)  | .81<br>(21)  | 1.05<br>(27) |
| CP750C6        | F218850          | 750kcmil    | 9.51<br>(427)          | 2.50<br>(64) | 2.88<br>(73) | 3.75<br>(95) | 2.88<br>(73) | 1.06<br>(27) | 1.00<br>(25) | 1.32<br>(34) |



Type C8

### Type C8 - Dimensions

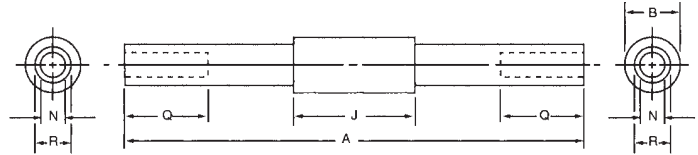
| Catalog Number | Reference Number | Cable* size | Cable* Dimensions-Inches (mm) |              |              |              |              |              |              |
|----------------|------------------|-------------|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                |                  |             | A                             | B            | D            | J            | L            | M            | N            |
| CP4/OC8        | F217815          | 4/0         | 9.62<br>(244)                 | 1.44<br>(37) | 1.12<br>(28) | 3.62<br>(92) | .96<br>(24)  | 2.50<br>(64) | .52<br>(13)  |
| CP250C8        | K216784          | 250kcmil    | 9.62<br>(244)                 | 1.44<br>(37) | 1.12<br>(28) | 3.62<br>(92) | .96<br>(24)  | 2.50<br>(64) | .58<br>(14)  |
| CP350C8        | Y212196          | 350kcmil    | 9.62<br>(244)                 | 1.62<br>(41) | 1.12<br>(28) | 3.62<br>(92) | .96<br>(24)  | 2.50<br>(64) | .68<br>(17)  |
| CP500C8        | L216279          | 500kcmil    | 10.00<br>(254)                | 1.88<br>(48) | 1.62<br>(41) | 3.62<br>(92) | 1.19<br>(30) | 2.88<br>(73) | .81<br>(21)  |
| CP750C8        | V219369          | 750kcmil    | 10.13<br>(257)                | 2.50<br>(64) | 2.00<br>(51) | 3.75<br>(95) | 1.31<br>(33) | 2.88<br>(73) | 1.00<br>(25) |

\* kcmil = MCM

# Special Purpose Fuses

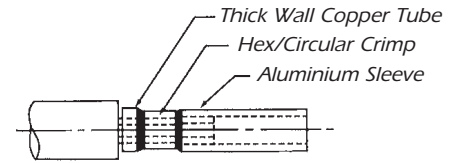
## American Fuses Cable Protectors CP & CPH

### Type A1 - Dimensions



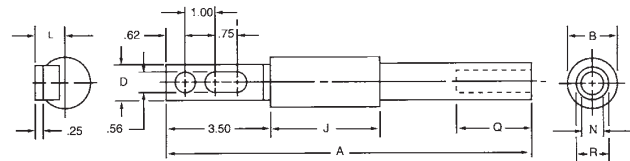
Type A1

| Catalog Number | Reference Number | Cable* size | Dimensions-Inches (mm) |              |              |              |              |              |
|----------------|------------------|-------------|------------------------|--------------|--------------|--------------|--------------|--------------|
|                |                  |             | A                      | B            | J            | N            | Q            | R            |
| CP4/0A1        | N212716          | 4/0         | 13.88<br>(353)         | 1.44<br>(37) | 3.62<br>(92) | .55<br>(14)  | 2.50<br>(64) | .85<br>(22)  |
| CP250A1        | R211684          | 250kcmil    | 13.88<br>(353)         | 1.44<br>(37) | 3.62<br>(92) | .59<br>(15)  | 2.50<br>(64) | .94<br>(24)  |
| CP350A1        | C218847          | 350kcmil    | 13.88<br>(353)         | 1.62<br>(41) | 3.62<br>(92) | .71<br>(18)  | 2.50<br>(64) | 1.13<br>(29) |
| CP500A1        | D218848          | 500kcmil    | 15.38<br>(391)         | 1.88<br>(48) | 3.62<br>(92) | .85<br>(22)  | 2.88<br>(73) | 1.33<br>(34) |
| CP750A1        | A212198          | 750kcmil    | 15.50<br>(394)         | 2.50<br>(64) | 3.75<br>(95) | 1.06<br>(27) | 2.88<br>(73) | 1.62<br>(41) |



Typical Terminal Assembly Details

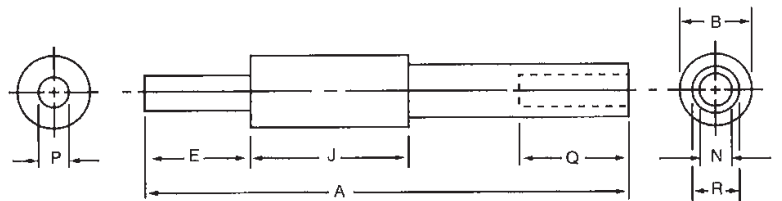
### Type A3 - Dimensions



Type A3

| Catalog Number | Reference Number | Cable* size | Dimensions-Inches (mm) |              |              |              |              |              |              |              |
|----------------|------------------|-------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                |                  |             | A                      | B            | D            | J            | L            | N            | Q            | R            |
| CP4/0A3        | Y213231          | 4/0         | 12.25<br>(311)         | 1.44<br>(37) | 1.12<br>(28) | 3.62<br>(92) | .96<br>(24)  | .55<br>(14)  | 2.50<br>(64) | .85<br>(22)  |
| CP250A3        | X212195          | 250kcmil    | 12.25<br>(311)         | 1.44<br>(37) | 1.12<br>(28) | 3.62<br>(92) | .96<br>(24)  | .59<br>(15)  | 2.50<br>(64) | .94<br>(24)  |
| CP350A3        | R219366          | 350kcmil    | 12.25<br>(311)         | 1.62<br>(41) | 1.12<br>(28) | 3.62<br>(92) | .96<br>(24)  | .71<br>(18)  | 2.50<br>(64) | 1.13<br>(29) |
| CP500A3        | S219367          | 500kcmil    | 13.00<br>(330)         | 1.88<br>(48) | 1.62<br>(41) | 3.62<br>(92) | 1.19<br>(30) | .85<br>(22)  | 2.88<br>(73) | 1.33<br>(34) |
| CP750A3        | A214245          | 750kcmil    | 13.12<br>(333)         | 2.50<br>(64) | 2.00<br>(51) | 3.75<br>(95) | 1.31<br>(33) | 1.06<br>(27) | 2.88<br>(73) | 1.62<br>(41) |

### Type A6 - Dimensions



Type A6

| Catalog Number | Reference Number | Cable* size | Dimensions-Inches (mm) |              |              |              |              |              |              |              |
|----------------|------------------|-------------|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                |                  |             | A                      | B            | E            | J            | N            | P            | Q            | R            |
| CP4/0A6        | P213729          | 4/0         | 11.25<br>(286)         | 1.44<br>(37) | 2.50<br>(64) | 3.62<br>(92) | .55<br>(14)  | .52<br>(13)  | 2.50<br>(64) | .85<br>(22)  |
| CP250A6        | M212715          | 250kcmil    | 11.25<br>(286)         | 1.44<br>(37) | 2.50<br>(64) | 3.62<br>(92) | .59<br>(15)  | .58<br>(14)  | 2.50<br>(64) | .94<br>(24)  |
| CP350A6        | E222575          | 350kcmil    | 11.25<br>(286)         | 1.62<br>(41) | 2.50<br>(64) | 3.62<br>(92) | .71<br>(18)  | .68<br>(17)  | 2.50<br>(64) | 1.13<br>(29) |
| CP500A6        | F222576          | 500kcmil    | 12.38<br>(314)         | 1.88<br>(48) | 2.88<br>(73) | 3.62<br>(92) | .85<br>(22)  | .81<br>(21)  | 2.88<br>(73) | 1.33<br>(34) |
| CP750A6        | G215769          | 750kcmil    | 12.50<br>(318)         | 2.50<br>(64) | 2.88<br>(73) | 3.75<br>(95) | 1.06<br>(27) | 1.00<br>(25) | 2.88<br>(73) | 1.59<br>(41) |

\* kcmil = MCM

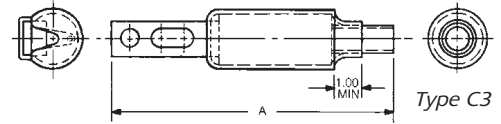
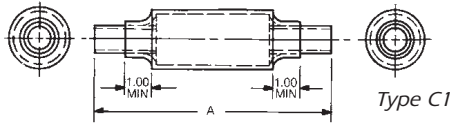
Note: Inside surface of sleeve ends is coated with oxide inhibitor and capped.

Type 5 - Use Copper Cable Protectors Type C5

Type 8 - Use Copper Cable Protectors Type C8

## American Fuses Cable Protectors CP & CPH

### Copper Cable Protectors with Heat Shrinkable Tubing\*

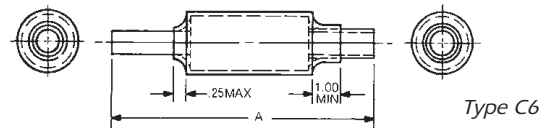
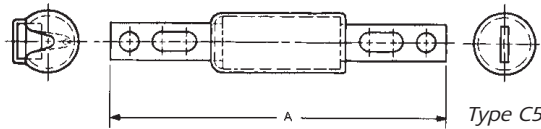


#### Type C1, Copper Cable - Dimensions

| Cable size | A      |       | Cable protector with heat shrinkable tubing |             |
|------------|--------|-------|---|-------------|
|            | Inches | mm    | Cat. Number                                 | Ref. Number |
|            | 4/0    | 7.12  |   |             |
| 250kcmil   | 7.38   | (188) | CP250C1-HS                                  | N213728     |
| 350kcmil   | 7.62   | (194) | CP350C1-HS                                  | C200884     |
| 500kcmil   | 9.38   | (238) | CP500C1-HS                                  | C201942     |
| 750kcmil   | 9.51   | (242) | CP750C1-HS                                  | N216787     |

#### Type C3, Copper Cable - Dimensions

| Cable size | A      |       | Cable protector with heat shrinkable tubing |             |
|------------|--------|-------|---|-------------|
|            | Inches | mm    | Cat. Number                                 | Ref. Number |
|            | 4/0    | 8.87  |   |             |
| 250kcmil   | 9.00   | (229) | CP250C3-HS                                  | L230355     |
| 350kcmil   | 9.12   | (232) | CP350C3-HS                                  | B201941     |
| 500kcmil   | 10.00  | (254) | CP500C3-HS                                  | P212717     |
| 750kcmil   | 10.13  | (257) | CP750C3-HS                                  | H217817     |

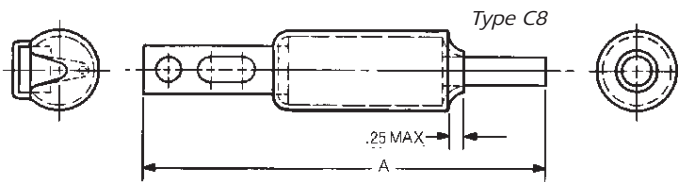


#### Type C5, Copper Cable - Dimensions

| Cable size | A      |       | Cable protector with heat shrinkable tubing |             |
|------------|--------|-------|---|-------------|
|            | Inches | mm    | Cat. Number                                 | Ref. Number |
|            | 4/0    | 10.37 |   |             |
| 250kcmil   | 10.37  | (263) | CP250C5-HS                                  | D215260     |
| 350kcmil   | 10.37  | (263) | CP350C5-HS                                  | R230360     |
| 500kcmil   | 10.37  | (263) | CP500C5-HS                                  | B214752     |
| 750kcmil   | 10.50  | (267) | CP750C5-HS                                  | O230382     |

#### Type C6, Copper Cable - Dimensions

| Cable size | A      |       | Cable protector with heat shrinkable tubing |             |
|------------|--------|-------|---|-------------|
|            | Inches | mm    | Cat. Number                                 | Ref. Number |
|            | 4/0    | 7.87  |   |             |
| 250kcmil   | 8.00   | (203) | CP250C6-HS                                  | M230356     |
| 350kcmil   | 8.12   | (206) | CP350C6-HS                                  | S230361     |
| 500kcmil   | 9.38   | (238) | CP500C6-HS                                  | L230378     |
| 750kcmil   | 9.51   | (242) | CP750C6-HS                                  | R230383     |



#### Type C8, Copper Cable - Dimensions

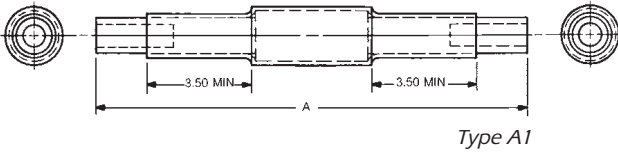
| Cable size | A      |       | Cable protector with heat shrinkable tubing |             |
|------------|--------|-------|---|-------------|
|            | Inches | mm    | Cat. Number                                 | Ref. Number |
|            | 4/0    | 9.62  |   |             |
| 250kcmil   | 9.62   | (244) | CP250C8-HS                                  | A217304     |
| 350kcmil   | 9.62   | (244) | CP350C8-HS                                  | V230363     |
| 500kcmil   | 10.00  | (254) | CP500C8-HS                                  | M216786     |
| 750kcmil   | 10.13  | (257) | CP750C8-HS                                  | S230384     |

\* Transparent heat shrinkable tubing is supplied separately with -HS Catalog No. Maximum curing conditions: 5 seconds at 450°F.

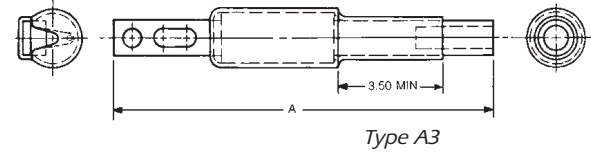
# Special Purpose Fuses

## American Fuses Cable Protectors CP & CPH

### Aluminum Cable Protectors with Heat Shrinkable Tubing\*



Type A1



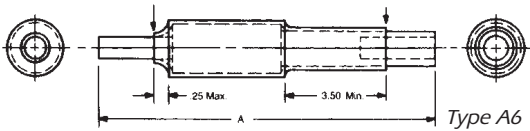
Type A3

### Type A1, Copper Cable - Dimensions

| Cable size | A      |       | Cable protector with heat shrinkable tubing |             |
|------------|--------|-------|---|-------------|
|            | Inches | mm    | Cat. Number                                 | Ref. Number |
|            | 4/0    | 13.88 |   |             |
| 250kcmil   | 13.88  | (353) | CP250A1-HS                                  | G230351     |
| 350kcmil   | 13.88  | (353) | CP350A1-HS                                  | N230357     |
| 500kcmil   | 15.38  | (391) | CP500A1-HS                                  | F230373     |
| 750kcmil   | 15.50  | (394) | CP750A1-HS                                  | O212718     |

### Type A3, Copper Cable - Dimensions

| Cable size | A      |       | Cable protector with heat shrinkable tubing |             |
|------------|--------|-------|---|-------------|
|            | Inches | mm    | Cat. Number                                 | Ref. Number |
|            | 4/0    | 12.25 |   |             |
| 250kcmil   | 12.25  | (311) | CP250A3-HS                                  | H230352     |
| 350kcmil   | 12.25  | (311) | CP350A3-HS                                  | N219892     |
| 500kcmil   | 13.00  | (330) | CP500A3-HS                                  | G230374     |
| 750kcmil   | 13.12  | (333) | CP750A3-HS                                  | N230380     |



Type A6

### Type A6, Copper Cable - Dimensions

| Cable size | A      |       | Cable protector with heat shrinkable tubing |             |
|------------|--------|-------|---|-------------|
|            | Inches | mm    | Cat. Number                                 | Ref. Number |
|            | 4/0    | 11.25 |   |             |
| 250kcmil   | 11.25  | (286) | CP250A6-HS                                  | J230353     |
| 350kcmil   | 11.25  | (286) | CP350A6-HS                                  | P230358     |
| 500kcmil   | 12.38  | (314) | CP500A6-HS                                  | H230375     |
| 750kcmil   | 12.50  | (318) | CP750A6-HS                                  | P230381     |

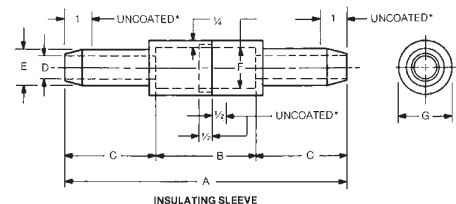
Type 5 - Use Copper Cable Protectors Type C5  
Type 8 - Use Copper Cable Protectors Type C8

\* Transparent heat shrinkable tubing is supplied separately with -HS Catalog Numbers. Maximum curing conditions: 5 seconds at 450°F.

### Molded Rubber Insulating Sleeves\*\*

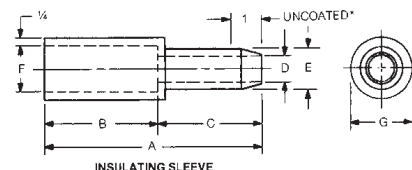
#### For Type C1 Copper Cable Protectors - Dimensions

| Catalog Number | Reference Number | Cable* size | Dimensions-Inches (mm) |              |               |              |              |              |              |
|----------------|------------------|-------------|------------------------|--------------|---------------|--------------|--------------|--------------|--------------|
|                |                  |             | A                      | B            | C             | D            | E            | F            | G            |
| 4/0CCR         | D213236          | 4/0         | 10.44<br>(265)         | 3.69<br>(94) | 3.38<br>(86)  | .83<br>(21)  | 1.33<br>(33) | 1.50<br>(38) | 2.00<br>(51) |
| 500CCR         | E214755          | 500kcmil    | 14.19<br>(360)         | 3.69<br>(94) | 5.25<br>(133) | 1.31<br>(33) | 1.81<br>(46) | 1.94<br>(49) | 2.44<br>(62) |



#### For Type C3 Copper Cable Protectors - Dimensions

| Catalog Number | Reference Number | Cable* size | Dimensions-Inches (mm) |              |               |              |              |              |              |
|----------------|------------------|-------------|------------------------|--------------|---------------|--------------|--------------|--------------|--------------|
|                |                  |             | A                      | B            | C             | D            | E            | F            | G            |
| 4/0C3BR        | D212201          | 4/0         | 7.06<br>(179)          | 3.69<br>(94) | 3.38<br>(86)  | .83<br>(21)  | 1.33<br>(33) | 1.50<br>(38) | 2.00<br>(51) |
| 500C3BR        | V213734          | 500kcmil    | 8.94<br>(227)          | 3.69<br>(94) | 5.25<br>(133) | 1.31<br>(33) | 1.81<br>(46) | 1.94<br>(49) | 2.44<br>(62) |

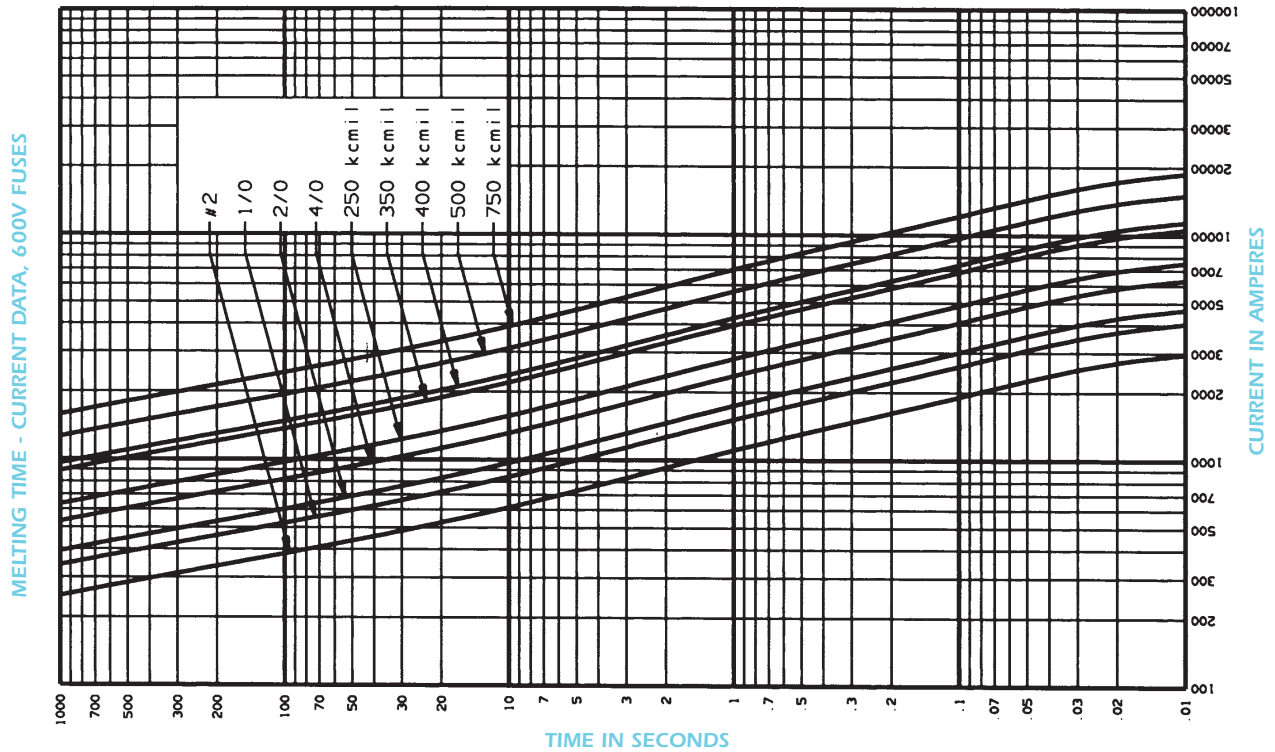


\*\* Molded rubber insulating sleeves are ordered by their own catalog numbers, and not as suffixes to the cable protector catalog numbers. Neoprene coated except as noted.

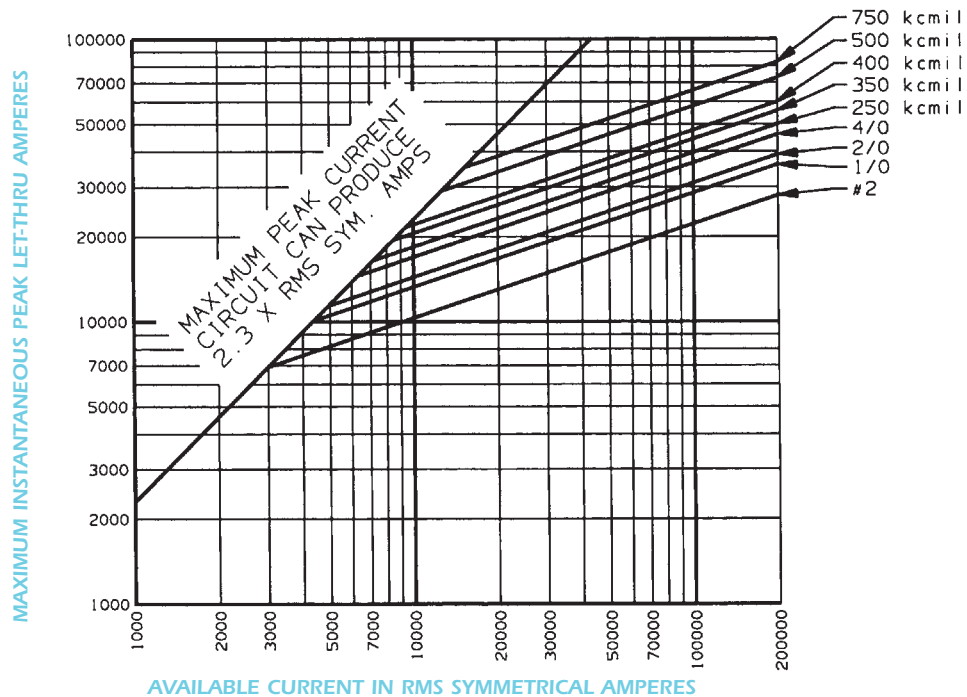


## American Fuses Cable Protectors CP & CPH

### Copper & Aluminum Cable Protectors - #2-750kcmil



### Peak Let-Thru Current Data Copper & Aluminum Cable Protectors - #2-750kcmil - 600V



## American Fuses Cable Protectors CP & CPH

### Recommended Tooling For Installing CP Cable Protectors on Copper & Aluminum Cables Circular Crimp – Copper Cable

| Cable**<br>Size | Burdny Hypress & Die Set |       |       |       |      |
|-----------------|--------------------------|-------|-------|-------|------|
|                 | Y34A                     | Y35   | Y39   | Y46*  | Y48B |
| 4/0             | A28R                     | U28RT | U28RT | U28RT | C28R |
| 250kcmil        | A29R                     | U29RT | U29RT | U29RT | C29R |
| 350kcmil        | A31R                     | U31RT | U31RT | U31RT | C31R |
| 500kcmil        | A34R                     | U34RT | U34RT | U34RT | C34R |
| 750kcmil        | -                        | -     | U39RT | U39RT | C39R |

### Circular Crimp – Aluminum Cable

|          |   |        |        |        |       |
|----------|---|--------|--------|--------|-------|
| 4/0      | - | U28ART | U28ART | U28ART | C28AR |
| 250kcmil | - | U29ART | U29ART | U29ART | C29AR |
| 350kcmil | - | U31ART | U31ART | U31ART | C31AR |
| 500kcmil | - | U34ART | U34ART | U34ART | C34AR |
| 750kcmil | - | -      | U39ART | U39ART | C39AR |

### Hex/Circular Crimp – Copper Cable

| Cable**<br>Size | T & B Installing Tools |             |             |             |             |
|-----------------|------------------------|-------------|-------------|-------------|-------------|
|                 | TBMB Tool              | 13642 Head  |             | TBM 15 Head |             |
|                 | Die                    | Die         |             | Die         |             |
|                 | Cat. Number            | Cat. Number | Code Number | Cat. Number | Code Number |
| 4/0             | 13463                  | 11740       | 54          | 15511       | 54H         |
| 250kcmil        | 13463                  | 11771       | 62          | 15510       | 62          |
| 350kcmil        | 13466                  | 11743       | 71H         | 15514       | 71H         |
| 500kcmil        | 13468                  | 11746       | 87H         | 15506       | 87H         |
| 750kcmil        | -                      | 11749       | 106H        | 15515       | 106H        |

### \*Hex/Circular Crimp – Aluminum Cable

|          |       |       |      |       |      |
|----------|-------|-------|------|-------|------|
| 4/0      | 13465 | 11742 | 66H  | 15534 | 66   |
| 250kcmil | 13466 | 11743 | 71H  | 15514 | 71H  |
| 350kcmil | 13468 | 11746 | 87H  | 15506 | 87H  |
| 500kcmil | -     | 11749 | 106H | 15515 | 106H |
| 750kcmil | -     | -     | -    | 15603 | 125H |

### Hex/Circular Crimp – Copper Cable

| Cable**<br>Size | Homac Tools<br>UT 15 Head<br>Die |              |
|-----------------|----------------------------------|--------------|
|                 | Cat. Number                      | Code. Number |
| 4/0             | 15511                            | 54H          |
| 250kcmil        | 15510                            | 62           |
| 350kcmil        | 15514                            | 71H          |
| 500kcmil        | 15587                            | 87H          |
| 750 kcmil       | 15500                            | 106H         |

Note: Crimping tools suitable for standard splicing sleeves are also suitable for CP cable protectors for copper and aluminum cables because Ferraz Shawmut uses standard commercial dimensions on both inside and outside diameters.

### Hex/Circular Crimp – Aluminum Cable

|           |       |      |
|-----------|-------|------|
| 4/0       | 15534 | 66   |
| 250kcmil  | 15514 | 71H  |
| 350kcmil  | 15506 | 87H  |
| 500kcmil  | 15515 | 106H |
| 750 kcmil | 15603 | 125H |

\* with adapter P-U-ADP

\*\* kcmil = MCM

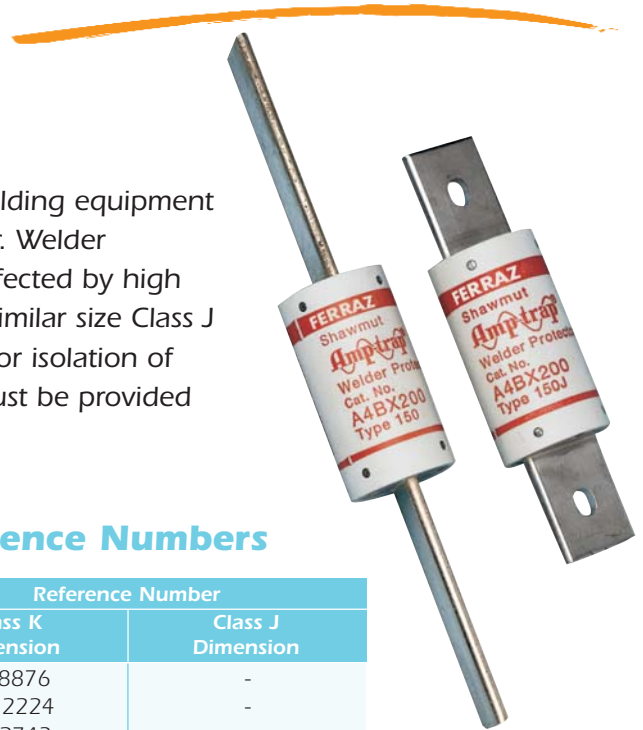


## American Fuses Welder Protectors A4BX

### WELDER PROTECTORS

Ferraz Shawmut Welder Protectors are special purpose limiters used to provide isolation of faulted welding equipment and protection for the cable drop supplying the welder. Welder Protectors have a high thermal capacity and are less affected by high ambient temperatures and extended weld times than similar size Class J or K fuses\*. Welder Protectors should only be applied for isolation of short circuited welding circuits. Overload protection must be provided for by other means.

\* Contact us for Class L sizes and rating



### Standard Fuse Ampere Ratings, Reference Numbers

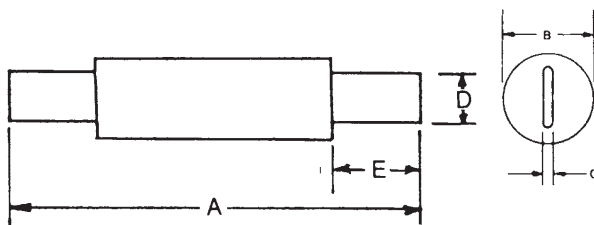
| Ampere Rating | Catalog Number    |                   | Reference Number  |                   |
|---------------|-------------------|-------------------|-------------------|-------------------|
|               | Class K Dimension | Class J Dimension | Class K Dimension | Class J Dimension |
| 100           | A4BX100-150       | -                 | J218876           | -                 |
| 125           | A4BX125-150       | -                 | D212224           | -                 |
| 150           | A4BX150-150       | -                 | S212743           | -                 |
| 200           | A4BX200-150       | A4BX200-150J      | H217334           | M217844           |
| 225           | A4BX225-150       | -                 | G211192           | -                 |
| 300           | A4BX300-150       | A4BX300-150J      | J215288           | K215795           |
| 400           | A4BX400-150       | A4BX400-150J      | N217845           | Y218360           |
| 500           | A4BX500-150       | -                 | M222605           | -                 |
| 600           | A4BX600-150       | -                 | F201968           | -                 |

### Ratings

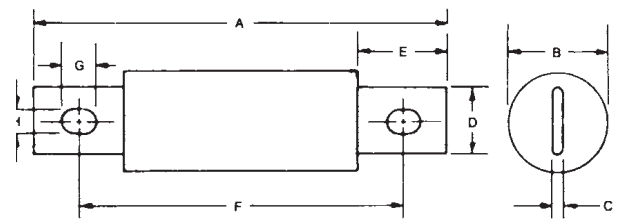
- 600VAC, 200kA I.R.

### Approvals

- Ferraz Shawmut Certified



CLASS K



CLASS J

### A4BX ( ) - 150; Class K Dimensions

| Ampere Rating | Inches |       |      |       |        |   |   |   |
|---------------|--------|-------|------|-------|--------|---|---|---|
|               | A      | B     | C    | D     | E      | F | G | H |
| 100           | 7-7/8  | 1     | 1/8  | 23/32 | 2-5/8  | - | - | - |
| 125-200       | 9-5/8  | 1-1/2 | 3/16 | 1-1/8 | 3-7/16 | - | - | - |
| 225-400       | 11-5/8 | 2     | 1/4  | 1-5/8 | 4-7/16 | - | - | - |
| 500-600       | 13-3/8 | 2-1/2 | 1/4  | 2     | 5-5/16 | - | - | - |

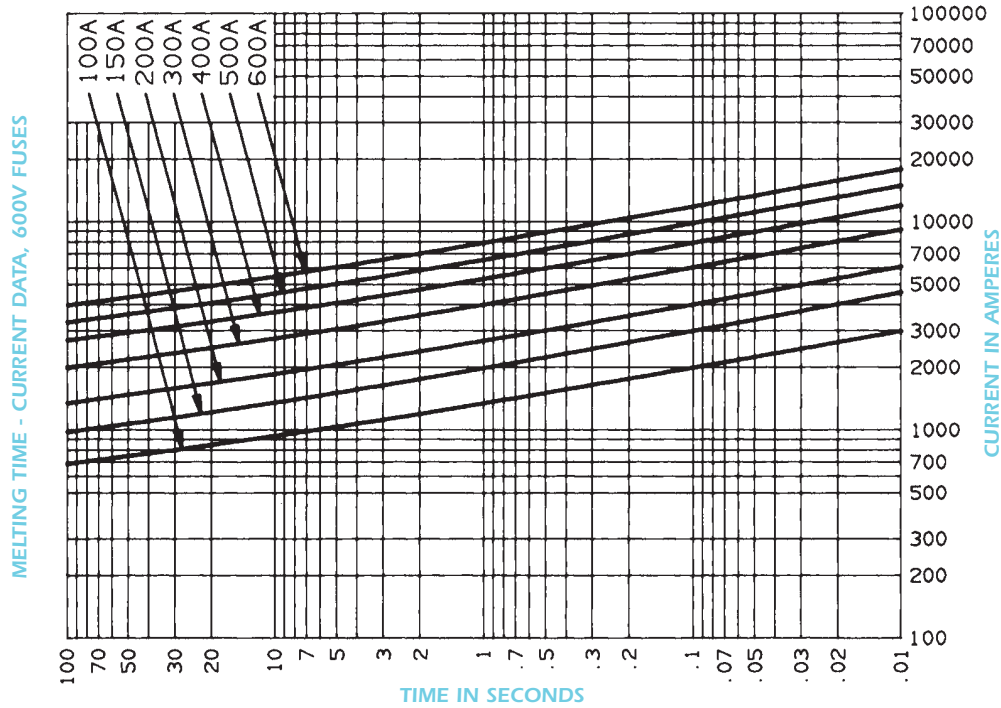
### A4BX ( ) - 150J; Class J Dimensions

|         |       |       |      |       |        |       |       |       |
|---------|-------|-------|------|-------|--------|-------|-------|-------|
| 125-200 | 5-3/4 | 1-1/2 | 3/16 | 1-1/8 | 1-1/2  | 4-3/8 | 3/8   | 9/32  |
| 225-400 | 7-1/8 | 2     | 1/4  | 1-5/8 | 2-3/16 | 5-1/4 | 17/32 | 13/32 |

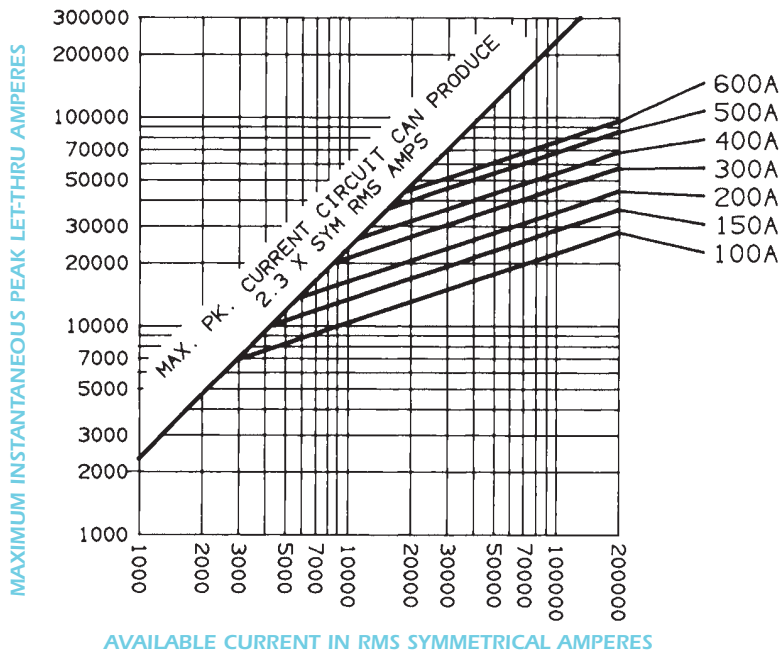
# Special Purpose Fuses

## American Fuses Welder Protectors A4BX

### A4BX100 to 600 Types 150, 150J



### Peak Let-Thru Current Data - A4BX100 to 600, 600 Volts AC



## American Fuses Form 600 A2Y, A6Y

### FORM 600 FUSES

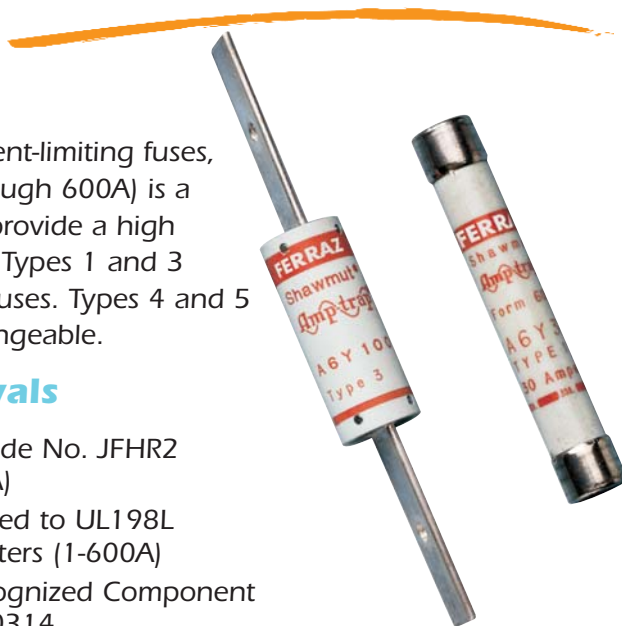
Ferraz Shawmut Form 600 fuses were the original current-limiting fuses, pre-dating all the standards. Their 500V DC rating (through 600A) is a useful feature for special applications. Form 600 fuses provide a high degree of current limitation in AC and DC applications. Types 1 and 3 are dimensionally interchangeable with Class H and K fuses. Types 4 and 5 have unique rejection dimensions and are not interchangeable.

### Ratings

- AC: A2Y 1-600A  
250VAC, 200kA I.R.  
A6Y 10-8A  
500VAC, 200kA I.R.  
A6Y 10-1200A  
600VAC, 200kA I.R.
- DC: A2Y 1-600A  
500VDC, 100kA I.R.  
A6Y 1-8A  
500VDC, 100kA I.R.  
A6Y 10-600A  
500VDC, 100kA I.R.

### Approvals

- AC: Guide No. JFHR2 (1-600A)
- DC Tested to UL198L Parameters (1-600A)
- UL Recognized Component File E60314

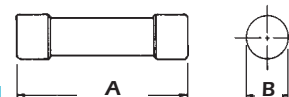


### A2Y –Standard Fuse Ampere Ratings, Reference Numbers

| Ampere Rating | Cat. Number | Ref. Number | Ampere Rating | Cat. Number | Ref. Number | Ampere Rating | Cat. Number | Ref. Number | Ampere Rating | Cat. Number | Ref. Number | Ampere Rating | Cat. Number | Ref. Number |
|---------------|-------------|-------------|---------------|-------------|-------------|---------------|-------------|-------------|---------------|-------------|-------------|---------------|-------------|-------------|
| 1             | A2Y1-1      | W222613     | 30            | A2Y30-1     | N213268     | 80            | A2Y80-4     | F218367     | 175           | A2Y175-4    | B212751     | 400           | A2Y400-4    | B219927     |
| 2             | A2Y2-1      | P201976     | 35            | A2Y35-1     | E213766     | 90            | A2Y90-3     | H219404     | 200           | A2Y200-3    | L213266     | 450           | A2Y450-3    | V222612     |
| 3             | A2Y3-1      | P212234     | 40            | A2Y40-1     | N214280     | 90            | A2Y90-4     | C219928     | 200           | A2Y200-4    | D213765     | 450           | A2Y450-4    | J223131     |
| 5             | A2Y5-1      | R215295     | 45            | A2Y45-1     | N214786     | 100           | A2Y100-3    | S218884     | 250           | A2Y250-3    | Q215294     | 500           | A2Y500-3    | R200920     |
| 6             | A2Y6-1      | Y216313     | 50            | A2Y50-1     | T215803     | 100           | A2Y100-4    | F219402     | 250           | A2Y250-4    | S215802     | 500           | A2Y500-4    | E201461     |
| 8             | A2Y8-1      | G218368     | 60            | A2Y60-1     | B216822     | 125           | A2Y125-3    | Q200919     | 300           | A2Y300-3    | A216821     | 500           | A2Y500-5    | N201975     |
| 10            | A2Y10-1     | K223132     | 70            | A2Y70-3     | C212752     | 125           | A2Y125-4    | D201460     | 300           | A2Y300-4    | R217342     | 600           | A2Y600-3    | P211199     |
| 15            | A2Y15-1     | F201462     | 70            | A2Y70-4     | M213267     | 150           | A2Y150-3    | M201974     | 350           | A2Y350-3    | W217852     | 600           | A2Y600-4    | F211720     |
| 20            | A2Y20-1     | Q211200     | 70            | A2Y70-5     | M214279     | 150           | A2Y150-4    | N211198     | 350           | A2Y350-4    | T218885     | 600           | A2Y600-5    | N212233     |
| 25            | A2Y25-1     | G211721     | 80            | A2Y80-3     | X217853     | 175           | A2Y175-3    | M212232     | 400           | A2Y400-3    | G219403     |               |             |             |

### A6Y –Standard Fuse Ampere Ratings, Reference Numbers

| Ampere Rating | Cat. Number | Ref. Number | Ampere Rating | Cat. Number | Ref. Number | Ampere Rating | Cat. Number | Ref. Number | Ampere Rating | Cat. Number | Ref. Number |
|---------------|-------------|-------------|---------------|-------------|-------------|---------------|-------------|-------------|---------------|-------------|-------------|
| 1             | A6Y1-1      | H216828     | 70            | A6Y70-4     | J212758     | 200           | A6Y200-4    | N223135     | 450           | A6Y450-4    | X215300     |
| 2             | A6Y2-1      | Z200927     | 80            | A6Y80-3     | L213772     | 200           | A6Y200-5    | W200924     | 450           | A6Y450-5    | Z215808     |
| 3             | A6Y3-1      | W214793     | 80            | A6Y80-4     | V214286     | 225           | A6Y225-3    | V211204     | 500           | A6Y500-3    | X217347     |
| 5             | A6Y5-1      | R219412     | 90            | A6Y90-3     | A215809     | 225           | A6Y225-4    | T212238     | 500           | A6Y500-4    | M218373     |
| 6             | A6Y6-1      | A200928     | 90            | A6Y90-3     | A215809     | 225           | A6Y225-5    | G212756     | 500           | A6Y500-5    | B218892     |
| 8             | A6Y8-1      | Q211729     | 100           | A6Y100-4    | Z222616     | 250           | A6Y250-3    | S213272     | 600           | A6Y600-3    | Q223137     |
| 10            | A6Y10-1     | N218374     | 100           | A6Y100-3    | F219931     | 250           | A6Y250-4    | S214284     | 600           | A6Y600-4    | L201467     |
| 15            | A6Y15-1     | K219935     | 125           | A6Y125-4    | F212755     | 250           | A6Y250-5    | S214790     | 600           | A6Y600-5    | W201982     |
| 20            | A6Y20-1     | Y211207     | 125           | A6Y125-3    | S212237     | 300           | A6Y300-3    | Y215807     | 650           | A6Y650-4    | X211206     |
| 25            | A6Y25-1     | W213275     | 125           | A6Y125-5    | R213271     | 300           | A6Y300-4    | F216826     | 650           | A6Y650-4    | X211206     |
| 30            | A6Y30-1     | F216320     | 150           | A6Y150-3    | R214283     | 300           | A6Y300-5    | W217346     | 800           | A6Y800-4    | V214792     |
| 35            | A6Y35-1     | F217861     | 150           | A6Y150-4    | R214789     | 350           | A6Y350-3    | A218891     | 800           | A6Y800-5    | Y215301     |
| 40            | A6Y40-1     | P218375     | 150           | A6Y150-5    | V215298     | 350           | A6Y350-4    | H219933     | 1000          | A6Y1000-4   | M223134     |
| 45            | A6Y45-1     | D218894     | 175           | A6Y175-3    | B217857     | 400           | A6Y400-3    | W211205     | 1000          | A6Y1000-5   | V200923     |
| 50            | A6Y50-1     | S223139     | 175           | A6Y175-4    | K218371     | 400           | A6Y400-4    | V212239     | 1200          | A6Y1200-4   | T211203     |
| 60            | A6Y60-1     | Z211208     | 175           | A6Y175-5    | Z218890     | 400           | A6Y400-5    | H212757     | 1200          | A6Y1200-5   | K211724     |
| 70            | A6Y70-3     | W212240     | 200           | A6Y200-3    | A222617     | 450           | A6Y450-3    | T214791     |               |             |             |



**Type 1,  
1-60 Amperes  
Class K  
Dimensions**

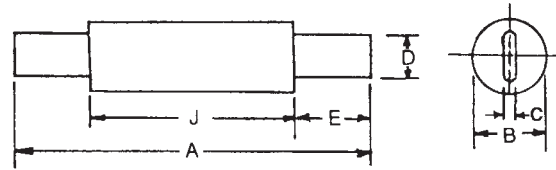
| Ampere Rating | Inches |        |
|---------------|--------|--------|
|               | A      | B      |
| A2Y - 1-60A   |        |        |
| 1-30          | 2      | 9/16   |
| 35-60         | 3      | 13/16  |
| A6Y - 1-60A   |        |        |
| 1-30          | 5      | 13/16  |
| 35-60         | 5-1/2  | 1-1/16 |

# Special Purpose Fuses

## American Fuses Form 600 A2Y, A6Y

### Type 3, 70-600 Amperes, Class K - Dimensions

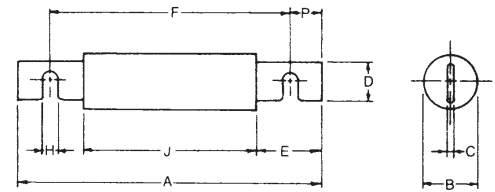
| Ampere Rating                          | Inches |       |      |       |         |         |
|--|--------|-------|------|-------|---------|---------|
|  | A      | B     | C    | D     | E       | J       |
| <b>250 VAC/500 VDC - A2Y (Amp) - 3</b> |        |       |      |       |         |         |
| 70-100                                 | 5-7/8  | 1     | 1/8  | 23/32 | 1-5/8   | 2-21/32 |
| 125-200                                | 7-1/8  | 1-1/2 | 3/16 | 1-1/8 | 2-3/16  | 2-25/32 |
| 225-400                                | 8-5/8  | 2     | 1/4  | 1-5/8 | 2-15/16 | 2-25/32 |
| 450-600                                | 10-3/8 | 2-1/2 | 1/4  | 2     | 3-13/16 | 2-25/32 |
| <b>600 VAC/500 VDC - A6Y (Amp) - 3</b> |        |       |      |       |         |         |
| 70-100                                 | 7-7/8  | 1     | 1/8  | 23/32 | 2-5/8   | 2-21/32 |
| 110-200                                | 9-5/8  | 1-1/2 | 3/16 | 1-1/8 | 3-7/16  | 2-25/32 |
| 225-400                                | 11-5/8 | 2     | 1/4  | 1-5/8 | 4-7/16  | 2-25/32 |
| 450-600                                | 13-3/8 | 2-1/2 | 1/4  | 2     | 5-5/16  | 2-25/32 |



Type 3 70-600A

### Type 4, 70-600 Amperes - Dimensions

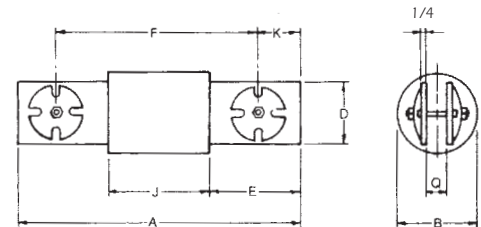
| Ampere Rating                          | Inches |       |      |       |         |        |       |         |       |
|--|--------|-------|------|-------|---------|--------|-------|---------|-------|
|  | A      | B     | C    | D     | E       | F      | H     | J       | P     |
| <b>250 VAC/500 VDC - A2Y (Amp) - 4</b> |        |       |      |       |         |        |       |         |       |
| 70-100                                 | 5-7/8  | 1     | 1/8  | 23/32 | 1-5/8   | 4-7/8  | 13/64 | 2-21/32 | 1/2   |
| 125-200                                | 7-1/8  | 1-1/2 | 3/16 | 1-1/8 | 2-3/16  | 5-3/4  | 17/64 | 2-25/32 | 11/16 |
| 225-400                                | 8-5/8  | 2     | 1/4  | 1-5/8 | 2-15/16 | 6-3/4  | 21/64 | 2-25/32 | 15/16 |
| 450-600                                | 10-3/8 | 2-1/2 | 1/4  | 2     | 3-13/16 | 8-1/8  | 25/64 | 2-25/32 | 1-1/8 |
| <b>600 VAC/500 VDC - A6Y (Amp) - 4</b> |        |       |      |       |         |        |       |         |       |
| 70-100                                 | 7-7/8  | 1     | 1/8  | 23/32 | 2-5/8   | 6-7/8  | 13/64 | 2-21/32 | 1/2   |
| 125-200                                | 9-5/8  | 1-1/2 | 3/16 | 1-1/8 | 3-7/16  | 8-1/4  | 17/64 | 2-25/32 | 11/16 |
| 225-400                                | 11-5/8 | 2     | 1/4  | 1-5/8 | 4-7/16  | 9-3/4  | 21/64 | 2-25/32 | 15/16 |
| 450-600                                | 13-3/8 | 2-1/2 | 1/4  | 2     | 5-5/16  | 11-1/8 | 25/64 | 2-25/32 | 1-1/8 |



Type 4 70-600A

### Type 4, 650-1200 Amperes - Dimensions

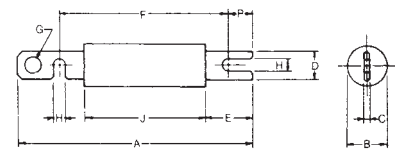
| Ampere Rating                       | Inches |   |   |       |       |       |        |     |
|-------------------------------------|--------|---|---|-------|-------|-------|--------|-----|
|                                     | A      | B | D | E     | F     | J     | K      | Q   |
| <b>600 VAC only - A6Y (Amp) - 4</b> |        |   |   |       |       |       |        |     |
| 650-1200                            | 10-1/2 | 3 | 2 | 3-3/8 | 7-7/8 | 3-3/4 | 1-5/16 | 5/8 |



Type 4 650-1200A

### Type 5, 125-600 Amperes/Hinge Disconnect type - Dimensions

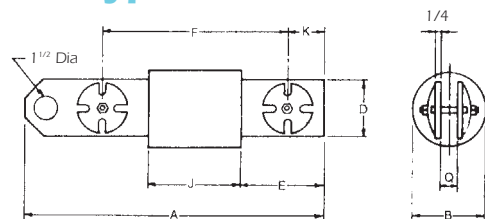
| Ampere Rating                          | Inches  |       |      |       |        |        |     |       |         |       |
|--|---------|-------|------|-------|--------|--------|-----|-------|---------|-------|
|  | A       | B     | C    | D     | E      | F      | G   | H     | J       | P     |
| <b>600 VAC/500 VDC - A6Y (Amp) - 5</b> |         |       |      |       |        |        |     |       |         |       |
| 125-200                                | 10-3/4  | 1-1/2 | 3/16 | 1-1/8 | 3-7/16 | 8-1/4  | 3/4 | 17/64 | 2-25/32 | 11/16 |
| 225-400                                | 13-1/4  | 2     | 1/4  | 1-5/8 | 4-7/16 | 9-3/4  | 7/8 | 21/64 | 2-25/32 | 15/16 |
| 450-600                                | 15-3/16 | 2-1/2 | 1/4  | 2     | 5-5/16 | 11-1/8 | 1   | 25/64 | 2-25/32 | 1     |



Type 5 125-600A

### Type 5, 650-1200 Amperes/Hinge Disconnect Type - Dimensions

| Ampere Rating                       | Inches |   |   |       |       |       |        |     |
|-------------------------------------|--------|---|---|-------|-------|-------|--------|-----|
|                                     | A      | B | D | E     | F     | J     | K      | Q   |
| <b>600 VAC only - A6Y (Amp) - 5</b> |        |   |   |       |       |       |        |     |
| 650-1200                            | 12-1/8 | 3 | 2 | 3-3/8 | 7-7/8 | 3-3/4 | 1-5/16 | 5/8 |

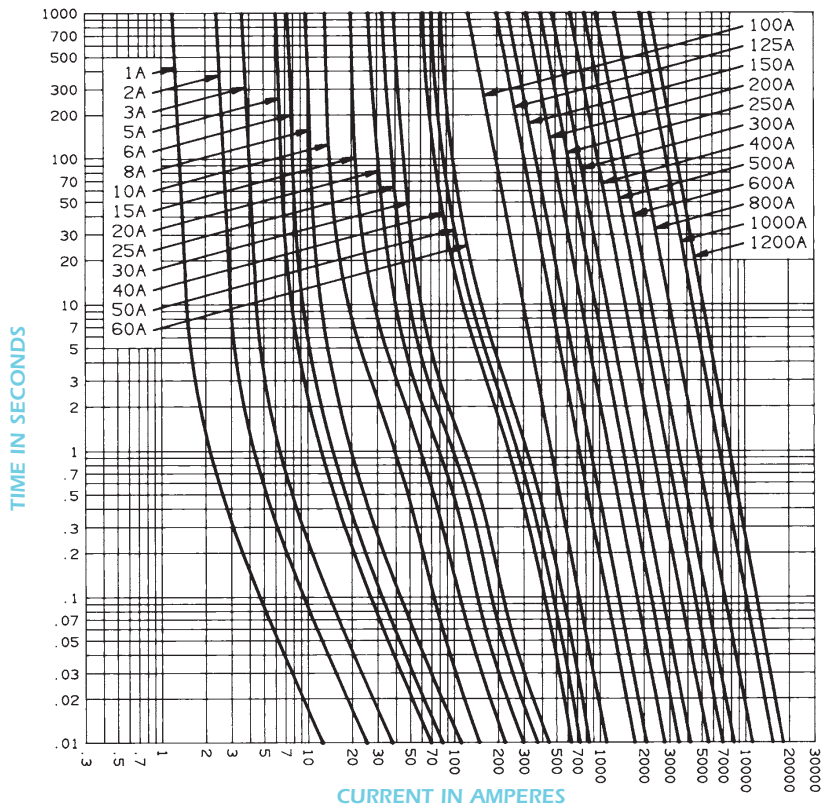


Type 5 650-1200A

## American Fuses Form 600 A2Y, A6Y

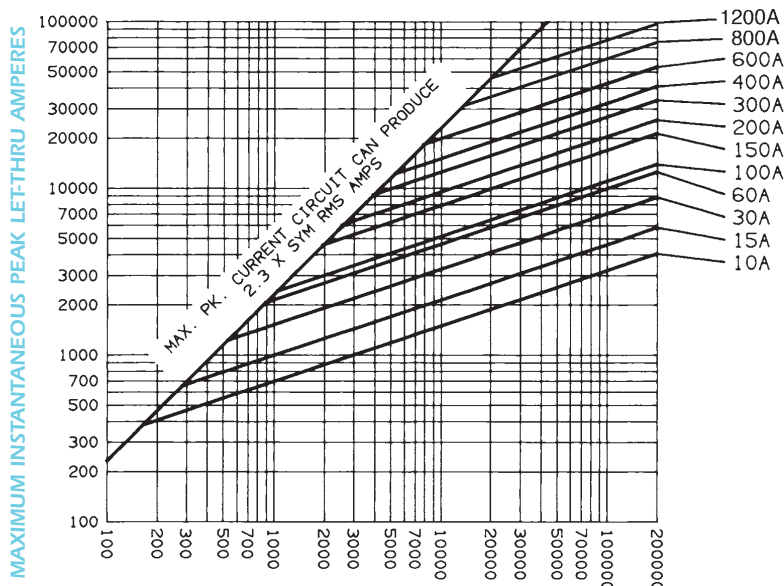
**1-600 Amperes, 250 or 600 Volts - Types 1, 3 or 5**  
**800-1200 Amperes, 600 Volts - Types 4 or 5**

MELTING TIME - CURRENT DATA



**10-600 Amperes, 250 or 600 Volts**  
**800-1200 Amperes, 600 Volts only**

PEAK LET-THRU CURRENT DATA



AVAILABLE CURRENT IN RMS SYMMETRICAL AMPERES

### DC Capability

| Cat No. Prefix | Ampere Rating | DC Voltage Rating* |
|----------------|---------------|--------------------|
| A2Y            | 1-600         | 500                |
| A6Y            | 1-600         | 500                |

\*Consult factory for specifics regarding circuit time constants and DC interrupting rating.

Recommended Fuse Blocks With Box Connectors For Form 600 Types 1 & 3 Fuses

| Ampere Rating         | 250V   |        | 600V   |        |
|-----------------------|--------|--------|--------|--------|
|                       | 1 Pole | 3 pole | 1 Pole | 3 pole |
| <b>Catalog Number</b> |        |        |        |        |
| 1-30                  | 20306  | 20308  | 60306  | 60308  |
| 31-60                 | 20606  | 20608  | 60606  | 60608  |
| 61-100                | 21036  | 21038  | 61036  | 61038  |
| 101-200               | 22001  | 22003  | 62001  | 62003  |
| 201-400               | 24001  | 24003  | 64001  | 64003  |
| 401-600               | 2631   | 2633   | 6631   | 6633   |

### Reference Number

|         |         |         |         |         |
|---------|---------|---------|---------|---------|
| 1-30    | Z212381 | F215446 | V211871 | X213920 |
| 31-60   | N211865 | C214431 | X211873 | Z213922 |
| 61-100  | S201105 | O211867 | K201627 | S211363 |
| 101-200 | Y213415 | E214433 | M212393 | H213424 |
| 201-400 | T219046 | -       | H218530 | T219575 |
| 401-600 | F214434 | K215450 | Z216475 | W217507 |

A variety of pole configurations and termination provisions is available. Refer to Fuse Blocks and Fuse Holders section for details.



# Special Purpose Fuses

## American Fuses Plug Fuses

### PLUG FUSES: G/GP/TD/GW /GTL/GT/GSL

Ferraz Shawmut Plug Fuses are for industrial and residential applications. Standard non-time delay fuses are for receptacle and lighting circuits. Standard time delay fuses are for motor loads. For Canadian requirements, a type "P" fuse is used for non-motor loads and type "D" fuses are used for electric heating and cycling loads circuits. Both fuses have low melting-point temperature elements. Low-Temp time delay plug fuses have thermal sensitivity are also for cycling loads and motor circuits. Type "S" plug fuses are time delay and tamper-resistant.



### Ratings

- 125V AC, 10kA I.R.
- 3 to 30 Amperes
- Choice of Edison Base, Types "P", "D", or "S"

### Approvals

- UL Listed  
Guide JEFV, File E76208
- CSA Certified  
Class 142301, File 15525



### Plug Fuses – Standard Fuse Ampere Ratings, Reference Numbers

| Ampere Rating           | Non-Time Delay UL | Non-Time Delay CSA | Edison Base   |                             | Low-Temp Time-Delay UL | "D" Type Time-Delay CSA | Type S rejection* Time-Delay UL |
|-------------------------|-------------------|--------------------|---------------|-----------------------------|------------------------|-------------------------|---------------------------------|
|                         |                   |                    | Time Delay UL | "P" Type Non Time-Delay CSA |                        |                         |                                 |
| <b>Catalog Number</b>   |                   |                    |               |                             |                        |                         |                                 |
| 3                       | GW3               | G3                 | -             | -                           | -                      | -                       | -                               |
| 6                       | GW6               | G6                 | -             | -                           | -                      | -                       | -                               |
| 10                      | GW10              | G10                | -             | -                           | -                      | -                       | -                               |
| 15                      | GW15              | -                  | GTL15         | GP15                        | GT15                   | TD15                    | GSL15                           |
| 20                      | GW20              | -                  | GTL20         | GP20                        | GT20                   | TD20                    | GSL20                           |
| 25                      | GW25              | -                  | GTL25         | GP25                        | GT25                   | TD25                    | GSL25                           |
| 30                      | GW30              | -                  | GTL30         | GP30                        | GT30                   | TD30                    | GSL30                           |
| <b>Reference Number</b> |                   |                    |               |                             |                        |                         |                                 |
| 3                       | G214389           | V218472            | -             | -                           | -                      | -                       | -                               |
| 6                       | K215404           | N218995            | -             | -                           | -                      | -                       | -                               |
| 10                      | K212345           | N217960            | -             | -                           | -                      | -                       | -                               |
| 15                      | V212860           | -                  | K219521       | -                           | K217451                | P201056                 | C213373                         |
| 20                      | D213374           | -                  | N222721       | Y223236                     | T217965                | R211822                 | F214388                         |
| 25                      | X213874           | -                  | T201060       | F211306                     | A218477                | T213871                 | J215403                         |
| 30                      | G214895           | -                  | B203804       | T212859                     | S218999                | H215908                 | Q216421                         |

\* Must be used with an SAG adaptor to fit an Edison base fuse holder

FR15, FR20 Rejector Rings  
FRW Rejection tool

### Type S Plug Fuses adaptators

| Cat. Number/Rating | ref Number | Fuse range - amps |
|--------------------|------------|-------------------|
| SAG3-2/10          | Z216935    | 1-8/10 - 3-2/10   |
| SAG6-1/4           | P230427    | 3-1/2 - 6-1/4     |
| SAG6-3/10          | V217966    | 2-1/2 - 6-1/4     |
| SAG15              | M215912    | 7 - 15            |
| SAG20              | R216422    | 20                |
| SAG30              | L217452    | 25 - 30           |

Type S adaptors screw into the Edison base and allow Type S fuses to be installed. Type S adaptors prevent the wrong ampere size fuse from being used.







## American Fuses In line Fuse SLR - SMF - SHR



Ferraz Shawmut SLR and SMF in-line fuses are used to protect fluorescent lighting fixtures and ballasts. The SLR is a fast-acting fuse. SMF is a time-delay fuse. Both used to protect individual 300V fixtures. Ferraz Shawmut SHR fuse holder has an integral clip for panel mounting to meet this requirement. The holder fits into a standard 7/8" knock-out or keyhole punch that provides anti-rotation. The SHR is available in a single or double wire version. The single wire version (SHR-1) allows insertion of #18 AWG ballast leads directly into the holder.

### SLR FUSES

#### Ratings

- 300VAC, 100A I.R.
- 125VAC, 10kA I.R.
- 1/2 to 15A

#### Approvals

- UL Listed
- File No. E10480
- CSA Certified

#### Highlights:

- Fast Acting
- Integral fuse & insulating cap

### SMF FUSES

#### Ratings

- 300VAC, 100A I.R.
- 125VAC, 10kA I.R.
- 3/10 to 10A

#### Approvals

- UL Listed
- File No. E10480
- CSA Certified

#### Highlights:

- Time-Delay
- Integral fuse & insulating cap
- Designed specifically to handle ballast inrush currents

### SHR FUSE HOLDERS

#### Ratings

- 300VAC: 15A
- Withstand Rating: 10kA I.R.
- Dielectric Strength: 2,000 V

#### Approvals

- UL Recognized Component
- Guide IZLT2, UL File No. E52283



#### Highlights:

- Superior wire retention
- Thermoplastic Insulator - 150° C RTI
- Single and two wire versions
- Two load plug-in ports available
- Integral mounting clip - 0.062" thick panel
- Integral wire retention clip to hold #18 wire
- Tin plated, insulated #18 solid copper wire leads, 6" length



## American Fuses In line Fuse SLR - SMF - SHR

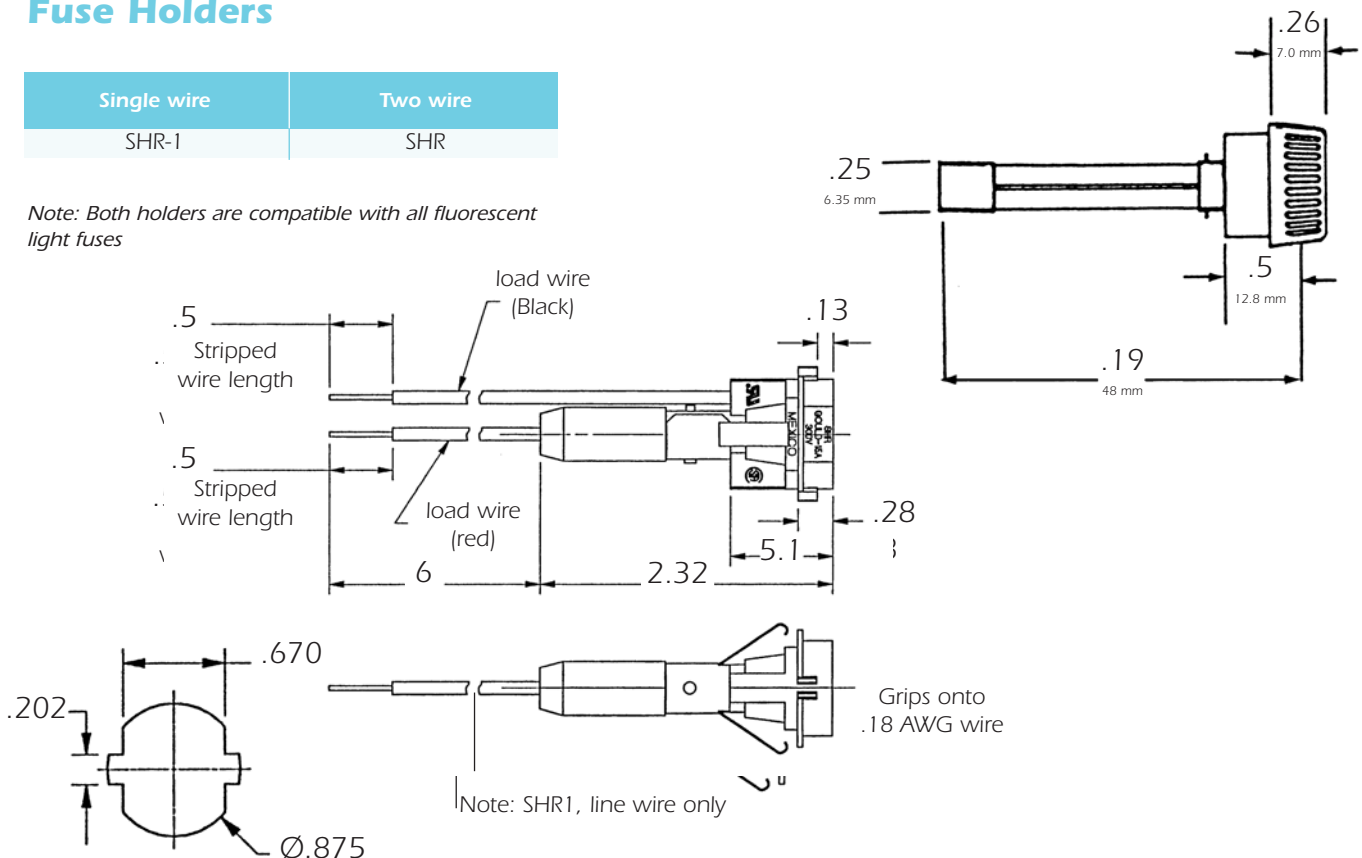
### Ampere Ratings, Reference Numbers

| Ampere Rating | Catalog Number |           | Reference Number |         |
|---------------|----------------|-----------|------------------|---------|
| 300mA         |                | SMF3/10   |                  |         |
| 500mA         | SLR1/2         | SMF1/2    | M215521          | R211937 |
| 600mA         |                | SMF6/10   |                  | E215008 |
| 800mA         |                | SMF8/10   |                  | R216537 |
| 1A            | SLR1           | SMF1      | Q211936          | Y201685 |
| 1-1/4A        |                | SMF1-1/4  |                  | P205702 |
| 1-1/2A        | SLR1-1/2       |           | C212453          |         |
| 1-6/10A       | SLR1-6/10      | SMF1-6/10 | T213986          | P211429 |
| 2A            | SLR2           | SMF2      | Q217571          | D212454 |
| 2-1/2A        | SLR2-1/2       | SMF2-1/2  | X218083          | M212968 |
| 2-8/10A       |                | SMF2-8/10 |                  | W213482 |
| 3A            | SLR3           | SMF3      | A218592          | V213987 |
| 3-2/10A       |                | SMF3-2/10 |                  | D214501 |
| 4A            | SLR4           | SMF4      | T219115          |         |
| 5A            | SLR5           | SMF5      | P219640          |         |
| 6A            | SLR6           |           | A222088          |         |
| 61/4A         |                | SMF61/4   |                  |         |
| 7A            | SLR7           | SMF7      | N222836          |         |
| 8A            | SLR8           | SMF8      | A223353          |         |
| 9A            | SLR9           |           | T201175          |         |
| 10A           | SLR10          | SMF10     | V216034          |         |
| 12A           | SLR12          |           | Q216536          |         |
| 15A           | SLR15          |           | F217056          |         |

### Fuse Holders

| Single wire | Two wire |
|-------------|----------|
| SHR-1       | SHR      |

Note: Both holders are compatible with all fluorescent light fuses



## American Fuses Surge Suppression Fuses VSP

Ferraz Shawmut surge suppression fuses are specially designed to address the protection of TVSS systems. Surge suppression fuses have been specially designed to withstand 8x20 mSec surge pulses without opening, allowing the TVSS system to react to the surge. All surge suppression fuses have a 8x20 mSec surge rating, not a continuous current rating. Under AC short circuit conditions these surge suppression fuses are very current limiting.

### Features/Benefits

- VSP fuses rated 600 VAC, 200kA I.R.
- Surge Ratings of 5-100kA 8x20  $\mu$  sec capacity
- Designed to help meet UL1449 Second Edition Requirements
- Various Mounting Configurations: ferrules, blade, bolt-in, pc board mount



### Ratings

- 5-100 kA 8x20  $\mu$ Sec Weveform 600 VAC, 200 kA I.R.

### Approvals

- UL Recognized Component
- File E60314, Vol.3 Special Purpose MOV Protector

### Applications:

- Protection of TVSS Devices
- Coordination with other protection devices



| Catalog Number  | Reference Number | Voltage Rating (AC) | 8x20 $\mu$ sec Surge Rating | Melting I <sup>2</sup> t (A <sup>2</sup> S) | Clearing I <sup>2</sup> t (A <sup>2</sup> S) | I <sub>peak</sub> @ 100KA (60 Hz (A) |
|-----------------|------------------|---------------------|-----------------------------|---|--|--------------------------------------|
| VSP5-2,R,-H,-S  | G219886          | 600V                | 5,000                       | 341   | 936  | 3,652                                |
| VSP10-2,R,-H,-S | X217807          | 600V                | 10,000                      | 1,541                                       | 3,744  | 5,794                                |
| VSP15-2,R,-H,-S | L227572          | 600V                | 15,000                      | 3,072                                       | 8,424  | 7,591                                |
| VSP20-2,R,-H,-S | W218841          | 600V                | 20,000                      | 4,992                                       | 14,400                                       | 9,194                                |
| VSP30-2         | X230457          | 600V                | 30,000                      | 12,507                                      | 33,696                                       | 12,044                               |
| VSP40-2         | J211677          | 600V                | 40,000                      | 19,543                                      | 59,904                                       | 14,588                               |
| VSP50-2         | W232250          | 600V                | 50,000                      | 32,020                                      | 93,600                                       | 16,925                               |
| VSP60-2         | F212709          | 600V                | 60,000                      | 42,808                                      | 134,784                                      | 19,110                               |
| VSP70-2         | G213722          | 600V                | 70,000                      | 61,152                                      | 183,456                                      | 21,176                               |
| VSP80-2         | S214744          | 600V                | 80,000                      | 79,872                                      | 239,616                                      | 23,146                               |
| VSP90-2         | X232251          | 600V                | 90,000                      | 99,000                                      | 303,264                                      | 25,034                               |
| VSP100-2        | F201416          | 480V                | 100,000                     | 121,500                                     | 374,400                                      | 26,854                               |
| VSP100-XL       | L230447          | 600V                | 100,000                     | 121,500                                     | 374,400                                      | 26,854                               |

### Recommended Fuse Blocks for VSP Fuses

#### VSP(5-20)-2 Catalog Number

| Number of poles | Box   | Screw | Pressure plate |
|-----------------|-------|-------|----------------|
| Adder           | 30310 | 30320 | 30350          |
| 1               | 30311 | 30321 | 30351          |
| 2               | 30312 | 30322 | 30352          |
| 3               | 30313 | 30323 | 30353          |

#### VSP(5-20)-2 Reference Number

| Number of poles | Box     | Screw   | Pressure plate |
|-----------------|---------|---------|----------------|
| Adder           | N211888 | S218033 | F214457        |
| 1               | A212405 | Y218544 | G214964        |
| 2               | E214456 | K222787 | L216486        |
| 3               | F214963 | B201642 | Z217004        |

#### VSP(30-100)-2 Catalog Number

| Number of poles | Box    | Screw  | Pressure plate |
|-----------------|--------|--------|----------------|
| Adder           | 60305J | 60315J | 60325J         |
| 1               | 60306J | 60316J | 60326J         |
| 2               | 60307J | 60317J | 60327J         |
| 3               | 60308J | 60318J | 60328J         |

#### VSP(30-100)-2 Reference Number

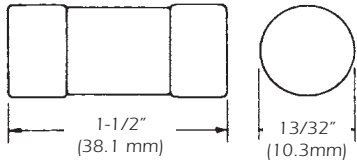
| Number of poles | Box     | Screw   | Pressure plate |
|-----------------|---------|---------|----------------|
| Adder           | K204893 | N218029 | Y212403        |
| 1               | J211884 | P219065 | T213434        |
| 2               | S213433 | Y222040 | B214453        |
| 3               | A214452 | V223302 | F215469        |

## American Fuses Surge Suppression Fuses VSP

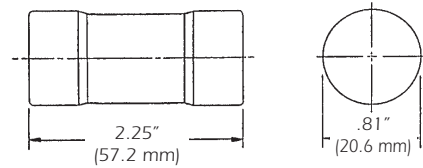
### Dimensions

VSP (5-20)-2,R,H,S

-2

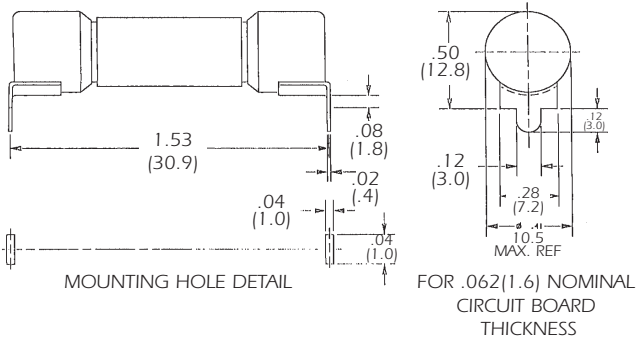


VSP (30-100)-2

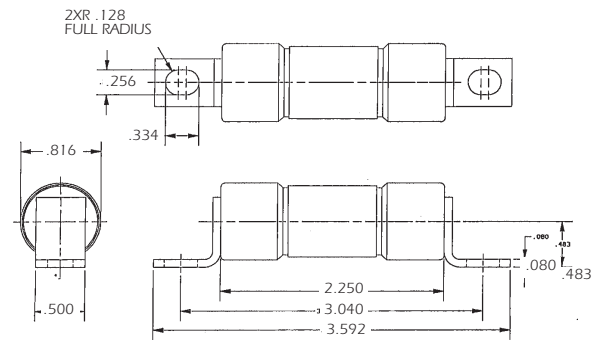


PC BOARD MOUNTING

-R

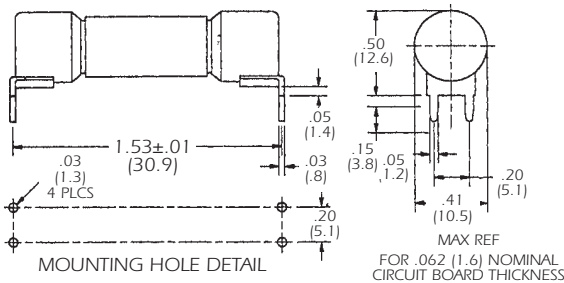


VSP30-100

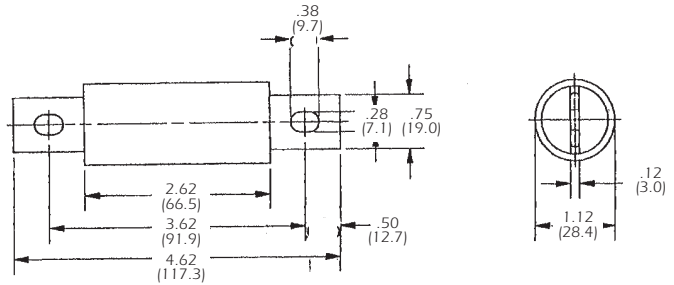


DOUBLE HOLE MOUNT (ROUND HOLES)

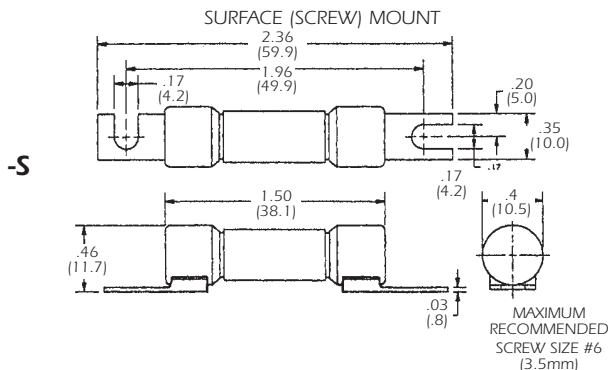
-H



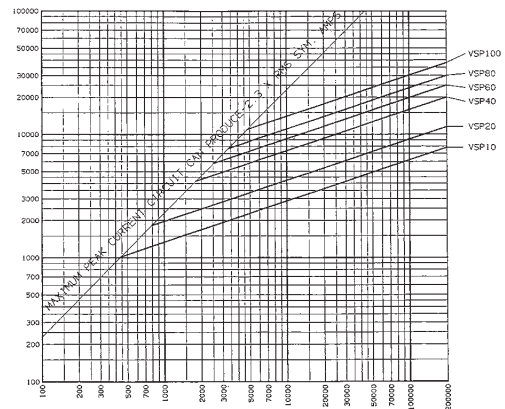
VSP100-XL



### Peak Let-Thru Current data



MAXIMUM INSTANTANEOUS PEAK LET-THRU AMPERES



AVAILABLE CURRENT IN RMS SYMMETRICAL AMPERES

## American Fuses Surge Suppression Fuses TPMOV



### Ratings

- 150V to 550VAC/100KA I.R.
- 40ka 8/20 $\mu$ s Withstand

### Approvals

- UL 1449 2nd Edition  
Recognized

### Features/Benefits

- High Energy Capacity
- Consistent footprint with 25–40mm MOV's
- Built-In Visual/Remote Indication
- Fail-Safe Operation

### Application:

- Transient Voltage Surge Suppressors
- AC/DC Distribution Systems
- High Voltage Power Supplies
- Telecommunications Equipment
- Motor Control Systems
- Computer Related Products
- PLC Applications
- Power Transfer Switches

### Thermally protected mov

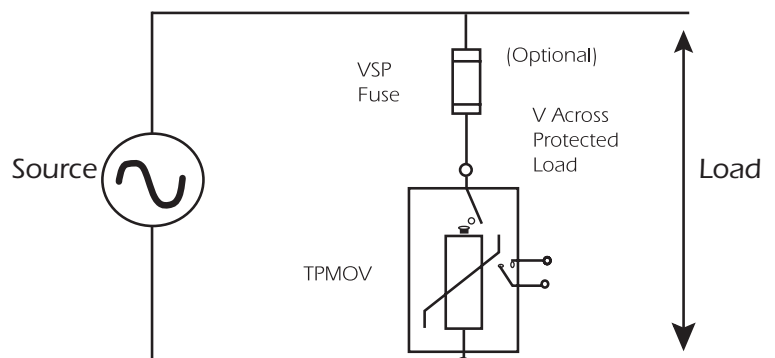
The Ferraz Shawmut Thermally Protected MOV has been developed to assist in eliminating the failure characteristics of Metal-Oxide-Varistors. The TPMOV is a fail-safe device. It is composed of a voltage clamping device and a disconnecting apparatus that monitors the status of the metal-oxide disk. In the event that the disk is approaching breakdown it is effectively disconnected from system power. The TPMOV is rated for 40ka of 8/20 $\mu$ s surge current. The TPMOV ratings are available from 150V to 550V. The TPMOV has been designed with two built in isolated indicating features. The first is a visual indicator. When the unit has disconnected from system power, two isolated pins will be noticed atop the TPMOV enclosure. The second feature is a remote indicator composed of a N/O micro-switch. In the event that the TPMOV has disconnected system power the switch will change status. These features lower costly engineering time that would be required for traditional MOV products.

### Layout

The TPMOV footings are similar\* to that of equivalent voltage ratings of traditional 25 to 40mm MOV's. The TPMOV can be utilized on existing systems that utilize traditional MOV's without costly board redesigns.

*\*refer to dimensional drawings on next page.*

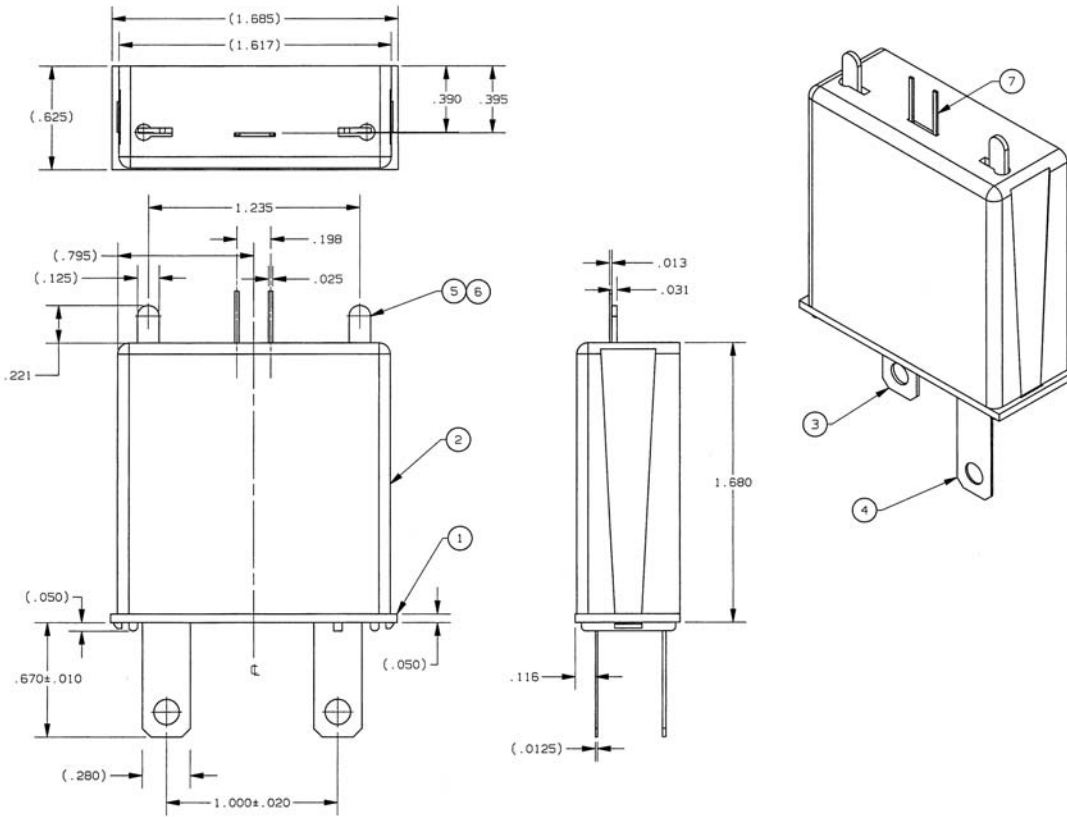
### Typical Application





## American Fuses Surge Suppression Fuses TPMOV

### Dimensions



| Reference Number | catalog Number | safety standards Recognition | maximum rating |      | peak current<br>1 pulse 8/20us | TPMOV voltage @ 1mA |      |
|------------------|----------------|------------------------------|----------------|------|--------------------------------|---------------------|------|
|                  |                |                              | AC             | DC   |                                | Vmin                | Vmax |
| X230595          | 150TPMOV       | UL1449                       | 150V           | 200V | 40,000A                        | 212V                | 259V |
| -                | 250TPMOV       | UL1449                       | 250V           | 330V | 40,000A                        | 354V                | 432V |
| Z230597          | 270TPMOV       | UL1449                       | 270V           | 360V | 40,000A                        | 382V                | 466V |
| A230598          | 320TPMOV       | UL1449                       | 320V           | 420V | 40,000A                        | 453V                | 553V |
| B230599          | 420TPMOV       | UL1449                       | 420V           | 550V | 40,000A                        | 594V                | 725V |
| C230600          | 510TPMOV       | UL1449                       | 510V           | 675V | 40,000A                        | 722V                | 881V |
| D230601          | 550TPMOV       | UL1449                       | 550V           | 700V | 40,000A                        | 778V                | 950V |