


# Fuses for Semiconductor Protection

## Cylindrical Fuses



SIBA cylindrical ultra-rapid fuses are available in six different sizes. They can be fitted with or without a built-in striker pin for fuse blown indication or operation of microswitches.

Approval:   
 Standards: IEC 60269-1 and -4  
 DIN VDE 0636-40  
 UL 248-13  
 Classes: gR/aR/gRL (gS)  
 Current ratings: 100 mA – 250 A

### Sizes and voltage ratings:

5 x 20 mm: AC 250 V  
 6.35 x 32 mm: AC 500 – 1000 V  
 10 x 38 mm: AC 600 – 1000 V  
 14 x 51 mm: AC 500/600V – 690/700 V  
 22 x 58 mm: AC 500/600 V – 690/700 V  
 27 x 60 mm: AC 660 V – 1000 V

## Features / Benefits

- ▶ High interrupting rating up to 300 kA
- ▶ Voltage rating AC 250 V to AC 1000 V
- ▶ Protection of Power Semiconductors according to IEC 60269-1 and -4
- ▶ Available with integrated striker pin
- ▶ Classes according to IEC 60269-4 and DIN VDE 0636-40
- ▶ Fuse-holder / fuse-clips and accessories are available



## Fuses for Semiconductor Protection

### Cylindrical Fuses

### Selection Guide Fuse-Links

| Size      | Rated Voltage | Indicator Type | Part No.  | Selector Guide [Page] | Techn. Data [Page] |
|-----------|---------------|----------------|-----------|-----------------------|--------------------|
| 5 x 20    | AC 250 V      | –              | 70 001 40 | URZ 4                 | URZ 16             |
| 5 x 20    | AC 250 V      | –              | 70 007 40 | URZ 4                 | URZ 16             |
| 6.35 x 32 | AC 500/700 V  | –              | 70 125 40 | URZ 5                 | URZ 18             |
| 6.35 x 32 | AC 400 V      | –              | 70 065 84 | URZ 5                 | URZ 17             |
| 6.35 x 32 | AC/DC 1000 V  | –              | 70 172 40 | URZ 6                 | URZ 19             |
| 10 x 38   | AC 600 V      | –              | 60 034 34 | URZ 7                 | URZ 20             |
| 10 x 38   | AC 600 V      | –              | 60 064 34 | URZ 7                 | URZ 20             |
| 10 x 38   | AC 600 V      | –              | 60 033 05 | URZ 7                 | URZ 21             |
| 10 x 38   | AC 660 V      | –              | 50 179 06 | URZ 8                 | URZ 22             |
| 10 x 38   | AC/DC 1000 V  | –              | 50 199 06 | URZ 8                 | URZ 23             |
| 10 x 35   | AC/DC 1000 V  | –              | 50 210 06 | URZ 8                 | URZ 24             |
| 14 x 51   | AC 500/600 V  | –              | 50 058 06 | URZ 9                 | URZ 25             |
| 14 x 51   | AC 500/600 V  | with striker   | 50 059 06 | URZ 9                 | URZ 25             |
| 14 x 51   | AC 690 V      | –              | 50 124 06 | URZ 9                 | URZ 27             |
| 14 x 51   | AC 690 V      | with striker   | 50 126 06 | URZ 9                 | URZ 27             |
| 14 x 51   | AC 690 V      | –              | 50 124 34 | URZ 10                | URZ 26             |
| 14 x 51   | AC 690 V      | with striker   | 50 126 34 | URZ 10                | URZ 26             |
| 14 x 51   | DC 700 V      | –              | 50 118 06 | URZ 11                | URZ 28             |
| 14 x 51   | DC 700 V      | –              | 50 201 06 | URZ 11                | URZ 29             |
| 22 x 58   | AC 500/660 V  | –              | 50 060 06 | URZ 12                | URZ 30             |
| 22 x 58   | AC 500/660 V  | with striker   | 50 061 06 | URZ 12                | URZ 30             |
| 22 x 58   | AC 690 V      | –              | 50 140 06 | URZ 12                | URZ 31             |
| 22 x 58   | AC 690 V      | with striker   | 50 142 06 | URZ 12                | URZ 31             |
| 22 x 58   | AC 690 V      | –              | 50 140 34 | URZ 13                | URZ 32             |
| 22 x 58   | AC 690 V      | with striker   | 50 142 34 | URZ 13                | URZ 32             |
| 27 x 60   | AC 660 V      | –              | 50 193 20 | URZ 14                | URZ 33             |
| 27 x 60   | AC 660 V      | with striker   | 50 194 20 | URZ 14                | URZ 33             |
| 27 x 60   | AC 1000 V     | –              | 50 196 20 | URZ 14                | URZ 34             |
| 27 x 60   | AC 1000 V     | with striker   | 50 197 20 | URZ 14                | URZ 34             |
| 27 x 60   | DC 660 V      | –              | 50 190 06 | URZ 15                | URZ 35             |



## Fuses for Semiconductor Protection

### Cylindrical Fuses

### Selection Guide Fuse-Holder ZS-Modul

| ZS-Module | Number of Poles | Indicator Type | Part No.     | Techn. Data [Page] |
|-----------|-----------------|----------------|--------------|--------------------|
| 10 x 38   | 1               | -              | 51 063 04.DC | URZ 37             |
| 10 x 38   | 1               | -              | 51 063 04    | URZ 37             |
| 10 x 38   | 2               | -              | 51 063 04.2  | URZ 37             |
| 10 x 38   | 3               | -              | 51 063 04.3  | URZ 37             |
| 10 x 38   | 1               | LED indicator  | 51 063 04.L  | URZ 37             |
| 10 x 38   | 2               | LED indicator  | 51 063 04.2L | URZ 37             |
| 10 x 38   | 3               | LED indicator  | 51 063 04.3L | URZ 37             |
| 14 x 51   | 1               | -              | 51 058 04    | URZ 37             |
| 14 x 51   | 2               | -              | 51 058 04.2  | URZ 37             |
| 14 x 51   | 3               | -              | 51 058 04.3  | URZ 37             |
| 14 x 51   | 1               | micro switch   | 51 058 04.S  | URZ 37             |
| 14 x 51   | 2               | micro switch   | 51 058 04.2S | URZ 37             |
| 14 x 51   | 3               | micro switch   | 51 058 04.3S | URZ 37             |
| 22 x 58   | 1               | -              | 51 060 04    | URZ 37             |
| 22 x 58   | 2               | -              | 51 060 04.2  | URZ 37             |
| 22 x 58   | 3               | -              | 51 060 04.3  | URZ 37             |
| 22 x 58   | 1               | micro switch   | 51 060 04.S  | URZ 37             |
| 22 x 58   | 3               | micro switch   | 51 060 04.3S | URZ 37             |

### Selection Guide Fuse-Clips

| Size  | Part No.    | Techn Data [Page] | Type      |
|-------|-------------|-------------------|-----------|
| 10 mm | 61 017 01.2 | URZ 35            |           |
| 14 mm | 61 001 01.2 | URZ 35            | screw     |
| 22 mm | 61 002 01.3 | URZ 35            | mountable |
| 27 mm | 61 004 01.3 | URZ 35            |           |
| 14 mm | 58 058 06   | URZ 36            | PCB       |
| 22 mm | 58 060 06   | URZ 36            | mountable |



## Fuses for Semiconductor Protection

### Cylindrical Fuses

Size  
**5 x 20 mm**

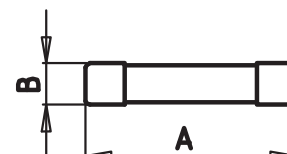
Rated Voltage  
**AC 250 V**

Class  
**aR**

| Rated Current [A] | Part No.        | Rated Breaking Capacity [kA] | UL Rec. | Weight [kg/100] | Pack |
|-------------------|-----------------|------------------------------|---------|-----------------|------|
| 100 mA            | 70 001 40.0.100 | 300                          | ✓       | 0.14            | 100  |
| 125 mA            | 70 001 40.0.125 | 300                          | ✓       | 0.14            | 100  |
| 160 mA            | 70 001 40.0.160 | 300                          | ✓       | 0.14            | 100  |
| 200 mA            | 70 001 40.0.200 | 300                          | ✓       | 0.14            | 100  |
| 250 mA            | 70 001 40.0.250 | 300                          | ✓       | 0.14            | 100  |
| 315 mA            | 70 001 40.0.315 | 300                          | ✓       | 0.14            | 100  |
| 400 mA            | 70 001 40.0.400 | 300                          | ✓       | 0.14            | 100  |
| 500 mA            | 70 001 40.0.500 | 300                          | ✓       | 0.14            | 100  |
| 630 mA            | 70 001 40.0.630 | 300                          | ✓       | 0.14            | 100  |
| 800 mA            | 70 001 40.0.800 | 300                          | ✓       | 0.14            | 100  |
| 1                 | 70 001 40.1     | 300                          | ✓       | 0.14            | 100  |
| 1.25              | 70 001 40.1.25  | 300                          | ✓       | 0.14            | 100  |
| 1.6               | 70 001 40.1.6   | 300                          | ✓       | 0.14            | 100  |
| 2                 | 70 001 40.2     | 300                          | ✓       | 0.14            | 100  |
| 2.5               | 70 001 40.2.5   | 300                          | ✓       | 0.14            | 100  |
| 3.15              | 70 001 40.3.15  | 300                          | ✓       | 0.14            | 100  |
| 4                 | 70 001 40.4     | 300                          | ✓       | 0.14            | 100  |
| 5                 | 70 001 40.5     | 300                          | ✓       | 0.14            | 100  |
| 6.3               | 70 001 40.6.3   | 1 500 A                      |         | 0.14            | 100  |
| 8                 | 70 001 40.8     | 1 500 A                      |         | 0.14            | 100  |
| 10                | 70 001 40.10    | 1 500 A                      |         | 0.14            | 100  |
| 6.3               | 70 007 40.6.3   | 300                          | ✓       | 0.14            | 100  |
| 8                 | 70 007 40.8     | 300                          | ✓       | 0.14            | 100  |
| 10                | 70 007 40.10    | 300                          | ✓       | 0.14            | 100  |
| 12.5              | 70 007 40.12.5  | 300                          | ✓       | 0.14            | 100  |

**A** 0.79" (20 mm)

**B** 0.2" (5 mm)





**Fuses for Semiconductor Protection**  
Cylindrical Fuses

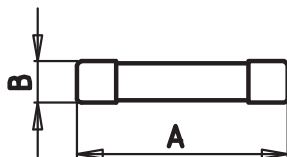
Size **6.35 x 32 mm**      Rated Voltage **AC 400 V**      Class **gRL(gS)**

| Rated Current<br>[A] | Part No.       | Rated Breaking Capacity<br>[kA] | Rated Voltage<br>[AC] | UL Rec. | Weight<br>[kg/100] | Pack |
|----------------------|----------------|---------------------------------|-----------------------|---------|--------------------|------|
| 6.3                  | 70 065 84.6.3  | 120 kA                          | 400 V                 | ✓       | 0.9                | 10   |
| 8                    | 70 065 84.8    | 120 kA                          | 400 V                 | ✓       | 0.9                | 10   |
| 10                   | 70 065 84.10   | 120 kA                          | 400 V                 | ✓       | 0.9                | 10   |
| 12.5                 | 70 065 84.12.5 | 120 kA                          | 400 V                 | ✓       | 0.9                | 10   |
| 16                   | 70 065 84.16   | 120 kA                          | 400 V                 | ✓       | 0.9                | 10   |
| 20                   | 70 065 84.20   | 120 kA                          | 400 V                 | ✓       | 0.9                | 10   |

Size **6.35 x 32 mm**      Rated Voltage **AC 500/700 V**      Class **aR**

| Rated Current<br>[A] | Part No.        | Rated Breaking Capacity<br>[kA] | Rated Voltage<br>[V] | UL Rec. | cUL | Weight<br>[kg/100] | Pack |
|----------------------|-----------------|---------------------------------|----------------------|---------|-----|--------------------|------|
| 160 mA               | 70 125 40.0.160 | 50                              | 700                  | ✓       | ✓   | 0.24               | 100  |
| 200 mA               | 70 125 40.0.200 | 50                              | 700                  | ✓       | ✓   | 0.24               | 100  |
| 250 mA               | 70 125 40.0.250 | 50                              | 700                  | ✓       | ✓   | 0.24               | 100  |
| 315 mA               | 70 125 40.0.315 | 50                              | 700                  | ✓       | ✓   | 0.24               | 100  |
| 400 mA               | 70 125 40.0.400 | 50                              | 700                  | ✓       | ✓   | 0.24               | 100  |
| 500 mA               | 70 125 40.0.500 | 50                              | 700                  | ✓       | ✓   | 0.24               | 100  |
| 630 mA               | 70 125 40.0.630 | 50                              | 700                  | ✓       | ✓   | 0.24               | 100  |
| 800 mA               | 70 125 40.0.800 | 50                              | 700                  | ✓       | ✓   | 0.24               | 100  |
| 1                    | 70 125 40.1     | 50                              | 700                  | ✓       | ✓   | 0.24               | 100  |
| 1.25                 | 70 125 40.1.25  | 50                              | 700                  | ✓       | ✓   | 0.24               | 100  |
| 1.6                  | 70 125 40.1.6   | 50                              | 700                  | ✓       | ✓   | 0.24               | 100  |
| 2                    | 70 125 40.2     | 50                              | 700                  | ✓       | ✓   | 0.24               | 100  |
| 2.5                  | 70 125 40.2.5   | 50                              | 500                  | ✓       | ✓   | 0.24               | 100  |
| 3.15                 | 70 125 40.3.15  | 50                              | 500                  | ✓       | ✓   | 0.24               | 100  |
| 4                    | 70 125 40.4     | 50                              | 500                  | ✓       | ✓   | 0.24               | 100  |
| 5                    | 70 125 40.5     | 50                              | 500                  | ✓       | ✓   | 0.24               | 100  |
| 6.3                  | 70 125 40.6.3   | 50                              | 500                  | ✓       | ✓   | 0.24               | 100  |
| 8 <sup>1</sup>       | 70 125 40.8     | 50                              | 500                  | ✓       | ✓   | 0.24               | 100  |
| 10 <sup>1</sup>      | 70 125 40.10    | 50                              | 500                  | ✓       | ✓   | 0.24               | 100  |
| 12.5 <sup>1</sup>    | 70 125 40.12.5  | 50                              | 500                  | ✓       | ✓   | 0.24               | 100  |
| 16 <sup>1</sup>      | 70 125 40.16    | 50                              | 500                  | ✓       | ✓   | 0.24               | 100  |
| 20 <sup>1</sup>      | 70 125 40.20    | 50                              | 500                  | ✓       | ✓   | 0.24               | 100  |

<sup>1</sup> Consideration should be given to heat dissipation.



**A** 1.26" (32 mm)  
**B** 0.25" (6.35 mm)



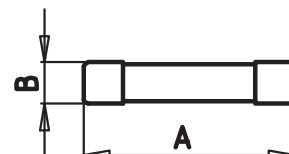
## Fuses for Semiconductor Protection

### Cylindrical Fuses

Size **6.35 x 32 mm**      Rated Voltage **AC/DC 1000 V**      **DMI Fuse for Digital Measuring Instruments**      Class **aR**

| Rated Current [A] | Part No.        | UL Rec. | Weight [kg/100] | Pack |
|-------------------|-----------------|---------|-----------------|------|
| 315 mA            | 70 172 40.0.315 |         | 0.24            | 100  |
| 500 mA            | 70 172 40.0.500 |         | 0.24            | 100  |
| 1.6 A             | 70 172 40.1.6   |         | 0.24            | 100  |
| 2 A               | 70 172 40.2     |         | 0.24            | 100  |

**A** 1.26" (32 mm)  
**B** 0.25" (6.35 mm)





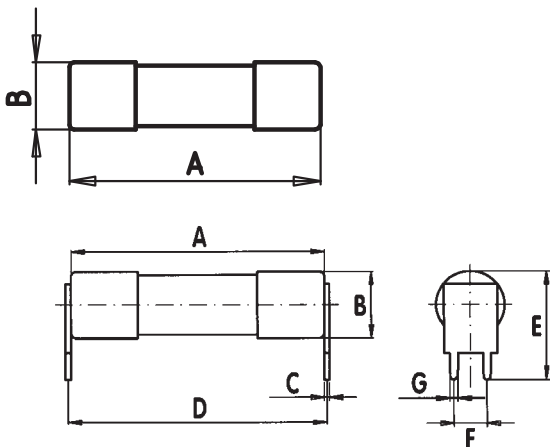
**Fuses for Semiconductor Protection**  
Cylindrical Fuses

Size **10 x 38 mm**      Rated Voltage **AC 500 V (IEC) · AC 600 V (UL)**      Class **gRL(gS)**

| Rated Current [A] | Part No.     | Part No. PCB Mounting | UL Rec. | Weight [kg/100] | Pack |
|-------------------|--------------|-----------------------|---------|-----------------|------|
| 6                 | 60 034 34.6  | 60 064 34.6           | ✓       | 0.9             | 10   |
| 8                 | 60 034 34.8  | 60 064 34.8           | ✓       | 0.9             | 10   |
| 10                | 60 034 34.10 | 60 064 34.10          | ✓       | 0.9             | 10   |
| 12                | 60 034 34.12 | 60 064 34.12          | ✓       | 0.9             | 10   |
| 16                | 60 034 34.16 | 60 064 34.16          | ✓       | 0.9             | 10   |
| 20                | 60 034 34.20 | 60 064 34.20          | ✓       | 0.9             | 10   |
| 25                | 60 034 34.25 | 60 064 34.25          | ✓       | 0.9             | 10   |
| 30                | 60 034 34.30 | 60 064 34.30          | ✓       | 0.9             | 10   |

Size **10 x 38 mm**      Rated Voltage **AC 600 V**      Class **aR**

| Rated Current [A] | Part No.     | UL Rec. | Weight [kg/100] | Pack |
|-------------------|--------------|---------|-----------------|------|
| 1                 | 60 033 05.1  |         | 0.9             | 10   |
| 2                 | 60 033 05.2  |         | 0.9             | 10   |
| 4                 | 60 033 05.4  |         | 0.9             | 10   |
| 5                 | 60 033 05.5  | ✓       | 0.9             | 10   |
| 6                 | 60 033 05.6  | ✓       | 0.9             | 10   |
| 8                 | 60 033 05.8  | ✓       | 0.9             | 10   |
| 10                | 60 033 05.10 | ✓       | 0.9             | 10   |
| 12                | 60 033 05.12 | ✓       | 0.9             | 10   |
| 16                | 60 033 05.16 | ✓       | 0.9             | 10   |
| 20                | 60 033 05.20 | ✓       | 0.9             | 10   |
| 25                | 60 033 05.25 | ✓       | 0.9             | 10   |
| 30                | 60 033 05.30 | ✓       | 0.9             | 10   |



- A 1.50" (38 mm)
- B 0.40" (10 mm)

- PCB Mounting**
- A 1.50" (38 mm)
  - B 0.40" (10 mm)
  - C 0.03" (0.8 mm)
  - D 1.53" (16.4 mm)
  - E 0.65" (16.4 mm)
  - F 0.20" (5.1 mm)
  - G 0.05" (1.2 mm)



**Fuses for Semiconductor Protection**  
Cylindrical Fuses

Size **10 x 38 mm**      Rated Voltage **AC 660 V (IEC) · AC 700 V (UL)**

Class **gR**

| Rated Current [A] | Part No.     | UL Rec. CSA | Weight [kg/100] | Pack |
|-------------------|--------------|-------------|-----------------|------|
| 1                 | 50 179 06.1  | ✓ ✓         | 0.9             | 10   |
| 2                 | 50 179 06.2  | ✓ ✓         | 0.9             | 10   |
| 4                 | 50 179 06.4  | ✓ ✓         | 0.9             | 10   |
| 5                 | 50 179 06.5  | ✓ ✓         | 0.9             | 10   |
| 6                 | 50 179 06.6  | ✓ ✓         | 0.9             | 10   |
| 8                 | 50 179 06.8  | ✓ ✓         | 0.9             | 10   |
| 10                | 50 179 06.10 | ✓ ✓         | 0.9             | 10   |
| 12                | 50 179 06.12 | ✓ ✓         | 0.9             | 10   |
| 16                | 50 179 06.16 | ✓ ✓         | 0.9             | 10   |
| 20                | 50 179 06.20 | ✓ ✓         | 0.9             | 10   |
| 25                | 50 179 06.25 | ✓ ✓         | 0.9             | 10   |
| 30                | 50 179 06.30 | ✓ ✓         | 0.9             | 10   |

Size **10 x 38 mm**      Rated Voltage **AC/DC 1000 V**      **DMI Fuse for Digital Measuring Instruments**

Class **aR**

| Rated Current [A] | Part No.     | UL Rec. | Weight [kg/100] | Pack |
|-------------------|--------------|---------|-----------------|------|
| 4                 | 50 199 06.4  |         | 0.9             | 10   |
| 6                 | 50 199 06.6  |         | 0.9             | 10   |
| 8                 | 50 199 06.8  |         | 0.9             | 10   |
| 10                | 50 199 06.10 |         | 0.9             | 10   |
| 12                | 50 199 06.12 |         | 0.9             | 10   |
| 16                | 50 199 06.16 |         | 0.9             | 10   |

Size **10 x 35 mm**      Rated Voltage **AC/DC 1000 V**      **DMI Fuse for Digital Measuring Instruments**

Class **aR**

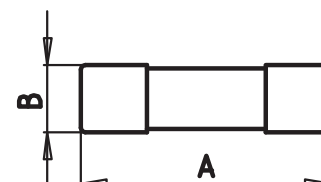
| Rated Current [A] | Part No.        | UL Rec. | Weight [kg/100] | Pack |
|-------------------|-----------------|---------|-----------------|------|
| 0.2               | 50 210 06.0.2   |         | 0.8             | 10   |
| 0.25              | 50 210 06.0.25  |         | 0.8             | 10   |
| 0.315             | 50 210 06.0.315 |         | 0.8             | 10   |
| 0.4               | 50 210 06.0.4   |         | 0.8             | 10   |
| 0.44              | 50 210 06.0.44  |         | 0.8             | 10   |

Part No.  
**50 179 06 + 50 199 06**

**A** 1.50" (38 mm)  
**B** 0.40" (10 mm)

Part No.  
**50 210 06**

**A** 1.38" (35 mm)  
**B** 0.40" (10 mm)







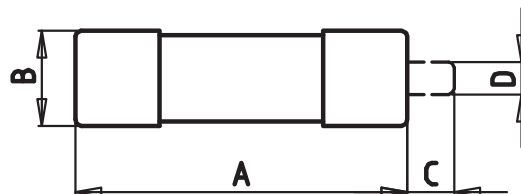
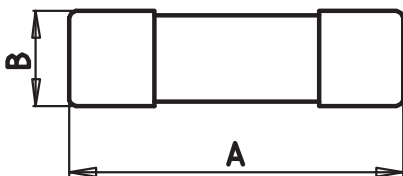
**Fuses for Semiconductor Protection**  
Cylindrical Fuses

Size **14 x 51 mm**      Rated Voltage **AC 500 V (IEC) · AC 600 V (UL)**      Class **aR**

| Rated Current<br>[A] | Part No.<br>without Striker | Part No.<br>with Striker | UL Rec. | Weight<br>[kg/100] | Pack |
|----------------------|-----------------------------|--------------------------|---------|--------------------|------|
| 6                    | 50 058 06.6                 | 50 059 06.6              |         | 2.2                | 10   |
| 8                    | 50 058 06.8                 | 50 059 06.8              |         | 2.2                | 10   |
| 10                   | 50 058 06.10                | 50 059 06.10             |         | 2.2                | 10   |
| 12                   | 50 058 06.12                | 50 059 06.12             |         | 2.2                | 10   |
| 16                   | 50 058 06.16                | 50 059 06.16             |         | 2.2                | 10   |
| 20                   | 50 058 06.20                | 50 059 06.20             |         | 2.2                | 10   |
| 25                   | 50 058 06.25                | 50 059 06.25             |         | 2.2                | 10   |
| 32                   | 50 058 06.32                | 50 059 06.32             |         | 2.2                | 10   |
| 40                   | 50 058 06.40                | 50 059 06.40             |         | 2.2                | 10   |
| 50                   | 50 058 06.50                | 50 059 06.50             |         | 2.2                | 10   |

Size **14 x 51 mm**      Rated Voltage **AC 690 V (IEC) · AC 700 V (UL)**      Class **gR**

| Rated Current<br>[A] | Part No.<br>without Striker | Part No.<br>with Striker | UL Rec. | Weight<br>[kg/100] | Pack |
|----------------------|-----------------------------|--------------------------|---------|--------------------|------|
| 6                    | 50 124 06.6                 | 50 126 06.6              | ✓       | 2.2                | 10   |
| 8                    | 50 124 06.8                 | 50 126 06.8              | ✓       | 2.2                | 10   |
| 10                   | 50 124 06.10                | 50 126 06.10             | ✓       | 2.2                | 10   |
| 12                   | 50 124 06.12                | 50 126 06.12             | ✓       | 2.2                | 10   |
| 16                   | 50 124 06.16                | 50 126 06.16             | ✓       | 2.2                | 10   |
| 20                   | 50 124 06.20                | 50 126 06.20             | ✓       | 2.2                | 10   |
| 25                   | 50 124 06.25                | 50 126 06.25             | ✓       | 2.2                | 10   |
| 32                   | 50 124 06.32                | 50 126 06.32             | ✓       | 2.2                | 10   |
| 40                   | 50 124 06.40                | 50 126 06.40             | ✓       | 2.2                | 10   |
| 50                   | 50 124 06.50                | 50 126 06.50             | ✓       | 2.2                | 10   |



**Without Striker**  
A 2.00" (51 mm)  
B 0.55" (14 mm)

**With Striker**  
A 2.00" (51 mm)  
B 0.55" (14 mm)  
C<sub>min</sub> 0.28" (7 mm)  
D 0.20" (4.9 mm)



**Fuses for Semiconductor Protection**  
Cylindrical Fuses

Size  
**14 x 51 mm**

Rated Voltage  
**AC 690 / 700 V**

Class  
**gRL(gS)**

| Rated Current<br>[A] | Part No.<br>without Striker | Part No.<br>with Striker | Part No.<br>Fixing Center 63,5 mm | UL Rec. | Weight<br>[kg/100] | Pack |
|----------------------|-----------------------------|--------------------------|-----------------------------------|---------|--------------------|------|
| 10                   | 50 124 34.10                | 50 126 34.10             | 50 129 34.10                      | ✓       | 2.2                | 10   |
| 12                   | 50 124 34.12                | 50 126 34.12             | 50 129 34.12                      | ✓       | 2.2                | 10   |
| 16                   | 50 124 34.16                | 50 126 34.16             | 50 129 34.16                      | ✓       | 2.2                | 10   |
| 20                   | 50 124 34.20                | 50 126 34.20             | 50 129 34.20                      | ✓       | 2.2                | 10   |
| 25                   | 50 124 34.25                | 50 126 34.25             | 50 129 34.25                      | ✓       | 2.2                | 10   |
| 30                   | 50 124 34.30                | 50 126 34.30             | 50 129 34.30                      | ✓       | 2.2                | 10   |
| 32                   | 50 124 34.32                | 50 126 34.32             | 50 129 34.32                      | ✓       | 2.2                | 10   |
| 35                   | 50 124 34.35                | 50 126 34.35             | 50 129 34.35                      | ✓       | 2.2                | 10   |
| 40                   | 50 124 34.40                | 50 126 34.40             | 50 129 34.40                      | ✓       | 2.2                | 10   |

**Without Striker**

- A 2.00" (51 mm)
- B 0.55" (14 mm)

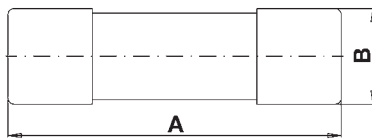
**With Striker**

- A 2.00" (51 mm)
- B 0.55" (14 mm)
- C<sub>min</sub> 0.28" (7 mm)
- D 0.20" (4.9 mm)

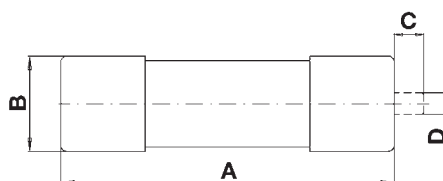
**Fixing Center 63,5 mm**

- A 2.00" (51 mm)
- B 0.55" (14 mm)
- C 0.00" (63.5 mm)
- D 0.00" (77 mm)
- E 0.00" (8.7 mm)
- F 0.00" (5.5 mm)

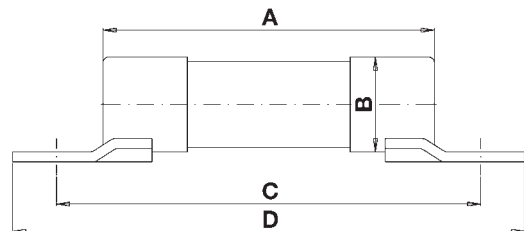
Part No. 50 124 34. ...



Part No. 50 126 34. ...



Part No. 50 129 34. ...





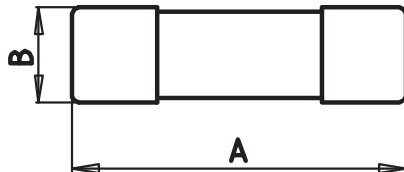
**Fuses for Semiconductor Protection**  
Cylindrical Fuses

Size **14 x 51 mm**      Rated Voltage **DC 700 V (UL)**      Class **aR**

| Rated Current [A] | Part No.     | UL Rec. | Weight [kg/100] | Pack |
|-------------------|--------------|---------|-----------------|------|
| 10                | 50 201 06.10 | ✓       | 2.2             | 10   |
| 12                | 50 201 06.12 | ✓       | 2.2             | 10   |
| 16                | 50 201 06.16 | ✓       | 2.2             | 10   |
| 20                | 50 201 06.20 | ✓       | 2.2             | 10   |
| 25                | 50 201 06.25 | ✓       | 2.2             | 10   |
| 32                | 50 201 06.32 | ✓       | 2.2             | 10   |
| 40                | 50 201 06.40 | ✓       | 2.2             | 10   |
| 50                | 50 201 06.50 | ✓       | 2.2             | 10   |

Size **14 x 51 mm**      Rated Voltage **DC 700 V (UL)**      Class **aR**

| Rated Current [A] | Part No.     | UL Rec. | Weight [kg/100] | Pack |
|-------------------|--------------|---------|-----------------|------|
| 6                 | 50 118 06.6  | ✓       | 2.2             | 10   |
| 8                 | 50 118 06.8  | ✓       | 2.2             | 10   |
| 10                | 50 118 06.10 | ✓       | 2.2             | 10   |
| 12                | 50 118 06.12 | ✓       | 2.2             | 10   |
| 16                | 50 118 06.16 | ✓       | 2.2             | 10   |
| 20                | 50 118 06.20 | ✓       | 2.2             | 10   |
| 25                | 50 118 06.25 | ✓       | 2.2             | 10   |
| 30                | 50 118 06.30 | ✓       | 2.2             | 10   |
| 35                | 50 118 06.35 |         | 2.2             | 10   |
| 40                | 50 118 06.40 |         | 2.2             | 10   |
| 50                | 50 118 06.50 |         | 2.2             | 10   |



**A** 2.00" (51 mm)  
**B** 0.55" (14 mm)



**Fuses for Semiconductor Protection**  
Cylindrical Fuses

Size  
**22 x 58 mm**

Rated Voltage  
**AC 500 V (IEC) · AC 600 V (UL)**

Class  
**aR**

| Rated Current<br>[A] | Part No.<br>without Striker | Part No.<br>with Striker | UL Rec. | Weight<br>[kg/100] | Pack |
|----------------------|-----------------------------|--------------------------|---------|--------------------|------|
| 12                   | 50 060 06.12                | 50 061 06.12             |         | 5.5                | 10   |
| 16                   | 50 060 06.16                | 50 061 06.16             |         | 5.5                | 10   |
| 20                   | 50 060 06.20                | 50 061 06.20             |         | 5.5                | 10   |
| 25                   | 50 060 06.25                | 50 061 06.25             |         | 5.5                | 10   |
| 32                   | 50 060 06.32                | 50 061 06.32             |         | 5.5                | 10   |
| 40                   | 50 060 06.40                | 50 061 06.40             |         | 5.5                | 10   |
| 50                   | 50 060 06.50                | 50 061 06.50             |         | 5.5                | 10   |
| 63                   | 50 060 06.63                | 50 061 06.63             |         | 5.5                | 10   |
| 80                   | 50 060 06.80                | 50 061 06.80             |         | 5.5                | 10   |
| 100                  | 50 060 06.100               | 50 061 06.100            |         | 5.5                | 10   |

Size  
**22 x 58 mm**

Rated Voltage  
**AC 690 V (IEC) · AC 700 V (UL)**

Class  
**gR/aR**

| Rated Current<br>[A] | Part No.<br>without Striker | Part No.<br>with Striker | UL Rec. | Weight<br>(kg/100) | Pack | Class |
|----------------------|-----------------------------|--------------------------|---------|--------------------|------|-------|
| 12                   | 50 140 06.12                | 50 142 06.12             | ✓       | 5.5                | 10   | gR    |
| 16                   | 50 140 06.16                | 50 142 06.16             | ✓       | 5.5                | 10   | gR    |
| 20                   | 50 140 06.20                | 50 142 06.20             | ✓       | 5.5                | 10   | gR    |
| 25                   | 50 140 06.25                | 50 142 06.25             | ✓       | 5.5                | 10   | gR    |
| 32                   | 50 140 06.32                | 50 142 06.32             | ✓       | 5.5                | 10   | gR    |
| 40                   | 50 140 06.40                | 50 142 06.40             | ✓       | 5.5                | 10   | gR    |
| 50                   | 50 140 06.50                | 50 142 06.50             | ✓       | 5.5                | 10   | gR    |
| 63                   | 50 140 06.63                | 50 142 06.63             | ✓       | 5.5                | 10   | gR    |
| 80                   | 50 140 06.80                | 50 142 06.80             | ✓       | 5.5                | 10   | gR    |
| 100                  | 50 140 06.100               | 50 142 06.100            | ✓       | 5.5                | 10   | gR    |
| 125*                 | 50 140 06.125               | 50 142 06.125            |         | 5.5                | 10   | aR    |
| 135*                 | 50 140 06.135               | 50 142 06.135            |         | 5.5                | 10   | aR    |

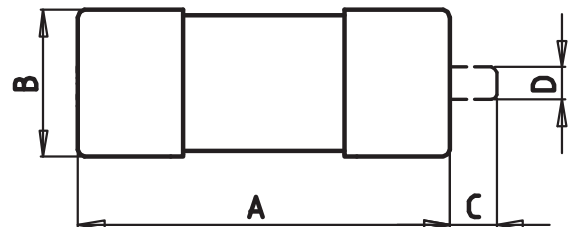
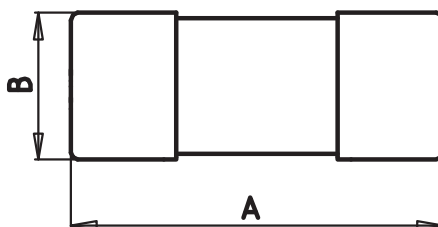
\* AC 600 V

**Without Striker**

- A** 2.28" (58 mm)
- B** 0.87" (22 mm)

**With Striker**

- A** 2.28" (58 mm)
- B** 0.87" (22 mm)
- C<sub>min</sub>** 0.28" (7 mm)
- D** 0.20" (4.9 mm)

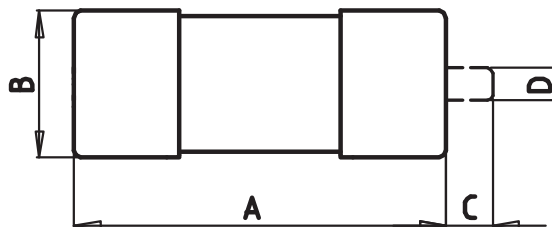
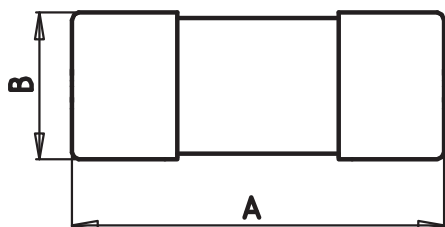




**Fuses for Semiconductor Protection**  
Cylindrical Fuses

Size **22 x 58 mm**      Rated Voltage **AC 690 V (IEC) · AC 700 V (UL)**      Class **gRL(gS)**

| Rated Current<br>[A] | Part No.<br>without Striker | Part No.<br>with Striker | UL Rec. | Weight<br>[kg/100] | Pack |
|----------------------|-----------------------------|--------------------------|---------|--------------------|------|
| 25                   | 50 140 34.25                | 50 142 34.25             | ✓       | 5.5                | 10   |
| 30                   | 50 140 34.30                | 50 142 34.30             | ✓       | 5.5                | 10   |
| 32                   | 50 140 34.32                | 50 142 34.32             | ✓       | 5.5                | 10   |
| 35                   | 50 140 34.35                | 50 142 34.35             | ✓       | 5.5                | 10   |
| 50                   | 50 140 34.50                | 50 142 34.50             | ✓       | 5.5                | 10   |
| 63                   | 50 140 34.63                | 50 142 34.63             | ✓       | 5.5                | 10   |
| 80                   | 50 140 34.80                | 50 142 34.80             | ✓       | 5.5                | 10   |
| 100                  | 50 140 34.100               | 50 142 34.100            | ✓       | 5.5                | 10   |



**Without Striker**  
A 2.28" (58 mm)  
B 0.87" (22 mm)

**With Striker**  
A 2.28" (58 mm)  
B 0.87" (22 mm)  
C<sub>min</sub> 0.28" (7 mm)  
D 0.20" (4.9 mm)



**Fuses for Semiconductor Protection**  
Cylindrical Fuses

Size  
**27 x 60 mm**

Rated Voltage  
**AC 660 V**

Class  
**aR**

| Rated Current<br>[A] | Part No.<br>without Striker | Part No.<br>with Striker | UL Rec. | Weight<br>[kg/100] | Pack |
|----------------------|-----------------------------|--------------------------|---------|--------------------|------|
| 20                   | 50 193 20.20                | 50 194 20.20             |         | 6.0                | 10   |
| 25                   | 50 193 20.25                | 50 194 20.25             |         | 6.0                | 10   |
| 32                   | 50 193 20.32                | 50 194 20.32             |         | 6.0                | 10   |
| 40                   | 50 193 20.40                | 50 194 20.40             |         | 6.0                | 10   |
| 50                   | 50 193 20.50                | 50 194 20.50             |         | 6.0                | 10   |
| 63                   | 50 193 20.63                | 50 194 20.63             |         | 6.0                | 10   |
| 100                  | 50 193 20.100               | 50 194 20.100            |         | 6.0                | 10   |
| 125                  | 50 193 20.125               | 50 194 20.125            |         | 6.0                | 10   |
| 200                  | 50 193 20.200               | 50 194 20.200            |         | 6.0                | 10   |
| 250                  | 50 193 20.250               | 50 194 20.250            |         | 6.0                | 10   |

Size  
**27 x 60 mm**

Rated Voltage  
**AC 1000 V**

Class  
**aR**

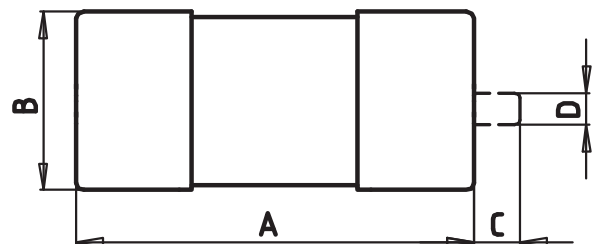
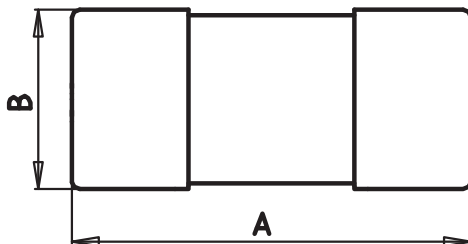
| Rated Current<br>[A] | Part No.<br>without Striker | Part No.<br>with Striker | UL Rec. | Weight<br>[kg/100] | Pack |
|----------------------|-----------------------------|--------------------------|---------|--------------------|------|
| 32                   | 50 196 20.32                | 50 197 20.32             |         | 6.0                | 10   |
| 40                   | 50 196 20.40                | 50 197 20.40             |         | 6.0                | 10   |
| 50                   | 50 196 20.50                | 50 197 20.50             |         | 6.0                | 10   |
| 63                   | 50 196 20.63                | 50 197 20.63             |         | 6.0                | 10   |
| 80                   | 50 196 20.80                | 50 197 20.80             |         | 6.0                | 10   |
| 100                  | 50 196 20.100               | 50 197 20.100            |         | 6.0                | 10   |
| 125                  | 50 196 20.125               | 50 197 20.125            |         | 6.0                | 10   |
| 160                  | 50 196 20.160               | 50 197 20.160            |         | 6.0                | 10   |
| 170                  | 50 196 20.170               | 50 197 20.170            |         | 6.0                | 10   |

**Without Striker**

- A** 2.36" (60 mm)
- B** 1.06" (27 mm)

**With Striker**

- A** 2.36" (60 mm)
- B** 1.06" (27 mm)
- C<sub>min</sub>** 0.28" (7 mm)
- D** 0.20" (4.9 mm)

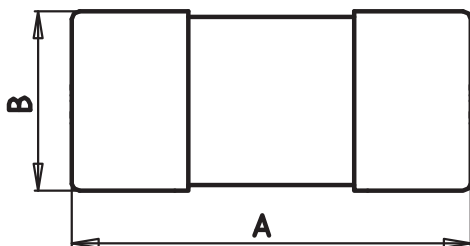




**Fuses for Semiconductor Protection**  
Cylindrical Fuses

Size **27 x 60 mm**      Rated Voltage **DC 660 V**      Class **gR**

| Rated Current [A] | Part No.      | UL Rec. | Weight [kg/100] | Pack |
|-------------------|---------------|---------|-----------------|------|
| 8                 | 50 190 06.8   |         | 6.0             | 10   |
| 10                | 50 190 06.10  |         | 6.0             | 10   |
| 12                | 50 190 06.12  |         | 6.0             | 10   |
| 16                | 50 190 06.16  |         | 6.0             | 10   |
| 20                | 50 190 06.20  |         | 6.0             | 10   |
| 25                | 50 190 06.25  |         | 6.0             | 10   |
| 32                | 50 190 06.32  |         | 6.0             | 10   |
| 40                | 50 190 06.40  |         | 6.0             | 10   |
| 50                | 50 190 06.50  |         | 6.0             | 10   |
| 63                | 50 190 06.63  |         | 6.0             | 10   |
| 80                | 50 190 06.80  |         | 6.0             | 10   |
| 100               | 50 190 06.100 |         | 6.0             | 10   |
| 110               | 50 190 06.110 |         | 6.0             | 10   |



**Without Striker**  
**A** 2.36" (60 mm)  
**B** 1.06" (27 mm)

Size  
**5 x 20 mm**

Rated Voltage  
**AC 250 V**

**Ceramic Tube**

Class  
**FF**

| Rated Current [A] | Part No.        | Max. Voltage Drop [mV] | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value [A <sup>2</sup> s] | Rated Breaking Capacity                            |
|-------------------|-----------------|------------------------|----------------|--|---|--|
| 100 mA            | 70 001 40.0.100 | 4 000                  | 0.4            | 0.0016   | 0.0023  |  |
| 125 mA            | 70 001 40.0.125 | 3 500                  | 0.5            | 0.0024   | 0.0034  |  |
| 160 mA            | 70 001 40.0.160 | 1 300                  | 0.3            | 0.004  | 0.0056  |  |
| 200 mA            | 70 001 40.0.200 | 1 100                  | 0.3            | 0.008  | 0.011   |  |
| 250 mA            | 70 001 40.0.250 | 1 000                  | 0.3            | 0.019  | 0.027   |  |
| 315 mA            | 70 001 40.0.315 | 900                    | 0.3            | 0.03   | 0.042   |  |
| 400 mA            | 70 001 40.0.400 | 850                    | 0.4            | 0.065  | 0.09  |  |
| 500 mA            | 70 001 40.0.500 | 800                    | 0.4            | 0.12   | 0.17  |  |
| 630 mA            | 70 001 40.0.630 | 700                    | 0.5            | 0.17   | 0.24  |  |
| 800 mA            | 70 001 40.0.800 | 600                    | 0.5            | 0.26   | 0.36  |  |
| 1                 | 70 001 40.1     | 750                    | 0.8            | 0.17   | 0.26  | <b>300 kA at<br/>AC 250 V<br/>cos phi &lt; 0.2</b> |
| 1.25              | 70 001 40.1.25  | 750                    | 1.0            | 0.26   | 0.39  |  |
| 1.6               | 70 001 40.1.6   | 700                    | 1.2            | 0.31   | 0.51  |  |
| 2                 | 70 001 40.2     | 650                    | 1.3            | 0.64   | 1   |  |
| 2.5               | 70 001 40.2.5   | 600                    | 1.5            | 0.88   | 1.5   |  |
| 3.15              | 70 001 40.3.15  | 550                    | 1.8            | 1.6  | 2.7   |  |
| 4                 | 70 001 40.4     | 500                    | 2.0            | 3.2  | 5.4   |  |
| 5                 | 70 001 40.5     | 500                    | 2.4            | 5.9  | 10  |  |
| 6.3               | 70 007 40.6.3   | 250                    | 2.8            | 1.6  | 4.8   |  |
| 8                 | 70 007 40.8     | 250                    | 3.0            | 4.5  | 14  |  |
| 10                | 70 007 40.10    | 200                    | 3.4            | 8.8  | 26  |  |
| 12.5              | 70 007 40.12.5  | 200                    | 4.0            | 15   | 44  |  |
| 6.3               | 70 001 40.6.3   | 450                    | 2.8            | 10   | 17  | <b>1500 kA at<br/>AC 250 V</b>                     |
| 8                 | 70 001 40.8     | 400                    | 3.2            | 19   | 32  |  |
| 10                | 70 001 40.10    | 400                    | 4.0            | 30   | 54  |  |

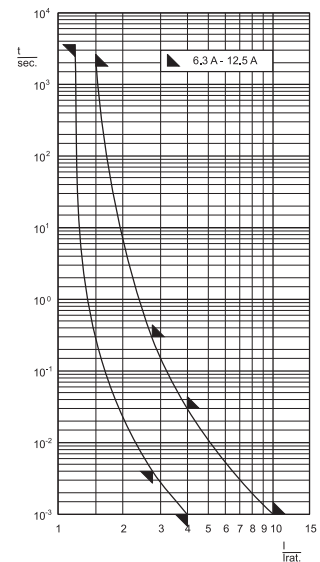
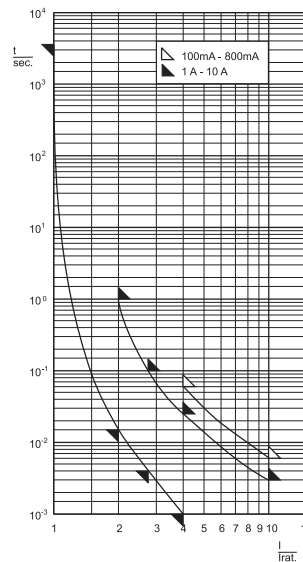
**Pre-Arcing Time Limits**

**Part No. 70 001 40**

| Rated Current         | 1.0 I <sub>rat</sub> | 2.0 I <sub>rat</sub> | 2.75 I <sub>rat</sub> | 4 I <sub>rat</sub> | 10 I <sub>rat</sub> |
|-----------------------|----------------------|----------------------|-----------------------|--------------------|---------------------|
| 100 mA<br>▼<br>800 mA | > 1 h                | -                    | -                     | < 60 ms            | < 6 ms              |
| 1 A<br>▼<br>10 A      |                      | < 1 s                | 4 ms<br>▼<br>100 ms   | 1 ms<br>▼<br>25 ms | < 3 ms              |

**Part No. 70 007 40**

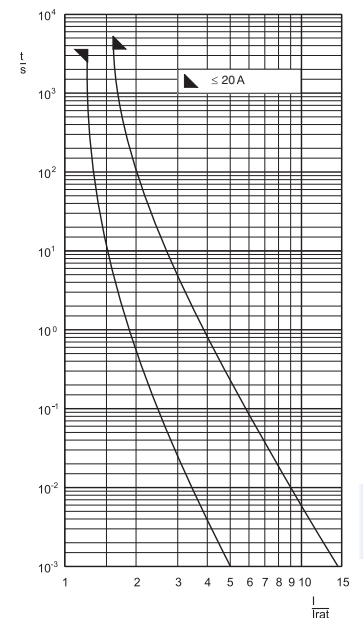
| Rated Current        | 1.2 I <sub>rat</sub> | 1.5 I <sub>rat</sub> | 2.75 I <sub>rat</sub> | 4 I <sub>rat</sub> | 10 I <sub>rat</sub> |
|----------------------|----------------------|----------------------|-----------------------|--------------------|---------------------|
| 6.3 A<br>▼<br>12.5 A | > 1 h                | < 30 min             | 4 ms<br>▼<br>300 ms   | 1 ms<br>▼<br>30 ms | < 1 ms              |





|                             |                                  |                                    |  |
|-----------------------------|----------------------------------|------------------------------------|--|
| Size<br><b>6.35 x 32 mm</b> | Rated Voltage<br><b>AC 400 V</b> | Operating Class<br><b>gRL (gS)</b> | Rated Breaking Capacity<br><b>120 kA</b> |
|-----------------------------|----------------------------------|------------------------------------|--|

| Rated Current [A] | Part No.       | Max. Voltage Drop [mV] | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value [A <sup>2</sup> s] |
|-------------------|----------------|------------------------|----------------|--|---|
| 6.3               | 70 065 84.6.3  | 190                    | 1.2            | 1.8  | 11  |
| 8                 | 70 065 84.8    | 190                    | 1.5            | 3.0  | 18  |
| 10                | 70 065 84.10   | 180                    | 1.8            | 5.1  | 31  |
| 12.5              | 70 065 84.12.5 | 150                    | 1.9            | 12   | 69  |
| 16                | 70 065 84.16   | 150                    | 2.3            | 20   | 120   |
| 20                | 70 065 84.20   | 160                    | 3.2            | 35   | 210   |

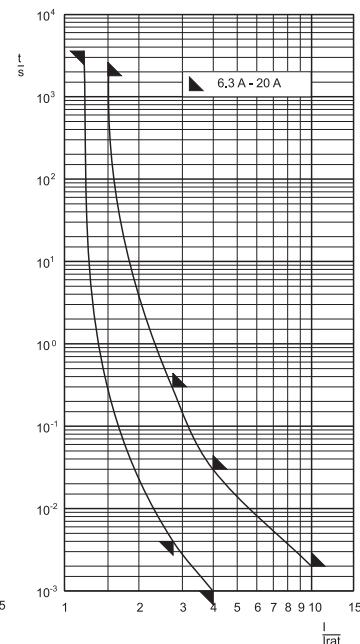
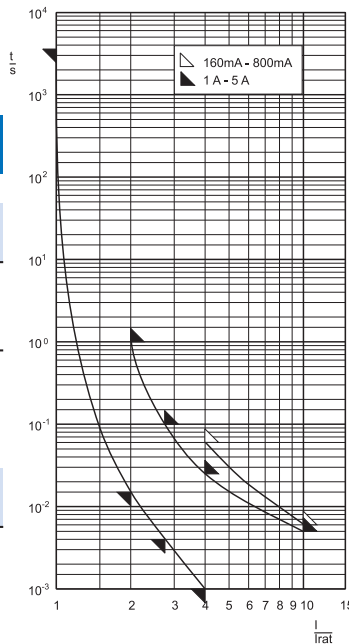


Size **6.35 x 32 mm**      Rated Voltage **AC 500/700 V**      **Ceramic Tube**      Class **FF**

| Rated Current [A] | Part No.        | Max. Voltage Drop [mV] | Pre-arcing I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s] | Total I <sup>2</sup> t <sub>s</sub> -value [A <sup>2</sup> s] | Rated Breaking Capacity                      | Rated Voltage |
|-------------------|-----------------|------------------------|--|---|--|---------------|
| 160 mA            | 70 125 40.0.160 | 2 000                  | 0.004  | 0.014   |  |               |
| 200 mA            | 70 125 40.0.200 | 1 600                  | 0.008  | 0.03  |  |               |
| 250 mA            | 70 125 40.0.250 | 1 500                  | 0.024  | 0.08  |  |               |
| 315 mA            | 70 125 40.0.315 | 1 350                  | 0.035  | 0.12  |  |               |
| 400 mA            | 70 125 40.0.400 | 1 030                  | 0.07   | 0.24  | <b>50 kA at</b><br>AC 700 V<br>cos phi < 0.2 | AC 700 V      |
| 500 mA            | 70 125 40.0.500 | 950                    | 0.14   | 0.48  |  |               |
| 630 mA            | 70 125 40.0.630 | 860                    | 0.14   | 0.5   |  |               |
| 800 mA            | 70 125 40.0.800 | 760                    | 0.22   | 0.8   |  |               |
| 1                 | 70 125 40.1     | 1 100                  | 0.14   | 0.5   |  |               |
| 1.25              | 70 125 40.1.25  | 1 000                  | 0.22   | 0.8   |  |               |
| 1.6               | 70 125 40.1.6   | 900                    | 0.31   | 1.1   |  |               |
| 2                 | 70 125 40.2     | 800                    | 0.64   | 2.2   |  |               |
| 2.5               | 70 125 40.2.5   | 800                    | 1.2  | 3   |  |               |
| 3.15              | 70 125 40.3.15  | 700                    | 2  | 5   |  |               |
| 4                 | 70 125 40.4     | 500                    | 5  | 13  |  |               |
| 5                 | 70 125 40.5     | 400                    | 10   | 25  | <b>50 kA at</b><br>AC 500 V<br>cos phi < 0.2 | AC 500 V      |
| 6.3               | 70 125 40.6.3   | 400                    | 3  | 14  |  |               |
| 8                 | 70 125 40.8     | 350                    | 6.5  | 30  |  |               |
| 10                | 70 125 40.10    | 350                    | 12   | 55  |  |               |
| 12.5              | 70 125 40.12.5  | 300                    | 18   | 80  |  |               |
| 16                | 70 125 40.16    | 300                    | 31   | 140   |  |               |
| 20                | 70 125 40.20    | 300                    | 46   | 200   |  |               |

**Pre-Arcing Time Limits**

| Rated Current         | 1.0 I <sub>rat</sub> | 2.0 I <sub>rat</sub> | 2.75 I <sub>rat</sub> | 4 I <sub>rat</sub> | 10 I <sub>rat</sub> |
|-----------------------|----------------------|----------------------|-----------------------|--------------------|---------------------|
| 160 mA<br>▼<br>800 mA | > 1 h                | -                    | -                     | < 60 ms            | < 6 ms              |
| 1 A<br>▼<br>5 A       |                      | -                    | 4 ms<br>▼<br>100 ms   | 1 ms<br>▼<br>25 ms | < 5 ms              |
| Rated Current         | 1.2 I <sub>rat</sub> | 1.5 I <sub>rat</sub> | 2.75 I <sub>rat</sub> | 4 I <sub>rat</sub> | 10 I <sub>rat</sub> |
| 6.3 A<br>▼<br>20 A    | > 1 h                | < 30 min             | 4 ms<br>▼<br>300 ms   | 1 ms<br>▼<br>30 ms | < 2 ms              |

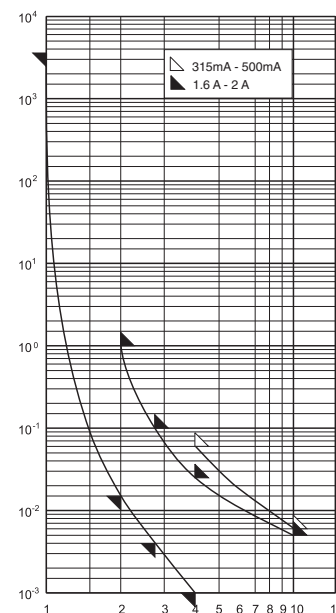


|                             |                                      |            |
|-----------------------------|--------------------------------------|------------|
| Size<br><b>6.35 x 32 mm</b> | Rated Voltage<br><b>AC/DC 1000 V</b> | <b>DMI</b> |
|-----------------------------|--------------------------------------|------------|

| Rated Current [A] | Part No.        | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 600 V [A <sup>2</sup> s] | Rated Breaking Capacity  |
|-------------------|-----------------|----------------|--|---|--|
| 315 mA            | 70 172 40.0.315 | 0.3            | 0.035  | 0.35  | <b>50 kA</b> at AC 1000 V cos phi < 0.19<br><b>50 kA</b> at DC 1000 V L/R = 1 ms |
| 500 mA            | 70 172 40.0.500 | 0.4            | 0.15   | 1.5   |  |
| 1.6               | 70 172 40.1.6   | 1.1            | 0.31   | 3   | <b>30 kA</b> at DC 1000 V  |
| 2                 | 70 172 40.2     | 1.4            | 0.64   | 6   |  |

## Pre-Arcing Time Limits

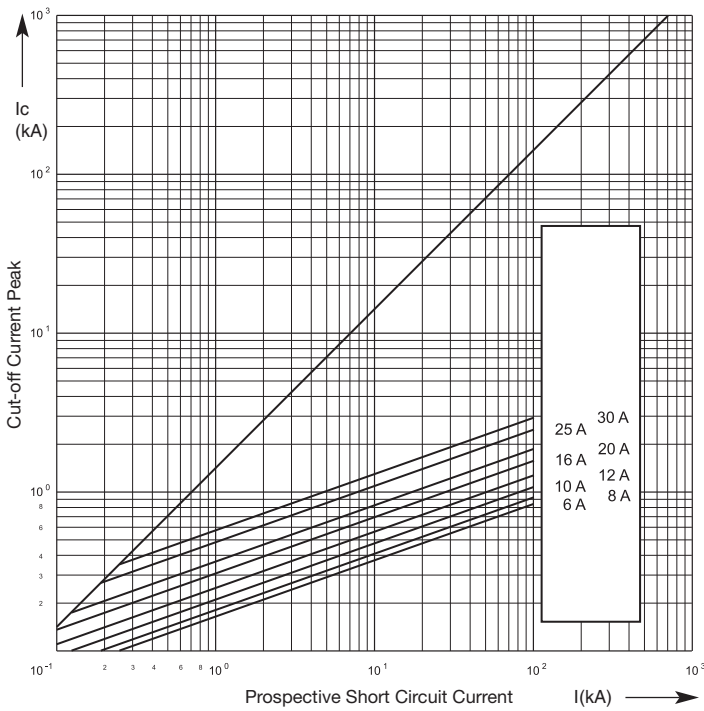
| Rated Current         | 1.0 I <sub>rat</sub> | 2.0 I <sub>rat</sub> | 2.75 I <sub>rat</sub> | 4 I <sub>rat</sub> | 10 I <sub>rat</sub> |
|-----------------------|----------------------|----------------------|-----------------------|--------------------|---------------------|
| 315 mA<br>▼<br>500 mA | > 1 h                | -                    | -                     | < 60 ms            | < 6 ms              |
| 1.6 A<br>▼<br>2 A     |                      | -                    | -                     | 1 ms<br>▼<br>25 ms | < 5 ms              |



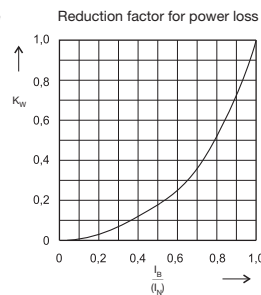
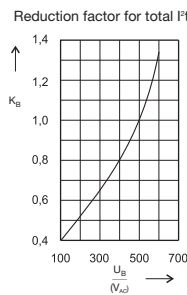
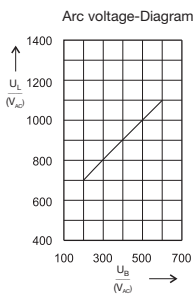
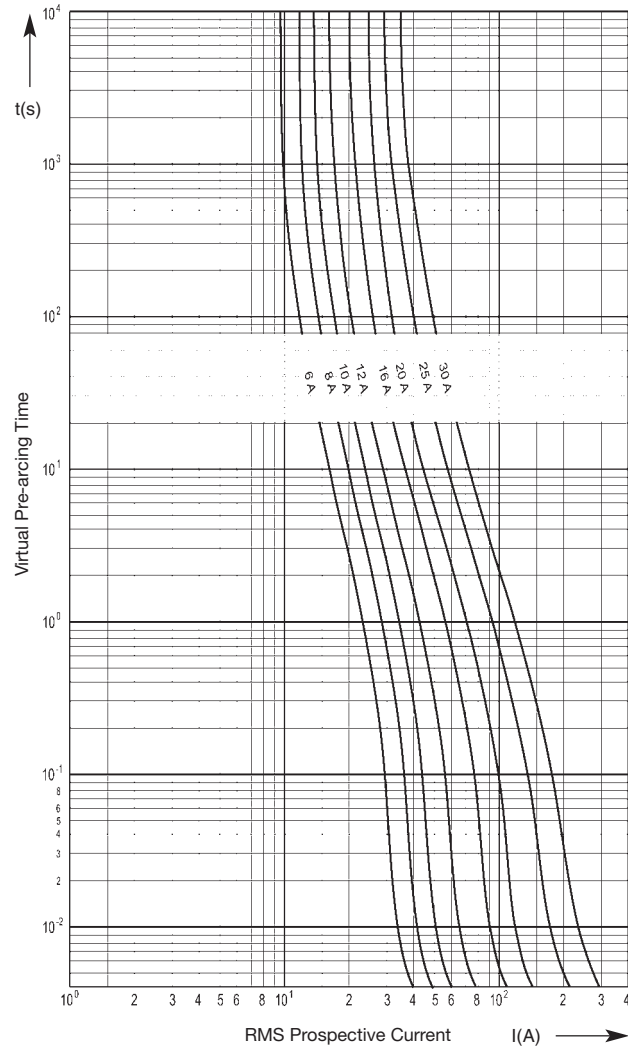
|                           |                                  |                         |  |
|---------------------------|----------------------------------|-------------------------|--|
| Size<br><b>10 x 38 mm</b> | Rated Voltage<br><b>AC 600 V</b> | Class<br><b>gRL(gS)</b> | Rated Breaking Capacity<br><b>200 kA</b> |
|---------------------------|----------------------------------|-------------------------|--|

| Rated Current [A] | Part No.     | Part No. PCB Mounting | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 500 V [A <sup>2</sup> s] |
|-------------------|--------------|-----------------------|----------------|--|---|
| 6                 | 60 034 34.6  | 60 064 34.6           | 1              | 2.5  | 20  |
| 8                 | 60 034 34.8  | 60 064 34.8           | 1.3            | 3.3  | 36  |
| 10                | 60 034 34.10 | 60 064 34.10          | 1.1            | 5.1  | 41  |
| 12                | 60 034 34.12 | 60 064 34.12          | 1.9            | 8.7  | 69  |
| 16                | 60 034 34.16 | 60 064 34.16          | 2.4            | 17   | 130   |
| 20                | 60 034 34.20 | 60 064 34.20          | 3.5            | 29   | 240   |
| 25                | 60 034 34.25 | 60 064 34.25          | 3.8            | 66   | 530   |
| 30                | 60 034 34.30 | 60 064 34.30          | 4.3            | 120  | 950   |

Cut-Off Characteristics



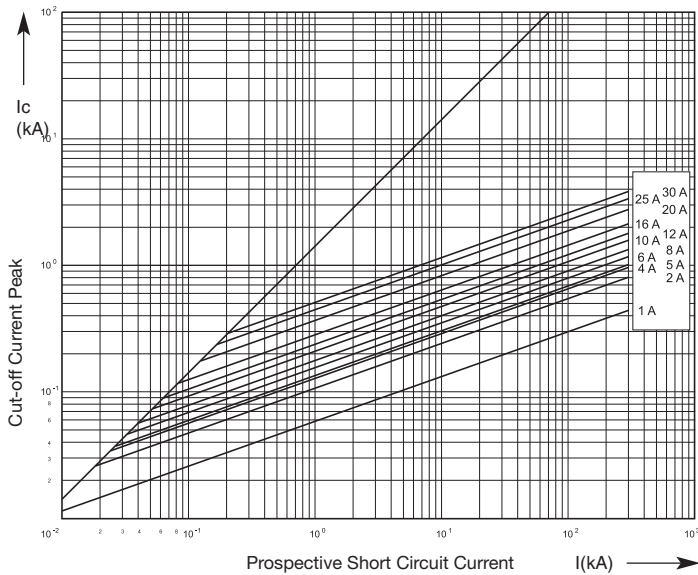
Time-Current Characteristics



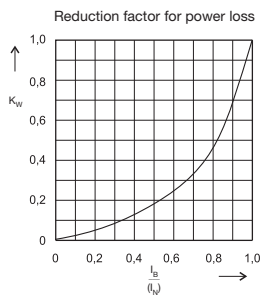
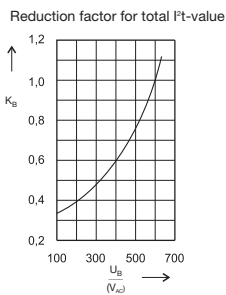
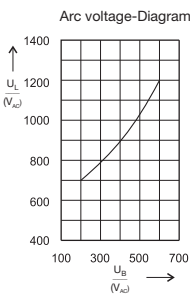
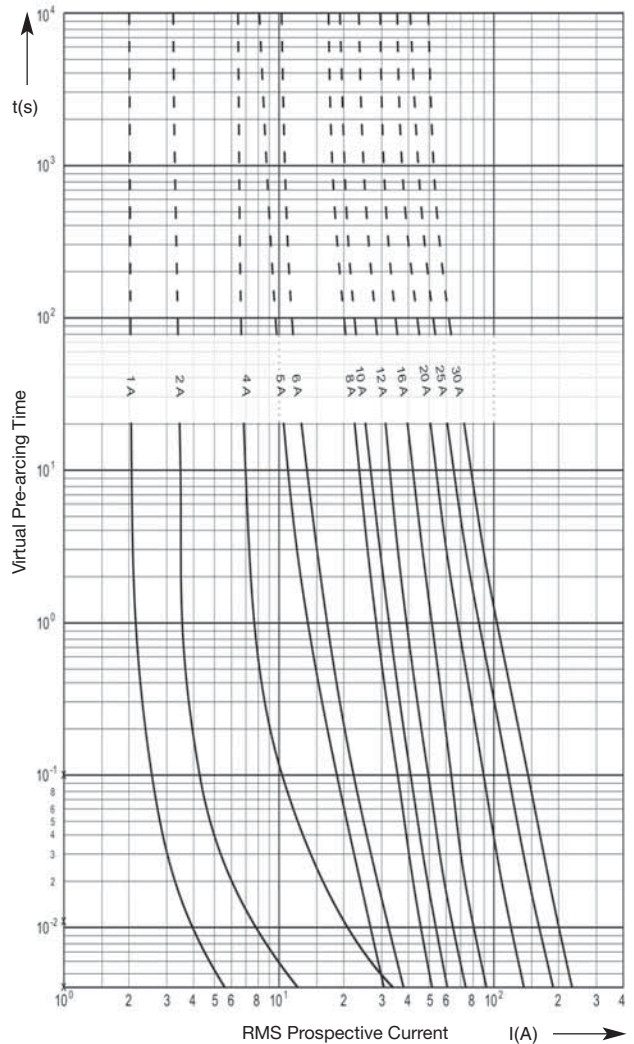
|                           |                                  |                    |  |
|---------------------------|----------------------------------|--------------------|--|
| Size<br><b>10 x 38 mm</b> | Rated Voltage<br><b>AC 600 V</b> | Class<br><b>aR</b> | Rated Breaking Capacity<br><b>300 kA</b> |
|---------------------------|----------------------------------|--------------------|--|

| Rated Current [A] | Part No.     | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 600 V [A <sup>2</sup> s] |
|-------------------|--------------|----------------|--|---|
| 1                 | 60 033 05.1  | 1              | 0.1  | 0.9   |
| 2                 | 60 033 05.2  | 1.8            | 0.64   | 5.8   |
| 4                 | 60 033 05.4  | 1.1            | 1.1  | 6   |
| 5                 | 60 033 05.5  | 1.4            | 1.3  | 12  |
| 6                 | 60 033 05.6  | 1.6            | 2.0  | 18  |
| 8                 | 60 033 05.8  | 1.8            | 3  | 28  |
| 10                | 60 033 05.10 | 2.1            | 5.1  | 48  |
| 12                | 60 033 05.12 | 2.5            | 7.4  | 63  |
| 16                | 60 033 05.16 | 3              | 13   | 120   |
| 20                | 60 033 05.20 | 3.6            | 29   | 200   |
| 25                | 60 033 05.25 | 4.5            | 52   | 420   |
| 30                | 60 033 05.30 | 5.8            | 81   | 730   |

Cut-Off Characteristics



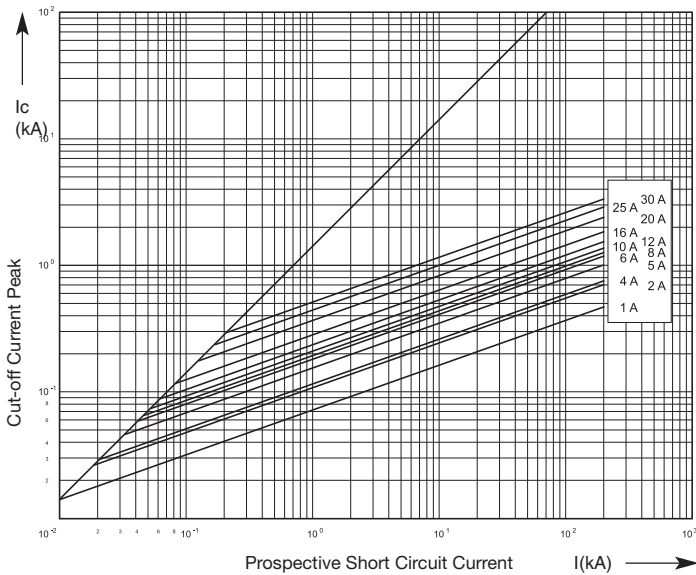
Time-Current Characteristics



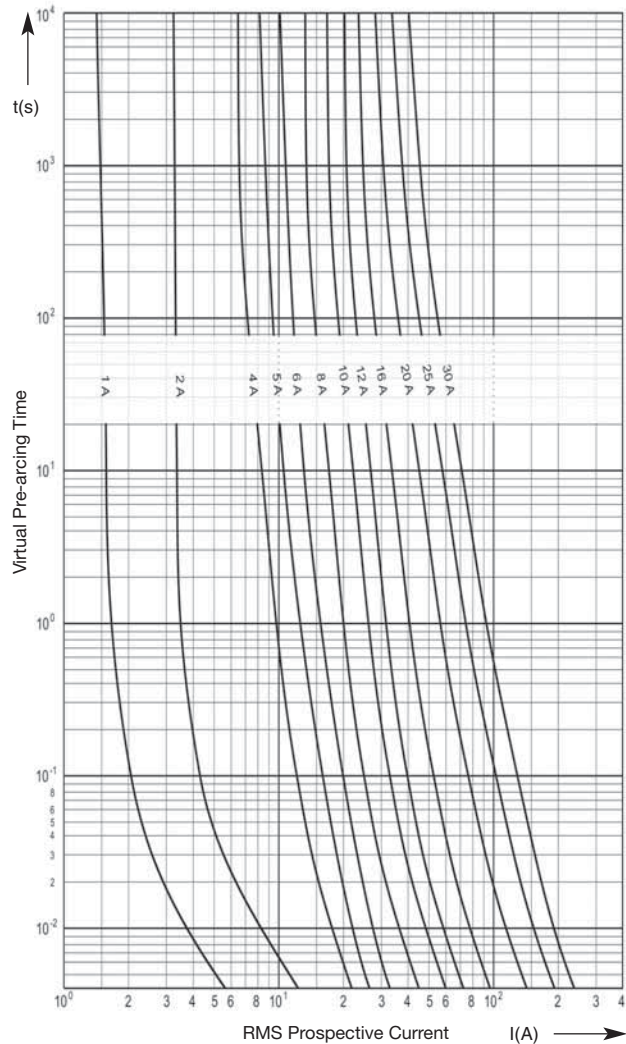
Size **10 x 38 mm**    Rated Voltage **AC 660 V (IEC) · AC 700 V (UL)**    Class **gR**    Rated Breaking Capacity **200 kA**

| Rated Current [A] | Part No.     | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 660 V [A <sup>2</sup> s] |
|-------------------|--------------|----------------|--|---|
| 1                 | 50 179 06.1  | 1.0            | 0.93   | 1.6   |
| 2                 | 50 179 06.2  | 1.8            | 0.64   | 8   |
| 4                 | 50 179 06.4  | 1.1            | 0.8  | 10  |
| 5                 | 50 179 06.5  | 1.5            | 2.0  | 25  |
| 6                 | 50 179 06.6  | 1.8            | 3.0  | 38  |
| 8                 | 50 179 06.8  | 1.8            | 3.1  | 39  |
| 10                | 50 179 06.10 | 2.3            | 5.1  | 64  |
| 12                | 50 179 06.12 | 2.8            | 7.4  | 93  |
| 16                | 50 179 06.16 | 3.7            | 13.1   | 164   |
| 20                | 50 179 06.20 | 4.7            | 29   | 360   |
| 25                | 50 179 06.25 | 5.4            | 52   | 650   |
| 30                | 50 179 06.30 | 6.4            | 81   | 1 010   |

Cut-Off Characteristics



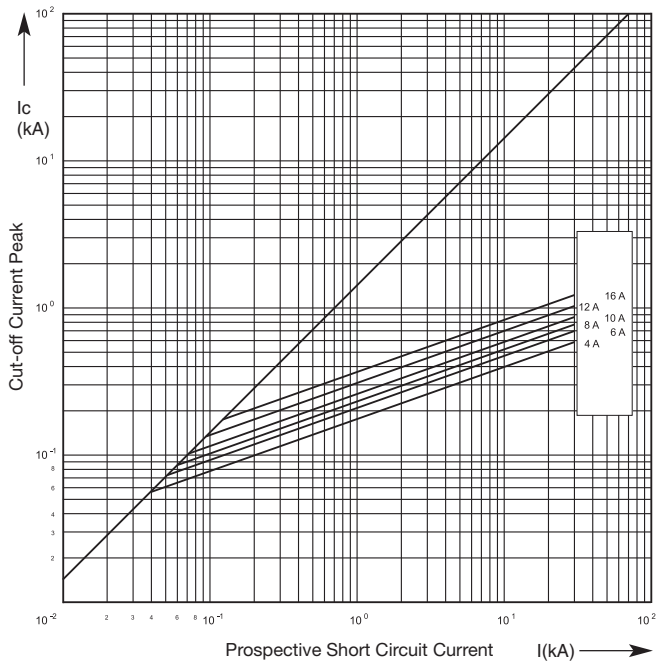
Time-Current Characteristics



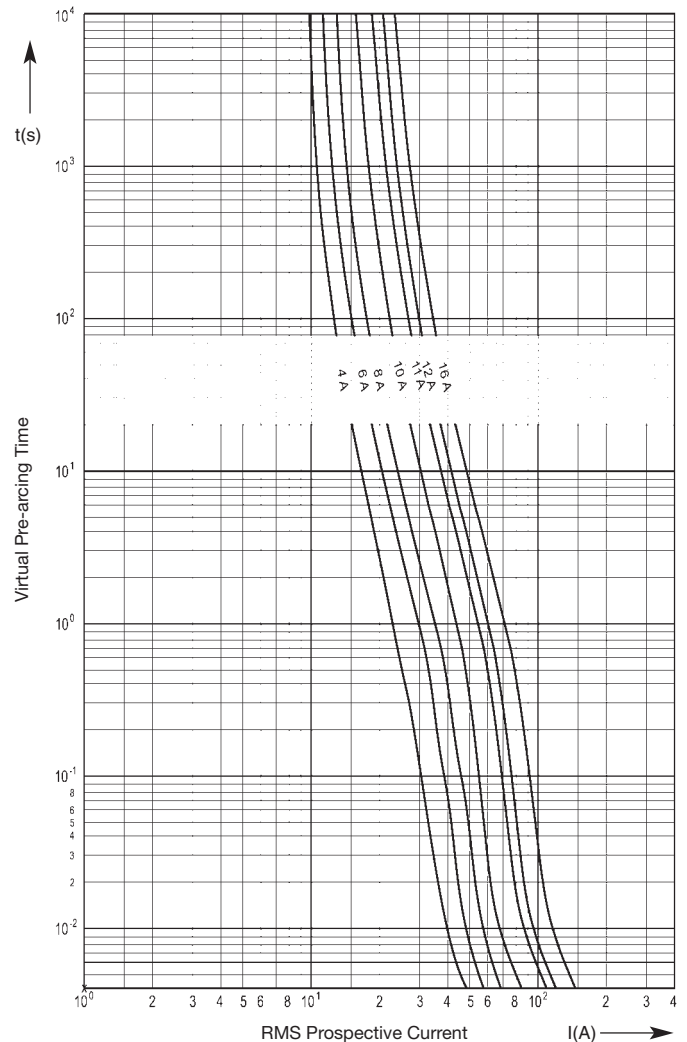
Size **10 x 38 mm**      Rated Voltage **AC/DC 1000 V**      DMI      Rated Breaking Capacity **30 kA (cos phi 0.5 / L/R = 1 ms)**

| Rated Current [A] | Part No.     | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ AC 1000 V [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ DC 1000 V [A <sup>2</sup> s] |
|-------------------|--------------|----------------|--|---|---|
| 4                 | 50 199 06.4  | 0.5            | 3  | 35  | 18  |
| 6                 | 50 199 06.6  | 0.7            | 5  | 55  | 28  |
| 8                 | 50 199 06.8  | 1.1            | 7  | 79  | 40  |
| 10                | 50 199 06.10 | 1.5            | 10   | 106   | 53  |
| 12                | 50 199 06.12 | 1.6            | 17   | 180   | 90  |
| 16                | 50 199 06.16 | 2.1            | 30   | 320   | 160   |

Cut-Off Characteristics



Time-Current Characteristics



Size  
**10 x 35 mm**

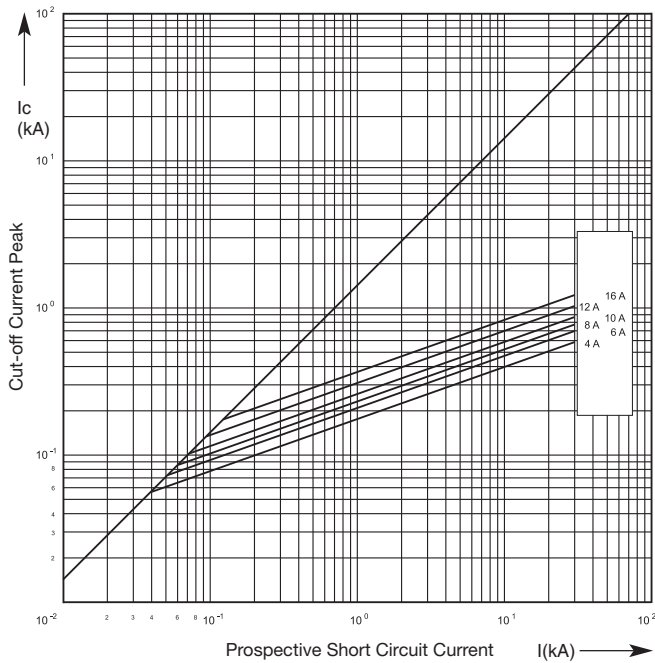
Rated Voltage  
**AC/DC 1000 V**

**DMI**

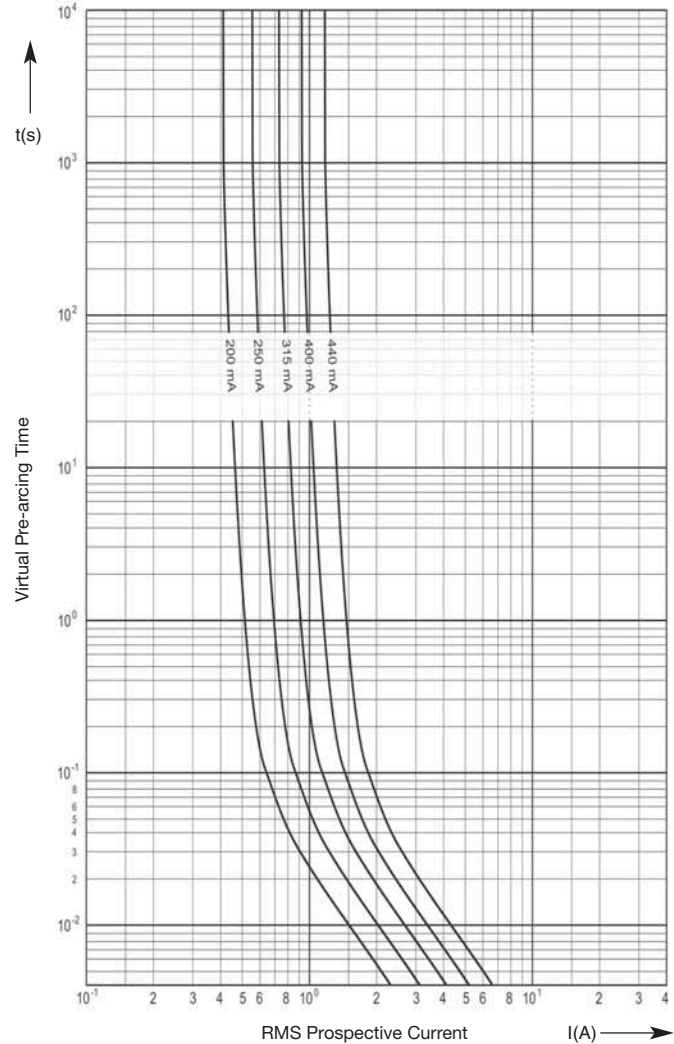
Rated Breaking Capacity  
**30 kA (cos phi 0.5 / L/R = 1 ms)**

| Rated Current [A] | Part No.        | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ AC 1000 V [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ DC 1000 V [A <sup>2</sup> s] |
|-------------------|-----------------|----------------|--|---|---|
| 0.2               | 50 210 06.0.2   | 0.12           | 0.02   | 0.15  | 0.12  |
| 0.25              | 50 210 06.0.25  | 0.13           | 0.04   | 0.28  | 0.2   |
| 0.315             | 50 210 06.0.315 | 0.16           | 0.07   | 0.5   | 0.4   |
| 0.4               | 50 210 06.0.4   | 0.2            | 0.11   | 0.8   | 0.7   |
| 0.44              | 50 210 06.0.44  | 0.2            | 0.17   | 1.2   | 1   |

**Cut-Off Characteristics**



**Time-Current Characteristics**

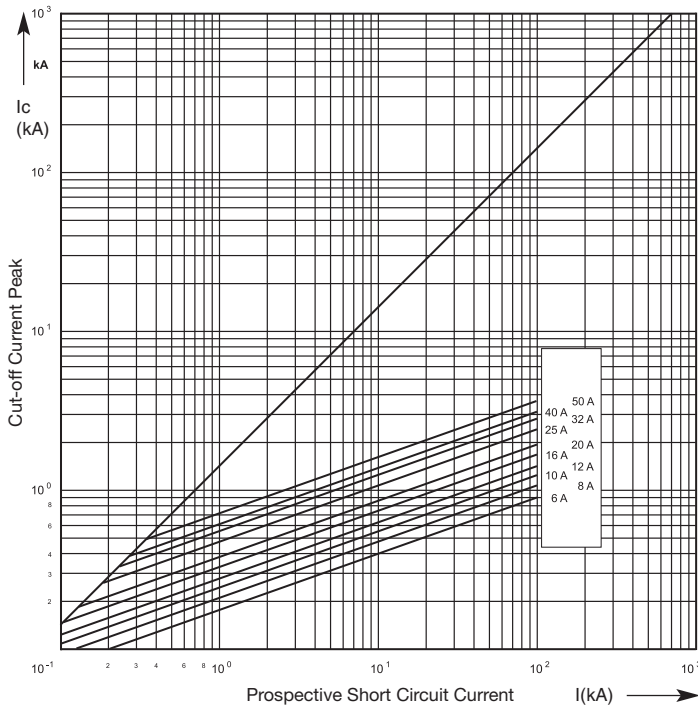




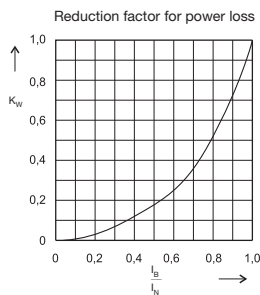
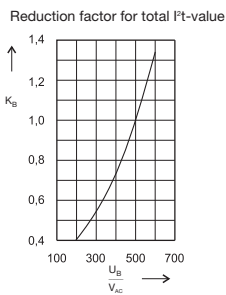
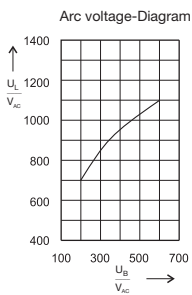
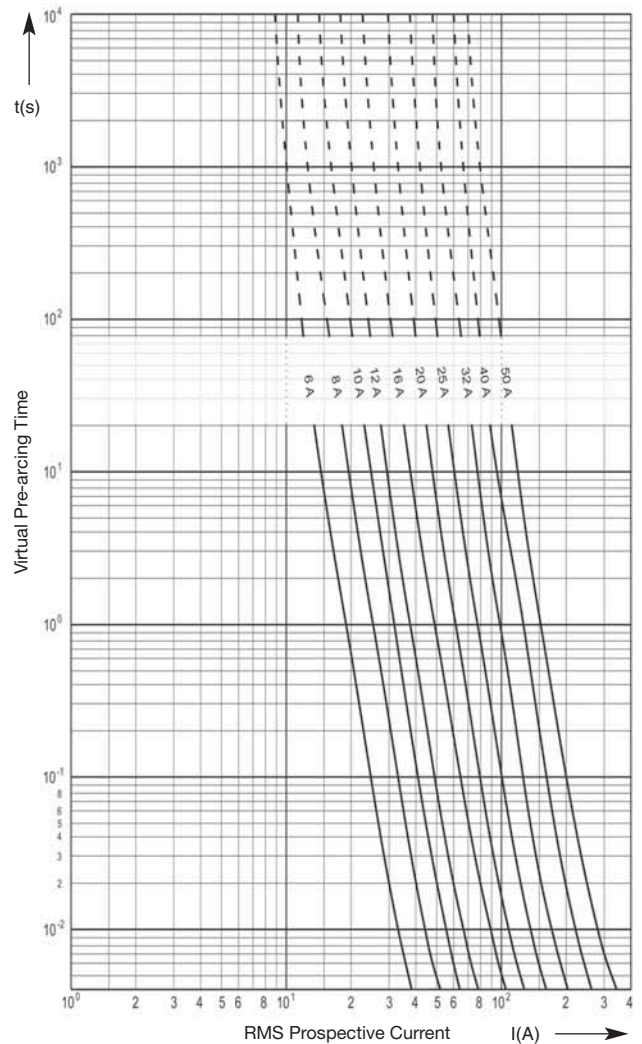
|                           |                                  |                    |  |
|---------------------------|----------------------------------|--------------------|--|
| Size<br><b>14 x 51 mm</b> | Rated Voltage<br><b>AC 600 V</b> | Class<br><b>aR</b> | Rated Breaking Capacity<br><b>100 kA</b> |
|---------------------------|----------------------------------|--------------------|--|

| Rated Current [A] | Part No. without Striker | Part No. with Striker | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 500 V [A <sup>2</sup> s] |
|-------------------|--------------------------|-----------------------|----------------|--|---|
| 6                 | 50 058 06.6              | 50 059 06.6           | 1.3            | 3  | 18  |
| 8                 | 50 058 06.8              | 50 059 06.8           | 1.7            | 5  | 27  |
| 10                | 50 058 06.10             | 50 059 06.10          | 2.4            | 8  | 48  |
| 12                | 50 058 06.12             | 50 059 06.12          | 2.5            | 12   | 93  |
| 16                | 50 058 06.16             | 50 059 06.16          | 4.0            | 21   | 150   |
| 20                | 50 058 06.20             | 50 059 06.20          | 4.6            | 32   | 250   |
| 25                | 50 058 06.25             | 50 059 06.25          | 6.4            | 63   | 400   |
| 32                | 50 058 06.32             | 50 059 06.32          | 8.2            | 104  | 680   |
| 40                | 50 058 06.40             | 50 059 06.40          | 9.1            | 140  | 1 200   |
| 50                | 50 058 06.50             | 50 059 06.50          | 12.0           | 230  | 1 600   |

Cut-Off Characteristics



Time-Current Characteristics



Size  
**14 x 51 mm**

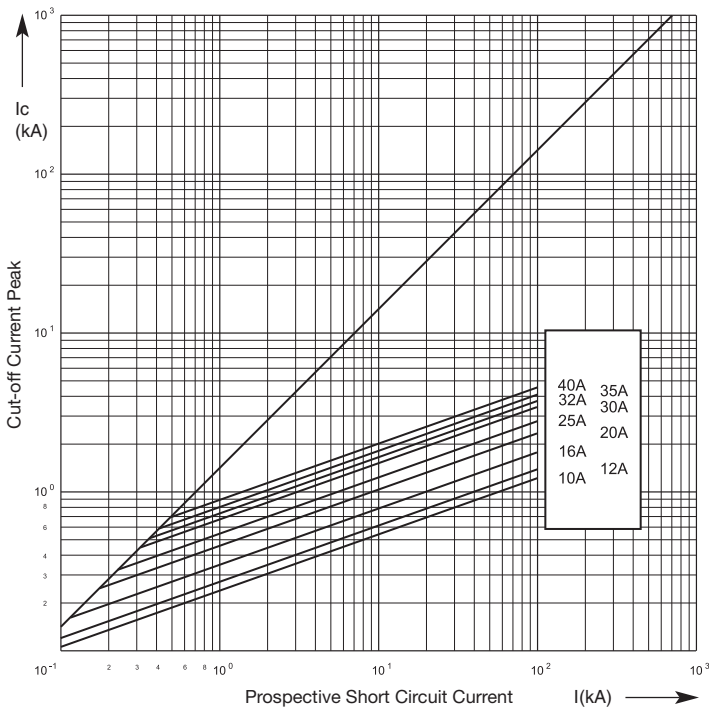
Rated Voltage  
**AC 690 V**

Operating Class  
**gRL (gS)**

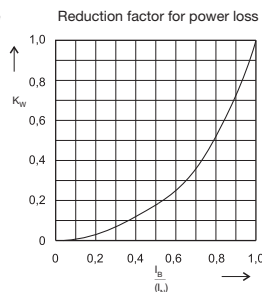
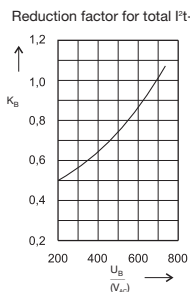
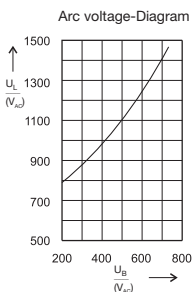
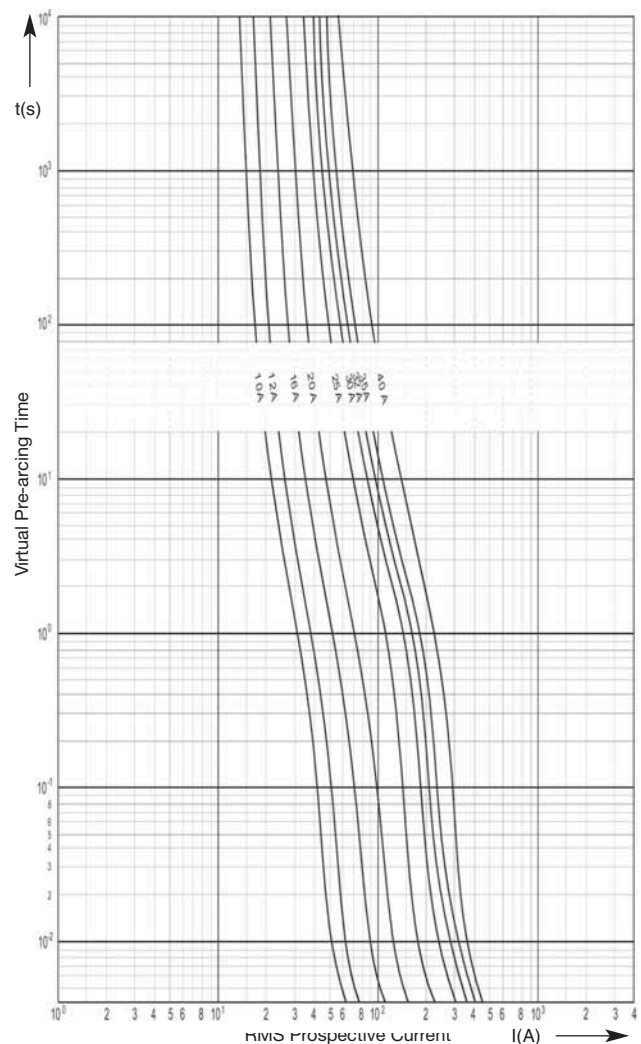
Rated Breaking Capacity  
**200 kA**

| Rated Current [A] | Part No. without Striker | Part No. with Striker | Part No. Fixing Center 63,5 mm | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 690 V [A <sup>2</sup> s] |
|-------------------|--------------------------|-----------------------|--------------------------------|----------------|--|---|
| 10                | 50 124 34.10             | 50 126 34.10          | 50 129 34.10                   | 1.9            | 8  | 60  |
| 12                | 50 124 34.12             | 50 126 34.12          | 50 129 34.12                   | 2.3            | 12   | 90  |
| 16                | 50 124 34.16             | 50 126 34.16          | 50 129 34.16                   | 2.8            | 25   | 190   |
| 20                | 50 124 34.20             | 50 126 34.20          | 50 129 34.20                   | 3.0            | 46   | 340   |
| 25                | 50 124 34.25             | 50 126 34.25          | 50 129 34.15                   | 3.2            | 100  | 740   |
| 30                | 50 124 34.30             | 50 126 34.30          | 50 129 34.30                   | 3.8            | 190  | 1 400   |
| 32                | 50 124 34.32             | 50 126 34.32          | 50 129 34.32                   | 4.0            | 250  | 1 900   |
| 35                | 50 124 34.35             | 50 126 34.35          | 50 129 34.35                   | 4.2            | 370  | 2 800   |
| 40                | 50 124 34.40             | 50 126 34.40          | 50 129 34.40                   | 4.4            | 420  | 3 100   |

Cut-Off Characteristics



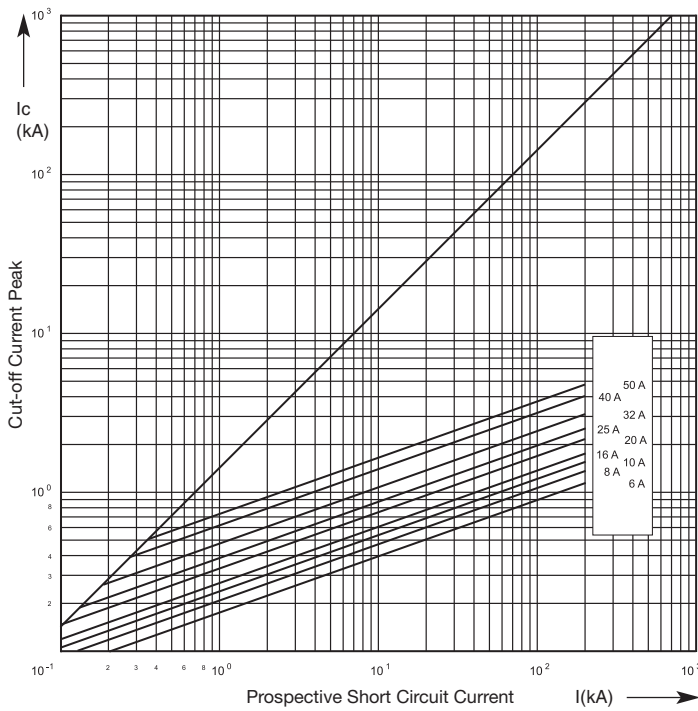
Time-Current Characteristics



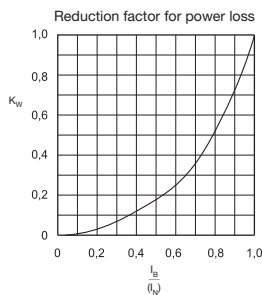
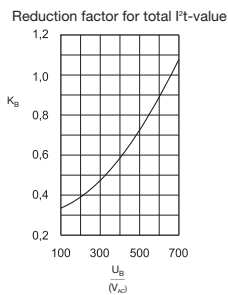
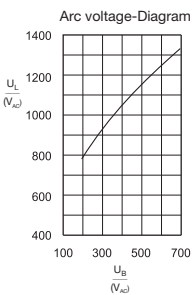
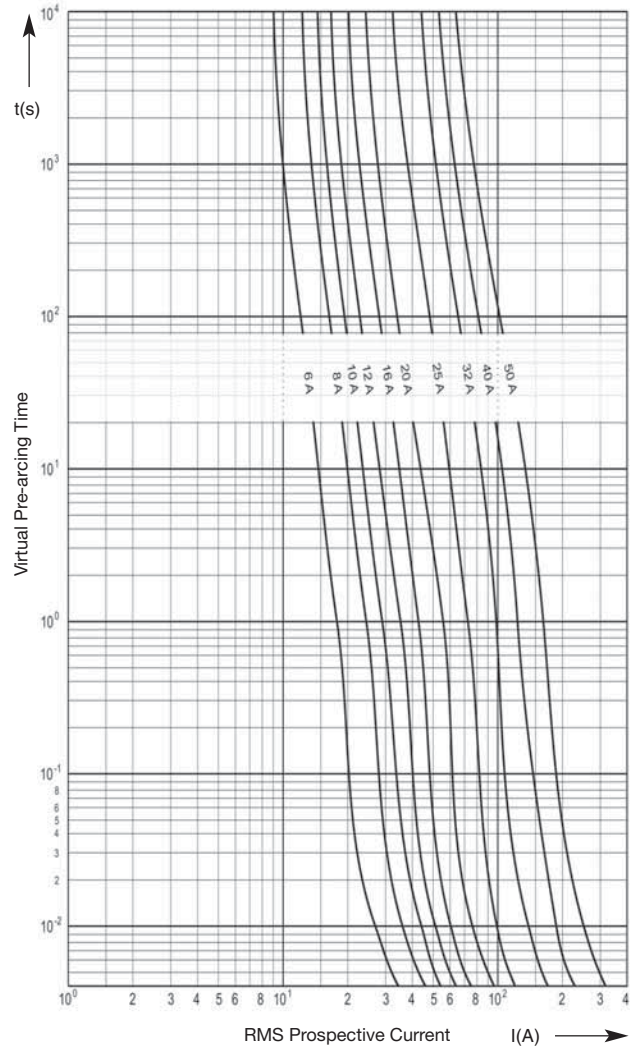
Size **14 x 51 mm**      Rated Voltage **AC 690 V (IEC) · AC 700 V (UL)**      Class **gR**      Rated Breaking Capacity **200 kA**

| Rated Current [A] | Part No. without Striker | Part No. with Striker | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 660 V [A <sup>2</sup> s] |
|-------------------|--------------------------|-----------------------|----------------|--|---|
| 6                 | 50 124 06.6              | 50 126 06.6           | 1.3            | 2.9  | 18  |
| 8                 | 50 124 06.8              | 50 126 06.8           | 1.7            | 5.1  | 28  |
| 10                | 50 124 06.10             | 50 126 06.10          | 2.6            | 7.7  | 39  |
| 12                | 50 124 06.12             | 50 126 06.12          | 3.1            | 8.1  | 75  |
| 16                | 50 124 06.16             | 50 126 06.16          | 4.7            | 11   | 115   |
| 20                | 50 124 06.20             | 50 126 06.20          | 6.0            | 21   | 190   |
| 25                | 50 124 06.25             | 50 126 06.25          | 7.6            | 32   | 340   |
| 32                | 50 124 06.32             | 50 126 06.32          | 9.5            | 63   | 620   |
| 40                | 50 124 06.40             | 50 126 06.40          | 10.0           | 140  | 1 050   |
| 50                | 50 124 06.50             | 50 126 06.50          | 12.0           | 250  | 1 900   |

Cut-Off Characteristics



Time-Current Characteristics



Size  
**14 x 51 mm**

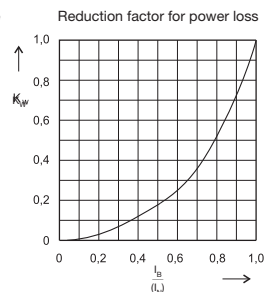
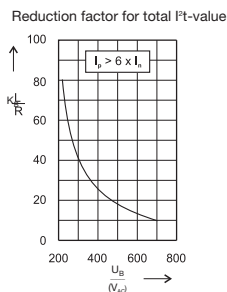
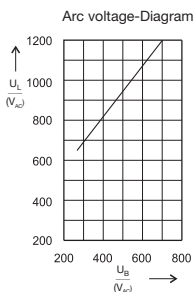
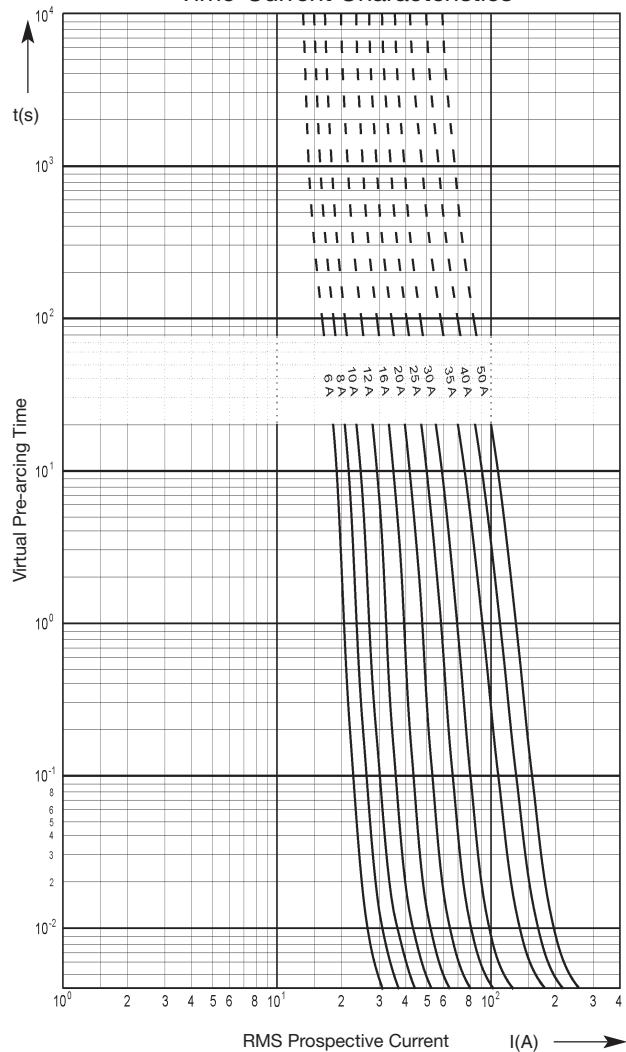
Rated Voltage  
**DC 700 V**

Class  
**aR**

Rated Breaking Capacity  
**50 kA**

| Rated Current [A] | Part No.     | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 700 V [A <sup>2</sup> s (L/R = 1 ms)] |
|-------------------|--------------|----------------|--|--|
| 6                 | 50 118 06.6  | 1.3            | 2.0  | 12   |
| 8                 | 50 118 06.8  | 1.7            | 2.9  | 17   |
| 10                | 50 118 06.10 | 2.6            | 3.9  | 25   |
| 12                | 50 118 06.12 | 3.1            | 6.5  | 41   |
| 16                | 50 118 06.16 | 4.7            | 8.0  | 52   |
| 20                | 50 118 06.20 | 6.0            | 12   | 70   |
| 25                | 50 118 06.25 | 7.6            | 20   | 130  |
| 30                | 50 118 06.30 | 9.8            | 32   | 190  |
| 35                | 50 118 06.35 | 10.3           | 72   | 430  |
| 40                | 50 118 06.40 | 11.2           | 103  | 620  |
| 50                | 50 118 06.50 | 12.6           | 128  | 770  |

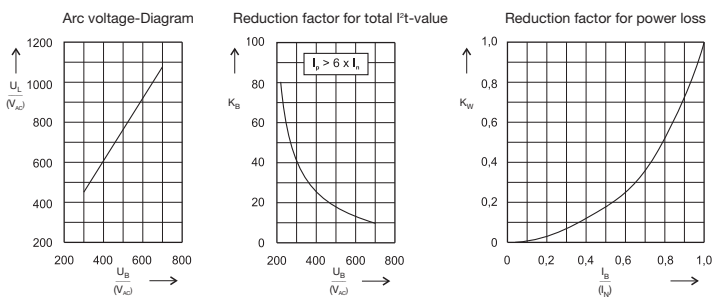
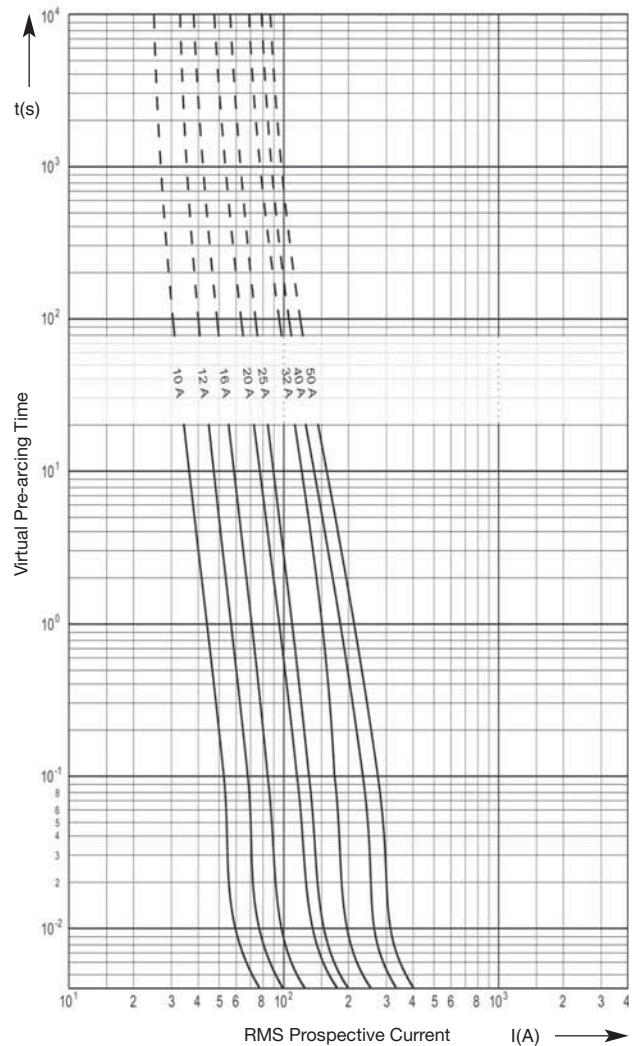
Time-Current Characteristics



|                           |                                  |                    |   |
|---------------------------|----------------------------------|--------------------|---|
| Size<br><b>14 x 51 mm</b> | Rated Voltage<br><b>DC 700 V</b> | Class<br><b>aR</b> | Rated Breaking Capacity<br><b>30 kA</b> |
|---------------------------|----------------------------------|--------------------|---|

| Rated Current [A] | Part No.     | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 700 V [A <sup>2</sup> s (L/R = 1 ms)] |
|-------------------|--------------|----------------|--|--|
| 10                | 50 201 06.10 | 1.1            | 12   | 67   |
| 12                | 50 201 06.12 | 1.2            | 20   | 120  |
| 16                | 50 201 06.16 | 2.0            | 32   | 190  |
| 20                | 50 201 06.20 | 2.3            | 63   | 360  |
| 25                | 50 201 06.25 | 3.1            | 82   | 480  |
| 32                | 50 201 06.32 | 4.1            | 130  | 740  |
| 40                | 50 201 06.40 | 4.6            | 250  | 1 460  |
| 50                | 50 201 06.50 | 7.0            | 330  | 1 900  |

Time-Current Characteristics



Size  
**22 x 58 mm**

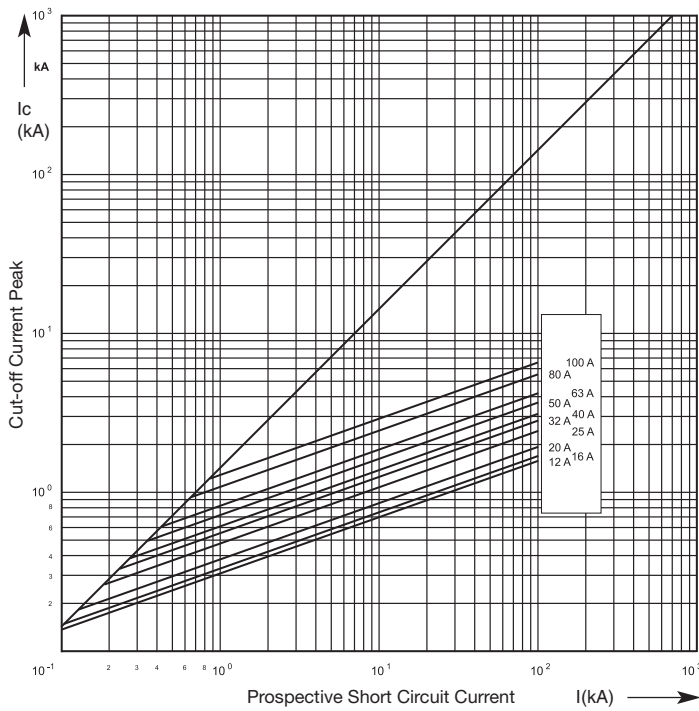
Rated Voltage  
**AC 600 V**

Class  
**aR**

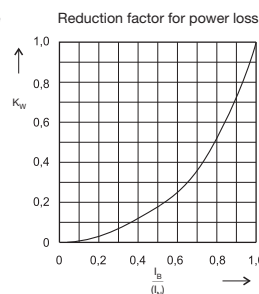
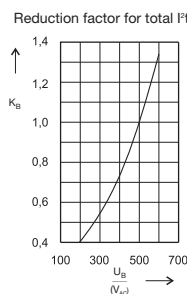
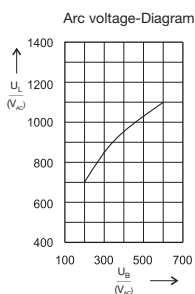
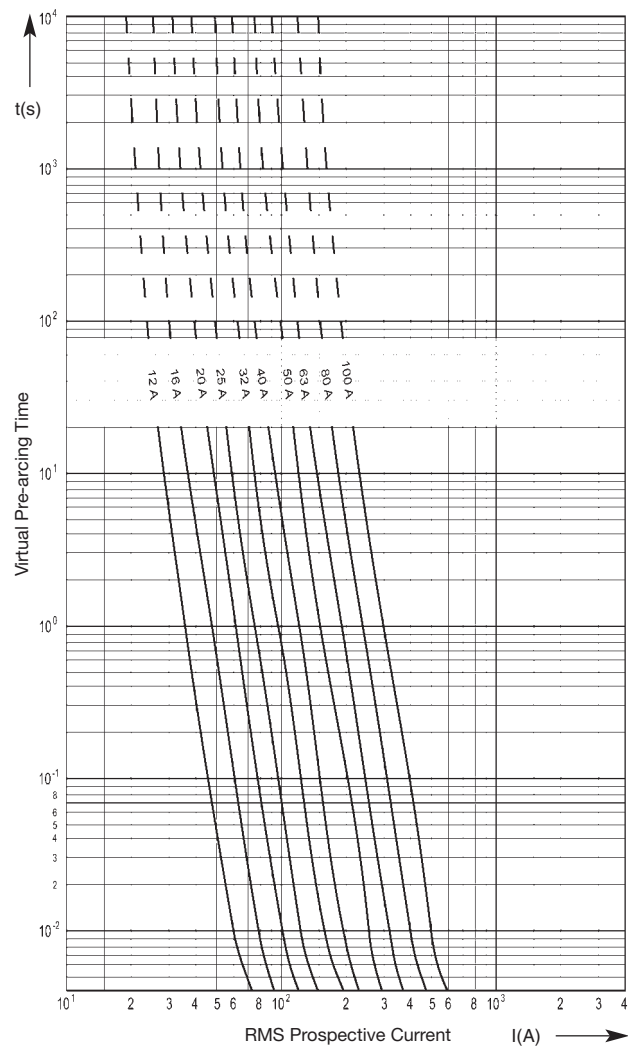
Rated Breaking Capacity  
**100 kA**

| Rated Current [A] | Part No. without Striker | Part No. with Striker | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 500 V [A <sup>2</sup> s] |
|-------------------|--------------------------|-----------------------|----------------|--|---|
| 12                | 50 060 06.12             | 50 061 06.12          | 2.1            | 16   | 93  |
| 16                | 50 060 06.16             | 50 061 06.16          | 3.6            | 21   | 170   |
| 20                | 50 060 06.20             | 50 061 06.20          | 4.6            | 32   | 250   |
| 25                | 50 060 06.25             | 50 061 06.25          | 5.3            | 63   | 400   |
| 32                | 50 060 06.32             | 50 061 06.32          | 8.2            | 104  | 730   |
| 40                | 50 060 06.40             | 50 061 06.40          | 8.6            | 140  | 1 000   |
| 50                | 50 060 06.50             | 50 061 06.50          | 11             | 230  | 1 800   |
| 63                | 50 060 06.63             | 50 061 06.63          | 15             | 350  | 2 600   |
| 80                | 50 060 06.80             | 50 061 06.80          | 18             | 740  | 5 000   |
| 100               | 50 060 06.100            | 50 061 06.100         | 20             | 1 400  | 10 000  |

Cut-Off Characteristics



Time-Current Characteristics

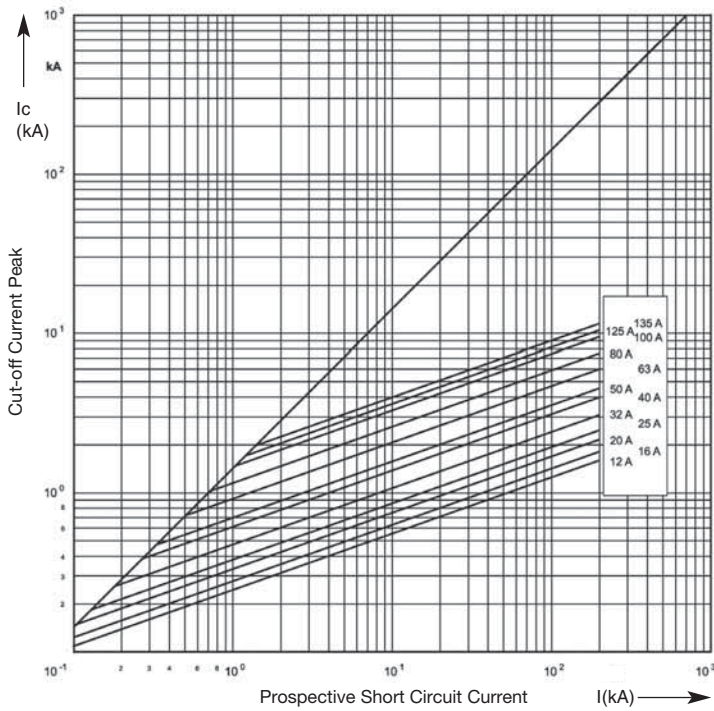


|                           |  |                    |  |
|---------------------------|--|--------------------|--|
| Size<br><b>22 x 58 mm</b> | Rated Voltage<br><b>AC 690 V (IEC) · AC 700 V (UL)</b> | Class<br><b>gR</b> | Rated Breaking Capacity<br><b>200 kA</b> |
|---------------------------|--|--------------------|--|

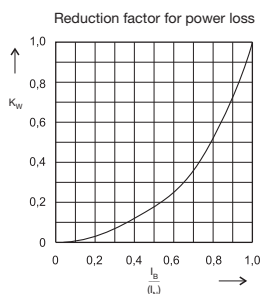
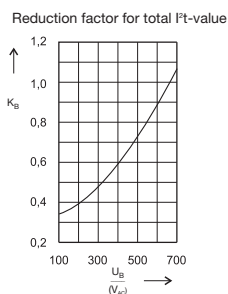
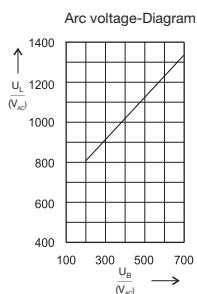
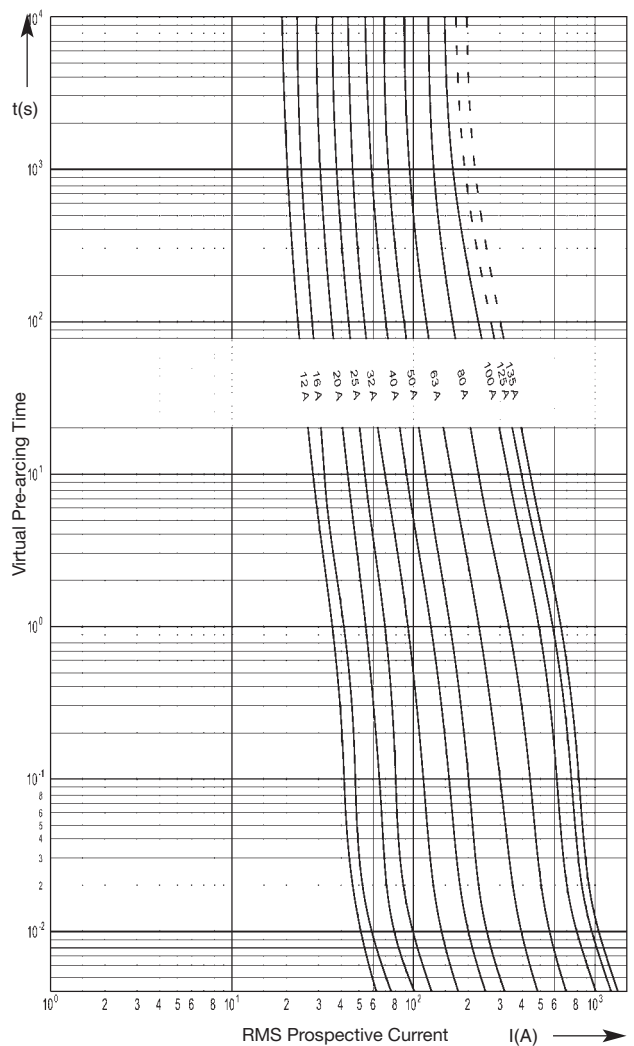
| Rated Current [A] | Part No. without Striker | Part No. with Striker | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 660 V [A <sup>2</sup> s] | Class |
|-------------------|--------------------------|-----------------------|----------------|--|---|-------|
| 12                | 50 140 06.12             | 50 142 06.12          | 4.8            | 8  | 35  | gR    |
| 16                | 50 140 06.16             | 50 142 06.16          | 5.5            | 12   | 52  | gR    |
| 20                | 50 140 06.20             | 50 142 06.20          | 6.0            | 21   | 91  | gR    |
| 25                | 50 140 06.25             | 50 142 06.25          | 7.2            | 32   | 140   | gR    |
| 32                | 50 140 06.32             | 50 142 06.32          | 9.6            | 63   | 315   | gR    |
| 40                | 50 140 06.40             | 50 142 06.40          | 12             | 140  | 610   | gR    |
| 50                | 50 140 06.50             | 50 142 06.50          | 15             | 210  | 910   | gR    |
| 63                | 50 140 06.63             | 50 142 06.63          | 16             | 510  | 2 260   | gR    |
| 80                | 50 140 06.80             | 50 142 06.80          | 18             | 1 000  | 4 400   | gR    |
| 100               | 50 140 06.100            | 50 142 06.100         | 19             | 2 050  | 8 900   | gR    |
| 125*              | 50 140 06.125            | 50 142 06.125         | 23             | 3 000  | 22 000  | aR    |
| 135*              | 50 140 06.135            | 50 142 06.135         | 26             | 3 500  | 25 000  | aR    |

\* AC 600 V

Cut-Off Characteristics



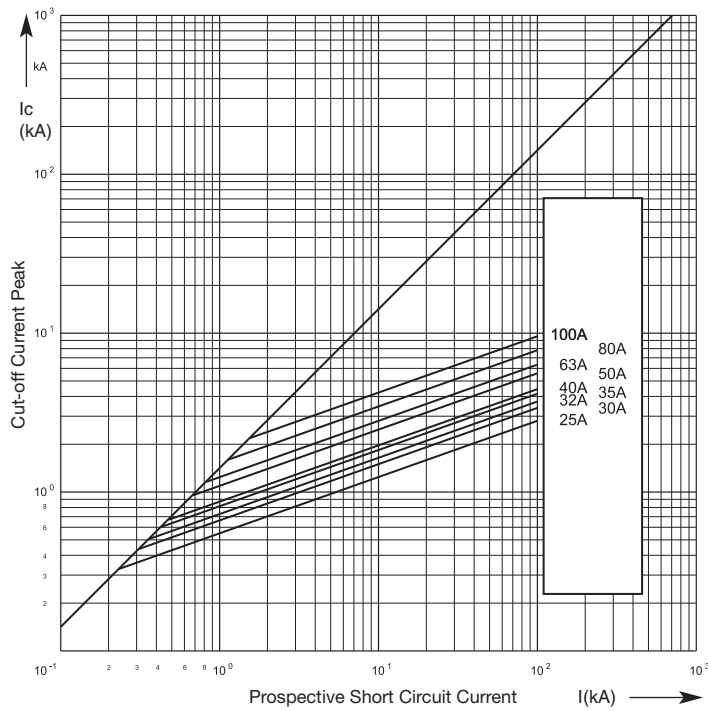
Time-Current Characteristics



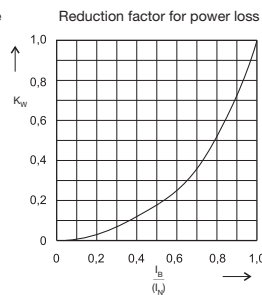
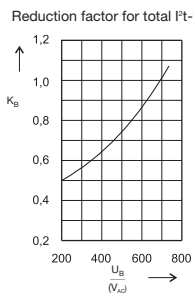
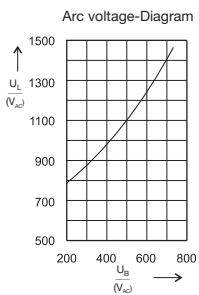
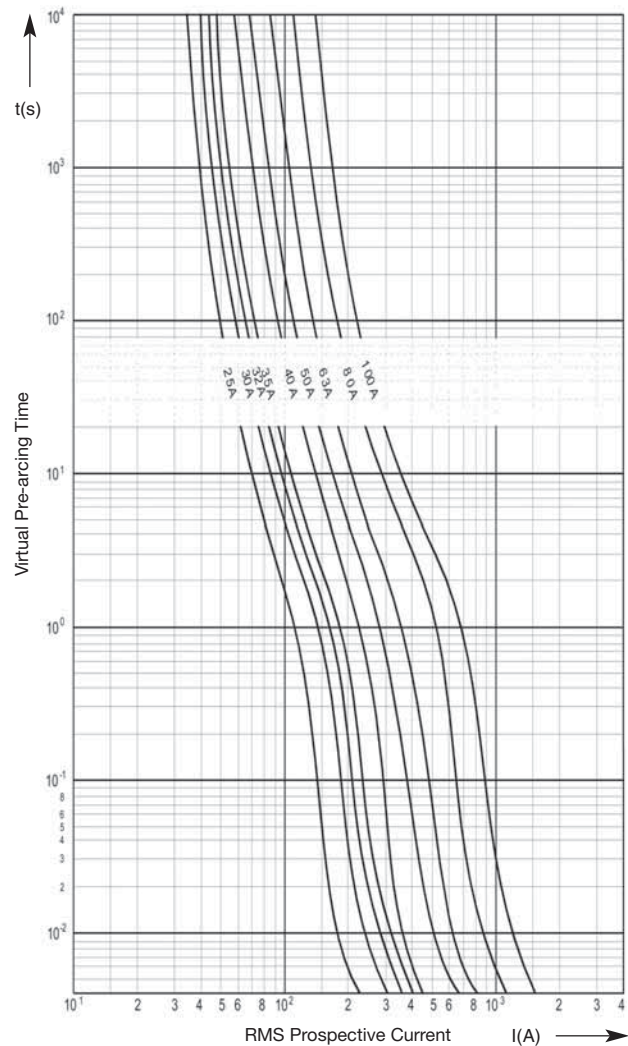
Size **22 x 58 mm**    Rated voltage **AC 690 V (IEC) · AC 700 V (UL)**    Class **gRL(gS)**    Rated Breaking Capacity **200 kA**

| Rated Current [A] | Part No. without Striker | Part No. with Striker | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 660 V [A <sup>2</sup> s] |
|-------------------|--------------------------|-----------------------|----------------|--|---|
| 25                | 50 140 34.25             | 50 142 34.25          | 3.6            | 100  | 800   |
| 30                | 50 140 34.30             | 50 142 34.30          | 4.6            | 190  | 1 500   |
| 32                | 50 140 34.32             | 50 142 34.32          | 4.8            | 250  | 2 000   |
| 35                | 50 140 34.35             | 50 142 34.35          | 5.0            | 370  | 3 000   |
| 40                | 50 140 34.40             | 50 142 34.40          | 5.2            | 420  | 3 400   |
| 50                | 50 140 34.50             | 50 142 34.50          | 5.4            | 870  | 7 000   |
| 63                | 50 140 34.63             | 50 142 34.63          | 6.8            | 1 300  | 10 500  |
| 80                | 50 140 34.80             | 50 142 34.80          | 7.5            | 2 500  | 20 000  |
| 100               | 50 140 34.100            | 50 142 34.100         | 7.7            | 4 600  | 37 000  |

Cut-Off Characteristics



Time-Current Characteristics

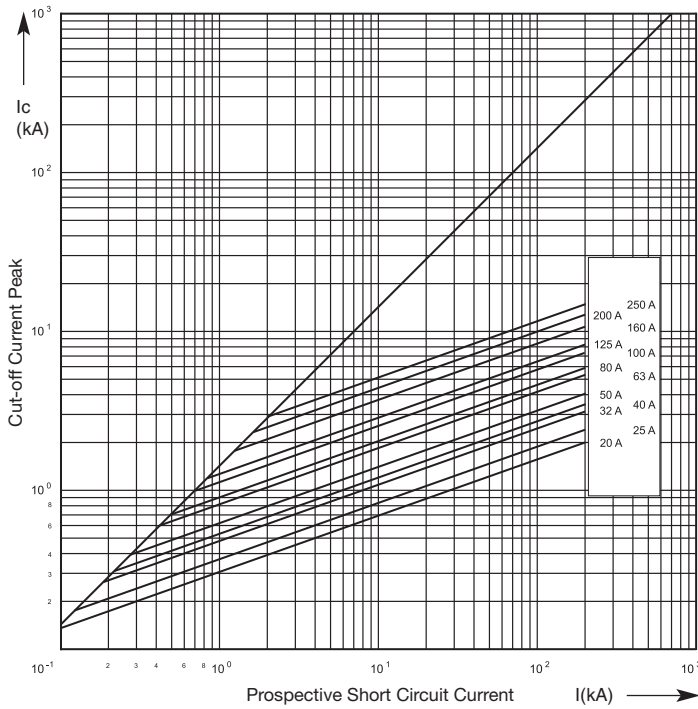




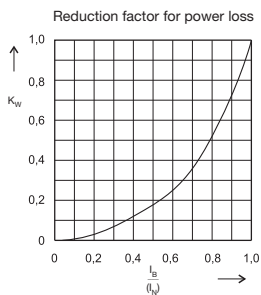
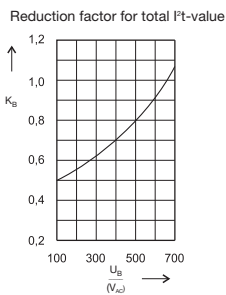
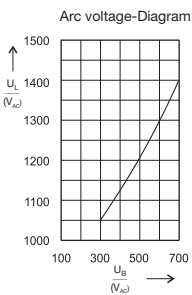
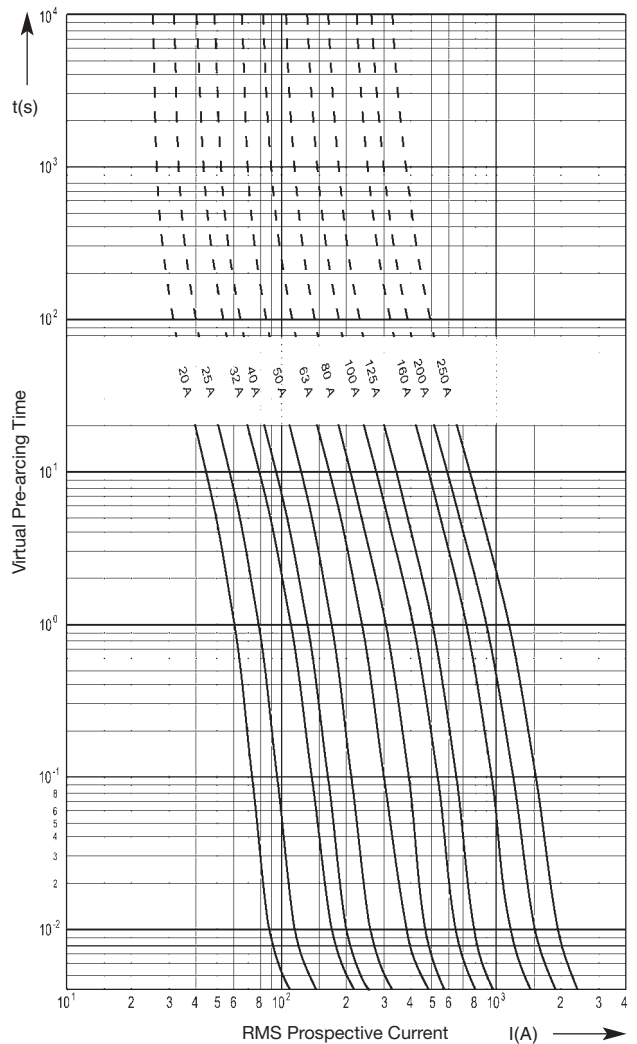
|                           |                                  |                    |  |
|---------------------------|----------------------------------|--------------------|--|
| Size<br><b>27 x 60 mm</b> | Rated Voltage<br><b>AC 660 V</b> | Class<br><b>aR</b> | Rated Breaking Capacity<br><b>200 kA</b> |
|---------------------------|----------------------------------|--------------------|--|

| Rated Current [A] | Part No. without Striker | Part No. with Striker | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 660 V [A <sup>2</sup> s] |
|-------------------|--------------------------|-----------------------|----------------|--|---|
| 20                | 50 193 20.20             | 50 194 20.20          | 8              | 17   | 100   |
| 25                | 50 193 20.25             | 50 194 20.25          | 9              | 30   | 180   |
| 32                | 50 193 20.32             | 50 194 20.32          | 10             | 67   | 400   |
| 40                | 50 193 20.40             | 50 194 20.40          | 13             | 90   | 550   |
| 50                | 50 193 20.50             | 50 194 20.50          | 15             | 150  | 900   |
| 63                | 50 193 20.63             | 50 194 20.63          | 16             | 330  | 2 000   |
| 80                | 50 193 20.80             | 50 194 20.80          | 22             | 472  | 2 900   |
| 100               | 50 193 20.100            | 50 194 20.100         | 25             | 850  | 5 400   |
| 125               | 50 193 20.125            | 50 194 20.125         | 30             | 1 310  | 7 900   |
| 160               | 50 193 20.160            | 50 194 20.160         | 32             | 2 950  | 17 700  |
| 200               | 50 193 20.200            | 50 194 20.200         | 37             | 5 000  | 30 000  |
| 250               | 50 193 20.250            | 50 194 20.250         | 43             | 8 100  | 49 000  |

Cut-Off Characteristics



Time-Current Characteristics



Size  
**27 x 60 mm**

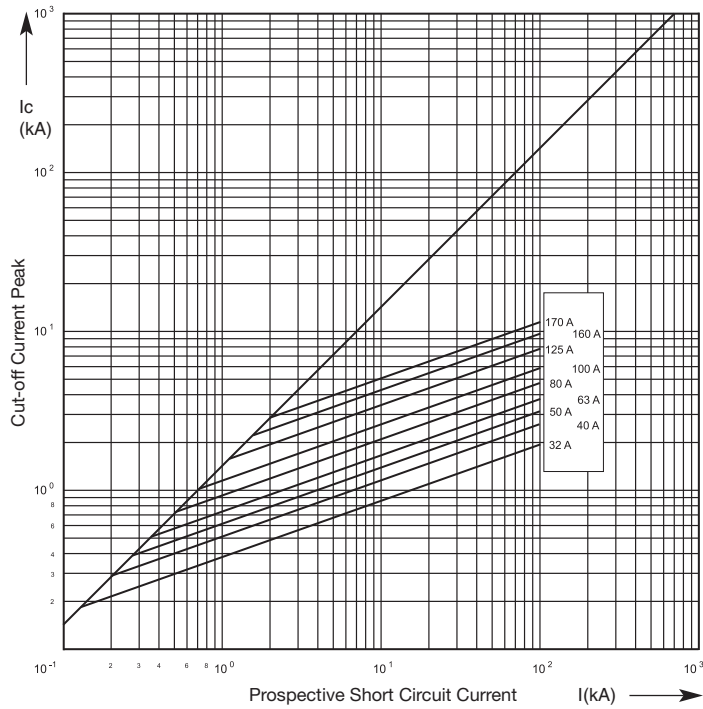
Rated Voltage  
**AC 1000 V**

Class  
**aR**

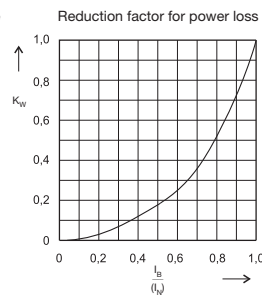
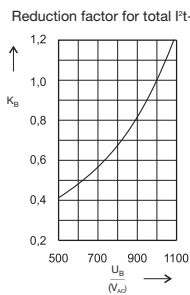
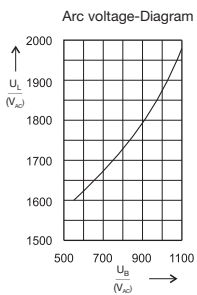
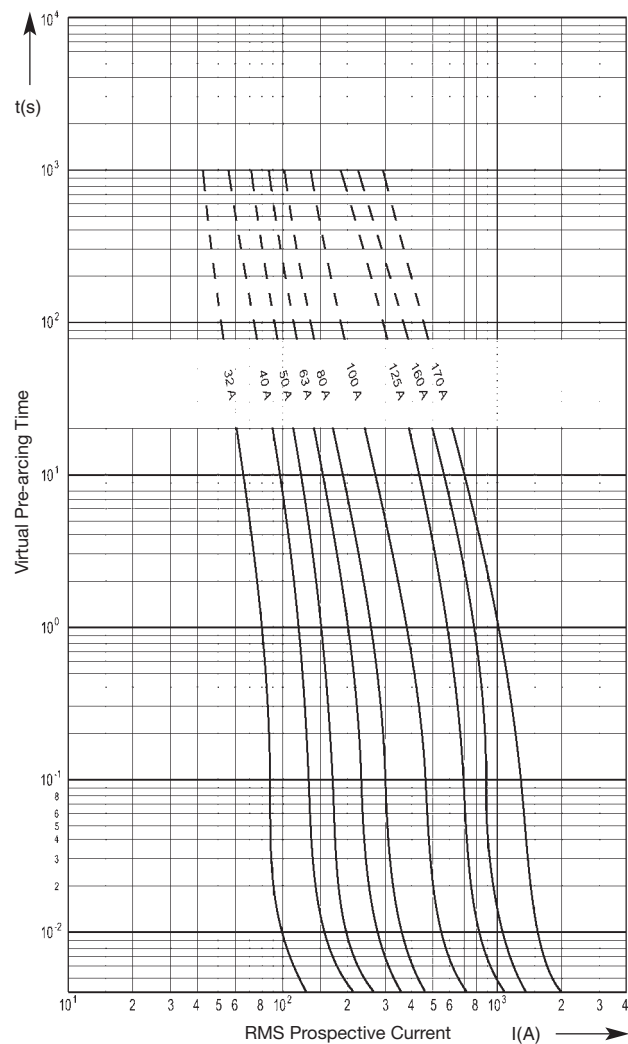
Rated Breaking Capacity  
**100 kA**

| Rated Current [A] | Part No. without Striker | Part No. with Striker | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 1000 V [A <sup>2</sup> s] |
|-------------------|--------------------------|-----------------------|----------------|--|--|
| 32                | 50 196 20.32             | 50 197 20.32          | 17             | 32   | 210  |
| 40                | 50 196 20.40             | 50 197 20.40          | 17             | 82   | 530  |
| 50                | 50 196 20.50             | 50 197 20.50          | 20             | 141  | 920  |
| 63                | 50 196 20.63             | 50 197 20.63          | 22             | 250  | 1 630  |
| 80                | 50 196 20.80             | 50 197 20.80          | 24             | 512  | 3 330  |
| 100               | 50 196 20.100            | 50 197 20.100         | 26             | 1 000  | 6 500  |
| 125               | 50 196 20.125            | 50 197 20.125         | 26             | 2 260  | 14 700   |
| 160               | 50 196 20.160            | 50 197 20.160         | 34             | 4 600  | 30 000   |
| 170               | 50 196 20.170            | 50 197 20.170         | 30             | 7 790  | 50 600   |

Cut-Off Characteristics



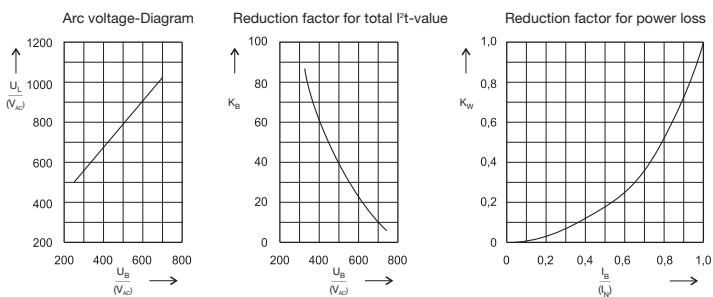
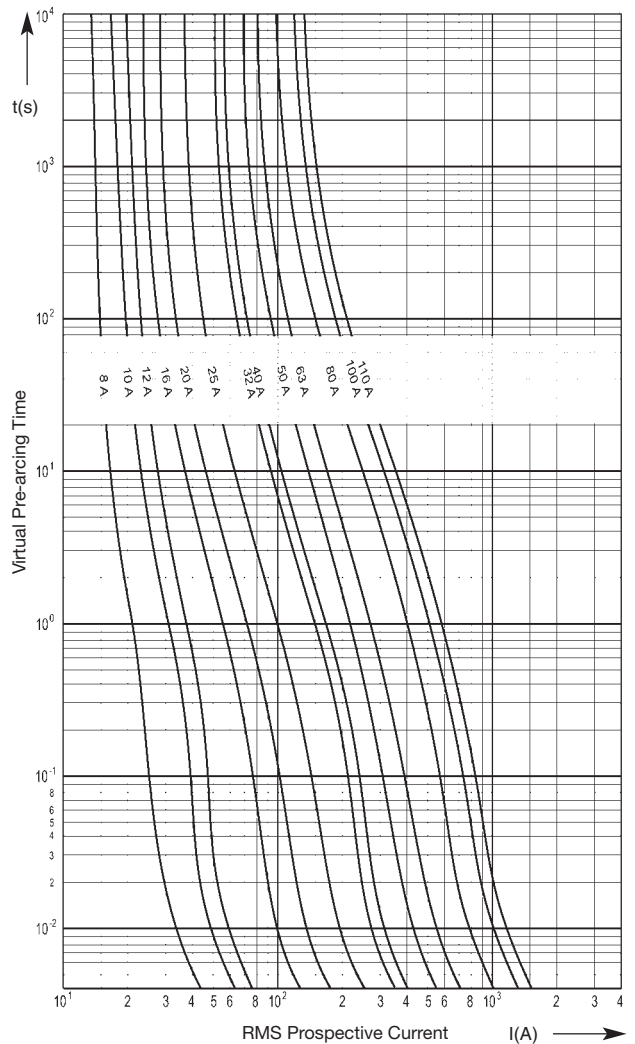
Time-Current Characteristics



|                           |                                  |                    |   |
|---------------------------|----------------------------------|--------------------|---|
| Size<br><b>27 x 60 mm</b> | Rated Voltage<br><b>DC 660 V</b> | Class<br><b>gR</b> | Rated Breaking Capacity<br><b>50 kA</b> |
|---------------------------|----------------------------------|--------------------|---|

| Rated Current [A] | Part No.      | Power Loss [W] | Pre-arcing I <sup>2</sup> t-value [A <sup>2</sup> s] | Total I <sup>2</sup> t-value @ 600 V [A <sup>2</sup> s] |
|-------------------|---------------|----------------|--|---|
| 8                 | 50 190 06.8   | 2.0            | 4  | 20  |
| 10                | 50 190 06.10  | 2.2            | 8  | 40  |
| 12                | 50 190 06.12  | 2.7            | 12   | 60  |
| 16                | 50 190 06.16  | 3.1            | 32   | 160   |
| 20                | 50 190 06.20  | 3.5            | 62   | 310   |
| 25                | 50 190 06.25  | 3.9            | 130  | 650   |
| 32                | 50 190 06.32  | 4.6            | 250  | 1 250   |
| 40                | 50 190 06.40  | 6.6            | 420  | 2 100   |
| 50                | 50 190 06.50  | 7.5            | 620  | 3 100   |
| 63                | 50 190 06.63  | 8.9            | 1 200  | 6 000   |
| 80                | 50 190 06.80  | 10.9           | 2 100  | 10 500  |
| 100               | 50 190 06.100 | 13.5           | 3 500  | 17 500  |
| 110               | 50 190 06.110 | 14.2           | 4 600  | 23 000  |

Time-Current Characteristics



**Fuse-Clip Screw Mountable**

Power Acceptance  
**4 W**  
**61 017 01.2**  
Size 10

**A 0.50"** (13 mm)  
**B 0.55"** (14 mm)  
**C 0.70"** (18 mm)  
**D 0.17"** (4.2 mm)  
**E 0.20"** (5 mm)

Power Acceptance  
**6 W**  
**61 001 01.2**  
Size 14

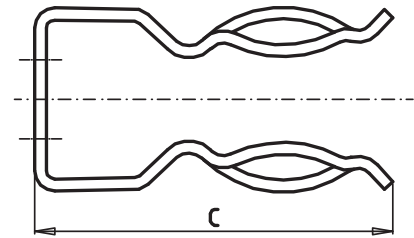
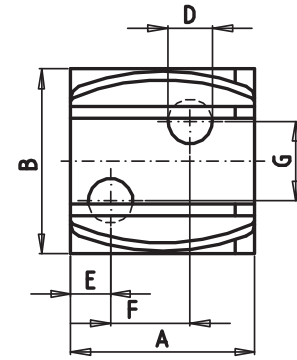
**A 0.63"** (16 mm)  
**B 0.63"** (16 mm)  
**C 0.90"** (23 mm)  
**D 0.17"** (4.2 mm)  
**E 0.26"** (6.5 mm)

Power Acceptance  
**12 W**  
**61 002 01.3**  
Size 22

**A 0.75"** (19 mm)  
**B 1.06"** (27 mm)  
**C 1.50"** (38 mm)  
**D 0.18"** (4.5 mm)  
**E 0.16"** (4 mm)  
**F 0.30"** (8 mm)  
**G 0.30"** (8 mm)

Power Acceptance  
**12 W**  
**61 004 01.3**  
Size 27

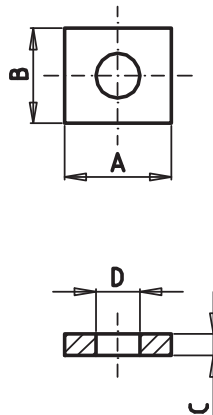
**A 1.06"** (27 mm)  
**B 2.30"** (58.4 mm)  
**C 4.55"** (115.6 mm)



**Clamping Plate**

Part No.  
**63 017 01**

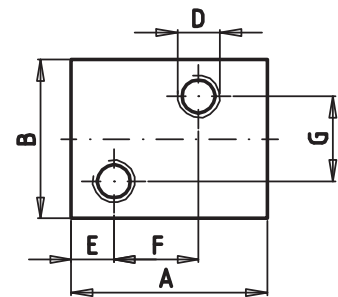
**A 0.40"** (10 mm)  
**B 0.35"** (9 mm)  
**C 0.08"** (2 mm)  
**D 0.17"** (4.2 mm)



To be used with fuse clips 61 017 01.2  
and 61 001 01.2

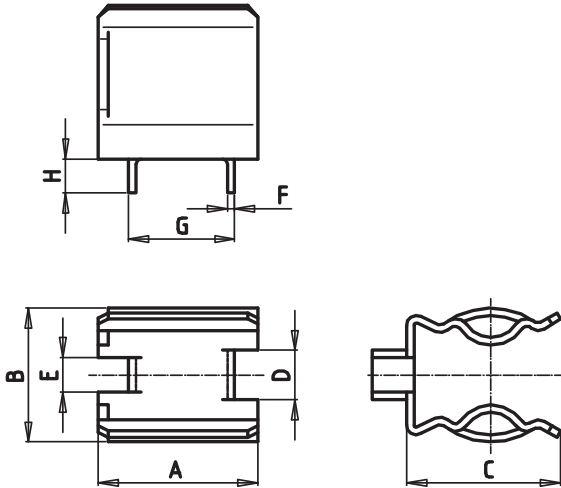
Part No.  
**63 002 01**

**A 0.73"** (18.5 mm)  
**B 0.60"** (15 mm)  
**C 0.12"** (3 mm)  
**D M4**  
**E 0.16"** (4 mm)  
**F 0.30"** (8 mm)  
**G 0.30"** (8 mm)



To be used with fuse clips 61 002 01.3

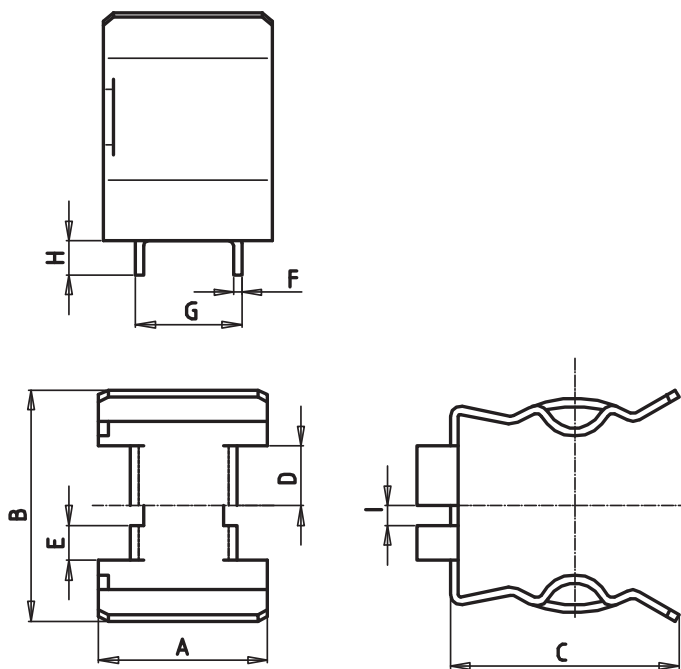
**Fuse-Clip PCB mountable**



**Power Acceptance  
6 W  
58 058 06  
Size 14**

|   |                 |
|---|-----------------|
| A | 0.63" (16 mm)   |
| B | 0.55" (14 mm)   |
| C | 0.60" (15.5 mm) |
| D | 0.20" (5 mm)    |
| E | 0.14" (3.5 mm)  |
| F | 0.03" (0.75 mm) |
| G | 0.42" (10.7 mm) |
| H | 0.14" (3.5 mm)  |

**Fuse-Clip PCB Mountable**



**Power Acceptance  
12 W  
58 060 06  
Size 22**

|   |                 |
|---|-----------------|
| A | 0.67" (17 mm)   |
| B | 0.87" (22 mm)   |
| C | 0.90" (23 mm)   |
| D | 0.24" (6 mm)    |
| E | 0.14" (3.5 mm)  |
| F | 0.03" (0.75 mm) |
| G | 0.42" (10.7 mm) |
| H | 0.14" (3.5 mm)  |

**ZS-Modul for Fuse-Links with Cylindrical Contact Caps**

**Isolated Fuse-Base**

**Size 10 x 38**

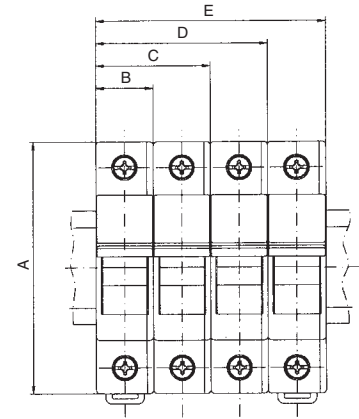
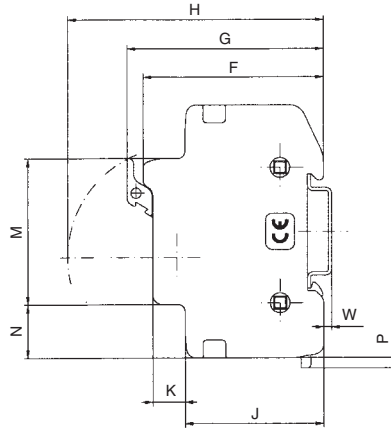
|                 |                            |              |        |
|-----------------|----------------------------|--------------|--------|
| <b>Part No.</b> | 51 063 04.DC for 1000 V DC |              |        |
|                 | 51 063 04                  | 51 063 04.L  | 1 pol. |
|                 | 51 063 04.2                | 51 063 04.2L | 2 pol. |
|                 | 51 063 04.3                | 51 063 04.3L | 3 pol. |



L= Light Emitting Diode (LED) Indicator

Power Acceptance: **4 W**

|          |                        |          |                        |
|----------|------------------------|----------|------------------------|
| <b>A</b> | <b>3.07"</b> (78 mm)   | <b>H</b> | <b>3.13"</b> (79.5 mm) |
| <b>B</b> | <b>0.70"</b> (17.8 mm) | <b>J</b> | <b>1.69"</b> (43 mm)   |
| <b>C</b> | <b>1.40"</b> (35.6 mm) | <b>K</b> | <b>0.40"</b> (10 mm)   |
| <b>D</b> | <b>2.10"</b> (53.4 mm) | <b>M</b> | <b>1.77"</b> (45 mm)   |
| <b>E</b> | <b>2.80"</b> (71.2 mm) | <b>N</b> | <b>0.65"</b> (16.5 mm) |
| <b>F</b> | <b>2.20"</b> (56 mm)   | <b>P</b> | <b>0.13"</b> (3.2 mm)  |
| <b>G</b> | <b>2.40"</b> (61 mm)   | <b>W</b> | <b>0.10"</b> (2.5 mm)  |



**Size 14 x 51**

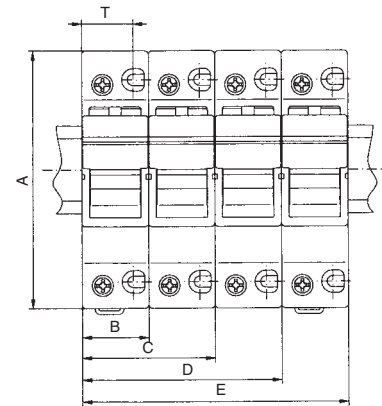
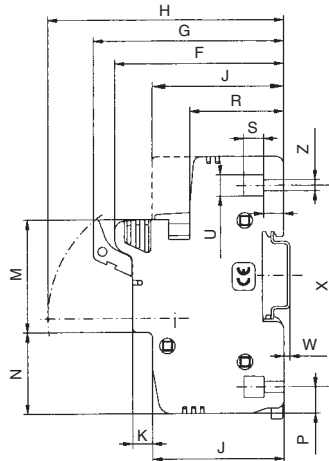
|                 |             |              |        |
|-----------------|-------------|--------------|--------|
| <b>Part No.</b> | 51 058 04   | 51 058 04.S  | 1 pol. |
|                 | 51 058 04.2 |              | 2 pol. |
|                 | 51 058 04.3 | 51 058 04.3S | 3 pol. |



S= Micro switch

Power Acceptance: **6 W**

|          |                         |            |                        |
|----------|-------------------------|------------|------------------------|
| <b>A</b> | <b>4.04"</b> (102.5 mm) | <b>M</b>   | <b>1.77"</b> (45 mm)   |
| <b>B</b> | <b>1.04"</b> (26.5 mm)  | <b>N</b>   | <b>1.28"</b> (32.5 mm) |
| <b>C</b> | <b>2.10"</b> (53 mm)    | <b>P</b>   | <b>0.40"</b> (10.5 mm) |
| <b>D</b> | <b>3.13"</b> (79.5 mm)  | <b>R</b>   | <b>1.48"</b> (37.5 mm) |
| <b>E</b> | <b>4.17"</b> (106 mm)   | <b>S</b>   | <b>0.30"</b> (8 mm)    |
| <b>F</b> | <b>2.66"</b> (67.5 mm)  | <b>T</b>   | <b>0.80"</b> (20.5 mm) |
| <b>G</b> | <b>3.00"</b> (76 mm)    | <b>U Ø</b> | <b>0.33"</b> (8.5 mm)  |
| <b>H</b> | <b>3.70"</b> (94.2 mm)  | <b>W</b>   | <b>0.1"</b> (2.5 mm)   |
| <b>J</b> | <b>2.07"</b> (52.5 mm)  | <b>X</b>   | <b>3.17"</b> (80.5 mm) |
| <b>K</b> | <b>0.30"</b> (8 mm)     | <b>Z Ø</b> | <b>0.17"</b> (4.4 mm)  |



**Size 22 x 58**

|                 |             |              |        |
|-----------------|-------------|--------------|--------|
| <b>Part No.</b> | 51 060 04   | 51 060 04.S  | 1 pol. |
|                 | 51 060 04.2 |              | 2 pol. |
|                 | 51 060 04.3 | 51 060 04.3S | 3 pol. |



S= Micro switch

Power Acceptance: **12 W**

|          |                         |            |                         |
|----------|-------------------------|------------|-------------------------|
| <b>A</b> | <b>5.50"</b> (140 mm)   | <b>M</b>   | <b>1.77"</b> (45 mm)    |
| <b>B</b> | <b>1.40"</b> (35.6 mm)  | <b>N</b>   | <b>2.00"</b> (50.5 mm)  |
| <b>C</b> | <b>2.80"</b> (71.2 mm)  | <b>P</b>   | <b>0.30"</b> (7.5 mm)   |
| <b>D</b> | <b>4.20"</b> (106.8 mm) | <b>R</b>   | <b>1.57"</b> (40 mm)    |
| <b>E</b> | <b>5.60"</b> (142.4 mm) | <b>S</b>   | <b>0.30"</b> (8 mm)     |
| <b>F</b> | <b>2.97"</b> (75.5 mm)  | <b>T</b>   | <b>1.06"</b> (27 mm)    |
| <b>G</b> | <b>3.44"</b> (87.5 mm)  | <b>W</b>   | <b>0.10"</b> (2.5 mm)   |
| <b>H</b> | <b>4.35"</b> (110.5 mm) | <b>X</b>   | <b>4.30"</b> (109.5 mm) |
| <b>J</b> | <b>2.10"</b> (53 mm)    | <b>Z Ø</b> | <b>0.17"</b> (4.4 mm)   |
| <b>K</b> | <b>0.63"</b> (16 mm)    |            |                         |

