# 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<br>DIN VDE 0636-40<br>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 |

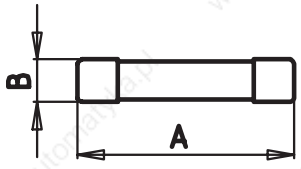
# Fuses for Semiconductor Protection

## Cylindrical Fuses

| Size | Rated Voltage | Class |
|---|---|---|
| **5 x 20 mm** | **AC 250 V** | **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

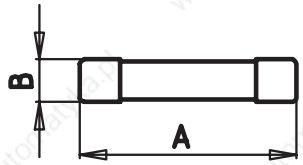
| Size | Rated Voltage | Class |
|---|---|---|
| 6.35 x 32 mm | AC 400 V | gRL(gS) |

| Rated Current [A] | Part No. | Rated Breaking Capacity [kA] | Rated Voltage [AC] | UL Rec. | Weight [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 | Rated Voltage | Class |
|---|---|---|
| 6.35 x 32 mm | AC 500/700 V | aR |

| Rated Current [A] | Part No. | Rated Breaking Capacity [kA] | Rated Voltage [V] | UL Rec. | c UL | Weight [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 [1] | 70 125 40.8 | 50 | 500 | ✓ | ✓ | 0.24 | 100 |
| 10 [1] | 70 125 40.10 | 50 | 500 | ✓ | ✓ | 0.24 | 100 |
| 12.5 [1] | 70 125 40.12.5 | 50 | 500 | ✓ | ✓ | 0.24 | 100 |
| 16 [1] | 70 125 40.16 | 50 | 500 | ✓ | ✓ | 0.24 | 100 |
| 20 [1] | 70 125 40.20 | 50 | 500 | ✓ | ✓ | 0.24 | 100 |

[1] **Consideration should be given to heat dissipation.**



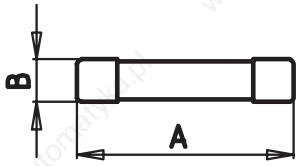

| | |
|---|---|
| **A** | **1.26”** (32 mm) |
| **B** | **0.25”** (6.35 mm) |

# Fuses for Semiconductor Protection

## Cylindrical Fuses

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

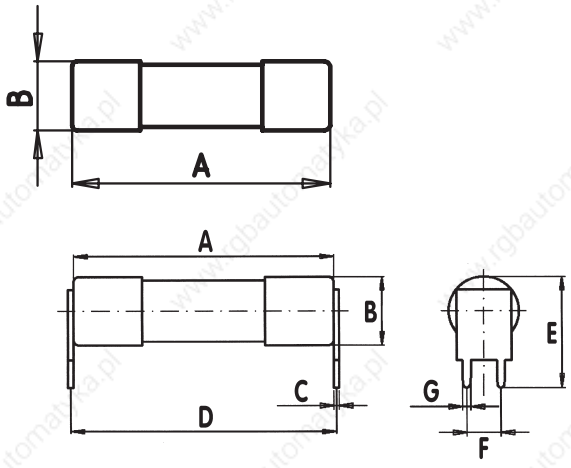
## Cylindrical Fuses

| Size | Rated Voltage | Class |
|---|---|---|
| 10 x 38 mm | AC 500 V (IEC) · AC 600 V (UL) | 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 | Rated Voltage | Class |
|---|---|---|
| 10 x 38 mm | AC 600 V | 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 | Rated Voltage | Class |
|---|---|---|
| 10 x 38 mm | AC 660 V (IEC) · AC 700 V (UL) | 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 | Rated Voltage | | Class |
|---|---|---|---|
| 10 x 38 mm | AC/DC 1000 V | DMI Fuse for Digital Measuring Instruments | aR |

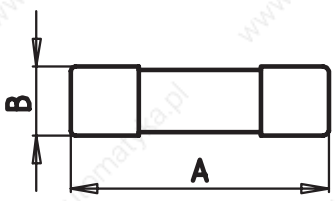
| Rated Current [A] | Part No. | UL Rec. | Weight [kg/100] | Pack |
|---|---|---|---|---|
| 4 | 50 199 06.4 | | 0.9 | 10 |
| 6 | 50 199 06.6 | | 0.9 | 10 |
| 8 | 50 199 06.8 | | 0.9 | 10 |
| 10 | 50 199 06.10 | | 0.9 | 10 |
| 12 | 50 199 06.12 | | 0.9 | 10 |
| 16 | 50 199 06.16 | | 0.9 | 10 |

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

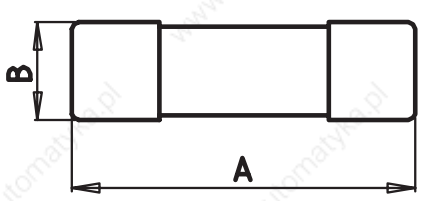
## Cylindrical Fuses

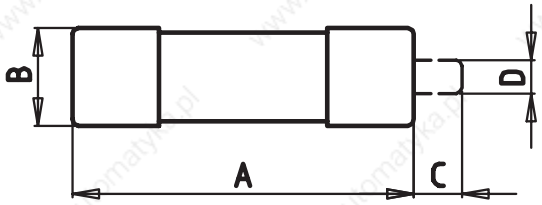
| Size | Rated Voltage | Class |
|---|---|---|
| 14 x 51 mm | AC 500 V (IEC) · AC 600 V (UL) | aR |

| Rated Current [A] | Part No. without Striker | Part No. with Striker | UL Rec. | Weight [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 | Rated Voltage | Class |
|---|---|---|
| 14 x 51 mm | AC 690 V (IEC) · AC 700 V (UL) | gR |

| Rated Current [A] | Part No. without Striker | Part No. with Striker | UL Rec. | Weight [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) |
| $C_{min}$ | 0.28 " (7 mm) |
| D | 0.20 " (4.9 mm) |

# Fuses for Semiconductor Protection

## Cylindrical Fuses

| Size | Rated Voltage | Class |
|---|---|---|
| **14 x 51 mm** | **AC 690 / 700 V** | **gRL(gS)** |

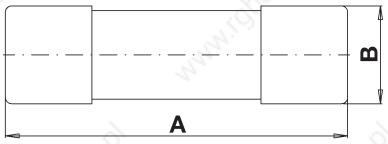
| Rated Current [A] | Part No. without Striker | Part No. with Striker | Part No. Fixing Center 63,5 mm | UL Rec. | Weight [kg/100] | Pack |
|---|---|---|---|---|---|---|
| 10 | 50 124 34.10 | 50 126 34.10 | 50 129 34.10 | ✓ | 2.2 | 10 |
| 12 | 50 124 34.12 | 50 126 34.12 | 50 129 34.12 | ✓ | 2.2 | 10 |
| 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) |

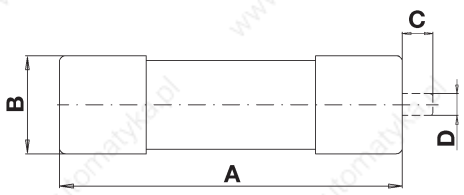
| With Striker | |
|---|---|
| A | **2.00"** (51 mm) |
| B | **0.55"** (14 mm) |
| $C_{min}$ | **0.28"** (7 mm) |
| D | **0.20"** (4.9 mm) |

| 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) |

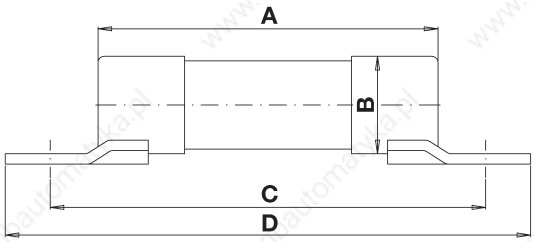
Part No. 50 124 34. ...




Part No. 50 126 34. ...




Part No. 50 129 34. ...



# Fuses for Semiconductor Protection

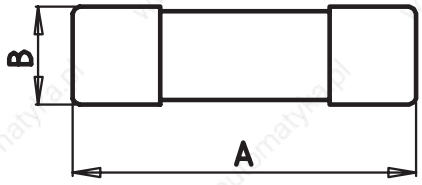
## Cylindrical Fuses

| Size | Rated Voltage | Class |
|---|---|---|
| **14 x 51 mm** | **DC 700 V (UL)** | **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 | Rated Voltage | Class |
|---|---|---|
| **14 x 51 mm** | **DC 700 V (UL)** | **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 | Rated Voltage | Class |
|---|---|---|
| 22 x 58 mm | AC 500 V (IEC) · AC 600 V (UL) | aR |

| Rated Current [A] | Part No. without Striker | Part No. with Striker | UL Rec. | Weight [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 |

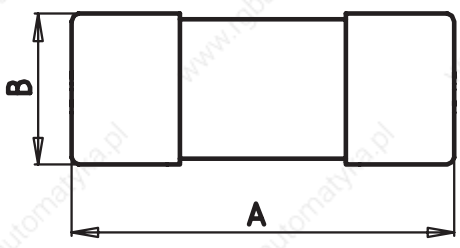
| Size | Rated Voltage | Class |
|---|---|---|
| 22 x 58 mm | AC 690 V (IEC) · AC 700 V (UL) | gR/aR |

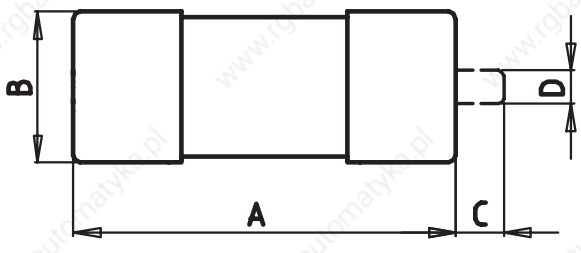
| Rated Current [A] | Part No. without Striker | Part No. with Striker | UL Rec. | Weight (kg/100) | Pack | Class |
|---|---|---|---|---|---|---|
| 12 | 50 140 06.12 | 50 142 06.12 | ✓ | 5.5 | 10 | gR |
| 16 | 50 140 06.16 | 50 142 06.16 | ✓ | 5.5 | 10 | gR |
| 20 | 50 140 06.20 | 50 142 06.20 | ✓ | 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) |
| $C_{min}$ | **0.28"** (7 mm) |
| D | **0.20"** (4.9 mm) |



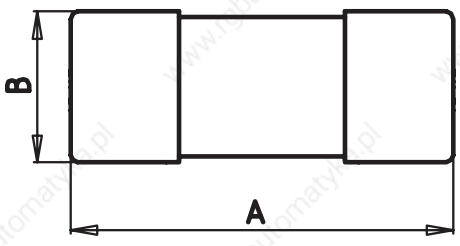



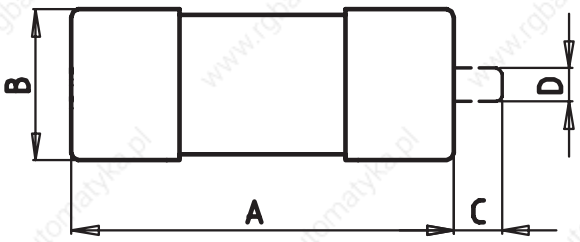
# Fuses for Semiconductor Protection

## Cylindrical Fuses

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

| Rated Current [A] | Part No. without Striker | Part No. with Striker | UL Rec. | Weight [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) |
| $C_{min}$ | **0.28"** (7 mm) |
| D | **0.20"** (4.9 mm) |

# Fuses for Semiconductor Protection

## Cylindrical Fuses

| Size | Rated Voltage | Class |
|---|---|---|
| 27 x 60 mm | AC 660 V | aR |

| Rated Current [A] | Part No. without Striker | Part No. with Striker | UL Rec. | Weight [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 | Rated Voltage | Class |
|---|---|---|
| 27 x 60 mm | AC 1000 V | aR |

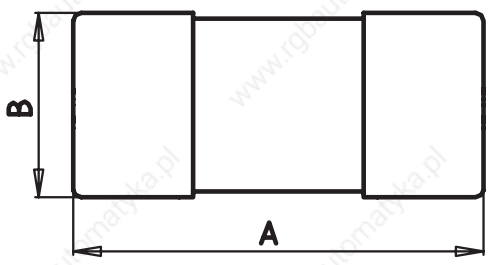
| Rated Current [A] | Part No. without Striker | Part No. with Striker | UL Rec. | Weight [kg/100] | Pack |
|---|---|---|---|---|---|
| 32 | 50 196 20.32 | 50 197 20.32 | | 6.0 | 10 |
| 40 | 50 196 20.40 | 50 197 20.40 | | 6.0 | 10 |
| 50 | 50 196 20.50 | 50 197 20.50 | | 6.0 | 10 |
| 63 | 50 196 20.63 | 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 |

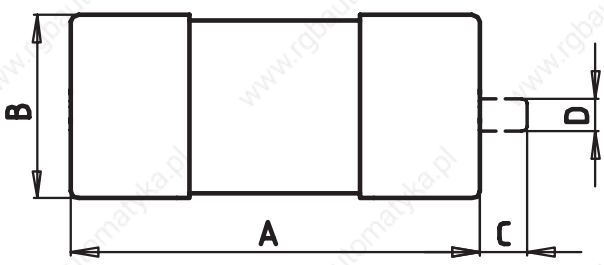
**Without Striker**

| | |
|---|---|
| A | **2.36”** (60 mm) |
| B | **1.06”** (27 mm) |

**With Striker**

| | |
|---|---|
| A | **2.36”** (60 mm) |
| B | **1.06”** (27 mm) |
| $C_{min}$ | **0.28”** (7 mm) |
| D | **0.20”** (4.9 mm) |



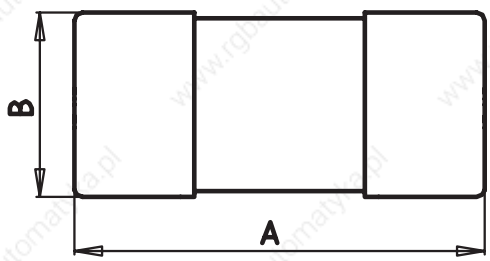



# Fuses for Semiconductor Protection

## Cylindrical Fuses

| Size | Rated Voltage | Class |
|---|---|---|
| 27 x 60 mm | DC 660 V | 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 | Rated Voltage | | Class |
|---|---|---|---|
| 5 x 20 mm | AC 250 V | Ceramic Tube | FF |

| Rated Current [A] | Part No. | Max. Voltage Drop [mV] | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value [$A^2s$] | 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 | **300 kA** at |
| 1 | 70 001 40.1 | 750 | 0.8 | 0.17 | 0.26 | AC 250 V |
| 1.25 | 70 001 40.1.25 | 750 | 1.0 | 0.26 | 0.39 | cos phi < 0.2 |
| 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 | **1500 kA** at |
| 8 | 70 001 40.8 | 400 | 3.2 | 19 | 32 | AC 250 V |
| 10 | 70 001 40.10 | 400 | 4.0 | 30 | 54 | |

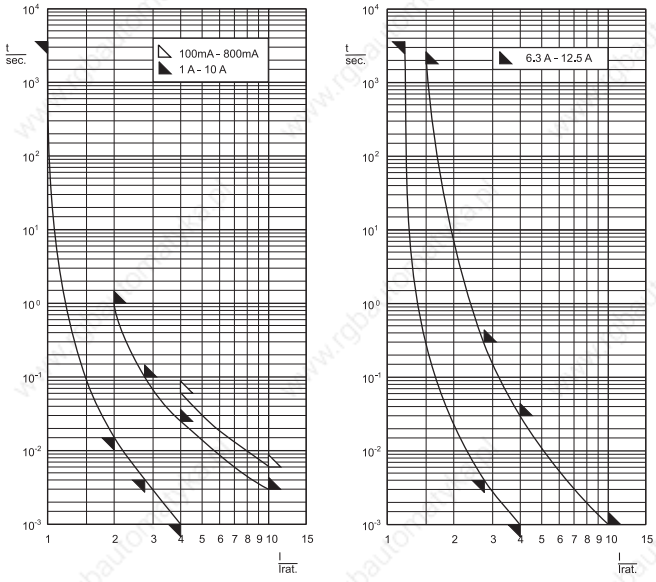
## Pre-Arcing Time Limits

### Part No. 70 001 40

| Rated Current | 1.0 $I_{rat}$ | 2.0 $I_{rat}$ | 2.75 $I_{rat}$ | 4 $I_{rat}$ | 10 $I_{rat}$ |
|---|---|---|---|---|---|
| 100 mA ▼ 800 mA | > 1 h | – | – | < 60 ms | < 6 ms |
| 1 A ▼ 10 A | | < 1 s | 4 ms ▼ 100 ms | 1 ms ▼ 25 ms | < 3 ms |

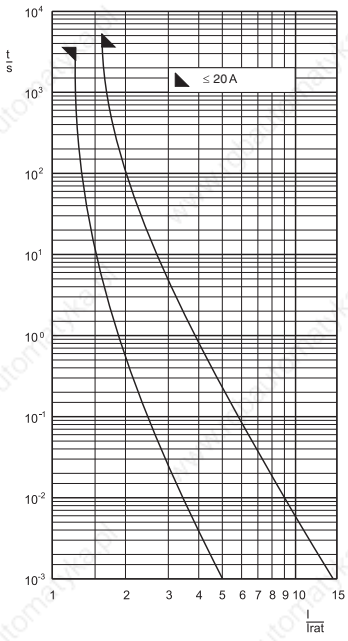
### Part No. 70 007 40

| Rated Current | 1.2 $I_{rat}$ | 1.5 $I_{rat}$ | 2.75 $I_{rat}$ | 4 $I_{rat}$ | 10 $I_{rat}$ |
|---|---|---|---|---|---|
| 6.3 A ▼ 12.5 A | > 1 h | < 30 min | 4 ms ▼ 300 ms | 1 ms ▼ 30 ms | < 1 ms |



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

| Rated Current [A] | Part No. | Max. Voltage Drop [mV] | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value [$A^2s$] | |
|---|---|---|---|---|---|---|
| 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 | |



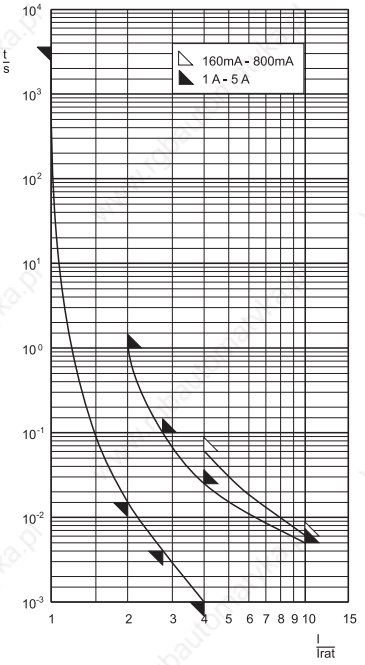
| Size | Rated Voltage | | Class |
|---|---|---|---|
| **6.35 x 32 mm** | **AC 500/700 V** | **Ceramic Tube** | **FF** |

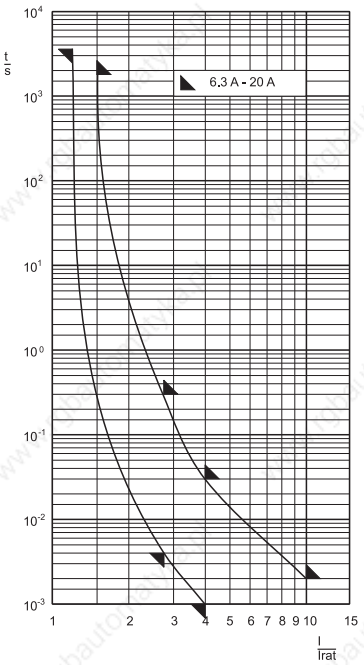
| Rated Current [A] | Part No. | Max. Voltage Drop [mV] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value [$A^2s$] | Rated Breaking Capacity | Rated Voltage |
|---|---|---|---|---|---|---|
| 160 mA | 70 125 40.0.160 | 2 000 | 0.004 | 0.014 | | |
| 200 mA | 70 125 40.0.200 | 1 600 | 0.008 | 0.03 | | |
| 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 | **50 kA** at | |
| 500 mA | 70 125 40.0.500 | 950 | 0.14 | 0.48 | AC 700 V | AC 700 V |
| 630 mA | 70 125 40.0.630 | 860 | 0.14 | 0.5 | cos phi < 0.2 | |
| 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 | **50 kA** at | |
| 6.3 | 70 125 40.6.3 | 400 | 3 | 14 | AC 500 V | AC 500 V |
| 8 | 70 125 40.8 | 350 | 6.5 | 30 | cos phi < 0.2 | |
| 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 $I_{rat}$ | 2.0 $I_{rat}$ | 2.75 $I_{rat}$ | 4 $I_{rat}$ | 10 $I_{rat}$ |
|---|---|---|---|---|---|
| 160 mA ▼ 800 mA | > 1 h | – | – | < 60 ms | < 6 ms |
| 1 A ▼ 5 A | | – | 4 ms ▼ 100 ms | 1 ms ▼ 25 ms | < 5 ms |

| Rated Current | 1.2 $I_{rat}$ | 1.5 $I_{rat}$ | 2.75 $I_{rat}$ | 4 $I_{rat}$ | 10 $I_{rat}$ |
|---|---|---|---|---|---|
| 6.3 A ▼ 20 A | > 1 h | < 30 min | 4 ms ▼ 300 ms | 1 ms ▼ 30 ms | < 2 ms |



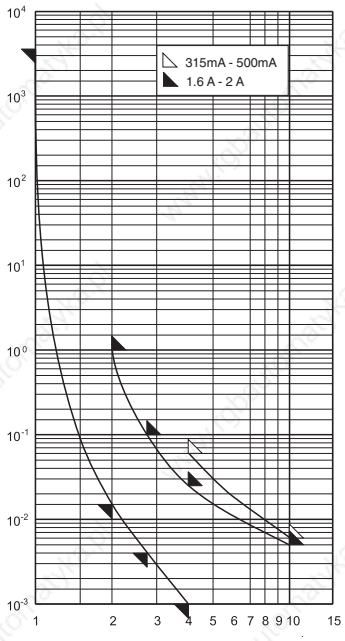



Size **6.35 x 32 mm** Rated Voltage **AC/DC 1000 V** **DMI**

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

## Pre-Arcing Time Limits

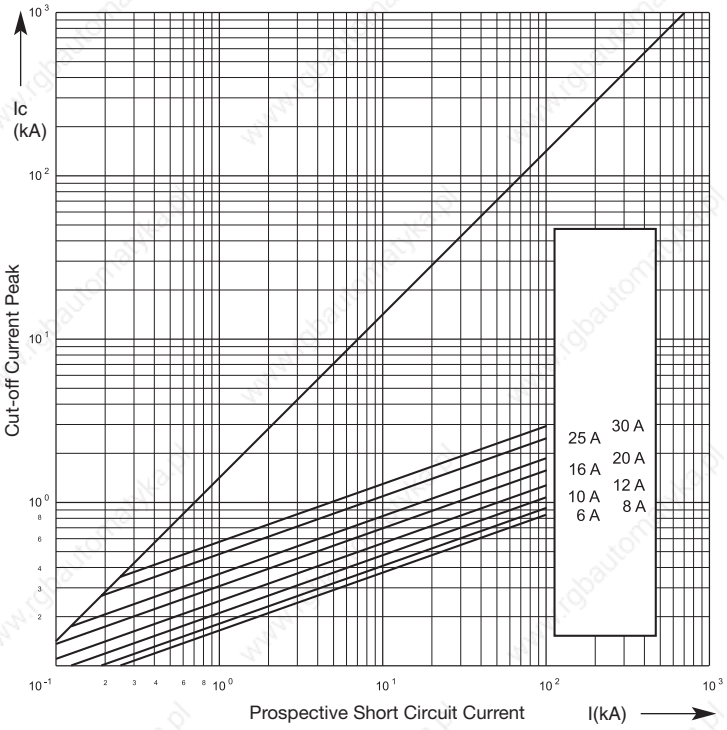
| Rated Current | 1.0 $I_{rat}$ | 2.0 $I_{rat}$ | 2.75 $I_{rat}$ | 4 $I_{rat}$ | 10 $I_{rat}$ |
|---|---|---|---|---|---|
| 315 mA ▼ 500 mA | > 1 h | - | - | < 60 ms | < 6 ms |
| 1.6 A ▼ 2 A | | - | - | 1 ms ▼ 25 ms | < 5 ms |



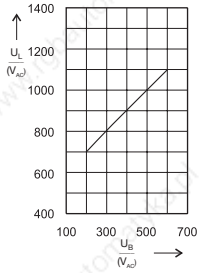
| Size | Rated Voltage | Class | Rated Breaking Capacity |
|---|---|---|---|
| 10 x 38 mm | AC 600 V | gRL(gS) | 200 kA |

| Rated Current [A] | Part No. | Part No. PCB Mounting | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ 500 V [$A^2s$] |
|---|---|---|---|---|---|
| 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 |

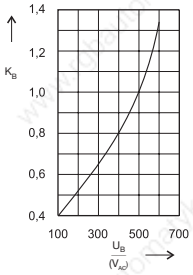
## Cut-Off Characteristics



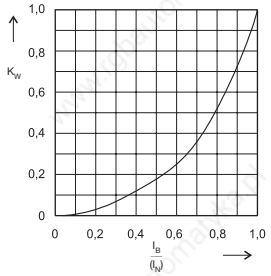

Arc voltage-Diagram



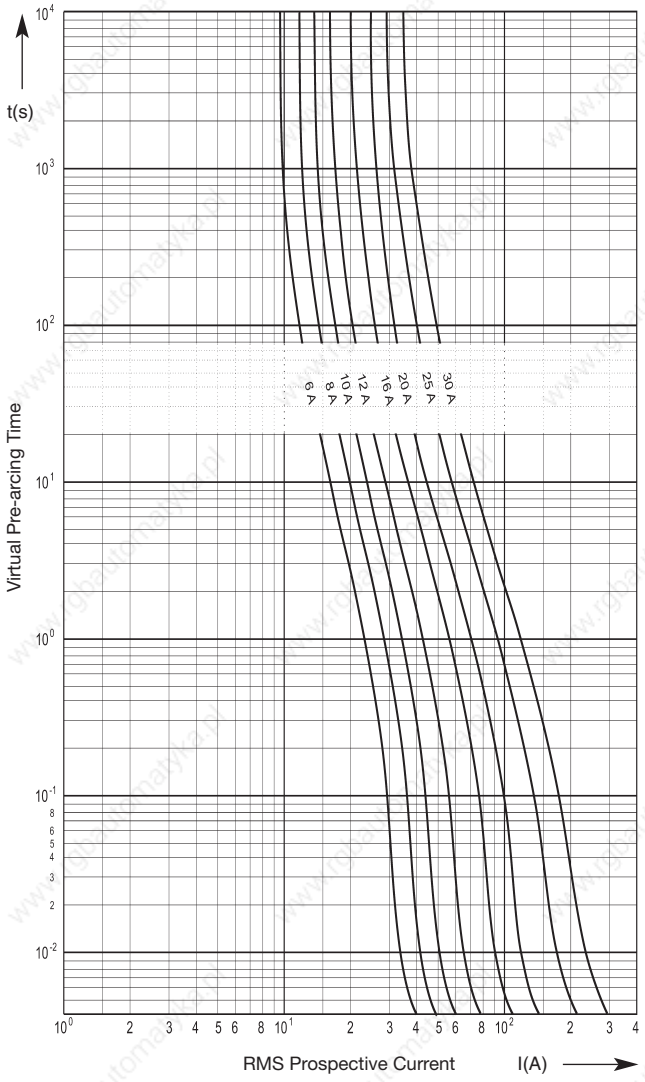
Reduction factor for total $I^2t$-value



Reduction factor for power loss



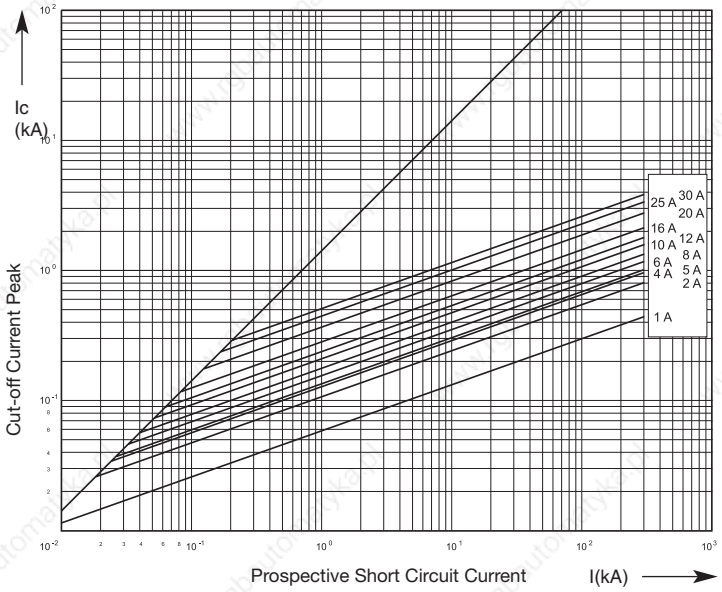
## Time-Current Characteristics



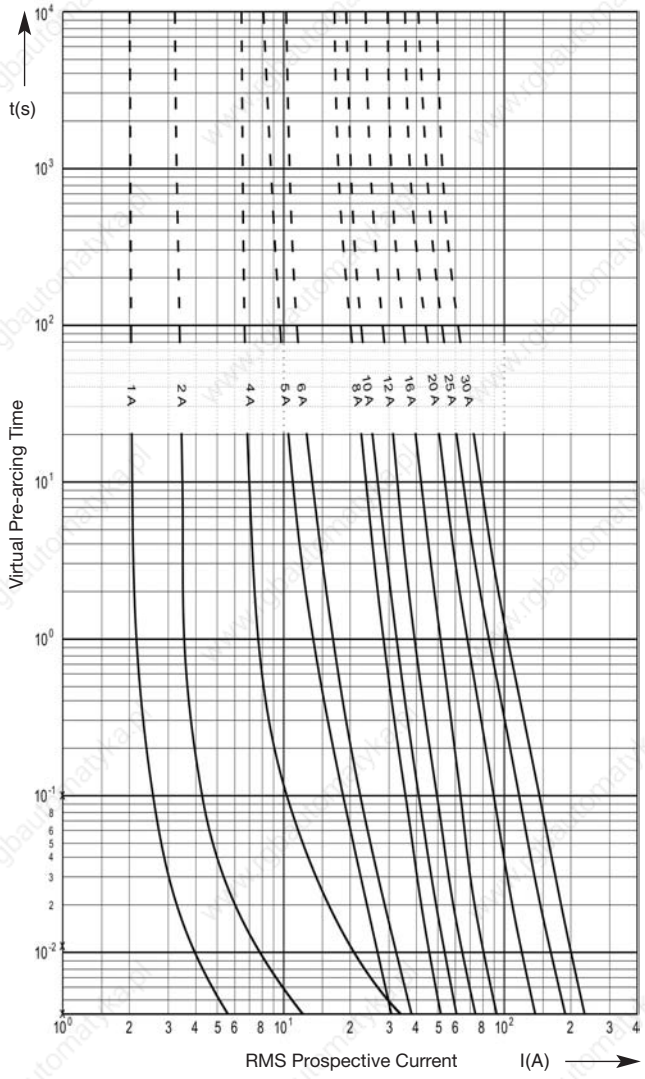
| Size | Rated Voltage | Class | Rated Breaking Capacity |
|---|---|---|---|
| 10 x 38 mm | AC 600 V | aR | 300 kA |

| Rated Current [A] | Part No. | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ 600 V [$A^2s$] |
|---|---|---|---|---|
| 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 |

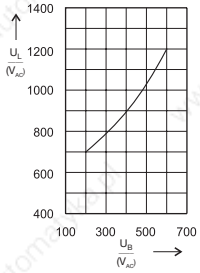
## Cut-Off Characteristics



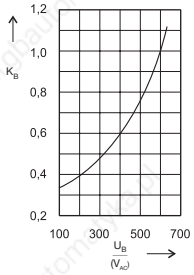

## Time-Current Characteristics



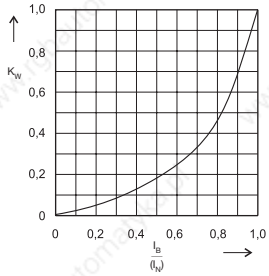

Arc voltage-Diagram




Reduction factor for total $I^2t$-value



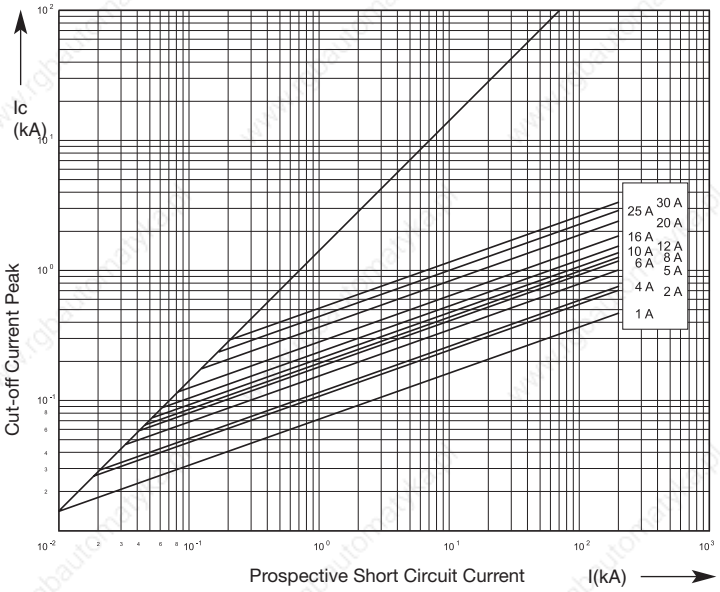

Reduction factor for power loss



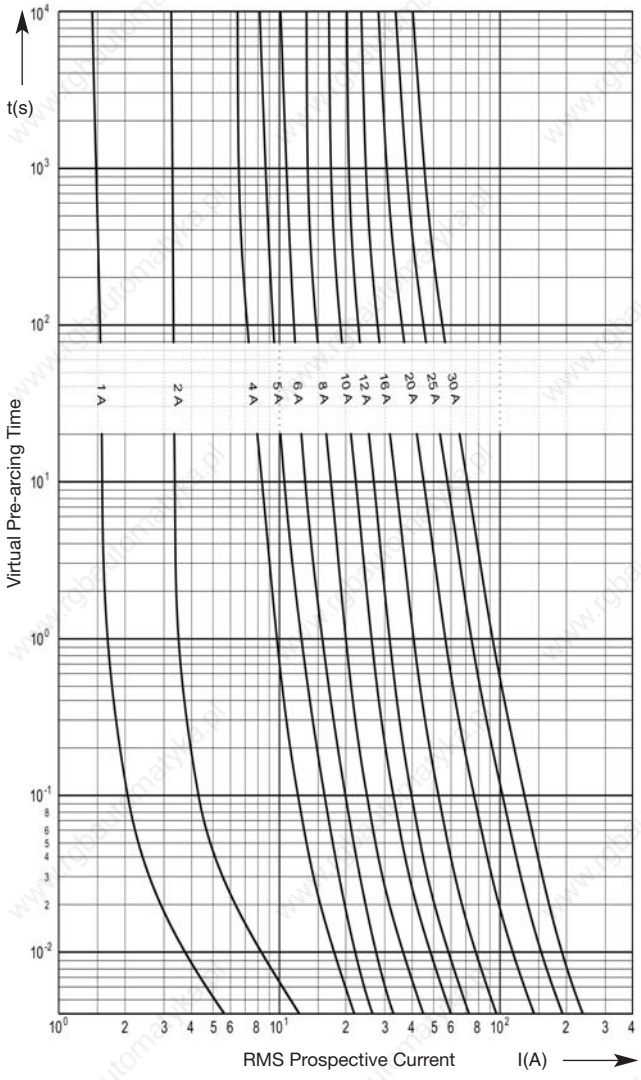
| Size | Rated Voltage | Class | Rated Breaking Capacity |
|---|---|---|---|
| 10 x 38 mm | AC 660 V (IEC) · AC 700 V (UL) | gR | 200 kA |

| Rated Current [A] | Part No. | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ 660 V [$A^2s$] |
|---|---|---|---|---|
| 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



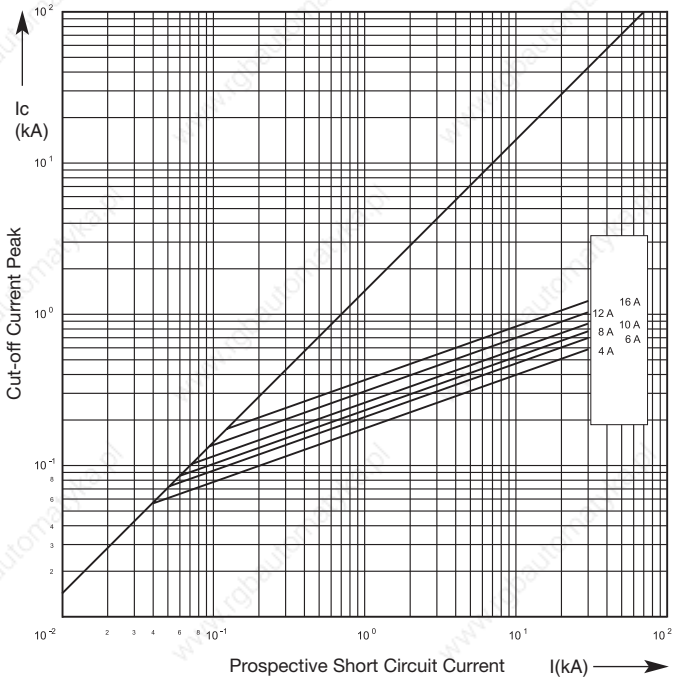

Time-Current Characteristics



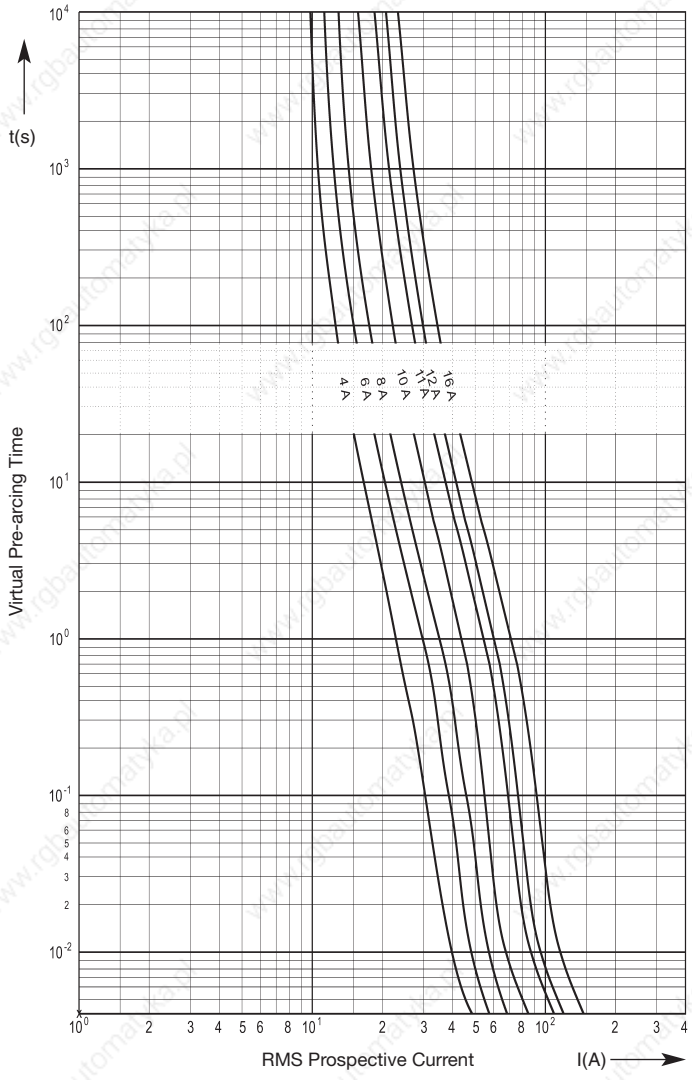
| Size | Rated Voltage | | Rated Breaking Capacity |
|---|---|---|---|
| 10 x 38 mm | AC/DC 1000 V | DMI | 30 kA (cos phi 0.5 / L/R = 1 ms) |

| Rated Current [A] | Part No. | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ AC 1000 V [$A^2s$] | Total $I^2t$-value @ DC 1000 V [$A^2s$] |
|---|---|---|---|---|---|
| 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



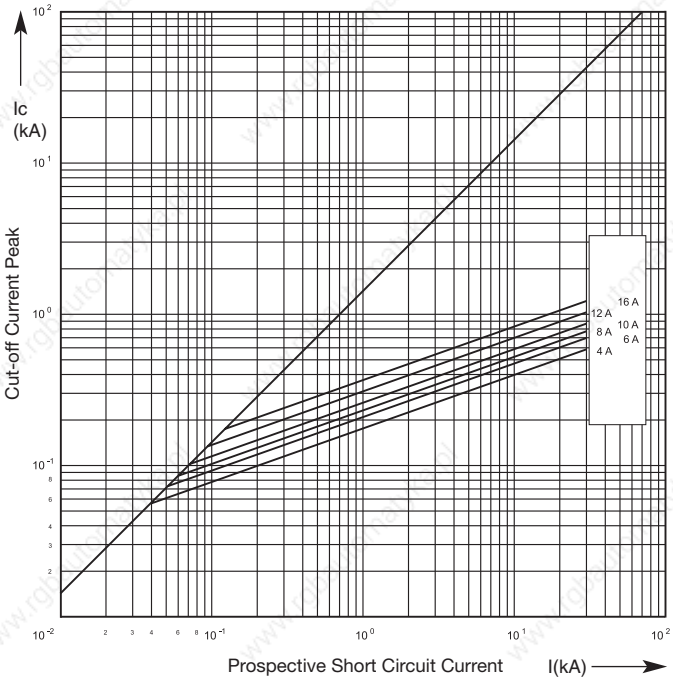

Time-Current Characteristics



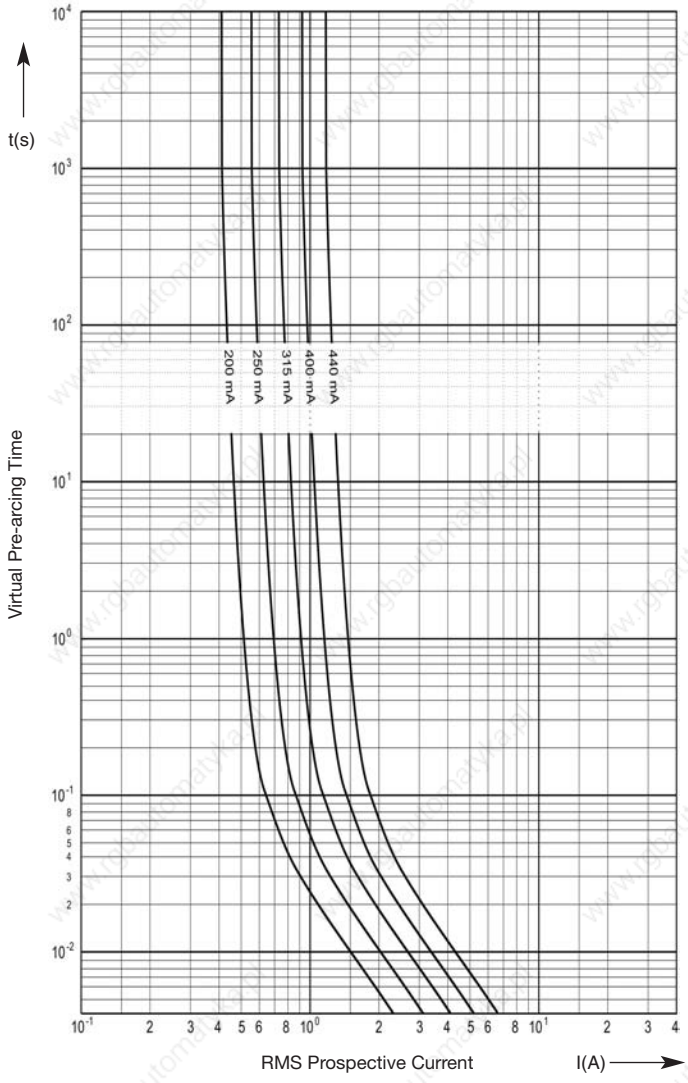
| Size | Rated Voltage | | Rated Breaking Capacity |
|---|---|---|---|
| 10 x 35 mm | AC/DC 1000 V | DMI | 30 kA (cos phi 0.5 / L/R = 1 ms) |

| Rated Current [A] | Part No. | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ AC 1000 V [$A^2s$] | Total $I^2t$-value @ DC 1000 V [$A^2s$] |
|---|---|---|---|---|---|
| 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



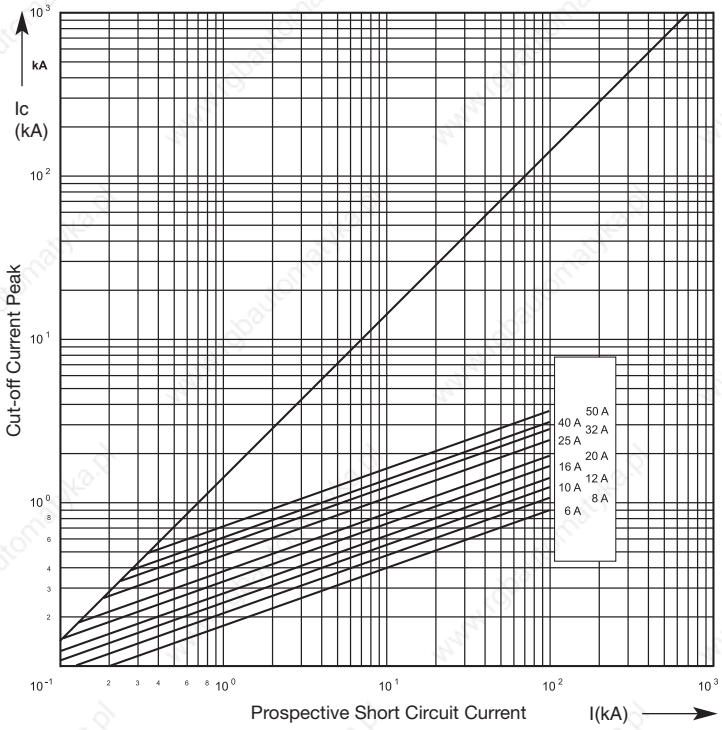

Time-Current Characteristics



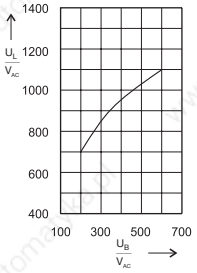
| Size | Rated Voltage | Class | Rated Breaking Capacity |
|---|---|---|---|
| 14 x 51 mm | AC 600 V | aR | 100 kA |

| Rated Current [A] | Part No. without Striker | Part No. with Striker | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ 500 V [$A^2s$] |
|---|---|---|---|---|---|
| 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 |

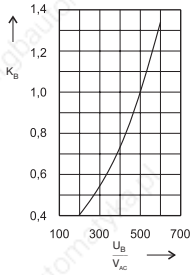
## Cut-Off Characteristics



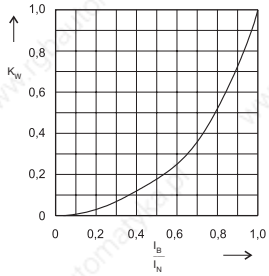

Arc voltage-Diagram



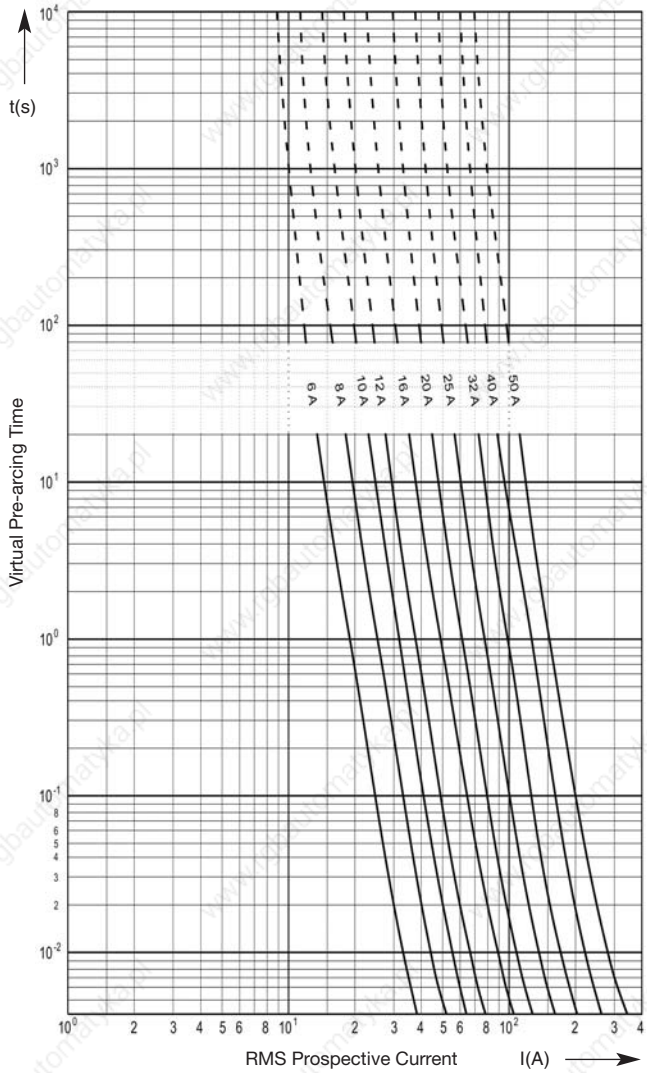

Reduction factor for total $I^2t$-value




Reduction factor for power loss



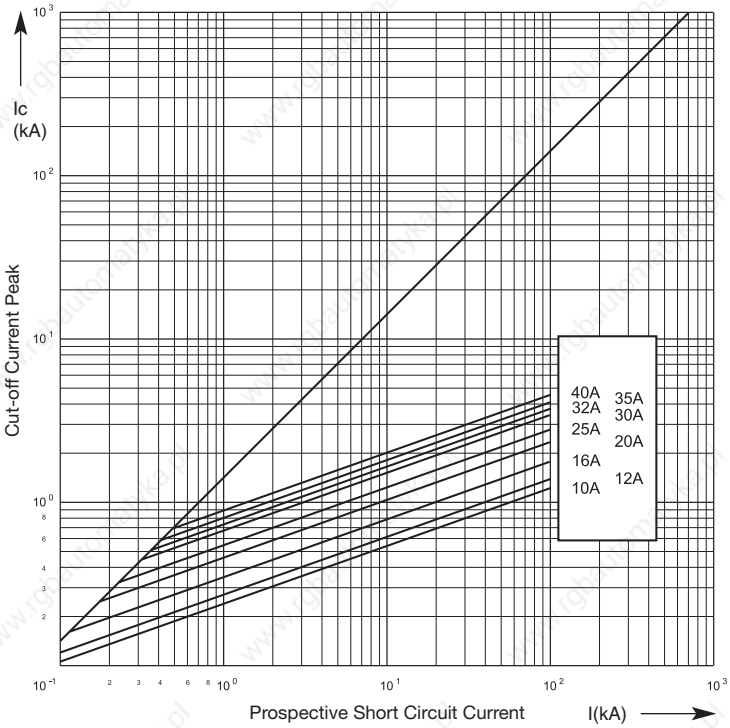

## Time-Current Characteristics



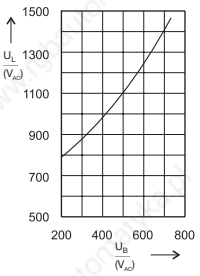
| Size | Rated Voltage | Operating Class | Rated Breaking Capacity |
|---|---|---|---|
| 14 x 51 mm | AC 690 V | gRL (gS) | 200 kA |

| Rated Current [A] | Part No. without Striker | Part No. with Striker | Part No. Fixing Center 63,5 mm | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ 690 V [$A^2s$] |
|---|---|---|---|---|---|---|
| 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 |

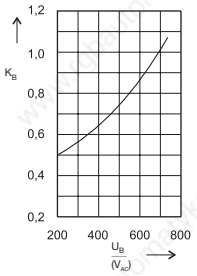
## Cut-Off Characteristics



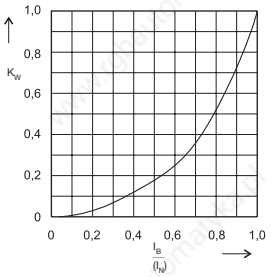

Arc voltage-Diagram



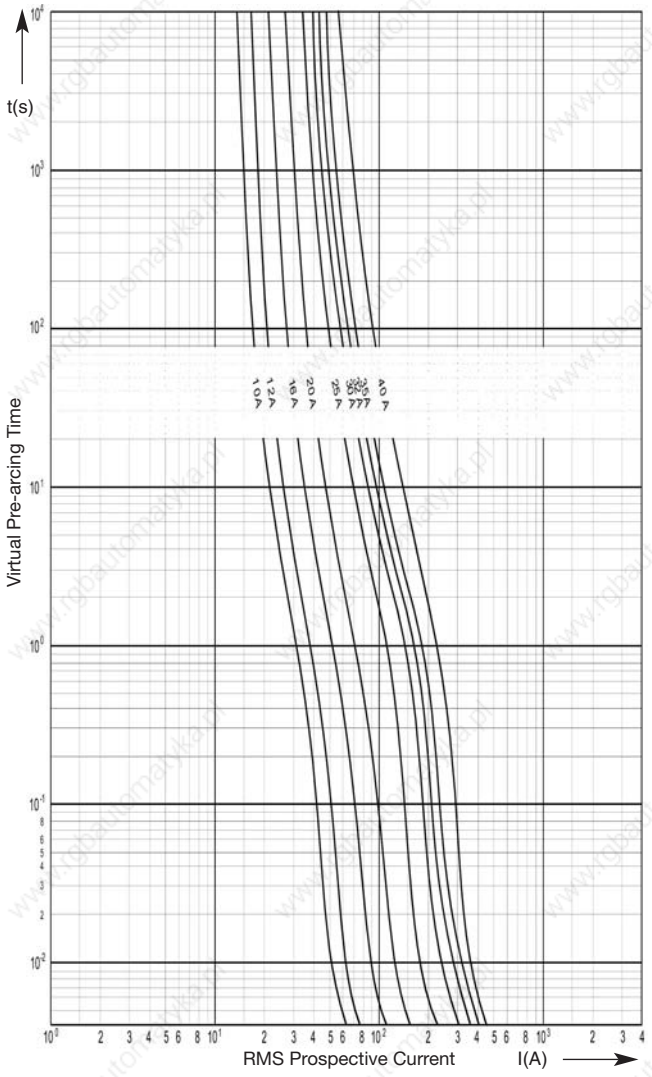

Reduction factor for total $I^2t$-value




Reduction factor for power loss



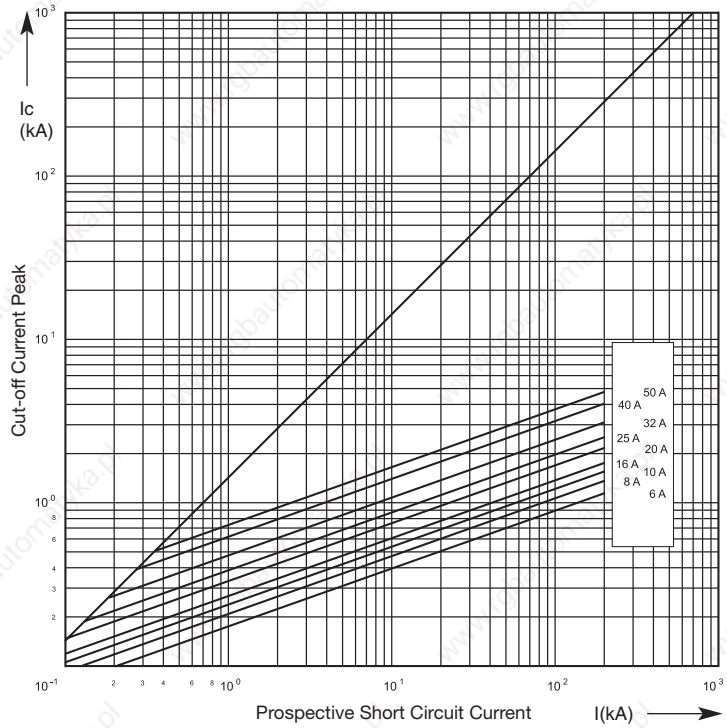

## Time-Current Characteristics



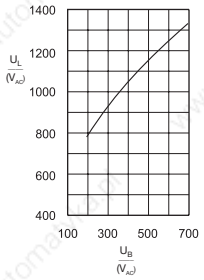
| Size | Rated Voltage | Class | Rated Breaking Capacity |
|---|---|---|---|
| 14 x 51 mm | AC 690 V (IEC) · AC 700 V (UL) | gR | 200 kA |

| Rated Current [A] | Part No. without Striker | Part No. with Striker | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ 660 V [$A^2s$] |
|---|---|---|---|---|---|
| 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 |

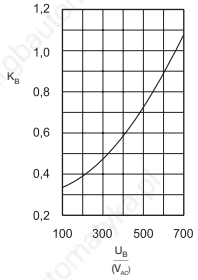
## Cut-Off Characteristics



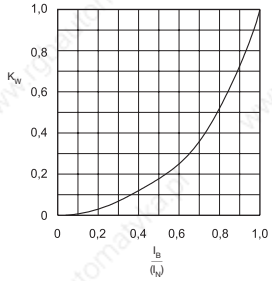

Arc voltage-Diagram



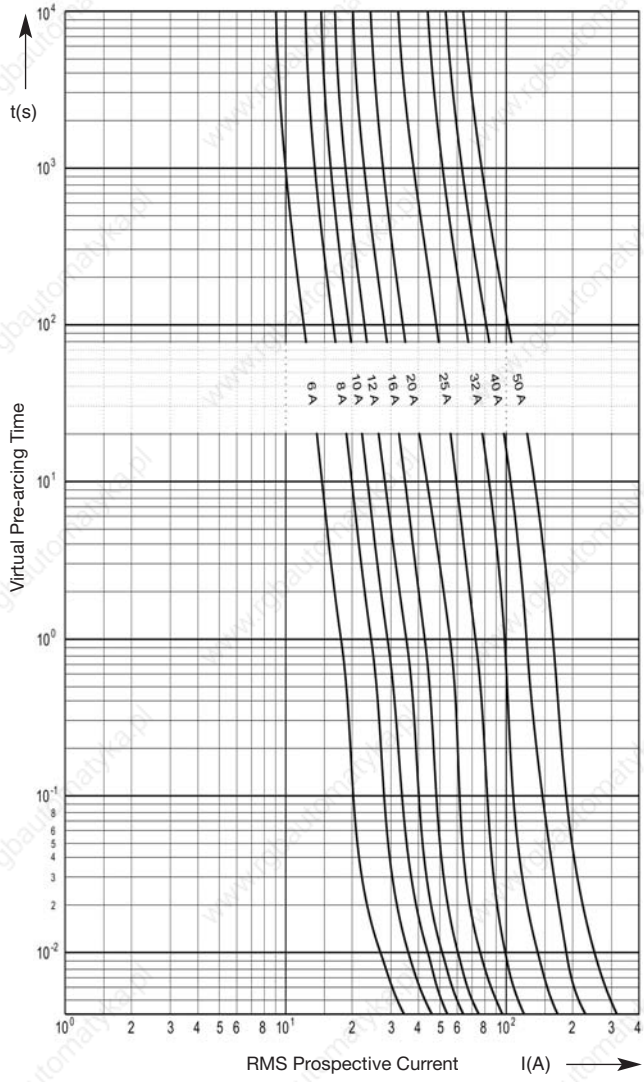

Reduction factor for total $I^2t$-value




Reduction factor for power loss



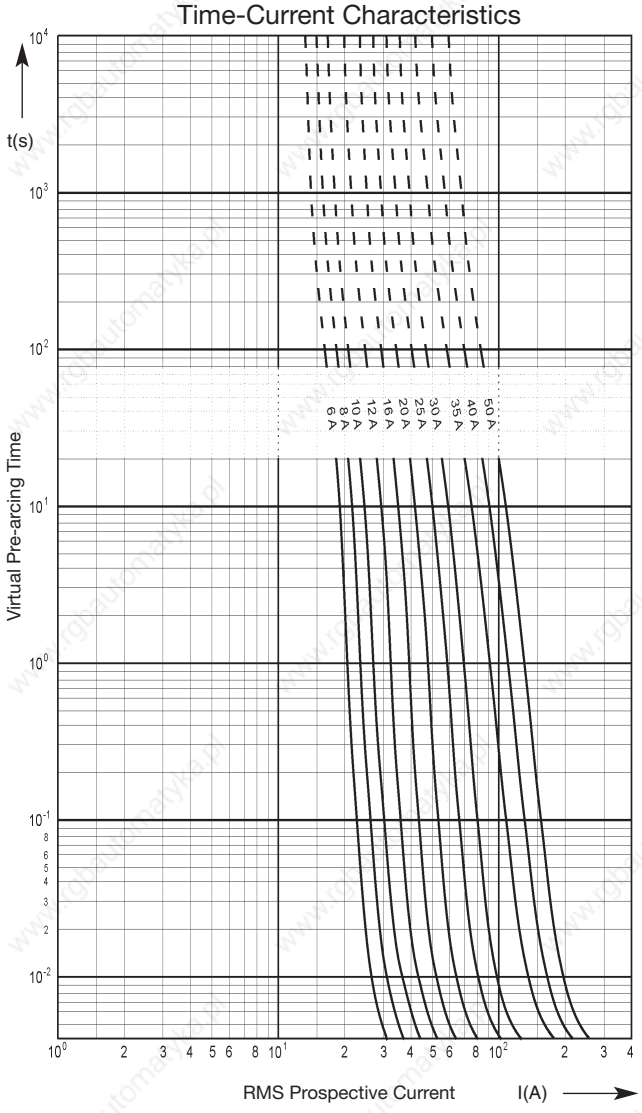

## Time-Current Characteristics



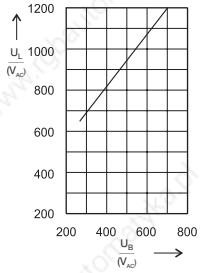
| Size | Rated Voltage | Class | Rated Breaking Capacity |
|---|---|---|---|
| 14 x 51 mm | DC 700 V | aR | 50 kA |

| Rated Current [A] | Part No. | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ 700 V [$A^2s$ (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 |

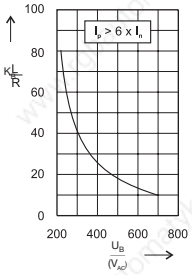
Time-Current Characteristics



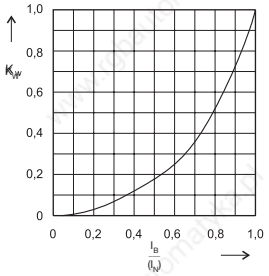

Arc voltage-Diagram




Reduction factor for total $I^2t$-value



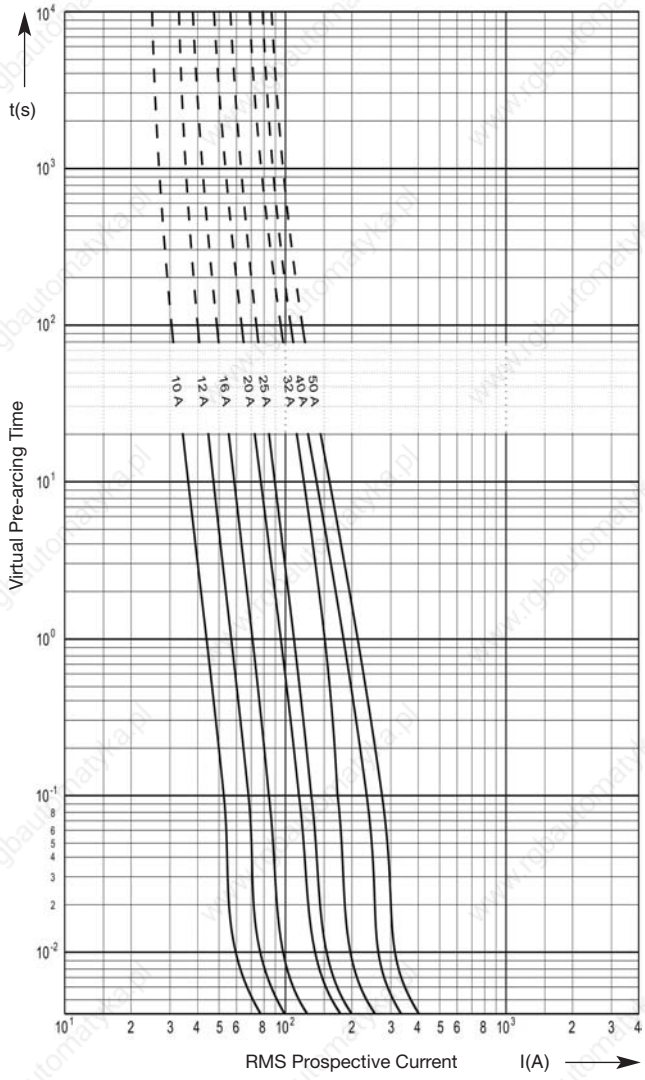

Reduction factor for power loss



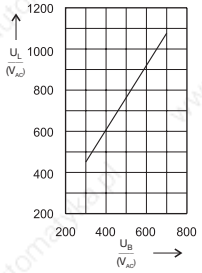
| Size | Rated Voltage | Class | Rated Breaking Capacity |
|---|---|---|---|
| 14 x 51 mm | DC 700 V | aR | 30 kA |

| Rated Current [A] | Part No. | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ 700 V [$A^2s$ (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 |

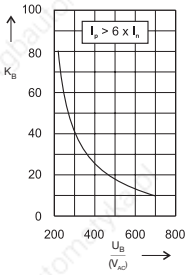
Time-Current Characteristics



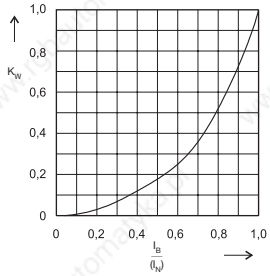

Arc voltage-Diagram




Reduction factor for total $I^2t$-value



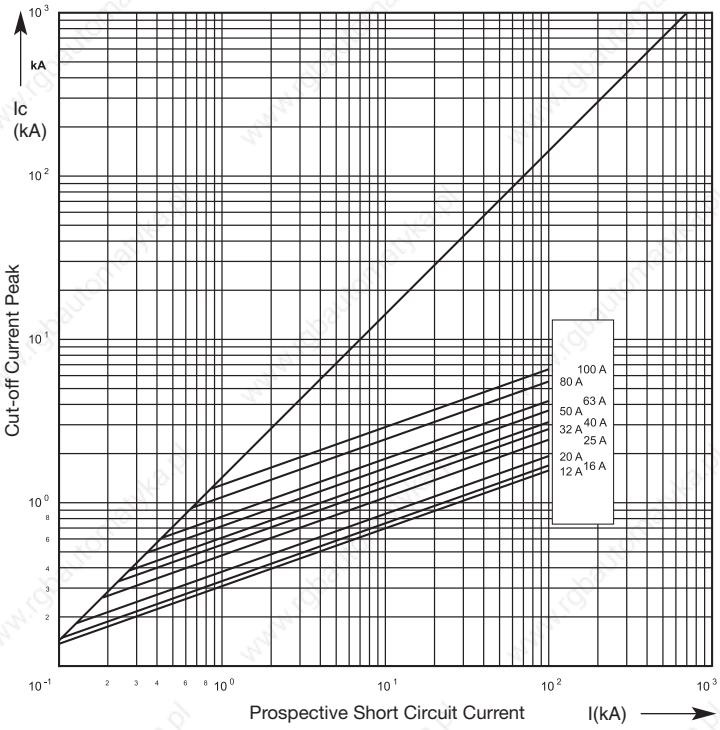

Reduction factor for power loss



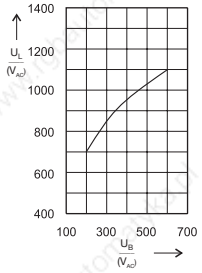
| Size | Rated Voltage | Class | Rated Breaking Capacity |
|---|---|---|---|
| 22 x 58 mm | AC 600 V | aR | 100 kA |

| Rated Current [A] | Part No. without Striker | Part No. with Striker | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ 500 V [$A^2s$] |
|---|---|---|---|---|---|
| 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 |

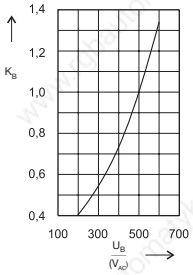
## Cut-Off Characteristics



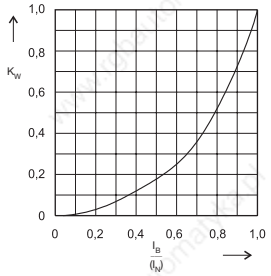

Arc voltage-Diagram



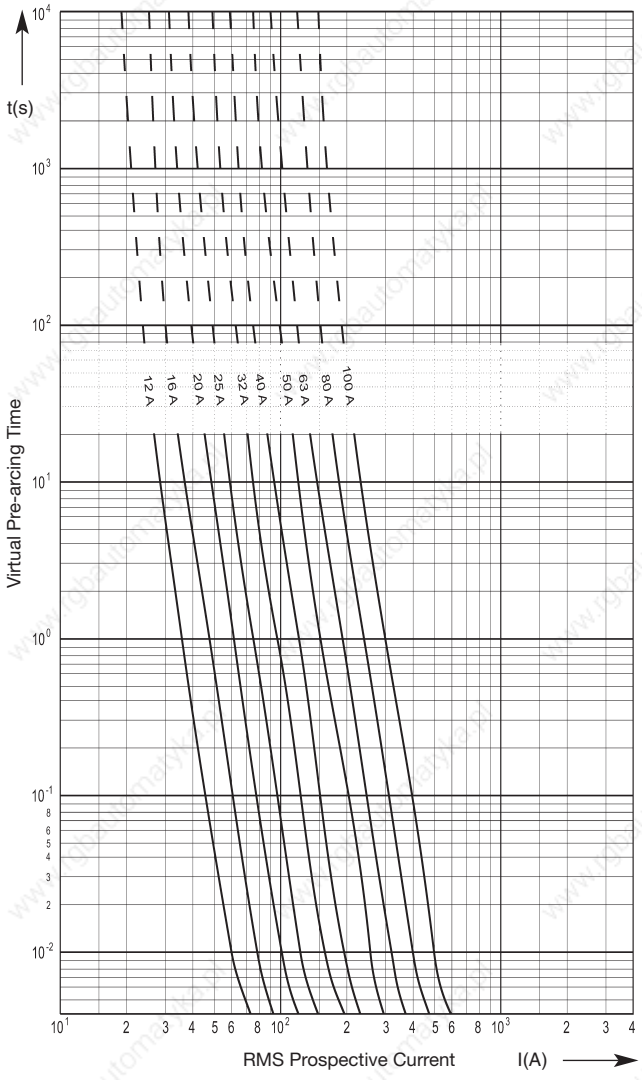

Reduction factor for total $I^2t$-value




Reduction factor for power loss




## Time-Current Characteristics

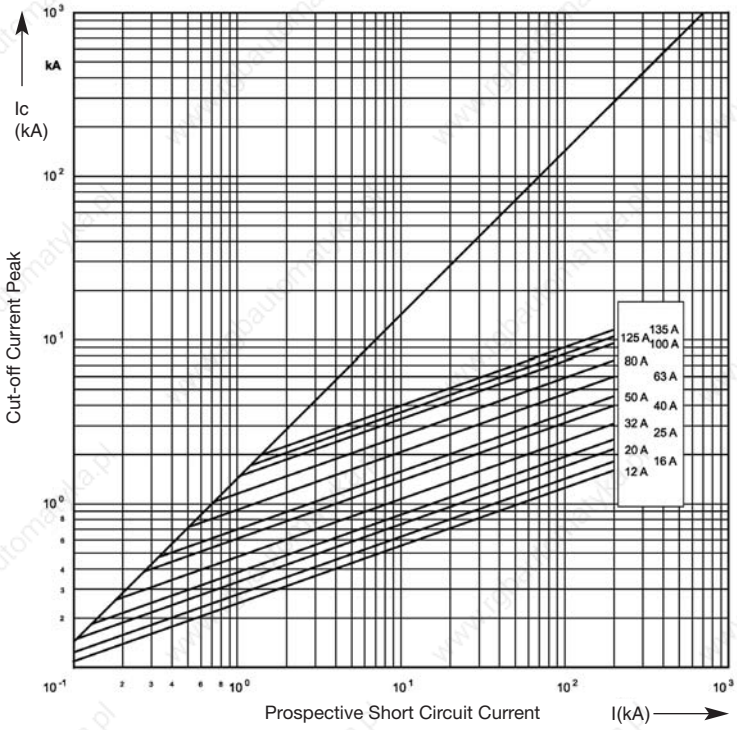


| Size | Rated Voltage | Class | Rated Breaking Capacity |
|---|---|---|---|
| 22 x 58 mm | AC 690 V (IEC) · AC 700 V (UL) | gR | 200 kA |

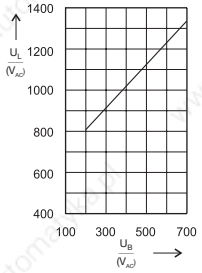
| Rated Current [A] | Part No. without Striker | Part No. with Striker | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ 660 V [$A^2s$] | Class |
|---|---|---|---|---|---|---|
| 12 | 50 140 06.12 | 50 142 06.12 | 4.8 | 8 | 35 | gR |
| 16 | 50 140 06.16 | 50 142 06.16 | 5.5 | 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

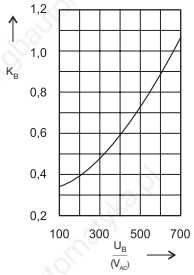
## Cut-Off Characteristics



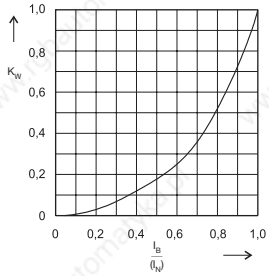

Arc voltage-Diagram



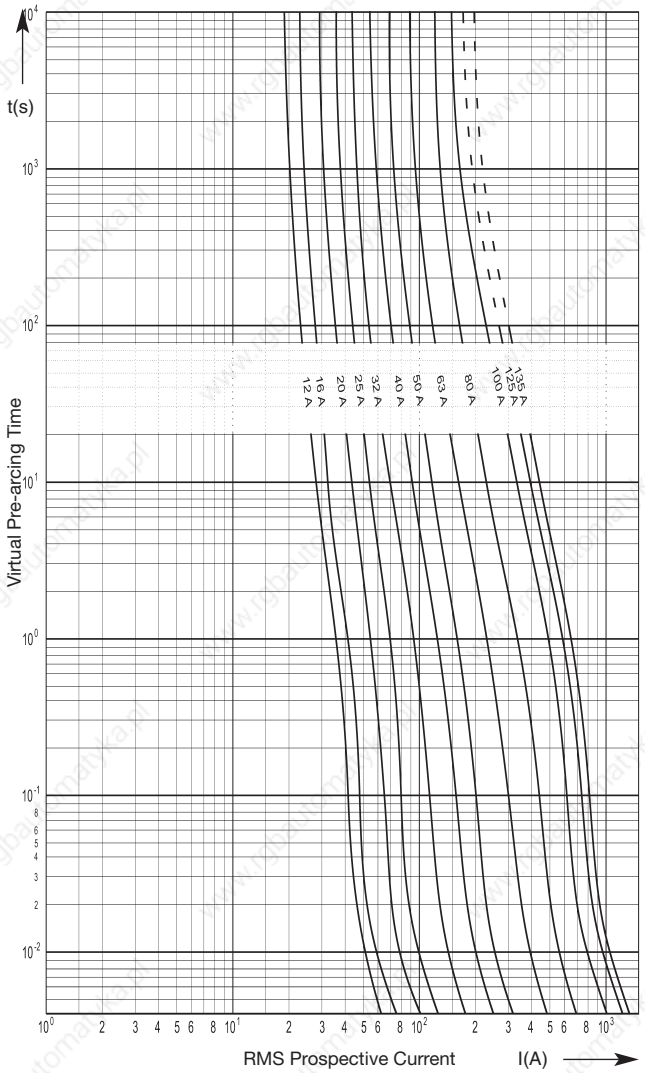

Reduction factor for total $I^2t$-value




Reduction factor for power loss



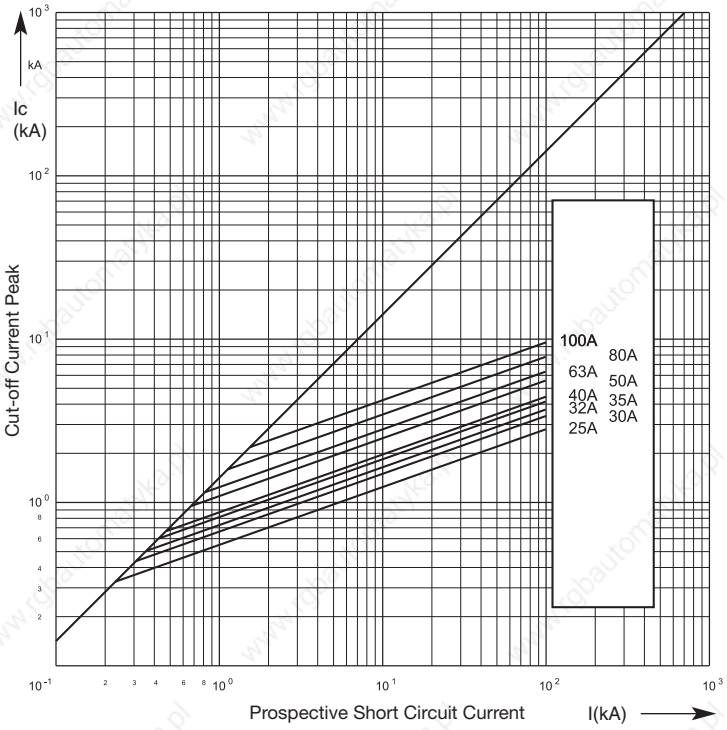

## Time-Current Characteristics



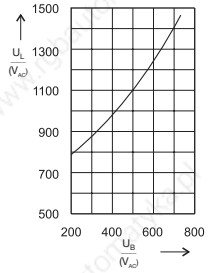
| Size | Rated voltage | Class | Rated Breaking Capacity |
|---|---|---|---|
| 22 x 58 mm | AC 690 V (IEC) · AC 700 V (UL) | gRL(gS) | 200 kA |

| Rated Current [A] | Part No. without Striker | Part No. with Striker | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ 660 V [$A^2s$] |
|---|---|---|---|---|---|
| 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 |

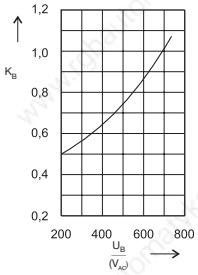
## Cut-Off Characteristics



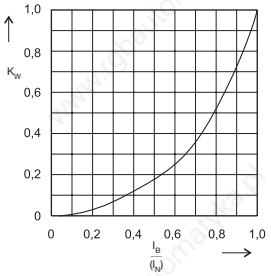

Arc voltage-Diagram



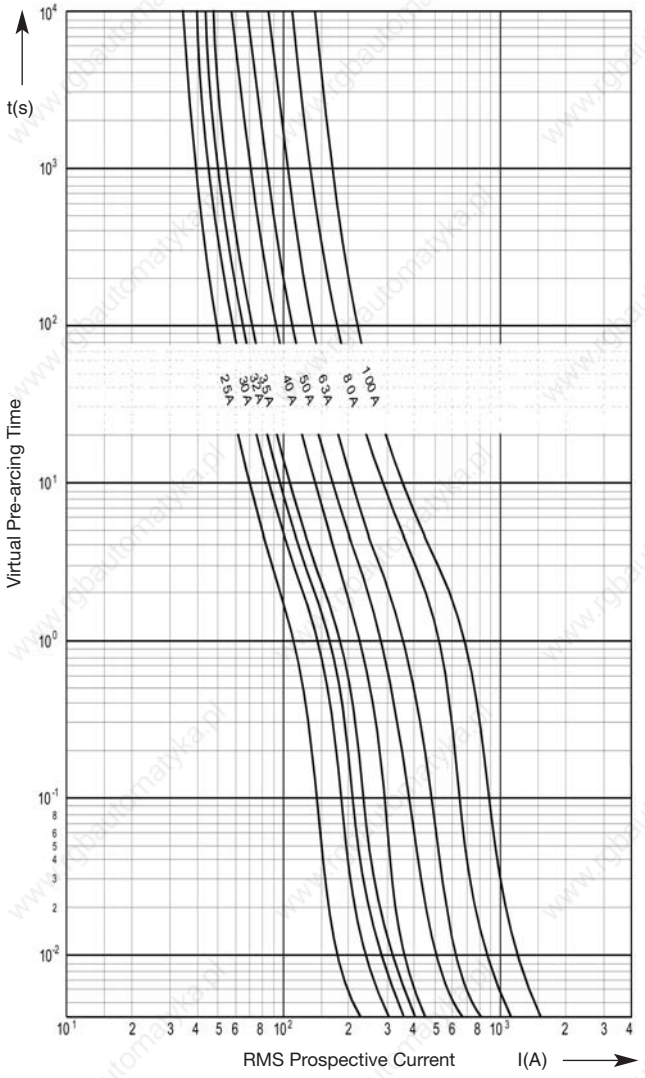

Reduction factor for total $I^2t$-value




Reduction factor for power loss



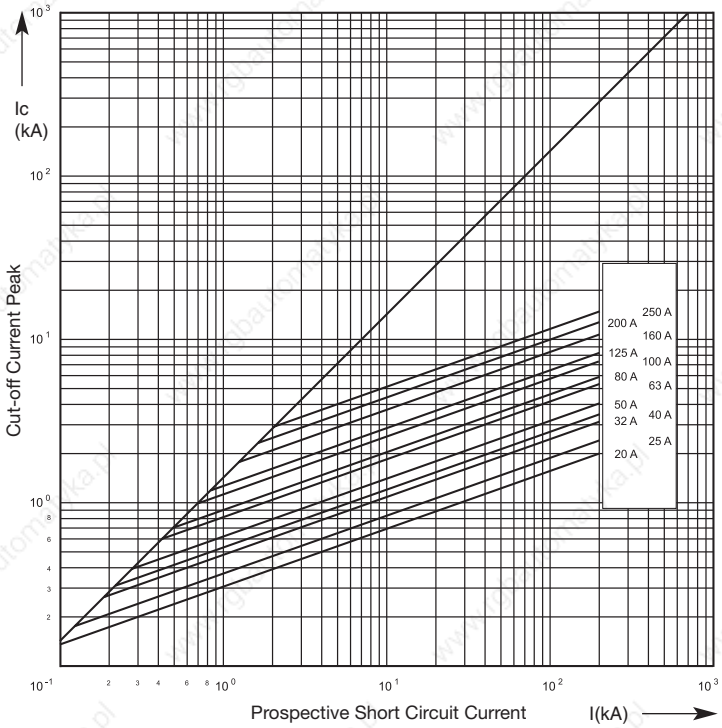

## Time-Current Characteristics



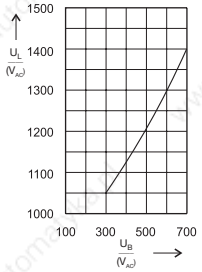
| Size | Rated Voltage | Class | Rated Breaking Capacity |
|---|---|---|---|
| 27 x 60 mm | AC 660 V | aR | 200 kA |

| Rated Current [A] | Part No. without Striker | Part No. with Striker | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ 660 V [$A^2s$] |
|---|---|---|---|---|---|
| 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 |

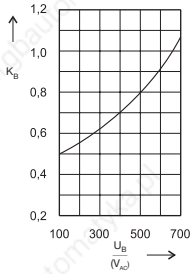
## Cut-Off Characteristics



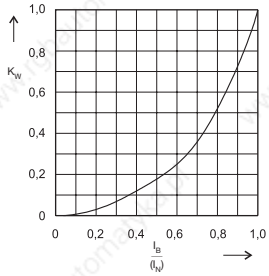

Arc voltage-Diagram



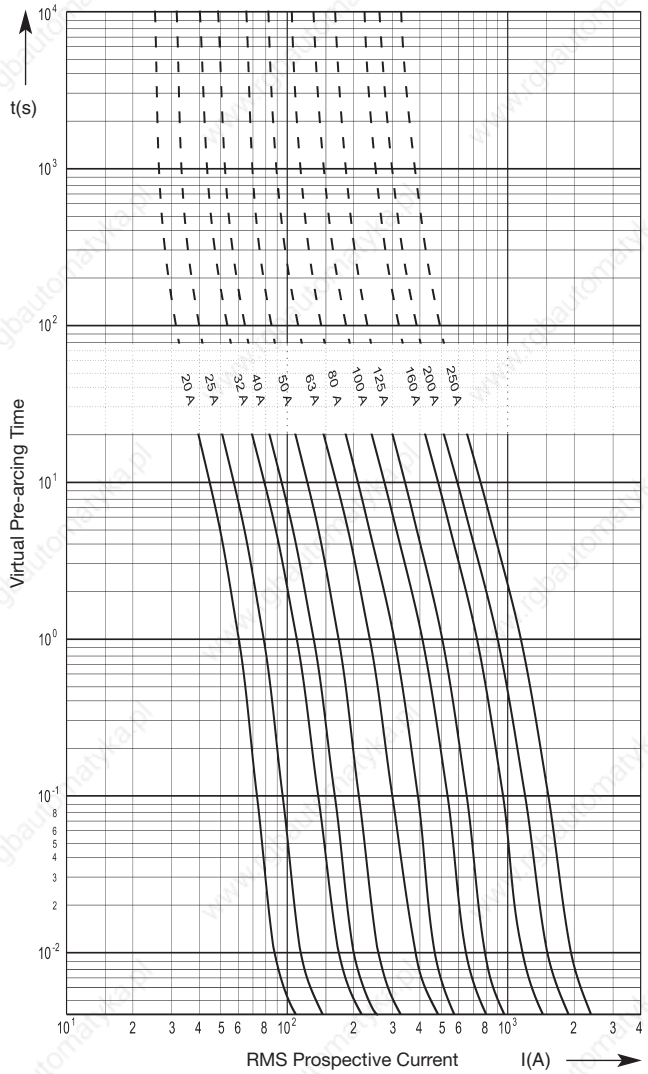

Reduction factor for total $I^2t$-value




Reduction factor for power loss



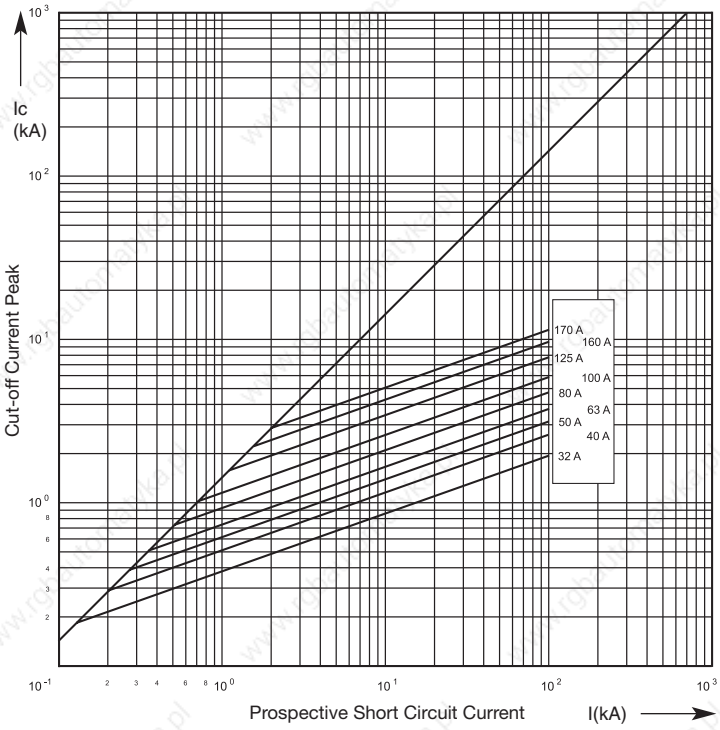

## Time-Current Characteristics



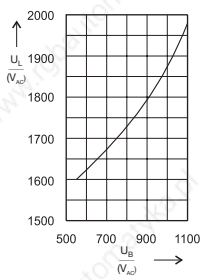
| Size | Rated Voltage | Class | Rated Breaking Capacity |
|---|---|---|---|
| 27 x 60 mm | AC 1000 V | aR | 100 kA |

| Rated Current [A] | Part No. without Striker | Part No. with Striker | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ 1000 V [$A^2s$] |
|---|---|---|---|---|---|
| 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 |

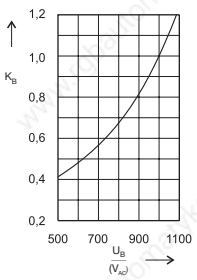
## Cut-Off Characteristics



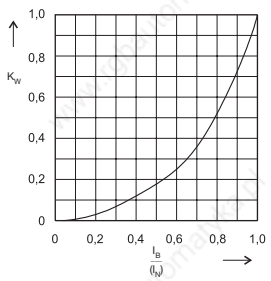

Arc voltage-Diagram



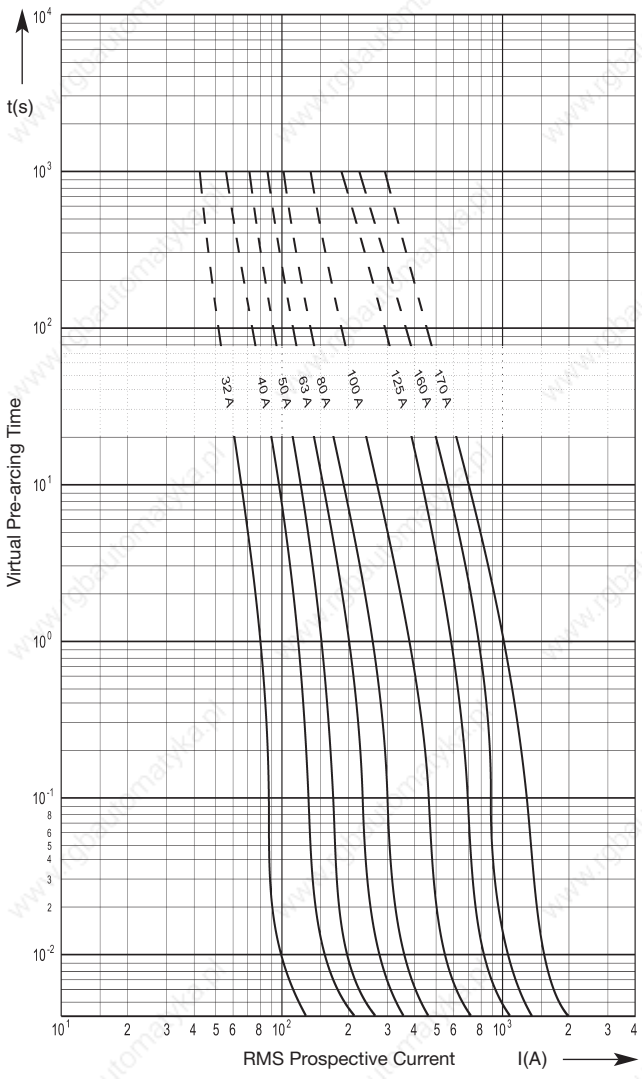

Reduction factor for total $I^2t$-value




Reduction factor for power loss



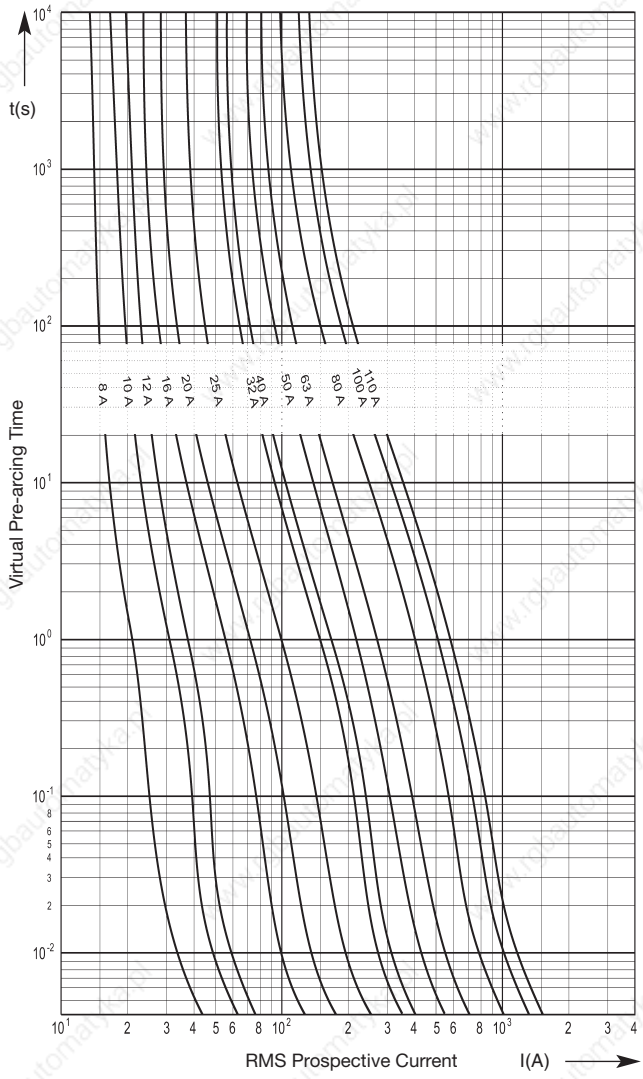

## Time-Current Characteristics



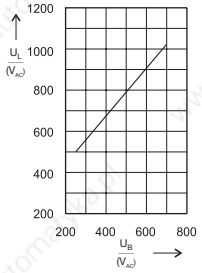
| Size | Rated Voltage | Class | Rated Breaking Capacity |
|---|---|---|---|
| 27 x 60 mm | DC 660 V | gR | 50 kA |

| Rated Current [A] | Part No. | Power Loss [W] | Pre-arcing $I^2t$-value [$A^2s$] | Total $I^2t$-value @ 600 V [$A^2s$] |
|---|---|---|---|---|
| 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 |

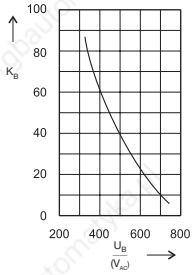
Time-Current Characteristics



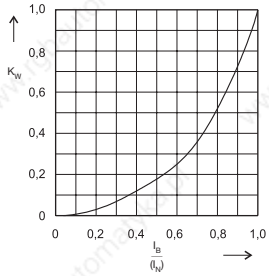

Arc voltage-Diagram




Reduction factor for total $I^2t$-value




Reduction factor for power loss



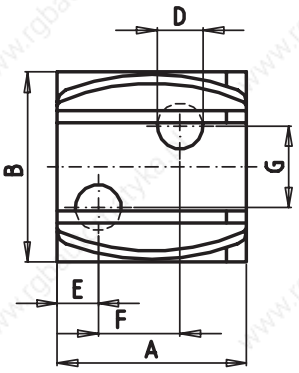
## Fuse-Clip Screw Mountable

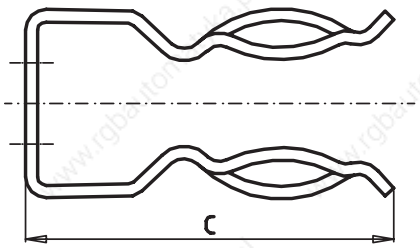
| Power Acceptance 4 W<br>61 017 01.2<br>Size 10 | |
|---|---|
| A | 0.50" (13 mm) |
| B | 0.55" (14 mm) |
| C | 0.70" (18 mm) |
| D | 0.17" (4.2 mm) |
| E | 0.20" (5 mm) |

| Power Acceptance 6 W<br>61 001 01.2<br>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<br>61 002 01.3<br>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) |

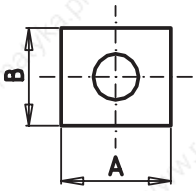
| Power Acceptance 12 W<br>61 004 01.3<br>Size 27 | |
|---|---|
| A | 1.06" (27 mm) |
| B | 2.30" (58.4 mm) |
| C | 4.55" (115.6 mm) |

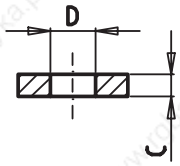



## Clamping Plate

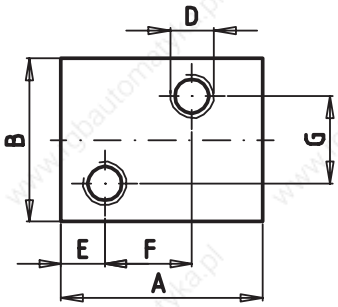
| Part No.<br>63 017 01 | |
|---|---|
| A | 0.40" (10 mm) |
| B | 0.35" (9 mm) |
| C | 0.08" (2 mm) |
| D | 0.17" (4.2 mm) |



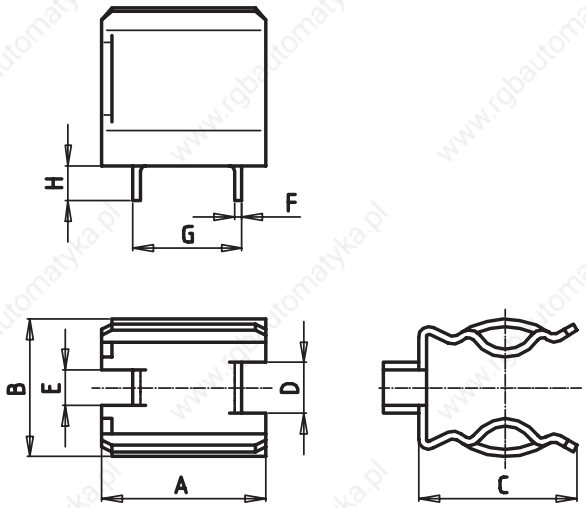

**To be used with fuse clips 61 017 01.2 and 61 001 01.2**

| Part No.<br>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**

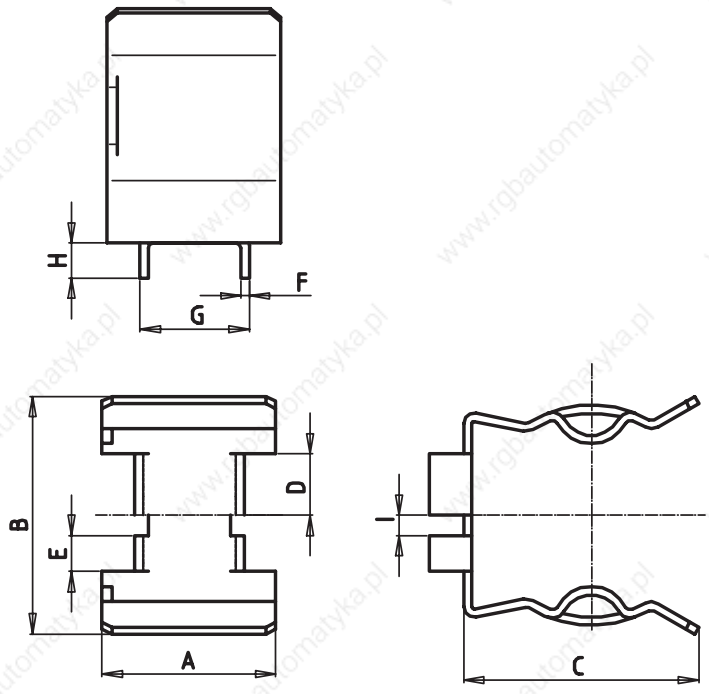
## Fuse-Clip PCB mountable




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

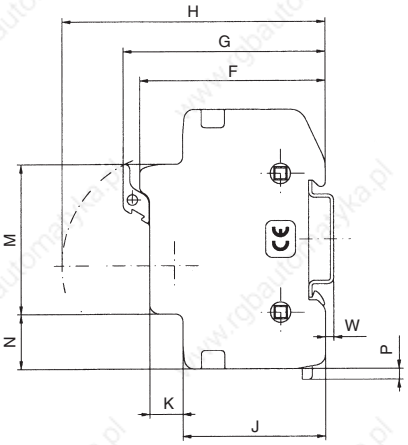
**Part No.** 51 063 04.DC for 1000 V DC

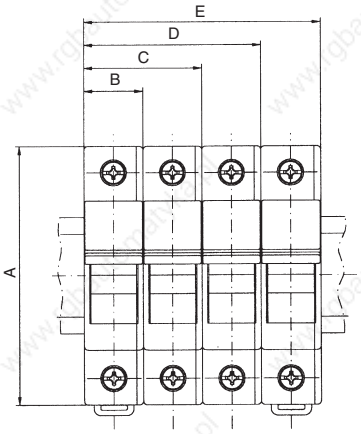
| | | |
|---|---|---|
| 51 063 04 | 51 063 04.L | 1 pol. |
| 51 063 04.2 | 51 063 04.2L | 2 pol. |
| 51 063 04.3 | 51 063 04.3L | 3 pol. |

L= Light Emitting Diode (LED) Indicator

Power Acceptance: **4 W**

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




## Size 14 x 51

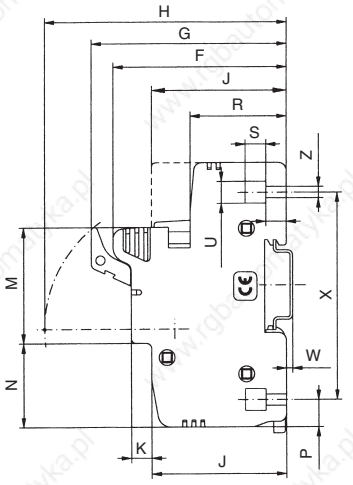
**Part No.**

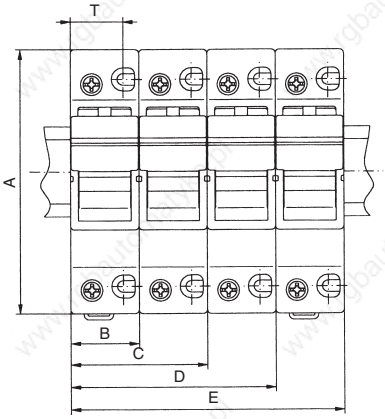
| | | |
|---|---|---|
| 51 058 04 | 51 058 04.S | 1 pol. |
| 51 058 04.2 | | 2 pol. |
| 51 058 04.3 | 51 058 04.3S | 3 pol. |

S= Micro switch

Power Acceptance: **6 W**

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



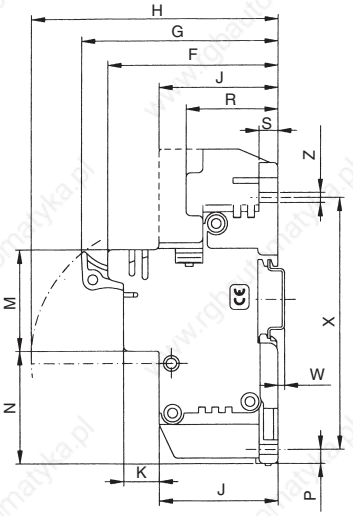
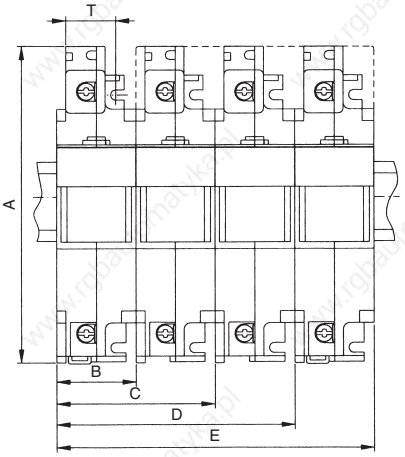




## Size 22 x 58

**Part No.**

| | | |
|---|---|---|
| 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**

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