

# Protistor® size 22x58 gR

690VAC (IEC) / 700VAC (UL)

## SEMICONDUCTOR PROTECTION FUSES

### IEC HIGH-SPEED CYLINDRICAL FUSE-LINKS AC PROTECTION



These Protistor® size 22x58 have been designed to protect power semiconductors, complying with standard IEC 60269-1 and -4.

They are extremely high interrupting rating fuses: 690 VAC, with large band of ratings (current rating 15 to 135 A).

Two models are existing: with or without trip-indicator

## TECHNICAL DATA OVERVIEW

|                        |              |
|------------------------|--------------|
| Ampere Range (A)       | 12 ... 135 A |
| Size per Standard      | 22x58        |
| Speed/Characteristic   | gR           |
| I.R. AC (IEC)          | 160 kA       |
| I.R. AC (UL)           | 200 kA       |
| I.R. DC (UL)           | 50 kA        |
| Rated voltage AC (IEC) | 690 V        |
| Rated voltage AC (UL)  | 700 V        |
| Rated voltage DC (UL)  | 500 V        |

## FEATURES & BENEFITS

- IEC standard 60269-4 compliant
- UL 248-13 compliant
- gR class
- Clearing all overloads
- Improved safety and protection
- Enabling selective coordination among all
- Distribution circuit fuses
- With or without trip-indicator

## STANDARDS

- IEC 60269-4
- UL recognized
- UL 248-13
- CCC GB 1539.4
- RoHS compliant



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## PRODUCT RANGE

### CP 22x58 gR with striker

| Catalog number | Reference number | Rated voltage AC (IEC) | Rated current I <sub>n</sub> | Pre-arcing I <sup>2</sup> t | Clearing I <sup>2</sup> t at Rated Voltage | Power dissipation at I <sub>n</sub> | Weight | Package |
|----------------|------------------|------------------------|------------------------------|-----------------------------|--|-------------------------------------|--------|---------|
| FR22GR69V12T   | W1018620         | 690 V                  | 12 A                         | 5.4 A <sup>2</sup> s        | 60 A <sup>2</sup> s                        | 4.4 W                               | 60 g   | 10      |
| FR22GR69V16T   | X1018621         | 690 V                  | 16 A                         | 13.1 A <sup>2</sup> s       | 125 A <sup>2</sup> s                       | 4.65 W                              | 60 g   | 10      |
| FR22GR69V20T   | Y1018622         | 690 V                  | 20 A                         | 17.1 A <sup>2</sup> s       | 160 A <sup>2</sup> s                       | 7 W                                 | 60 g   | 10      |
| FR22GR69V25T   | Z1018623         | 690 V                  | 25 A                         | 38.6 A <sup>2</sup> s       | 315 A <sup>2</sup> s                       | 7.65 W                              | 60 g   | 10      |
| FR22GR69V32T   | A1018624         | 690 V                  | 32 A                         | 77.4 A <sup>2</sup> s       | 670 A <sup>2</sup> s                       | 9.1 W                               | 60 g   | 10      |
| FR22GR69V40T   | B1018625         | 690 V                  | 40 A                         | 154 A <sup>2</sup> s        | 1050 A <sup>2</sup> s                      | 9.5 W                               | 60 g   | 10      |
| FR22GR69V50T   | C1018626         | 690 V                  | 50 A                         | 292 A <sup>2</sup> s        | 2050 A <sup>2</sup> s                      | 11.8 W                              | 60 g   | 10      |
| FR22GR69V63T   | D1018627         | 690 V                  | 63 A                         | 519 A <sup>2</sup> s        | 3350 A <sup>2</sup> s                      | 13.6 W                              | 60 g   | 10      |
| FR22GR69V80T   | E1018628         | 690 V                  | 80 A                         | 1240 A <sup>2</sup> s       | 7600 A <sup>2</sup> s                      | 13.8 W                              | 60 g   | 10      |
| FR22GR69V100T  | F1018629         | 690 V                  | 100 A                        | 2470 A <sup>2</sup> s       | 14500 A <sup>2</sup> s                     | 16 W                                | 60 g   | 10      |
| FR22GR69V125T  | G1018630         | 690 V                  | 125 A                        | 3360 A <sup>2</sup> s       | 16800 A <sup>2</sup> s                     | 22.8 W                              | 60 g   | 10      |
| FR22GR69V135T  | H1018631         | 690 V                  | 135 A                        | 4390 A <sup>2</sup> s       | 19800 A <sup>2</sup> s                     | 25.5 W                              | 60 g   | 10      |



FR22GR69V12

### CP 22x58 gR without striker

| Catalog number | Reference number | Rated voltage AC (IEC) | Rated current I <sub>n</sub> | Pre-arcing I <sup>2</sup> t | Clearing I <sup>2</sup> t at Rated Voltage | Power dissipation at I <sub>n</sub> | Weight | Package |
|----------------|------------------|------------------------|------------------------------|-----------------------------|--|-------------------------------------|--------|---------|
| FR22GR69V12    | W1018551         | 690 V                  | 12 A                         | 5.4 A <sup>2</sup> s        | 60 A <sup>2</sup> s                        | 4.4 W                               | 60 g   | 10      |
| FR22GR69V16    | X1018552         | 690 V                  | 16 A                         | 13.1 A <sup>2</sup> s       | 125 A <sup>2</sup> s                       | 4.65 W                              | 60 g   | 10      |
| FR22GR69V20    | Y1018553         | 690 V                  | 20 A                         | 17.1 A <sup>2</sup> s       | 160 A <sup>2</sup> s                       | 7 W                                 | 60 g   | 10      |
| FR22GR69V25    | Z1018554         | 690 V                  | 25 A                         | 38.6 A <sup>2</sup> s       | 315 A <sup>2</sup> s                       | 7.65 W                              | 60 g   | 10      |
| FR22GR69V32    | A1018555         | 690 V                  | 32 A                         | 77.4 A <sup>2</sup> s       | 670 A <sup>2</sup> s                       | 9.1 W                               | 60 g   | 10      |
| FR22GR69V40    | B1018556         | 690 V                  | 40 A                         | 154 A <sup>2</sup> s        | 1050 A <sup>2</sup> s                      | 9.5 W                               | 60 g   | 10      |
| FR22GR69V50    | C1018557         | 690 V                  | 50 A                         | 292 A <sup>2</sup> s        | 2050 A <sup>2</sup> s                      | 11.8 W                              | 60 g   | 10      |
| FR22GR69V63    | D1018558         | 690 V                  | 63 A                         | 519 A <sup>2</sup> s        | 3350 A <sup>2</sup> s                      | 13.6 W                              | 60 g   | 10      |
| FR22GR69V80    | E1018559         | 690 V                  | 80 A                         | 1240 A <sup>2</sup> s       | 7600 A <sup>2</sup> s                      | 13.8 W                              | 60 g   | 10      |
| FR22GR69V100   | F1018560         | 690 V                  | 100 A                        | 2470 A <sup>2</sup> s       | 14500 A <sup>2</sup> s                     | 16 W                                | 60 g   | 10      |
| FR22GR69V125   | G1018561         | 690 V                  | 125 A                        | 3360 A <sup>2</sup> s       | 16800 A <sup>2</sup> s                     | 22.8 W                              | 60 g   | 10      |
| FR22GR69V135   | H1018562         | 690 V                  | 135 A                        | 4390 A <sup>2</sup> s       | 19800 A <sup>2</sup> s                     | 25.5 W                              | 60 g   | 10      |

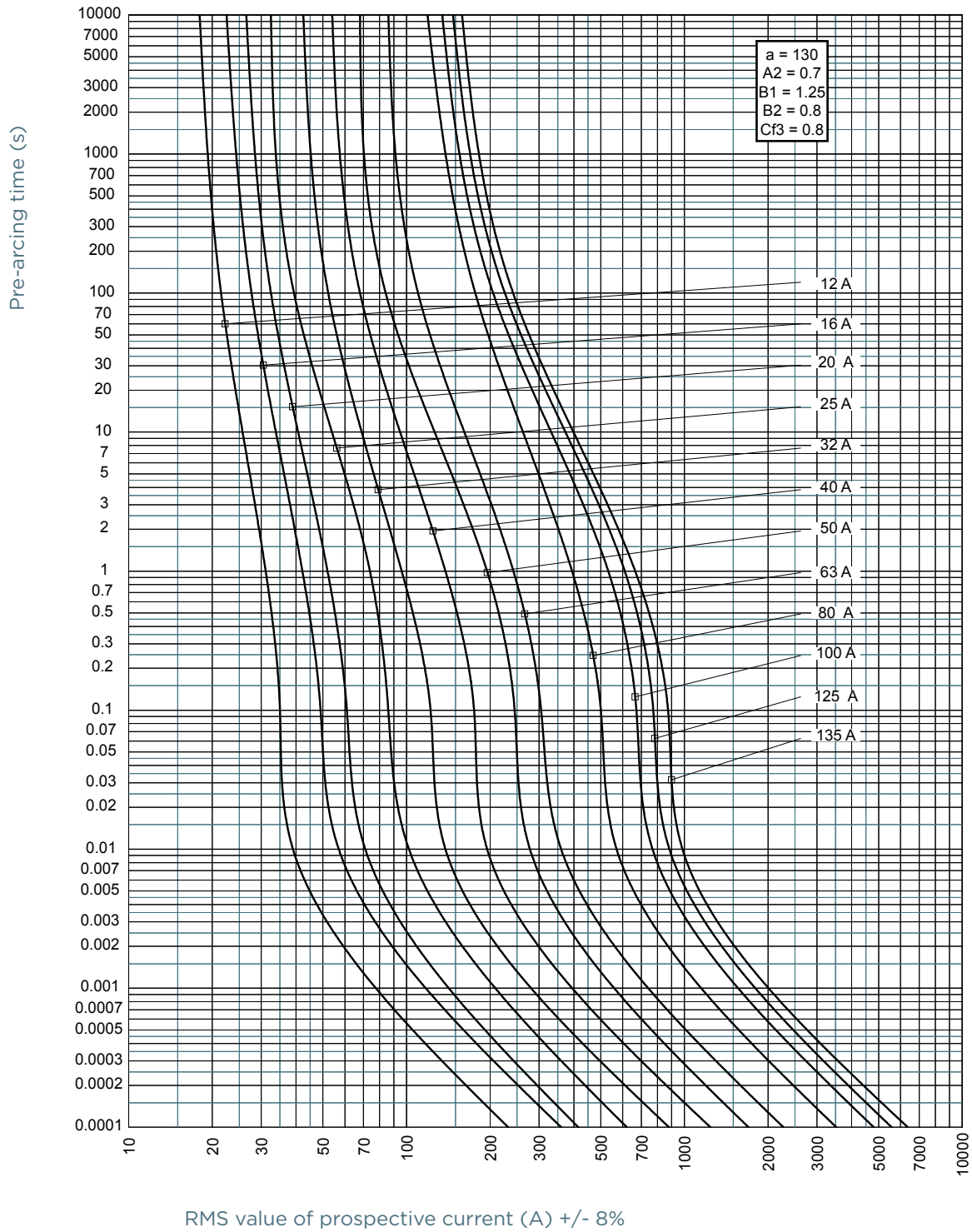
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# Protistor® size 22x58 gR

690VAC (IEC) / 700VAC (UL)

## TIME CURRENT CHARACTERISTIC CURVES

### Size 22x58 gR



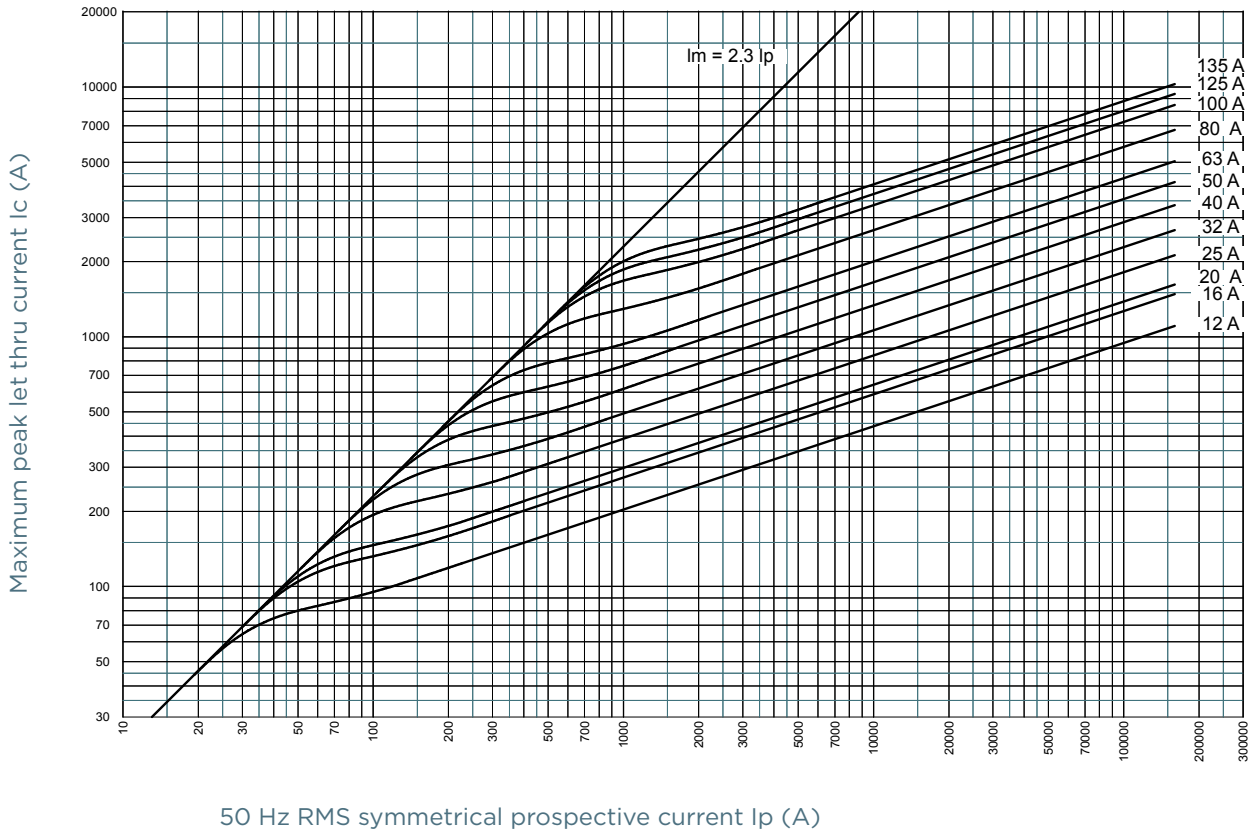
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690VAC (IEC) / 700VAC (UL)

## CUT-OFF CURRENT CHARACTERISTIC

### Size 22x58 gR



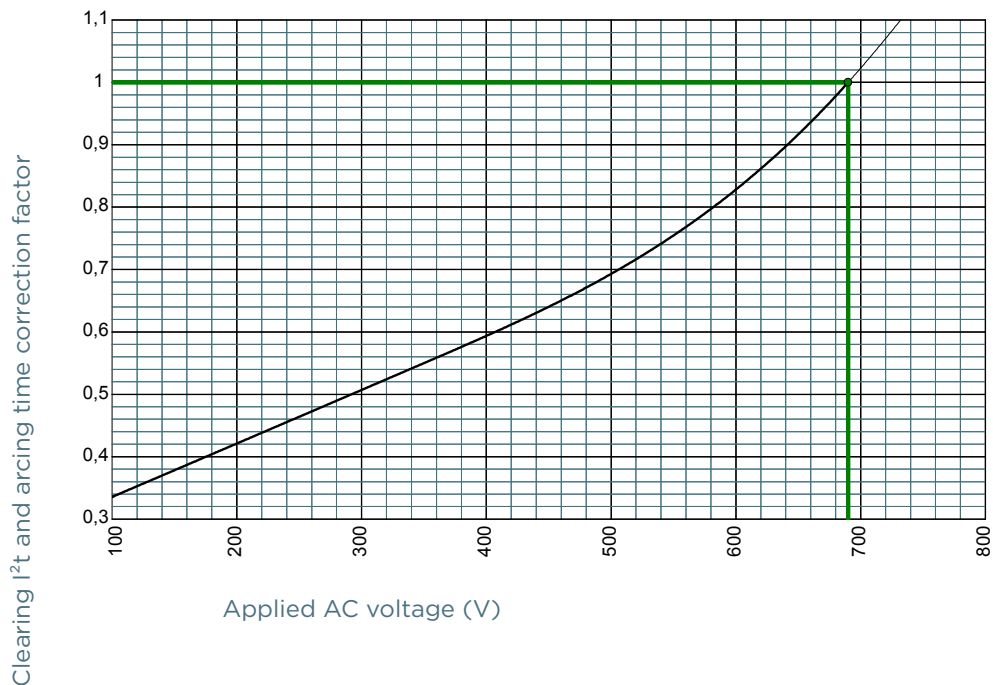
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690VAC (IEC) / 700VAC (UL)

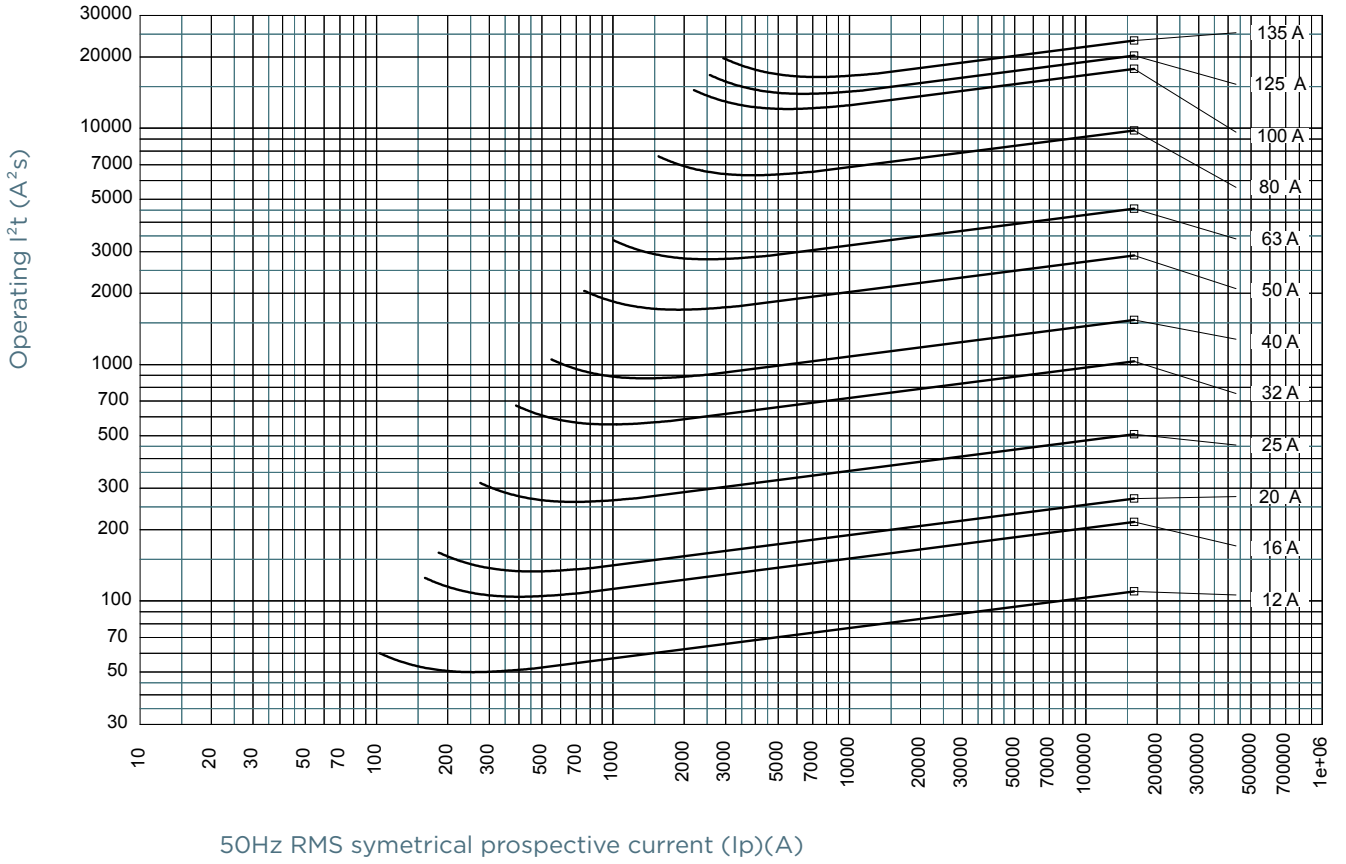
## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 22x58 gR



CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

Size 22x58 gR



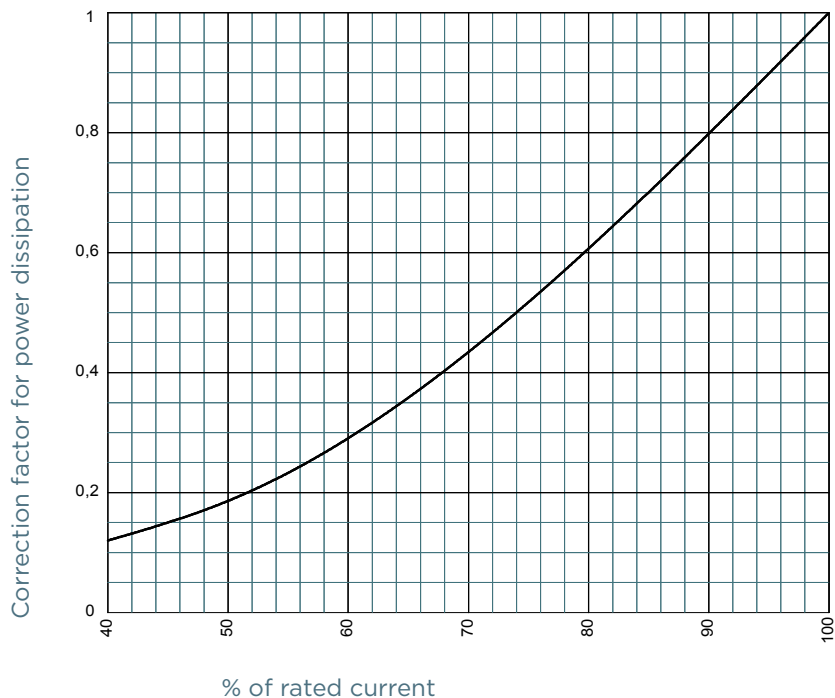
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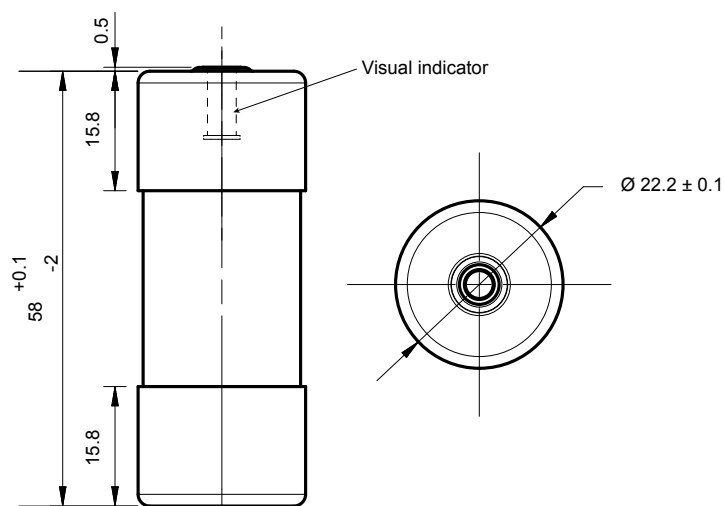
## POWER DISSIPATION

### Size 22x58 gR



## DIMENSIONS

### CP 22x58 gR with striker (100213)



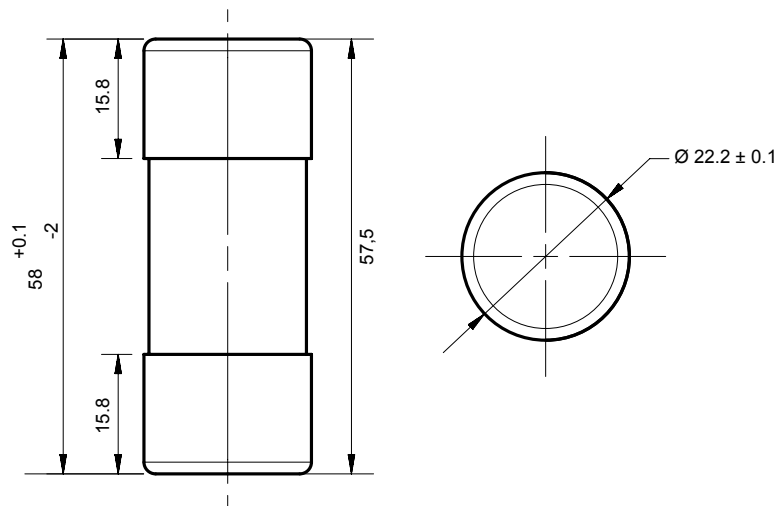
Dimensions in mm

# Protistor® size 22x58 gR

690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

CP 22x58 gR without striker (100214)



Dimensions in mm