

# Protistor® size 72 gR

690VAC (IEC)

## SEMICONDUCTOR PROTECTION FUSES

### SQUARE BODY HIGH-SPEED FUSE-LINKS AC PROTECTION



The 690V Protistor® fuse-links provide maximum flexibility in equipment design and ultimate protection for today's power conversion equipment. These square body fuse-links are available in different body sizes, each size having multiple worldwide acceptable mounting styles.

The Protistor® gR have been engineered to provide full range protection to eliminate all overloads and short circuit fault. Each fuse is assembled with pure silver, die-cut elements embedded in solidified sand, which helps control arcing characteristics for a lower  $I^2t$  and high interrupting rating level. All contact surfaces are silver plated and all hardware is non-magnetic.

All fuse-links can be equipped with a low voltage trip-indicator which can operate a field mountable microswitch.

## TECHNICAL DATA OVERVIEW

Voltage AC	690 VAC
Ampere Range (A)	200 ... 700 A
Speed/Characteristic	gR
I.R. AC (IEC)	150 kA
Product Size	72

## FEATURES & BENEFITS

- Excellent cycling capability
- Multiple body sizes and terminals or blades combination
- Extremely fast acting
- Eliminate all overloads
- Low  $I^2t$  for improved semiconductor protection
- gR Class according to IEC 60269-4 and VDE 636-23

## APPLICATIONS

- Protection of inverters, motor drives, UPS systems and similar 690V or less equipments.

## STANDARDS

- IEC 60269-4 Compliance



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### PRODUCT RANGE



PC72GB69V700TF

#### Size 72 type TTF-with one ISO metric threaded hole

Catalog number	Item 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	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC72GB69V200TF	F301328	690 V	200 A	4.2 kA <sup>2</sup> s	25 kA <sup>2</sup> s	150 kA	45 W	0.7333 kg	3
PC72GB69V250TF	G301329	690 V	250 A	8.6 kA <sup>2</sup> s	50 kA <sup>2</sup> s	150 kA	49 W	735 g	3
PC72GB69V315TF	H301330	690 V	315 A	17 kA <sup>2</sup> s	100 kA <sup>2</sup> s	150 kA	55 W	735 g	3
PC72GB69V350TF	W301710	690 V	350 A	23.2 kA <sup>2</sup> s	140 kA <sup>2</sup> s	150 kA	58 W	735 g	3
PC72GB69V400TF	J301331	690 V	400 A	34.1 kA <sup>2</sup> s	200 kA <sup>2</sup> s	150 kA	63 W	735 g	3
PC72GB69V450TF	X301711	690 V	450 A	47.3 kA <sup>2</sup> s	280 kA <sup>2</sup> s	150 kA	67 W	735 g	3
PC72GB69V500TF	K301332	690 V	500 A	68 kA <sup>2</sup> s	400 kA <sup>2</sup> s	150 kA	69 W	735 g	3
PC72GB69V550TF	L301333	690 V	550 A	84.1 kA <sup>2</sup> s	495 kA <sup>2</sup> s	150 kA	75 W	735 g	3
PC72GB69V630TF	M301334	690 V	630 A	123.8 kA <sup>2</sup> s	730 kA <sup>2</sup> s	150 kA	81 W	735 g	3
PC72GB69V700TF	Y301712	690 V	700 A	154.8 kA <sup>2</sup> s	910 kA <sup>2</sup> s	150 kA	89 W	735 g	3



PC72GB69V630EF

#### Size 72 type EF for bolted connections

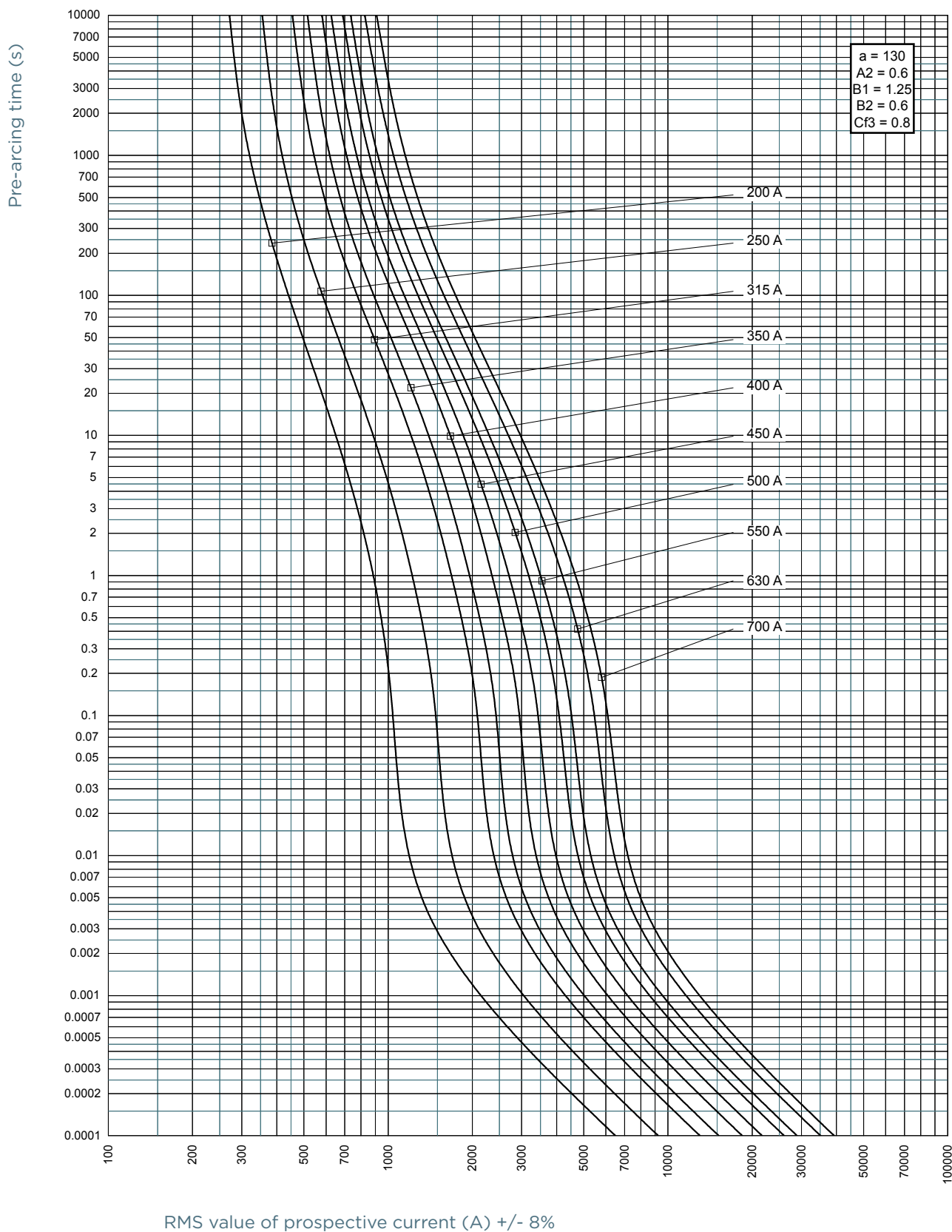
Catalog number	Item number	Rated voltage AC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC72GB69V200EF	N301335	690 V	200 A	4.2 kA <sup>2</sup> s	25 kA <sup>2</sup> s	150 kA	45 W	0.758 kg	3
PC72GB69V250EF	P301336	690 V	250 A	8.6 kA <sup>2</sup> s	50 kA <sup>2</sup> s	150 kA	50 W	0.758 kg	3
PC72GB69V315EF	Q301337	690 V	315 A	17 kA <sup>2</sup> s	100 kA <sup>2</sup> s	150 kA	57 W	0.758 kg	3
PC72GB69V400EF	R301338	690 V	400 A	23.2 kA <sup>2</sup> s	140 kA <sup>2</sup> s	150 kA	65 W	0.758 kg	3
PC72GB69V500EF	S301339	690 V	500 A	34.1 kA <sup>2</sup> s	200 kA <sup>2</sup> s	150 kA	72 W	0.758 kg	3
PC72GB69V550EF	T301340	690 V	550 A	84.1 kA <sup>2</sup> s	495 kA <sup>2</sup> s	150 kA	78 W	0.758 kg	3
PC72GB69V630EF	V301341	690 V	630 A	123.8 kA <sup>2</sup> s	730 kA <sup>2</sup> s	150 kA	86 W	0.758 kg	3

#### Size 72 type DIN110

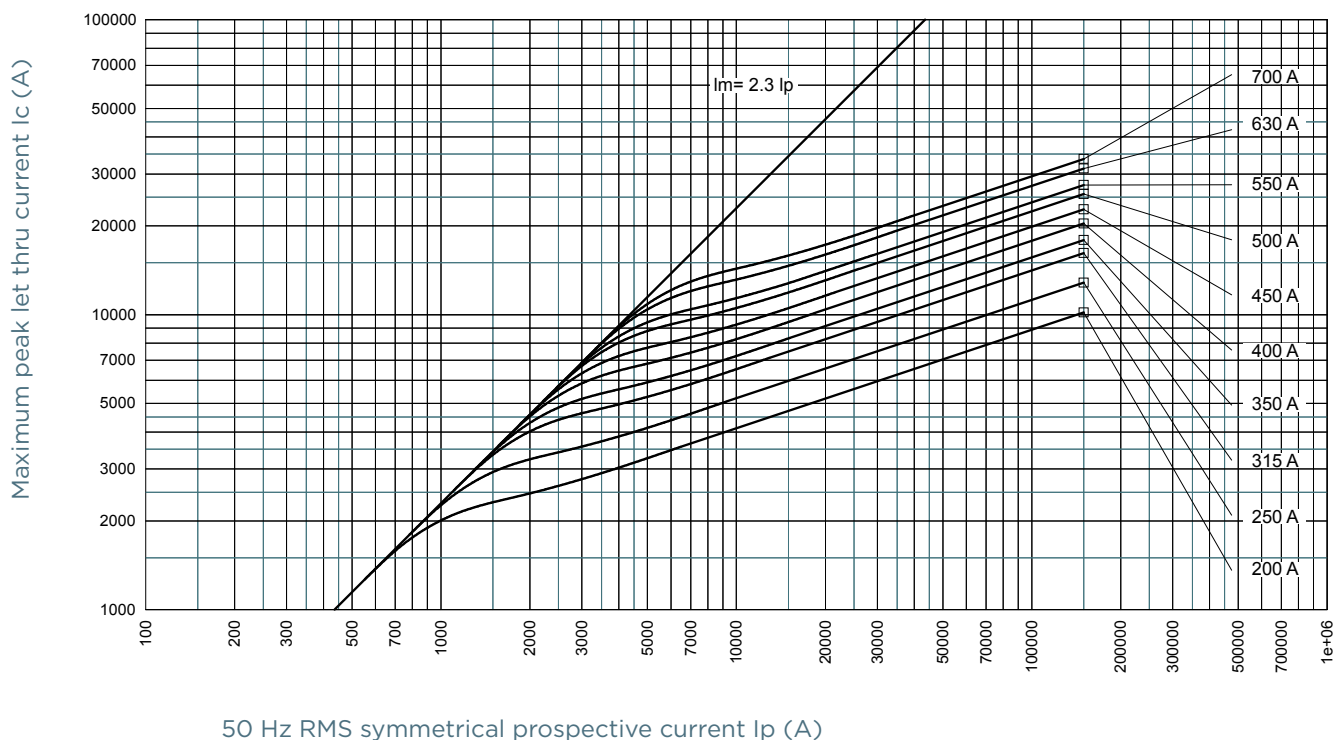
Catalog number	Item number	Rated voltage AC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC72GB69V250D1A	T302697	690 V	250 A	8.6 kA <sup>2</sup> s	50 kA <sup>2</sup> s	150 kA	50 W	0.8 kg	3
PC72GB69V315D1A	V302698	690 V	315 A	17 kA <sup>2</sup> s	100 kA <sup>2</sup> s	150 kA	57 W	0.7033 kg	3
PC72GB69V350D1A	E302500	690 V	350 A	23.2 kA <sup>2</sup> s	140 kA <sup>2</sup> s	150 kA	60 W	0.7033 kg	3
PC72GB69V400D1A	V302215	690 V	400 A	34.1 kA <sup>2</sup> s	200 kA <sup>2</sup> s	150 kA	65 W	0.7333 kg	3
PC72GB69V450D1A	Q302671	690 V	450 A	47.3 kA <sup>2</sup> s	280 kA <sup>2</sup> s	150 kA	70 W	0.7033 kg	3
PC72GB69V550D1A	L301724	690 V	550 A	84.1 kA <sup>2</sup> s	495 kA <sup>2</sup> s	150 kA	78 W	0.7033 kg	3
PC72GB69V630D1A	J1001888	690 V	630 A	123.8 kA <sup>2</sup> s	730 kA <sup>2</sup> s	150 kA	86 W	705 g	3

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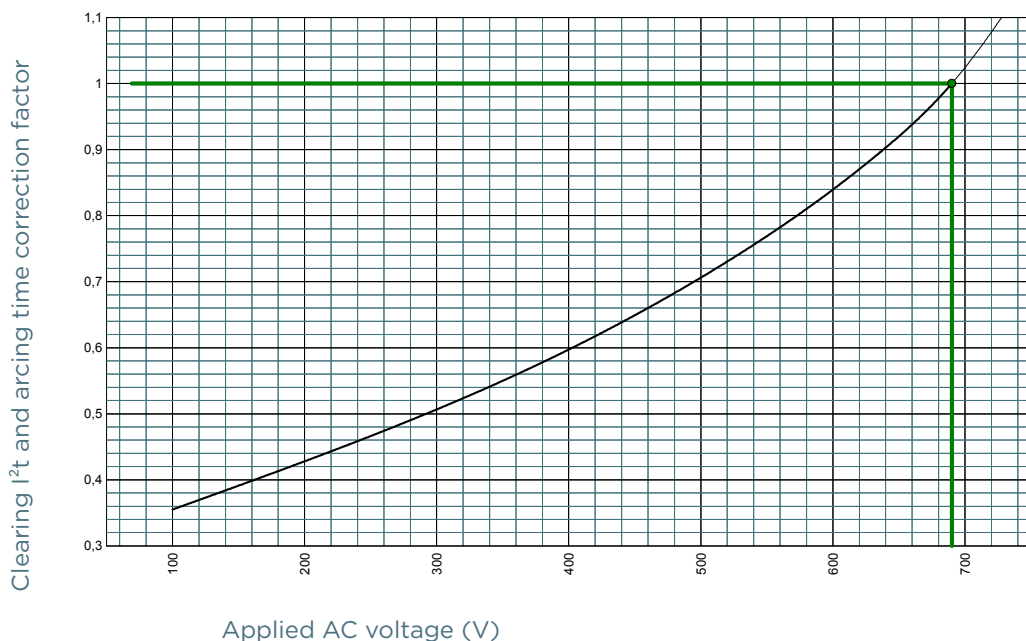
## TIME CURRENT CHARACTERISTIC CURVES



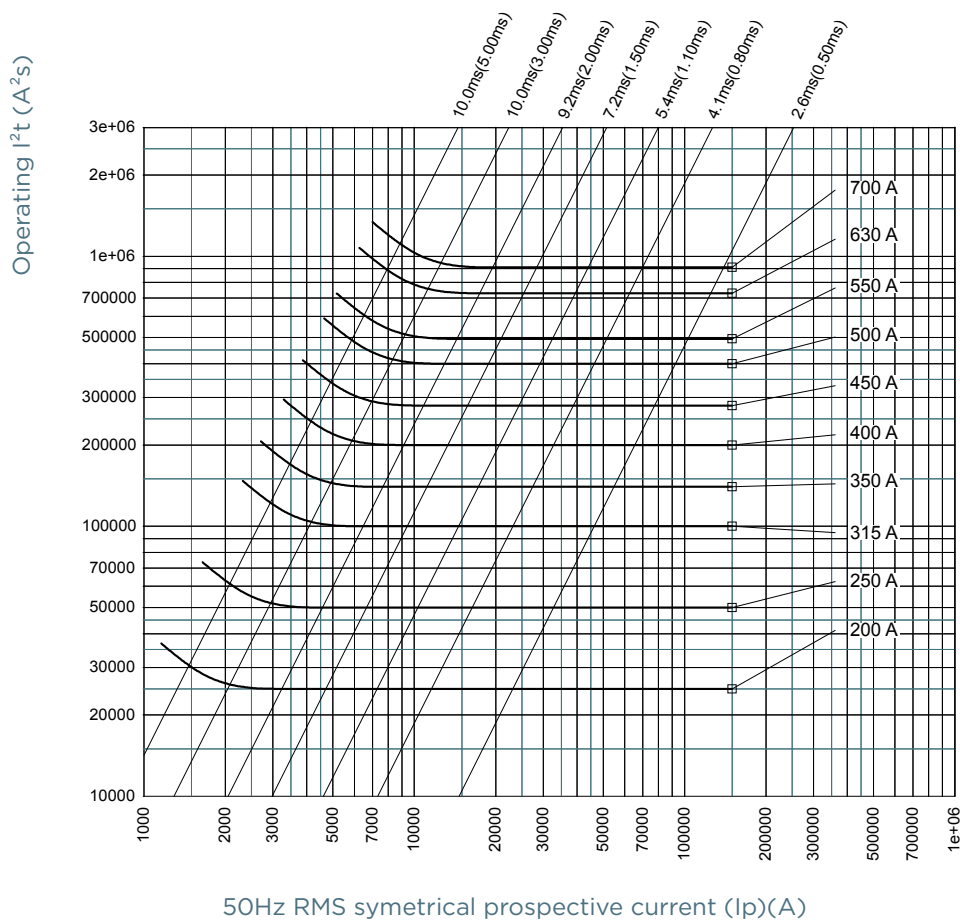
## CUT-OFF CURRENT CHARACTERISTIC



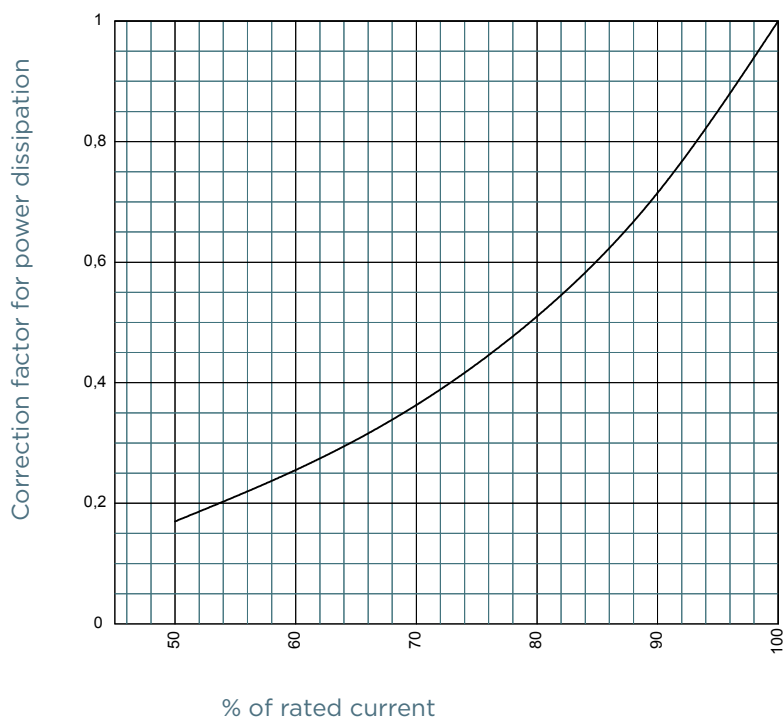
## I<sup>2</sup>T MULTIPLIER COEFFICIENT



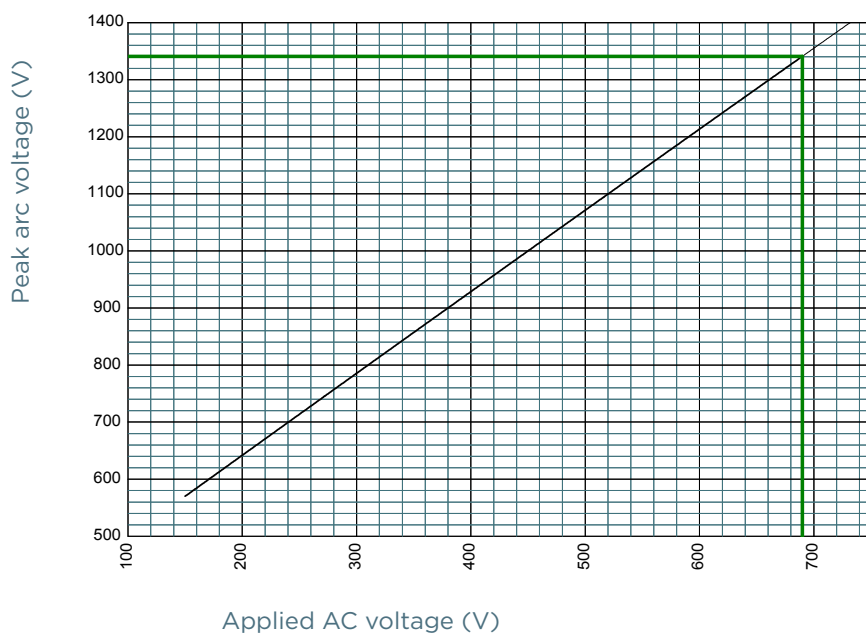
## CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE



## POWER DISSIPATION



## PEAK ARC VOLTAGE

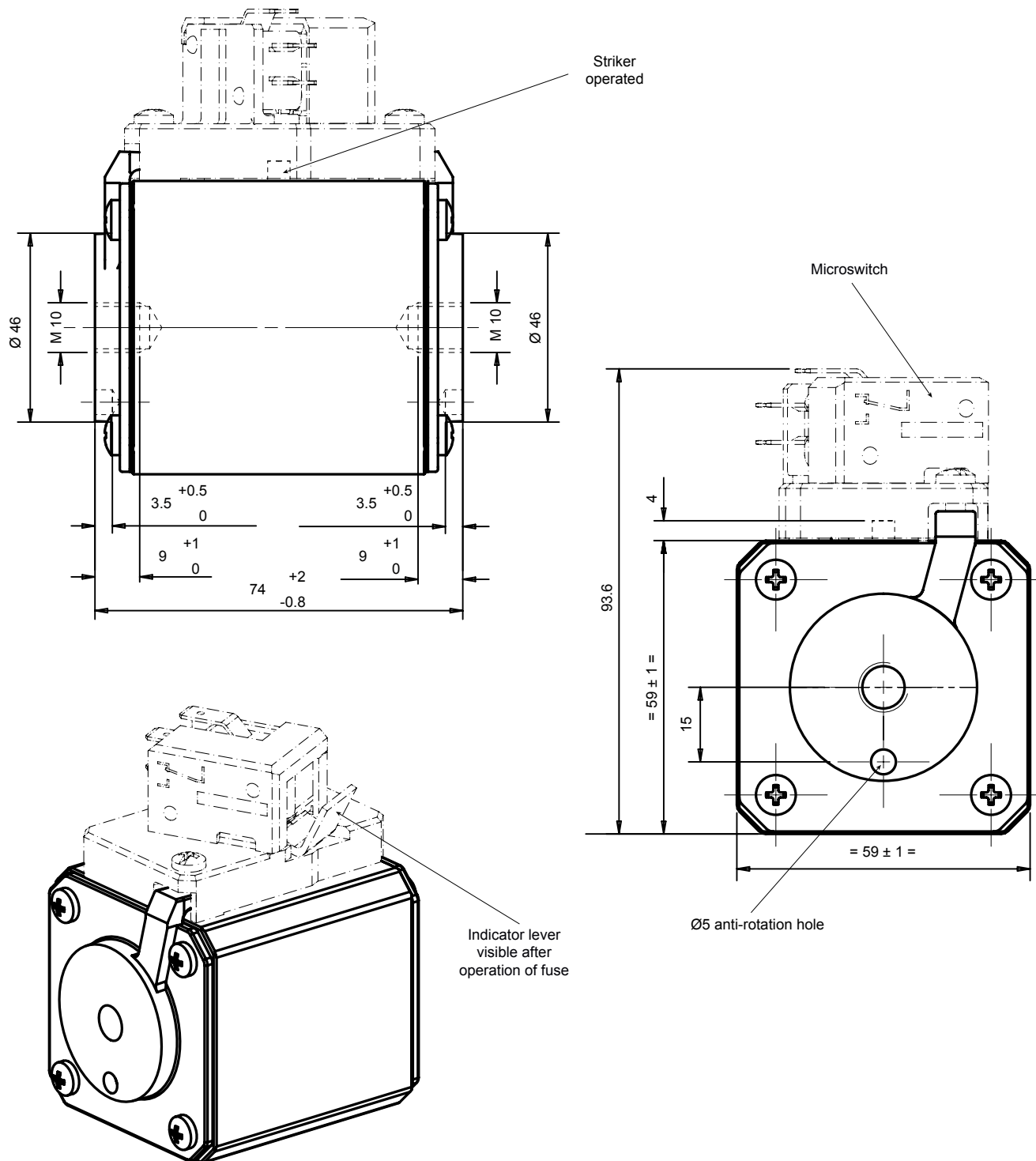


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## DIMENSIONS

### Size 72 gR TTF



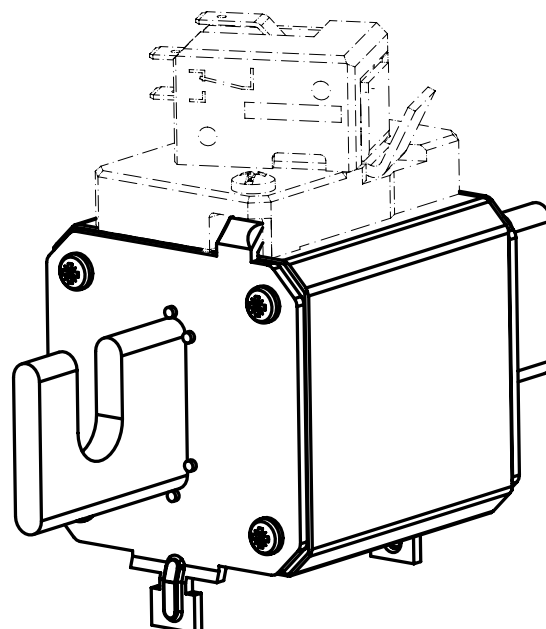
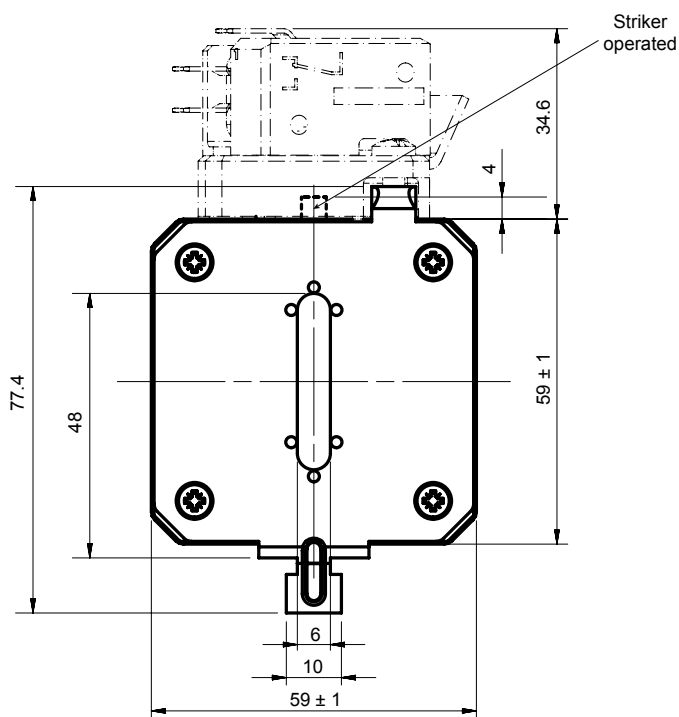
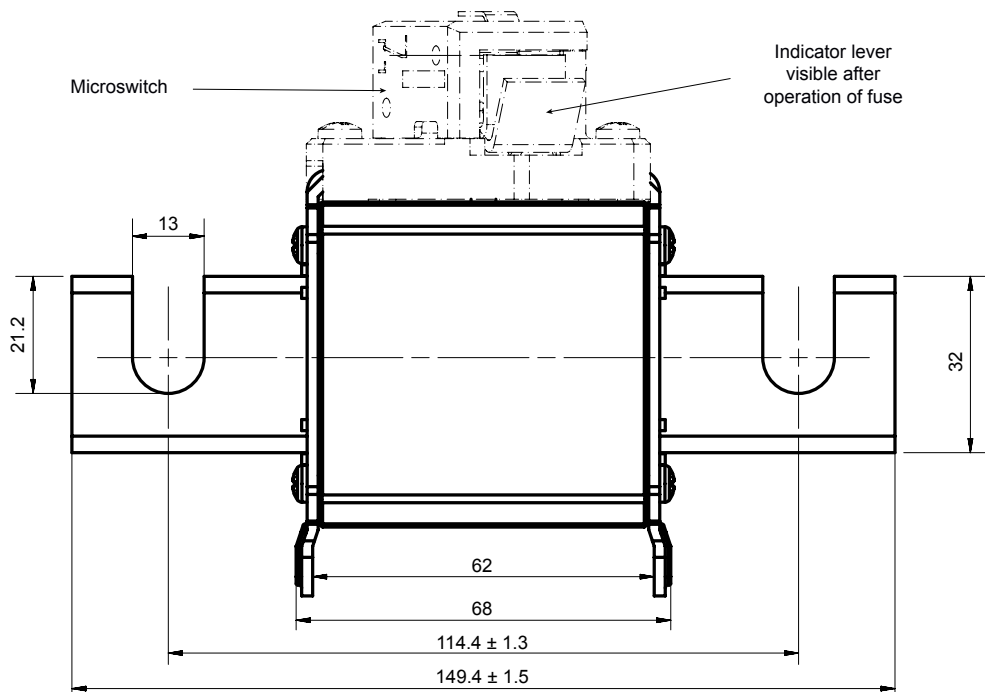
Dimensions in mm

# Protistor® size 72 gR

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## DIMENSIONS

### Size 72 gR type EF for bolted connections



Dimensions in mm

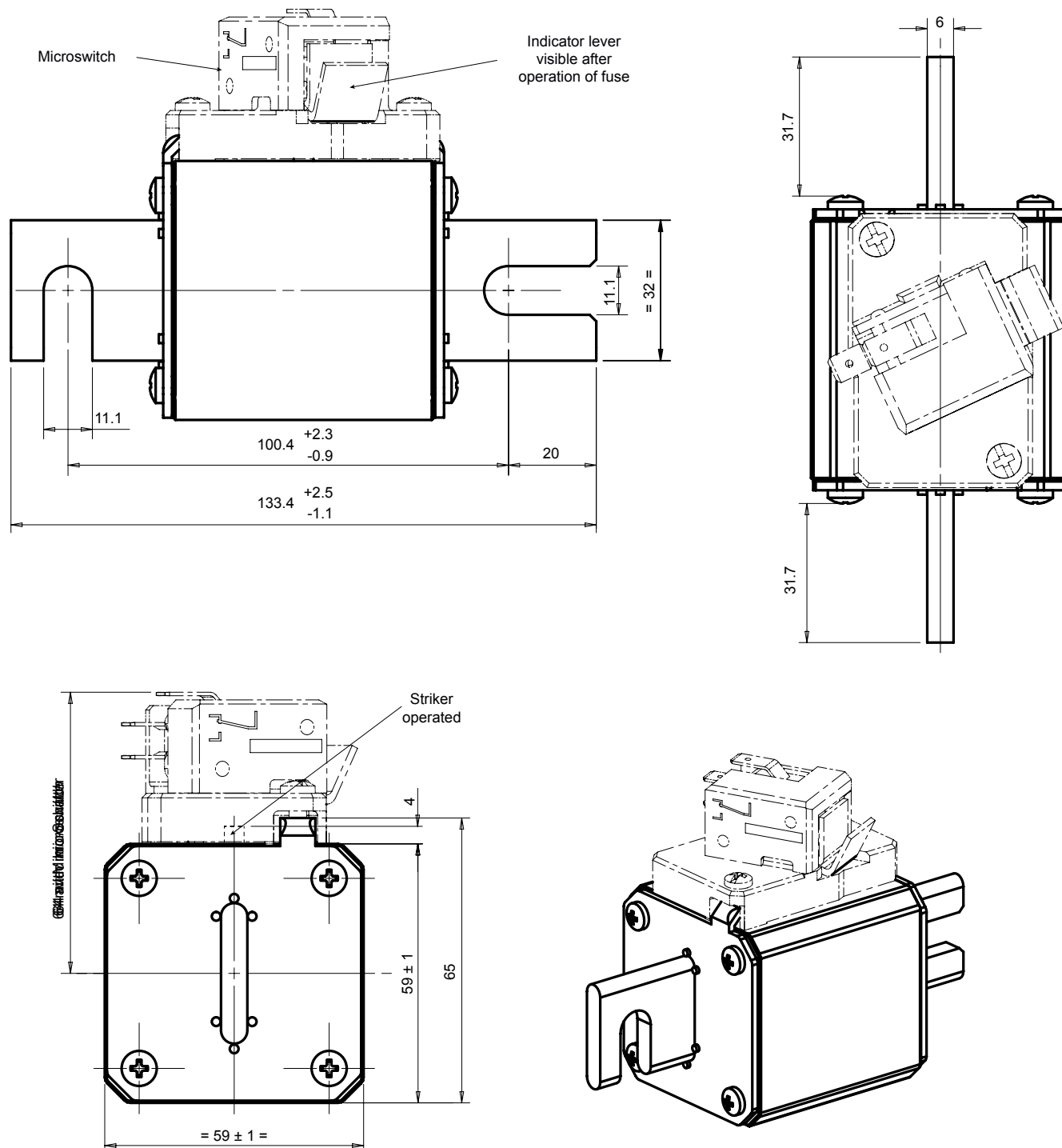


# Protistor® size 72 gR

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## DIMENSIONS

### Size 72 gR DIN 110



Dimensions in mm