

# Protistor® size 70 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)	50 ... 350 A
Speed/Characteristic	gR
I.R. AC (IEC)	150 kA
Product Size	70

### 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 equipment.

### STANDARDS

- IEC 60269-4 Compliance



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## 690VAC (IEC)

### PRODUCT RANGE



PC70GB69V250TF

#### Size 70 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
PC70GB69V50TF	C301279	690 V	50 A	118 A <sup>2</sup> s	700 A <sup>2</sup> s	150 kA	17 W	0.339 kg	3
PC70GB69V63TF	D301280	690 V	63 A	266 A <sup>2</sup> s	1600 A <sup>2</sup> s	150 kA	18 W	0.339 kg	3
PC70GB69V80TF	E301281	690 V	80 A	473 A <sup>2</sup> s	2800 A <sup>2</sup> s	150 kA	22 W	0.339 kg	3
PC70GB69V100TF	F301282	690 V	100 A	1058 A <sup>2</sup> s	6200 A <sup>2</sup> s	150 kA	23 W	0.339 kg	3
PC70GB69V125TF	G301283	690 V	125 A	1897 A <sup>2</sup> s	11200 A <sup>2</sup> s	150 kA	26 W	0.339 kg	3
PC70GB69V160TF	L301310	690 V	160 A	4232 A <sup>2</sup> s	25000 A <sup>2</sup> s	150 kA	29 W	0.339 kg	3
PC70GB69V200TF	M301311	690 V	200 A	7540 A <sup>2</sup> s	44000 A <sup>2</sup> s	150 kA	34 W	0.339 kg	3
PC70GB69V250TF	N301312	690 V	250 A	13450 A <sup>2</sup> s	79000 A <sup>2</sup> s	150 kA	40 W	0.339 kg	3
PC70GB69V315TF	P301313	690 V	315 A	24110 A <sup>2</sup> s	142000 A <sup>2</sup> s	150 kA	47 W	0.339 kg	3



PC70GB69V250ESF

#### Size 70 type EF for bolted connections

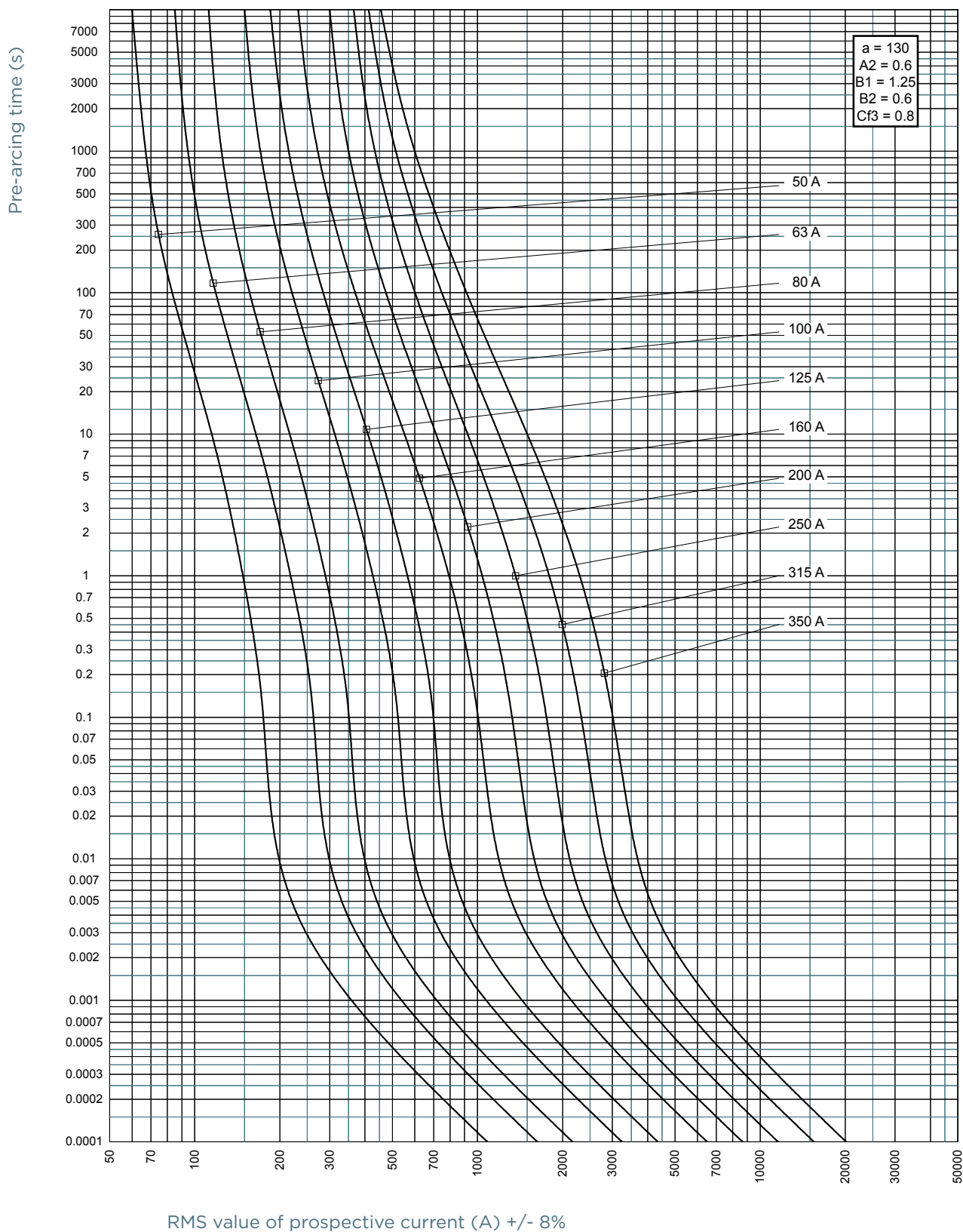
Catalog number	Item number	Rated voltage AC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC70GB69V50ESF	P301290	690 V	50 A	118 A <sup>2</sup> s	700 A <sup>2</sup> s	150 kA	17 W	400 g	3
PC70GB69V63ESF	Q301291	690 V	63 A	266 A <sup>2</sup> s	1600 A <sup>2</sup> s	150 kA	18 W	400 g	3
PC70GB69V80ESF	E301304	690 V	80 A	473 A <sup>2</sup> s	2800 A <sup>2</sup> s	150 kA	22 W	400 g	3
PC70GB69V100ESF	S301293	690 V	100 A	1058 A <sup>2</sup> s	6200 A <sup>2</sup> s	150 kA	23 W	0.4 kg	3
PC70GB69V125ESF	F301305	690 V	125 A	1897 A <sup>2</sup> s	11200 A <sup>2</sup> s	150 kA	26 W	0.4 kg	3
PC70GB69V160ESF	G301306	690 V	160 A	4232 A <sup>2</sup> s	25000 A <sup>2</sup> s	150 kA	29 W	0.4 kg	3
PC70GB69V200ESF	H301307	690 V	200 A	7540 A <sup>2</sup> s	44000 A <sup>2</sup> s	150 kA	34 W	0.4 kg	3
PC70GB69V250ESF	J301308	690 V	250 A	13448 A <sup>2</sup> s	79000 A <sup>2</sup> s	150 kA	40 W	400 g	3

#### Size 70 type DIN110

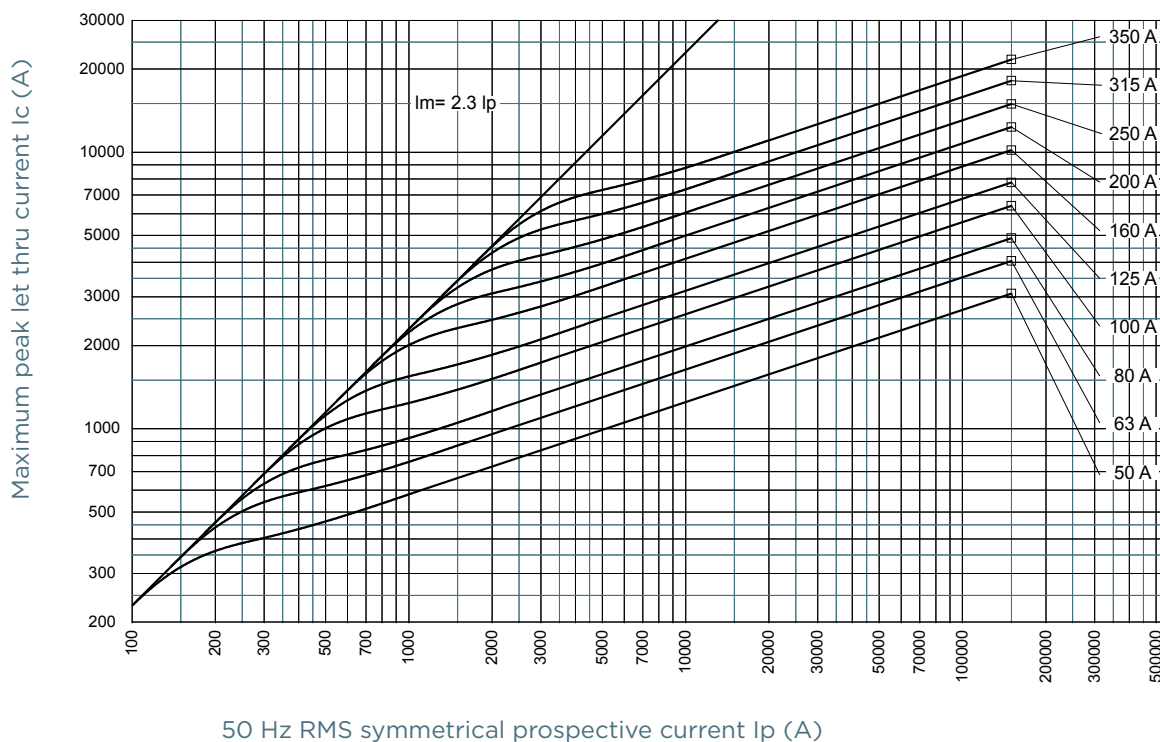
Catalog number	Item number	Rated voltage AC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC70GB69V100D1A	Q302027	690 V	100 A	1058 A <sup>2</sup> s	6200 A <sup>2</sup> s	150 kA	23 W	0.3633 kg	3
PC70GB69V125D1A	S302742	690 V	125 A	1897 A <sup>2</sup> s	11200 A <sup>2</sup> s	150 kA	26 W	365 g	3
PC70GB69V160D1A	R301591	690 V	160 A	4232 A <sup>2</sup> s	25000 A <sup>2</sup> s	150 kA	29 W	0.3633 kg	3
PC70GB69V200D1A	S301592	690 V	200 A	7540 A <sup>2</sup> s	44000 A <sup>2</sup> s	150 kA	34 W	0.3633 kg	3
PC70GB69V250D1A	Z301943	690 V	250 A	13448 A <sup>2</sup> s	79000 A <sup>2</sup> s	150 kA	40 W	0.3633 kg	3
PC70GB69V315D1A	J301584	690 V	315 A	24112 A <sup>2</sup> s	142000 A <sup>2</sup> s	150 kA	47 W	0.3633 kg	3
PC70GB69V350D1A	W302124	690 V	350 A	40780 A <sup>2</sup> s	240000 A <sup>2</sup> s	150 kA	47 W	365 g	3

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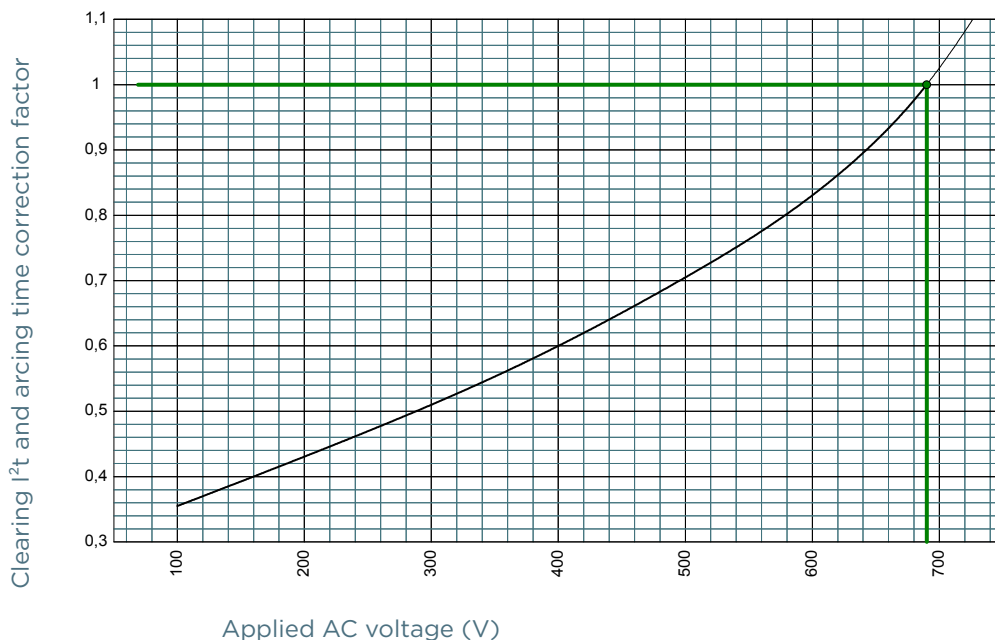
## TIME CURRENT CHARACTERISTIC CURVES



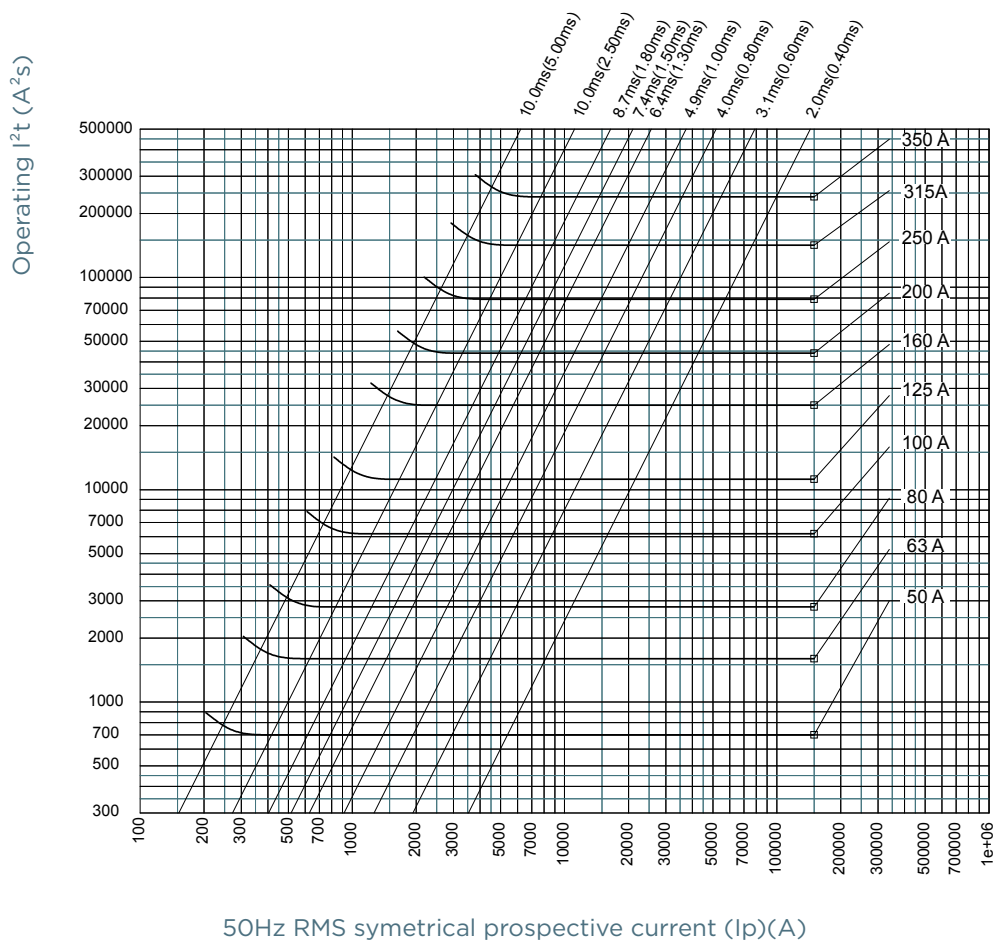
## CUT-OFF CURRENT CHARACTERISTIC



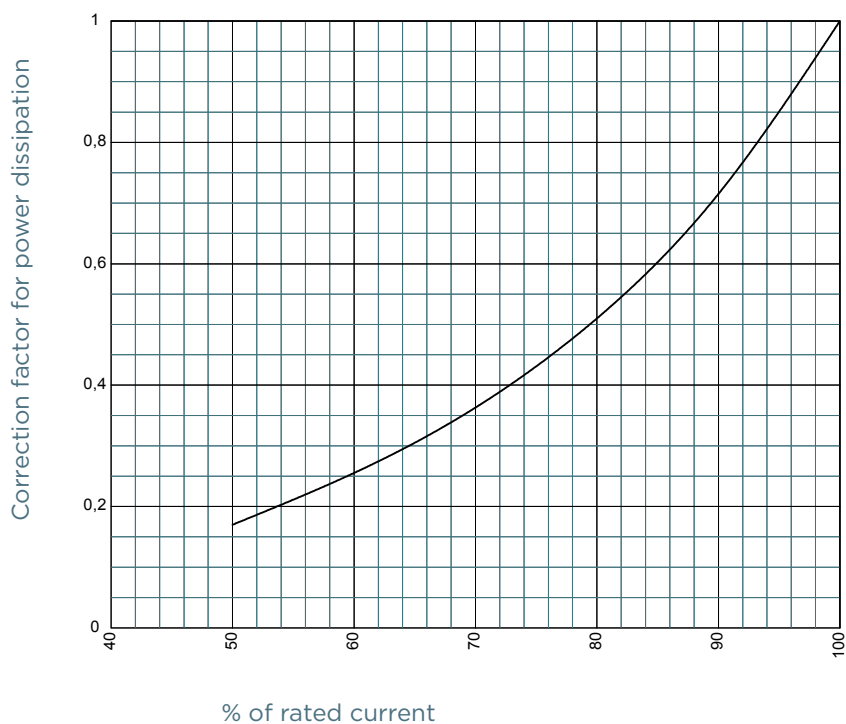
## I<sup>2</sup>T MULTIPLIER COEFFICIENT



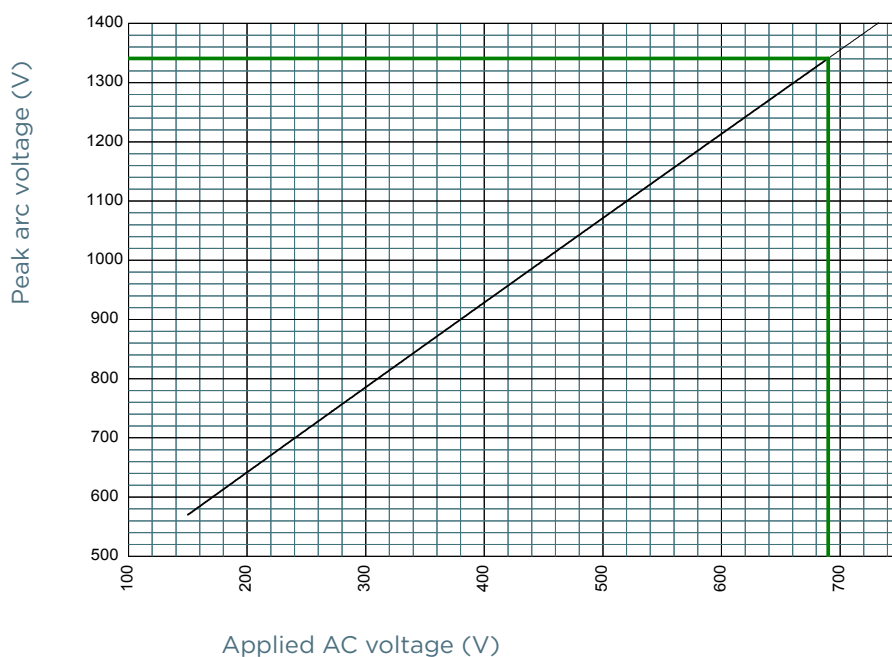
## CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE



## POWER DISSIPATION



## PEAK ARC VOLTAGE

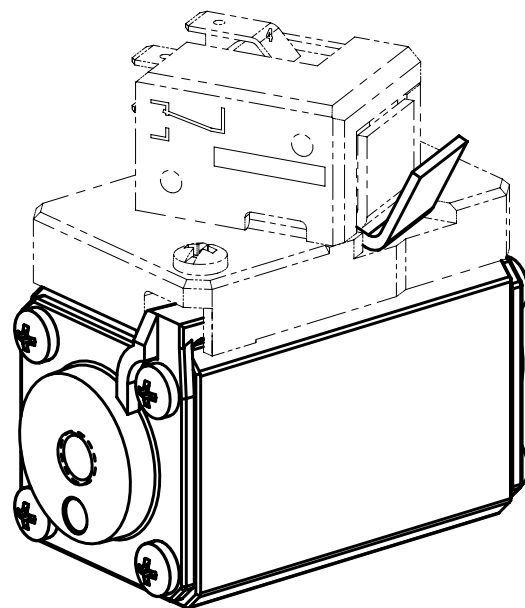
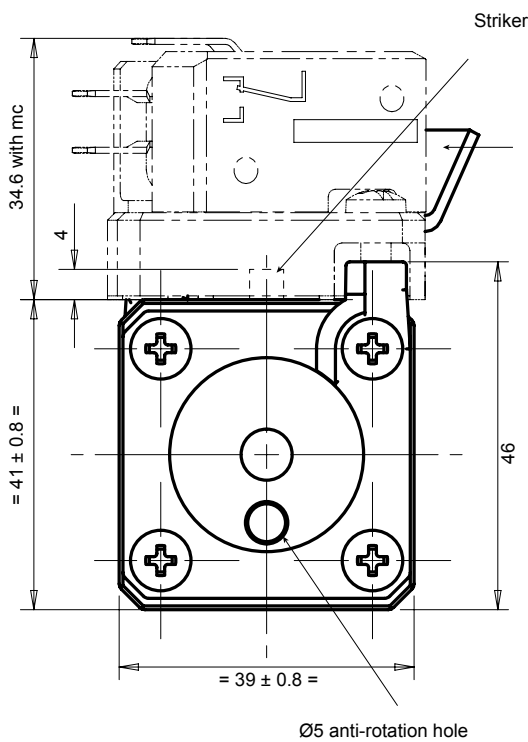
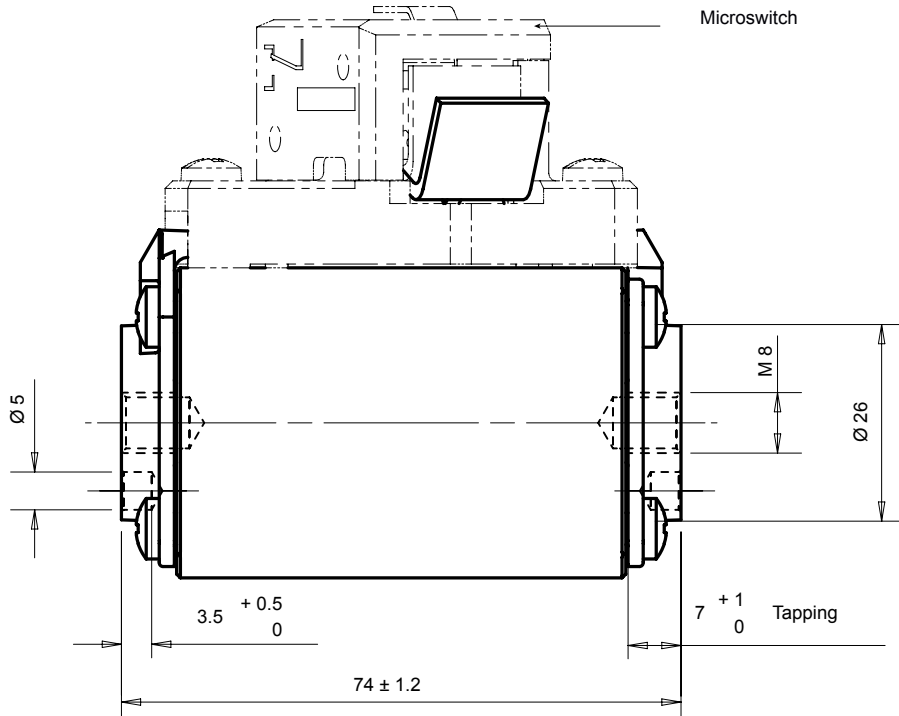


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## DIMENSIONS

### Size 70 gR TTF



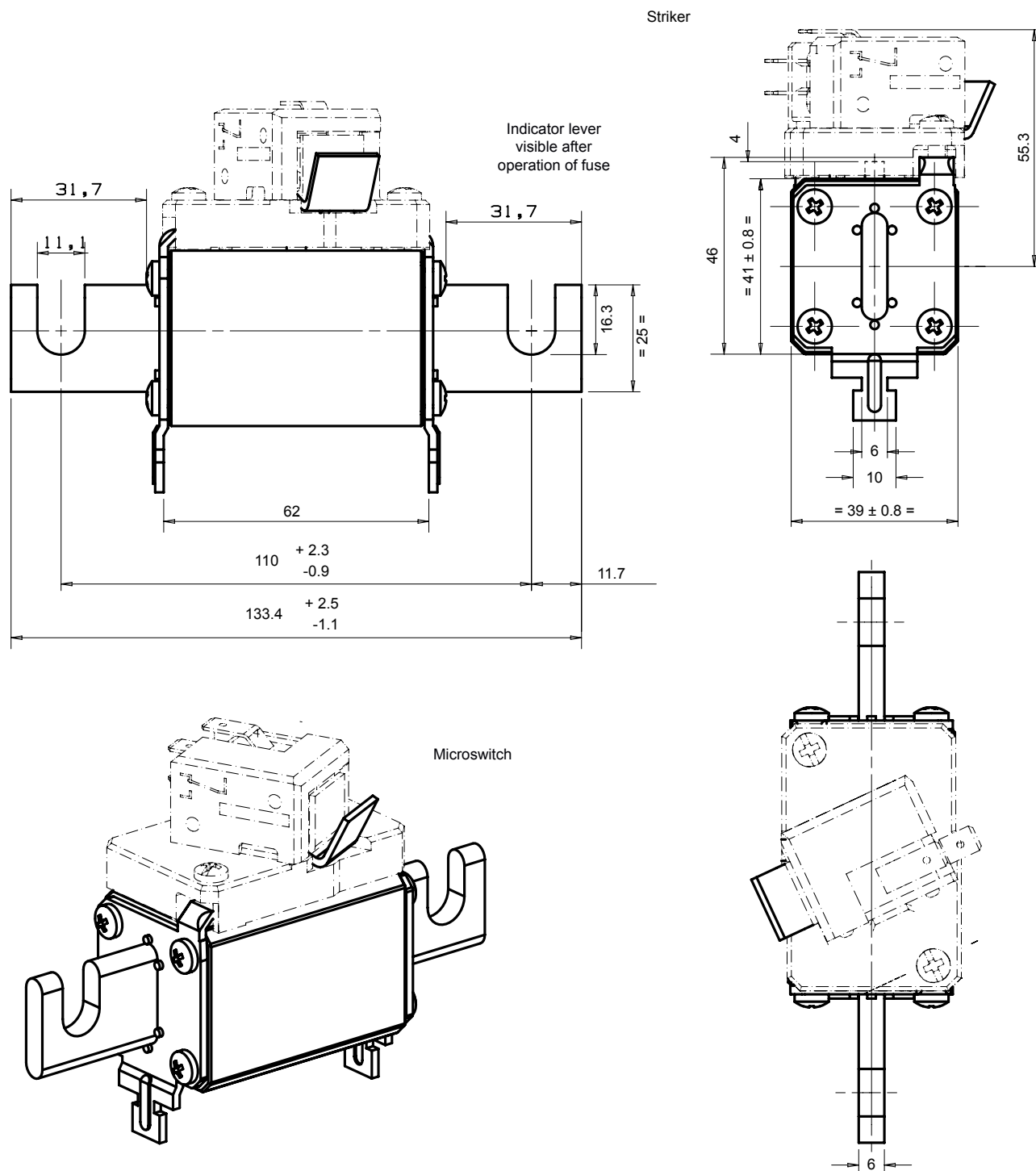
Dimensions in mm

# Protistor® size 70 gR

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## DIMENSIONS

### Size 70 gR type EF for bolted connections



Dimensions in mm

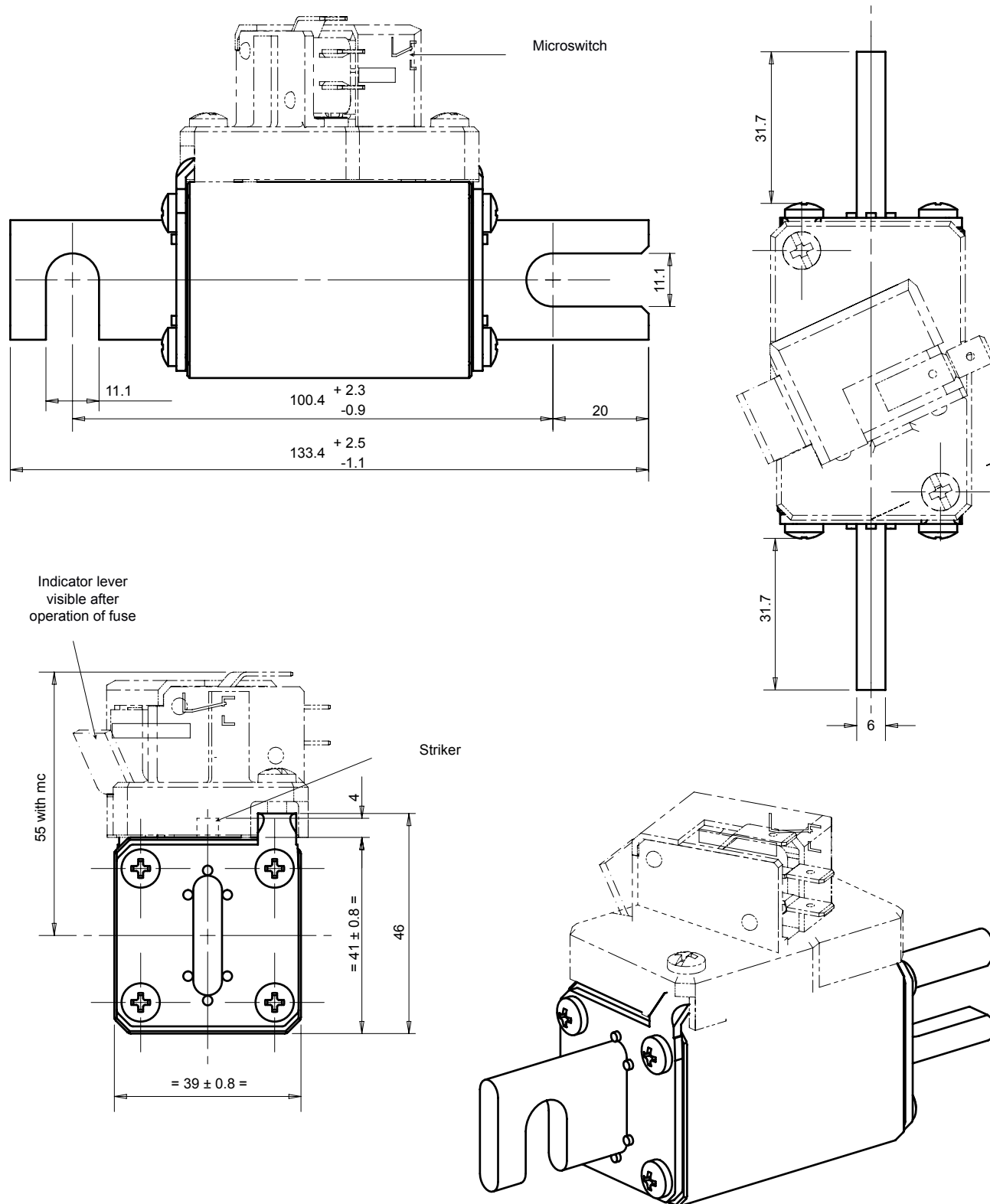


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## DIMENSIONS

### Size 70 gR DIN 110



Dimensions in mm