

# Protistor® size 71 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)	125 ... 500 A
Speed/Characteristic	gR
I.R. AC (IEC)	150 kA
Product Size	71

### 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



# Protistor® size 71 gR

## 690VAC (IEC)

### PRODUCT RANGE



PC71GB69V500TF

#### Size 71 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
PC71GB69V125TF	Q301314	690 V	125 A	1.06 kA <sup>2</sup> s	6.2 kA <sup>2</sup> s	150 kA	35 W	515 g	3
PC71GB69V160TF	R301315	690 V	160 A	2.39 kA <sup>2</sup> s	14 kA <sup>2</sup> s	150 kA	38 W	0.514 kg	3
PC71GB69V200TF	S301316	690 V	200 A	5 kA <sup>2</sup> s	29.5 kA <sup>2</sup> s	150 kA	41 W	0.514 kg	3
PC71GB69V250TF	T301317	690 V	250 A	9.58 kA <sup>2</sup> s	56 kA <sup>2</sup> s	150 kA	46 W	515 g	3
PC71GB69V315TF	N301427	690 V	315 A	18.4 kA <sup>2</sup> s	108 kA <sup>2</sup> s	150 kA	53 W	0.514 kg	3
PC71GB69V350TF	V301318	690 V	350 A	23.2 kA <sup>2</sup> s	140 kA <sup>2</sup> s	150 kA	58 W	0.514 kg	3
PC71GB69V400TF	W301319	690 V	400 A	38.3 kA <sup>2</sup> s	225 kA <sup>2</sup> s	150 kA	59 W	0.514 kg	3
PC71GB69V500TF	S301707	690 V	500 A	78.1 kA <sup>2</sup> s	460 kA <sup>2</sup> s	150 kA	64 W	0.514 kg	3



PC71GB69V500EF

#### Size 71 type EF for bolted connections

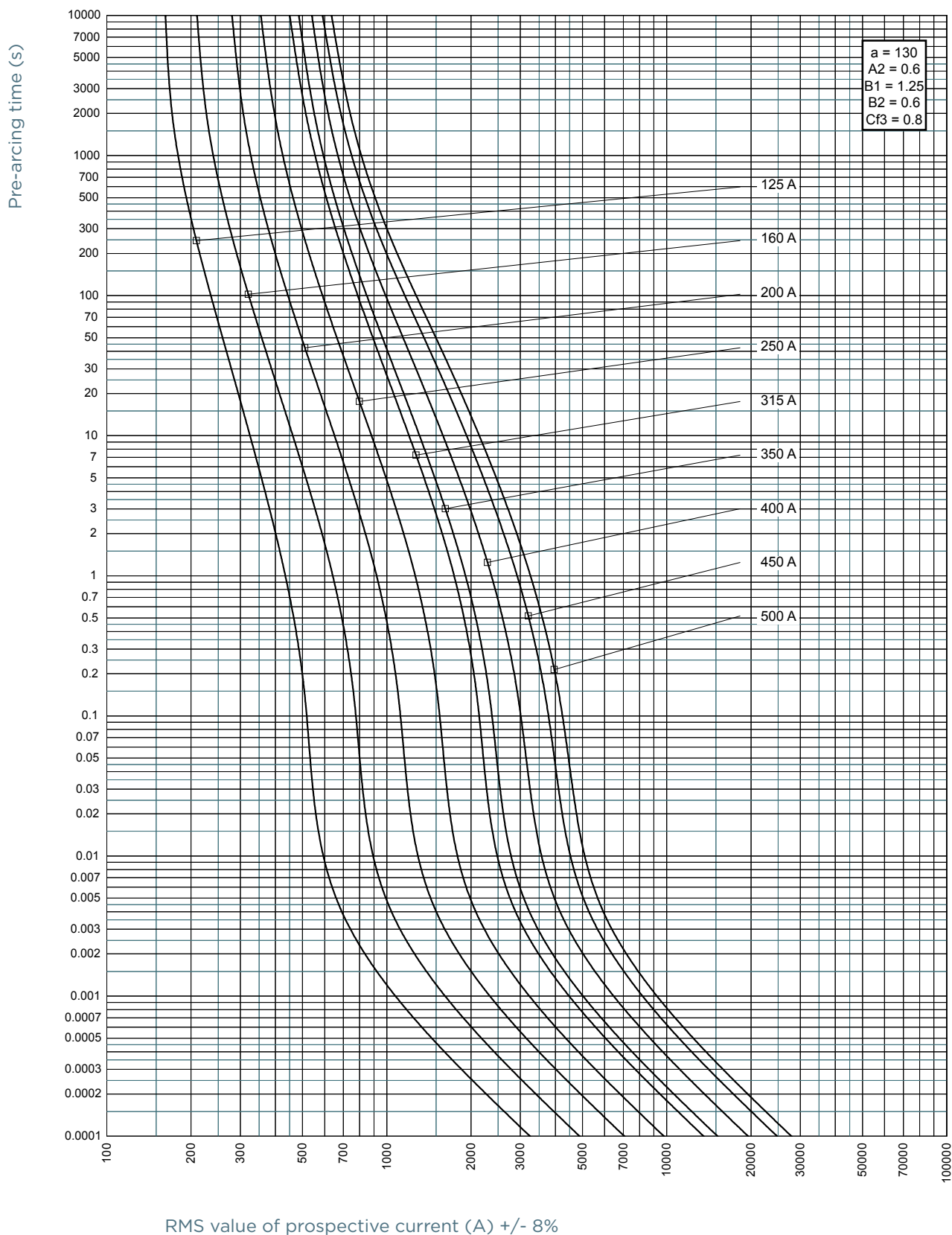
Catalog number	Item number	Rated voltage AC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC71GB69V160EF	Z301322	690 V	160 A	2.39 kA <sup>2</sup> s	14 kA <sup>2</sup> s	150 kA	38 W	540 g	3
PC71GB69V200EF	A301323	690 V	200 A	5 kA <sup>2</sup> s	29.5 kA <sup>2</sup> s	150 kA	42 W	0.5366 kg	3
PC71GB69V250EF	B301324	690 V	250 A	9.58 kA <sup>2</sup> s	56 kA <sup>2</sup> s	150 kA	48 W	0.5366 kg	3
PC71GB69V350EF	C301325	690 V	350 A	23.2 kA <sup>2</sup> s	140 kA <sup>2</sup> s	150 kA	60 W	540 g	3
PC71GB69V400EF	D301326	690 V	400 A	38.3 kA <sup>2</sup> s	225 kA <sup>2</sup> s	150 kA	61 W	0.5366 kg	3
PC71GB69V500EF	G301858	690 V	500 A	78.1 kA <sup>2</sup> s	460 kA <sup>2</sup> s	150 kA	67 W	0.5366 kg	3

#### Size 71 type DIN110

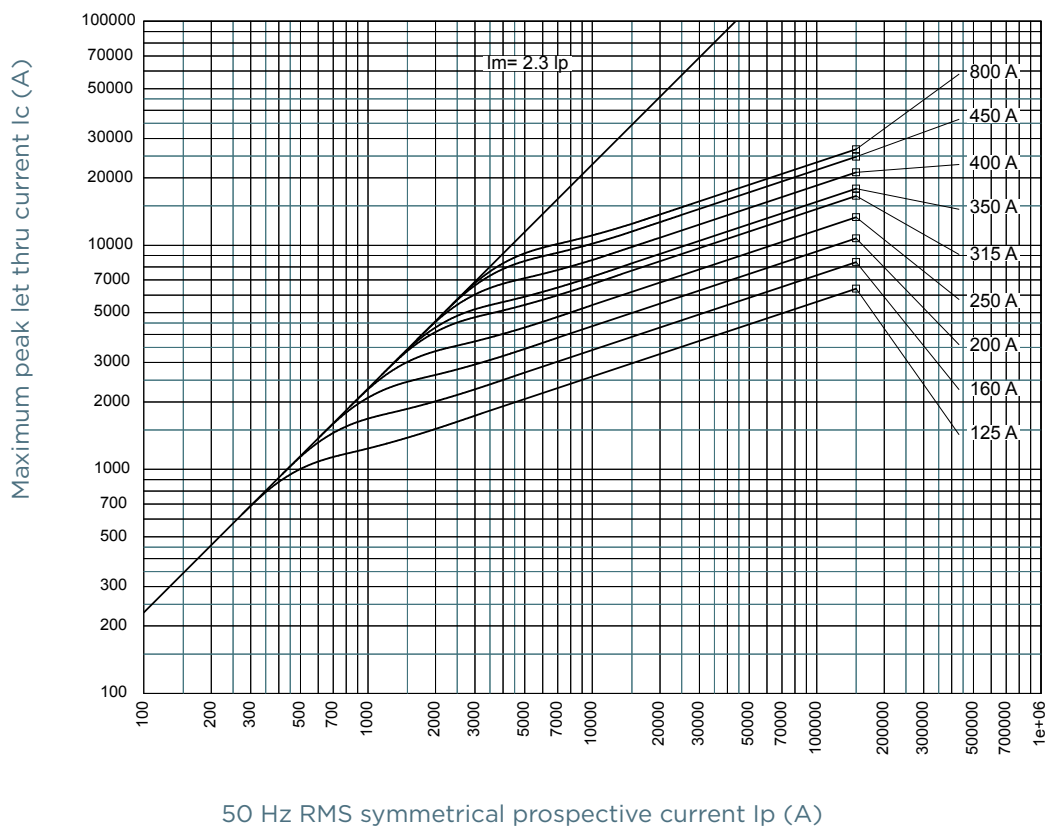
Catalog number	Item number	Rated voltage AC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC71GB69V125D1A	B302658	690 V	125 A	1.06 kA <sup>2</sup> s	6.2 kA <sup>2</sup> s	150 kA	35 W	520 g	3
PC71GB69V160D1A	C302659	690 V	160 A	2.39 kA <sup>2</sup> s	14 kA <sup>2</sup> s	150 kA	38 W	520 g	3
PC71GB69V200D1A	C302682	690 V	200 A	5 kA <sup>2</sup> s	29.5 kA <sup>2</sup> s	150 kA	42 W	0.5193 kg	3
PC71GB69V250D1A	R302143	690 V	250 A	9.58 kA <sup>2</sup> s	56 kA <sup>2</sup> s	150 kA	48 W	520 g	3
PC71GB69V450D1A	R301637	690 V	450 A	61.7 kA <sup>2</sup> s	360 kA <sup>2</sup> s	150 kA	61 W	520 g	3
PC71GB69V500D1A	A301737	690 V	500 A	78.1 kA <sup>2</sup> s	460 kA <sup>2</sup> s	150 kA	67 W	0.5193 kg	3

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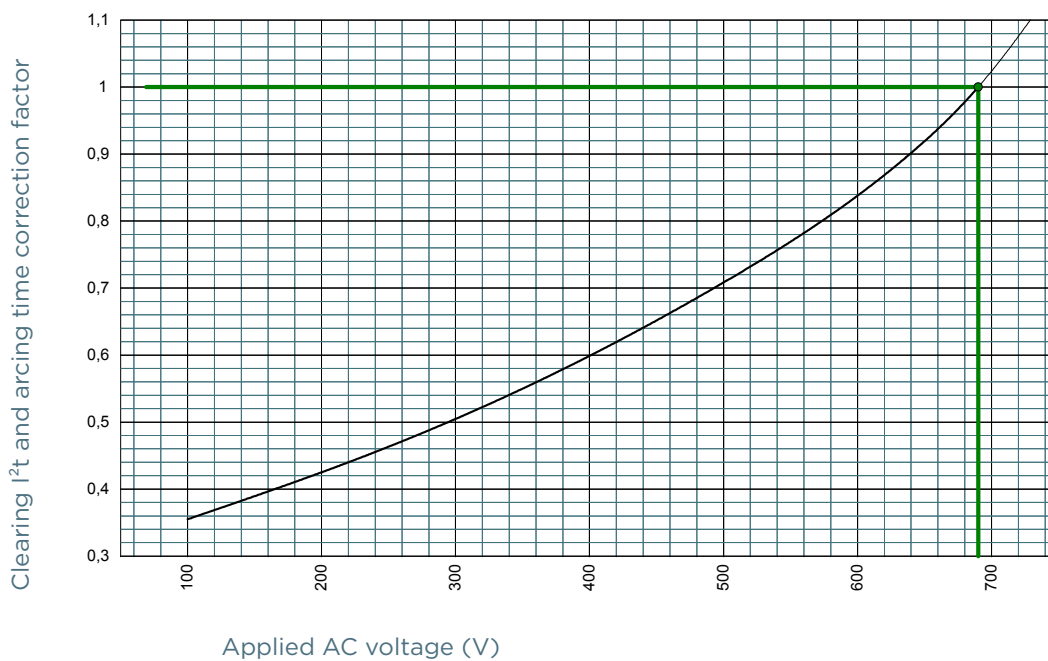
## TIME CURRENT CHARACTERISTIC CURVES



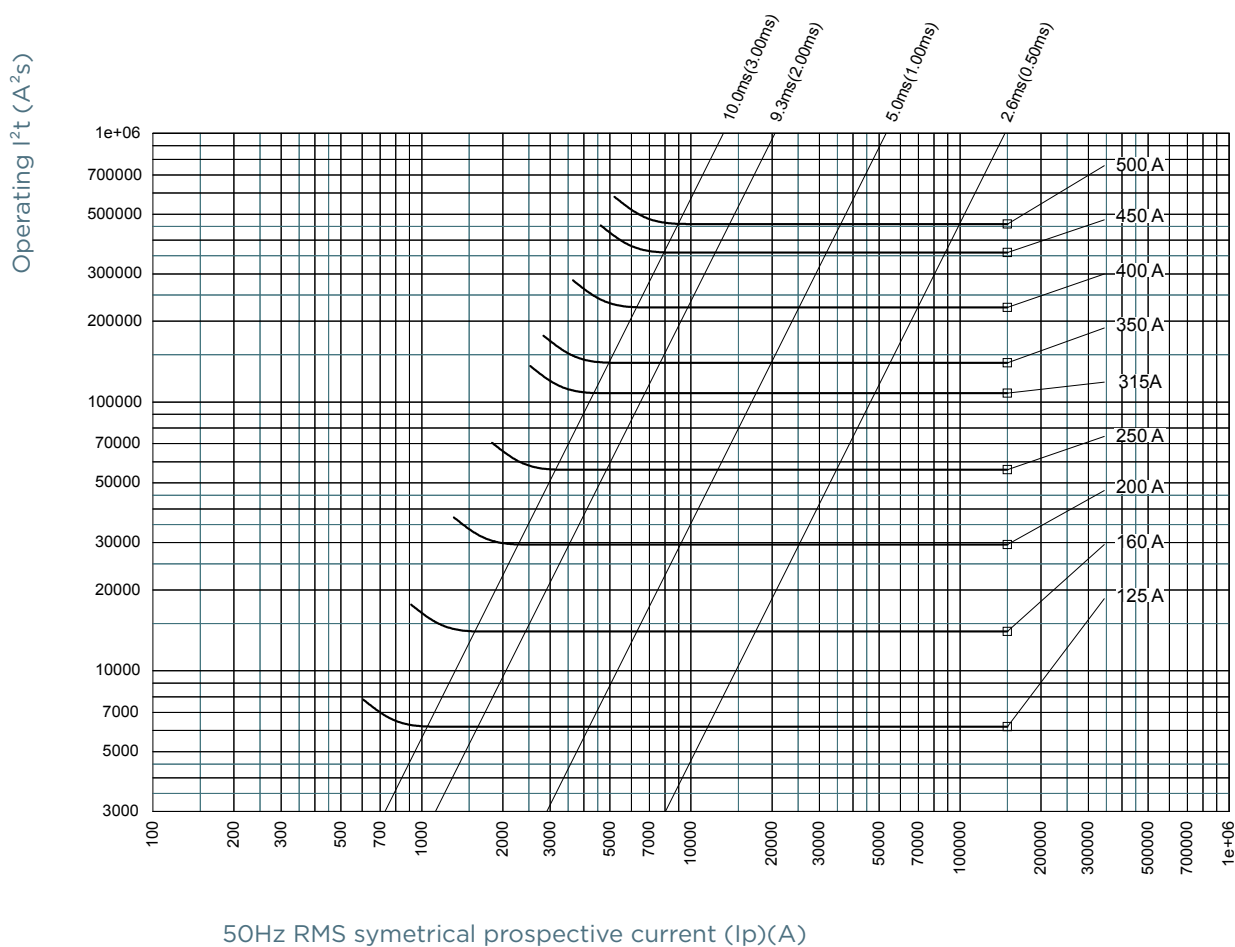
## CUT-OFF CURRENT CHARACTERISTIC



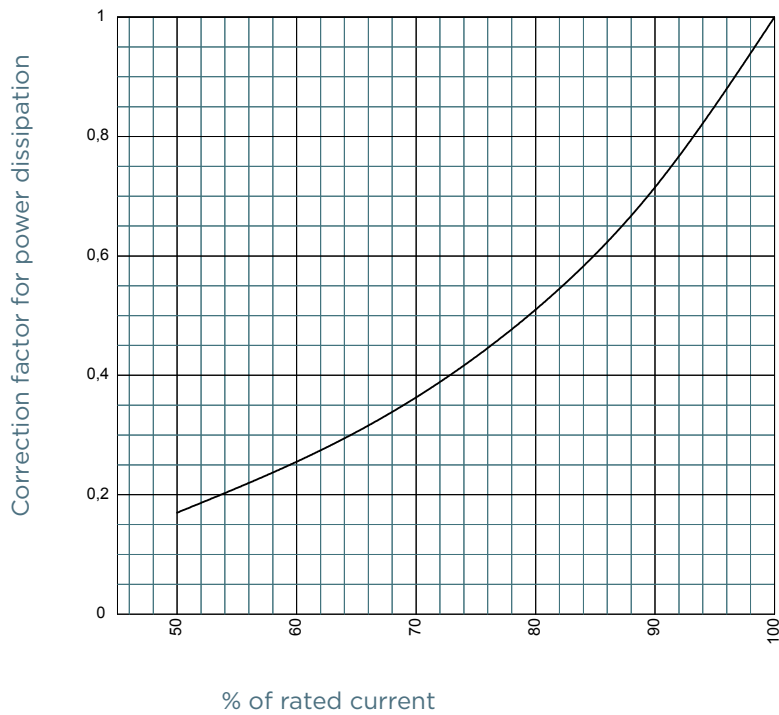
## $I^2t$ MULTIPLIER COEFFICIENT



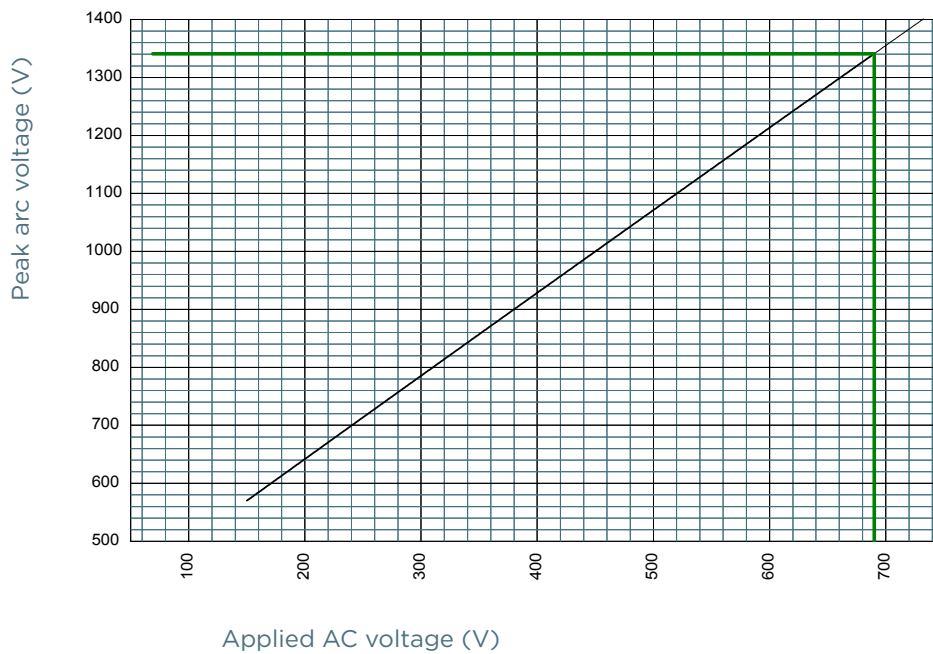
## CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE



## POWER DISSIPATION



## PEAK ARC VOLTAGE

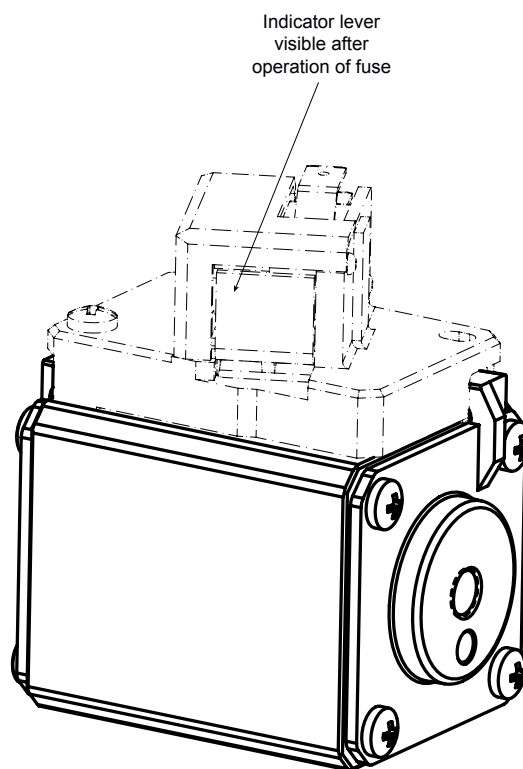
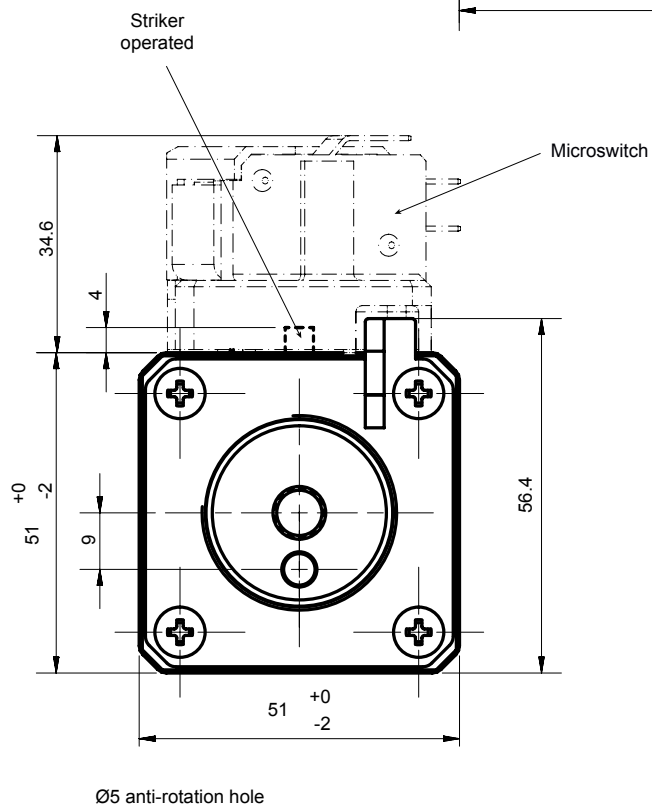
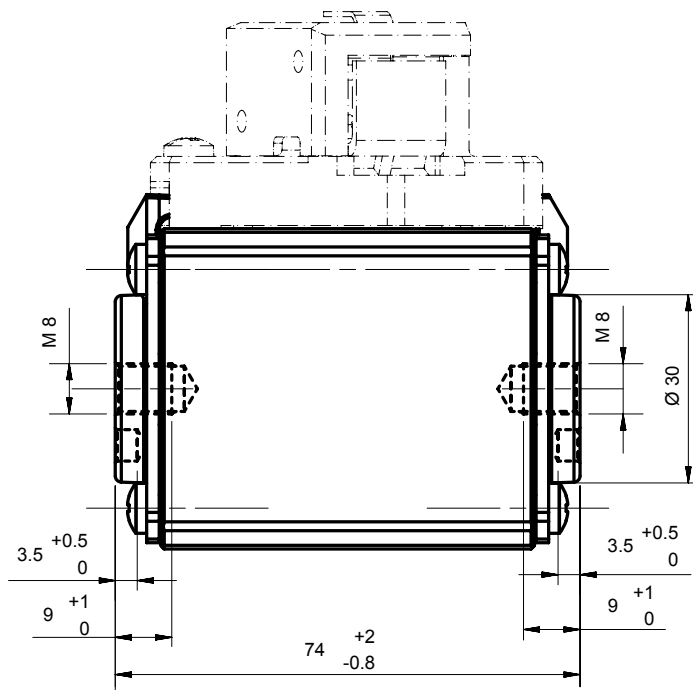


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## DIMENSIONS

### Size 71 gR TTF



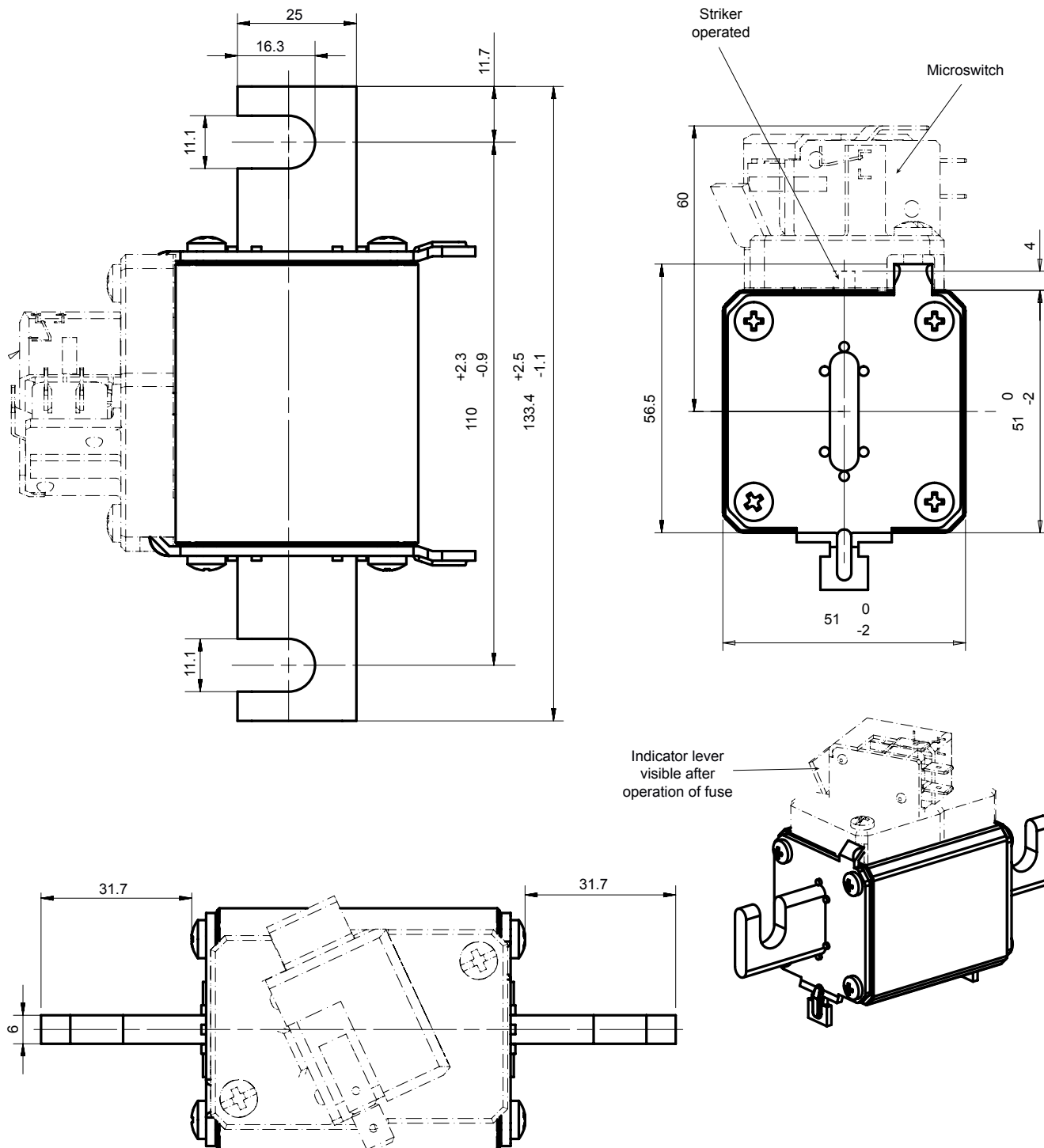
Dimensions in mm

# Protistor® size 71 gR

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## DIMENSIONS

### Size 71 gR type EF for bolted connections



Dimensions in mm

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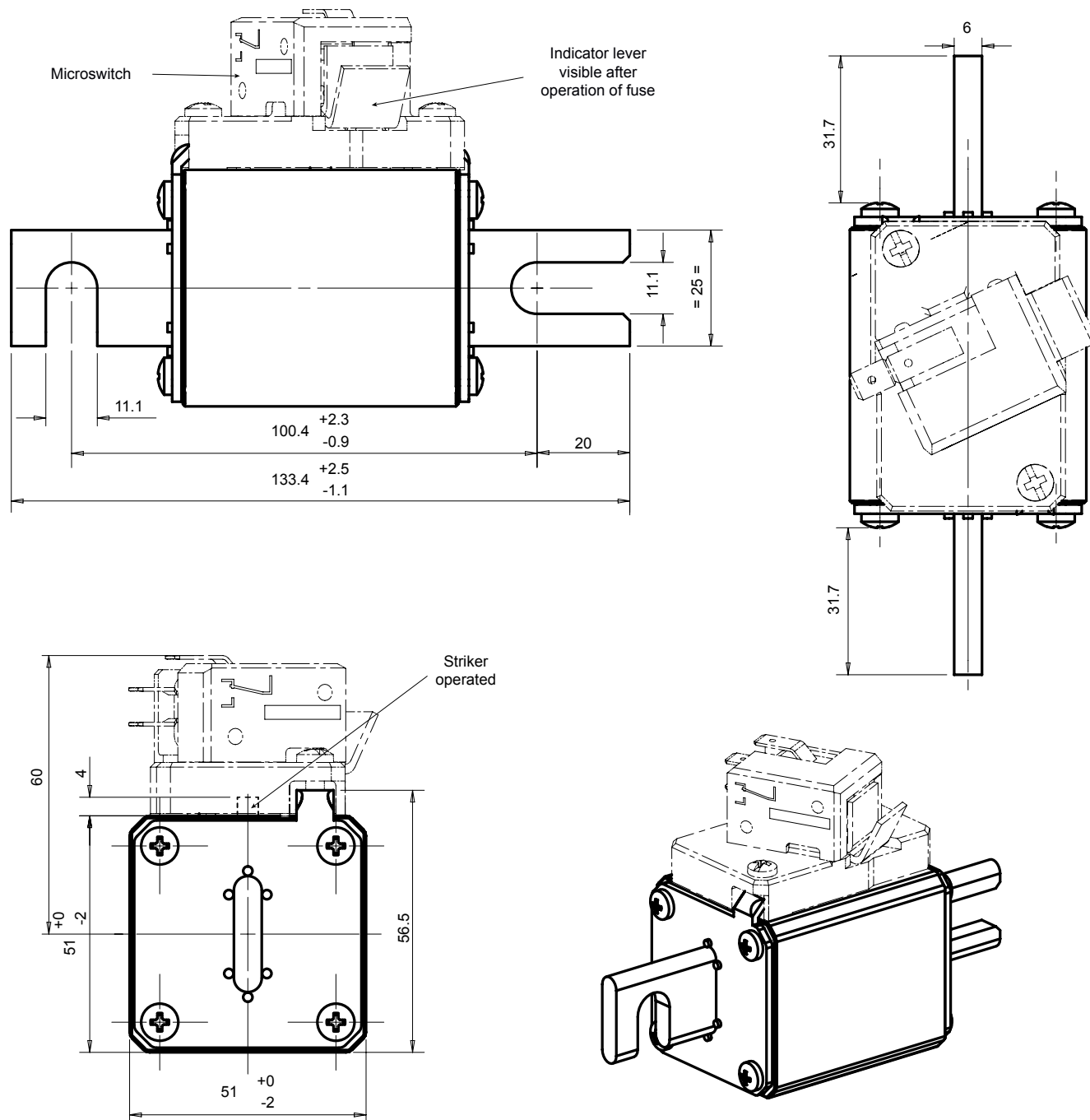


# Protistor® size 71 gR

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## DIMENSIONS

### Size 71 gR DIN 110



Dimensions in mm