

# Protistor® size 123 gR

750VDC (IEC)

## SEMICONDUCTOR PROTECTION FUSES

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



Mersen DC offers provide a very high performant protection for railway power and auxiliary circuits. Mersen DC Semiconductor fuse-links were developed to provide improved performance required by today's new DC equipment. These fuse-links are typically operated at more elevated temperature than other fuse type, have lower  $I^2t$  to minimize damage to protected components on short circuits, lower watts loss and longer life.

## TECHNICAL DATA OVERVIEW

Ampere Range (A)	500 ... 800 A
Speed/Characteristic	gR
Product Size	123
Rated Voltage DC (IEC)	750 VDC

## FEATURES & BENEFITS

- Multiple body sizes and terminals or blades combination
- Very low  $I^2t$
- Extremely fast acting
- Eliminate all overloads
- Excellent cycling capability

## APPLICATIONS

- Protection of inverters
- Protection of motor drives
- Protection of UPS systems
- Railway power and auxiliary circuits
- Similar 750VDC or less equipments

## STANDARDS

- IEC 60269-4 Compliance

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## PRODUCT RANGE

### Size 123 gR 660VDC to 750VDC threads terminals (TTF), with striker

Catalog number	Item number	Rated voltage DC (IEC)	Rated current I <sub>n</sub>	Rated breaking capacity DC	Max. I <sup>2</sup> t @900V, L/R=40ms, IP=50In	Max. I <sup>2</sup> t @900V, L/R=40ms, IP=10In	Power dissipation at I <sub>n</sub>	Power dissipation at 0.8 I <sub>n</sub>	Weight
D123GC75V500TF	D090439	750 V	500 A	100 kA	1000 kA <sup>2</sup> s	5000 kA <sup>2</sup> s	93.5 W	51 W	1.98 kg
D123GB75V630TF	C098557	750 V	630 A	100 kA	1500 kA <sup>2</sup> s	7500 kA <sup>2</sup> s	-	74 W	1.98 kg
D123GB75V700TF	F090441	750 V	700 A	100 kA	2000 kA <sup>2</sup> s	10000 kA <sup>2</sup> s	-	82 W	1.98 kg
D123GB75V750TF	H220945	750 V	750 A	100 kA	2000 kA <sup>2</sup> s	10000 kA <sup>2</sup> s	-	82 W	1.98 kg
D123GB66V800TF	J220946	660 V	800 A	100 kA	2600 kA <sup>2</sup> s	12150 kA <sup>2</sup> s	-	90 W	1.98 kg

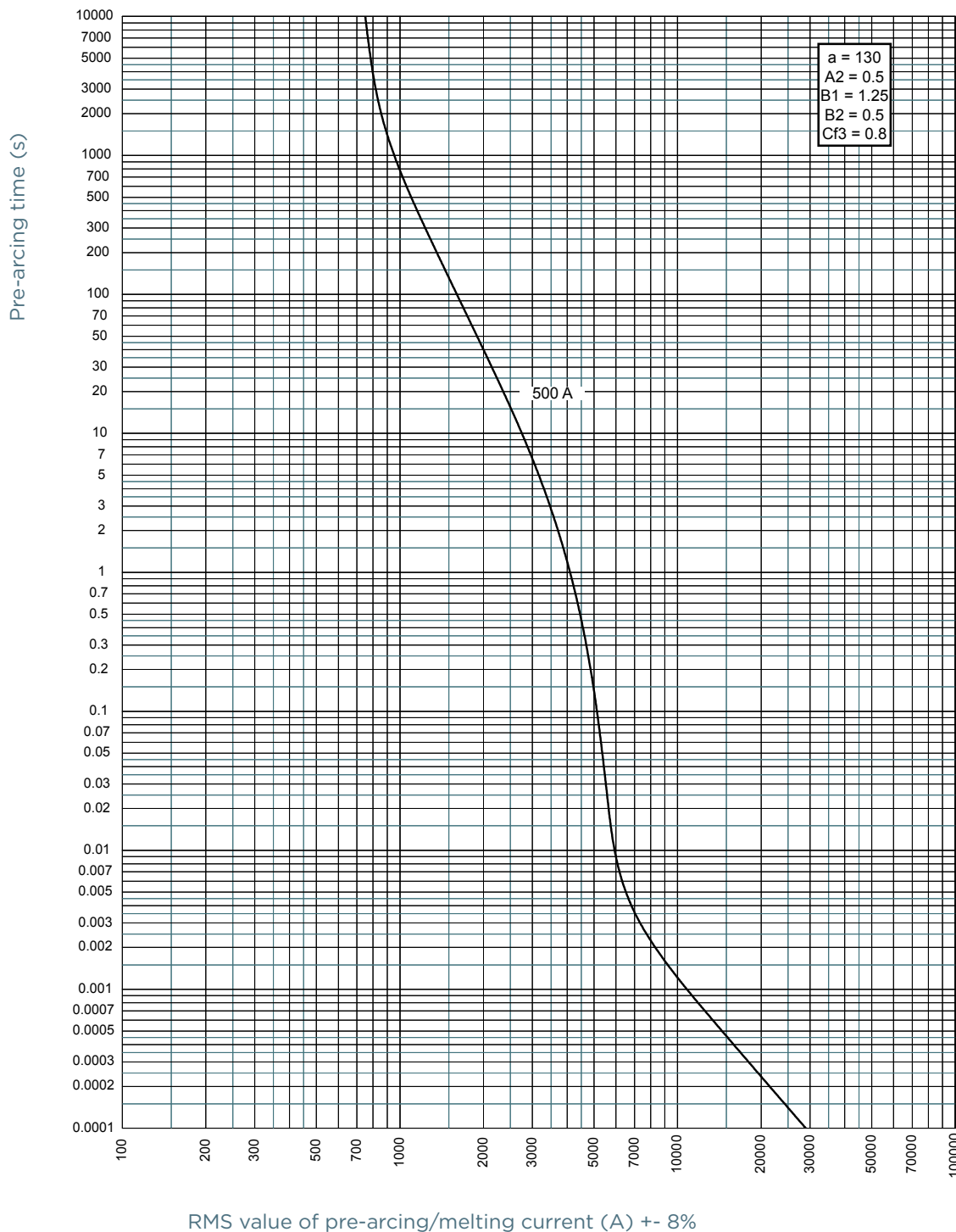
### Size 123 gR 660VDC to 750VDC blade contacts (EF) with striker



Catalog number	Item number	Rated voltage DC (IEC)	Rated current I <sub>n</sub>	Rated breaking capacity DC	Max. I <sup>2</sup> t @900V, L/R=40ms, IP=50In	Max. I <sup>2</sup> t @900V, L/R=40ms, IP=10In	Power dissipation at I <sub>n</sub>	Power dissipation at 0.8 I <sub>n</sub>	Weight
D123GC75V500EF	M089389	750 V	500 A	100 kA	2000 kA <sup>2</sup> s	10000 kA <sup>2</sup> s	93.5 W	51 W	2.1 kg
D123GB75V630EF	B098556	750 V	630 A	100 kA	1500 kA <sup>2</sup> s	7500 kA <sup>2</sup> s	-	74 W	2.1 kg
D123GB75V700EF	Q078191	750 V	700 A	100 kA	2000 kA <sup>2</sup> s	10000 kA <sup>2</sup> s	-	82 W	2.1 kg
D123GB66V800EF	G220944	750 V	800 A	100 kA	2600 kA <sup>2</sup> s	12150 kA <sup>2</sup> s	-	90 W	2.1 kg

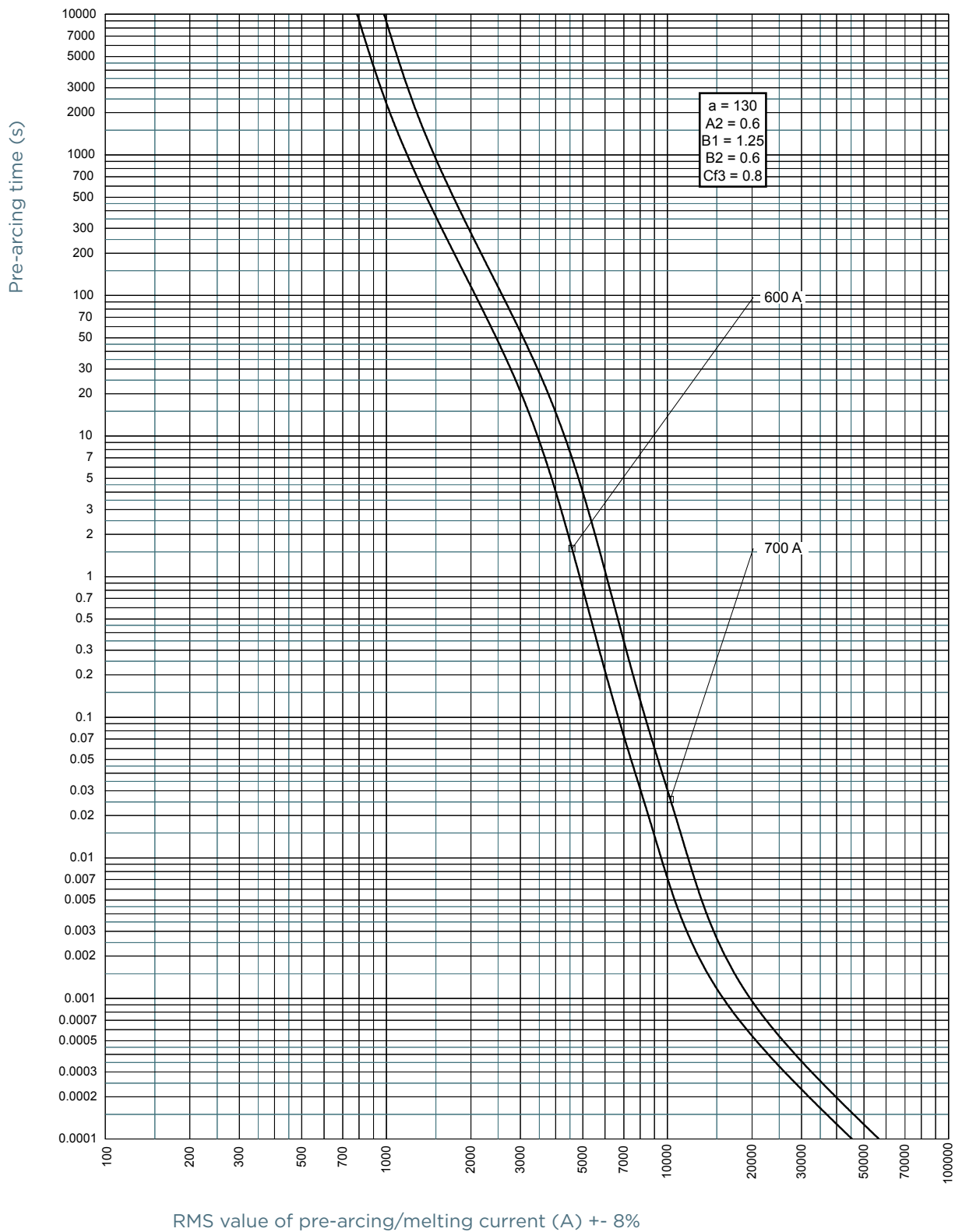
## TIME CURRENT CHARACTERISTIC CURVES

### Size 123 gR 500A



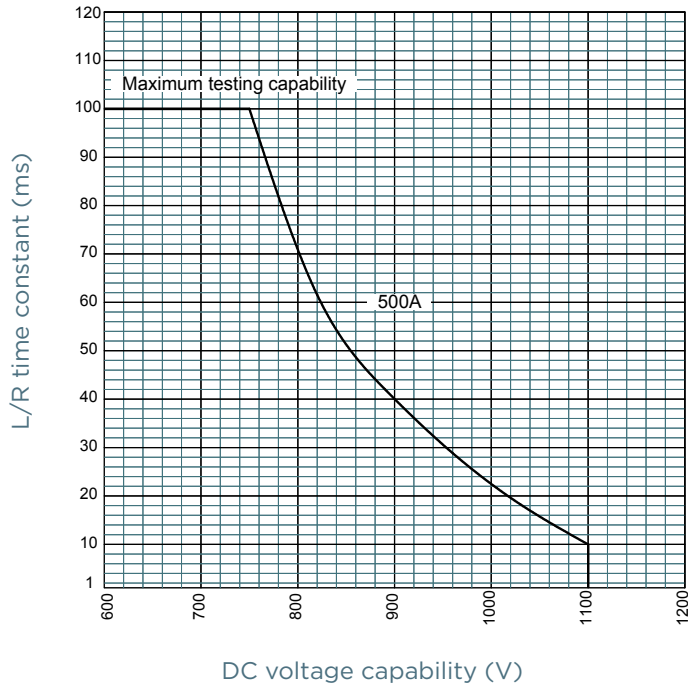
## TIME CURRENT CHARACTERISTIC CURVES

### Size 123 gR 600A - 700A

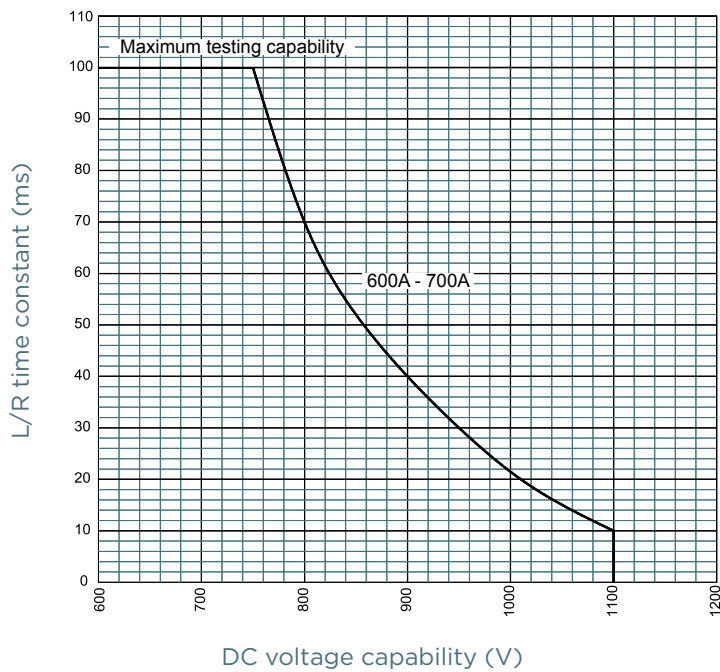


## L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

### Size 123 gR 500A

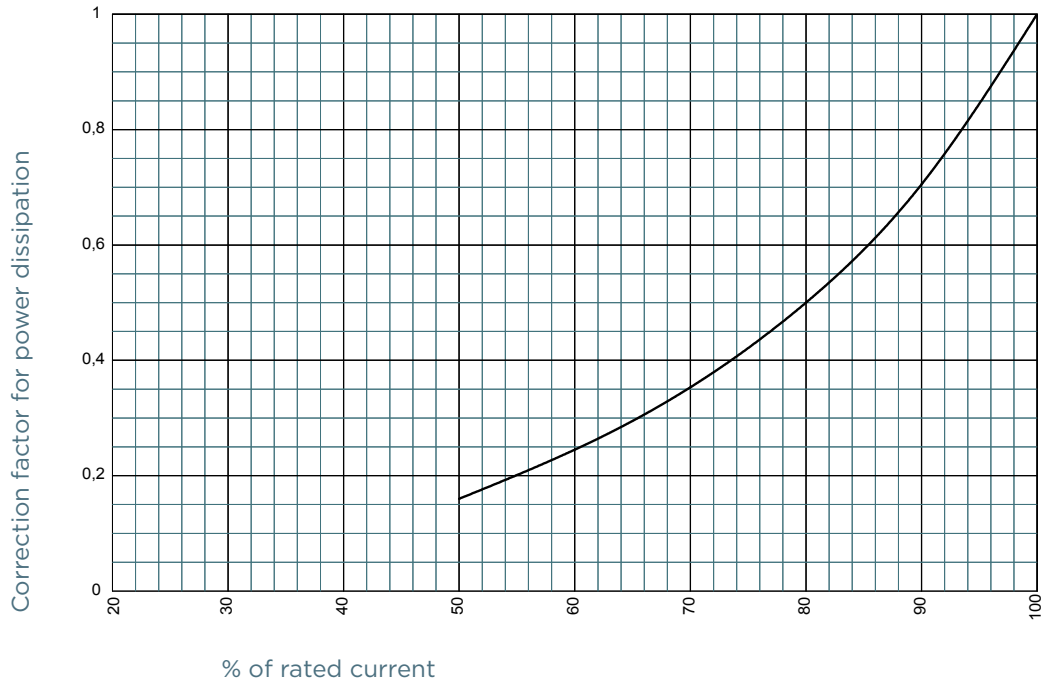


### Size 123 gR 600A - 700A



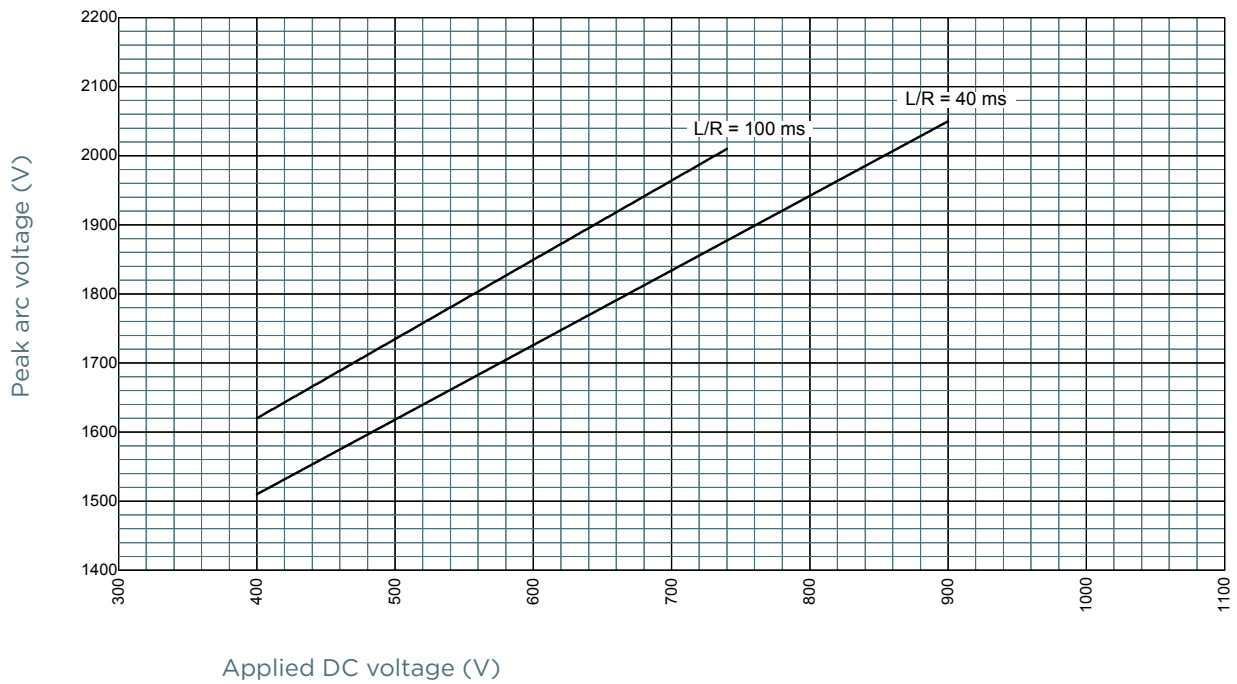
## POWER DISSIPATION

Size 123 gR 500A - 600A - 700A



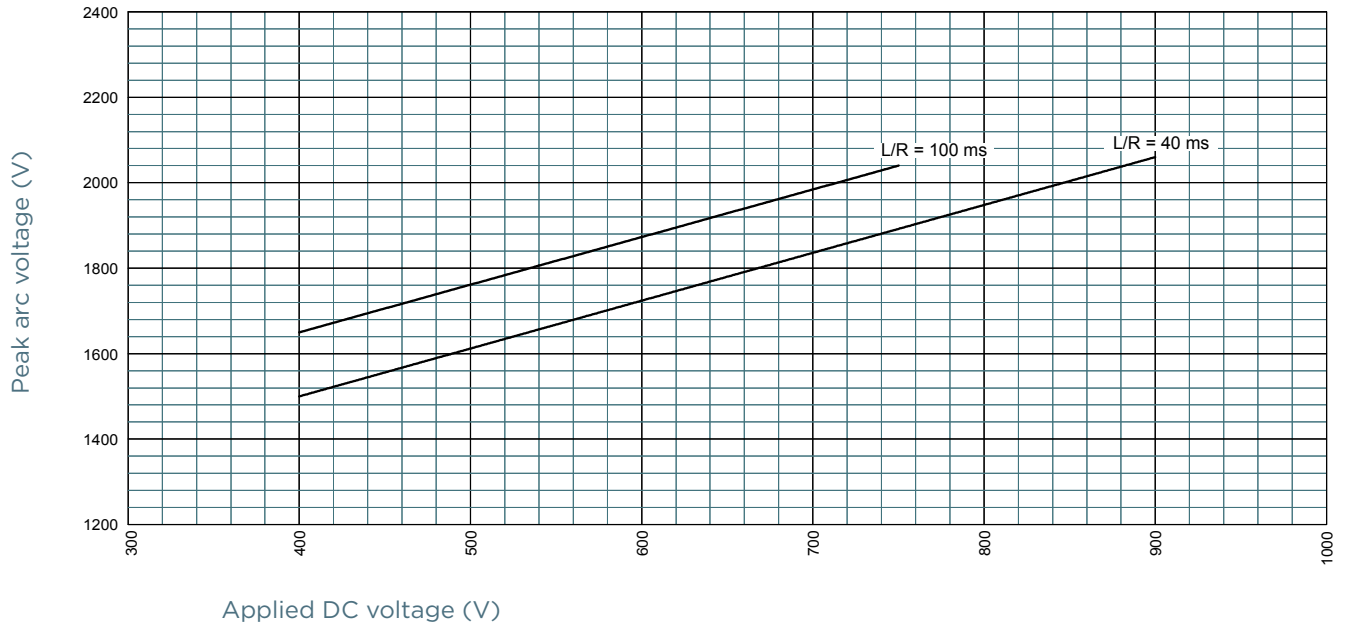
## PEAK ARC VOLTAGE

Size 123 gR 500A



## PEAK ARC VOLTAGE

### Size 123 gR 600A - 700A

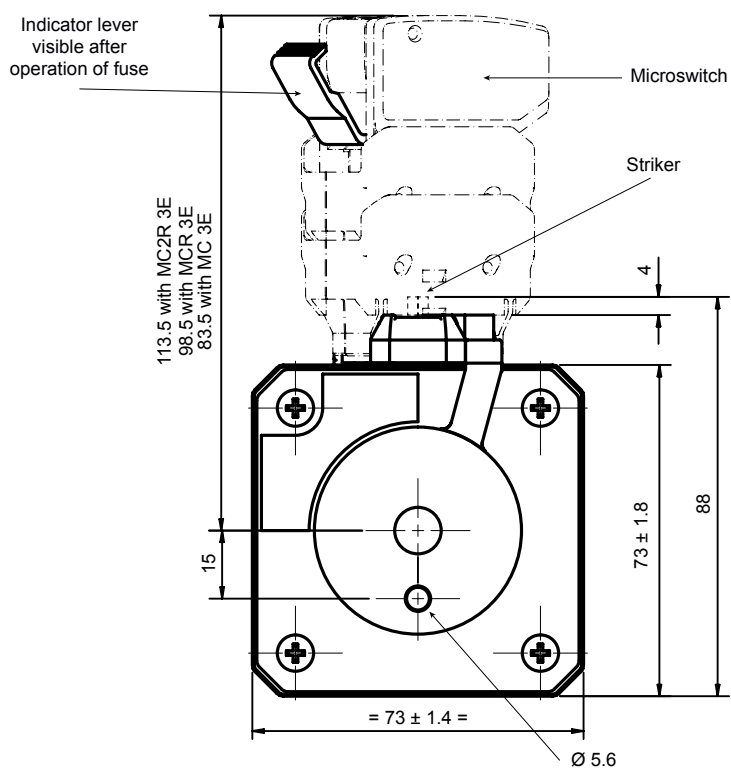
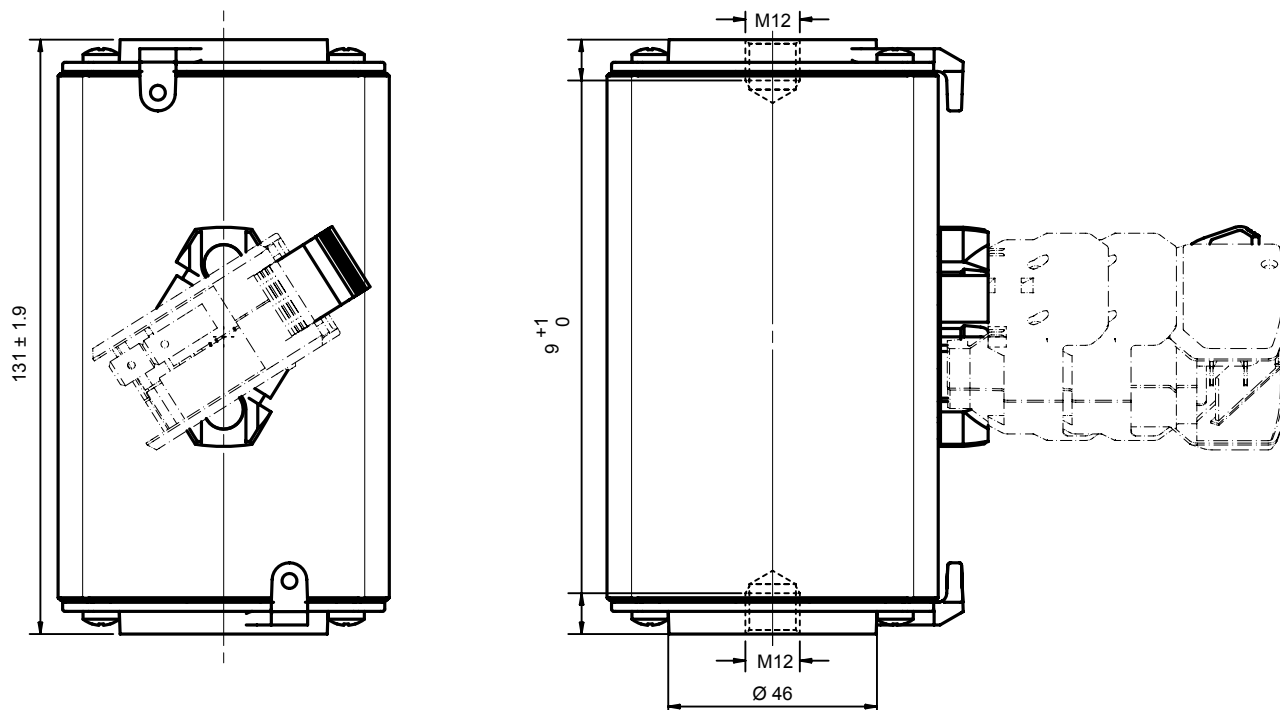


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## DIMENSIONS

### Size 123gR



Dimensions in mm

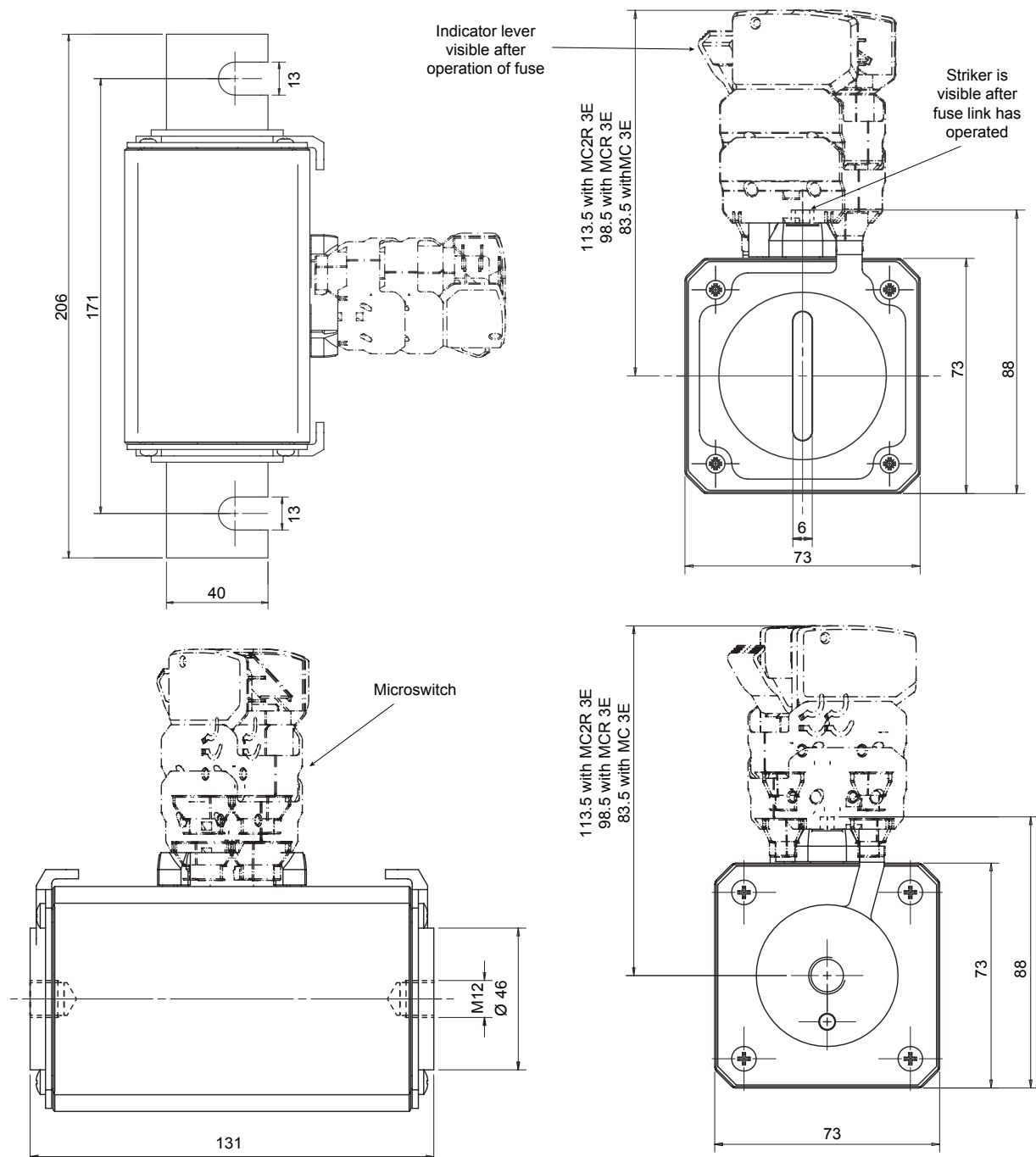
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## DIMENSIONS



Dimensions in mm