

# Protistor® size 122 gR

750VDC

## 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)	250 ... 500 A
Speed/Characteristic	gR
Product Size	122
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

MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

## PRODUCT RANGE



D122GC75V250EF

### Size 122 gR 750VDC blade contacts (EF), with striker

Catalog number	Item number	Rated voltage DC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Rated breaking capacity DC	Max. I <sup>2</sup> t @900V, L/R=40ms, IP=50I <sub>n</sub>	Max. I <sup>2</sup> t @900V, L/R=40ms, IP=10I <sub>n</sub>	Power dissipation at I <sub>n</sub>	Power dissipation at 0.8 I <sub>n</sub>	Weight
D122GC75V250EF	A087331	750 V	250 A	18.05 kA <sup>2</sup> s	100 kA	250 kA <sup>2</sup> s	1250 kA <sup>2</sup> s	46.7 W	25.5 W	1.3 kg
D122GC75V315EF	B087332	750 V	315 A	30.06 kA <sup>2</sup> s	100 kA	400 kA <sup>2</sup> s	2000 kA <sup>2</sup> s	58 W	31.5 W	1.3 kg
D122GC75V350EF	W221141	750 V	350 A	38.08 kA <sup>2</sup> s	100 kA	500 A <sup>2</sup> s	2500 A <sup>2</sup> s	64.5 W	35 W	1.3 kg
D122GC75V400EF	L089388	750 V	400 A	50.94 kA <sup>2</sup> s	100 kA	600 kA <sup>2</sup> s	3100 kA <sup>2</sup> s	74.5 W	40.5 W	1.3 kg
D122GD75V450EF	P220951	750 V	450 A	63.5 kA <sup>2</sup> s	100 kA	800 kA <sup>2</sup> s	4000 kA <sup>2</sup> s	90 W	49 W	1.3 kg
D122GD75V500EF	Q220952	750 V	500 A	103 kA <sup>2</sup> s	100 kA	1200 kA <sup>2</sup> s	6200 kA <sup>2</sup> s	95 W	52 W	1.3 kg

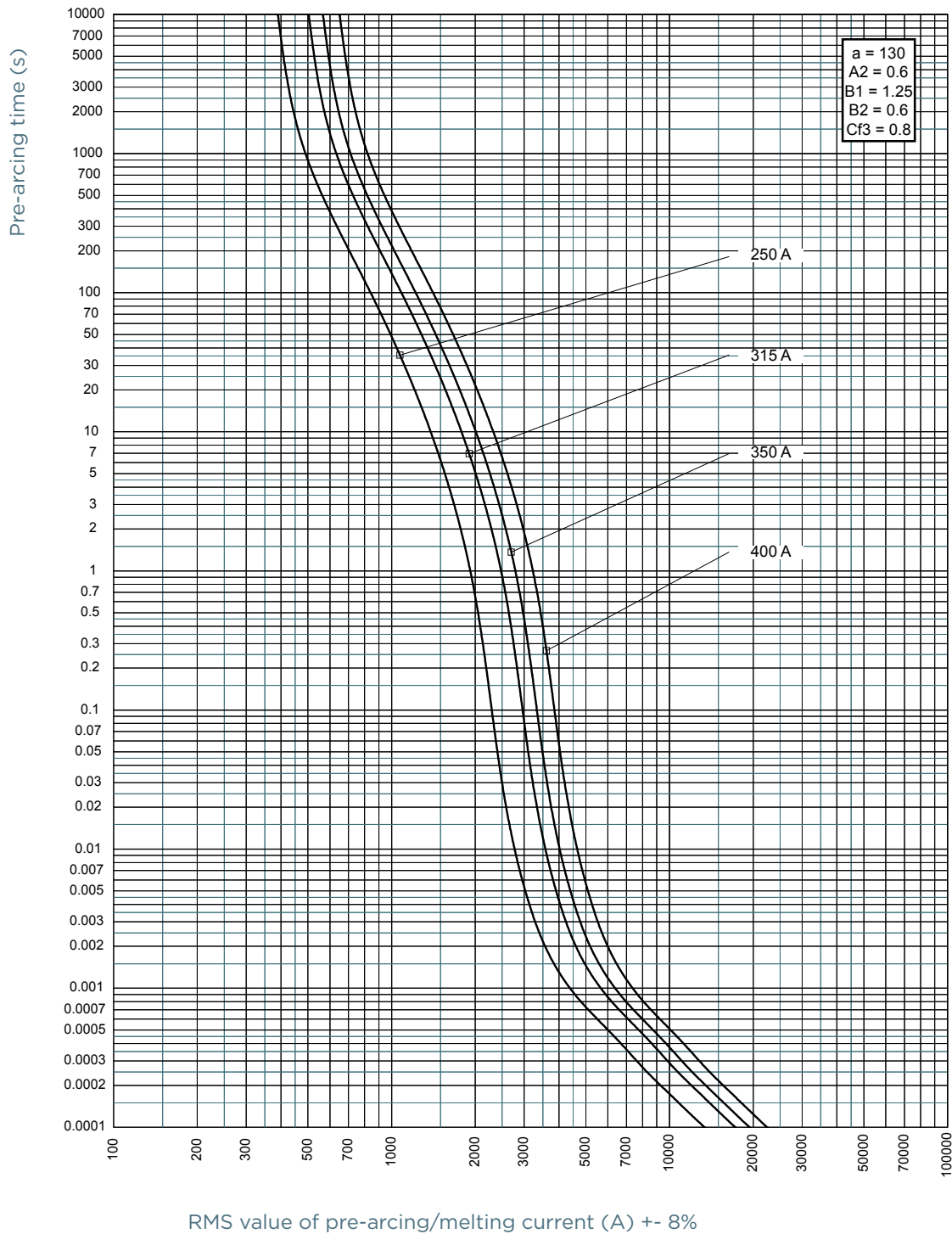


D122GC75V250TF

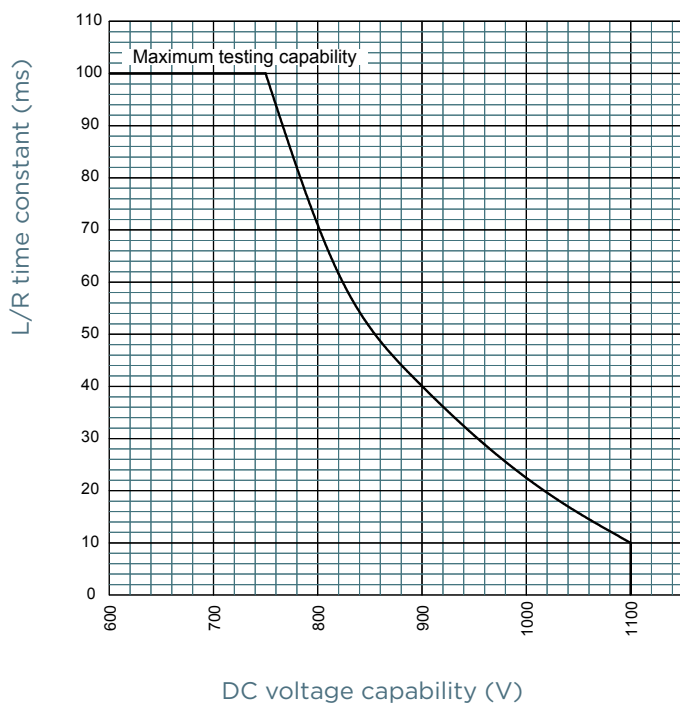
### Size 122 gR 750VDC threads terminals (TTF), with striker

Catalog number	Item number	Rated voltage DC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Rated breaking capacity DC	Max. I <sup>2</sup> t @900V, L/R=40ms, IP=50I <sub>n</sub>	Max. I <sup>2</sup> t @900V, L/R=40ms, IP=10I <sub>n</sub>	Power dissipation at I <sub>n</sub>	Power dissipation at 0.8 I <sub>n</sub>	Weight
D122GC75V250TF	B090437	750 V	250 A	18.05 kA <sup>2</sup> s	100 kA	250 kA <sup>2</sup> s	1250 kA <sup>2</sup> s	46.7 W	25.5 W	1.43 kg
D122GC75V315TF	M085249	750 V	315 A	30.06 kA <sup>2</sup> s	100 kA	400 kA <sup>2</sup> s	2000 kA <sup>2</sup> s	58 W	31.5 W	1.43 kg
D122GC75V350TF	G220898	750 V	350 A	38.08 kA <sup>2</sup> s	100 kA	500 kA <sup>2</sup> s	2500 kA <sup>2</sup> s	64.5 W	35 W	1.43 kg
D122GC75V400TF	C090438	750 V	400 A	50.94 kA <sup>2</sup> s	100 kA	600 kA <sup>2</sup> s	3100 kA <sup>2</sup> s	74.5 W	40.5 W	1.43 kg
D122GD75V450TF	R220953	750 V	450 A	63.5 A <sup>2</sup> s	100 kA	800 kA <sup>2</sup> s	4000 kA <sup>2</sup> s	90 W	49 W	1.43 kg
D122GD75V500TF	S220954	750 V	500 A	103 A <sup>2</sup> s	100 kA	1200 kA <sup>2</sup> s	6200 kA <sup>2</sup> s	95 W	52 W	1.43 kg

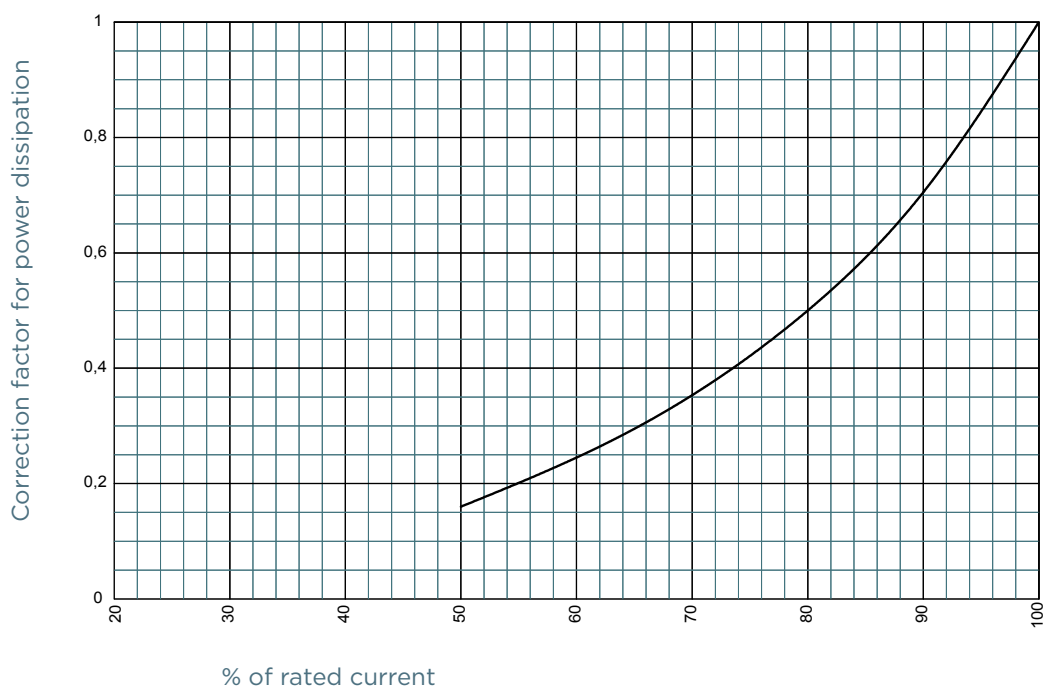
## TIME CURRENT CHARACTERISTIC CURVES



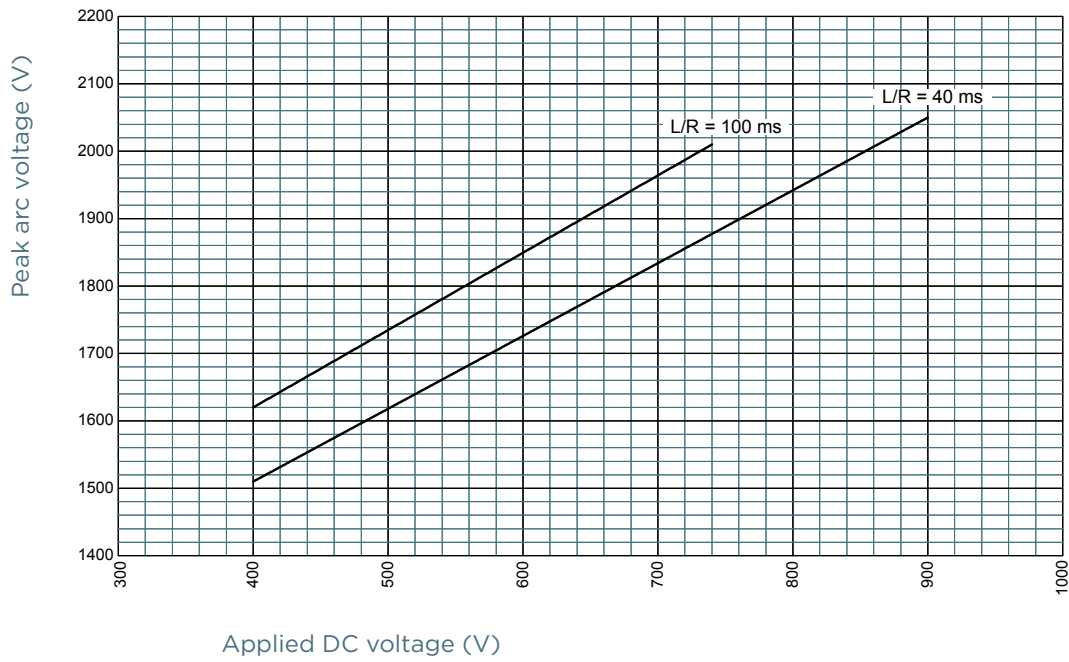
## L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY



## POWER DISSIPATION



## PEAK ARC VOLTAGE

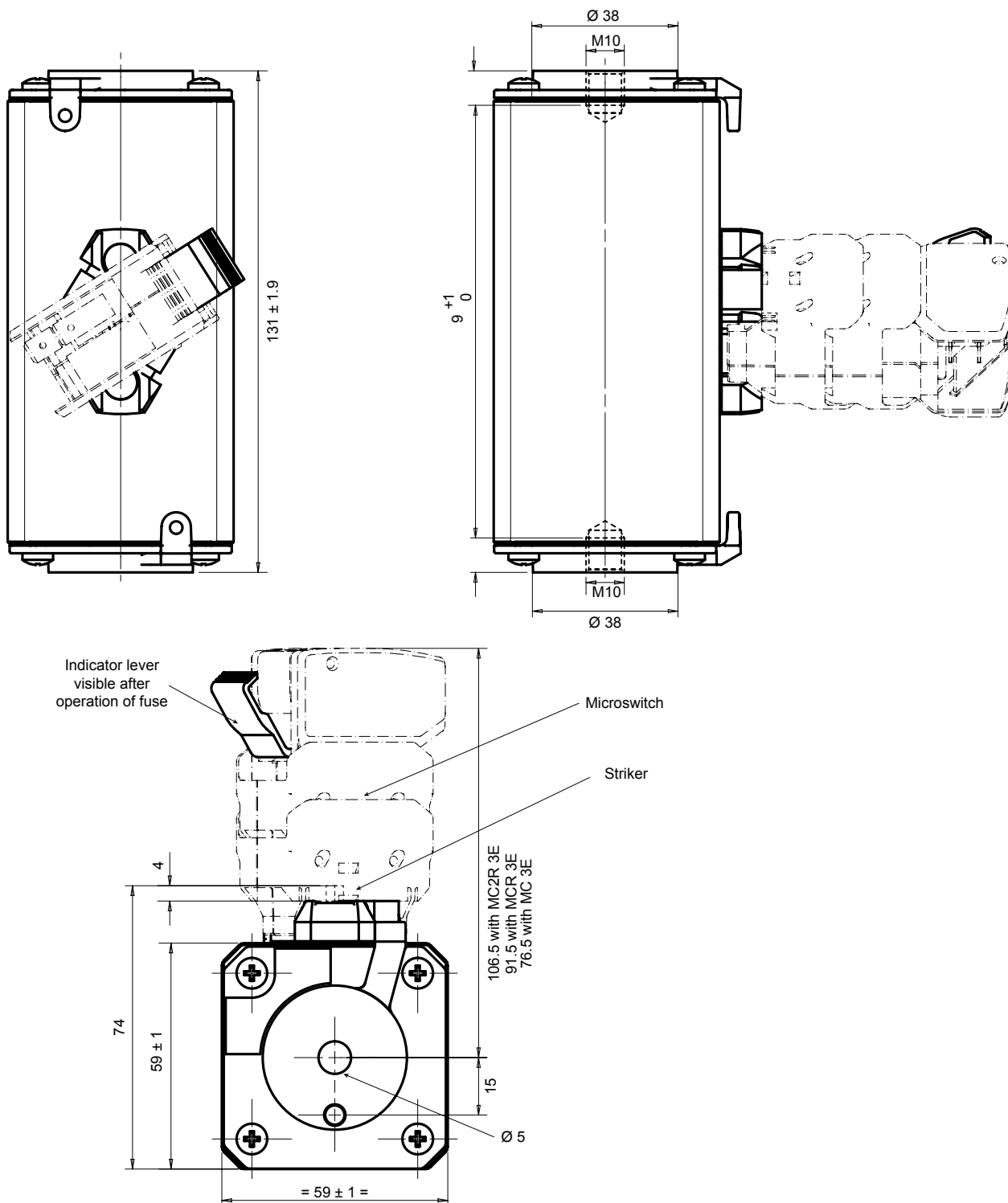


# Protistor® size 122 gR

750VDC

## DIMENSIONS

### Size 122 gR threads terminals (TTF)

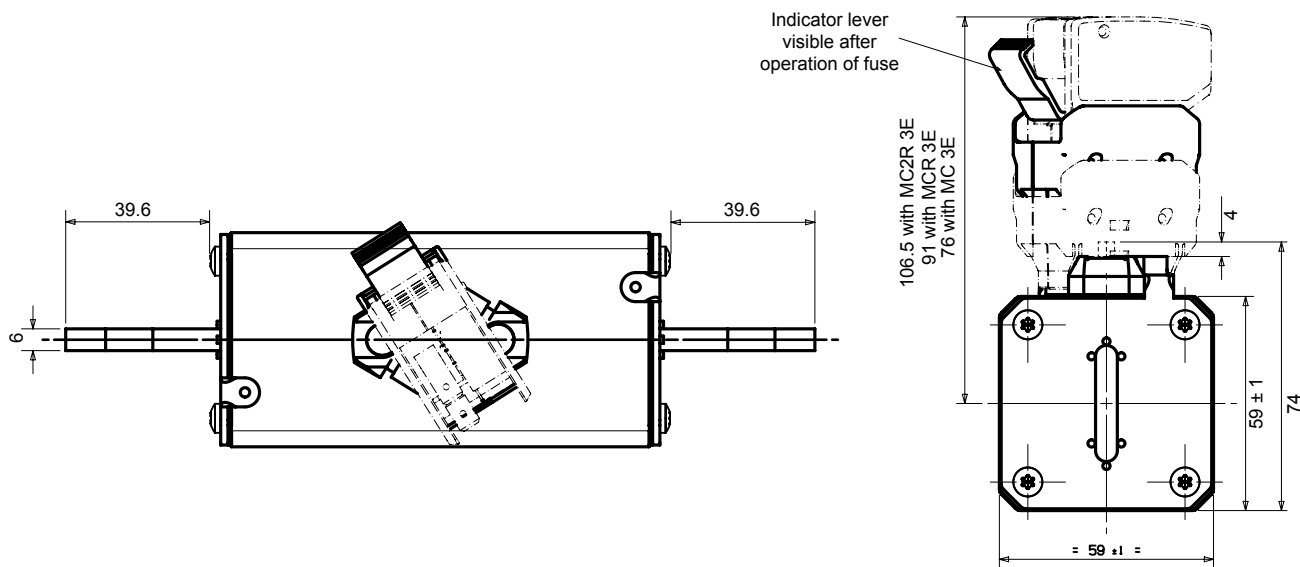
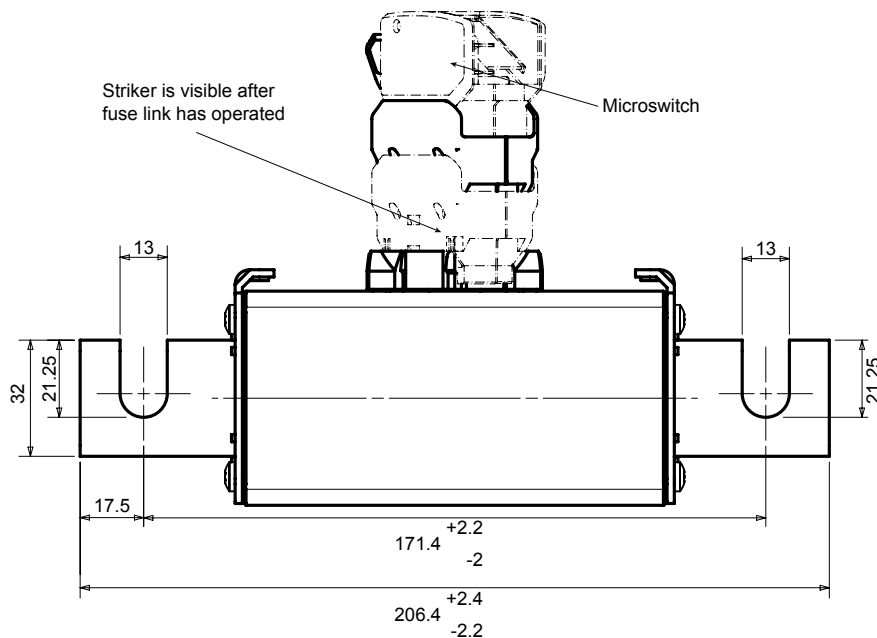


Dimensions in mm

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## DIMENSIONS

### Size 122 gR blade contacts (EF)



Dimensions in mm