

# 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

Voltage DC	750 VDC
Ampere Range (A)	250 ... 500 A
Speed/Characteristic	gR
Product Size	122

#### FEATURES & BENEFITS

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

#### APPLICATIONS

- Protection for inverters, moto drives, UPS systems and similar 750 VDC or less equipments

#### STANDARDS

- UL/CSA Recognized Component
- IEC 60269-4 Compliance
- CCC GB 1539.4

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## PRODUCT RANGE



D122GC75V250EF

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

Catalog number	Reference number	Rated current $I_n$	Pre-arcing $I^2t$	Clearing $I^2t$ at Rated Voltage	Rated breaking capacity DC	Power dissipation at 0.8 $I_n$	Power dissipation at $I_n$	Max. $I^2t$ @900V, L/R=40ms, IP=50In	Max. $I^2t$ @900V, L/R=40ms, IP=10In	Weight
D122GC75V250EF	A087331	250 A	18.05 kA <sup>2</sup> s	250 kA <sup>2</sup> s	100 kA	25.5 W	46.7 W	250 kA <sup>2</sup> s	1250 kA <sup>2</sup> s	1.3 kg
D122GC75V315EF	B087332	315 A	30.06 kA <sup>2</sup> s	400 kA <sup>2</sup> s	100 kA	31.5 W	58 W	400 kA <sup>2</sup> s	2000 kA <sup>2</sup> s	1.3 kg
D122GC75V400EF	L089388	400 A	50.94 kA <sup>2</sup> s	600 kA <sup>2</sup> s	100 kA	40.5 W	74.5 W	600 kA <sup>2</sup> s	3100 kA <sup>2</sup> s	1.3 kg
D122GD75V450EF	P220951	450 A	-	800 kA <sup>2</sup> s	100 kA	49 W	90 W	800 kA <sup>2</sup> s	4000 kA <sup>2</sup> s	1.3 kg
D122GD75V500EF	Q220952	500 A	-	1200 kA <sup>2</sup> s	100 kA	52 W	95 W	1200 kA <sup>2</sup> s	6200 kA <sup>2</sup> s	1.3 kg



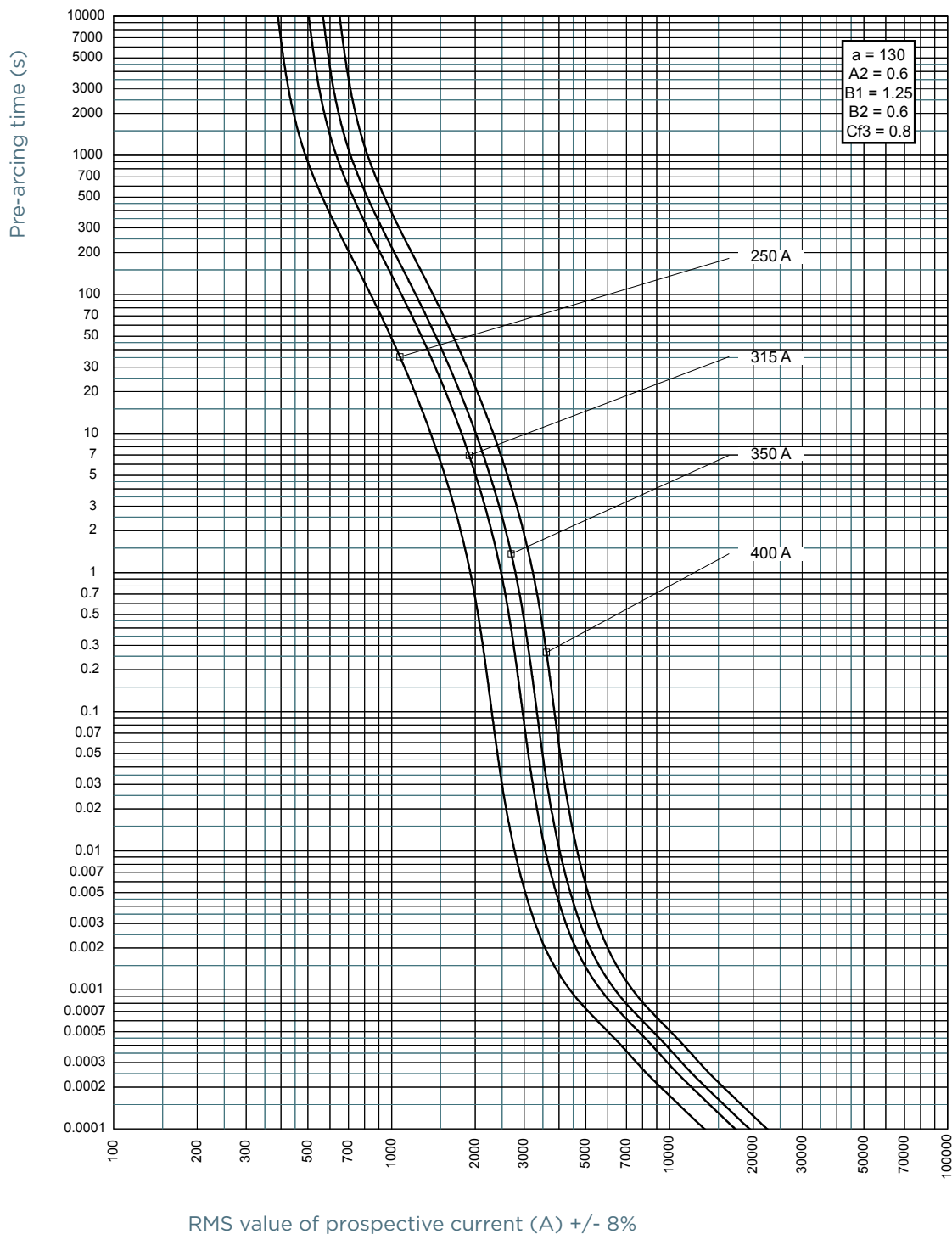
D122GC75V250TF

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

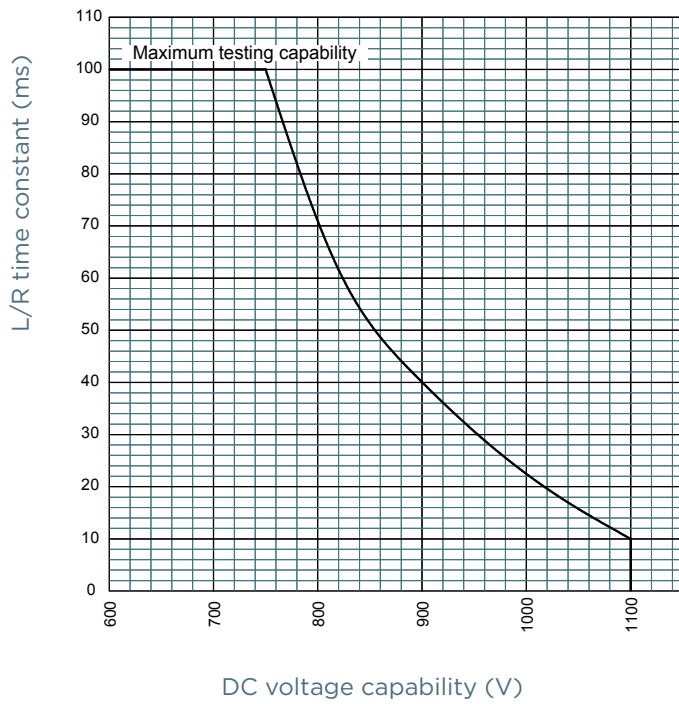
Catalog number	Reference number	Rated current $I_n$	Pre-arcing $I^2t$	Clearing $I^2t$ at Rated Voltage	Rated breaking capacity DC	Power dissipation at 0.8 $I_n$	Power dissipation at $I_n$	Max. $I^2t$ @900V, L/R=40ms, IP=50In	Max. $I^2t$ @900V, L/R=40ms, IP=10In	Weight
D122GC75V250TF	B090437	250 A	18.05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

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

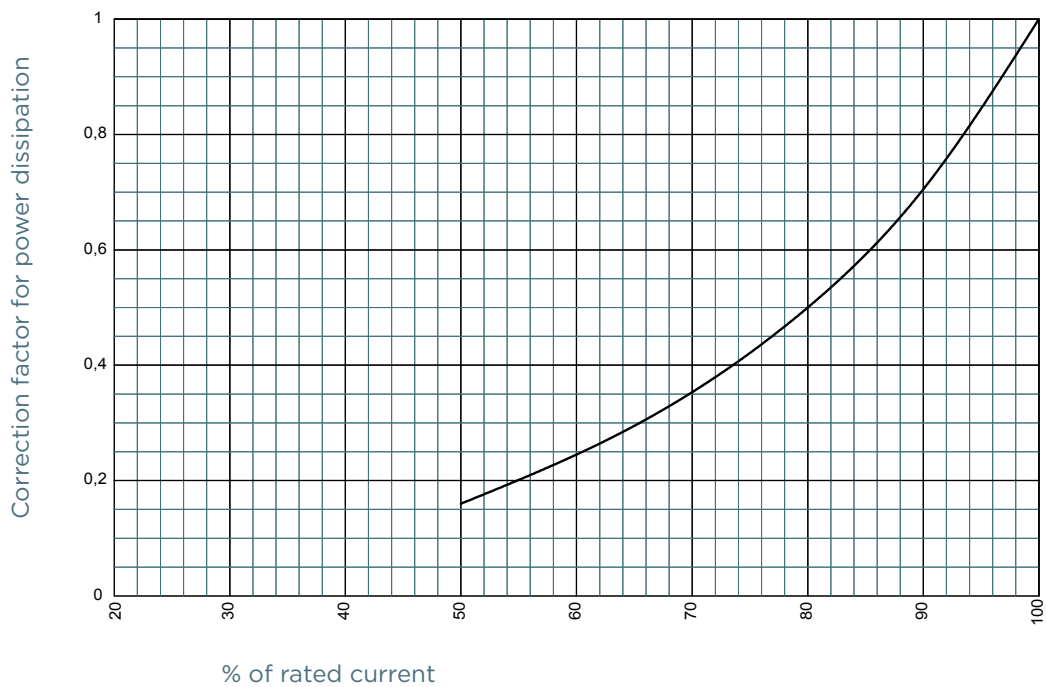
## TIME CURRENT CHARACTERISTIC CURVES



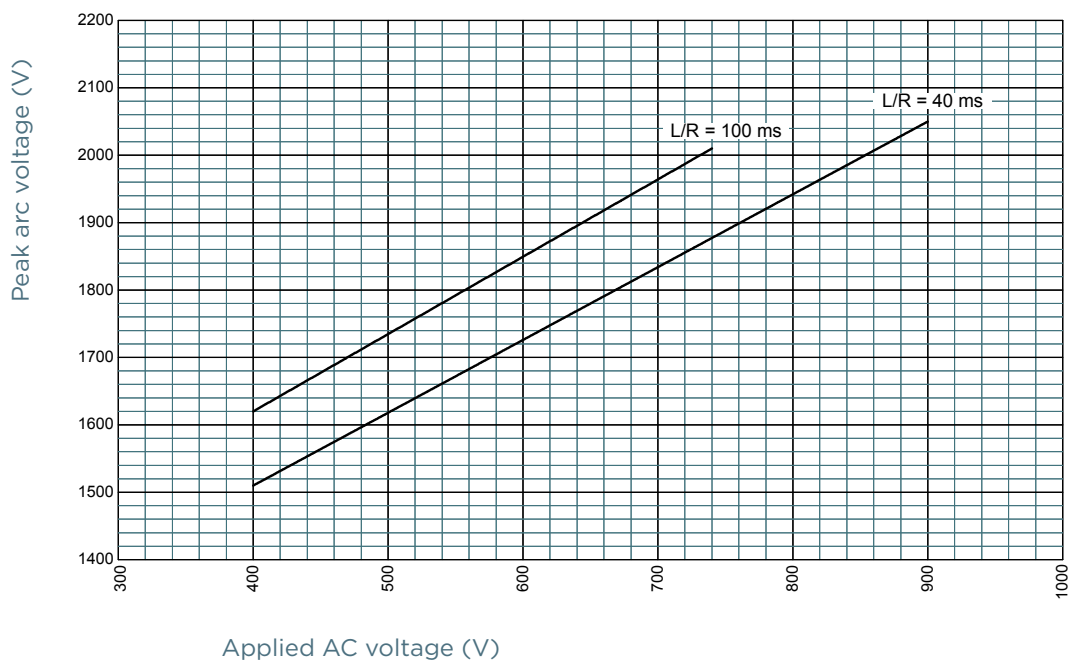
## L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY



## POWER DISSIPATION



## PEAK ARC VOLTAGE

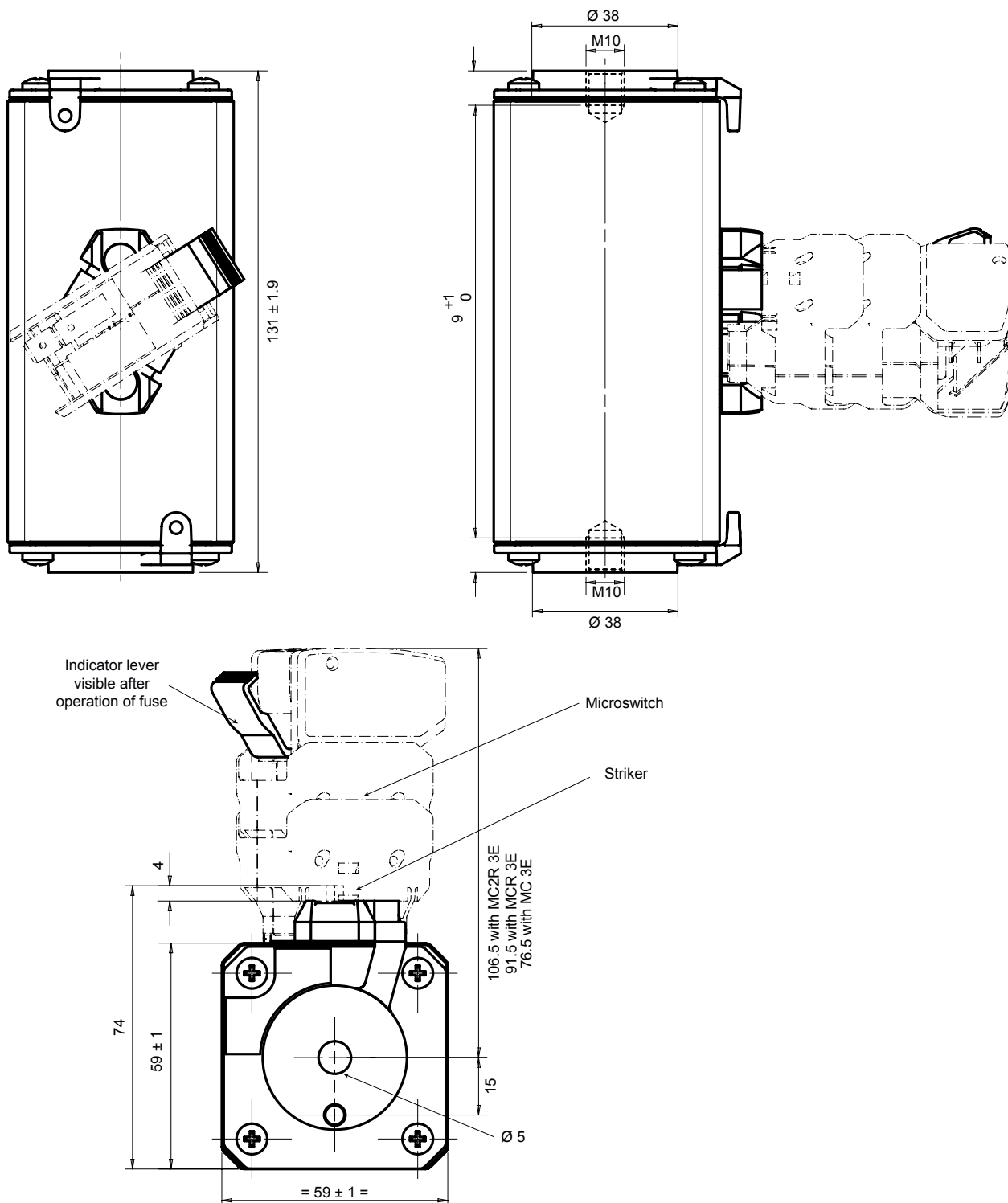


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## DIMENSIONS

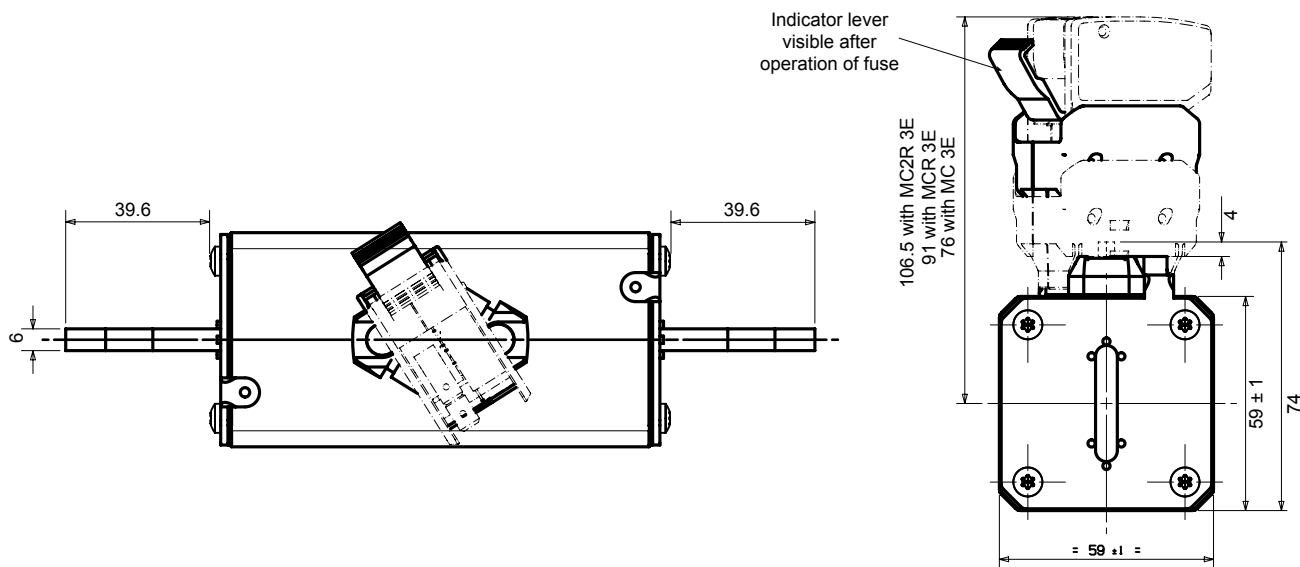
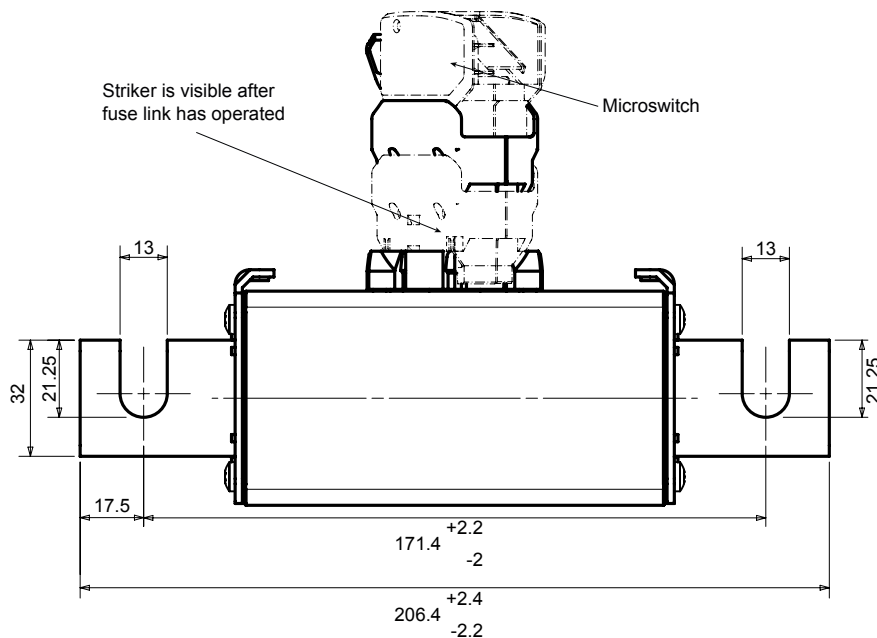
Size 122gR threads terminals (TTF)



Dimensions in mm

## DIMENSIONS

### Size 122gR blade contacts (EF)



Dimensions in mm