

# Protistor® size 72 gR

450 to 600VDC

## SEMICONDUCTOR PROTECTION FUSES

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



These 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® have been engineered to provide state-of-the-art protection for semiconductors: diodes, thyristors, GTO's and IGBT devices. Fuses are 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 Range DC	450 ... 600 VDC
Ampere Range (A)	200 ... 630 A
Speed/Characteristic	gR
Product Size	72

### FEATURES & BENEFITS

- Multiple body sizes and terminals or blades combination
- gR Class according to IEC 60269-4 and VDE 636-23
- Low  $I^2t$  for improved semiconductor protection
- Extremely fast acting
- Eliminate all overloads
- Excellent cycling capability

### APPLICATIONS

- Protection of inverters, motor drives, UPS systems and similar 600V or less equipments.

### STANDARDS

- IEC 60269-4 Compliance
- UL/CSA Recognized E76491
- CCC GB 1359.4



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## PRODUCT RANGE

### Size 72 type TTF-with one ISO metric threaded hole

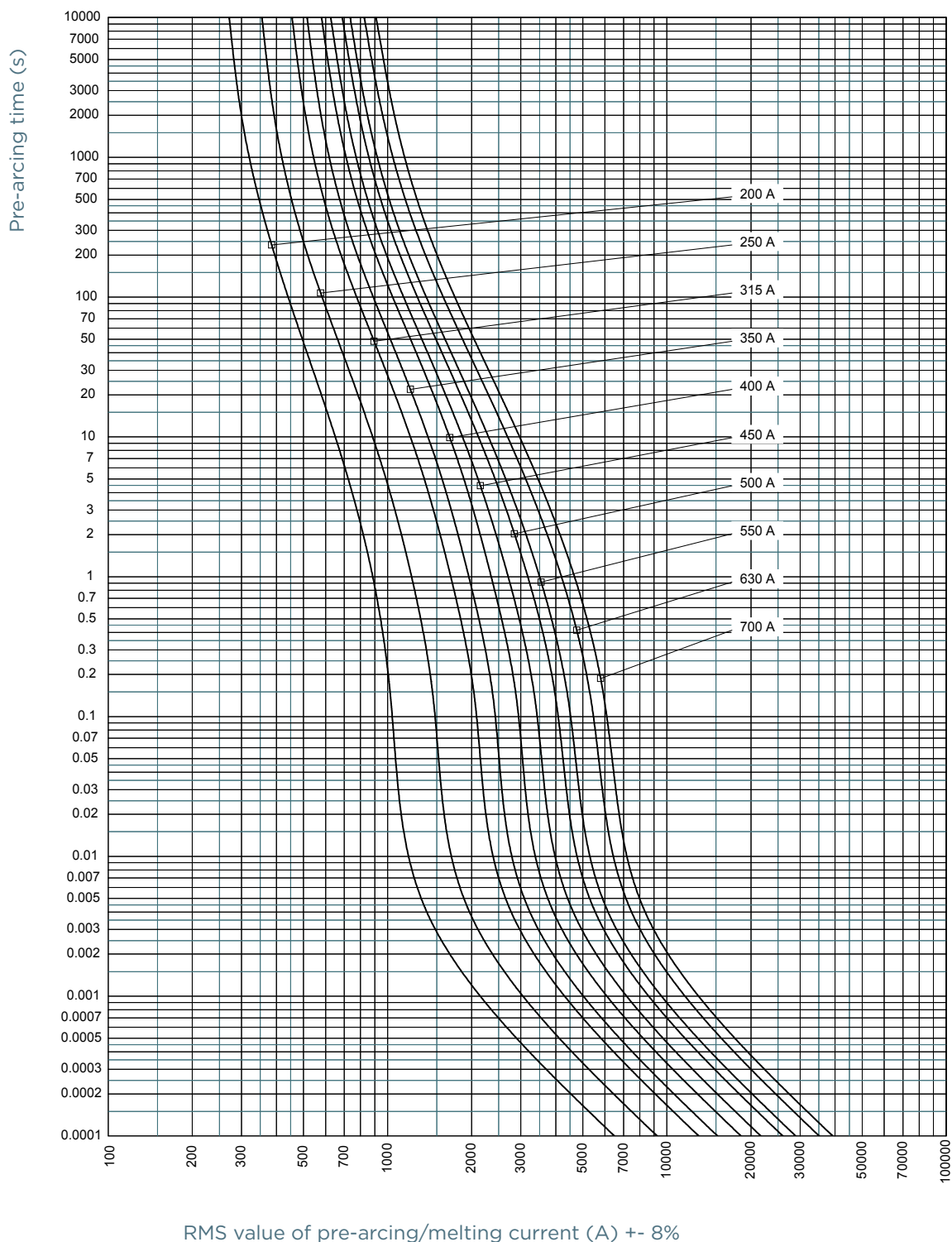
Catalog number	Item number	Rated voltage DC (IEC)	Rated voltage DC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Power dissipation at I <sub>n</sub>	Package	Weight
D72GB60V200TF	G302088	600 V	650 V	200 A	4232 A <sup>2</sup> s	45 W	3	0.73 kg
D72GB60V250TF	H302089	600 V	650 V	250 A	8554 A <sup>2</sup> s	49 W	3	0.73 kg
D72GB60V315TF	J302090	600 V	650 V	315 A	17002 A <sup>2</sup> s	55 W	3	0.73 kg
D72GB60V350TF	K302091	600 V	650 V	350 A	23156 A <sup>2</sup> s	58 W	3	0.73 kg
D72GB60V400TF	L302092	600 V	650 V	400 A	34113 A <sup>2</sup> s	63 W	3	0.73 kg
D72GB55V450TF	M302093	550 V	600 V	450 A	47309 A <sup>2</sup> s	67 W	3	0.73 kg
D72GB55V500TF	N302094	550 V	600 V	500 A	68007 A <sup>2</sup> s	69 W	3	0.73 kg
D72GB45V550TF	A302818	450 V	500 V	550 A	84050 A <sup>2</sup> s	75 W	3	0.73 kg
D72GB45V630TF	Z302196	450 V	500 V	630 A	123803 A <sup>2</sup> s	81 W	3	0.73 kg
D72GB45V700TF	C1016602	450 V	500 V	700 A	154790 A <sup>2</sup> s	89 W	3	0.73 kg

### Size 72 type EF style notched blade connections

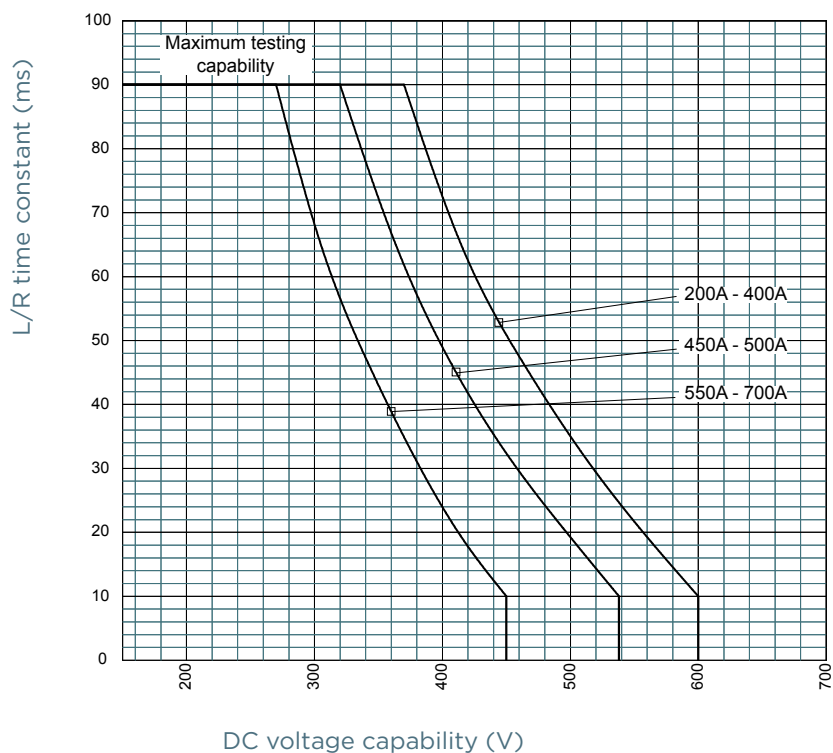
Catalog number	Item number	Rated voltage DC (IEC)	Rated voltage DC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Power dissipation at I <sub>n</sub>	Package	Weight
D72GB60V200EF	M302691	600 V	650 V	200 A	4232 A <sup>2</sup> s	45 W	3	0.76 kg
D72GB60V250EF	N302692	600 V	650 V	250 A	8554 A <sup>2</sup> s	50 W	3	0.76 kg
D72GB60V350EF	P302693	600 V	650 V	350 A	23156 A <sup>2</sup> s	60 W	3	0.76 kg
D72GB60V400EFB	L1005363	600 V	650 V	400 A	34113 A <sup>2</sup> s	65 W	3	0.76 kg
D72GB55V450EFB	B1003123	550 V	600 V	450 A	47309 A <sup>2</sup> s	70 W	3	0.76 kg
D72GB45V550EF	Q302694	450 V	500 V	550 A	84050 A <sup>2</sup> s	72 W	3	0.76 kg

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

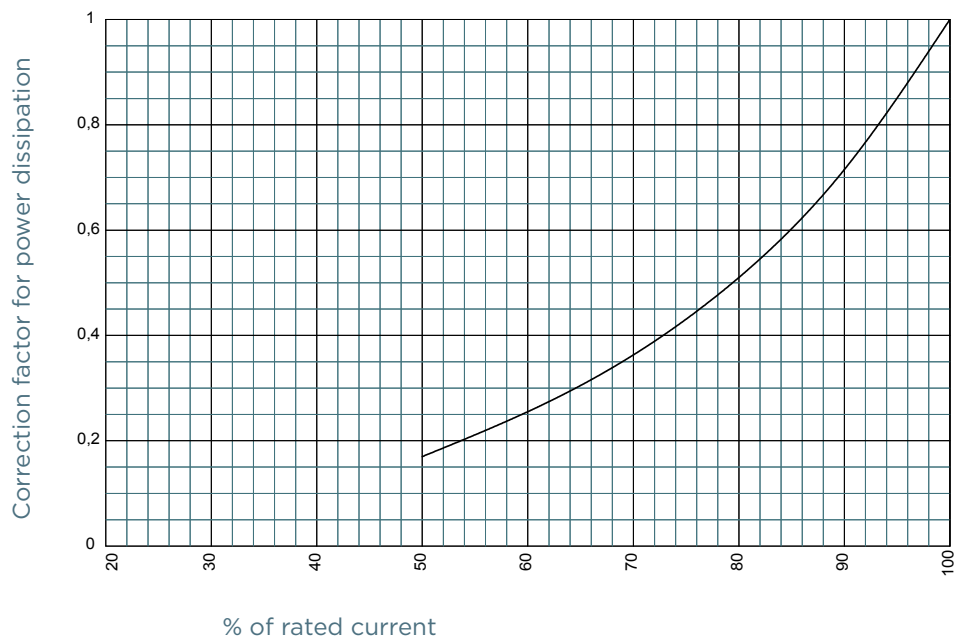
## TIME CURRENT CHARACTERISTIC CURVES



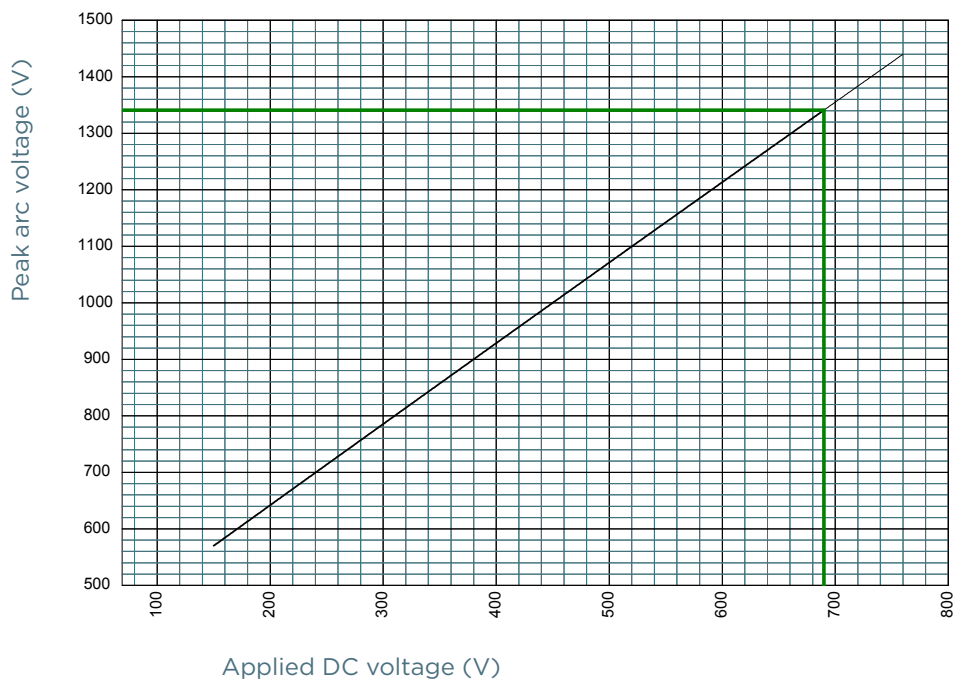
## L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY



## POWER DISSIPATION



## PEAK ARC VOLTAGE

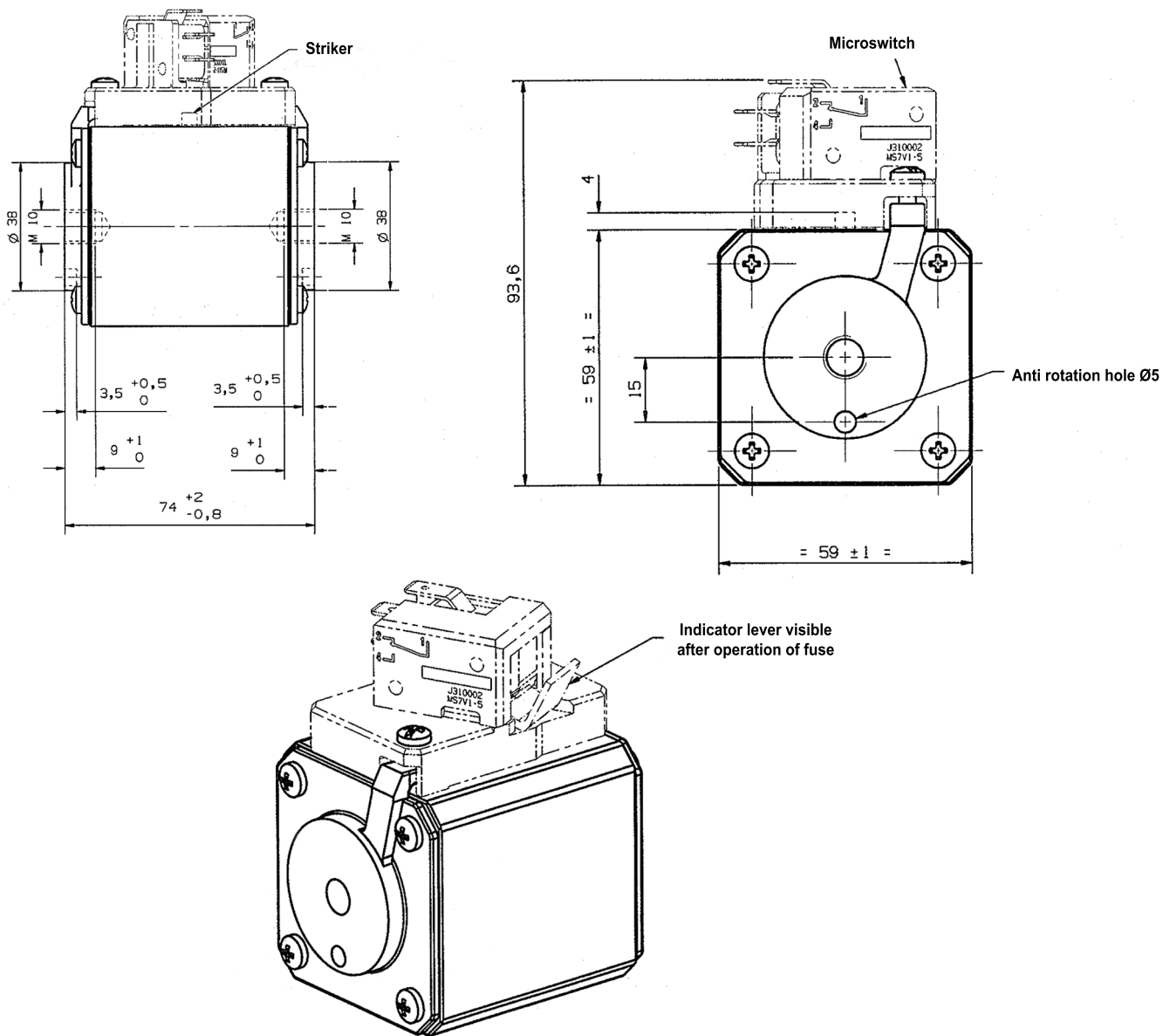


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## DIMENSIONS

### Size 72 gR type TTF



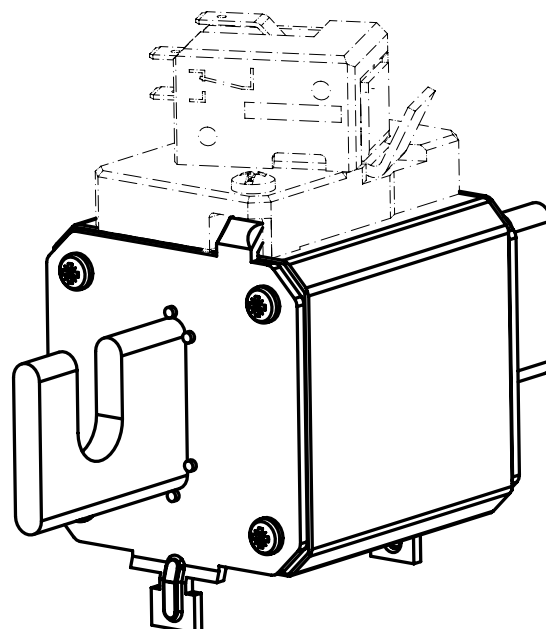
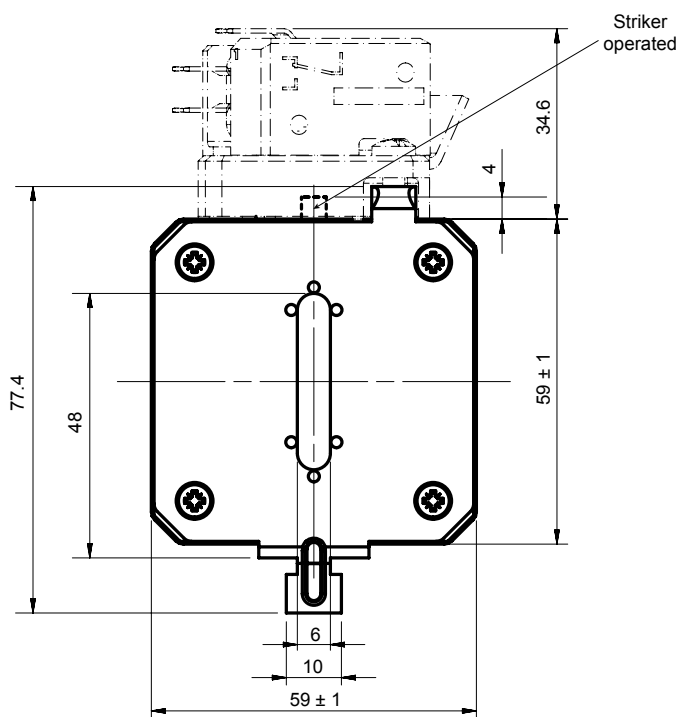
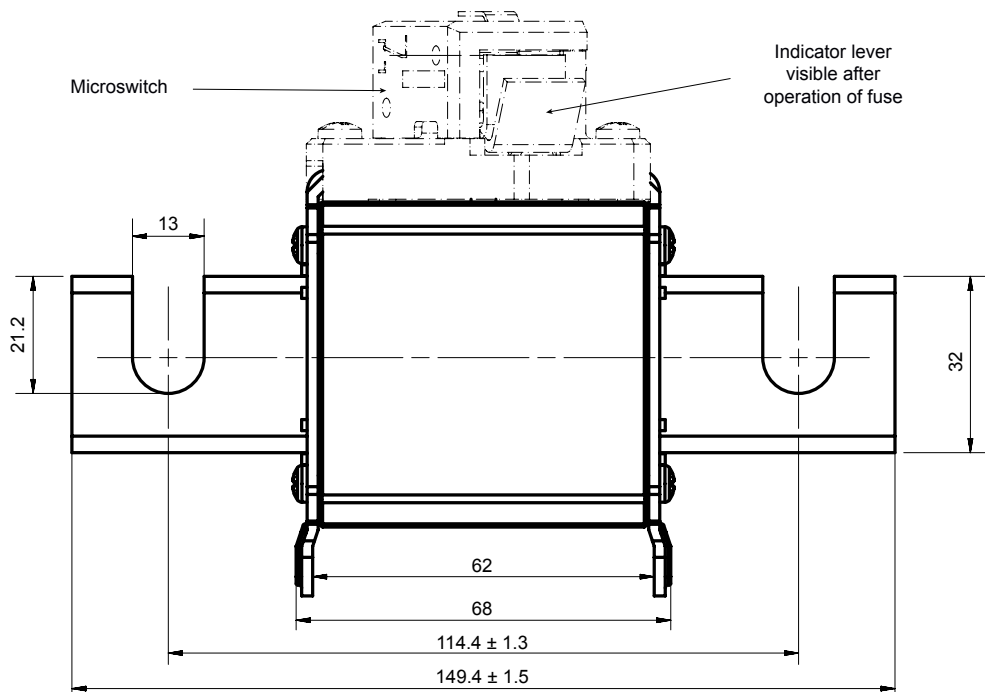
Dimensions in mm

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## DIMENSIONS

### Size 72 gR type EF



Dimensions in mm