

# Protistor® size 70 gR

350 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	350 ... 600 VDC
Ampere Range (A)	50 ... 350 A
Speed/Characteristic	gR
Product Size	70

#### 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 70 type TTF-with one ISO metric threaded hole

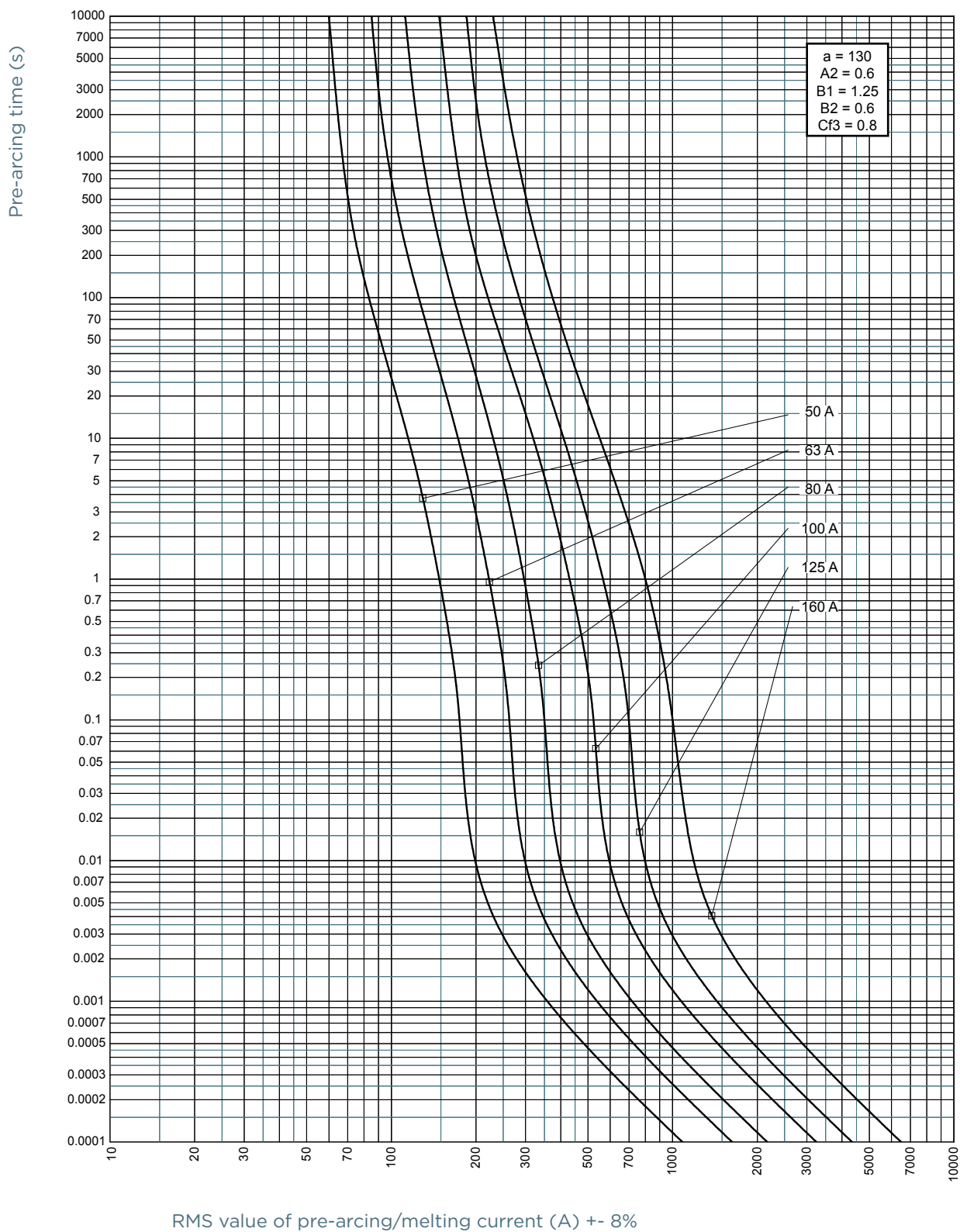
Catalog number	Item number	Rated voltage DC (IEC)	Rated voltage DC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Power dissipation at I <sub>n</sub>	Package	Weight
D70GB60V50TF	Q302073	600 V	650 V	50 A	118 A <sup>2</sup> s	17 W	3	0.34 kg
D70GB60V63TF	R302074	600 V	650 V	63 A	266 A <sup>2</sup> s	18 W	3	0.34 kg
D70GB60V80TF	S302075	600 V	650 V	80 A	473 A <sup>2</sup> s	22 W	3	0.34 kg
D70GB60V100TF	T302076	600 V	650 V	100 A	1058 A <sup>2</sup> s	23 W	3	0.34 kg
D70GB60V125TF	V302077	600 V	650 V	125 A	1897 A <sup>2</sup> s	26 W	3	0.34 kg
D70GB60V160TF	W302078	600 V	650 V	160 A	4232 A <sup>2</sup> s	29 W	3	0.34 kg
D70GB55V200TF	X302079	550 V	600 V	200 A	7540 A <sup>2</sup> s	33 W	3	0.34 kg
D70GB55V250TF	Y302080	550 V	600 V	250 A	13448 A <sup>2</sup> s	39 W	3	0.34 kg
D70GB45V315TF	K302666	450 V	500 V	315 A	24112 A <sup>2</sup> s	46 W	3	0.34 kg
D70GB35V350TF	-	350 V	400 V	350 A	40780 A <sup>2</sup> s	46 W	3	0.34 kg

### Size 70 type ESF style notched blade connections

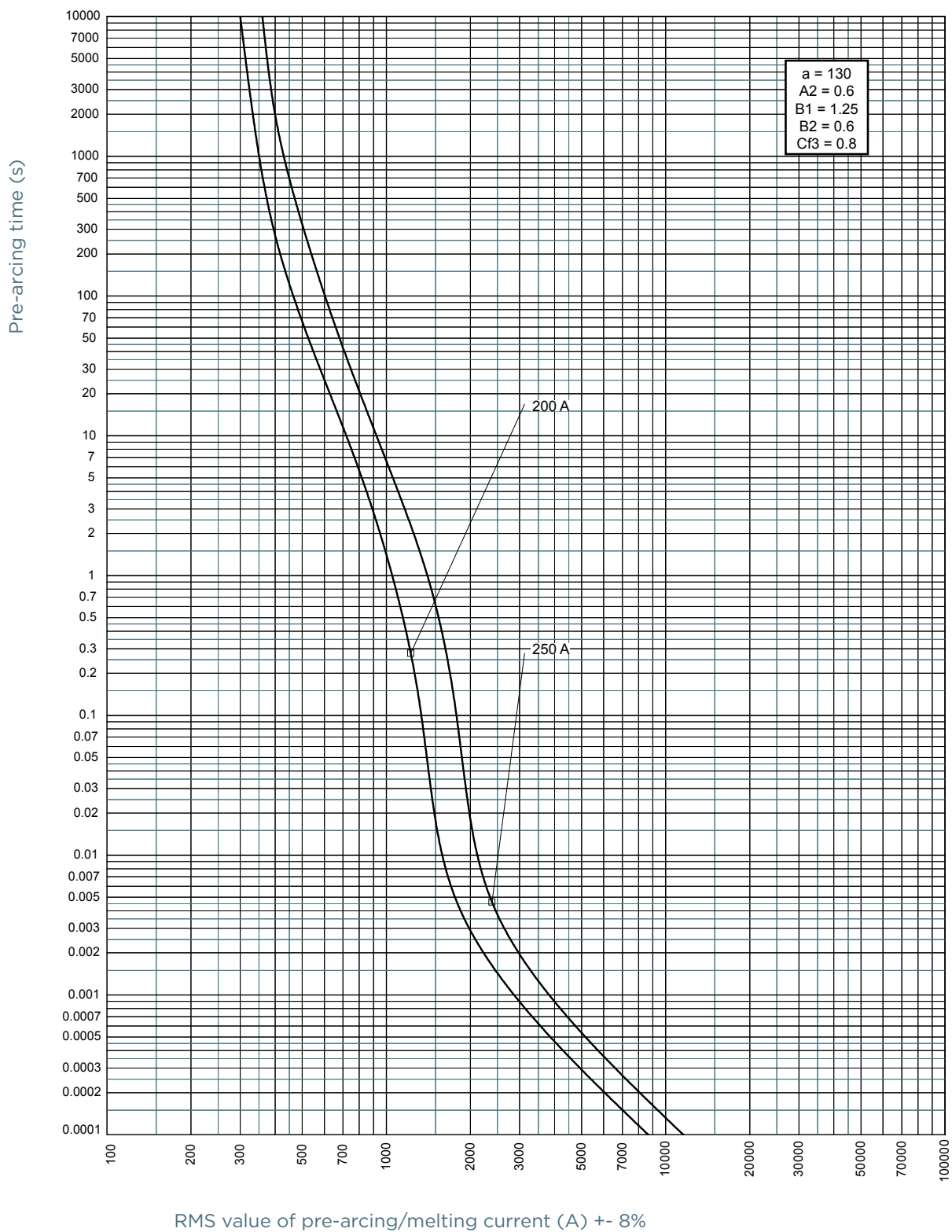
Catalog number	Item number	Rated voltage DC (IEC)	Rated voltage DC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Power dissipation at I <sub>n</sub>	Package	Weight
D70GB60V50ESFB	B1003031	600 V	650 V	50 A	118 A <sup>2</sup> s	17 W	3	0.4 kg
D70GB60V63ESF	Q232475	600 V	650 V	63 A	266 A <sup>2</sup> s	18 W	3	0.4 kg
D70GB60V80ESF	C232601	600 V	650 V	80 A	473 A <sup>2</sup> s	22 W	3	0.4 kg
D70GB60V100ESF	J302665	600 V	650 V	100 A	1058 A <sup>2</sup> s	23 W	3	0.4 kg
D70GB60V125ESF	Q235488	600 V	650 V	125 A	1897 A <sup>2</sup> s	26 W	3	0.4 kg
D70GB60V160ESF	T302490	600 V	650 V	160 A	4232 A <sup>2</sup> s	29 W	3	0.4 kg
D70GB55V200ESF	R302488	550 V	600 V	200 A	7540 A <sup>2</sup> s	34 W	3	0.4 kg
D70GB55V250ESF	J302688	550 V	600 V	250 A	13448 A <sup>2</sup> s	40 W	3	0.4 kg
D70GB45V315ESF	V229236	450 V	500 V	315 A	24112 A <sup>2</sup> s	47 W	3	0.4 kg
D70GB35V350ESF	S1022458	350 V	400 V	350 A	40780 A <sup>2</sup> s	47 W	3	0.4 kg

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

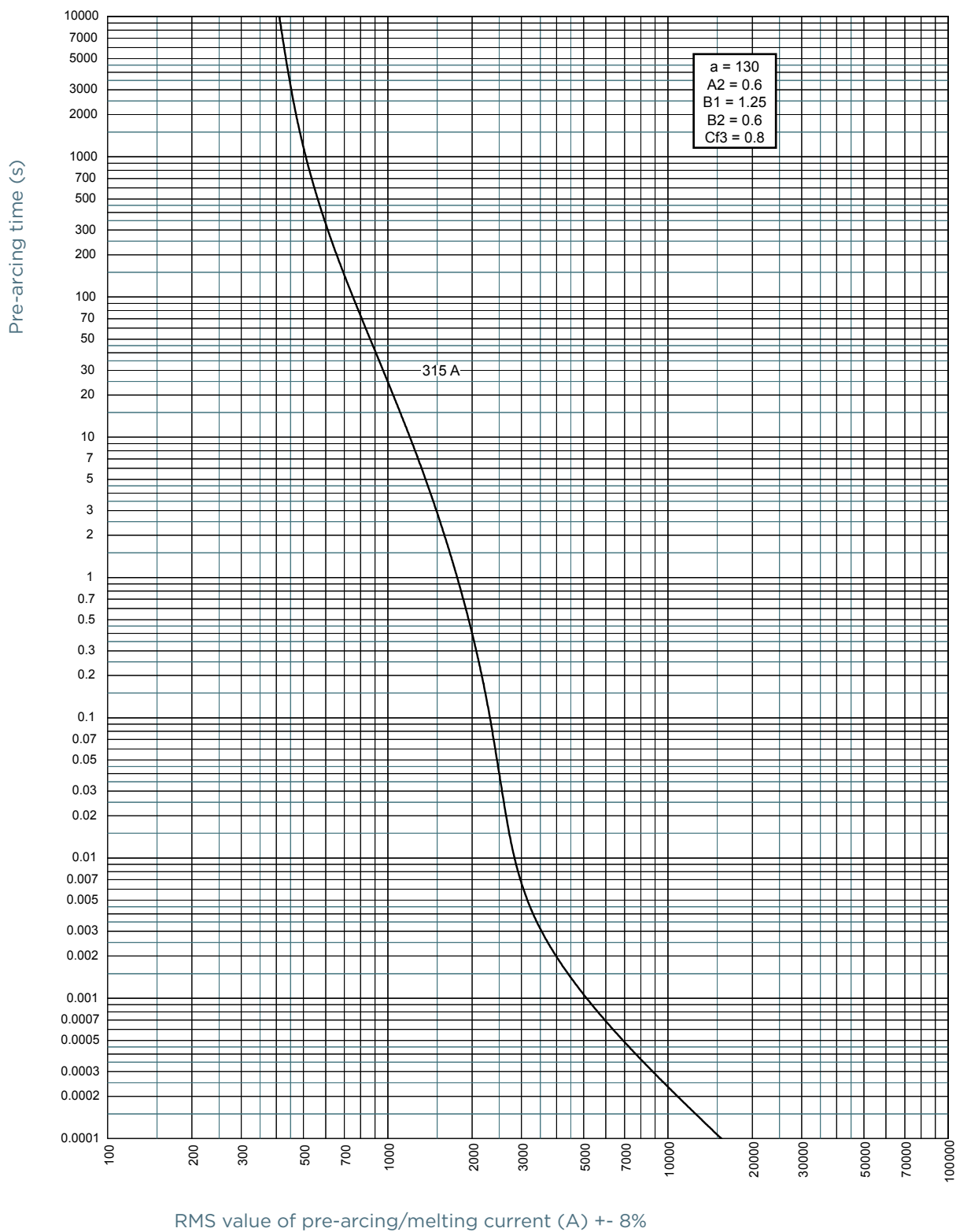
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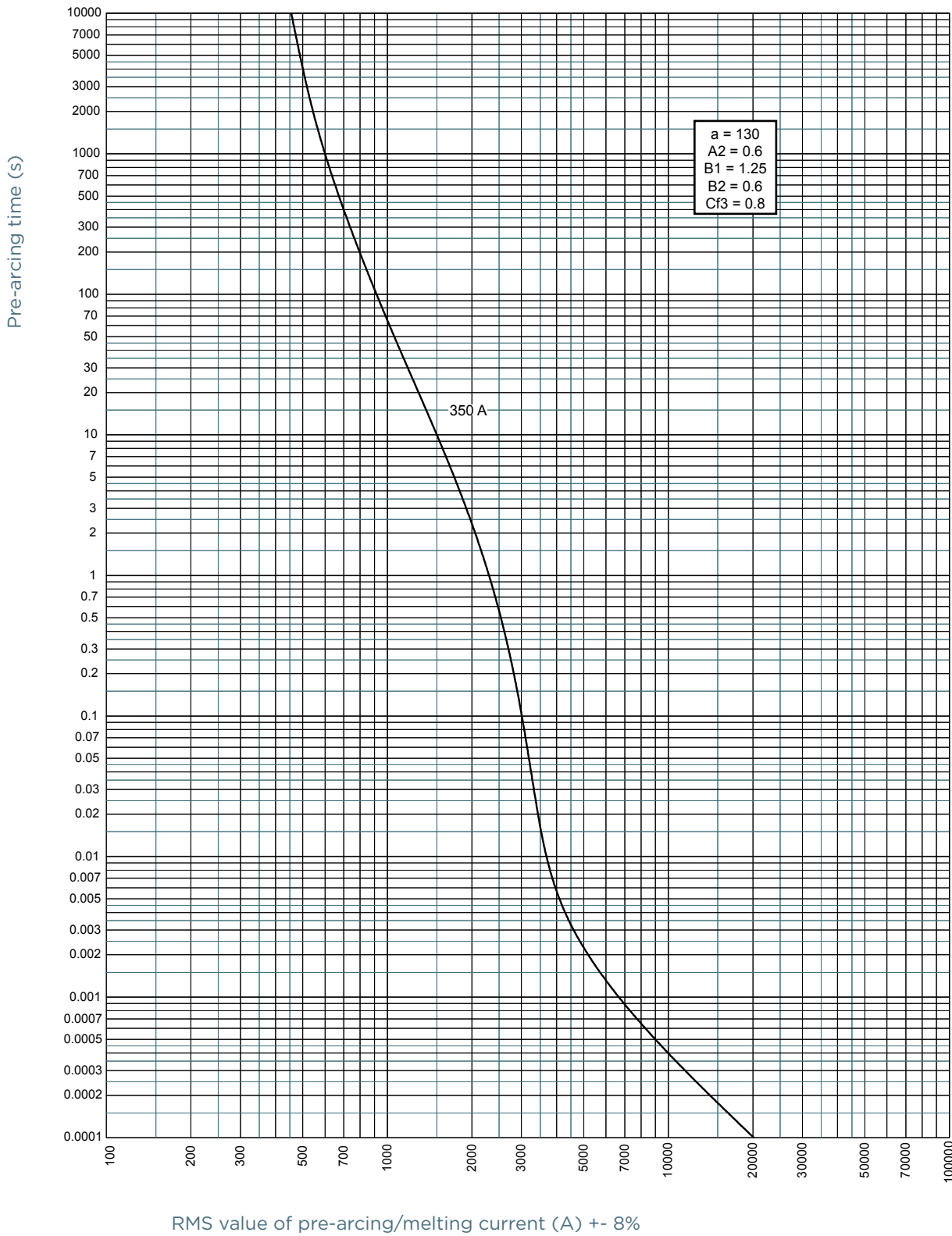
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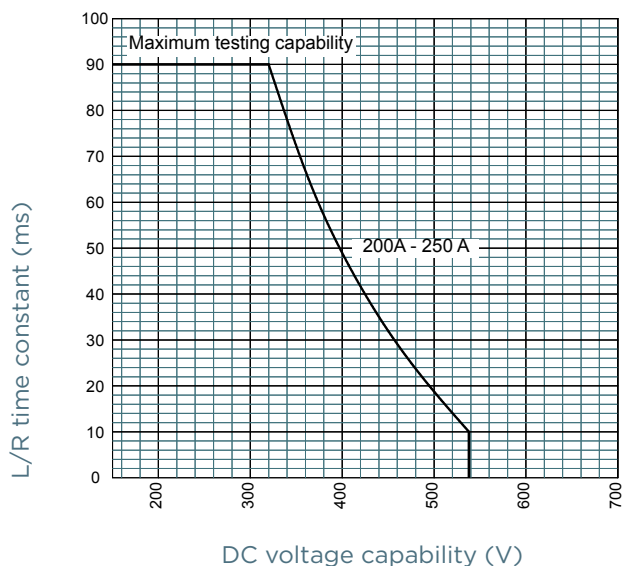
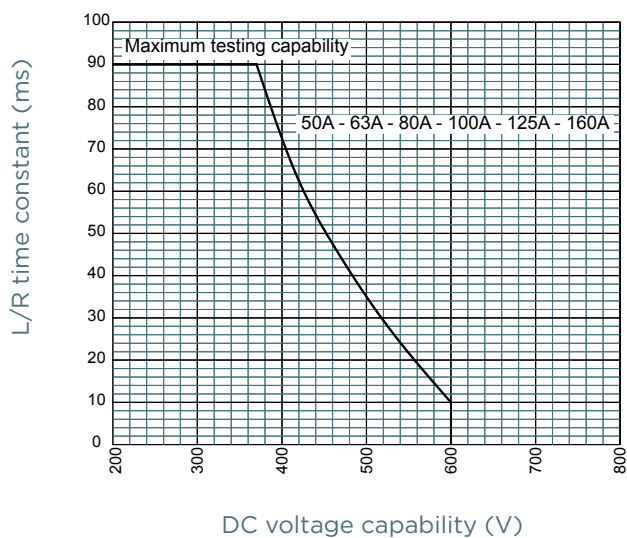


TIME CURRENT CHARACTERISTIC CURVES

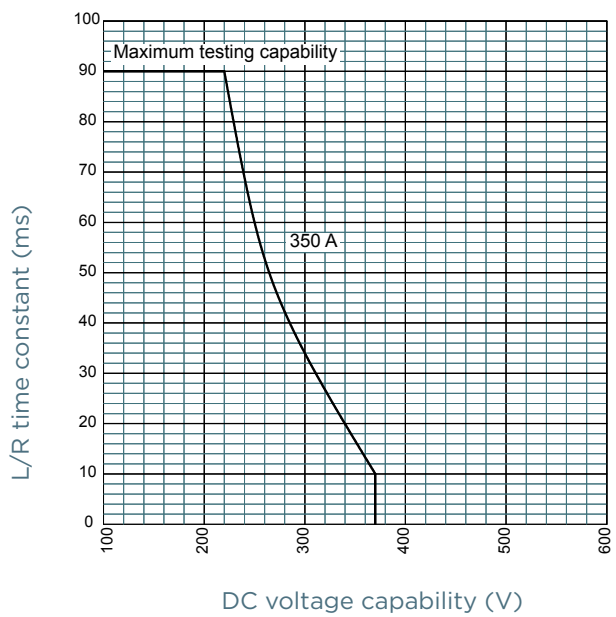
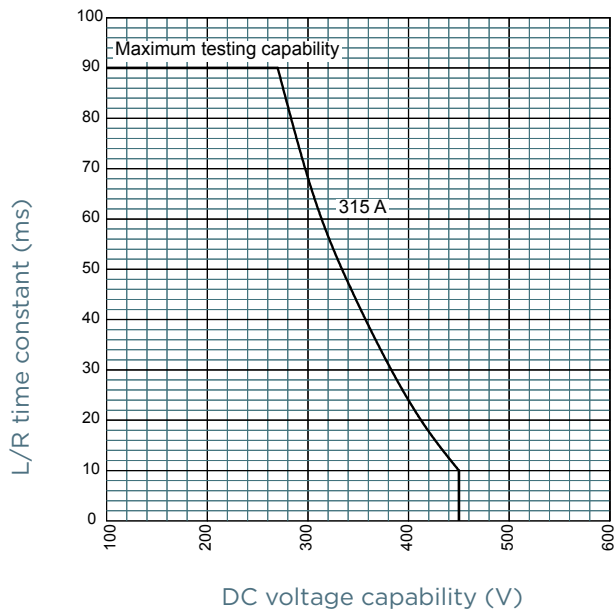


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## L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

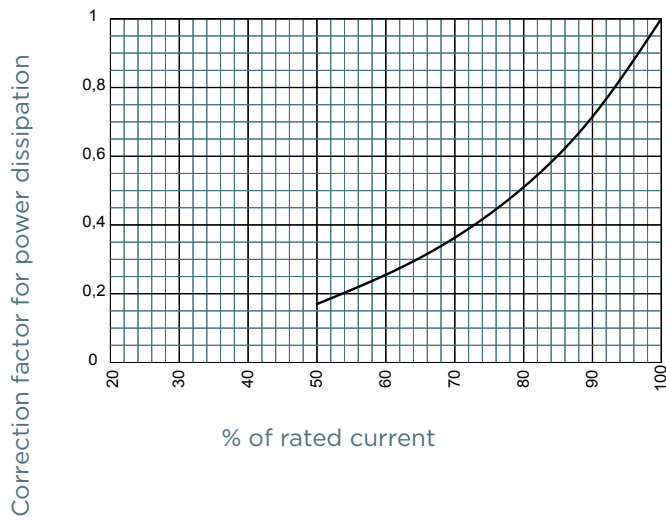


## L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

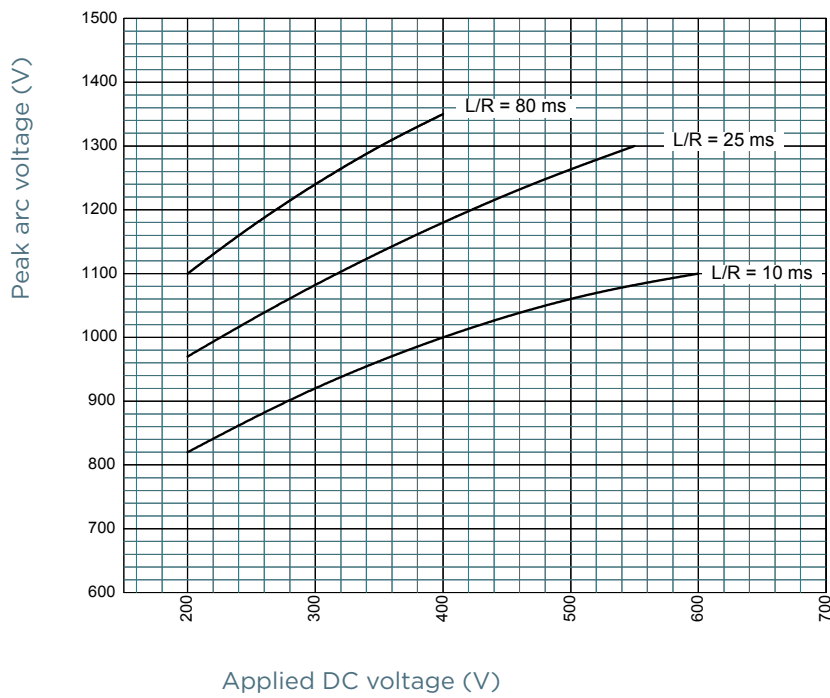




## POWER DISSIPATION



## PEAK ARC VOLTAGE

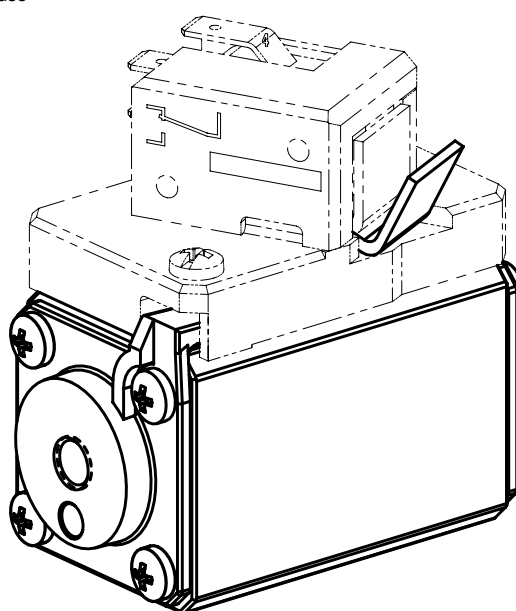
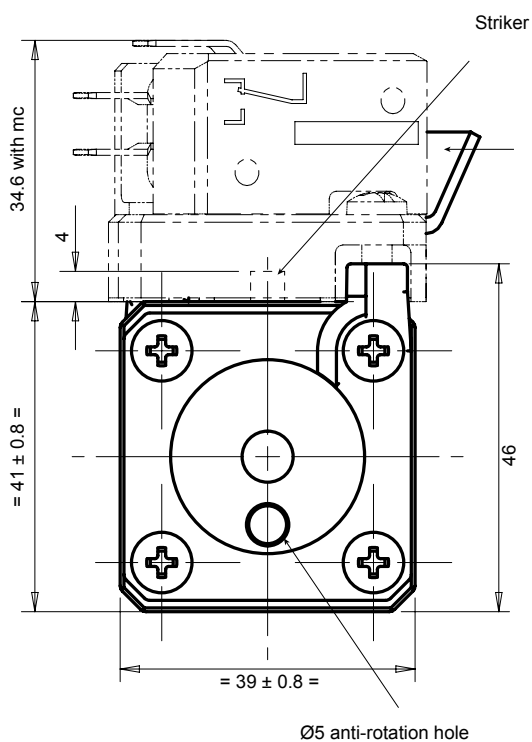
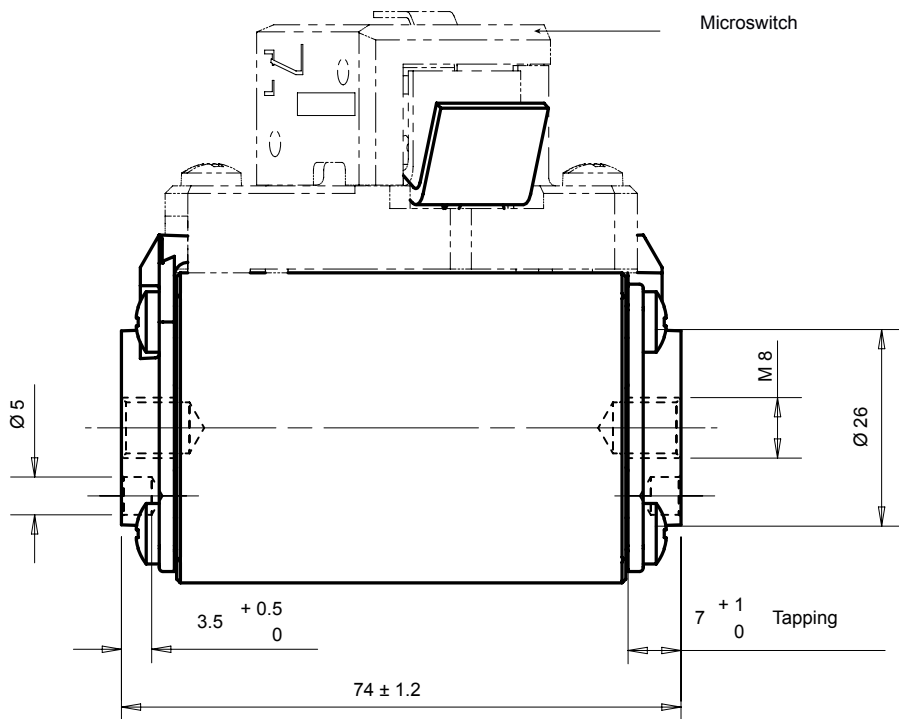


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## DIMENSIONS

### Size 70 gR TTF



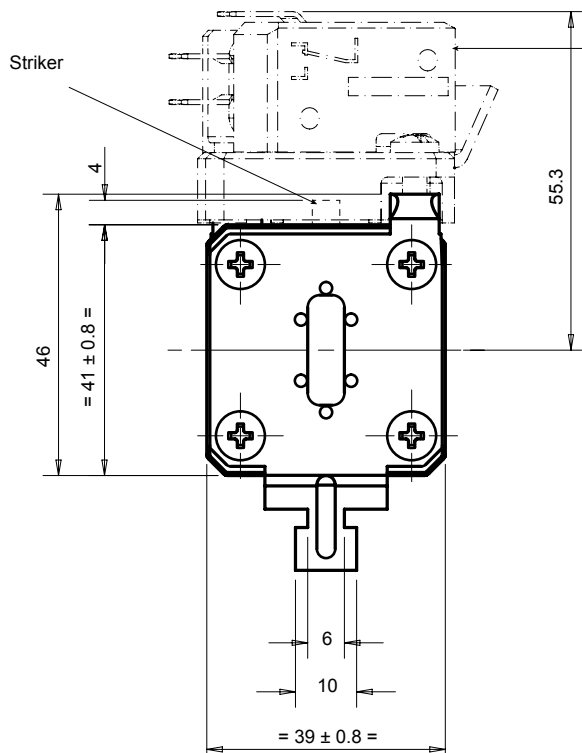
Dimensions in mm

# Protistor® size 70 gR

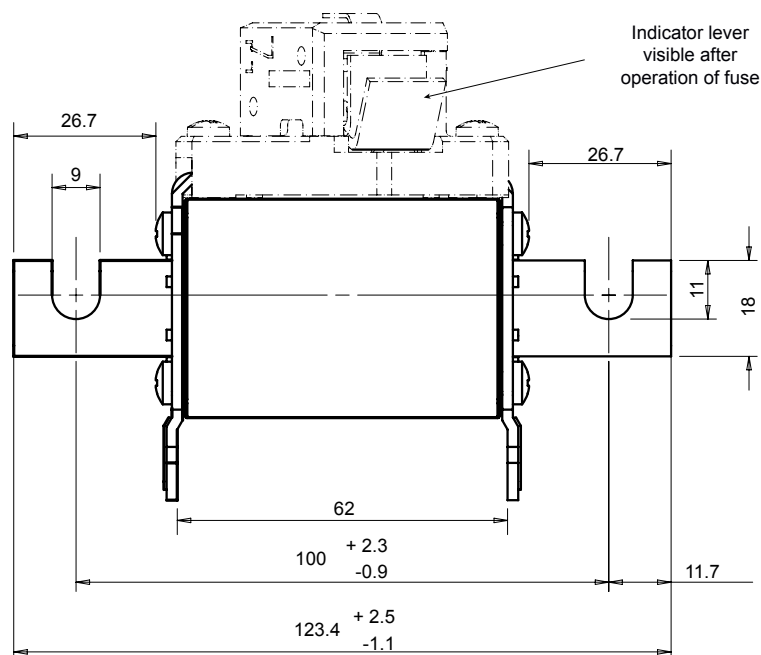
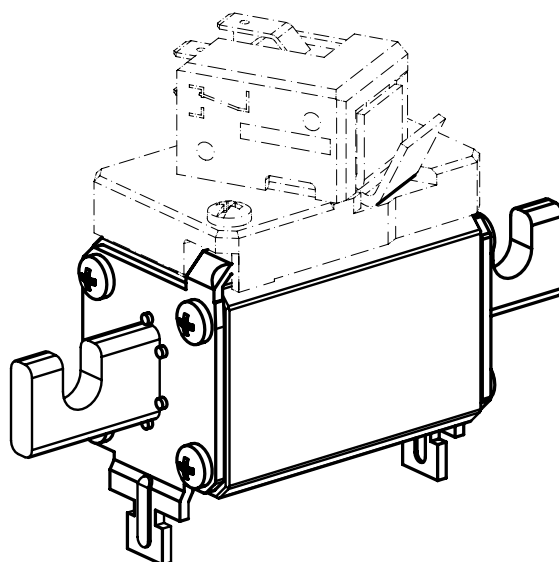
350 to 600VDC

## DIMENSIONS

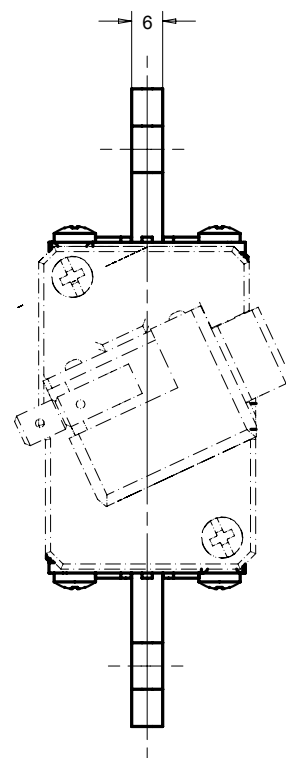
### Size 70 gR EF



Microswitch



Indicator lever visible after operation of fuse



Dimensions in mm