

# Wkładki topikowe G NH 690V AC aR

**Typ:** G NH1 - NH3

**Charakterystyka:** aR

**Prąd znamionowy:** 80-1400A

**Napięcie znamionowe:** 690V AC

**Zwarciova zdolność wyłączenia:** 100kA

**Wg normy:** IEC/PN 60269-1, PN 60269-4

**Budowa:** Korpus ze steatytu,  
styki miedziane srebrzone,  
bez zawartości Cd i Pb

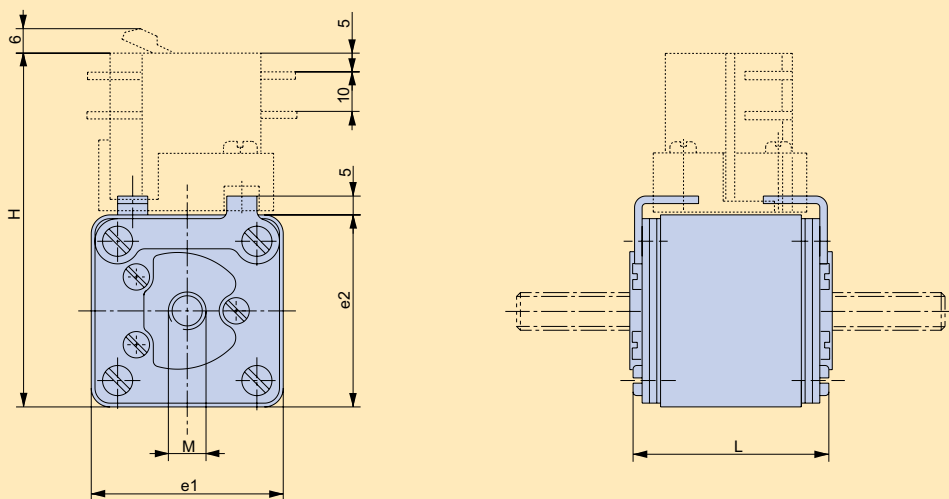


Wkładki topikowe przykręcane aR 690V AC

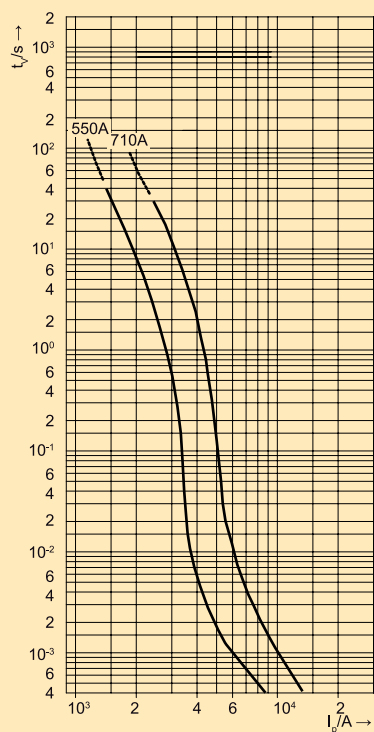
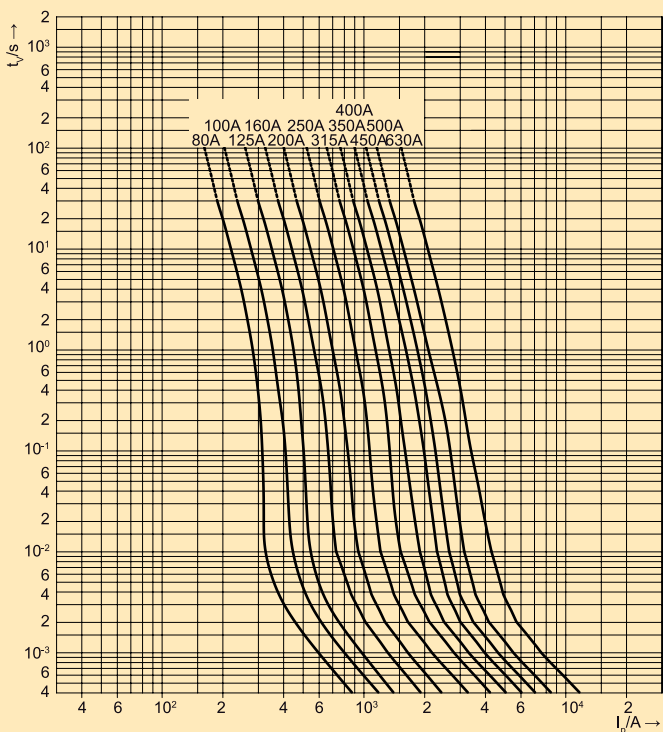
U <sub>n</sub>	Wielkość	I <sub>n</sub> [A]	Całka Joule`a wyłączenia I <sup>2</sup> t[A <sup>2</sup> s]	Całka Joule`a przedłukowa I <sup>2</sup> t[A <sup>2</sup> s]	Straty mocy P <sub>n</sub> [W]	Opakowanie	Typ	Wskaźnik	
								Wskaźnik górný	Wskaźnik śródkowy
								Nr artykułu	Nr artykułu
690V	1	80	2.400	390	16,0	2	G1üf0/80A/690V	R1084140	R1084141
		100	4.600	700	20,0		G1üf0/100A/690V	R1084340	R1084341
		125	6.800	1.000	25,0		G1üf0/125A/690V	R1084640	R1084641
		160	10.500	1.700	32,0		G1üf0/160A/690V	R1084940	R1084941
		200	18.500	2.700	40,0		G1üf0/200A/690V	R1085240	R1085241
		250	31.000	5.000	50,0		G1üf0/250A/690V	R1085640	R1085641
		315	54.000	8.000	60,0		G1üf0/315A/690V	R1085940	R1085941
		350	72.000	11.000	63,0		G1üf0/350A/690V	R1086040	R1086041
		400	105.000	16.000	67,0		G1üf0/400A/690V	R1086240	R1086241
		450	155.000	22.000	71,0		G1üf0/450A/690V	R1086440	R1086441
		500	205.000	31.000	74,0		G1üf0/500A/690V	R1086640	R1086641
		550	286.000	54.000	74,0		G1üf0/550A/690V	R1086740	R1086741
		630	345.000	50.000	88,0		G1üf0/630A/690V	R1086940	R1086941
		710	470.000	96.000	84,0		G1üf0/710A/690V	R1087040	R1087041
	2	400	82.000	11.000	70,0	2	G2üf0/400A/690V	R2086240	R2086241
		450	125.000	17.500	74,0		G2üf0/450A/690V	R2086440	R2086441
		500	170.000	22.000	80,0		G2üf0/500A/690V	R2086640	R2086641
		550	190.000	36.000	92,0		G2üf0/550A/690V	R2086740	R2086741
		630	305.000	44.000	85,0		G2üf0/630A/690V	R2086940	R2086941
		710	480.000	63.000	91,0		G2üf0/710A/690V	R2087040	R2087041
		800	710.000	98.000	95,0		G2üf0/800A/690V	R2087240	R2087241
		900	920.000	178.000	116,0		G2üf0/900A/690V	R2087440	R2087441
	3	1000	1.300.000	235.000	121,0	2	G2üf0/1000A/690V	R2087640	R2087641
		630	240.000	33.000	101,0		G3üf0/630A/690V	R3086940	R3086941
		710	340.000	50.000	112,0		G3üf0/710A/690V	R3087040	R3087041
		800	510.000	71.000	118,0		G3üf0/800A/690V	R3087240	R3087241
		900	710.000	130.000	128,0		G3üf0/900A/690V	R3087440	R3087441
1000		1.100.000	150.000	127,0	G3üf0/1000A/690V		R3087640	R3087641	
	1250	2.300.000	310.000	150,0		G3üf0/1250A/690V	R3087940	R3087941	
	1400	2.600.000	455.000	162,0		G3üf0/1400A/690V	R3088140	R3088141	

## Dane techniczne

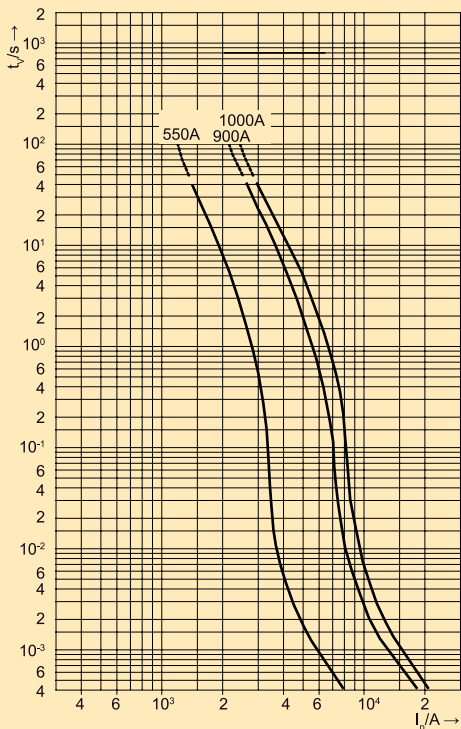
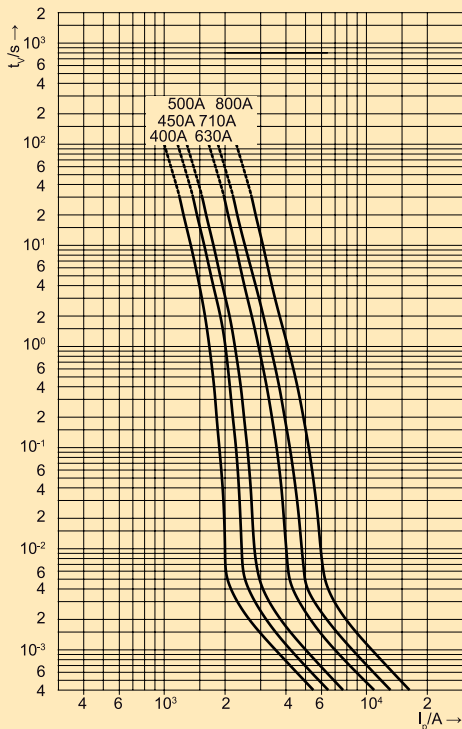
Typ			G1(M)üf0.../690V	G2(M)üf0.../690V	G3(M)üf0.../690V
Wielkość			NH1	NH2	NH3
Napięcie znamionowe	$U_n$	V	AC690	AC690	AC690
Prąd znamionowy	$I_n$	A	80-710	400-1000	630-1400
Zwarciova zdolność wyłączenia	-	kA	100		
Charakterystyka			aR		
Normy			IEC/PN 60269-1 IEC/PN 60269-4 DIN VDE 0636-2		
Wymiary	L	mm	53	53	53
	e1		51	60	75
	e2		8	10	12
	M		90	99	114
H					
Waga	-	g	500	650	850



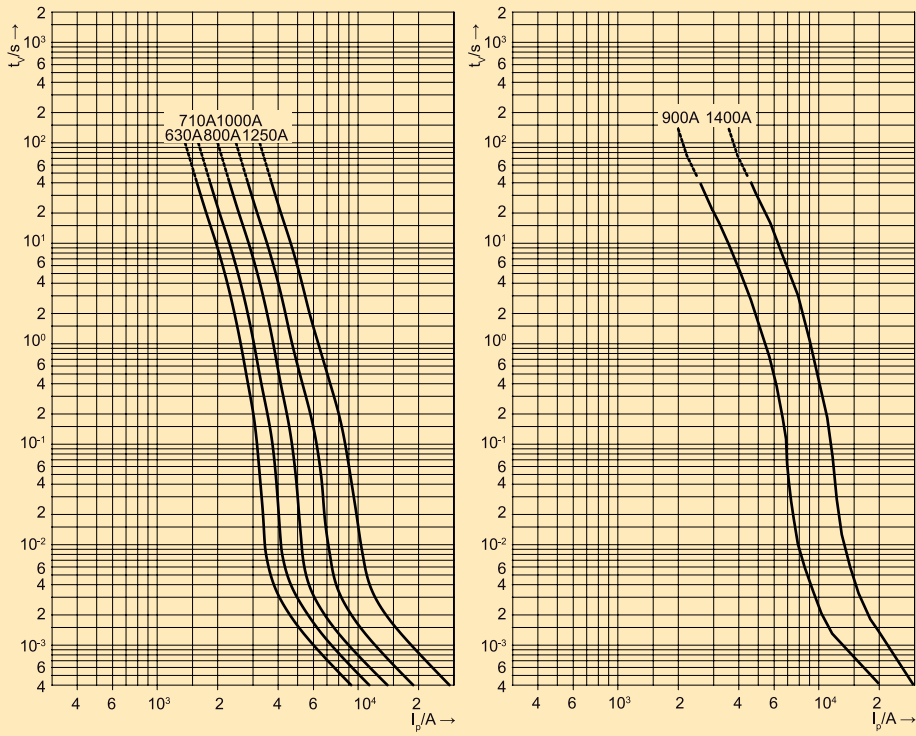
**Charakterystyka czasowo-prądowa**



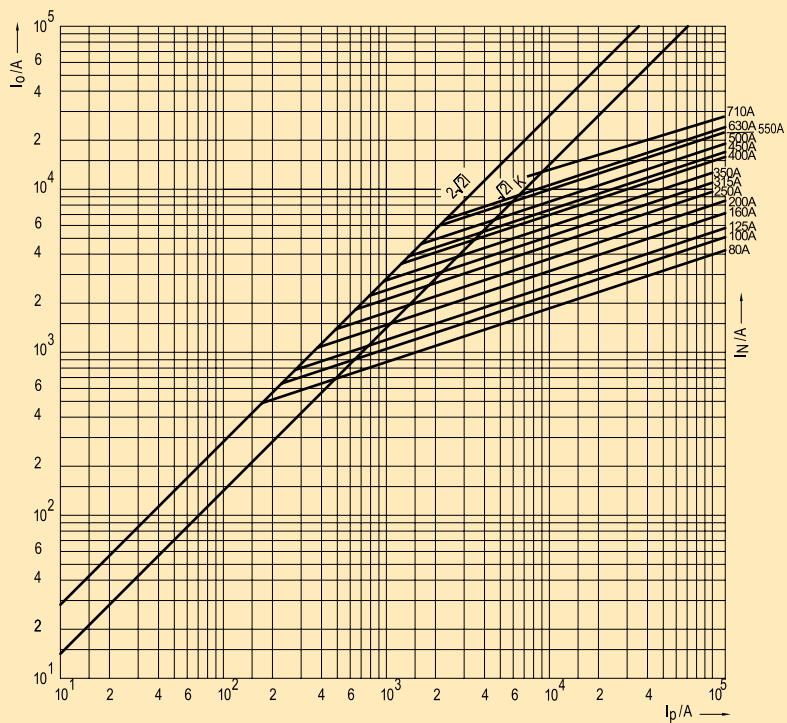
**Charakterystyka czasowo-prądowa**



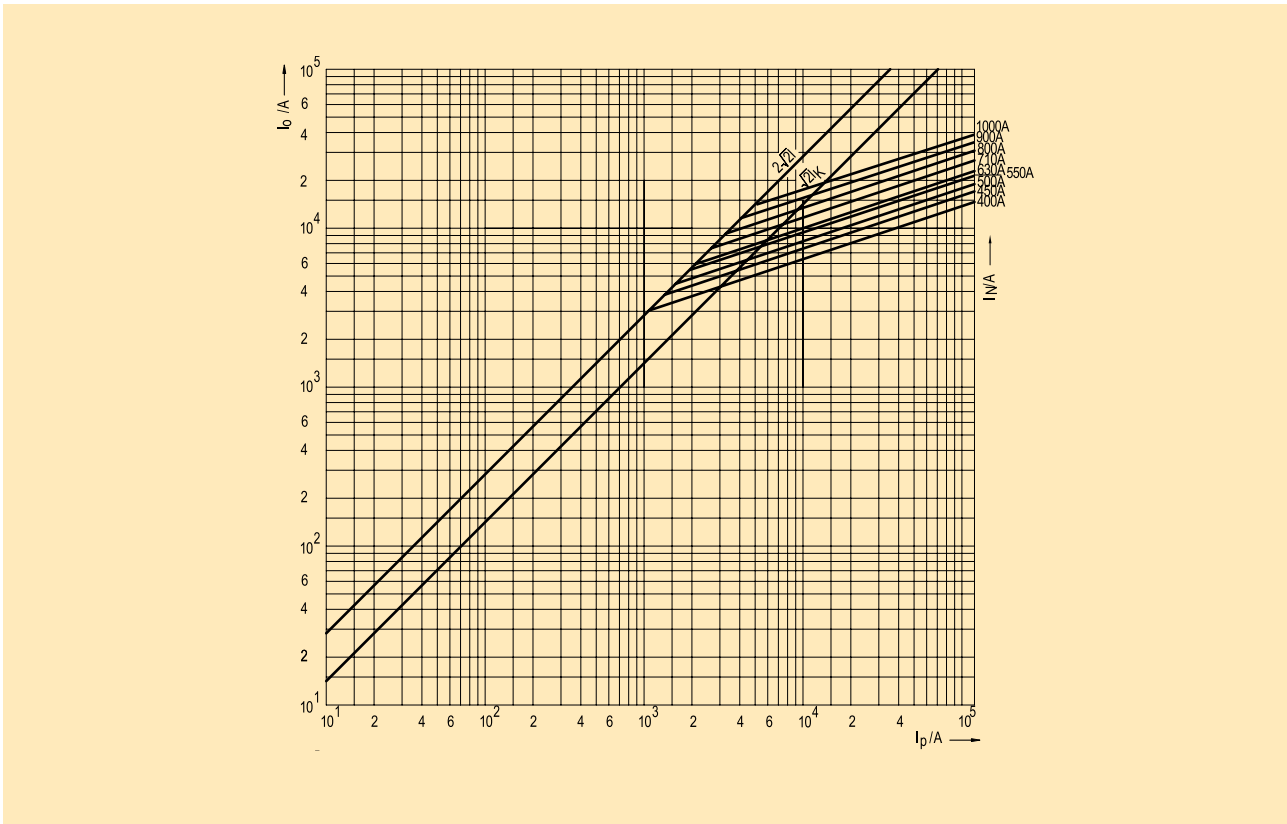
### Charakterystyka czasowo-prądowa



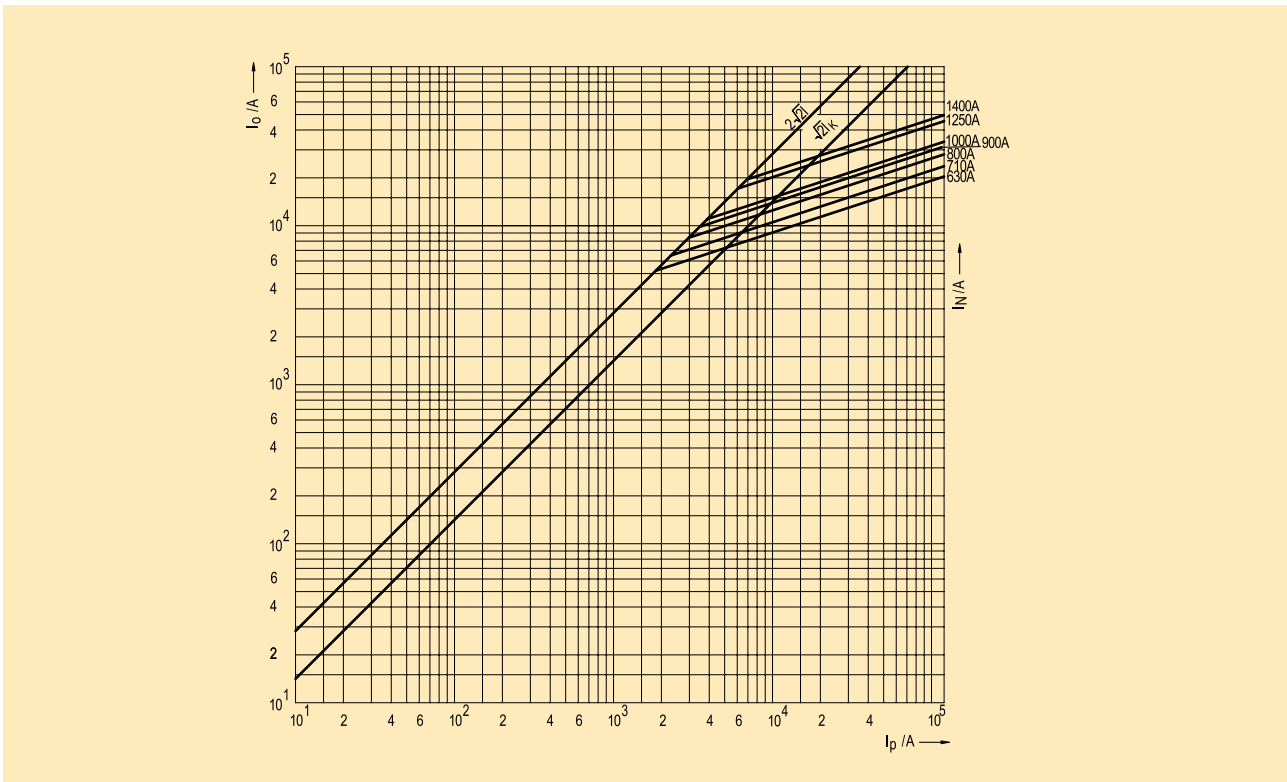
### Charakterystyka prądu ograniczonego



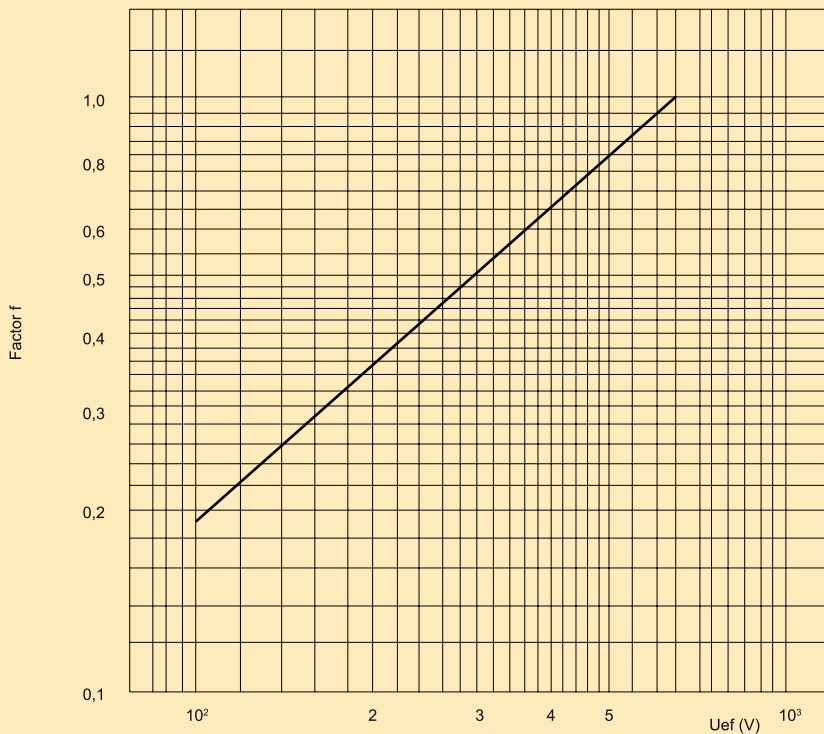
**Charakterystyka prądu ograniczonego**



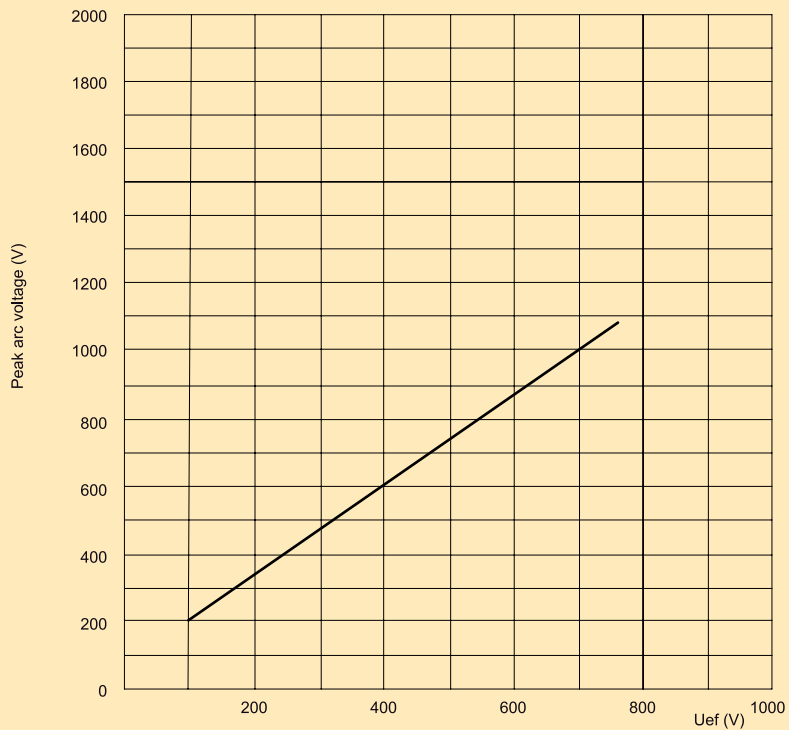
**Charakterystyka prądu ograniczonego**



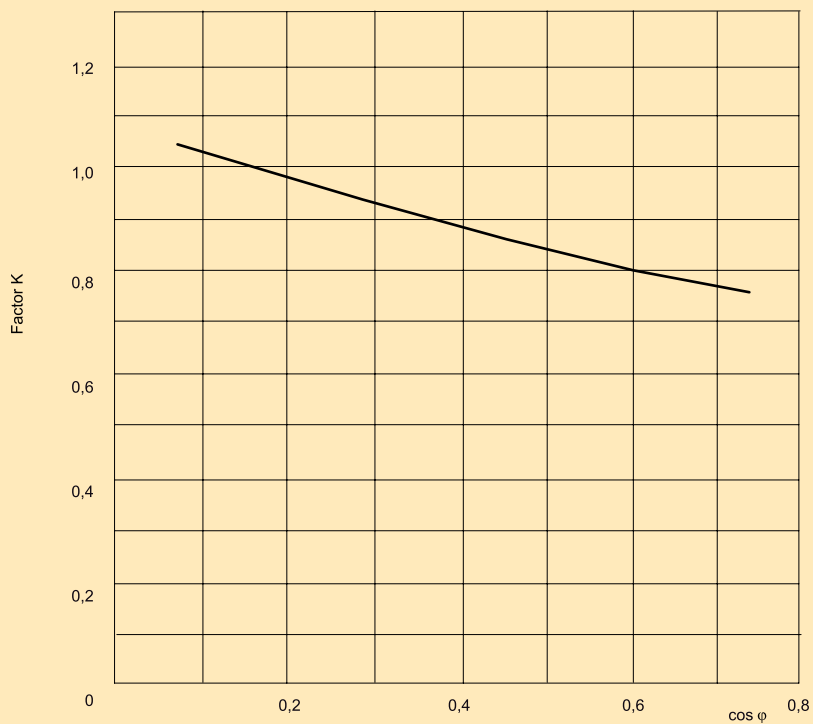
### Współczynnik korekcyjny dla określenia wartości całki wyłączenia



### Maksymalny spadek napięcia łuku



**Współczynnik korekcyjny dla wartości całki wyłączenia I<sup>2</sup>t**



Współczynnik korekcyjny C	0,005	0,025	0,063	0,122	0,204	0,31	0,442	0,6	0,785	1
Obciążenie %	10	20	30	40	50	60	70	80	90	100

# Protistor® size 30 aR

600 - 690VAC (IEC) / 700VAC (UL)

## SEMICONDUCTOR PROTECTION FUSES

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



The 690/700V Protistor® fuse-links range provide maximum flexibility in equipment design and ultimate protection for today's power conversion equipment. These aR ultra-fast acting square body fuse-links are available in different body sizes, each size having multiple worldwide acceptable mounting styles.

They have been engineered to provide state-of-the-art protection for semiconductors: diodes, thyristors, IGBT and MOSFET devices. They are assembled with 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.

Each fuse-link can be equipped with a low voltage trip-indicator which can operate a field mountable microswitch.

#### TECHNICAL DATA OVERVIEW

Voltage Range AC	600 ... 690 VAC
Ampere Range (A)	50 ... 630 A
Speed/Characteristic	aR
I.R. AC (kA)	170 kA 200 kA
Product Size	30

#### FEATURES & BENEFITS

- Multiple body sizes and terminals or blades combination
- aR Class according to IEC 60269-4 and VDE 636-23
- Very low  $I^2t$  for improved semiconductor protection
- Ultra fast acting
- Current limiting
- Superior cycling capability

#### APPLICATIONS

- Protection of inverters, motor drives, UPS systems and similar 690V or less equipments.

#### STANDARDS

- IEC 60269-4 Compliance
- UL/CSA Recognized E76491
- CCC GB 13539.4



# Protistor® size 30 aR

600 - 690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE



PC30UD69V100TF

### Size 30 type TTF M8 threaded terminals

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at In	Weight	Package
PC30UD69V50TF	S300373	690 V	700 V	50 A	0.116 kA <sup>2</sup> s	0.68 kA <sup>2</sup> s	170 kA	9 W	0.2463 kg	3
PC30UD69V63TF	M300000	690 V	700 V	63 A	0.2 kA <sup>2</sup> s	1.2 kA <sup>2</sup> s	170 kA	14 W	0.2463 kg	3
PC30UD69V80TF	S300051	690 V	700 V	80 A	0.33 kA <sup>2</sup> s	1.9 kA <sup>2</sup> s	170 kA	19 W	0.2463 kg	3
PC30UD69V100TF	T300052	690 V	700 V	100 A	0.47 kA <sup>2</sup> s	2.7 kA <sup>2</sup> s	170 kA	26 W	0.2463 kg	3
PC30UD69V125TF	V300053	690 V	700 V	125 A	0.85 kA <sup>2</sup> s	4.9 kA <sup>2</sup> s	170 kA	30 W	0.2696 kg	3
PC30UD69V160TF	W300054	690 V	700 V	160 A	1.6 kA <sup>2</sup> s	9.2 kA <sup>2</sup> s	170 kA	37 W	0.2696 kg	3
PC30UD69V200TF	X300055	690 V	700 V	200 A	3 kA <sup>2</sup> s	16.7 kA <sup>2</sup> s	170 kA	42 W	0.2696 kg	3
PC30UD69V250TF	Y300056	690 V	700 V	250 A	5.8 kA <sup>2</sup> s	32.4 kA <sup>2</sup> s	170 kA	48 W	0.2696 kg	3
PC30UD69V315TF	Z300057	690 V	700 V	315 A	12 kA <sup>2</sup> s	67 kA <sup>2</sup> s	170 kA	53 W	0.2463 kg	3
PC30UD69V350TF	A300058	690 V	700 V	350 A	15.5 kA <sup>2</sup> s	86 kA <sup>2</sup> s	170 kA	57 W	0.2463 kg	3
PC30UD69V400TF	B300059	690 V	700 V	400 A	23 kA <sup>2</sup> s	130 kA <sup>2</sup> s	170 kA	60 W	0.2696 kg	3
PC30UD69V450TF	V300398	690 V	700 V	450 A	26 kA <sup>2</sup> s	165 kA <sup>2</sup> s	170 kA	80 W	0.2666 kg	3
PC30UD69V500TF	W300399	690 V	700 V	500 A	41 kA <sup>2</sup> s	264 kA <sup>2</sup> s	170 kA	80 W	0.2463 kg	3
PC30UD69V550TF	X300400	690 V	700 V	550 A	52 kA <sup>2</sup> s	330 kA <sup>2</sup> s	170 kA	80 W	0.2463 kg	3
PC30UD60V630TF	L301770	600 V	650 V	630 A	84 kA <sup>2</sup> s	450 kA <sup>2</sup> s	200 kA	85 W	0.2463 kg	3

### Size 30 type TTI 5/16"-18 unified coarse threaded terminals

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at In	Weight	Package
A070UD30TTI50	V302744	690 V	700 V	50 A	0.116 kA <sup>2</sup> s	0.68 kA <sup>2</sup> s	170 kA	9 W	0.255 kg	3
A070UD30TTI63	A301967	690 V	700 V	63 A	0.2 kA <sup>2</sup> s	1.2 kA <sup>2</sup> s	170 kA	14 W	0.255 kg	3
A070UD30TTI80	V301962	690 V	700 V	80 A	0.33 kA <sup>2</sup> s	1.9 kA <sup>2</sup> s	170 kA	19 W	0.255 kg	3
A070UD30TTI100	W300744	690 V	700 V	100 A	0.47 kA <sup>2</sup> s	2.7 kA <sup>2</sup> s	170 kA	26 W	0.255 kg	3
A070UD30TTI125	G300708	690 V	700 V	125 A	0.85 kA <sup>2</sup> s	4.9 kA <sup>2</sup> s	170 kA	30 W	0.255 kg	3
A070UD30TTI160	N300576	690 V	700 V	160 A	1.6 kA <sup>2</sup> s	9.2 kA <sup>2</sup> s	170 kA	37 W	0.255 kg	3
A070UD30TTI200	P300577	690 V	700 V	200 A	3 kA <sup>2</sup> s	16.7 kA <sup>2</sup> s	170 kA	42 W	0.255 kg	3
A070UD30TTI250	Q300578	690 V	700 V	250 A	5.8 kA <sup>2</sup> s	32.4 kA <sup>2</sup> s	170 kA	48 W	0.255 kg	3
A070UD30TTI315	R300579	690 V	700 V	315 A	12 kA <sup>2</sup> s	67 kA <sup>2</sup> s	170 kA	53 W	0.255 kg	3
A070UD30TTI350	S300580	690 V	700 V	350 A	15.5 kA <sup>2</sup> s	86 kA <sup>2</sup> s	170 kA	57 W	0.255 kg	3
A070UD30TTI400	T300581	690 V	700 V	400 A	23 kA <sup>2</sup> s	130 kA <sup>2</sup> s	170 kA	60 W	0.255 kg	3
A070UD30TTI450	V300582	690 V	700 V	450 A	26 kA <sup>2</sup> s	165 kA <sup>2</sup> s	170 kA	80 W	0.255 kg	3
A070UD30TTI500	W300583	690 V	700 V	500 A	41 kA <sup>2</sup> s	264 kA <sup>2</sup> s	170 kA	80 W	0.255 kg	3
A070UD30TTI550	X300584	690 V	700 V	550 A	52 kA <sup>2</sup> s	330 kA <sup>2</sup> s	170 kA	80 W	0.255 kg	3
A065UD30TTI630	A302703	600 V	650 V	630 A	84 kA <sup>2</sup> s	450 kA <sup>2</sup> s	200 kA	85 W	0.255 kg	3

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# Protistor® size 30 aR

600 - 690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE



PC30UD69V160A

### Size 30 type DIN80 blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC30UD69V50A	F301926	690 V	700 V	50 A	0.116 kA <sup>2</sup> s	0.68 kA <sup>2</sup> s	170 kA	9 W	275 g	3
PC30UD69V63A	E300108	690 V	700 V	63 A	0.2 kA <sup>2</sup> s	1.2 kA <sup>2</sup> s	170 kA	14 W	0.2733 kg	3
PC30UD69V80A	F300109	690 V	700 V	80 A	0.33 kA <sup>2</sup> s	1.9 kA <sup>2</sup> s	170 kA	19 W	0.2733 kg	3
PC30UD69V100A	G300110	690 V	700 V	100 A	0.47 kA <sup>2</sup> s	2.7 kA <sup>2</sup> s	170 kA	26 W	0.2733 kg	3
PC30UD69V125A	H300111	690 V	700 V	125 A	0.85 kA <sup>2</sup> s	4.9 kA <sup>2</sup> s	170 kA	30 W	0.2733 kg	3
PC30UD69V160A	J300112	690 V	700 V	160 A	1.6 kA <sup>2</sup> s	9.2 kA <sup>2</sup> s	170 kA	37 W	0.2733 kg	3
PC30UD69V200A	K300113	690 V	700 V	200 A	3 kA <sup>2</sup> s	16.7 kA <sup>2</sup> s	170 kA	43 W	0.2733 kg	3
PC30UD69V250A	L300114	690 V	700 V	250 A	5.8 kA <sup>2</sup> s	32.4 kA <sup>2</sup> s	170 kA	50 W	0.2733 kg	3
PC30UD69V315A	M300115	690 V	700 V	315 A	12 kA <sup>2</sup> s	67 kA <sup>2</sup> s	170 kA	55 W	0.2733 kg	3
PC30UD69V350A	N300116	690 V	700 V	350 A	15.5 kA <sup>2</sup> s	86 kA <sup>2</sup> s	170 kA	60 W	0.2733 kg	3
PC30UD69V400A	P300117	690 V	700 V	400 A	23 kA <sup>2</sup> s	130 kA <sup>2</sup> s	170 kA	65 W	0.2733 kg	3
PC30UD69V450A	A300403	690 V	700 V	450 A	26 kA <sup>2</sup> s	165 kA <sup>2</sup> s	170 kA	88 W	0.2733 kg	3
PC30UD69V500A	B300404	690 V	700 V	500 A	41 kA <sup>2</sup> s	264 kA <sup>2</sup> s	170 kA	88 W	0.2733 kg	3
PC30UD69V550A	C300405	690 V	700 V	550 A	52 kA <sup>2</sup> s	330 kA <sup>2</sup> s	170 kA	90 W	0.2733 kg	3



PC30UD69V450D1A

### Size 30 type DIN110 blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC30UD69V50D1A	G301191	690 V	700 V	50 A	0.116 kA <sup>2</sup> s	0.68 kA <sup>2</sup> s	170 kA	9 W	0.2983 kg	3
PC30UD69V63D1A	Q300118	690 V	700 V	63 A	0.2 kA <sup>2</sup> s	1.2 kA <sup>2</sup> s	170 kA	14 W	0.2983 kg	3
PC30UD69V80D1A	R300119	690 V	700 V	80 A	0.33 kA <sup>2</sup> s	1.9 kA <sup>2</sup> s	170 kA	19 W	0.2983 kg	3
PC30UD69V100D1A	S300120	690 V	700 V	100 A	0.47 kA <sup>2</sup> s	2.7 kA <sup>2</sup> s	170 kA	26 W	0.2983 kg	3
PC30UD69V125D1A	T300121	690 V	700 V	125 A	0.85 kA <sup>2</sup> s	4.9 kA <sup>2</sup> s	170 kA	30 W	0.2983 kg	3
PC30UD69V160D1A	V300122	690 V	700 V	160 A	1.6 kA <sup>2</sup> s	9.2 kA <sup>2</sup> s	170 kA	37 W	0.2983 kg	3
PC30UD69V200D1A	W300123	690 V	700 V	200 A	3 kA <sup>2</sup> s	16.7 kA <sup>2</sup> s	170 kA	43 W	0.2983 kg	3
PC30UD69V250D1A	X300124	690 V	700 V	250 A	5.8 kA <sup>2</sup> s	32.4 kA <sup>2</sup> s	170 kA	50 W	0.2983 kg	3
PC30UD69V315D1A	Y300125	690 V	700 V	315 A	12 kA <sup>2</sup> s	67 kA <sup>2</sup> s	170 kA	55 W	0.2983 kg	3
PC30UD69V350D1A	Z300126	690 V	700 V	350 A	15.5 kA <sup>2</sup> s	86 kA <sup>2</sup> s	170 kA	60 W	0.2983 kg	3
PC30UD69V400D1A	A300127	690 V	700 V	400 A	23 kA <sup>2</sup> s	130 kA <sup>2</sup> s	170 kA	65 W	0.2983 kg	3
PC30UD69V450D1A	S300695	690 V	700 V	450 A	26 kA <sup>2</sup> s	165 kA <sup>2</sup> s	170 kA	88 W	0.2983 kg	3
PC30UD69V500D1A	Y301091	690 V	700 V	500 A	41 kA <sup>2</sup> s	264 kA <sup>2</sup> s	170 kA	88 W	0.2983 kg	3
PC30UD69V550D1A	Z301092	690 V	700 V	550 A	52 kA <sup>2</sup> s	330 kA <sup>2</sup> s	170 kA	90 W	0.2983 kg	3

# Protistor® size 30 aR

600 - 690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE

### Size 30 type KI short slotted blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at In	Weight	Package
A070UD30KI50	E301925	690 V	700 V	50 A	0.116 kA <sup>2</sup> s	0.68 kA <sup>2</sup> s	170 kA	9 W	0.291 kg	3
A070UD30KI630	B300128	690 V	700 V	63 A	0.2 kA <sup>2</sup> s	1.2 kA <sup>2</sup> s	170 kA	14 W	0.291 kg	3
A070UD30KI80	C300129	690 V	700 V	80 A	0.33 kA <sup>2</sup> s	1.9 kA <sup>2</sup> s	170 kA	19 W	0.291 kg	3
A070UD30KI100	D300130	690 V	700 V	100 A	0.47 kA <sup>2</sup> s	2.7 kA <sup>2</sup> s	170 kA	26 W	0.291 kg	3
A070UD30KI125	E300131	690 V	700 V	125 A	0.85 kA <sup>2</sup> s	4.9 kA <sup>2</sup> s	170 kA	30 W	0.291 kg	3
A070UD30KI160	F300132	690 V	700 V	160 A	1.6 kA <sup>2</sup> s	9.2 kA <sup>2</sup> s	170 kA	37 W	0.291 kg	3
A070UD30KI200	G300133	690 V	700 V	200 A	3 kA <sup>2</sup> s	16.7 kA <sup>2</sup> s	170 kA	43 W	0.291 kg	3
A070UD30KI250	H300134	690 V	700 V	250 A	5.8 kA <sup>2</sup> s	32.4 kA <sup>2</sup> s	170 kA	50 W	0.291 kg	3
A070UD30KI315	J300135	690 V	700 V	315 A	12 kA <sup>2</sup> s	67 kA <sup>2</sup> s	170 kA	55 W	0.291 kg	3
A070UD30KI350	K300136	690 V	700 V	350 A	15.5 kA <sup>2</sup> s	86 kA <sup>2</sup> s	170 kA	60 W	0.291 kg	3
A070UD30KI400	L300137	690 V	700 V	400 A	23 kA <sup>2</sup> s	130 kA <sup>2</sup> s	170 kA	65 W	0.291 kg	3
A070UD30KI450	T301064	690 V	700 V	450 A	26 kA <sup>2</sup> s	165 kA <sup>2</sup> s	170 kA	88 W	0.291 kg	3
A070UD30KI500	V301065	690 V	700 V	500 A	41 kA <sup>2</sup> s	264 kA <sup>2</sup> s	170 kA	88 W	0.291 kg	3
A070UD30KI550	W301066	690 V	700 V	550 A	52 kA <sup>2</sup> s	330 kA <sup>2</sup> s	170 kA	90 W	0.291 kg	3

### Size 30 type LI long slotted blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at In	Weight	Package
A070UD30LI50	A301921	690 V	700 V	50 A	0.116 kA <sup>2</sup> s	0.68 kA <sup>2</sup> s	170 kA	9 W	0.3213 kg	3
A070UD30LI63	M300138	690 V	700 V	63 A	0.2 kA <sup>2</sup> s	1.2 kA <sup>2</sup> s	170 kA	14 W	0.3213 kg	3
A070UD30LI80	N300139	690 V	700 V	80 A	0.33 kA <sup>2</sup> s	1.9 kA <sup>2</sup> s	170 kA	19 W	0.3213 kg	3
A070UD30LI100	P300140	690 V	700 V	100 A	0.47 kA <sup>2</sup> s	2.7 kA <sup>2</sup> s	170 kA	26 W	0.3213 kg	3
A070UD30LI125	Q300141	690 V	700 V	125 A	0.85 kA <sup>2</sup> s	4.9 kA <sup>2</sup> s	170 kA	30 W	0.3213 kg	3
A070UD30LI160	R300142	690 V	700 V	160 A	1.6 kA <sup>2</sup> s	9.2 kA <sup>2</sup> s	170 kA	37 W	0.3213 kg	3
A070UD30LI200	S300143	690 V	700 V	200 A	3 kA <sup>2</sup> s	16.7 kA <sup>2</sup> s	170 kA	43 W	0.3213 kg	3
A070UD30LI250	T300144	690 V	700 V	250 A	5.8 kA <sup>2</sup> s	32.4 kA <sup>2</sup> s	170 kA	50 W	0.3213 kg	3
A070UD30LI315	V300145	690 V	700 V	315 A	12 kA <sup>2</sup> s	67 kA <sup>2</sup> s	170 kA	55 W	0.3213 kg	3
A070UD30LI350	W300146	690 V	700 V	350 A	15.5 kA <sup>2</sup> s	86 kA <sup>2</sup> s	170 kA	60 W	0.3213 kg	3
A070UD30LI400	X300147	690 V	700 V	400 A	23 kA <sup>2</sup> s	130 kA <sup>2</sup> s	170 kA	65 W	0.3213 kg	3
A070UD30LI450	K300527	690 V	700 V	450 A	26 kA <sup>2</sup> s	165 kA <sup>2</sup> s	170 kA	88 W	0.3213 kg	3
A070UD30LI500	L300528	690 V	700 V	500 A	41 kA <sup>2</sup> s	264 kA <sup>2</sup> s	170 kA	88 W	0.3213 kg	3
A070UD30LI550	M300529	690 V	700 V	550 A	52 kA <sup>2</sup> s	330 kA <sup>2</sup> s	170 kA	90 W	0.3213 kg	3

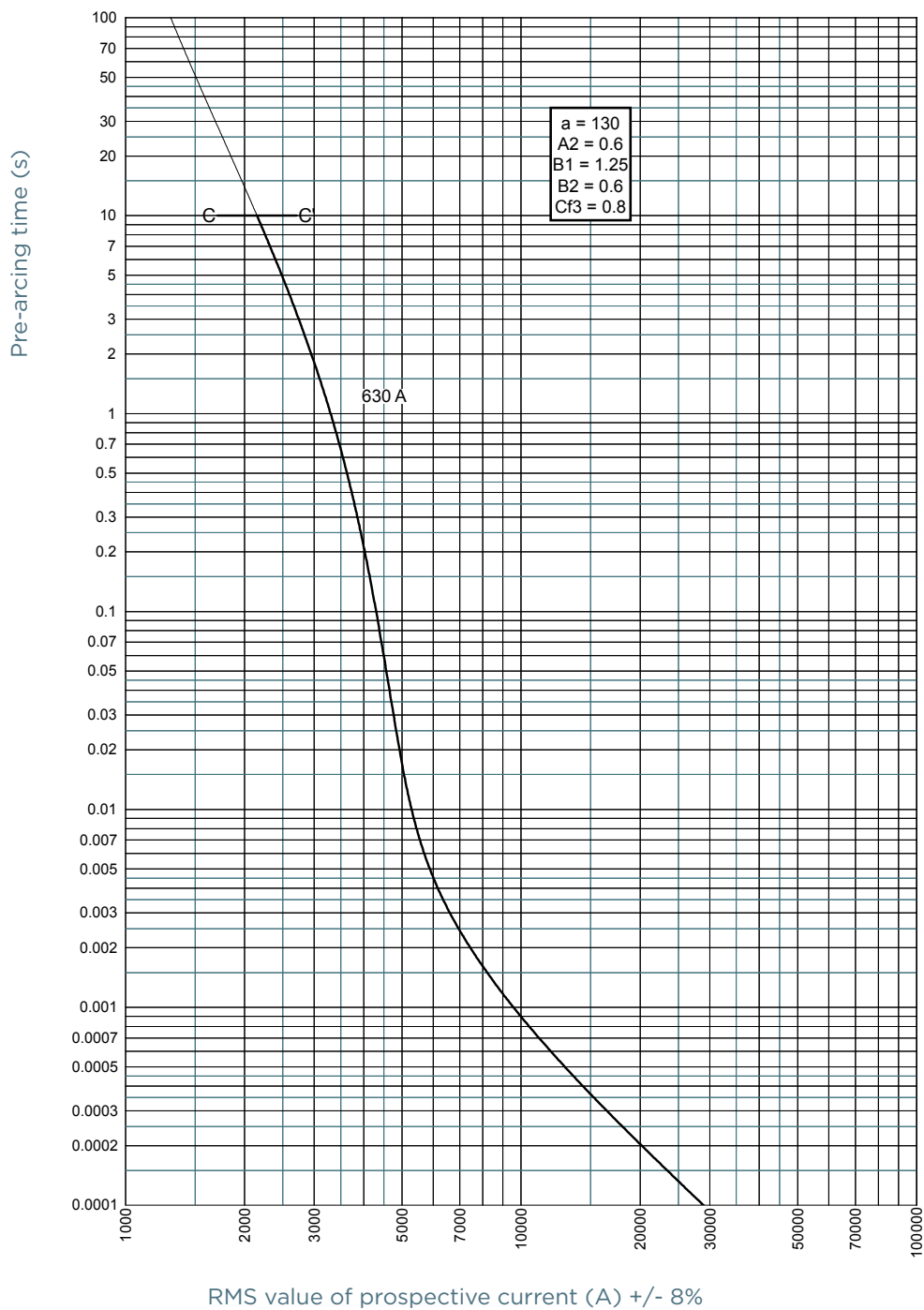
### Size 30 type EF blades for bolted connections

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at In	Weight	Package
PC30UD69V50EF	R300372	690 V	700 V	50 A	0.116 kA <sup>2</sup> s	0.68 kA <sup>2</sup> s	170 kA	9 W	0.2653 kg	3
PC30UD69V63EF	H300088	690 V	700 V	63 A	0.2 kA <sup>2</sup> s	1.2 kA <sup>2</sup> s	170 kA	14 W	0.2653 kg	3
PC30UD69V80EF	J300089	690 V	700 V	80 A	0.33 kA <sup>2</sup> s	1.9 kA <sup>2</sup> s	170 kA	19 W	0.2653 kg	3
PC30UD69V100EF	K300090	690 V	700 V	100 A	0.47 kA <sup>2</sup> s	2.7 kA <sup>2</sup> s	170 kA	26 W	0.2653 kg	3
PC30UD69V125EF	L300091	690 V	700 V	125 A	0.85 kA <sup>2</sup> s	4.9 kA <sup>2</sup> s	170 kA	30 W	0.2653 kg	3
PC30UD69V160EF	M300092	690 V	700 V	160 A	1.6 kA <sup>2</sup> s	9.2 kA <sup>2</sup> s	170 kA	37 W	0.2653 kg	3
PC30UD69V200EF	N300093	690 V	700 V	200 A	3 kA <sup>2</sup> s	16.7 kA <sup>2</sup> s	170 kA	43 W	0.2653 kg	3
PC30UD69V250EF	P300094	690 V	700 V	250 A	5.8 kA <sup>2</sup> s	32.4 kA <sup>2</sup> s	170 kA	50 W	0.2653 kg	3
PC30UD69V315EF	Q300095	690 V	700 V	315 A	12 kA <sup>2</sup> s	67 kA <sup>2</sup> s	170 kA	55 W	0.2653 kg	3
PC30UD69V350EF	R300096	690 V	700 V	350 A	15.5 kA <sup>2</sup> s	86 kA <sup>2</sup> s	170 kA	60 W	0.2653 kg	3
PC30UD69V400EF	S300097	690 V	700 V	400 A	23 kA <sup>2</sup> s	130 kA <sup>2</sup> s	170 kA	65 W	0.2653 kg	3

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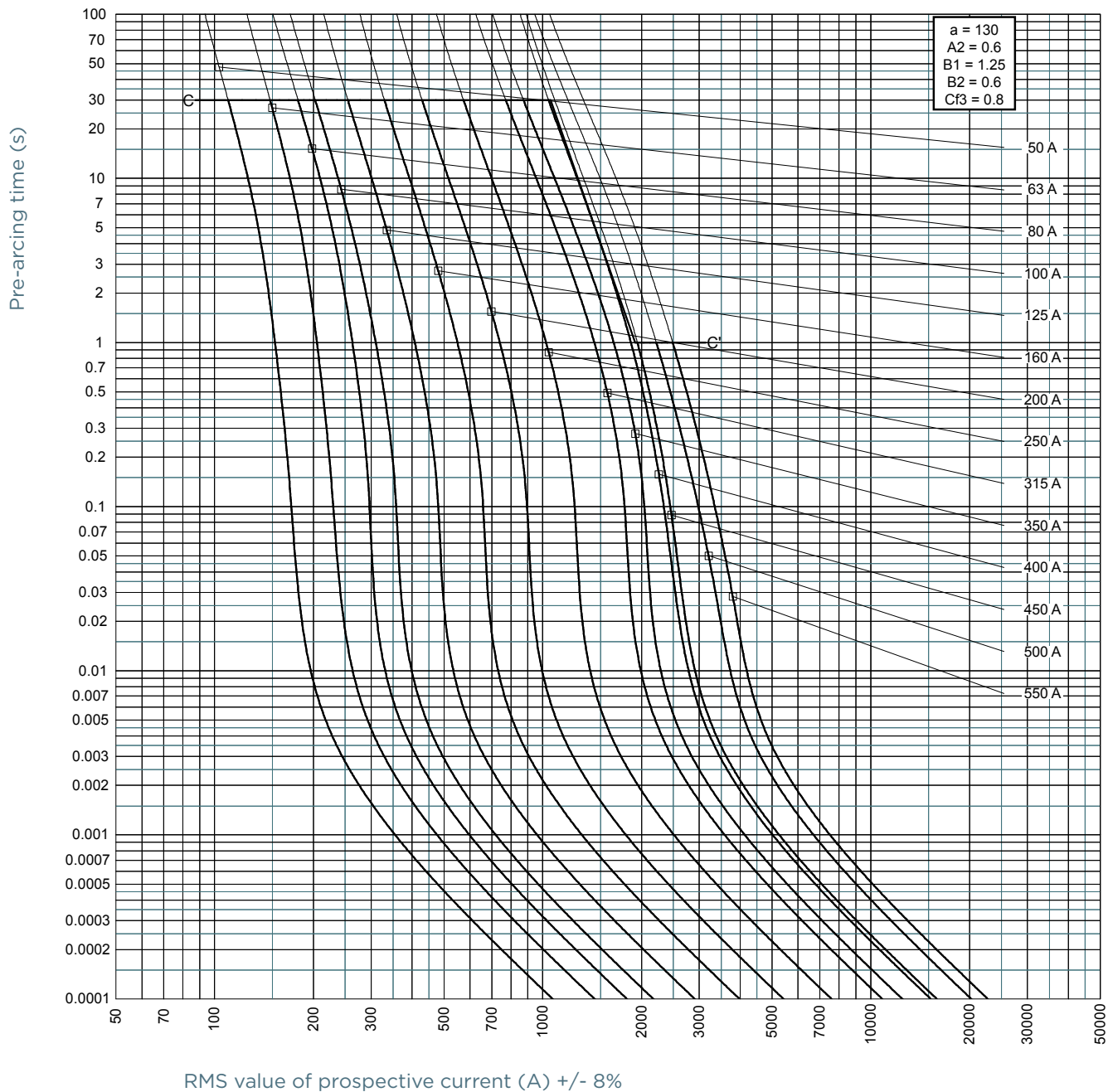
## TIME CURRENT CHARACTERISTIC CURVES

### Size 30 600V



## TIME CURRENT CHARACTERISTIC CURVES

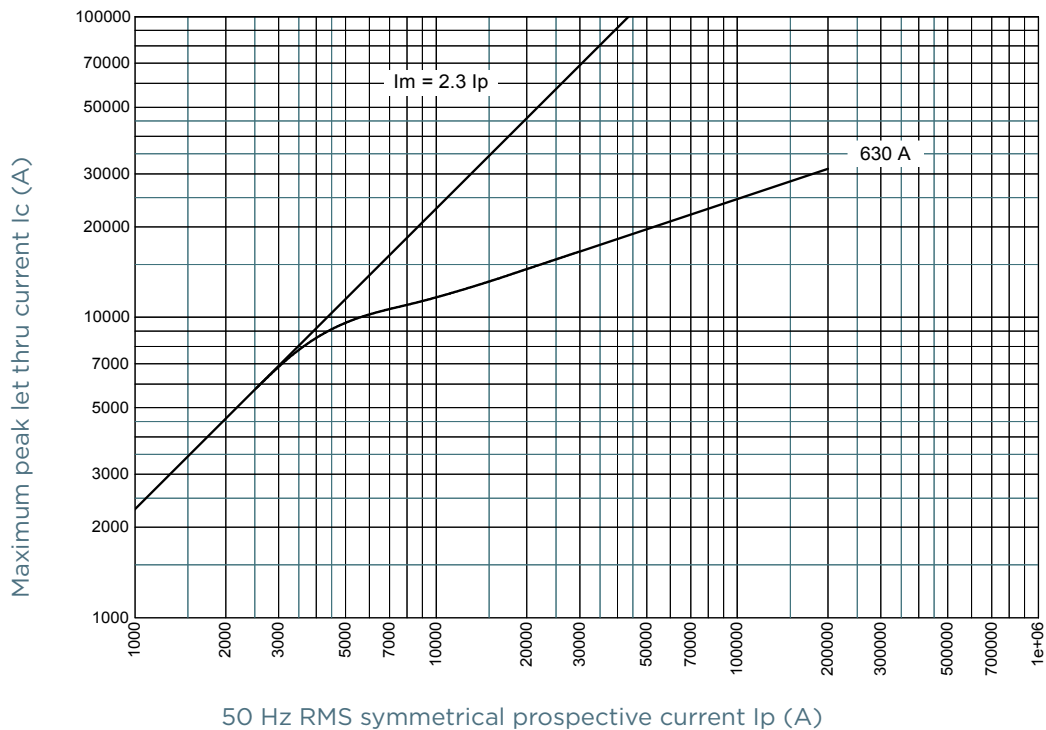
### Size 30 690V



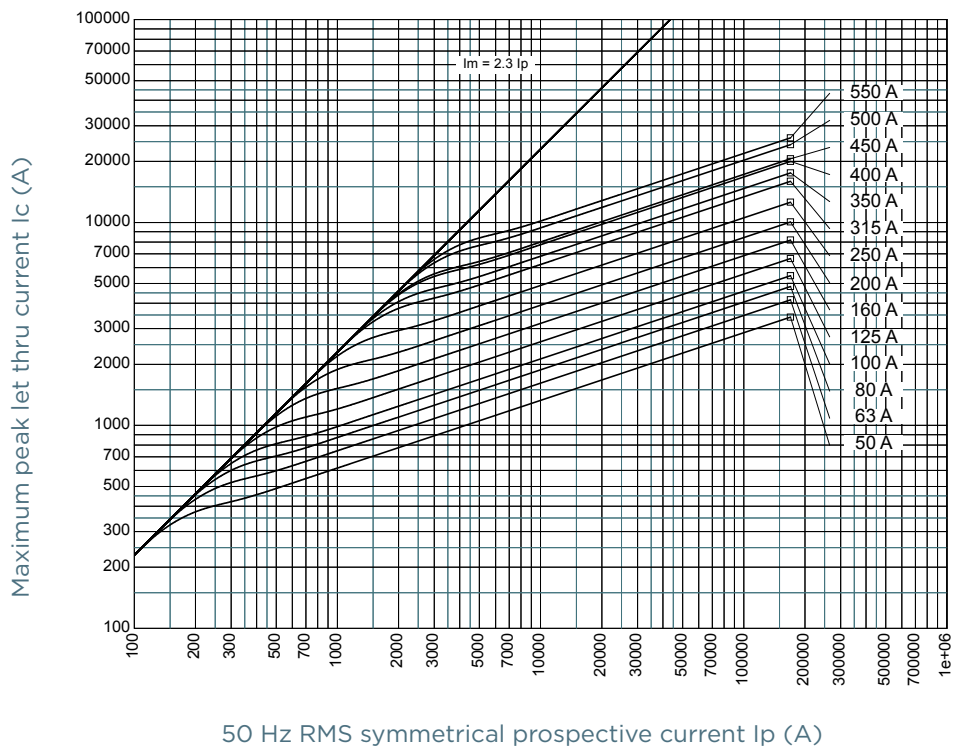
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

## CUT-OFF CURRENT CHARACTERISTIC

### Size 30 600V

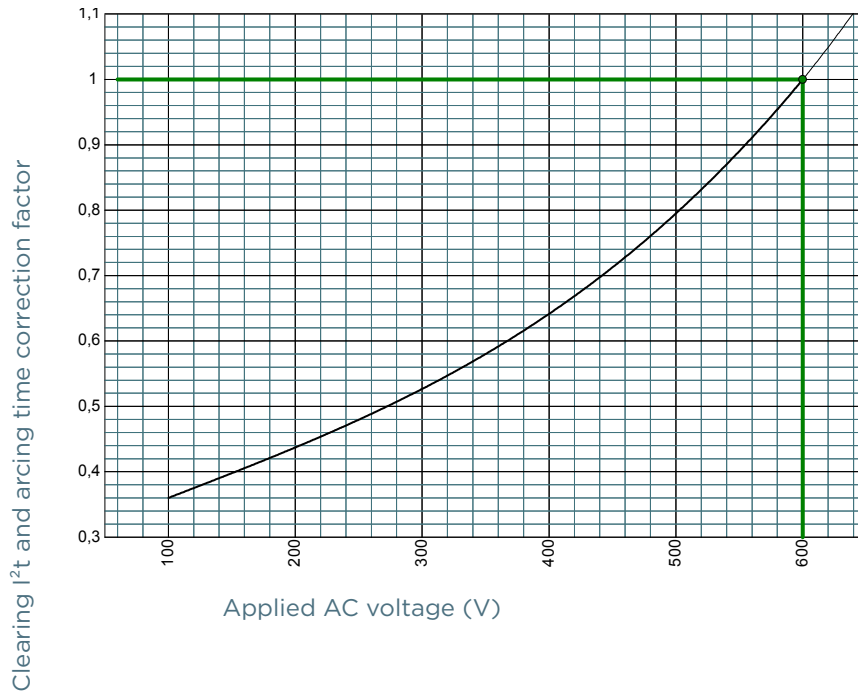


### Size 30 690V

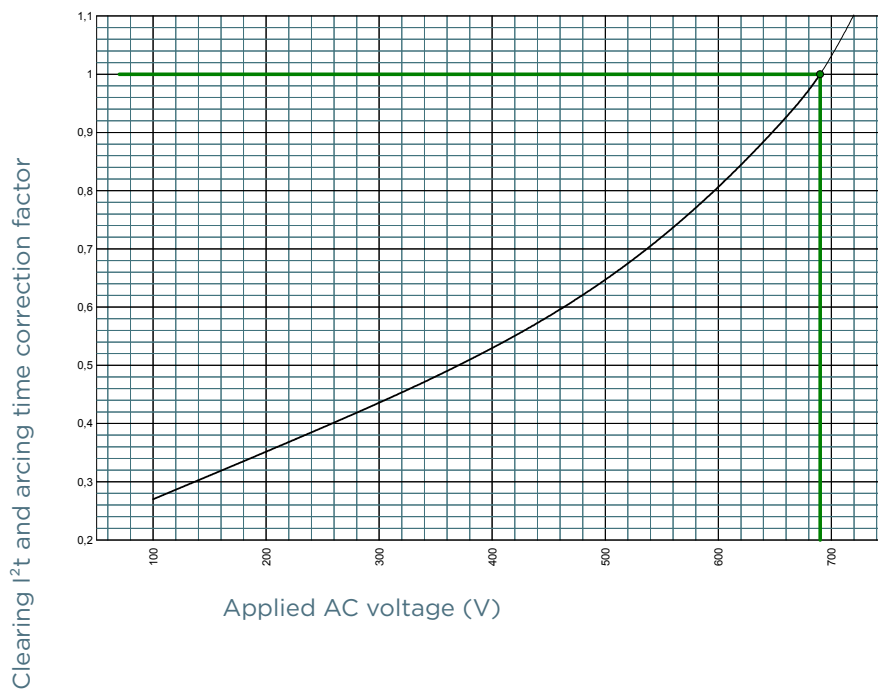


## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 30 600V



### Size 30 690V

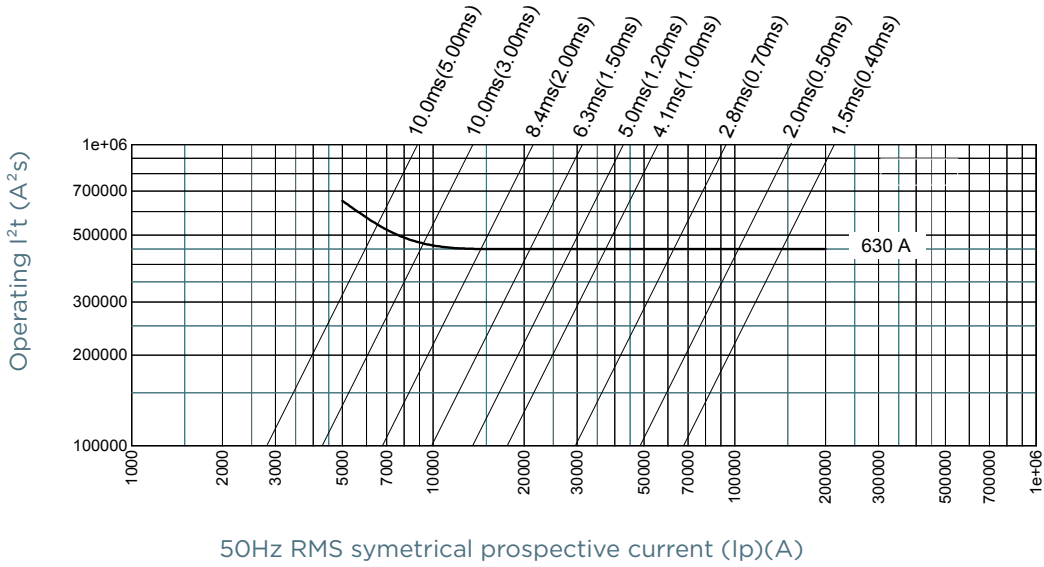


# Protistor® size 30 aR

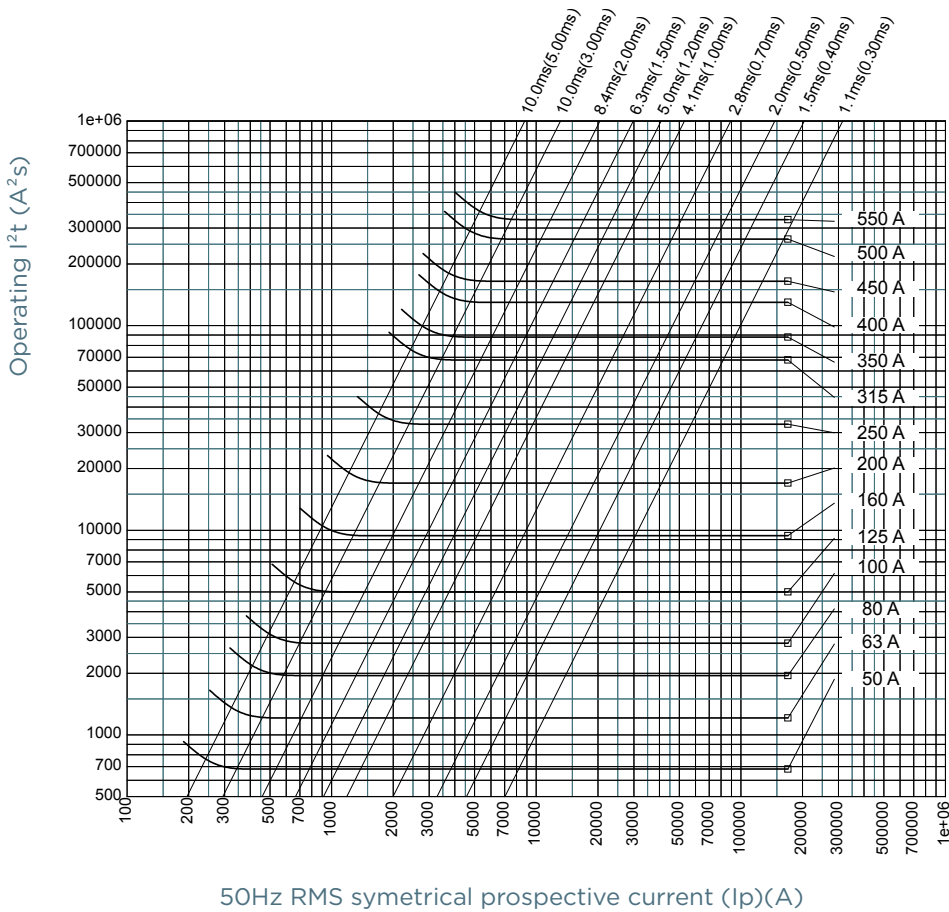
600 - 690VAC (IEC) / 700VAC (UL)

## CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

### Size 30 600V



### Size 30 690V



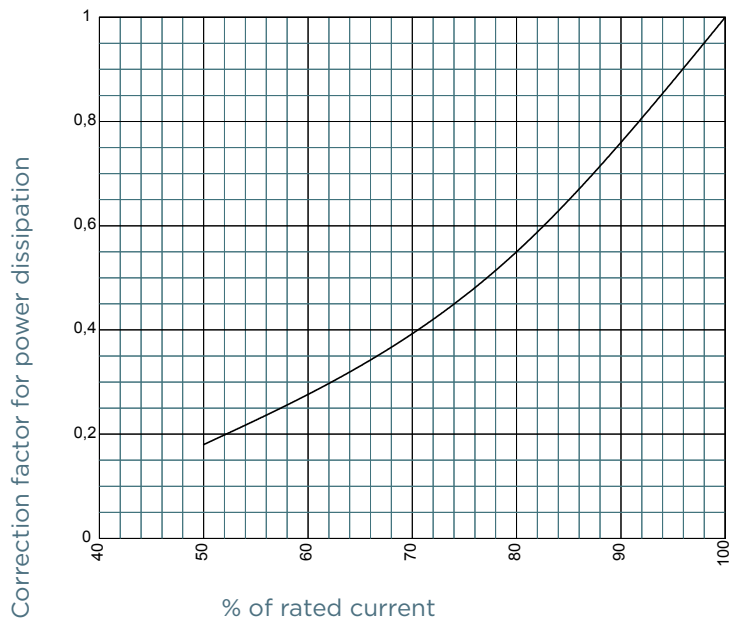
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# Protistor® size 30 aR

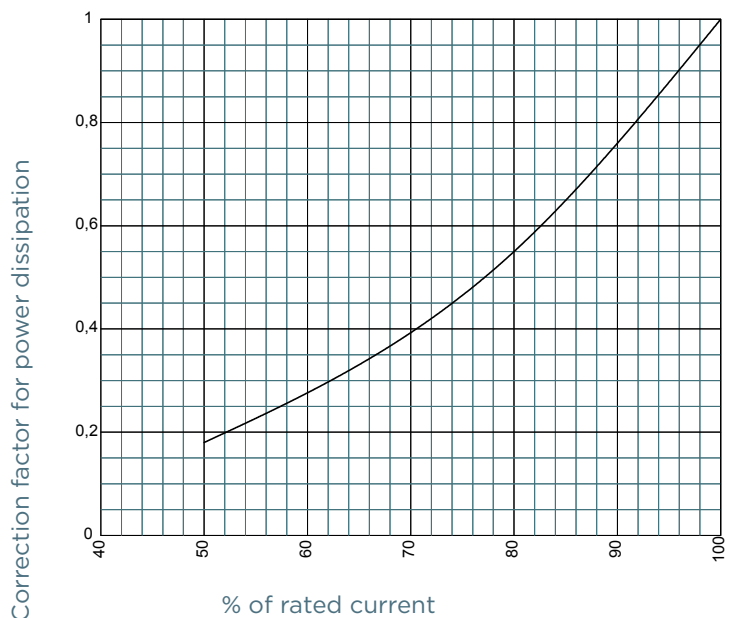
600 - 690VAC (IEC) / 700VAC (UL)

## POWER DISSIPATION

### Size 30 600V



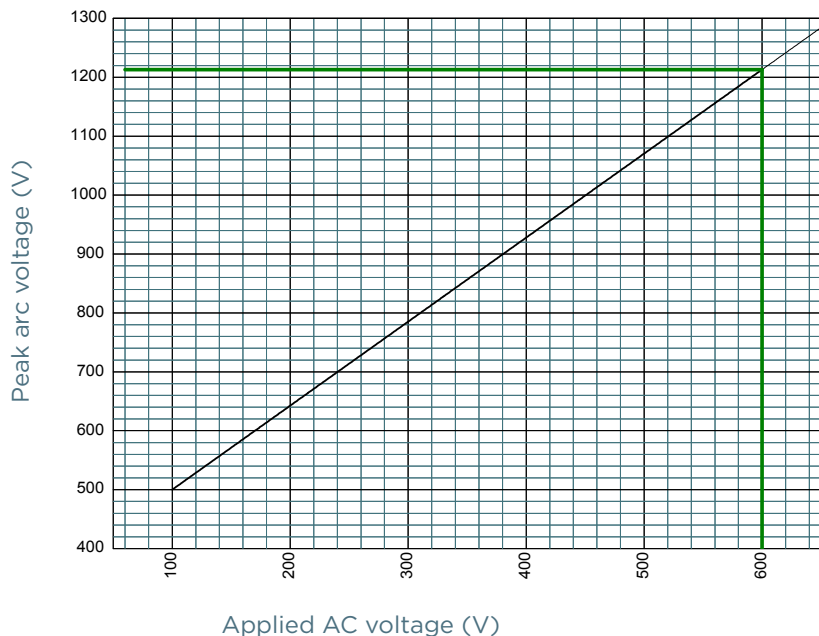
### Size 30 690V



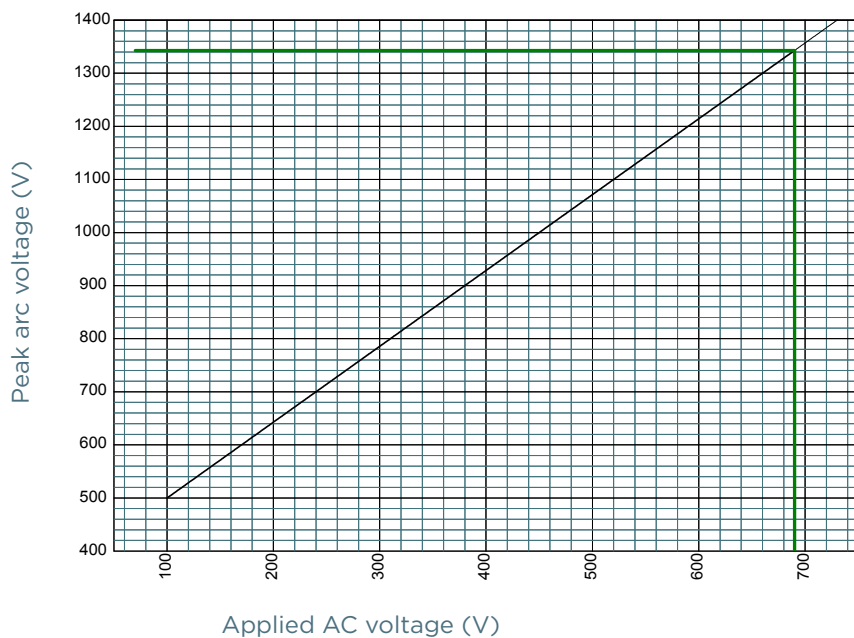
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## PEAK ARC VOLTAGE

### Size 30 600V



### Size 30 690V

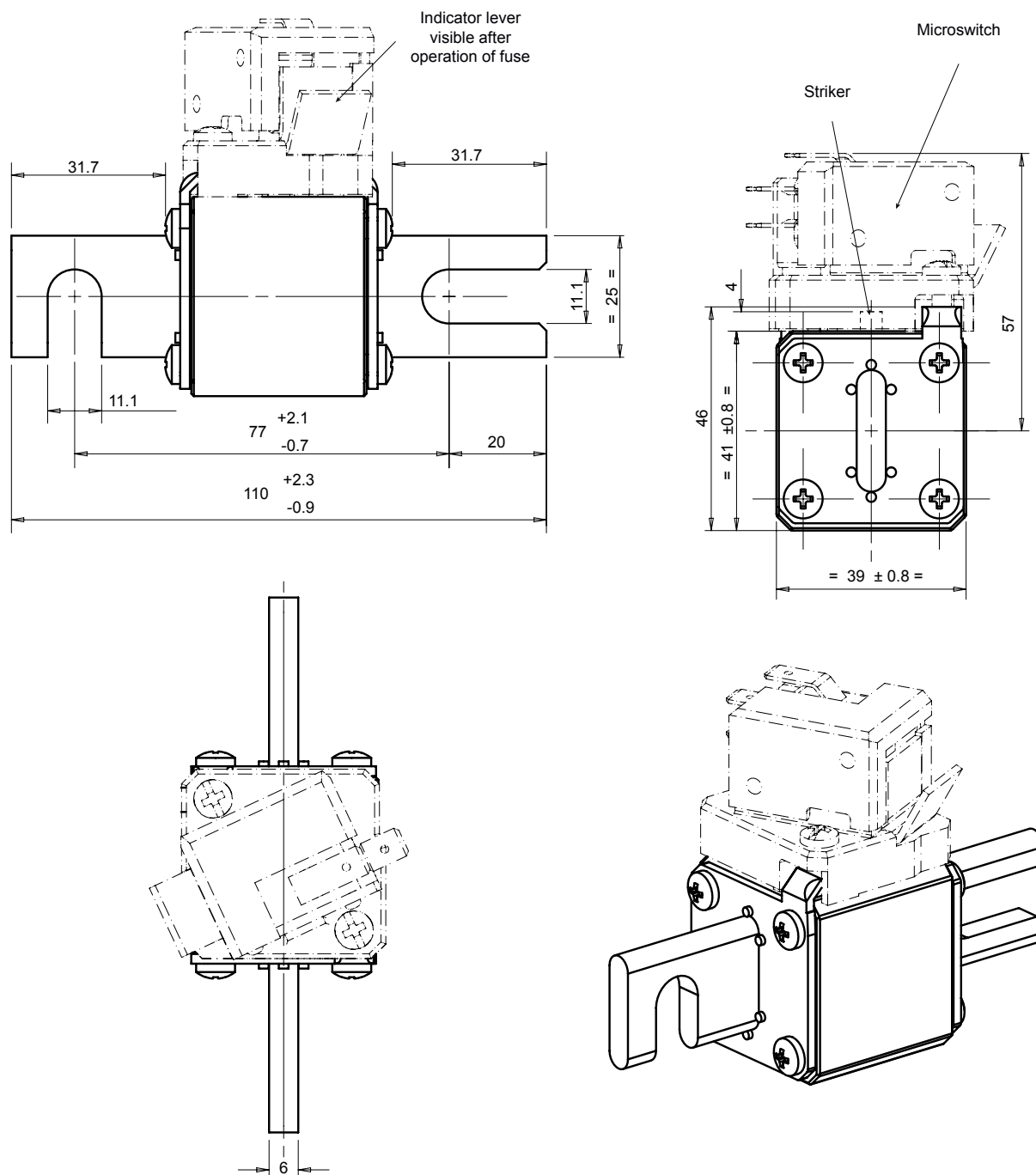


# Protistor® size 30 aR

600 - 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 30 type DIN 80 (102936)



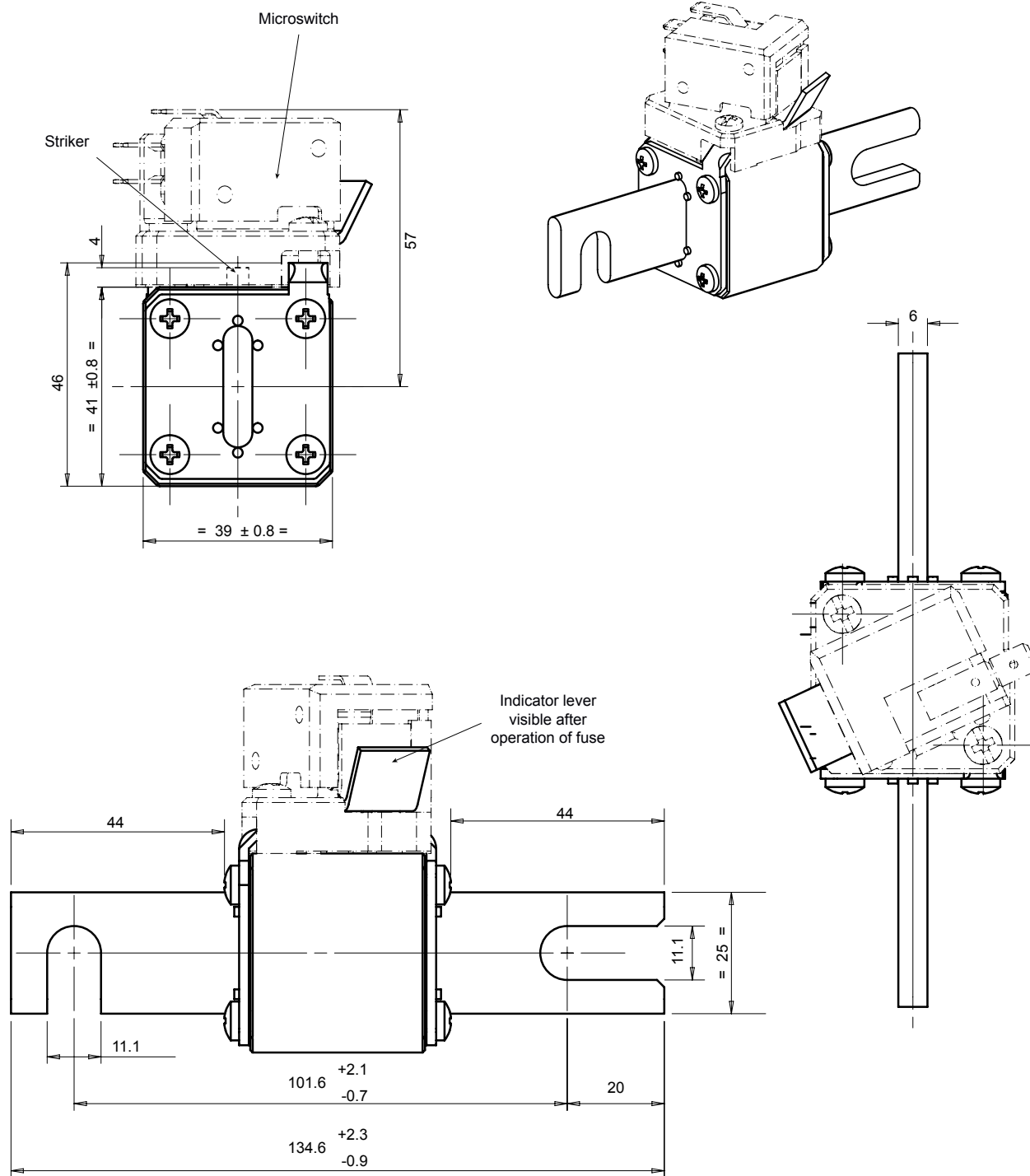
Dimensions in mm

# Protistor® size 30 aR

600 - 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 30 type DIN 110 (102937)



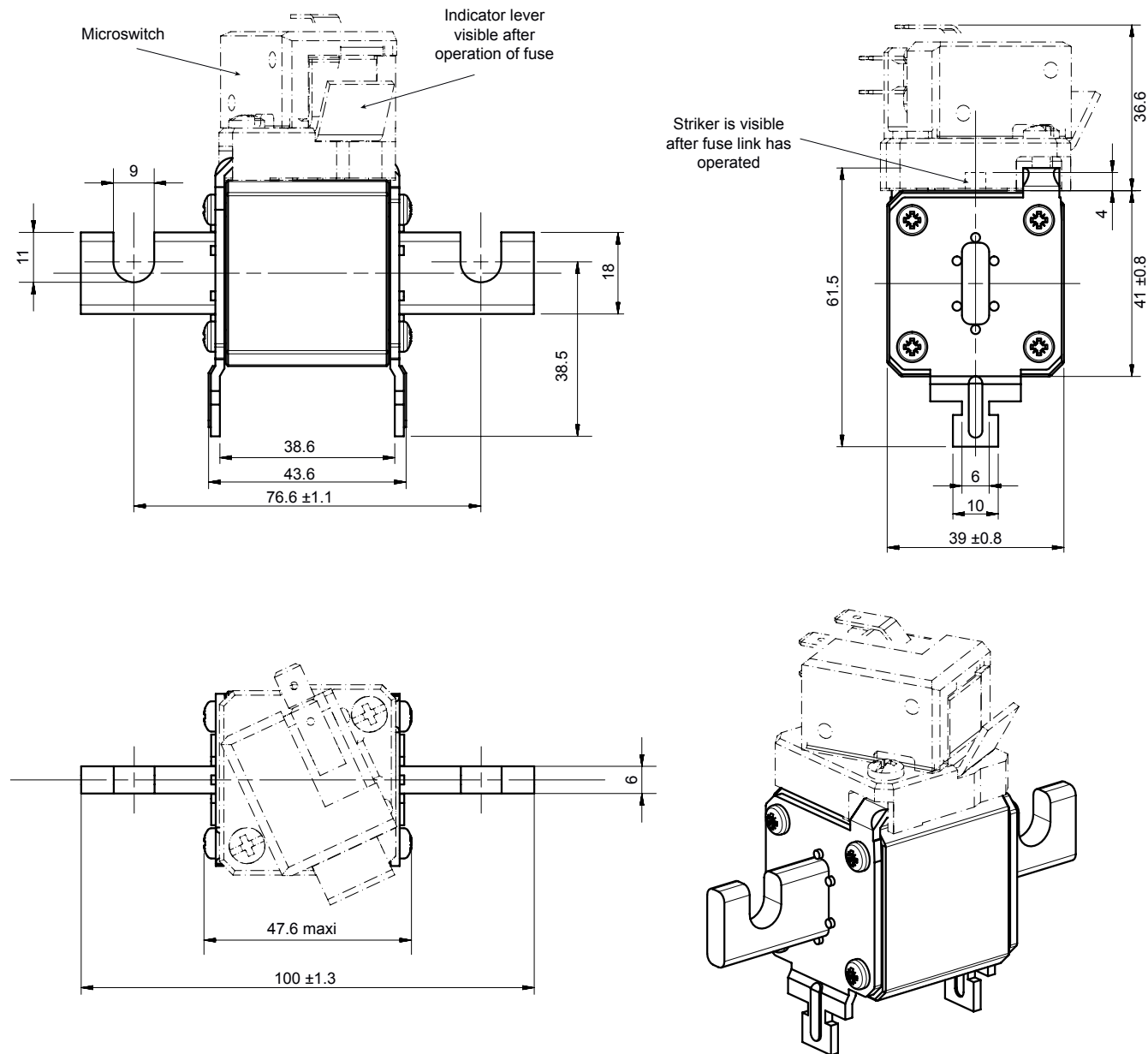
Dimensions in mm

# Protistor® size 30 aR

600 - 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 30 type EF (102935)



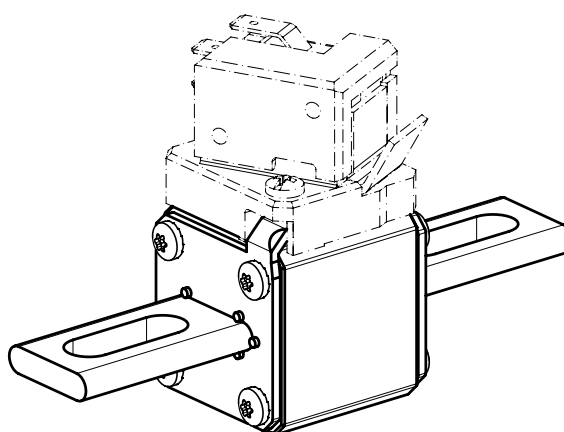
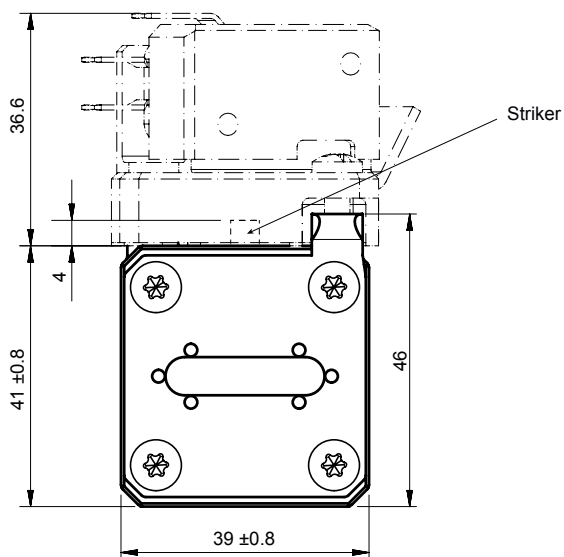
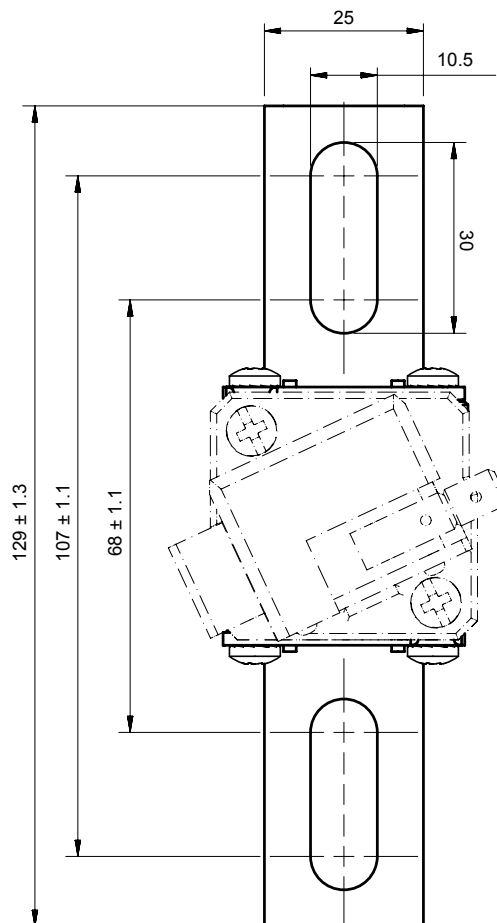
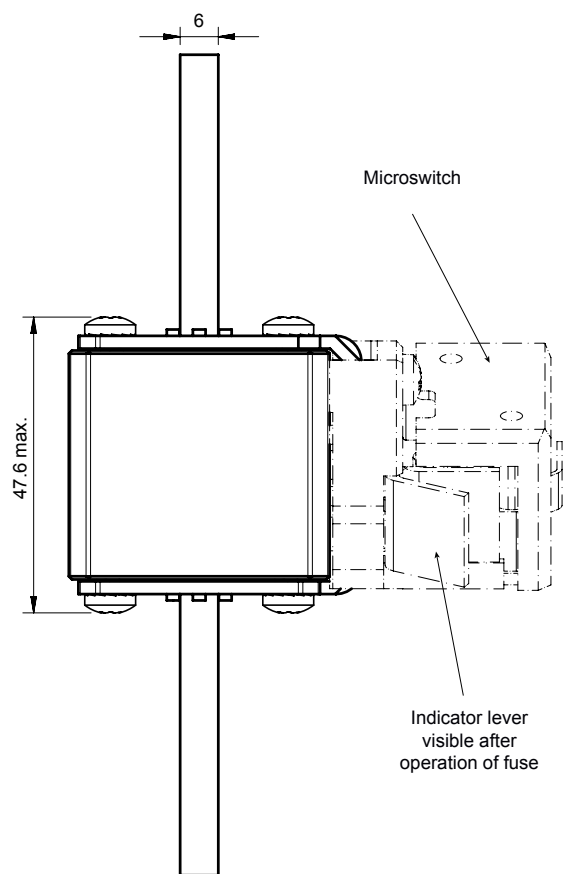
Dimensions in mm

# Protistor® size 30 aR

600 - 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 30 type KI (102934)



Dimensions in mm

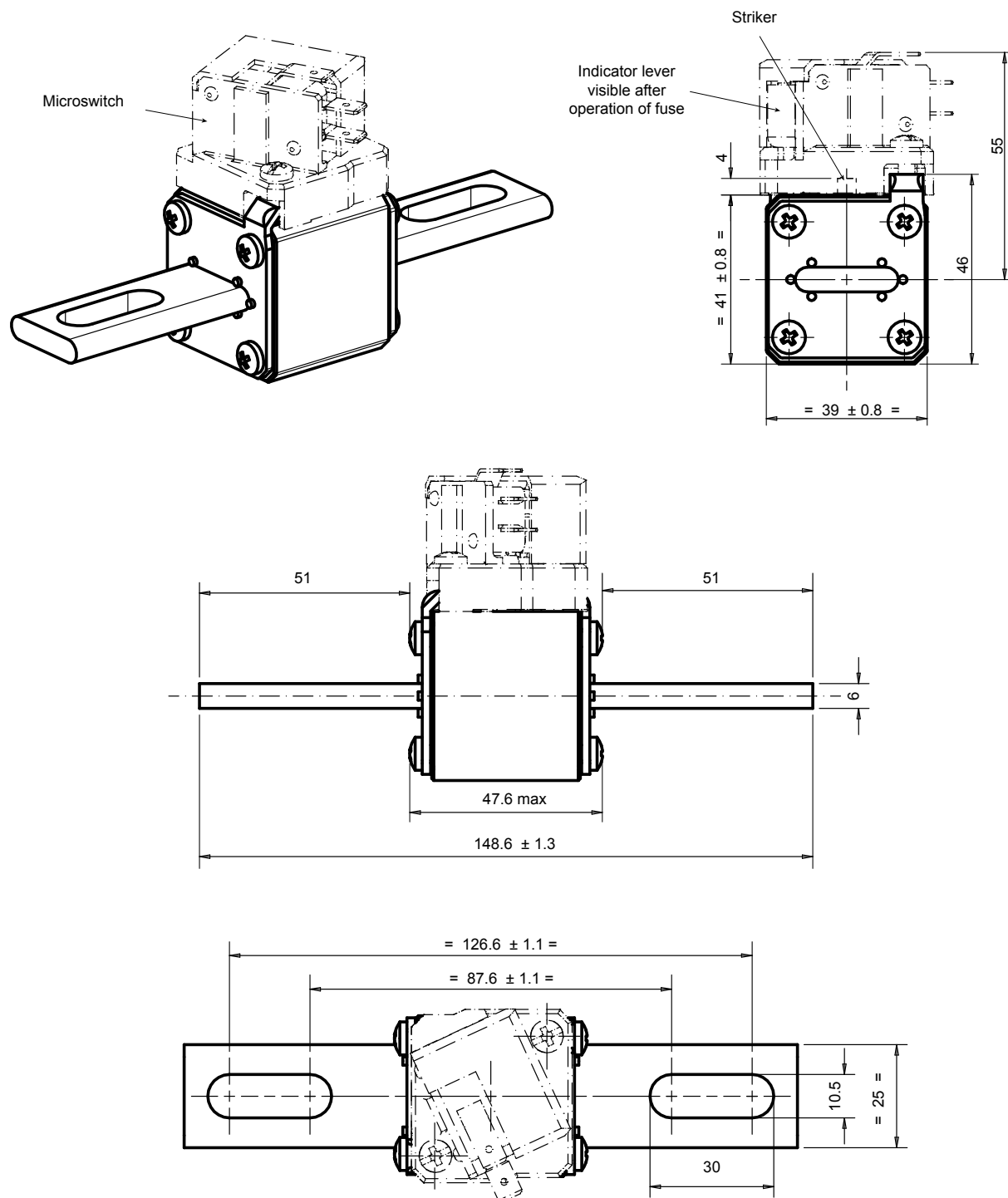
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# Protistor® size 30 aR

600 - 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 30 type LI (102933)



Dimensions in mm

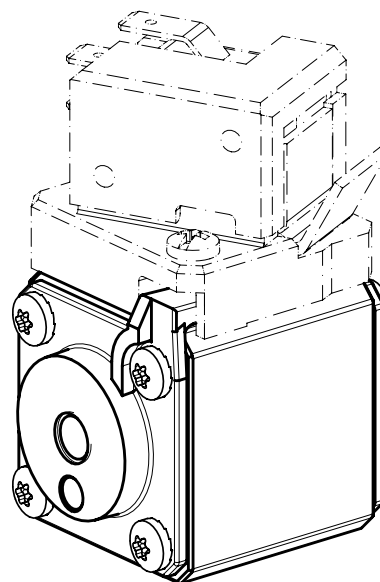
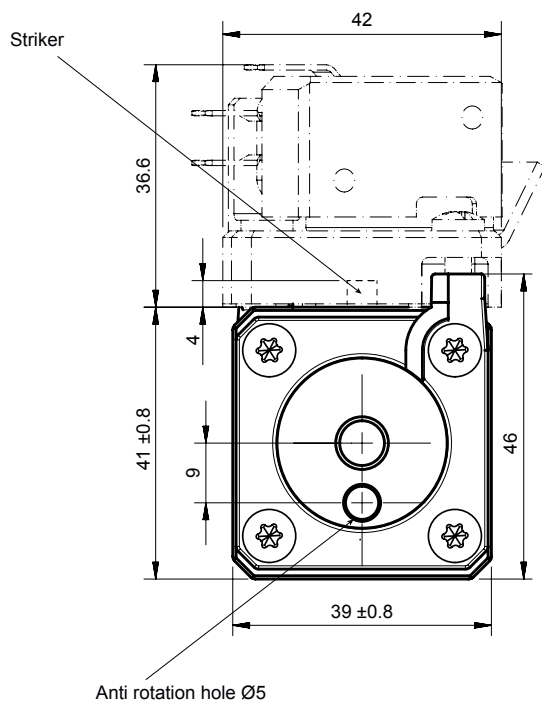
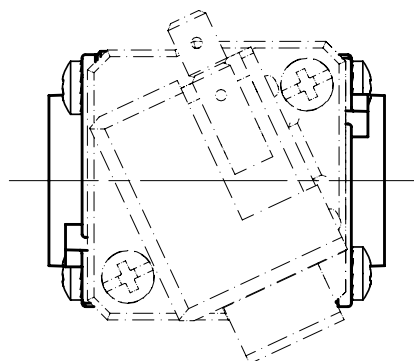
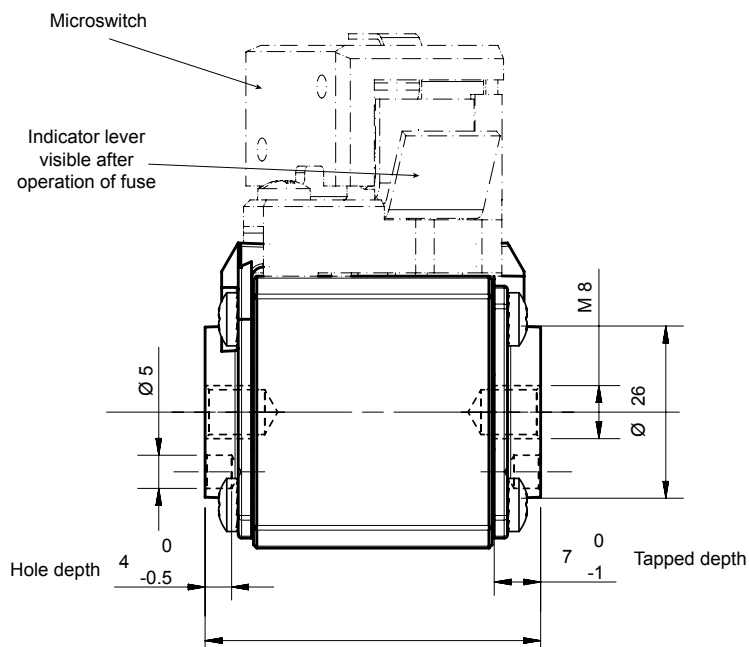
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

# Protistor® size 30 aR

600 - 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 30 type TTF (102920)



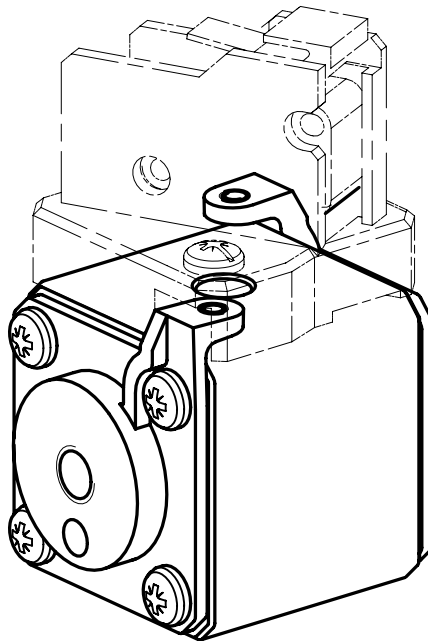
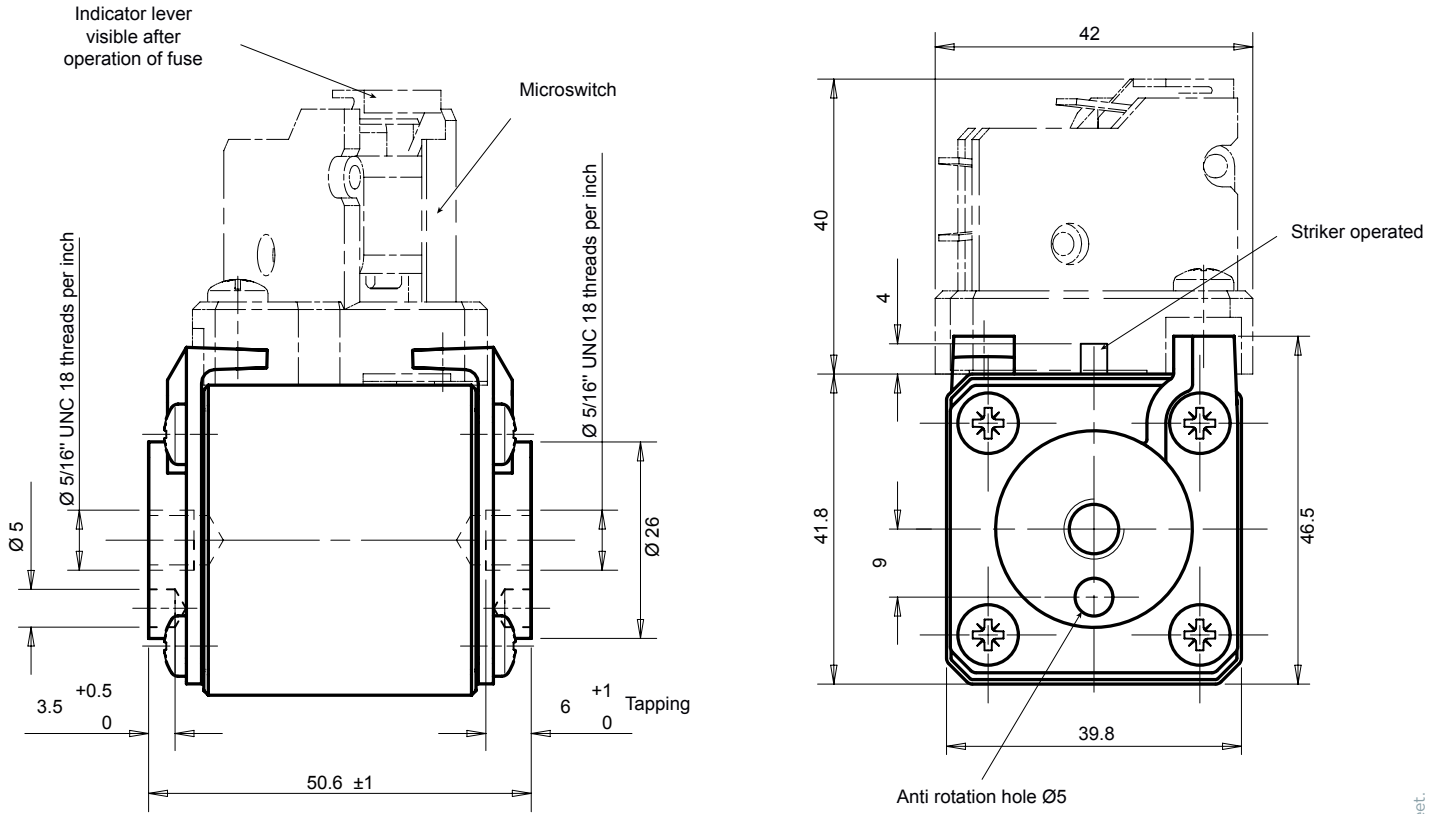
Dimensions in mm

# Protistor® size 30 aR

600 - 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 30 type TTI (107300)



Dimensions in mm

# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## SEMICONDUCTOR PROTECTION FUSES

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



The 690/700V Protistor® fuse-links provide maximum flexibility in equipment design and ultimate protection for today's power conversion equipment. These aR ultra-fast acting square body fuse-links are available in different body sizes, each size having multiple worldwide acceptable mounting styles.

They have been engineered to provide state-of-the-art protection for semiconductors: diodes, thyristors and IGBT devices. They are assembled with 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.

Each fuse-link can be equipped with a low voltage trip-indicator which can operate a field mountable microswitch.

## TECHNICAL DATA OVERVIEW

Voltage AC	690 VAC
Ampere Range (A)	160 ... 800 A
Speed/Characteristic	aR
I.R. AC	170 kA
Product Size	31

## FEATURES & BENEFITS

- Multiple body sizes and terminals or blades combination
- aR Class according to IEC 60269-4 and VDE 636-23
- Very low  $I^2t$  for improved semiconductor protection
- Ultra fast acting
- Current limiting
- Superior cycling capability

## APPLICATIONS

- Protection of inverters, motor drives, UPS systems and similar 690V or less equipments.

## STANDARDS

- IEC 60269.4 Compliance
- UL/CSA Recognized E76491
- CCC GB 1539.4



# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE



PC31UD69V800TF

### Size 31 type TTF M8 threaded terminals

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC31UD69V160TF	M300299	690 V	700 V	160 A	1300 A <sup>2</sup> s	7700 A <sup>2</sup> s	170 kA	35 W	0.3786 kg	3
PC31UD69V200TF	N300001	690 V	700 V	200 A	2600 A <sup>2</sup> s	15000 A <sup>2</sup> s	170 kA	45 W	0.3786 kg	3
PC31UD69V250TF	P300002	690 V	700 V	250 A	4700 A <sup>2</sup> s	28000 A <sup>2</sup> s	170 kA	52 W	0.3826 kg	3
PC31UD69V315TF	Q300003	690 V	700 V	315 A	7500 A <sup>2</sup> s	44000 A <sup>2</sup> s	170 kA	65 W	0.3826 kg	3
PC31UD69V350TF	M300046	690 V	700 V	350 A	10300 A <sup>2</sup> s	61000 A <sup>2</sup> s	170 kA	67 W	0.3826 kg	3
PC31UD69V400TF	R300004	690 V	700 V	400 A	19000 A <sup>2</sup> s	110000 A <sup>2</sup> s	170 kA	68 W	0.3826 kg	3
PC31UD69V450TF	S300005	690 V	700 V	450 A	26500 A <sup>2</sup> s	155000 A <sup>2</sup> s	170 kA	70 W	0.3826 kg	3
PC31UD69V500TF	T300006	690 V	700 V	500 A	37000 A <sup>2</sup> s	215000 A <sup>2</sup> s	170 kA	70 W	0.3826 kg	3
PC31UD69V550TF	V300007	690 V	700 V	550 A	52000 A <sup>2</sup> s	310000 A <sup>2</sup> s	170 kA	70 W	0.3786 kg	3
PC31UD69V630TF	W300008	690 V	700 V	630 A	75000 A <sup>2</sup> s	430000 A <sup>2</sup> s	170 kA	75 W	0.3826 kg	3
PC31UD69V700TF	X300009	690 V	700 V	700 A	95000 A <sup>2</sup> s	540000 A <sup>2</sup> s	170 kA	85 W	0.3826 kg	3
PC31UD69V800TF	Y300401	690 V	700 V	800 A	140000 A <sup>2</sup> s	880000 A <sup>2</sup> s	170 kA	105 W	0.3786 kg	3



A070UD31TTI800

### Size 31 type TTI 5/16''-18 unified coarse threaded terminals

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
A070UD31TTI200	A300472	690 V	700	200 A	2600 A <sup>2</sup> s	15000 A <sup>2</sup> s	170 kA	45 W	0.385 kg	3
A070UD31TTI250	B300473	690 V	700	250 A	4700 A <sup>2</sup> s	28000 A <sup>2</sup> s	170 kA	52 W	0.385 kg	3
A070UD31TTI315	C300474	690 V	700	315 A	7500 A <sup>2</sup> s	44000 A <sup>2</sup> s	170 kA	65 W	0.385 kg	3
A070UD31TTI350	D300475	690 V	700	350 A	10300 A <sup>2</sup> s	61000 A <sup>2</sup> s	170 kA	67 W	0.385 kg	3
A070UD31TTI400	E300476	690 V	700	400 A	19000 A <sup>2</sup> s	110000 A <sup>2</sup> s	170 kA	68 W	0.385 kg	3
A070UD31TTI450	F300477	690 V	700	450 A	26500 A <sup>2</sup> s	155000 A <sup>2</sup> s	170 kA	70 W	0.385 kg	3
A070UD31TTI500	G300478	690 V	700	500 A	37000 A <sup>2</sup> s	215000 A <sup>2</sup> s	170 kA	70 W	0.385 kg	3
A070UD31TTI550	H300479	690 V	700	550 A	52000 A <sup>2</sup> s	310000 A <sup>2</sup> s	170 kA	70 W	0.385 kg	3
A070UD31TTI630	J300480	690 V	700	630 A	75000 A <sup>2</sup> s	430000 A <sup>2</sup> s	170 kA	75 W	0.385 kg	3
A070UD31TTI700	K300481	690 V	700	700 A	95000 A <sup>2</sup> s	540000 A <sup>2</sup> s	170 kA	85 W	0.385 kg	3
A070UD31TTI800	L300482	690 V	700	800 A	140000 A <sup>2</sup> s	880000 A <sup>2</sup> s	170 kA	105 W	0.385 kg	3

# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE



PC31UD69V800A

### Size 31 type DIN80 blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC31UD69V160A	M300322	690 V	700 V	160 A	1300 A <sup>2</sup> s	7700 A <sup>2</sup> s	170 kA	35 W	0.3866 kg	3
PC31UD69V200A	Y300010	690 V	700 V	200 A	2600 A <sup>2</sup> s	15000 A <sup>2</sup> s	170 kA	45 W	0.3866 kg	3
PC31UD69V250A	Z300011	690 V	700 V	250 A	4700 A <sup>2</sup> s	28000 A <sup>2</sup> s	170 kA	52 W	0.3866 kg	3
PC31UD69V315A	A300012	690 V	700 V	315 A	7500 A <sup>2</sup> s	44000 A <sup>2</sup> s	170 kA	65 W	0.3866 kg	3
PC31UD69V350A	Q300049	690 V	700 V	350 A	10300 A <sup>2</sup> s	61000 A <sup>2</sup> s	170 kA	67 W	0.3866 kg	3
PC31UD69V400A	B300013	690 V	700 V	400 A	19000 A <sup>2</sup> s	110000 A <sup>2</sup> s	170 kA	68 W	0.3866 kg	3
PC31UD69V450A	C300014	690 V	700 V	450 A	26500 A <sup>2</sup> s	155000 A <sup>2</sup> s	170 kA	70 W	0.3866 kg	3
PC31UD69V500A	D300015	690 V	700 V	500 A	37000 A <sup>2</sup> s	215000 A <sup>2</sup> s	170 kA	72 W	0.3866 kg	3
PC31UD69V550A	E300016	690 V	700 V	550 A	52000 A <sup>2</sup> s	310000 A <sup>2</sup> s	170 kA	75 W	0.3866 kg	3
PC31UD69V630A	F300017	690 V	700 V	630 A	75000 A <sup>2</sup> s	430000 A <sup>2</sup> s	170 kA	85 W	0.3866 kg	3
PC31UD69V700A	G300018	690 V	700 V	700 A	95000 A <sup>2</sup> s	540000 A <sup>2</sup> s	170 kA	95 W	0.3866 kg	3
PC31UD69V800A	D300406	690 V	700 V	800 A	140000 A <sup>2</sup> s	880000 A <sup>2</sup> s	170 kA	120 W	0.3866 kg	3

### Size 31 type DIN110 blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC31UD69V200D1A	H300019	690 V	700 V	200 A	2600 A <sup>2</sup> s	15000 A <sup>2</sup> s	170 kA	45 W	0.4143 kg	3
PC31UD69V250D1A	J300020	690 V	700 V	250 A	4700 A <sup>2</sup> s	28000 A <sup>2</sup> s	170 kA	52 W	0.4143 kg	3
PC31UD69V315D1A	K300021	690 V	700 V	315 A	7500 A <sup>2</sup> s	44000 A <sup>2</sup> s	170 kA	65 W	0.4143 kg	3
PC31UD69V350D1A	P300048	690 V	700 V	350 A	10300 A <sup>2</sup> s	61000 A <sup>2</sup> s	170 kA	67 W	0.4143 kg	3
PC31UD69V400D1A	L300022	690 V	700 V	400 A	19000 A <sup>2</sup> s	110000 A <sup>2</sup> s	170 kA	68 W	0.4143 kg	3
PC31UD69V450D1A	M300023	690 V	700 V	450 A	26500 A <sup>2</sup> s	155000 A <sup>2</sup> s	170 kA	70 W	0.4143 kg	3
PC31UD69V500D1A	N300024	690 V	700 V	500 A	37000 A <sup>2</sup> s	215000 A <sup>2</sup> s	170 kA	72 W	0.4143 kg	3
PC31UD69V550D1A	P300025	690 V	700 V	550 A	52000 A <sup>2</sup> s	310000 A <sup>2</sup> s	170 kA	75 W	0.4143 kg	3
PC31UD69V630D1A	Q300026	690 V	700 V	630 A	75000 A <sup>2</sup> s	430000 A <sup>2</sup> s	170 kA	85 W	0.4143 kg	3
PC31UD69V700D1A	R300027	690 V	700 V	700 A	95000 A <sup>2</sup> s	540000 A <sup>2</sup> s	170 kA	95 W	0.4143 kg	3
PC31UD69V800D1A	H300709	690 V	700 V	800 A	140000 A <sup>2</sup> s	880000 A <sup>2</sup> s	170 kA	120 W	0.4143 kg	3

### Size 31 type KI short slotted blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
A070UD31KI160	F300385	690 V	700 V	160 A	1300 A <sup>2</sup> s	7700 A <sup>2</sup> s	170 kA	35 W	0.401 kg	3
A070UD31KI200	S300028	690 V	700 V	200 A	2600 A <sup>2</sup> s	15000 A <sup>2</sup> s	170 kA	45 W	0.401 kg	3
A070UD31KI250	T300029	690 V	700 V	250 A	4700 A <sup>2</sup> s	28000 A <sup>2</sup> s	170 kA	52 W	0.401 kg	3
A070UD31KI315	V300030	690 V	700 V	315 A	7500 A <sup>2</sup> s	44000 A <sup>2</sup> s	170 kA	65 W	0.401 kg	3
A070UD31KI350	R300050	690 V	700 V	350 A	10300 A <sup>2</sup> s	61000 A <sup>2</sup> s	170 kA	67 W	0.401 kg	3
A070UD31KI400	W300031	690 V	700 V	400 A	19000 A <sup>2</sup> s	110000 A <sup>2</sup> s	170 kA	68 W	0.401 kg	3
A070UD31KI450	X300032	690 V	700 V	450 A	26500 A <sup>2</sup> s	155000 A <sup>2</sup> s	170 kA	70 W	0.401 kg	3
A070UD31KI500	Y300033	690 V	700 V	500 A	37000 A <sup>2</sup> s	215000 A <sup>2</sup> s	170 kA	72 W	0.401 kg	3
A070UD31KI550	Z300034	690 V	700 V	550 A	52000 A <sup>2</sup> s	310000 A <sup>2</sup> s	170 kA	75 W	0.401 kg	3
A070UD31KI630	A300035	690 V	700 V	630 A	75000 A <sup>2</sup> s	430000 A <sup>2</sup> s	170 kA	85 W	0.401 kg	3
A070UD31KI700	B300036	690 V	700 V	700 A	95000 A <sup>2</sup> s	540000 A <sup>2</sup> s	170 kA	95 W	0.401 kg	3
A070UD31KI800	A301070	690 V	700 V	800 A	140000 A <sup>2</sup> s	880000 A <sup>2</sup> s	170 kA	120 W	0.401 kg	3

# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE



A070UD31LI800

### Size 31 type LI long slotted blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
A070UD31LI200	V300697	690 V	700 V	200 A	2600 A <sup>2</sup> s	15000 A <sup>2</sup> s	170 kA	45 W	420 g	3
A070UD31LI250	W300698	690 V	700 V	250 A	4700 A <sup>2</sup> s	28000 A <sup>2</sup> s	170 kA	52 W	0.4173 kg	3
A070UD31LI315	X300699	690 V	700 V	315 A	7500 A <sup>2</sup> s	44000 A <sup>2</sup> s	170 kA	65 W	0.4173 kg	3
A070UD31LI350	Y300700	690 V	700 V	350 A	10300 A <sup>2</sup> s	61000 A <sup>2</sup> s	170 kA	67 W	0.4173 kg	3
A070UD31LI400	Z300701	690 V	700 V	400 A	19000 A <sup>2</sup> s	110000 A <sup>2</sup> s	170 kA	68 W	0.4173 kg	3
A070UD31LI450	A300702	690 V	700 V	450 A	26500 A <sup>2</sup> s	155000 A <sup>2</sup> s	170 kA	70 W	0.4173 kg	3
A070UD31LI500	B300703	690 V	700 V	500 A	37000 A <sup>2</sup> s	215000 A <sup>2</sup> s	170 kA	72 W	0.4173 kg	3
A070UD31LI550	C300704	690 V	700 V	550 A	52000 A <sup>2</sup> s	310000 A <sup>2</sup> s	170 kA	75 W	0.4173 kg	3
A070UD31LI630	D300705	690 V	700 V	630 A	75000 A <sup>2</sup> s	430000 A <sup>2</sup> s	170 kA	85 W	0.4173 kg	3
A070UD31LI700	E300706	690 V	700 V	700 A	95000 A <sup>2</sup> s	540000 A <sup>2</sup> s	170 kA	95 W	0.4173 kg	3
A070UD31LI800	F300707	690 V	700 V	800 A	140000 A <sup>2</sup> s	880000 A <sup>2</sup> s	170 kA	120 W	0.4173 kg	3

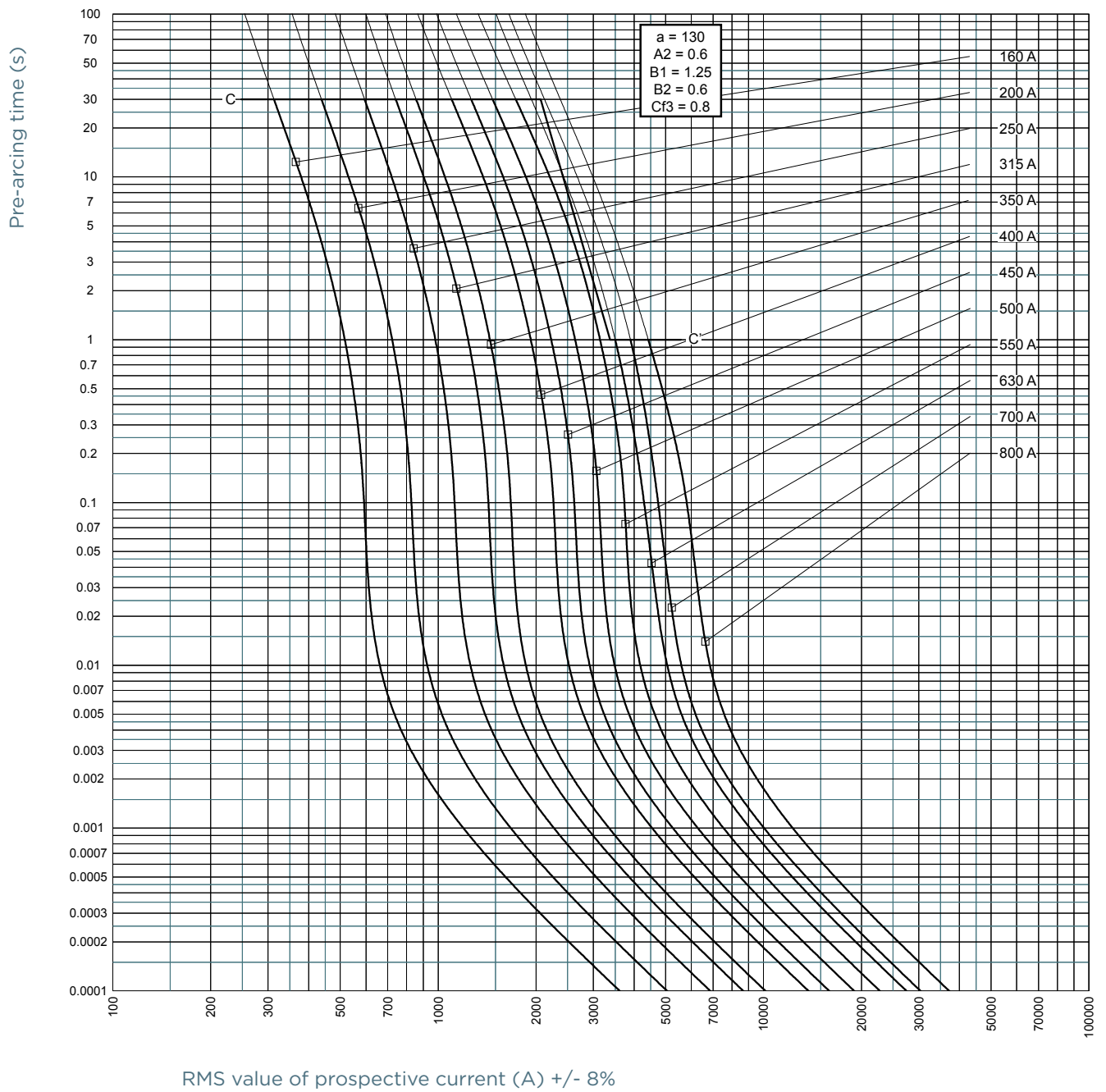


PC31UD69V700EF

### Size 31 for type EF blade bolted connections

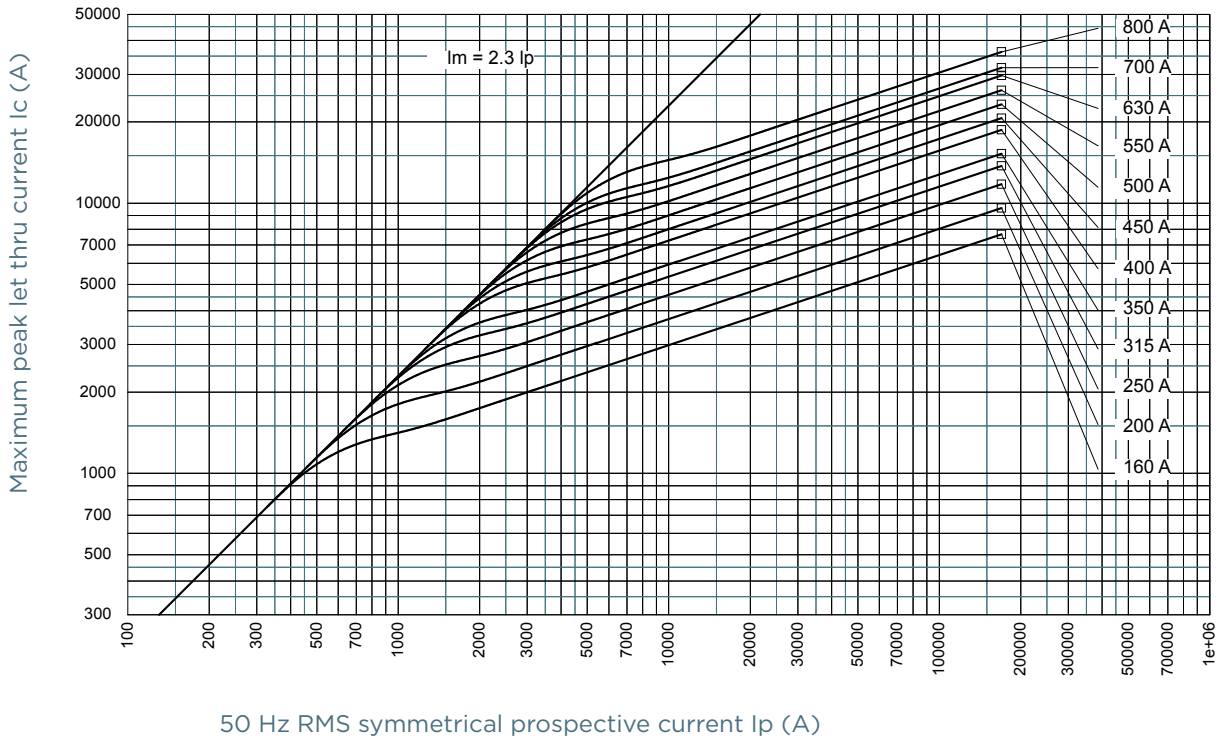
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PC31UD69V160EF	B301922	690 V	700 V	160 A	1300 A <sup>2</sup> s	7700 A <sup>2</sup> s	170 kA	35 W	430 g	3
PC31UD69V200EF	C300037	690 V	700 V	200 A	2600 A <sup>2</sup> s	15000 A <sup>2</sup> s	170 kA	45 W	0.4043 kg	3
PC31UD69V250EF	D300038	690 V	700 V	250 A	4700 A <sup>2</sup> s	28000 A <sup>2</sup> s	170 kA	52 W	0.4043 kg	3
PC31UD69V315EF	E300039	690 V	700 V	315 A	7500 A <sup>2</sup> s	44000 A <sup>2</sup> s	170 kA	65 W	0.4043 kg	3
PC31UD69V350EF	N300047	690 V	700 V	350 A	10300 A <sup>2</sup> s	61000 A <sup>2</sup> s	170 kA	67 W	0.4043 kg	3
PC31UD69V400EF	F300040	690 V	700 V	400 A	19000 A <sup>2</sup> s	110000 A <sup>2</sup> s	170 kA	68 W	0.4043 kg	3
PC31UD69V450EF	G300041	690 V	700 V	450 A	26500 A <sup>2</sup> s	155000 A <sup>2</sup> s	170 kA	70 W	0.4043 kg	3
PC31UD69V500EF	H300042	690 V	700 V	500 A	37000 A <sup>2</sup> s	215000 A <sup>2</sup> s	170 kA	72 W	0.4043 kg	3
PC31UD69V550EF	J300043	690 V	700 V	550 A	52000 A <sup>2</sup> s	310000 A <sup>2</sup> s	170 kA	75 W	0.4043 kg	3
PC31UD69V630EF	K300044	690 V	700 V	630 A	75000 A <sup>2</sup> s	430000 A <sup>2</sup> s	170 kA	85 W	0.4043 kg	3
PC31UD69V700EF	L300045	690 V	700 V	700 A	95000 A <sup>2</sup> s	540000 A <sup>2</sup> s	170 kA	95 W	0.4043 kg	3

## TIME CURRENT CHARACTERISTIC CURVES

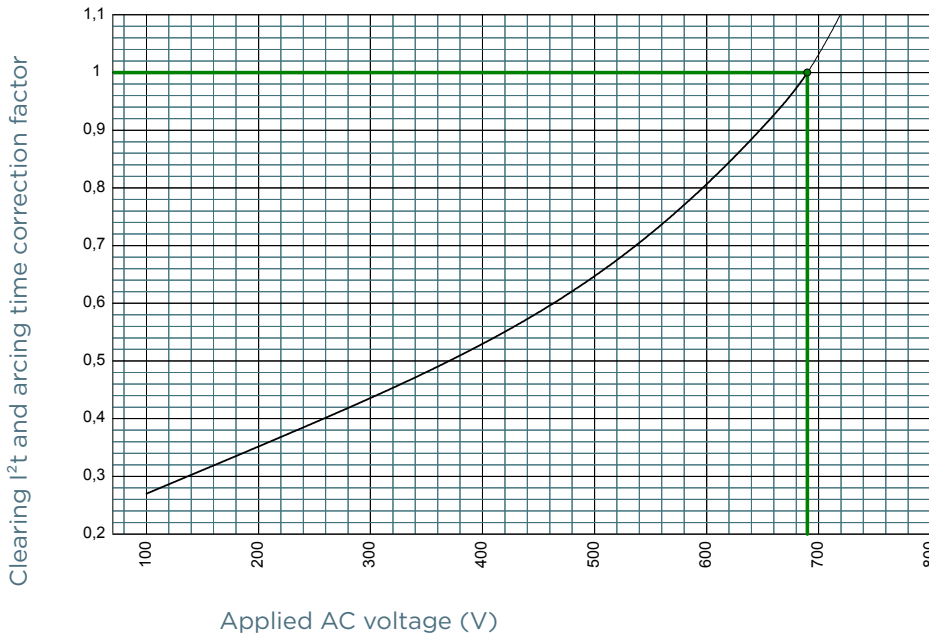


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### CUT-OFF CURRENT CHARACTERISTIC

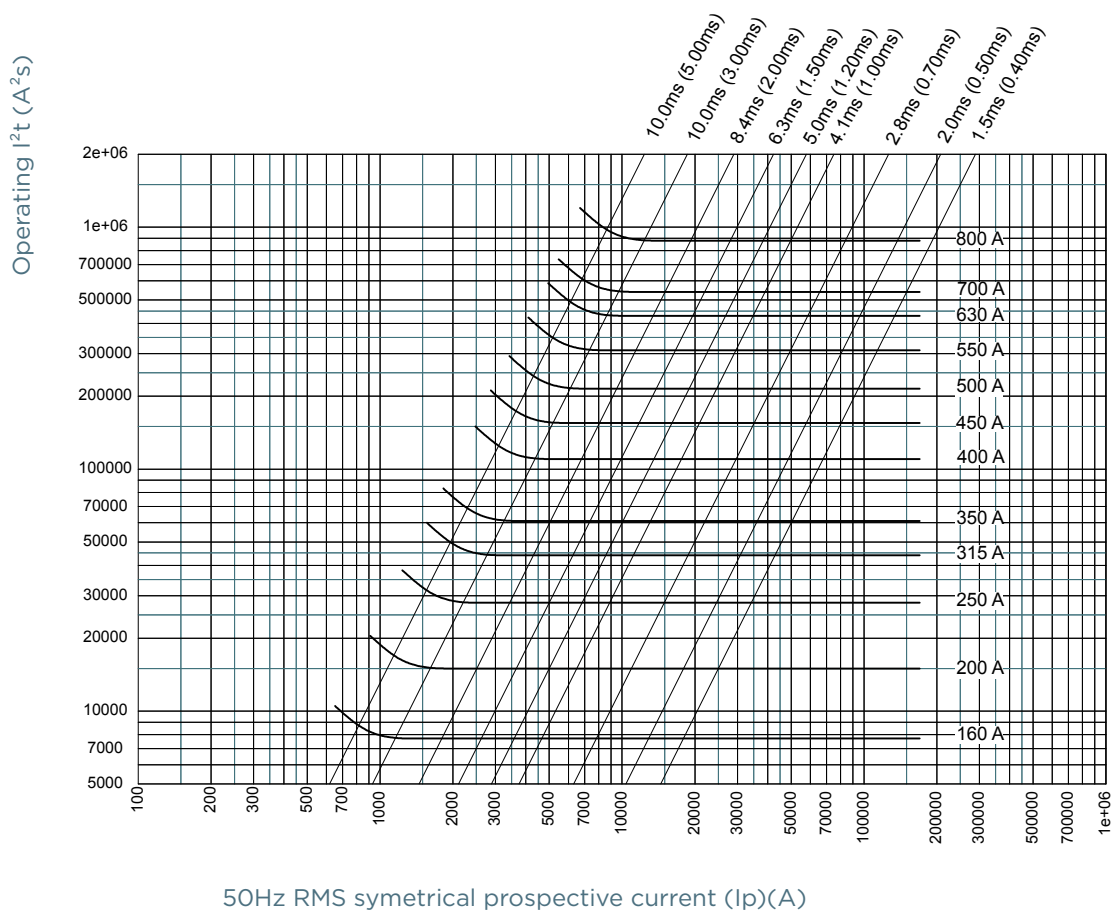


### I<sup>2</sup>T MULTIPLIER COEFFICIENT

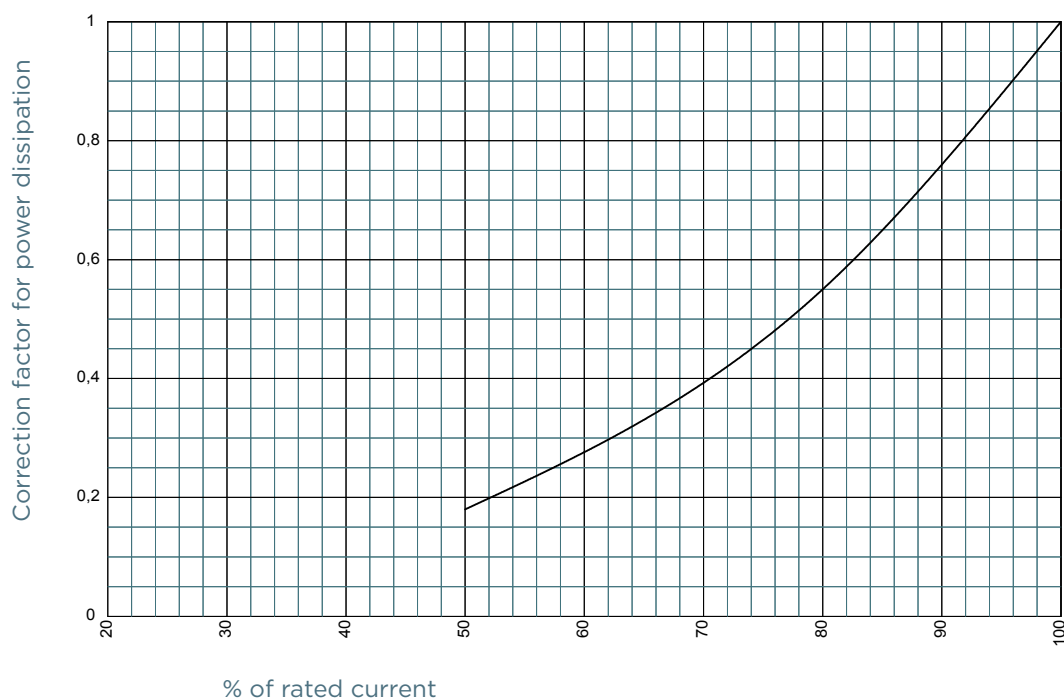


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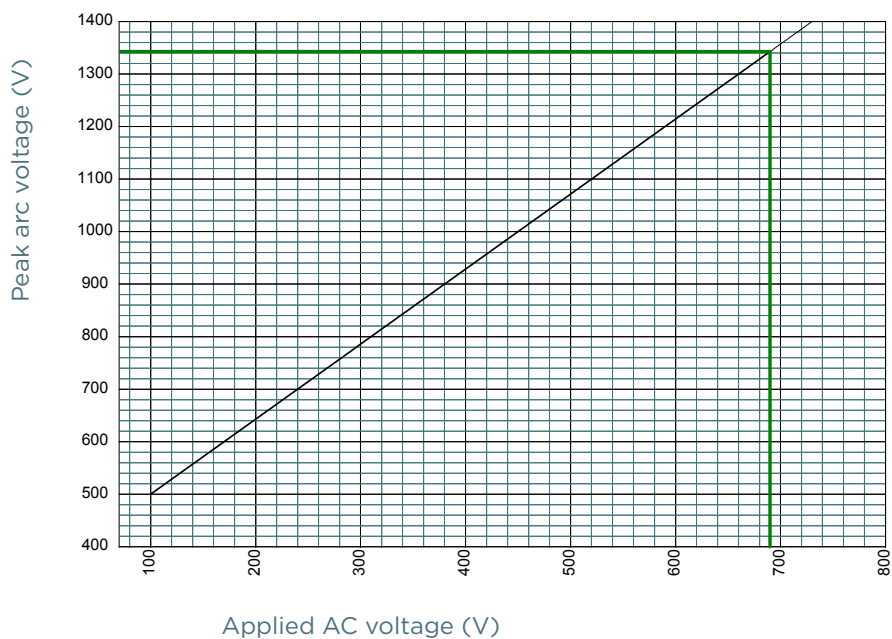
## CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE



## POWER DISSIPATION



## PEAK ARC VOLTAGE

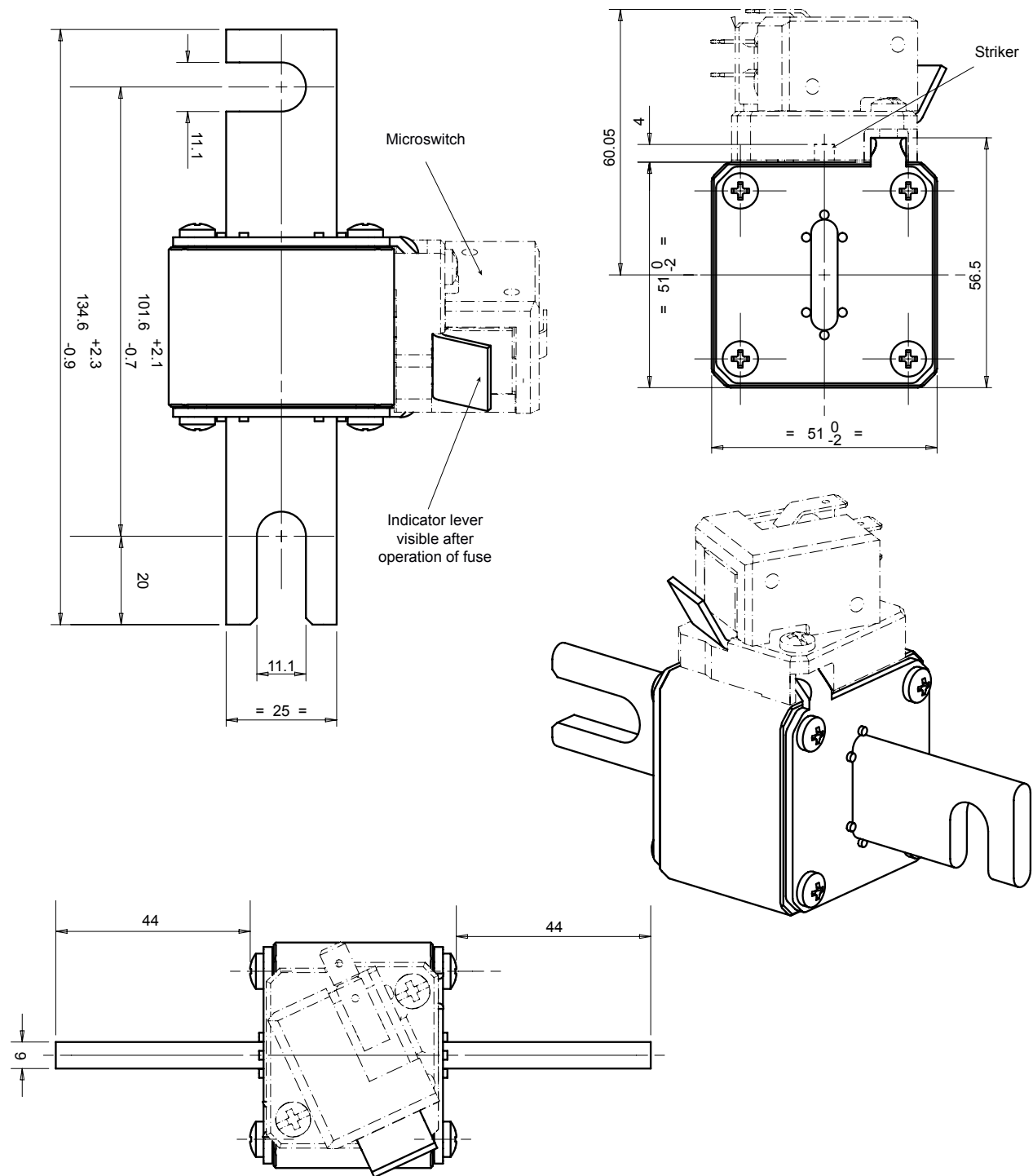


# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

### Size 31 type DIN 110



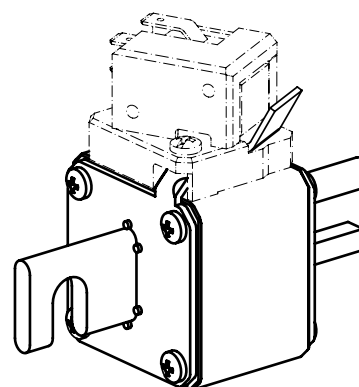
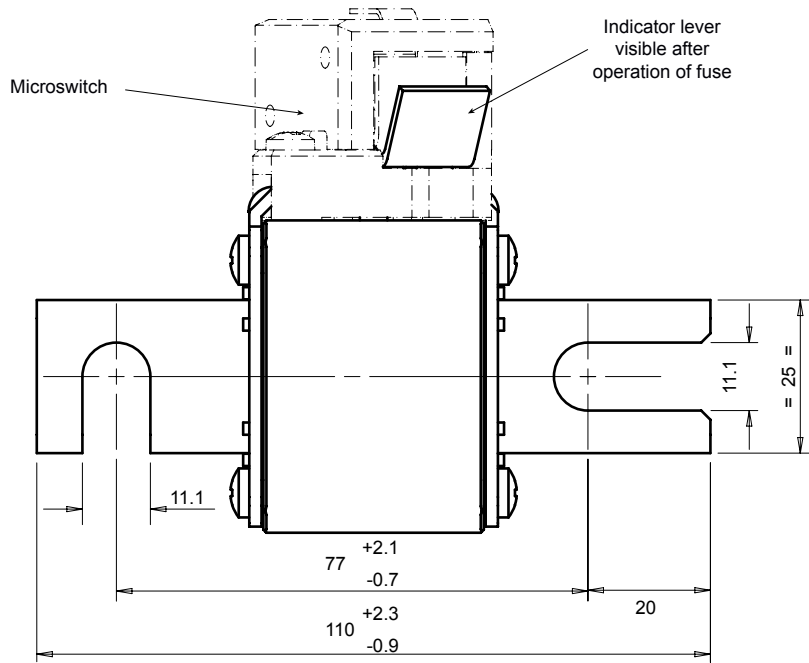
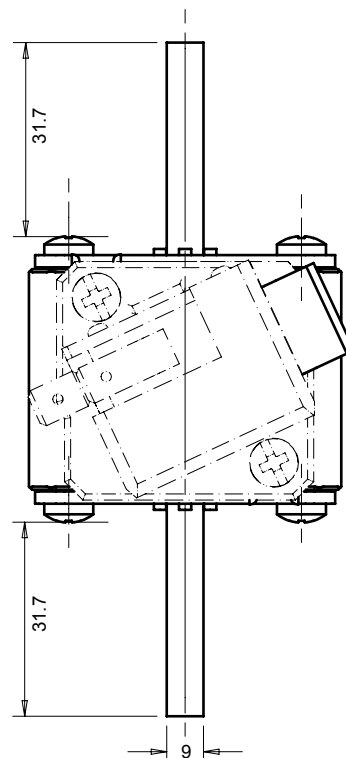
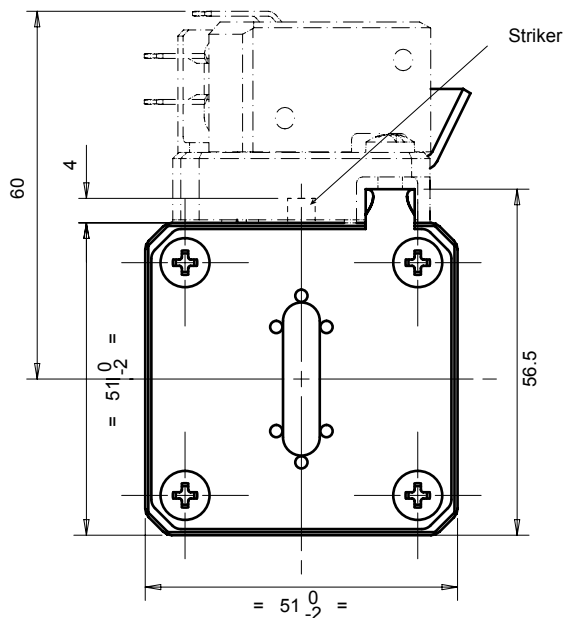
Dimensions in mm

# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

### Size 31 type DIN 80



Dimensions in mm

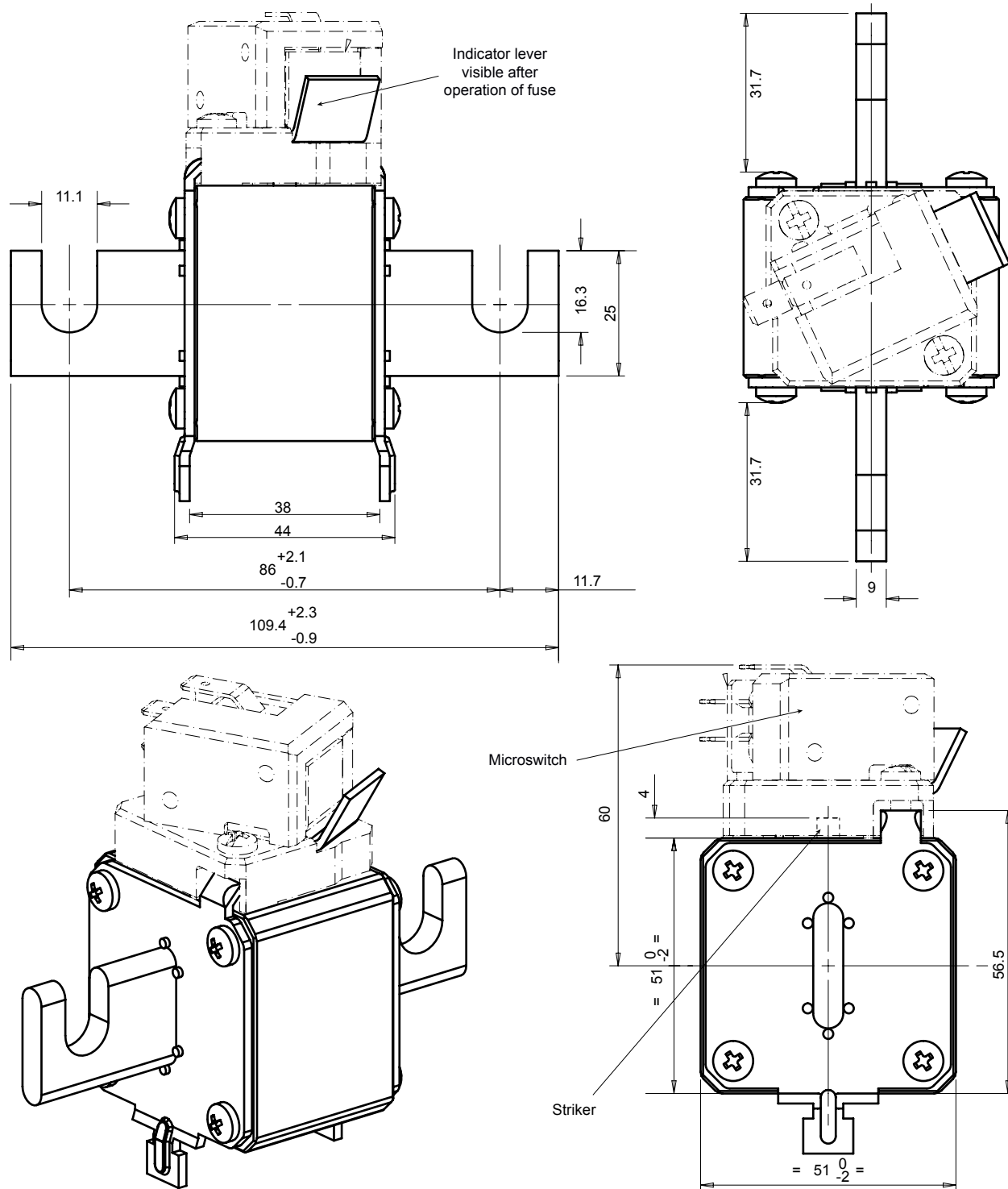
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# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

### Size 31 type EF



Dimensions in mm

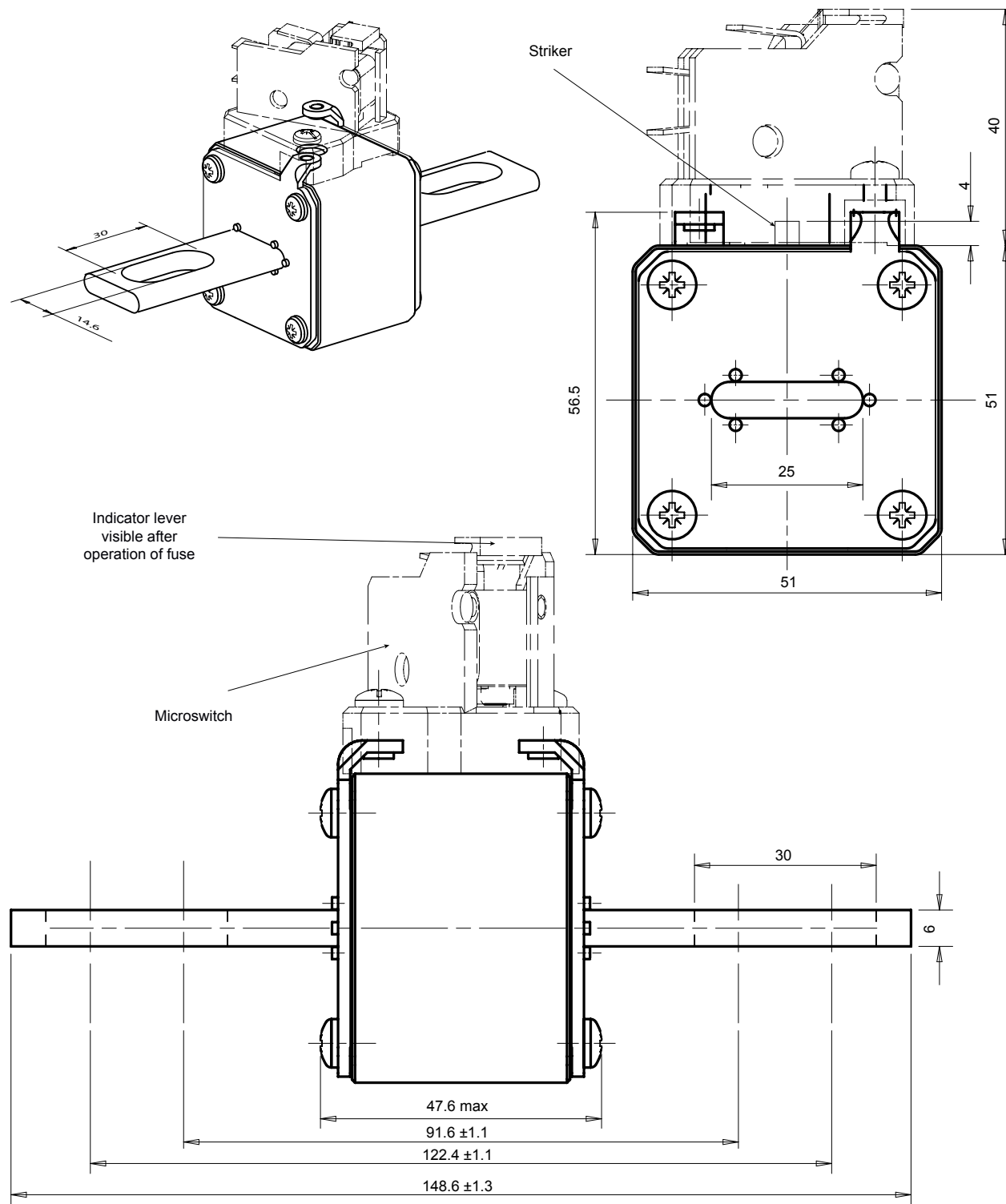
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# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

### Size 31 type LI



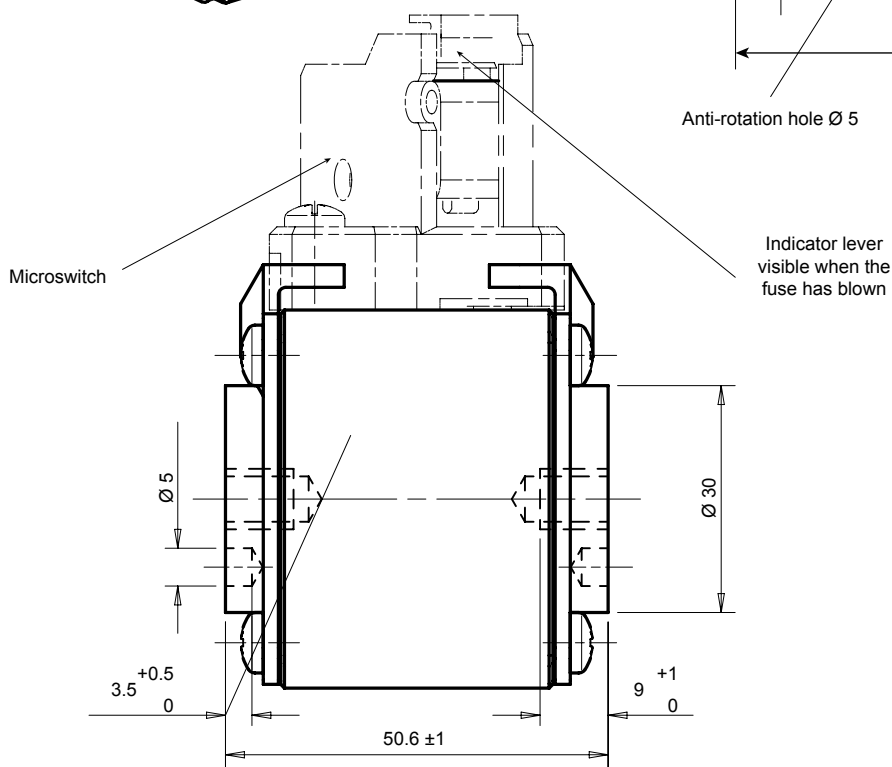
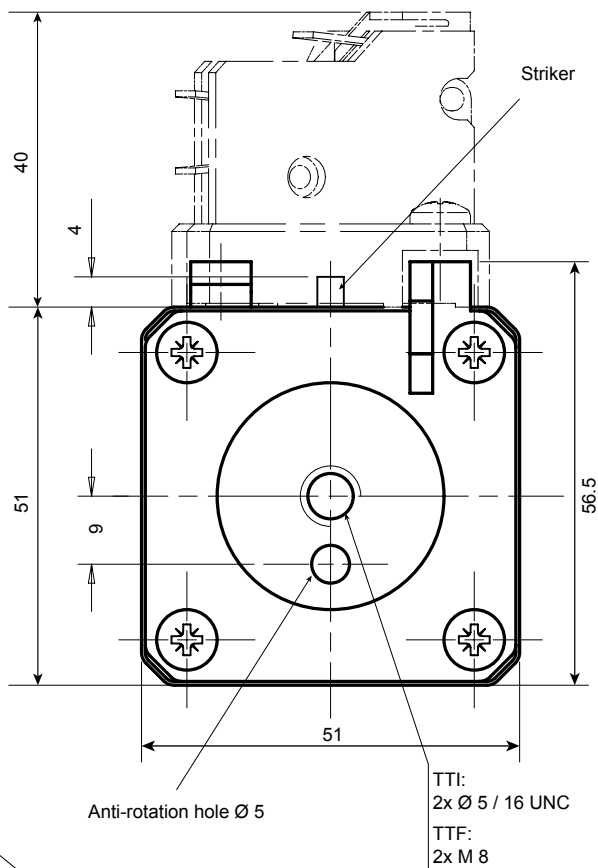
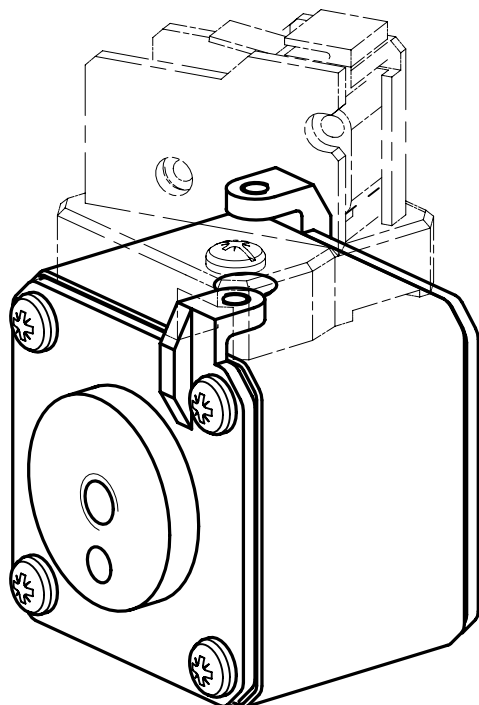
Dimensions in mm

# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

### Size 31 type TTF & TTI



Dimensions in mm

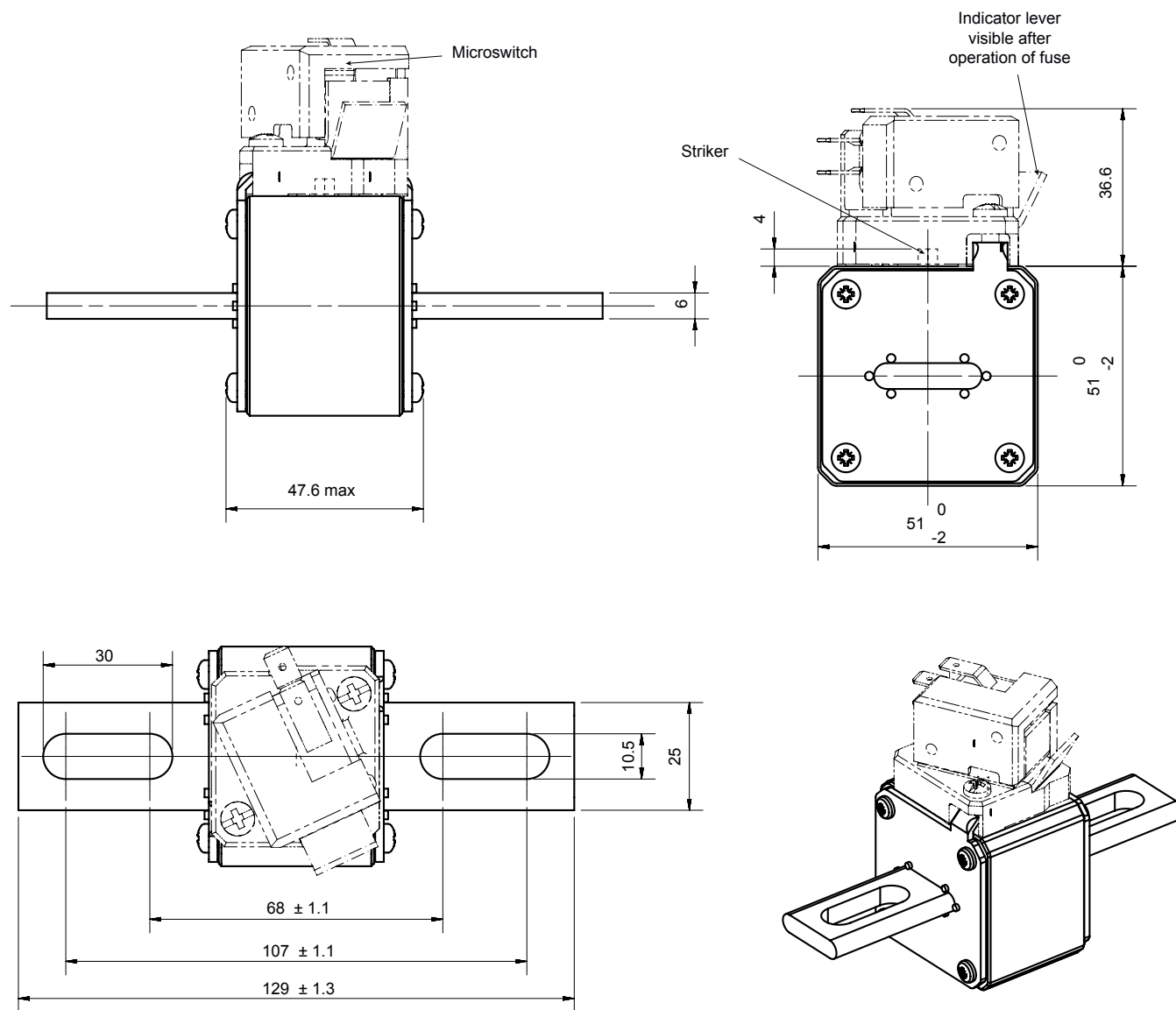
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# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

### Size 31 type KI



Dimensions in mm

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# Protistor® size 32 aR

450 to 690VAC (IEC) / 700VAC (UL)

## SEMICONDUCTOR PROTECTION FUSES

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



The 690/700V Protistor® fuse-links provide maximum flexibility in equipment design and ultimate protection for today's power conversion equipment. These aR ultra-fast acting 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 and IGBT devices. Fuses are assembled with 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.

Each fuse-link can be equipped with a low voltage trip-indicator which can operate a field mountable microswitch.

## TECHNICAL DATA OVERVIEW

Voltage Range AC	450 ... 690 VAC
Ampere Range (A)	315 ... 1800 A
Speed/Characteristic	aR
I.R. AC	110 ... 200 kA
Product Size	32

## FEATURES & BENEFITS

- Multiple body sizes and terminals or blades combination
- aR Class according to IEC 60269-4 and VDE 636-23
- Very low  $I^2t$  for improved semiconductor protection
- Ultra fast acting
- Current limiting
- Superior cycling capability

## APPLICATIONS

- Protection of inverters, motor drives, UPS systems and similar 690V or less equipments.

## STANDARDS

- IEC 60269-4 Compliance
- UL/CSA Recognized E76491
- CCC GB 13539.4



# Protistor® size 32 aR

450 to 690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE



PC32UD69V800TF

### Size 32 type TTF M10 threaded terminals

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
<b>Standard Terminal</b>										
PC32UD69V315TF	M302162	690 V	700 V	315 A	5.2 kA <sup>2</sup> s	31.8 kA <sup>2</sup> s	200 kA	71 W	0.5463 kg	3
PC32UD69V350TF	N302163	690 V	700 V	350 A	8.9 kA <sup>2</sup> s	53.7 kA <sup>2</sup> s	200 kA	71 W	0.5463 kg	3
PC32UD69V400TF	H300065	690 V	700 V	400 A	15 kA <sup>2</sup> s	90 kA <sup>2</sup> s	200 kA	72 W	0.5463 kg	3
PC32UD69V450TF	J300066	690 V	700 V	450 A	22 kA <sup>2</sup> s	130 kA <sup>2</sup> s	200 kA	77 W	0.5463 kg	3
PC32UD69V500TF	K300067	690 V	700 V	500 A	28 kA <sup>2</sup> s	145 kA <sup>2</sup> s	200 kA	85 W	0.5463 kg	3
PC32UD69V550TF	L300068	690 V	700 V	550 A	37 kA <sup>2</sup> s	215 kA <sup>2</sup> s	200 kA	90 W	0.5463 kg	3
PC32UD69V630TF	M300069	690 V	700 V	630 A	54 kA <sup>2</sup> s	310 kA <sup>2</sup> s	200 kA	95 W	0.5463 kg	3
PC32UD69V700TF	N300070	690 V	700 V	700 A	76 kA <sup>2</sup> s	440 kA <sup>2</sup> s	200 kA	100 W	0.5463 kg	3
PC32UD69V800TF	P300071	690 V	700 V	800 A	115 kA <sup>2</sup> s	660 kA <sup>2</sup> s	200 kA	110 W	0.5406 kg	3
<b>Reinforced Terminal</b>										
PC32UD69V900TF	Q300072	690 V	700 V	900 A	165 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	110 W	0.601 kg	3
PC32UD69V1000TF	S300074	690 V	700 V	1000 A	230 kA <sup>2</sup> s	1380 kA <sup>2</sup> s	200 kA	115 W	0.601 kg	3
PC32UD60V1100TF	M300759	600 V	650 V	1100 A	270 kA <sup>2</sup> s	1450 kA <sup>2</sup> s	160 kA	140 W	0.601 kg	3
PC32UD55V1250TF	P301060	550 V	600 V	1250 A	410 kA <sup>2</sup> s	1950 kA <sup>2</sup> s	150 kA	150 W	0.601 kg	3
PC32UD50V1400TF	Q301061	500 V	550 V	1400 A	555 kA <sup>2</sup> s	2300 kA <sup>2</sup> s	130 kA	160 W	0.601 kg	3
PC32UD50V1600TF	H300893	500 V	550 V	1600 A	870 kA <sup>2</sup> s	3600 kA <sup>2</sup> s	130 kA	165 W	0.601 kg	3
PC32UD45V1800TF	R301062	450 V	500 V	1800 A	1050 kA <sup>2</sup> s	3700 kA <sup>2</sup> s	110 kA	195 W	0.601 kg	3

### Size 32 type TTI 3/8"-16 unified coarse threaded terminals

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
<b>Standard Terminal</b>										
A070UD32TTI400	Q300463	690 V	700 V	400 A	15 kA <sup>2</sup> s	90 kA <sup>2</sup> s	200 kA	72 W	0.6033 kg	3
A070UD32TTI450	N300461	690 V	700 V	450 A	22 kA <sup>2</sup> s	130 kA <sup>2</sup> s	200 kA	77 W	0.6033 kg	3
A070UD32TTI500	P300462	690 V	700 V	500 A	28 kA <sup>2</sup> s	160 kA <sup>2</sup> s	200 kA	85 W	0.6033 kg	3
A070UD32TTI550	R300464	690 V	700 V	550 A	37 kA <sup>2</sup> s	215 kA <sup>2</sup> s	200 kA	90 W	0.6033 kg	3
A070UD32TTI630	S300465	690 V	700 V	630 A	54 kA <sup>2</sup> s	310 kA <sup>2</sup> s	200 kA	95 W	0.6033 kg	3
A070UD32TTI700	T300466	690 V	700 V	700 A	76 kA <sup>2</sup> s	440 kA <sup>2</sup> s	200 kA	100 W	0.6033 kg	3
A070UD32TTI800	V300467	690 V	700 V	800 A	115 kA <sup>2</sup> s	660 kA <sup>2</sup> s	200 kA	110 W	0.6033 kg	3
<b>Reinforced Terminal</b>										
A070UD32TTI900	W300468	690 V	700 V	900 A	165 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	110 W	0.6 kg	3
A070UD32TTI1000	X300469	690 V	700 V	1000 A	230 kA <sup>2</sup> s	1380 kA <sup>2</sup> s	200 kA	115 W	0.6033 kg	3
A065UD32TTI1100	M301081	600 V	650 V	1100 A	270 kA <sup>2</sup> s	1450 kA <sup>2</sup> s	160 kA	140 W	0.6 kg	3
A060UD32TTI1250	N301082	550 V	600 V	1250 A	410 kA <sup>2</sup> s	1950 kA <sup>2</sup> s	150 kA	150 W	0.6 kg	3
A055UD32TTI1400	P301083	500 V	550 V	1400 A	555 kA <sup>2</sup> s	2300 kA <sup>2</sup> s	130 kA	160 W	0.6033 kg	3
A055UD32TTI1600	Q301084	500 V	550 V	1600 A	870 kA <sup>2</sup> s	3600 kA <sup>2</sup> s	130 kA	165 W	0.6 kg	3
A050UD32TTI1800	R301085	450 V	500 V	1800 A	1050 kA <sup>2</sup> s	3700 kA <sup>2</sup> s	110 kA	195 W	0.6 kg	3

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# Protistor® size 32 aR

450 to 690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE

### Size 32 type DIN80 blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at In	Weight	Package
PC32UD69V315A	H302158	690 V	700 V	315 A	5.2 kA <sup>2</sup> s	31.8 kA <sup>2</sup> s	200 kA	71 W	530 g	3
PC32UD69V350A	J302159	690 V	700 V	350 A	8.9 kA <sup>2</sup> s	53.7 kA <sup>2</sup> s	200 kA	74 W	530 g	3
PC32UD69V400A	E300177	690 V	700 V	400 A	15 kA <sup>2</sup> s	90 kA <sup>2</sup> s	200 kA	75 W	0.5293 kg	3
PC32UD69V450A	F300178	690 V	700 V	450 A	22 kA <sup>2</sup> s	130 kA <sup>2</sup> s	200 kA	80 W	0.5293 kg	3
PC32UD69V500A	G300179	690 V	700 V	500 A	28 kA <sup>2</sup> s	160 kA <sup>2</sup> s	200 kA	90 W	0.5293 kg	3
PC32UD69V550A	H300180	690 V	700 V	550 A	37 A <sup>2</sup> s	215 kA <sup>2</sup> s	200 kA	95 W	0.5293 kg	3
PC32UD69V630A	J300181	690 V	700 V	630 A	54 kA <sup>2</sup> s	310 kA <sup>2</sup> s	200 kA	105 W	0.5293 kg	3
PC32UD69V700A	K300182	690 V	700 V	700 A	76 A <sup>2</sup> s	440 kA <sup>2</sup> s	200 kA	110 W	0.5293 kg	3
PC32UD69V800A	L300183	690 V	700 V	800 A	115 kA <sup>2</sup> s	660 kA <sup>2</sup> s	200 kA	120 W	0.5293 kg	3
PC32UD69V900A	M300184	690 V	700 V	900 A	170 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	125 W	0.5293 kg	3
PC32UD69V1000A	N300185	690 V	700 V	1000 A	240 kA <sup>2</sup> s	1380 kA <sup>2</sup> s	200 kA	135 W	0.5293 kg	3
PC32UD60V1100A	W302101	600 V	650 V	1100 A	270 kA <sup>2</sup> s	1450 kA <sup>2</sup> s	160 kA	165 W	0.704 kg	3
PC32UD55V1250A	G300409	550 V	600 V	1250 A	410 kA <sup>2</sup> s	1950 kA <sup>2</sup> s	150 kA	180 W	0.5293 kg	3



PC32UD69V900D1A

### Size 32 type DIN110 blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at In	Weight	Package
PC32UD69V315D1A	K302160	690 V	700 V	315 A	5.2 A <sup>2</sup> s	31.8 kA <sup>2</sup> s	200 kA	71 W	0.5633 kg	3
PC32UD69V350D1A	L302161	690 V	700 V	350 A	8.9 kA <sup>2</sup> s	53.7 kA <sup>2</sup> s	200 kA	74 W	565 g	3
PC32UD69V400D1A	P300186	690 V	700 V	400 A	15 kA <sup>2</sup> s	90 kA <sup>2</sup> s	200 kA	75 W	0.5633 kg	3
PC32UD69V450D1A	Q300187	690 V	700 V	450 A	22 kA <sup>2</sup> s	130 kA <sup>2</sup> s	200 kA	80 W	0.5633 kg	3
PC32UD69V500D1A	R300188	690 V	700 V	500 A	28 A <sup>2</sup> s	160 kA <sup>2</sup> s	200 kA	90 W	0.5633 kg	3
PC32UD69V550D1A	S300189	690 V	700 V	550 A	37 kA <sup>2</sup> s	215 kA <sup>2</sup> s	200 kA	95 W	0.5633 kg	3
PC32UD69V630D1A	T300190	690 V	700 V	630 A	54 kA <sup>2</sup> s	310 kA <sup>2</sup> s	200 kA	105 W	0.5633 kg	3
PC32UD69V700D1A	V300191	690 V	700 V	700 A	76 kA <sup>2</sup> s	440 kA <sup>2</sup> s	200 kA	110 W	0.5633 kg	3
PC32UD69V800D1A	W300192	690 V	700 V	800 A	115 kA <sup>2</sup> s	660 kA <sup>2</sup> s	200 kA	120 W	0.5633 kg	3
PC32UD69V900D1A	X300193	690 V	700 V	900 A	170 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	125 W	0.5633 kg	3
PC32UD69V10CD1A	Y300194	690 V	700 V	1000 A	240 kA <sup>2</sup> s	1380 kA <sup>2</sup> s	200 kA	135 W	0.5633 kg	3

### Size 32 type KI short slotted blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at In	Weight	Package
A070UD32KI315	P302164	690 V	700 V	315 A	5.2 kA <sup>2</sup> s	31.8 kA <sup>2</sup> s	200 kA	71 W	0.5523 kg	3
A070UD32KI350	Q302165	690 V	700 V	350 A	8.9 kA <sup>2</sup> s	53.7 kA <sup>2</sup> s	200 kA	74 W	0.5523 kg	3
A070UD32KI400	Z300195	690 V	700 V	400 A	15 kA <sup>2</sup> s	90 kA <sup>2</sup> s	200 kA	75 W	0.5523 kg	3
A070UD32KI450	A300196	690 V	700 V	450 A	22 kA <sup>2</sup> s	130 kA <sup>2</sup> s	200 kA	80 W	0.5523 kg	3
A070UD32KI500	B300197	690 V	700 V	500 A	28 kA <sup>2</sup> s	160 kA <sup>2</sup> s	200 kA	90 W	0.5523 kg	3
A070UD32KI550	C300198	690 V	700 V	550 A	37 kA <sup>2</sup> s	215 kA <sup>2</sup> s	200 kA	95 W	0.5523 kg	3
A070UD32KI630	D300199	690 V	700 V	630 A	54 kA <sup>2</sup> s	310 kA <sup>2</sup> s	200 kA	105 W	0.5523 kg	3
A070UD32KI700	E300200	690 V	700 V	700 A	76 kA <sup>2</sup> s	440 kA <sup>2</sup> s	200 kA	110 W	0.5523 kg	3
A070UD32KI800	F300201	690 V	700 V	800 A	115 kA <sup>2</sup> s	660 kA <sup>2</sup> s	200 kA	120 W	0.5523 kg	3
A070UD32KI900	G300202	690 V	700 V	900 A	170 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	125 W	0.5523 kg	3
A070UD32KI1000	H300203	690 V	700 V	1000 A	240 kA <sup>2</sup> s	1380 kA <sup>2</sup> s	200 kA	135 W	0.5523 kg	3

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# Protistor® size 32 aR

450 to 690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE

### Size 32 type LI long slotted blades

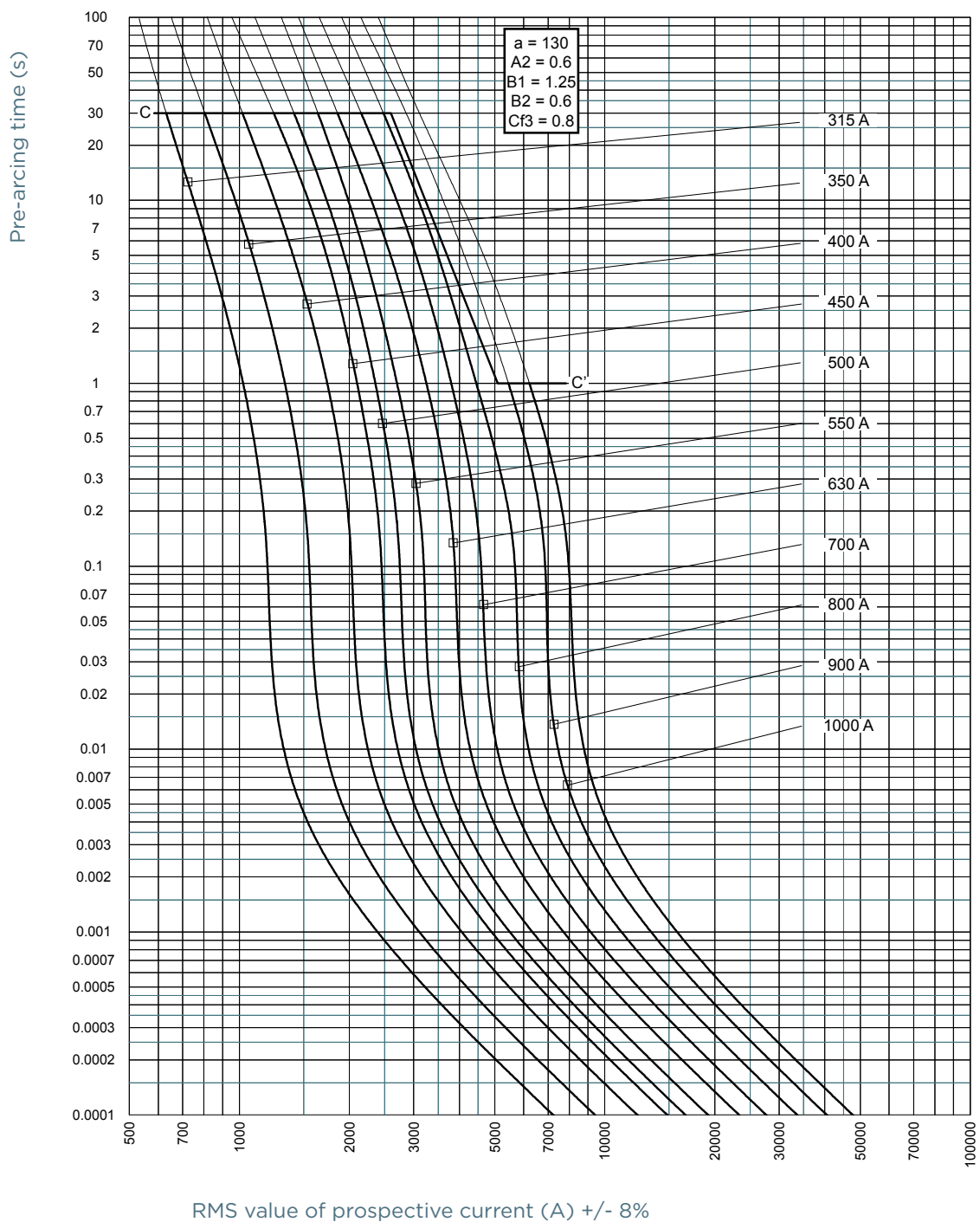
Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
A070UD32LI315	R302166	690 V	700 V	315 A	5.2 kA <sup>2</sup> s	31.8 kA <sup>2</sup> s	200 kA	71 W	0.5733 kg	3
A070UD32LI350	S302167	690 V	700 V	350 A	8.9 kA <sup>2</sup> s	53.7 kA <sup>2</sup> s	200 kA	74 W	0.5733 kg	3
A070UD32LI400	J300204	690 V	700 V	400 A	15 kA <sup>2</sup> s	90 kA <sup>2</sup> s	200 kA	75 W	0.5733 kg	3
A070UD32LI450	K300205	690 V	700 V	450 A	22 kA <sup>2</sup> s	130 kA <sup>2</sup> s	200 kA	80 W	0.5733 kg	3
A070UD32LI500	L300206	690 V	700 V	500 A	28 kA <sup>2</sup> s	160 kA <sup>2</sup> s	200 kA	90 W	0.5733 kg	3
A070UD32LI550	M300207	690 V	700 V	550 A	37 kA <sup>2</sup> s	215 kA <sup>2</sup> s	200 kA	95 W	0.5733 kg	3
A070UD32LI630	N300208	690 V	700 V	630 A	54 kA <sup>2</sup> s	310 kA <sup>2</sup> s	200 kA	105 W	0.5733 kg	3
A070UD32LI700	P300209	690 V	700 V	700 A	76 kA <sup>2</sup> s	440 kA <sup>2</sup> s	200 kA	110 W	0.5733 kg	3
A070UD32LI800	Q300210	690 V	700 V	800 A	115 kA <sup>2</sup> s	660 kA <sup>2</sup> s	200 kA	120 W	0.5733 kg	3
A070UD32LI900	R300211	690 V	700 V	900 A	170 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	125 W	0.7433 kg	3
A070UD32LI1000	S300212	690 V	700 V	1000 A	240 kA <sup>2</sup> s	1380 kA <sup>2</sup> s	200 kA	135 W	0.7433 kg	3
A065UD32LI1100	B301071	600 V	650 V	1100 A	270 kA <sup>2</sup> s	1450 kA <sup>2</sup> s	160 kA	165 W	0.7433 kg	3
A060UD32LI1250	C301072	550 V	600 V	1250 A	410 kA <sup>2</sup> s	1950 kA <sup>2</sup> s	150 kA	180 W	0.7433 kg	3
A070UD32LI1400	D301073	500 V	550 V	1400 A	555 kA <sup>2</sup> s	2300 kA <sup>2</sup> s	200 kA	200 W	0.7433 kg	3

### Size 32 type EF blades for bolted connections

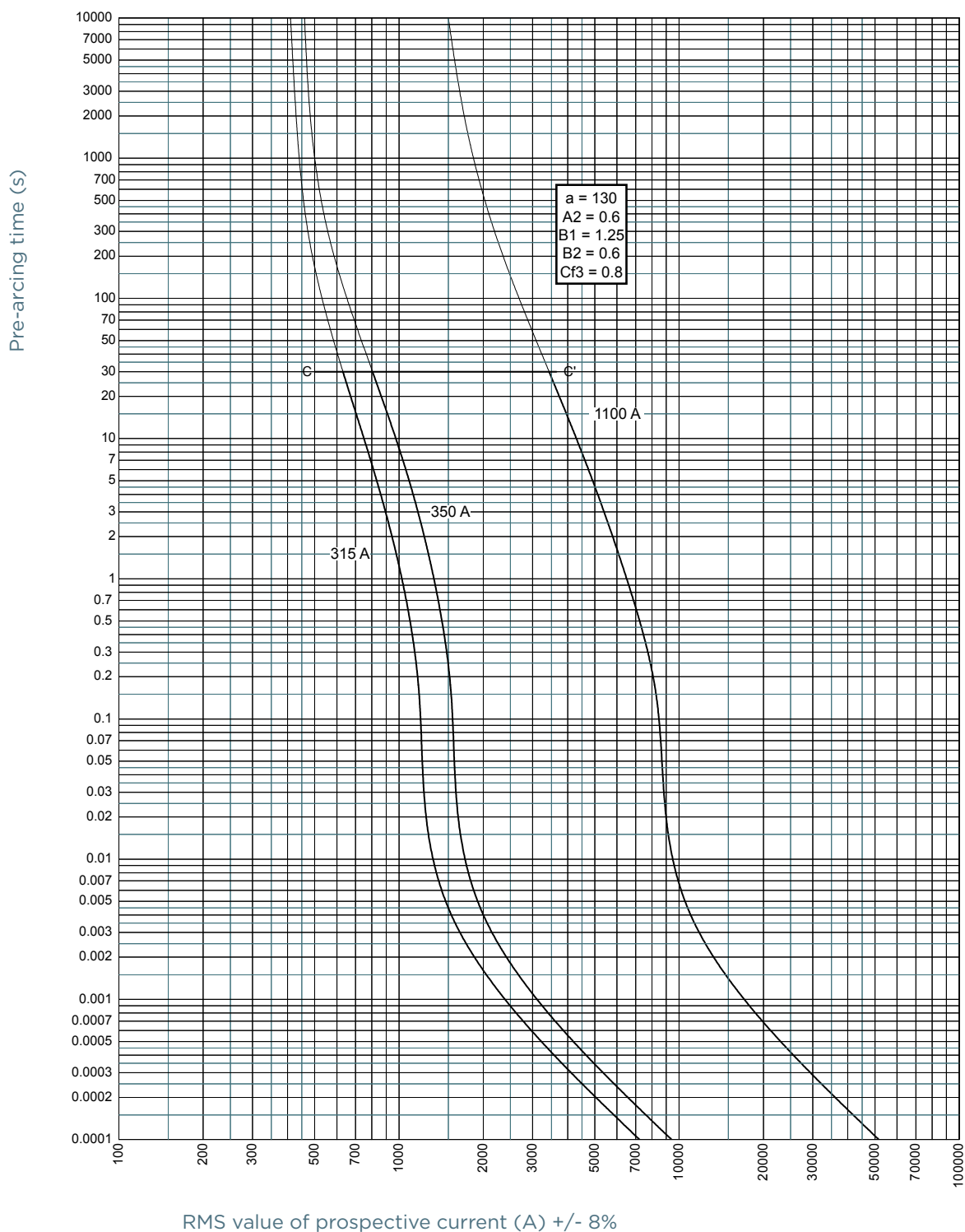
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PC32UD69V400EF	V300168	690 V	700 V	400 A	15 kA <sup>2</sup> s	90 kA <sup>2</sup> s	200 kA	75 W	0.5716 kg	3
PC32UD69V450EF	W300169	690 V	700 V	450 A	22 kA <sup>2</sup> s	130 kA <sup>2</sup> s	200 kA	80 W	0.5716 kg	3
PC32UD69V500EF	X300170	690 V	700 V	500 A	28 kA <sup>2</sup> s	160 kA <sup>2</sup> s	200 kA	90 W	0.5716 kg	3
PC32UD69V550EF	Y300171	690 V	700 V	550 A	37 kA <sup>2</sup> s	215 kA <sup>2</sup> s	200 kA	95 W	0.5716 kg	3
PC32UD69V630EF	Z300172	690 V	700 V	630 A	54 kA <sup>2</sup> s	310 kA <sup>2</sup> s	200 kA	105 W	0.5716 kg	3
PC32UD69V700EF	A300173	690 V	700 V	700 A	76 kA <sup>2</sup> s	440 kA <sup>2</sup> s	200 kA	110 W	0.5716 kg	3
PC32UD69V800EF	B300174	690 V	700 V	800 A	115 kA <sup>2</sup> s	660 kA <sup>2</sup> s	200 kA	120 W	0.5716 kg	3
PC32UD69V900EF	C300175	690 V	700 V	900 A	170 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	125 W	0.5716 kg	3
PC32UD69V1000EF	D300176	690 V	700 V	1000 A	240 kA <sup>2</sup> s	1380 kA <sup>2</sup> s	200 kA	135 W	0.5716 kg	3

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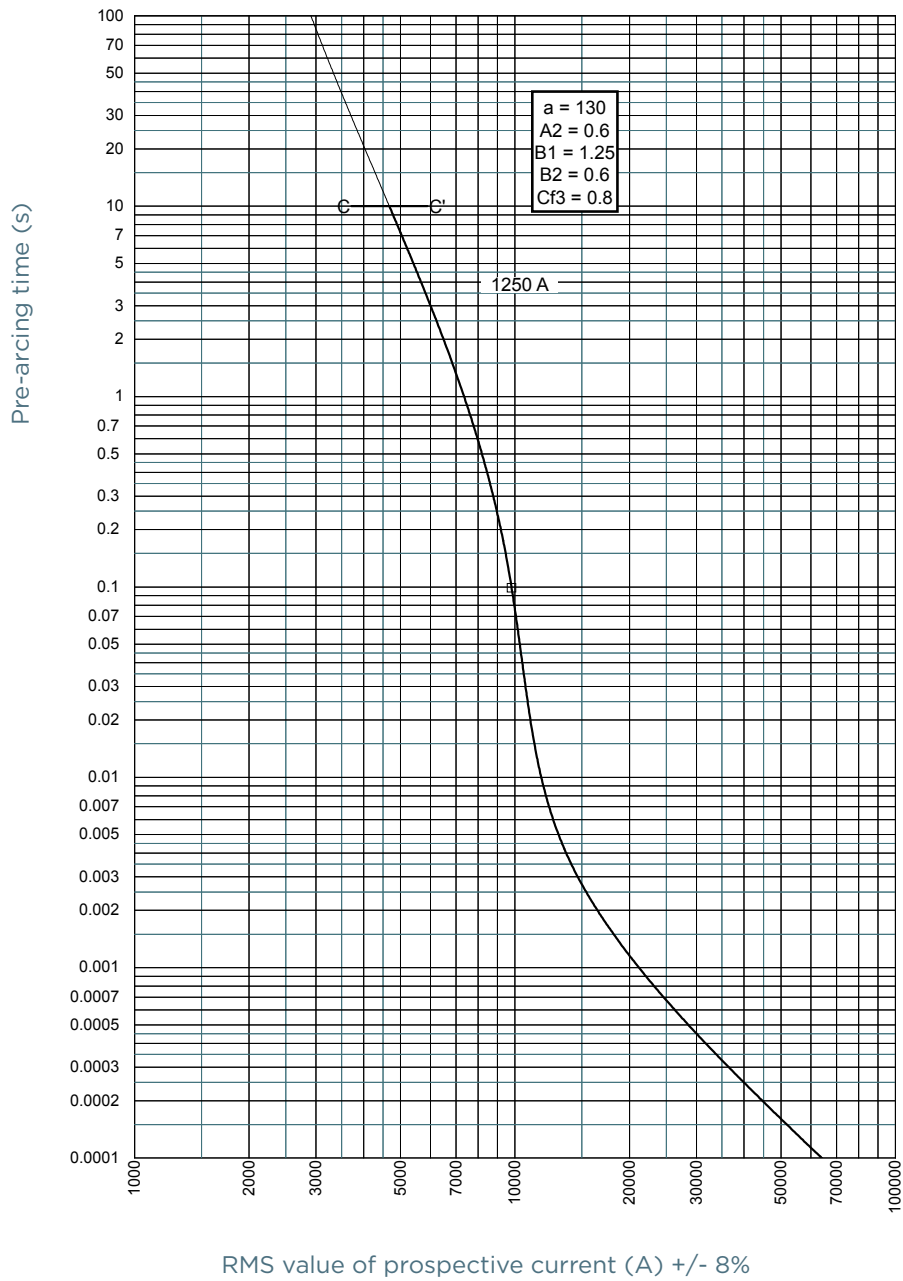
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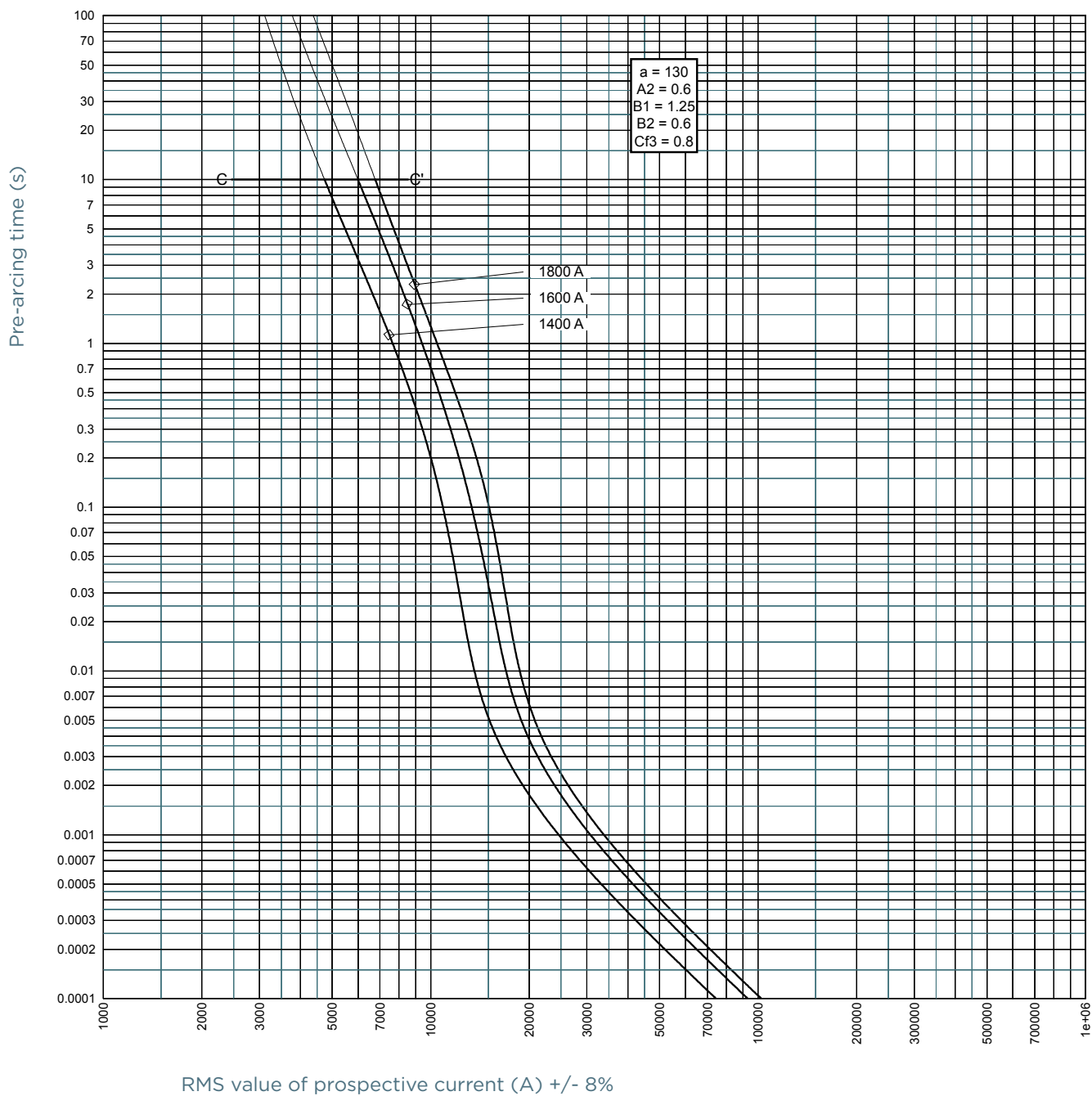
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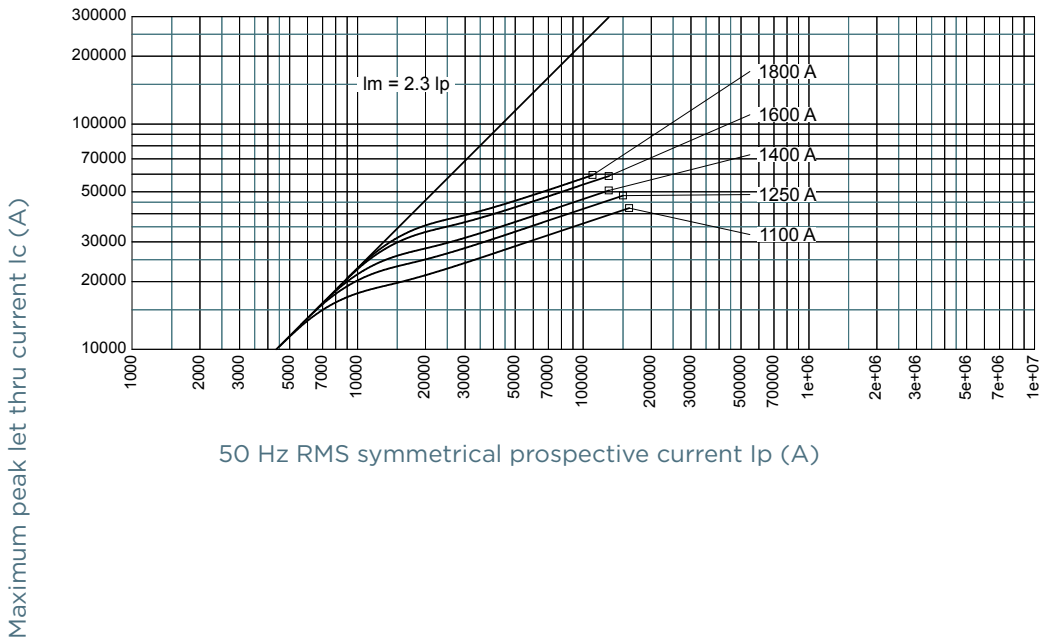
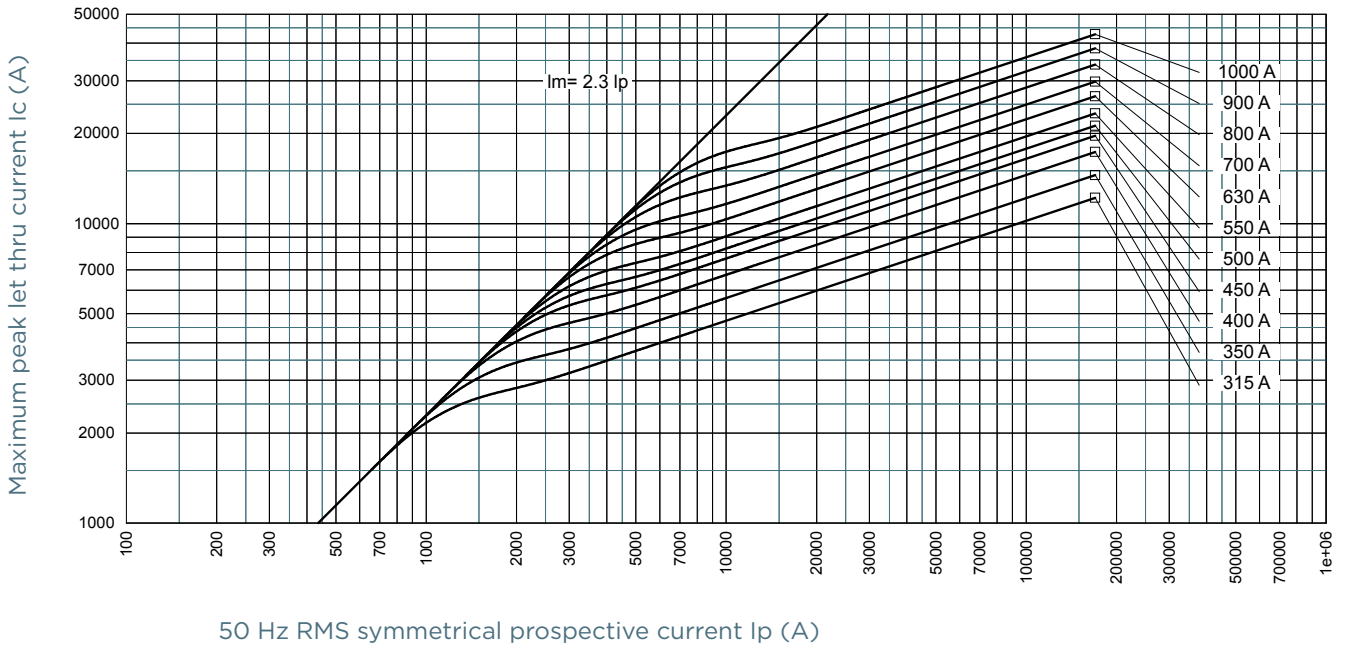
TIME CURRENT CHARACTERISTIC CURVES



## TIME CURRENT CHARACTERISTIC CURVES



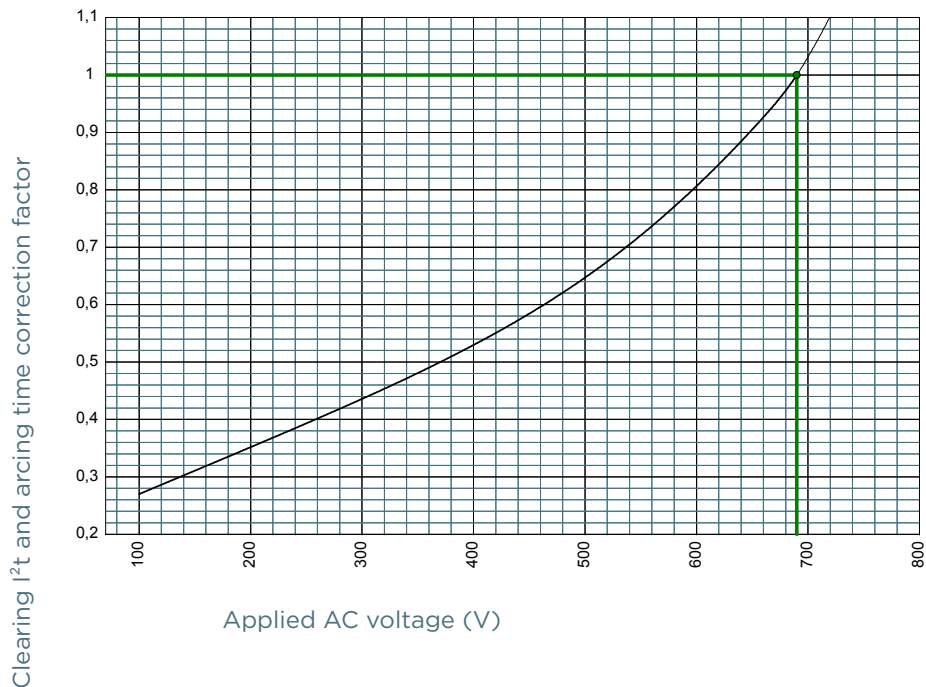
CUT-OFF CURRENT CHARACTERISTIC



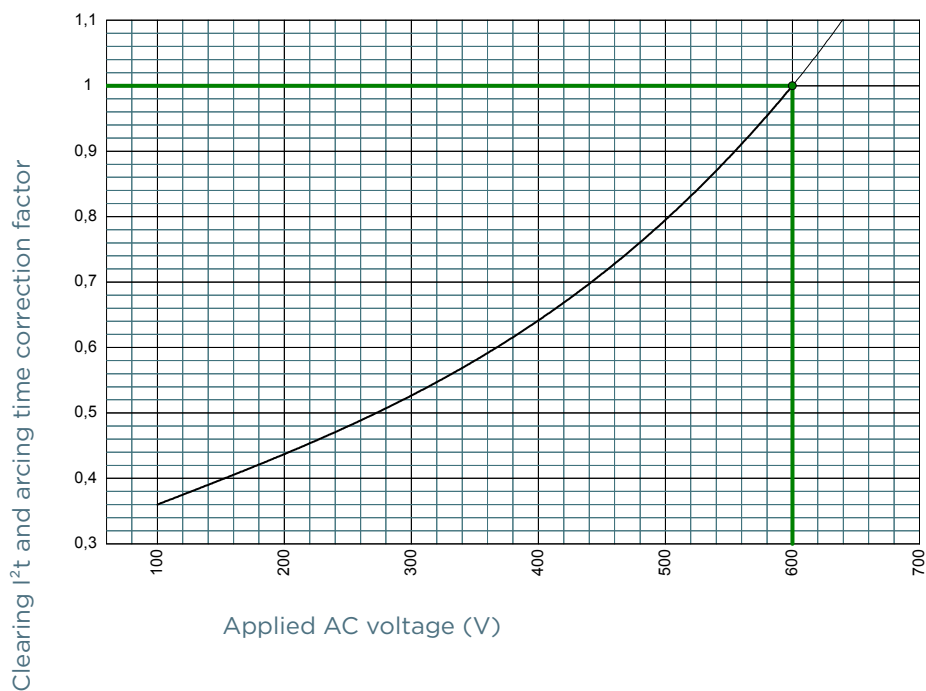
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## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 32 690V

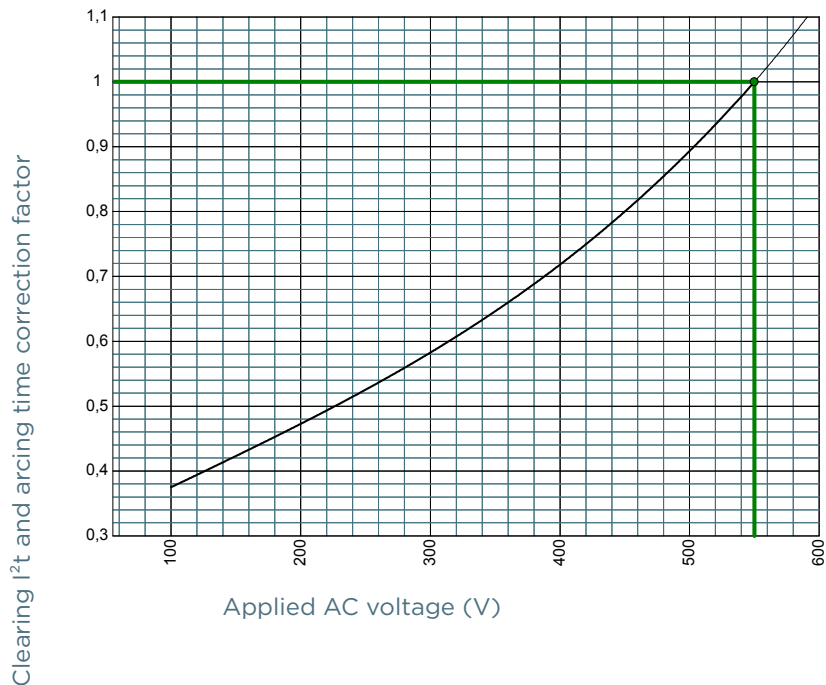


### Size 32 600V

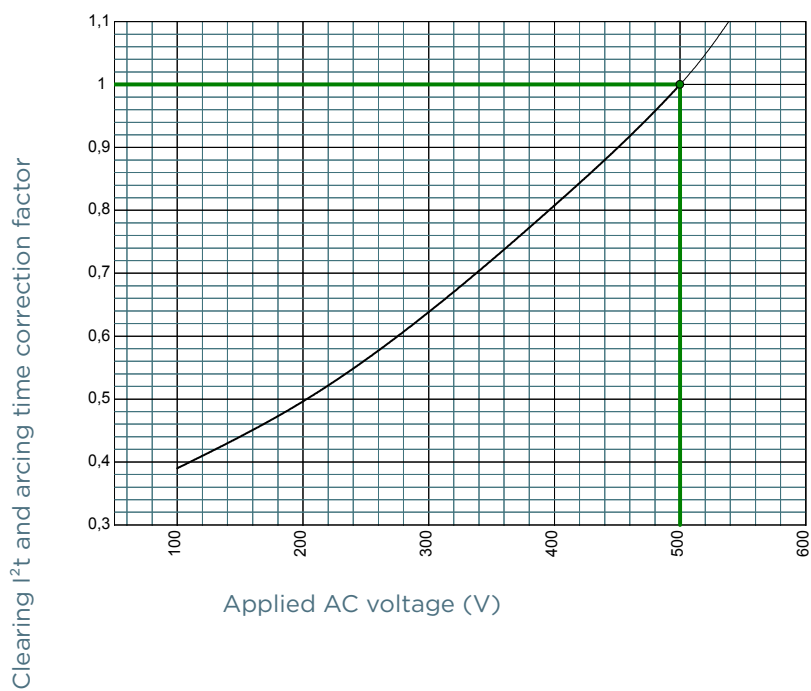


## I<sup>2</sup>T MULTIPLIER COEFFICIENT

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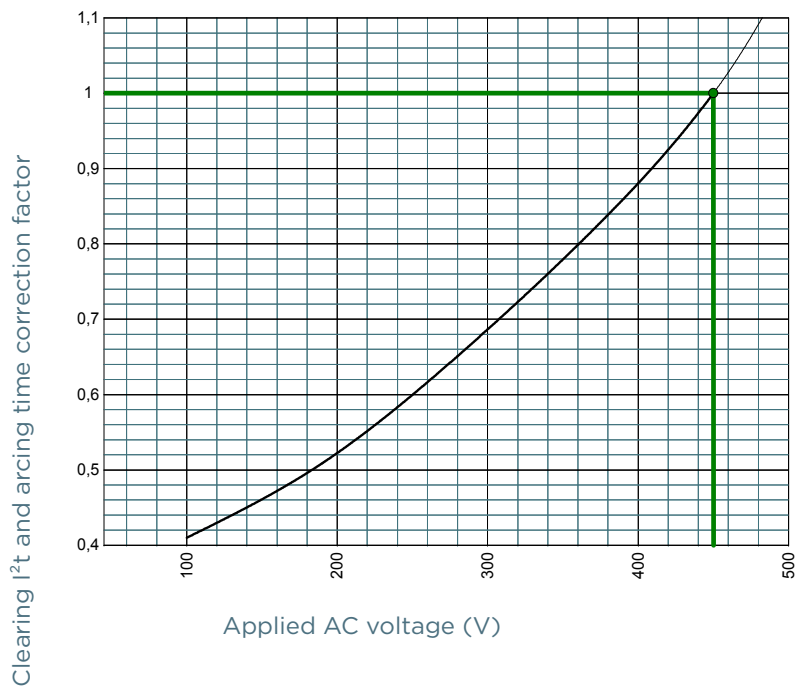


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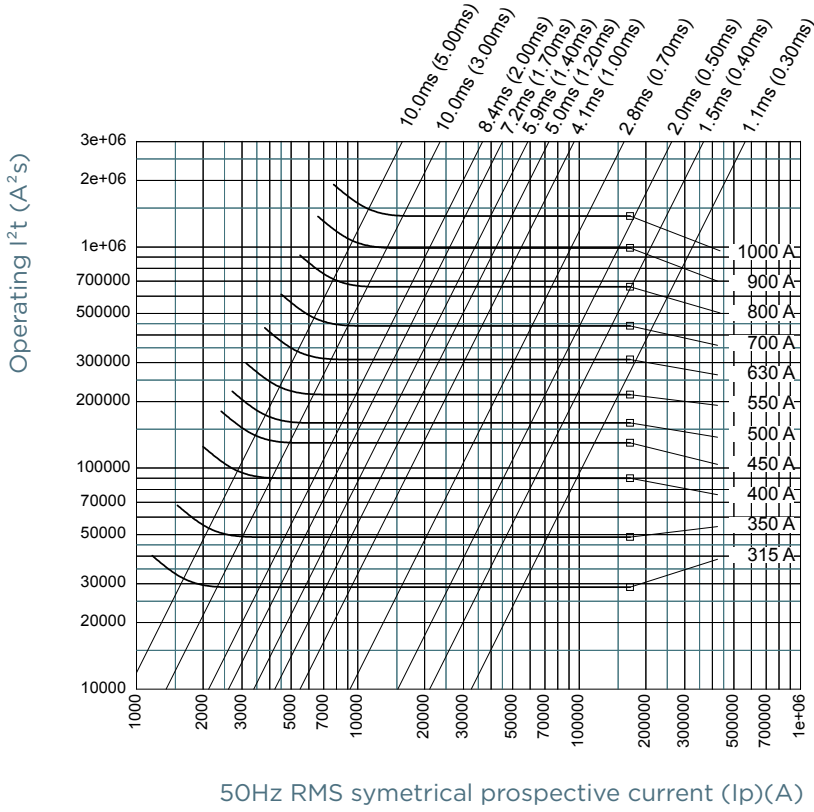
## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 32 450V

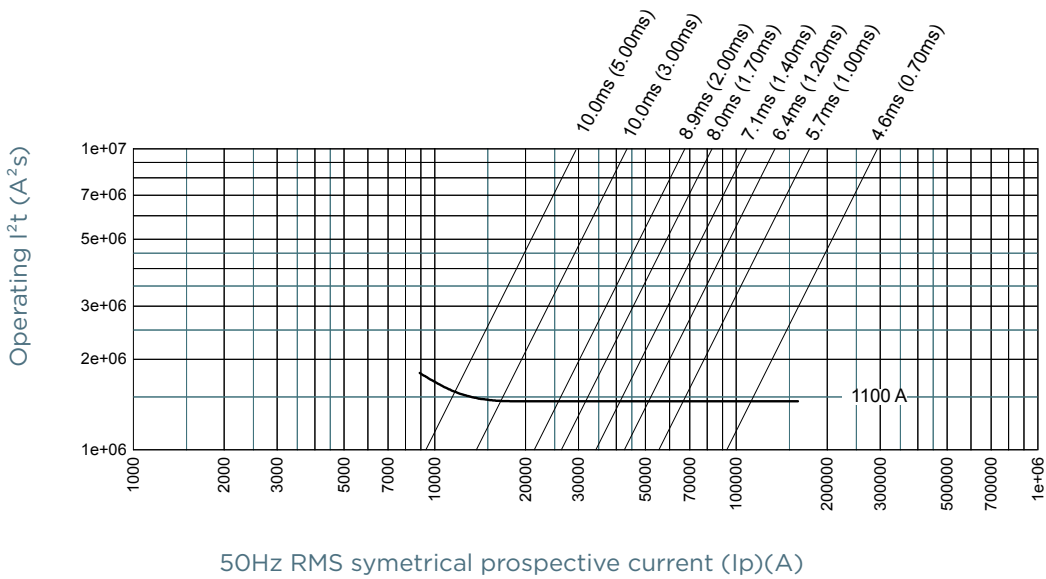


CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

Size 32 690V

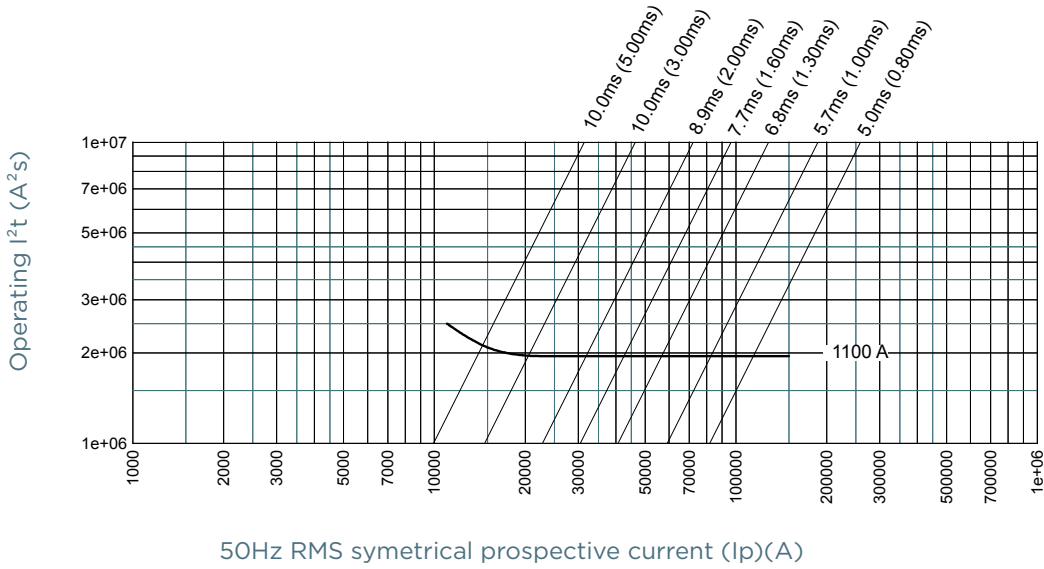


Size 32 660V

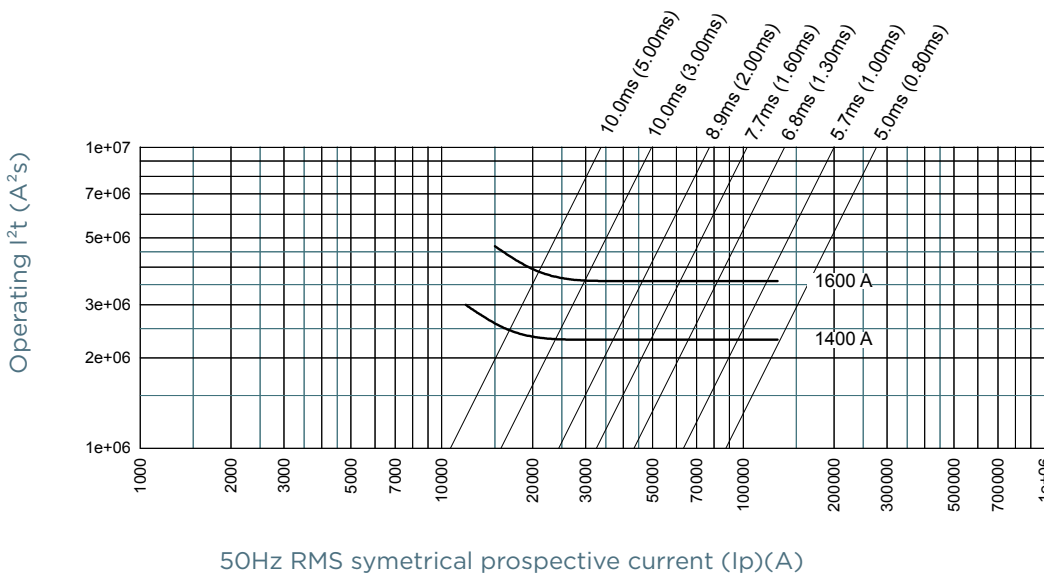


CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

Size 32 550V

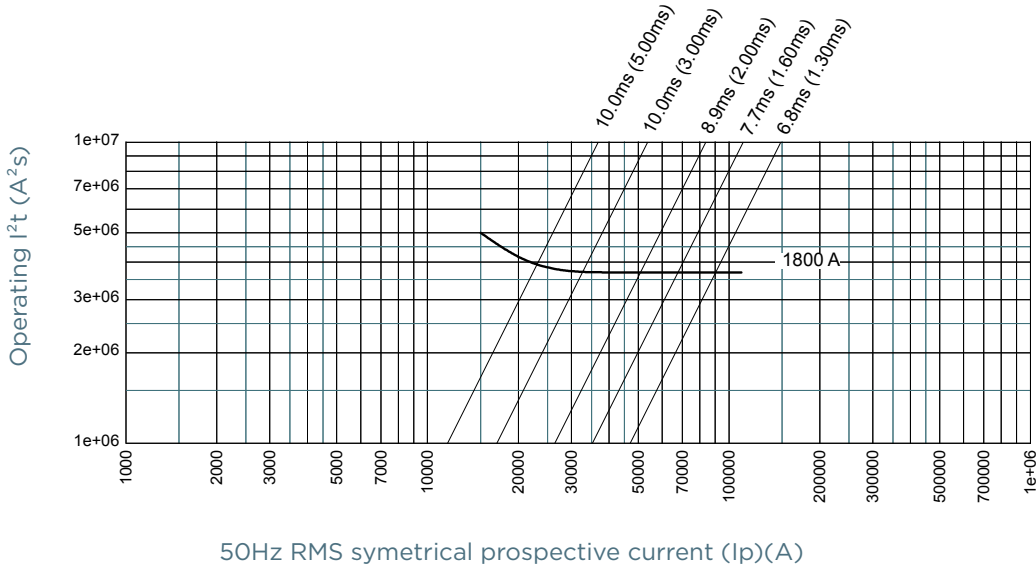


Size 32 500V

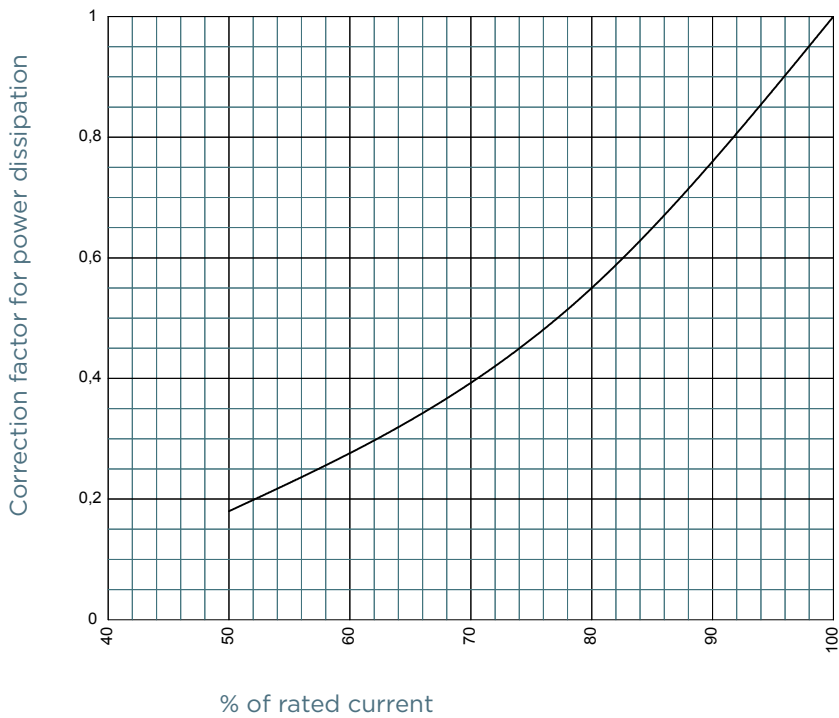


CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

Size 32 450V

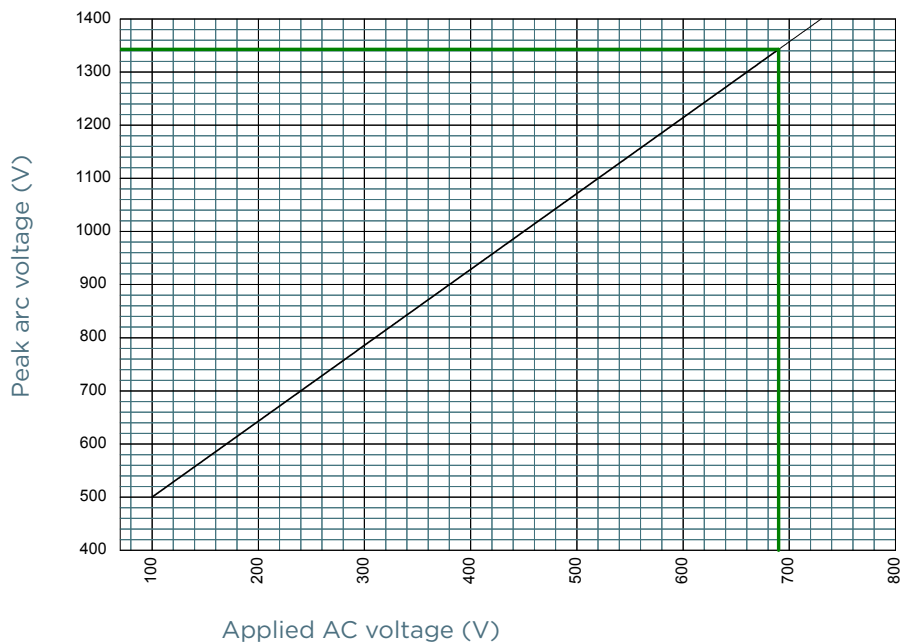


POWER DISSIPATION

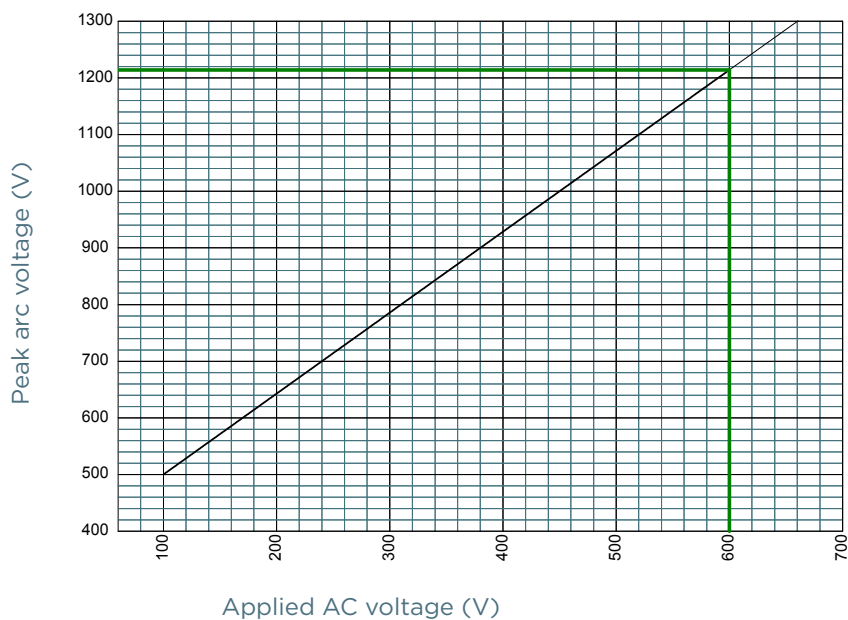


## PEAK ARC VOLTAGE

### Size 32 690V

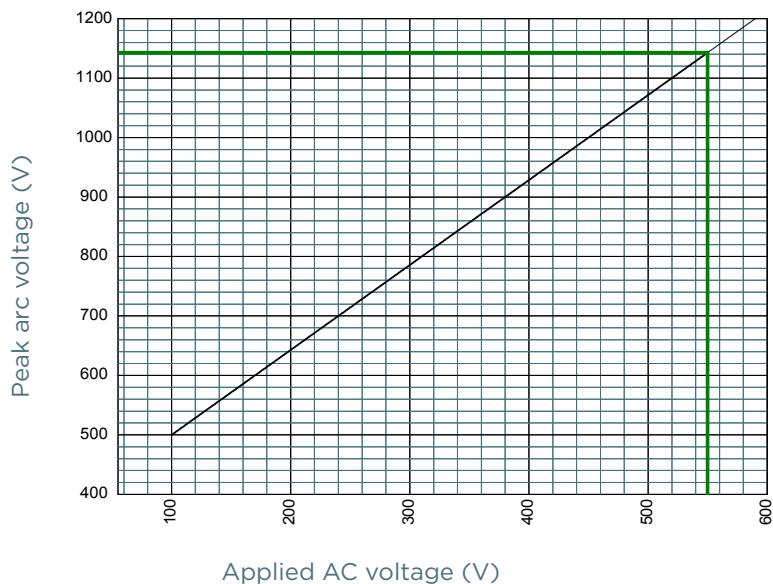


### Size 32 600V

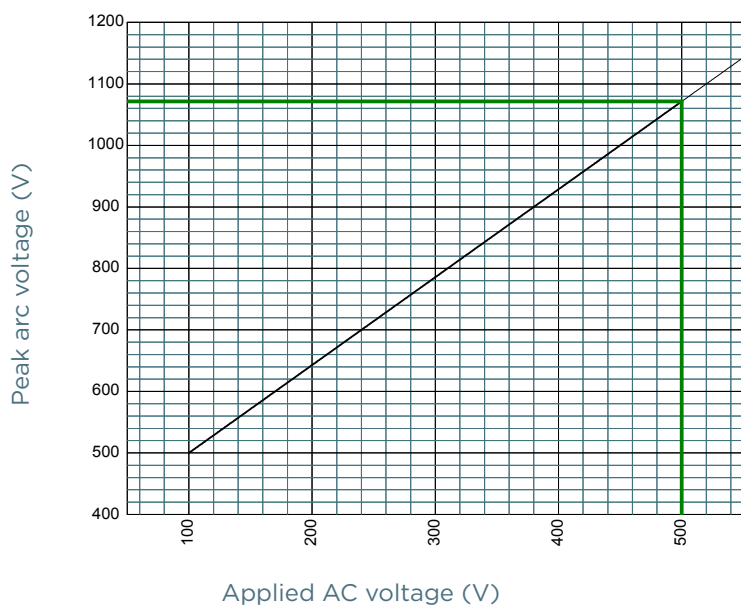


## PEAK ARC VOLTAGE

### Size 32 550V



### Size 32 500V



## PEAK ARC VOLTAGE

### Size 32 450V

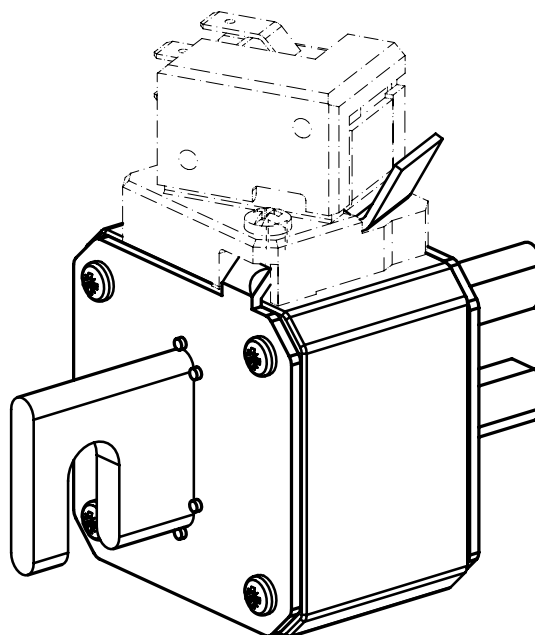
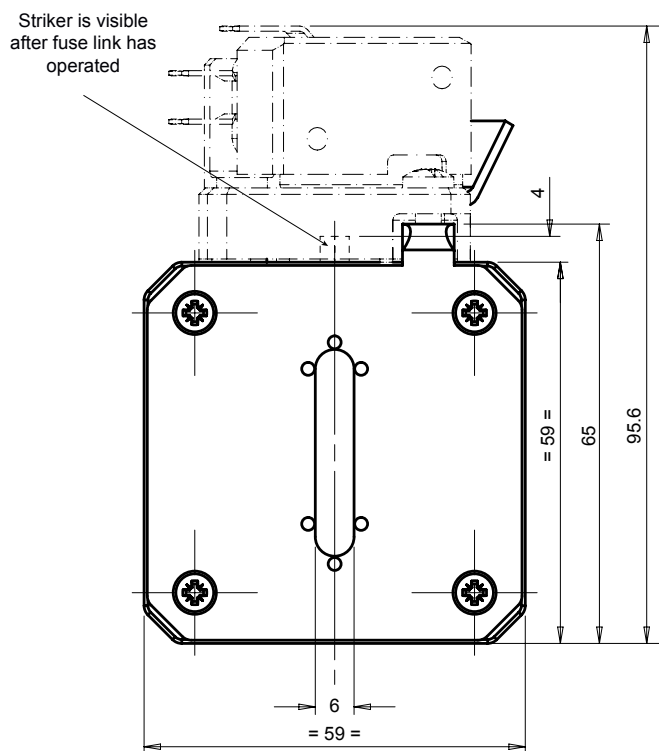
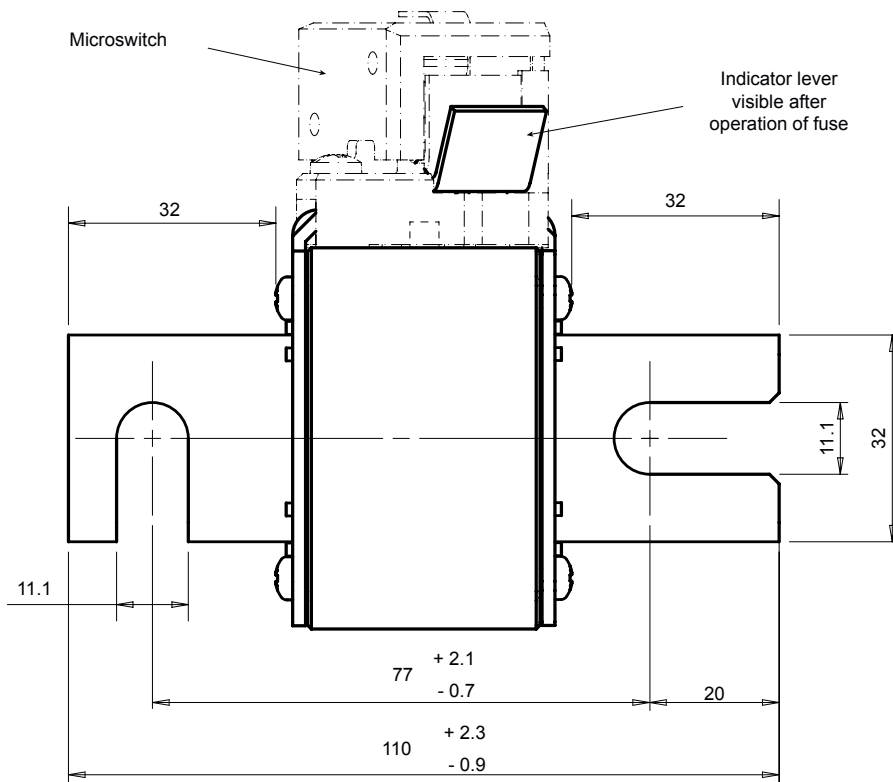


# Protistor® size 32 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 32 type DIN 80 (102923)



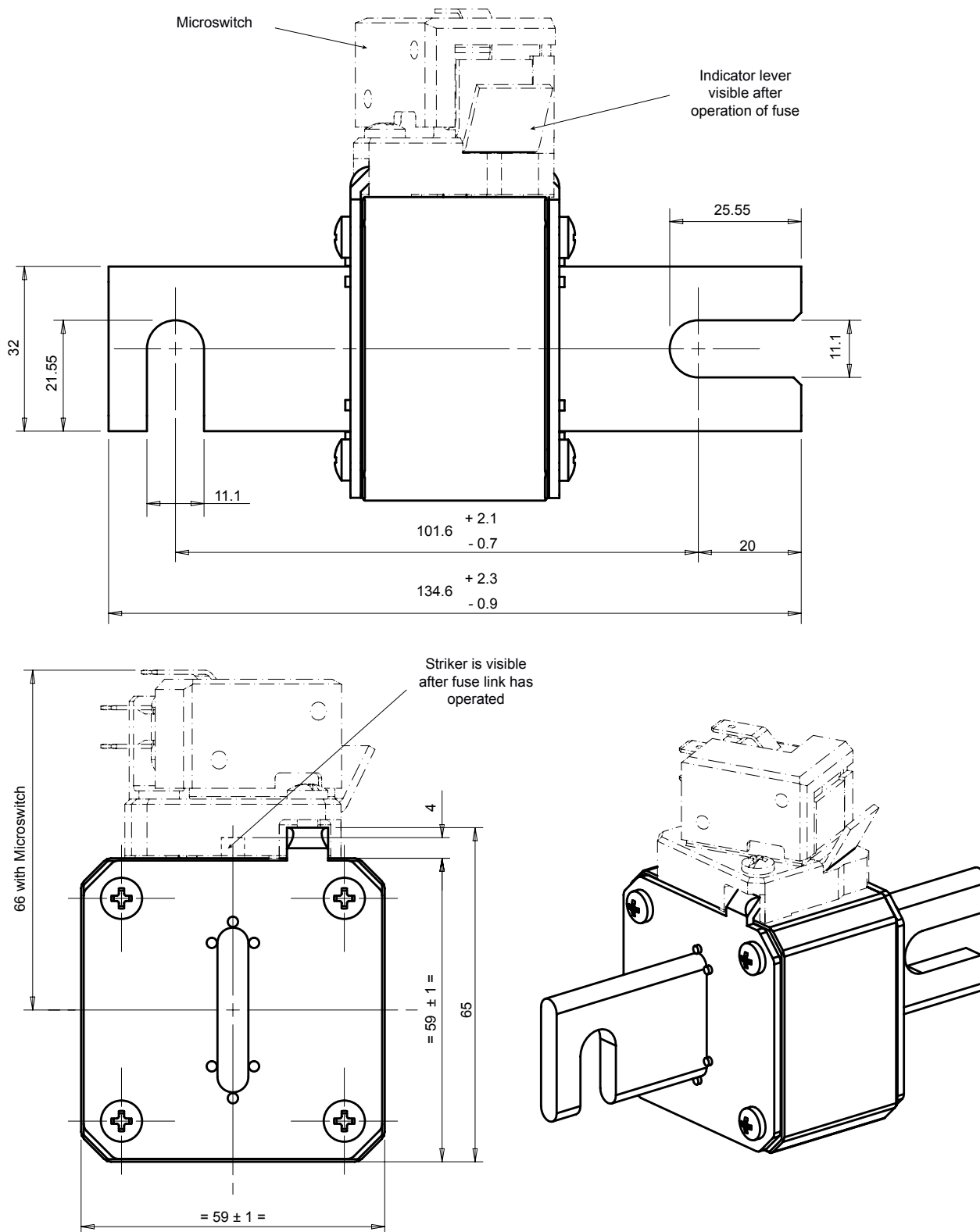
Dimensions in mm

# Protistor® size 32 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 32 type DIN 110 (102922)



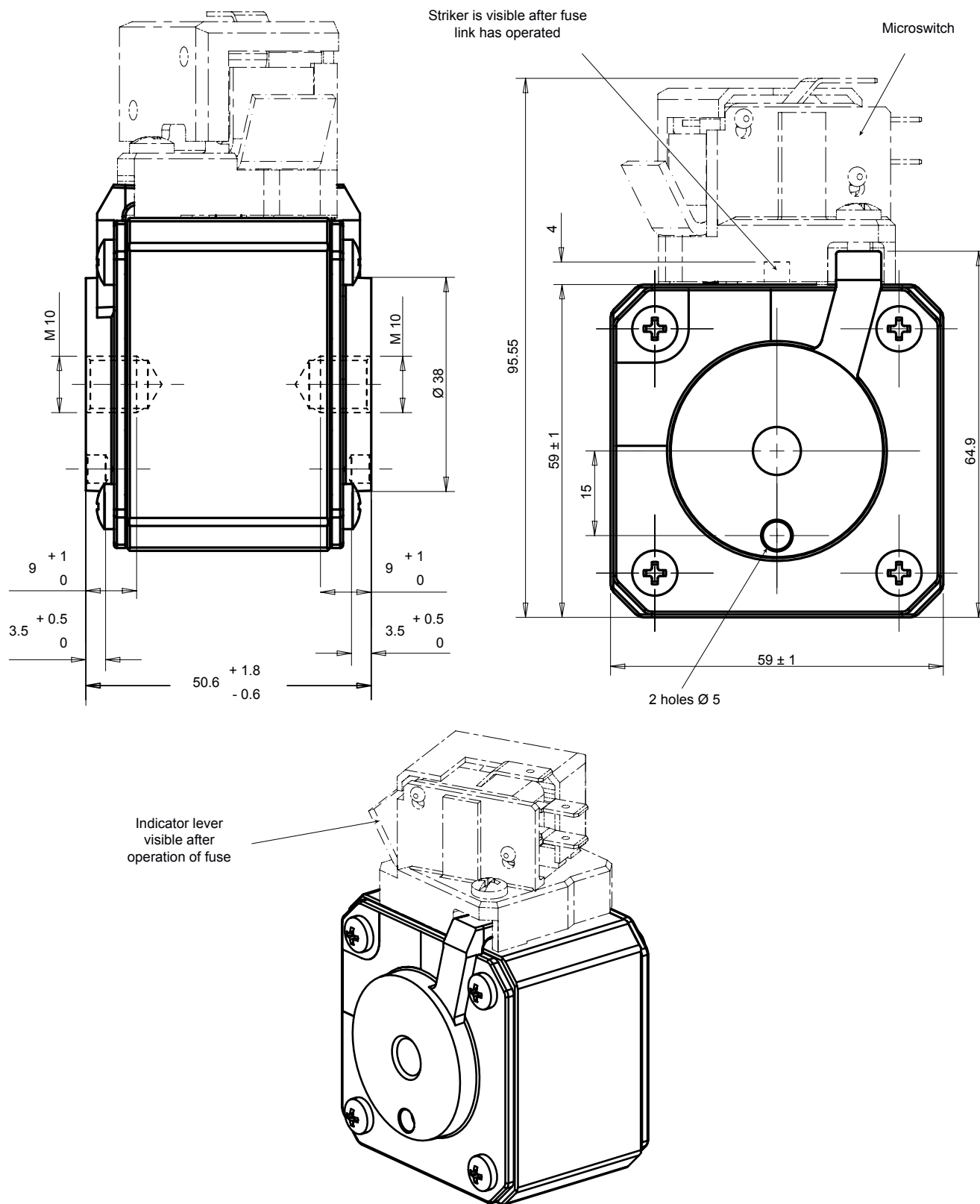
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# Protistor® size 32 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 32 type TTF (102756)



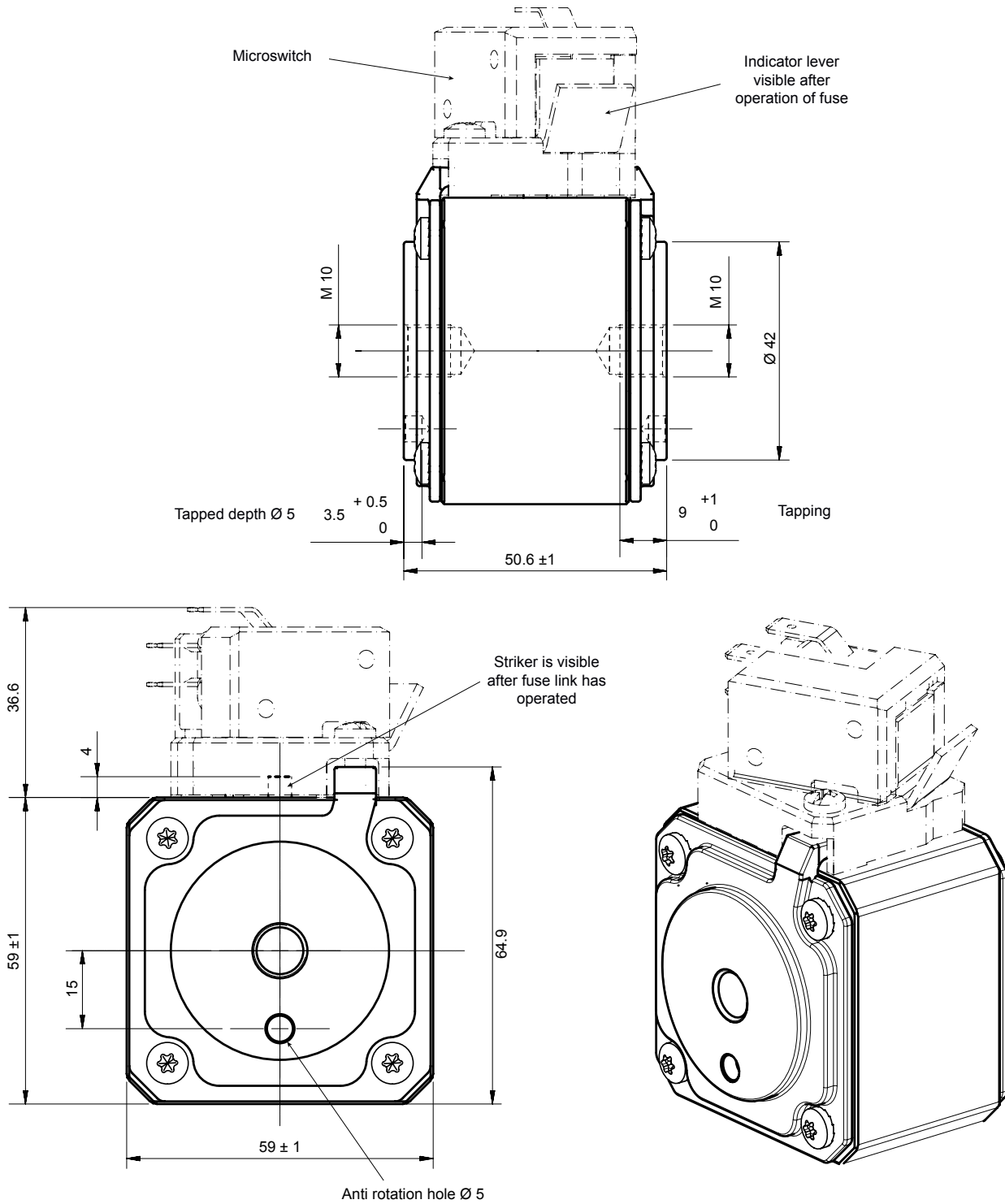
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

# Protistor® size 32 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 32 type TTF reinforced (108188)



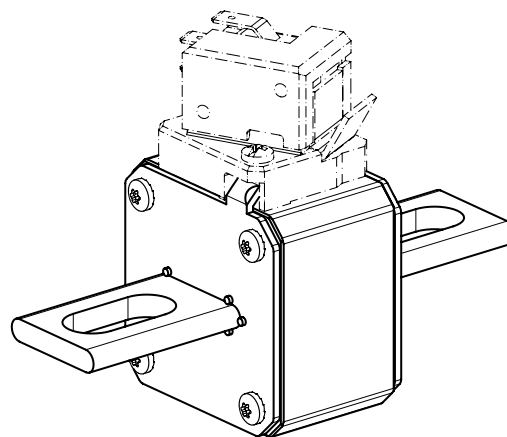
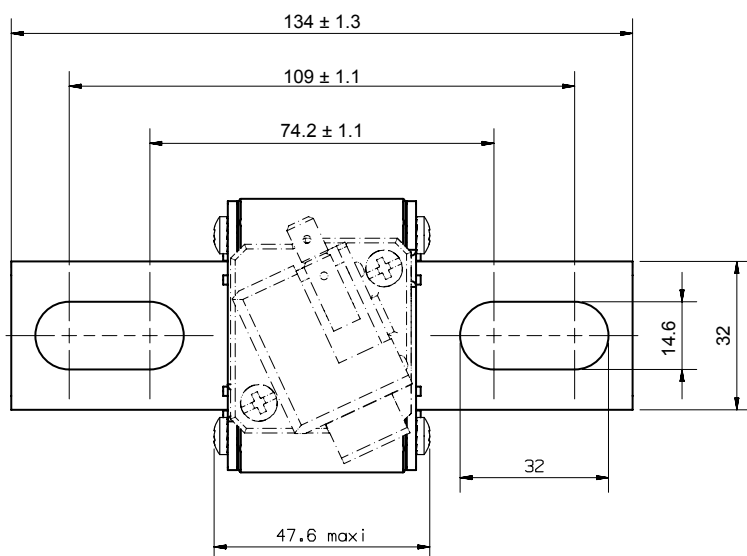
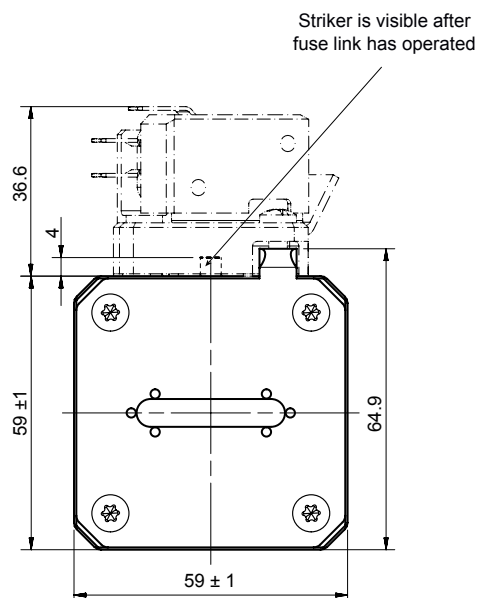
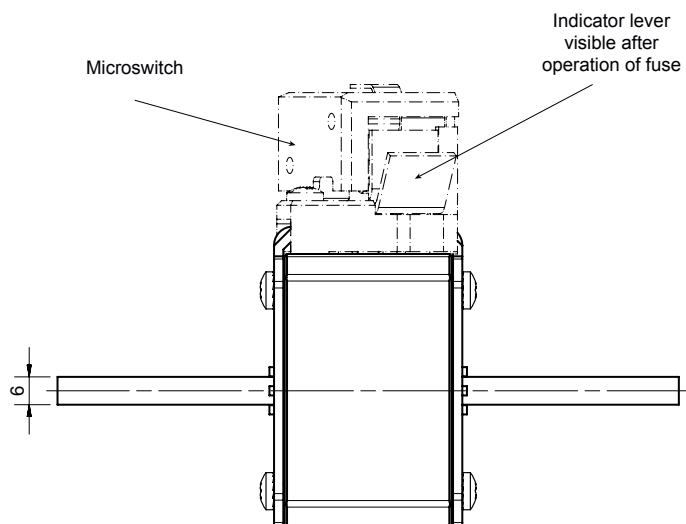
Dimensions in mm

# Protistor® size 32 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 32 type KI (102925)



Dimensions in mm

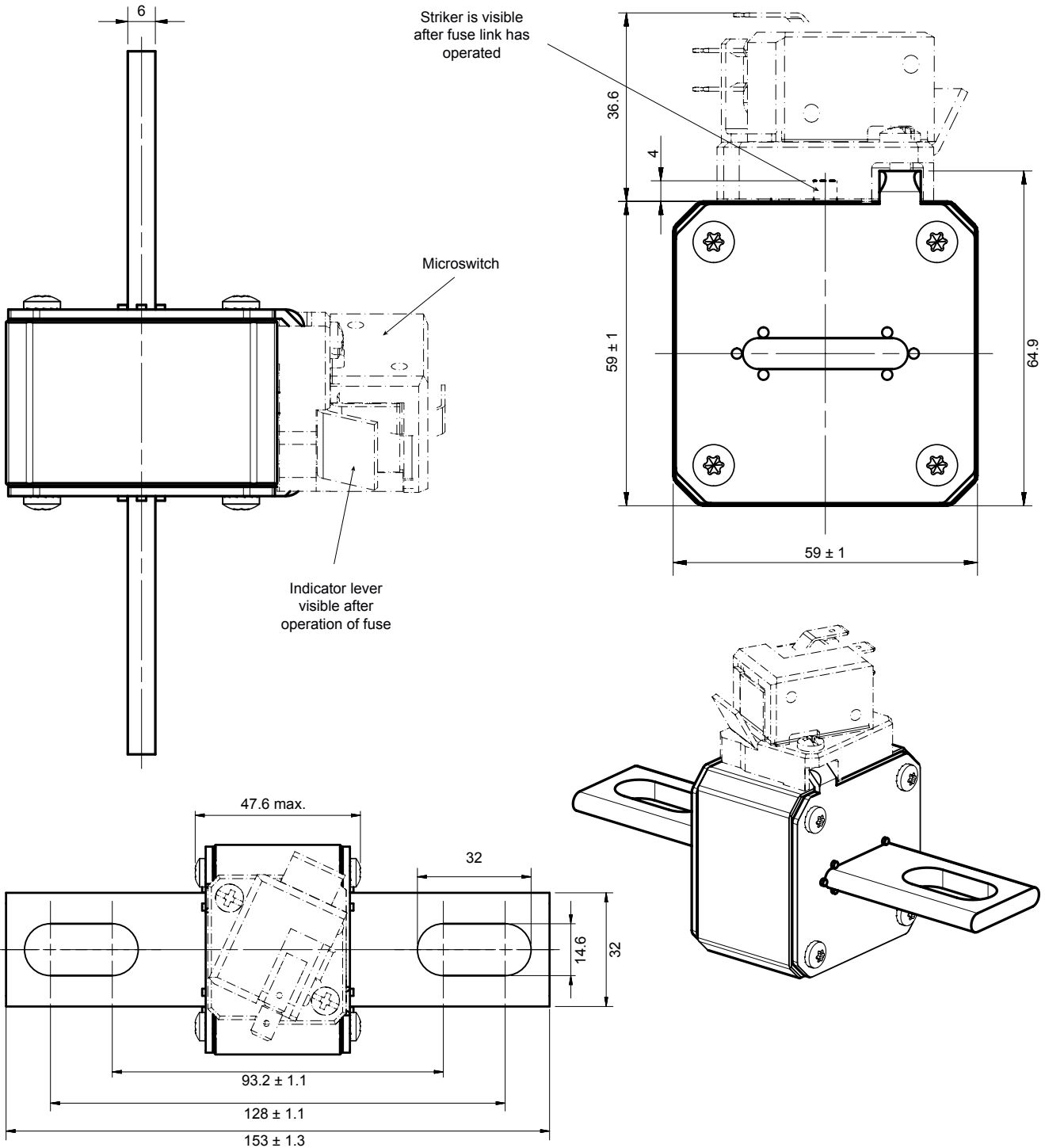
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# Protistor® size 32 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 32 type LI (102926)



Dimensions in mm

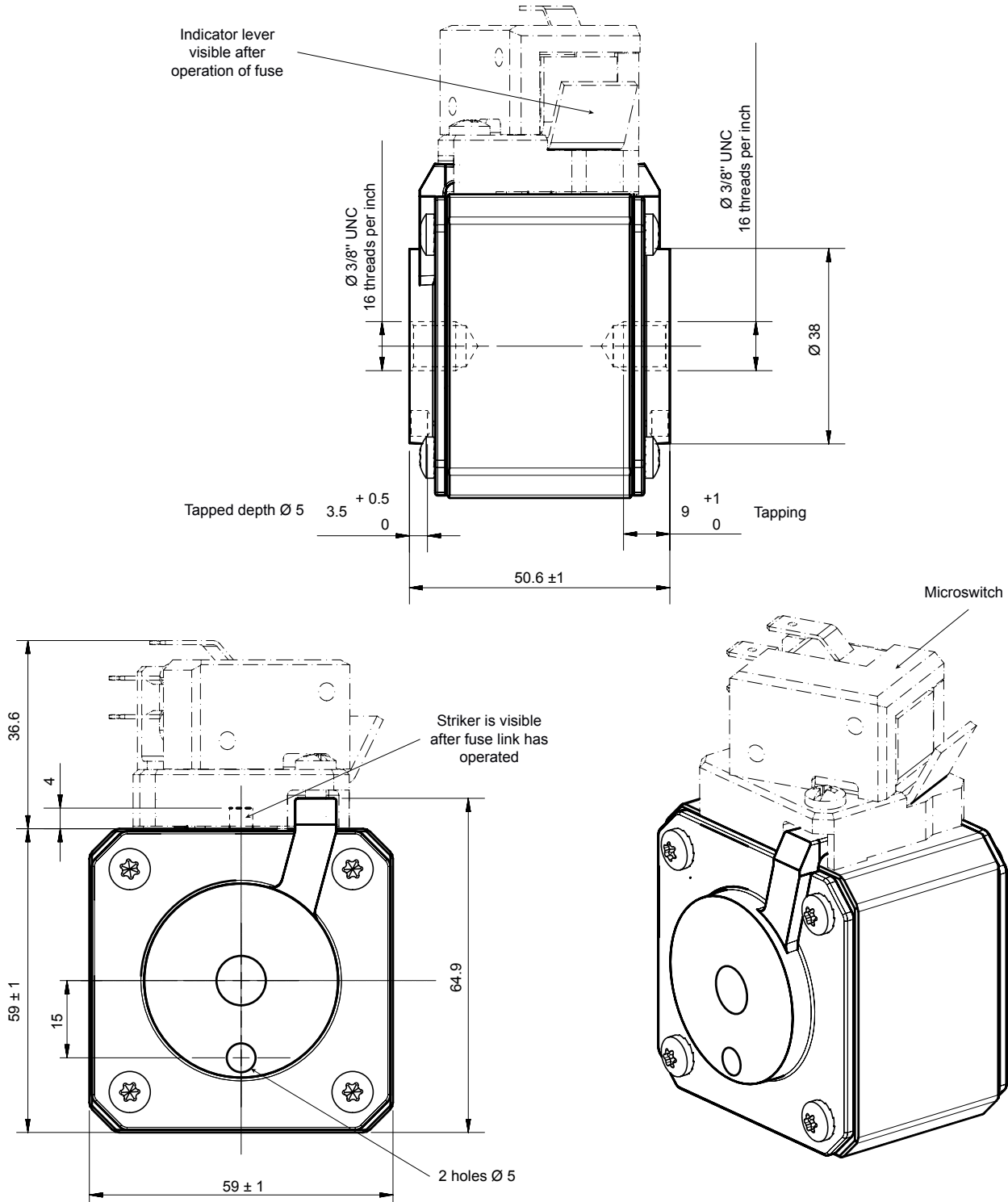
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

# Protistor® size 32 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 32 type TTI (107302)



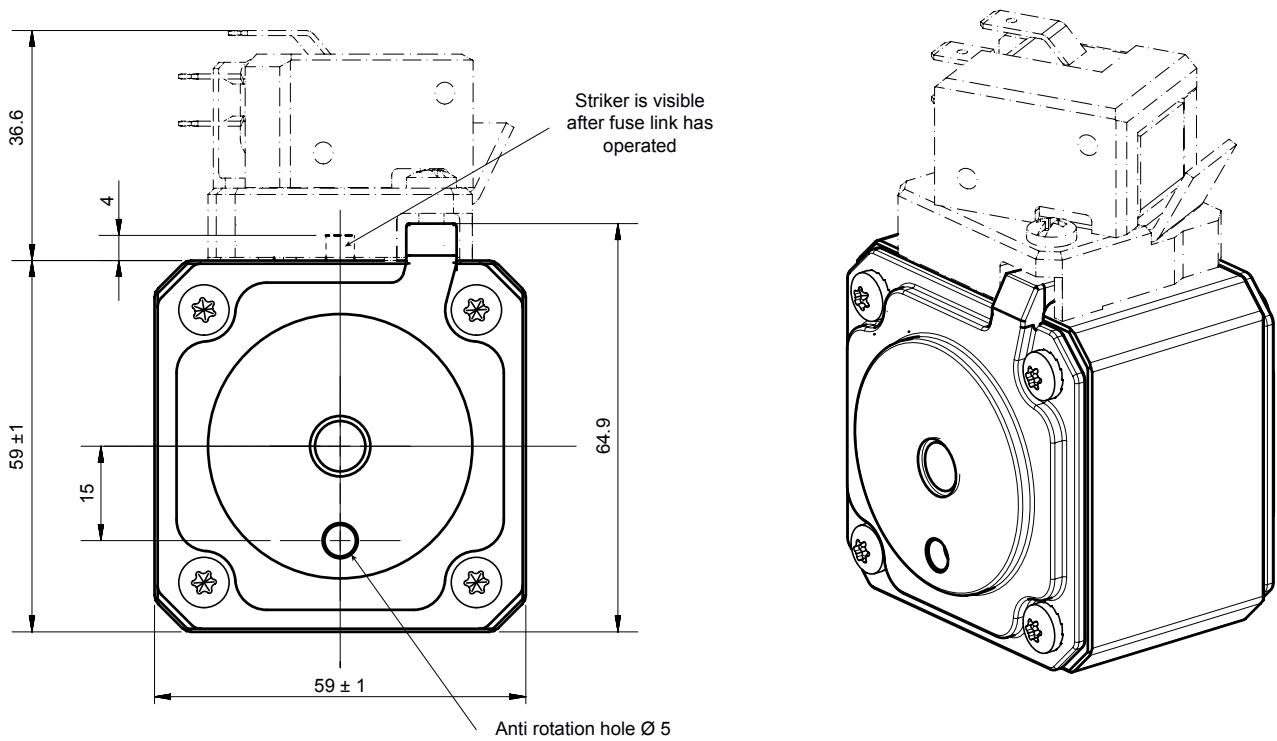
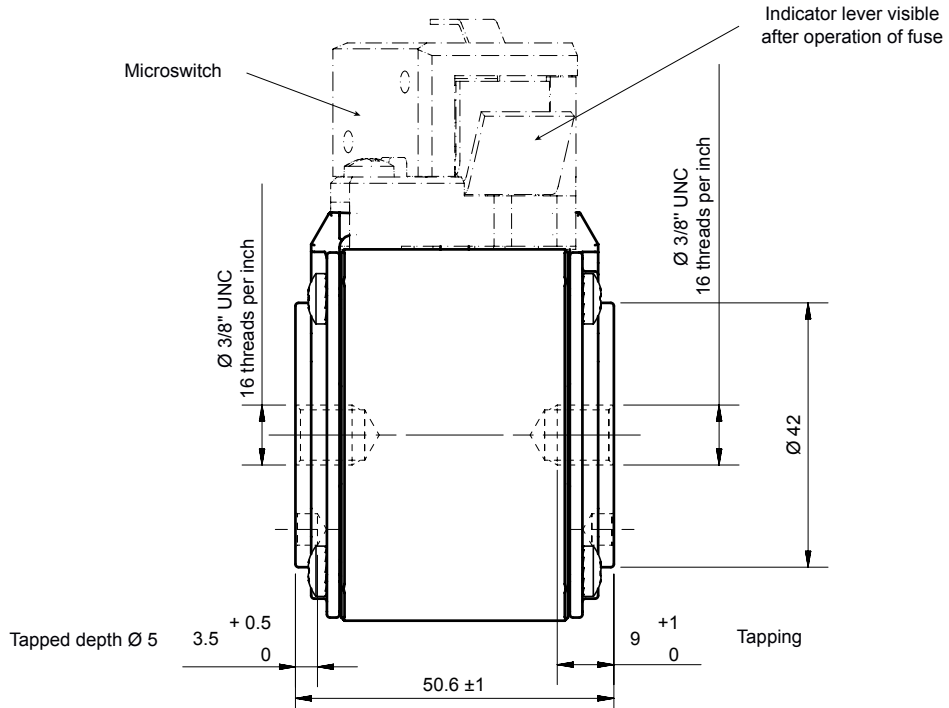
Dimensions in mm

# Protistor® size 32 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 32 type TTI reinforced (108833)



Dimensions in mm

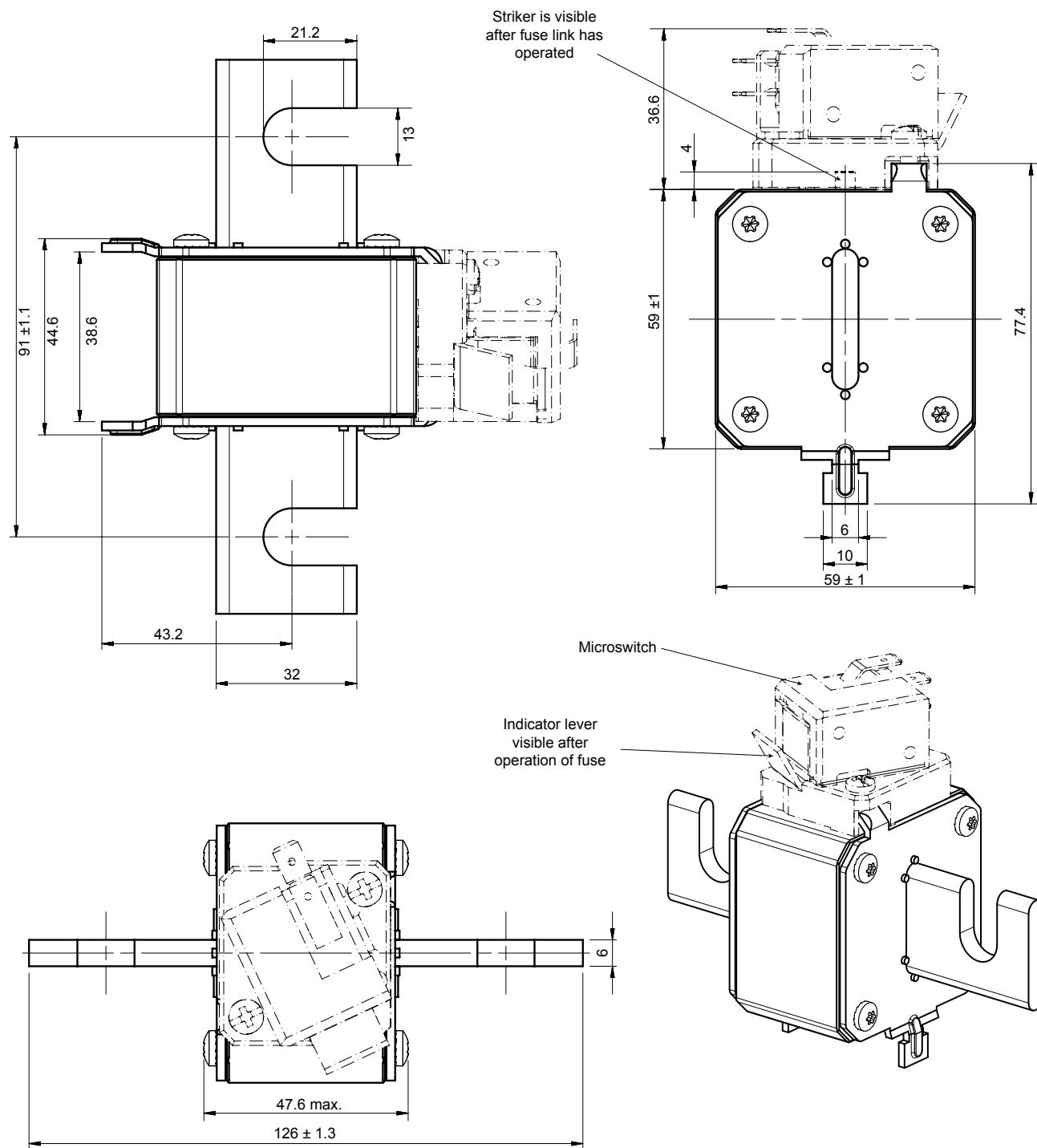
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# Protistor® size 32 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 32 type EF (102924)



Dimensions in mm

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# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## SEMICONDUCTOR PROTECTION FUSES

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



The 690/700V Protistor® fuse-links provide maximum flexibility in equipment design and ultimate protection for today's power conversion equipment. These aR ultra-fast acting 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 and IGBT devices. Fuses are assembled with 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.

Each fuse-link can be equipped with a low voltage trip-indicator which can operate a field mountable microswitch.

### TECHNICAL DATA OVERVIEW

Voltage Range AC	450 ... 690 VAC
Ampere Range (A)	450 ... 2500 A
Speed/Characteristic	aR
I.R. AC	110 ... 200 kA
Product Size	33

### FEATURES & BENEFITS

- Multiple body sizes and terminals or blades combination
- aR Class according to IEC 60269-4 and VDE 636-23
- Very low  $I^2t$  for improved semiconductor protection
- Ultra fast acting
- Current limiting
- Superior cycling capability

### APPLICATIONS

- Protection of inverters, motor drives, UPS systems and similar 690V or less equipments.

### STANDARDS

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



# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE



PC33UD69V1100A

### Size 33 type DIN80 blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
<b>Standard Terminal</b>										
PC33UD69V450A	T302168	690 V	700 V	450 A	13.45 kA <sup>2</sup> s	87 kA <sup>2</sup> s	200 kA	88 W	0.8123 kg	3
PC33UD69V500A	G300248	690 V	700 V	500 A	19 kA <sup>2</sup> s	110 kA <sup>2</sup> s	200 kA	105 W	0.8123 kg	3
PC33UD69V550A	H300249	690 V	700 V	550 A	27 kA <sup>2</sup> s	155 kA <sup>2</sup> s	200 kA	110 W	0.8123 kg	3
PC33UD69V630A	J300250	690 V	700 V	630 A	40 kA <sup>2</sup> s	230 kA <sup>2</sup> s	200 kA	120 W	0.8123 kg	3
PC33UD69V700A	K300251	690 V	700 V	700 A	57 kA <sup>2</sup> s	330 kA <sup>2</sup> s	200 kA	125 W	0.8123 kg	3
PC33UD69V800A	L300252	690 V	700 V	800 A	93 kA <sup>2</sup> s	540 kA <sup>2</sup> s	200 kA	130 W	0.8123 kg	3
PC33UD69V900A	M300253	690 V	700 V	900 A	130 kA <sup>2</sup> s	770 kA <sup>2</sup> s	200 kA	135 W	0.8123 kg	3
PC33UD69V1000A	N300254	690 V	700 V	1000 A	170 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	155 W	0.8123 kg	3
PC33UD69V1100A	P300255	690 V	700 V	1100 A	240 kA <sup>2</sup> s	1390 kA <sup>2</sup> s	200 kA	160 W	0.8123 kg	3
<b>Reinforced Terminal</b>										
PC33UD69V1250A	Q300256	690 V	700 V	1250 A	355 kA <sup>2</sup> s	2053 kA <sup>2</sup> s	200 kA	180 W	0.8123 kg	3
PC33UD69V1400A	R300257	690 V	700 V	1400 A	465 kA <sup>2</sup> s	2700 kA <sup>2</sup> s	200 kA	200 W	0.8123 kg	3
PC33UD65V1500A	M235071	600 V	650 V	1500 A	470 kA <sup>2</sup> s	2500 kA <sup>2</sup> s	160 kA	210 W	0.89 kg	3
PC33UD60V1600A	X301803	600 V	650 V	1600 A	555 kA <sup>2</sup> s	2900 kA <sup>2</sup> s	160 kA	240 W	0.89 kg	3
PC33UD55V2000A	A302657	550 V	600 V	2000 A	950 kA <sup>2</sup> s	4500 kA <sup>2</sup> s	150 kA	250 W	890 g	3
PC33UD60V1800A	E301971	600 V	650 V	1800 A	720 kA <sup>2</sup> s	3870 kA <sup>2</sup> s	160 kA	225 W	1.05 kg	3

### Size 33 type DIN110 blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
<b>Standard Terminal</b>										
PC33UD69V450D1A	V302169	690 V	700 V	450 A	13.45 kA <sup>2</sup> s	87 kA <sup>2</sup> s	200 kA	88 W	0.874 kg	3
PC33UD69V500D1A	S300258	690 V	700 V	500 A	19 kA <sup>2</sup> s	110 kA <sup>2</sup> s	200 kA	105 W	0.874 kg	3
PC33UD69V550D1A	T300259	690 V	700 V	550 A	27 kA <sup>2</sup> s	155 kA <sup>2</sup> s	200 kA	110 W	0.874 kg	3
PC33UD69V630D1A	V300260	690 V	700 V	630 A	40 kA <sup>2</sup> s	230 kA <sup>2</sup> s	200 kA	120 W	0.874 kg	3
PC33UD69V700D1A	W300261	690 V	700 V	700 A	57 kA <sup>2</sup> s	330 kA <sup>2</sup> s	200 kA	125 W	0.874 kg	3
PC33UD69V800D1A	X300262	690 V	700 V	800 A	93 kA <sup>2</sup> s	540 kA <sup>2</sup> s	200 kA	130 W	0.874 kg	3
PC33UD69V900D1A	Y300263	690 V	700 V	900 A	130 kA <sup>2</sup> s	770 kA <sup>2</sup> s	200 kA	135 W	0.874 kg	3
PC33UD69V10CD1A	Z300264	690 V	700 V	1000 A	170 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	155 W	0.874 kg	3
PC33UD69V11CD1A	A300265	690 V	700 V	1100 A	240 kA <sup>2</sup> s	1390 kA <sup>2</sup> s	200 kA	160 W	0.874 kg	3
<b>Reinforced Terminal</b>										
PC33UD69V12CD1A	B300266	690 V	700 V	1250 A	355 kA <sup>2</sup> s	2053 kA <sup>2</sup> s	200 kA	180 W	0.874 kg	3
PC33UD69V14CD1A	C300267	690 V	700 V	1400 A	465 kA <sup>2</sup> s	2700 kA <sup>2</sup> s	200 kA	200 W	0.874 kg	3
PC33UD65V15CD1A	H301974	600 V	650 V	1500 A	470 kA <sup>2</sup> s	2500 kA <sup>2</sup> s	160 kA	210 W	0.8296 kg	3
PC33UD60V16CD1A	Z301437	600 V	650 V	1600 A	500 kA <sup>2</sup> s	2900 kA <sup>2</sup> s	160 kA	240 W	0.8296 kg	3
PC33UD60V18CD1A	-	600 V	650 V	1800 A	720 kA <sup>2</sup> s	3870 kA <sup>2</sup> s	160 kA	260 W	1070 g	3
PC33UD55V20CD1A	S1015765	550 V	600 V	2000 A	950 kA <sup>2</sup> s	4500 kA <sup>2</sup> s	150 kA	290 W	2.1666 kg	3

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# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE

### Size 33 type EF style notched blade connections

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at In	Weight	Package
<b>Standard Terminal</b>										
PC33UD69V450EF	-	690 V	700 V	450 A	13.45 kA <sup>2</sup> s	87 kA <sup>2</sup> s	200 kA	88 W	850 g	3
PC33UD69V500EF	Z300218	690 V	700 V	500 A	19 kA <sup>2</sup> s	110 kA <sup>2</sup> s	200 kA	105 W	0.852 kg	3
PC33UD69V550EF	A300219	690 V	700 V	550 A	27 kA <sup>2</sup> s	155 kA <sup>2</sup> s	200 kA	110 W	0.852 kg	3
PC33UD69V630EF	B300220	690 V	700 V	630 A	40 kA <sup>2</sup> s	230 kA <sup>2</sup> s	200 kA	120 W	0.852 kg	3
PC33UD69V700EF	C300221	690 V	700 V	700 A	57 kA <sup>2</sup> s	330 kA <sup>2</sup> s	200 kA	125 W	0.852 kg	3
PC33UD69V800EF	D300222	690 V	700 V	800 A	93 kA <sup>2</sup> s	540 kA <sup>2</sup> s	200 kA	130 W	0.852 kg	3
PC33UD69V900EF	E300223	690 V	700 V	900 A	130 kA <sup>2</sup> s	770 kA <sup>2</sup> s	200 kA	135 W	0.852 kg	3
PC33UD69V1000EF	F300224	690 V	700 V	1000 A	170 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	155 W	0.852 kg	3
PC33UD69V1100EF	G300225	690 V	700 V	1100 A	240 kA <sup>2</sup> s	1390 kA <sup>2</sup> s	200 kA	160 W	0.852 kg	3
<b>Reinforced Terminal</b>										
PC33UD69V1250EF	H300226	690 V	700 V	1250 A	355 kA <sup>2</sup> s	2053 kA <sup>2</sup> s	200 kA	180 W	0.852 kg	3
PC33UD69V1400EF	J300227	690 V	700 V	1400 A	465 kA <sup>2</sup> s	2700 kA <sup>2</sup> s	200 kA	200 W	0.852 kg	3
PC33UD60V1500EF	-	600 V	650 V	1500 A	470 kA <sup>2</sup> s	2500 kA <sup>2</sup> s	160 kA	210 W	1070 g	3
PC33UD60V1600EF	-	600 V	650 V	1600 A	555 kA <sup>2</sup> s	2900 kA <sup>2</sup> s	160 kA	240 W	1070 g	3
PC33UD60V1800EF	-	600 V	650 V	1800 A	720 kA <sup>2</sup> s	3870 kA <sup>2</sup> s	160 kA	260 W	1070 g	3
PC33UD55V2000EF	-	550 V	600 V	2000 A	950 kA <sup>2</sup> s	4500 kA <sup>2</sup> s	150 kA	290 W	1070 g	3

### Size 33 type KI short slotted blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at In	Weight	Package
<b>Standard Terminal</b>										
A069UD33KI450	-	690 V	700 V	450 A	13.45 kA <sup>2</sup> s	87 kA <sup>2</sup> s	200 kA	88 W	850 g	3
A070UD33KI500	W300238	690 V	700 V	500 A	19 kA <sup>2</sup> s	110 kA <sup>2</sup> s	200 kA	105 W	850 g	3
A070UD33KI550	X300239	690 V	700 V	550 A	27 kA <sup>2</sup> s	155 kA <sup>2</sup> s	200 kA	110 W	0.8451 kg	3
A070UD33KI630	Y300240	690 V	700 V	630 A	40 kA <sup>2</sup> s	230 kA <sup>2</sup> s	200 kA	120 W	0.8451 kg	3
A070UD33KI700	Z300241	690 V	700 V	700 A	57 kA <sup>2</sup> s	330 kA <sup>2</sup> s	200 kA	125 W	0.8451 kg	3
A070UD33KI800	A300242	690 V	700 V	800 A	93 kA <sup>2</sup> s	540 kA <sup>2</sup> s	200 kA	130 W	0.8451 kg	3
A070UD33KI900	B300243	690 V	700 V	900 A	130 kA <sup>2</sup> s	770 kA <sup>2</sup> s	200 kA	135 W	0.8451 kg	3
A070UD33KI1000	C300244	690 V	700 V	1000 A	170 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	155 W	0.8451 kg	3
A070UD33KI1100	D300245	690 V	700 V	1100 A	240 kA <sup>2</sup> s	1390 kA <sup>2</sup> s	200 kA	160 W	0.8451 kg	3
<b>Reinforced Terminal</b>										
A070UD33KI1250	E300246	690 V	700 V	1250 A	355 kA <sup>2</sup> s	2053 kA <sup>2</sup> s	200 kA	180 W	0.8451 kg	3
A070UD33KI1400	F300247	690 V	700 V	1400 A	465 kA <sup>2</sup> s	2700 kA <sup>2</sup> s	200 kA	200 W	1070 g	3
A065UD33KI1500	-	600 V	650 V	1500 A	500 kA <sup>2</sup> s	2500 kA <sup>2</sup> s	160 kA	210 W	1070 g	3
A065UD33KI1600	E302063	600 V	650 V	1600 A	555 kA <sup>2</sup> s	2900 kA <sup>2</sup> s	160 kA	240 W	1.0616 kg	3
A065UD33KI1800	-	600 V	650 V	1800 A	720 kA <sup>2</sup> s	3870 kA <sup>2</sup> s	160 kA	260 W	1070 g	3
A060UD33KI2000	-	550 V	600 V	2000 A	950 kA <sup>2</sup> s	4500 kA <sup>2</sup> s	150 kA	290 W	1070 g	3

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# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE

### Size 33 type LI long slotted blades

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at In	Weight	Package
<b>Standard Terminal</b>										
A069UD33LI450	Y302172	690 V	700 V	450 A	13.45 kA <sup>2</sup> s	87 kA <sup>2</sup> s	200 kA	88 W	875 g	3
A070UD33LI500	K300228	690 V	700 V	500 A	19 kA <sup>2</sup> s	110 kA <sup>2</sup> s	200 kA	105 W	0.8766 kg	3
A070UD33LI550	L300229	690 V	700 V	550 A	27 kA <sup>2</sup> s	155 kA <sup>2</sup> s	200 kA	110 W	875 g	3
A070UD33LI630	M300231	690 V	700 V	630 A	40 kA <sup>2</sup> s	230 kA <sup>2</sup> s	200 kA	120 W	0.8766 kg	3
A070UD33LI700	N300231	690 V	700 V	700 A	57 kA <sup>2</sup> s	330 kA <sup>2</sup> s	200 kA	125 W	0.8766 kg	3
A070UD33LI800	P300232	690 V	700 V	800 A	93 kA <sup>2</sup> s	540 kA <sup>2</sup> s	200 kA	130 W	0.8766 kg	3
A070UD33LI900	Q300233	690 V	700 V	900 A	130 kA <sup>2</sup> s	770 kA <sup>2</sup> s	200 kA	135 W	0.8766 kg	3
A070UD33LI1000	R300234	690 V	700 V	1000 A	170 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	155 W	0.8766 kg	3
A070UD33LI1100	S300235	690 V	700 V	1100 A	240 kA <sup>2</sup> s	1390 kA <sup>2</sup> s	200 kA	160 W	1.1066 kg	3
<b>Reinforced Terminal</b>										
A070UD33LI1250	T300236	690 V	700 V	1250 A	355 kA <sup>2</sup> s	2053 kA <sup>2</sup> s	200 kA	180 W	1.1066 kg	3
A070UD33LI1400	V300237	690 V	700 V	1400 A	465 kA <sup>2</sup> s	2700 kA <sup>2</sup> s	200 kA	200 W	1.1066 kg	3
A065UD33LI1500	P300531	600 V	650 V	1500 A	470 kA <sup>2</sup> s	2500 kA <sup>2</sup> s	160 kA	210 W	1.1066 kg	3
A065UD33LI1600	G301076	600 V	650 V	1600 A	555 kA <sup>2</sup> s	2900 kA <sup>2</sup> s	160 kA	240 W	1.1066 kg	3
A065UD33LI1800	H301077	600 V	650 V	1800 A	720 kA <sup>2</sup> s	3870 kA <sup>2</sup> s	160 kA	260 W	1.1066 kg	3
A060UD33LI2000	J301078	550 V	600 V	2000 A	950 kA <sup>2</sup> s	4500 kA <sup>2</sup> s	150 kA	290 W	1.1066 kg	3



PC33UD69V1400TF

### Size 33 type TTF M12 threaded terminals

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at In	Weight	Package
<b>Standard Terminal</b>										
PC33UD69V450TF	W302170	690 V	700 V	450 A	13.45 kA <sup>2</sup> s	87 kA <sup>2</sup> s	200 kA	84 W	805 g	3
PC33UD69V500TF	V300076	690 V	700 V	500 A	19 kA <sup>2</sup> s	110 kA <sup>2</sup> s	200 kA	105 W	0.8056 kg	3
PC33UD69V550TF	W300077	690 V	700 V	550 A	27 kA <sup>2</sup> s	155 kA <sup>2</sup> s	200 kA	105 W	0.8056 kg	3
PC33UD69V630TF	X300078	690 V	700 V	630 A	40 kA <sup>2</sup> s	230 kA <sup>2</sup> s	200 kA	110 W	0.8056 kg	3
PC33UD69V700TF	Y300079	690 V	700 V	700 A	57 kA <sup>2</sup> s	330 kA <sup>2</sup> s	200 kA	115 W	0.8056 kg	3
PC33UD69V800TF	Z300080	690 V	700 V	800 A	93 kA <sup>2</sup> s	540 kA <sup>2</sup> s	200 kA	120 W	0.8056 kg	3
PC33UD69V900TF	A300081	690 V	700 V	900 A	130 kA <sup>2</sup> s	770 kA <sup>2</sup> s	200 kA	120 W	0.8056 kg	3
PC33UD69V1000TF	B300082	690 V	700 V	1000 A	170 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	135 W	0.8056 kg	3
PC33UD69V1100TF	C300083	690 V	700 V	1100 A	240 kA <sup>2</sup> s	1390 kA <sup>2</sup> s	200 kA	135 W	0.8056 kg	3
<b>Reinforced Terminal</b>										
PC33UD69V1250TF	D300084	690 V	700 V	1250 A	355 kA <sup>2</sup> s	2053 kA <sup>2</sup> s	200 kA	150 W	0.908 kg	3
PC33UD69V1400TF	E300085	690 V	700 V	1400 A	465 kA <sup>2</sup> s	2700 kA <sup>2</sup> s	200 kA	160 W	0.908 kg	3
PC33UD60V1500TF	Y300585	600 V	650 V	1500 A	470 kA <sup>2</sup> s	2500 kA <sup>2</sup> s	160 kA	210 W	0.908 kg	3
PC33UD60V1600TF	Z300586	600 V	650 V	1600 A	555 kA <sup>2</sup> s	2900 kA <sup>2</sup> s	160 kA	210 W	0.908 kg	3
PC33UD60V1800TF	A300587	600 V	650 V	1800 A	720 kA <sup>2</sup> s	3870 kA <sup>2</sup> s	160 kA	225 W	0.908 kg	3
PC33UD55V2000TF	B300588	550 V	600 V	2000 A	950 kA <sup>2</sup> s	4500 kA <sup>2</sup> s	150 kA	250 W	0.908 kg	3
PC33UD50V2250TF	K300757	500 V	550 V	2250 A	1250 kA <sup>2</sup> s	5160 kA <sup>2</sup> s	130 kA	280 W	0.908 kg	3
PC33UD45V2500TF	L300758	450 V	500 V	2500 A	1870 kA <sup>2</sup> s	6540 kA <sup>2</sup> s	110 kA	280 W	0.908 kg	3

# Protistor® size 33 aR

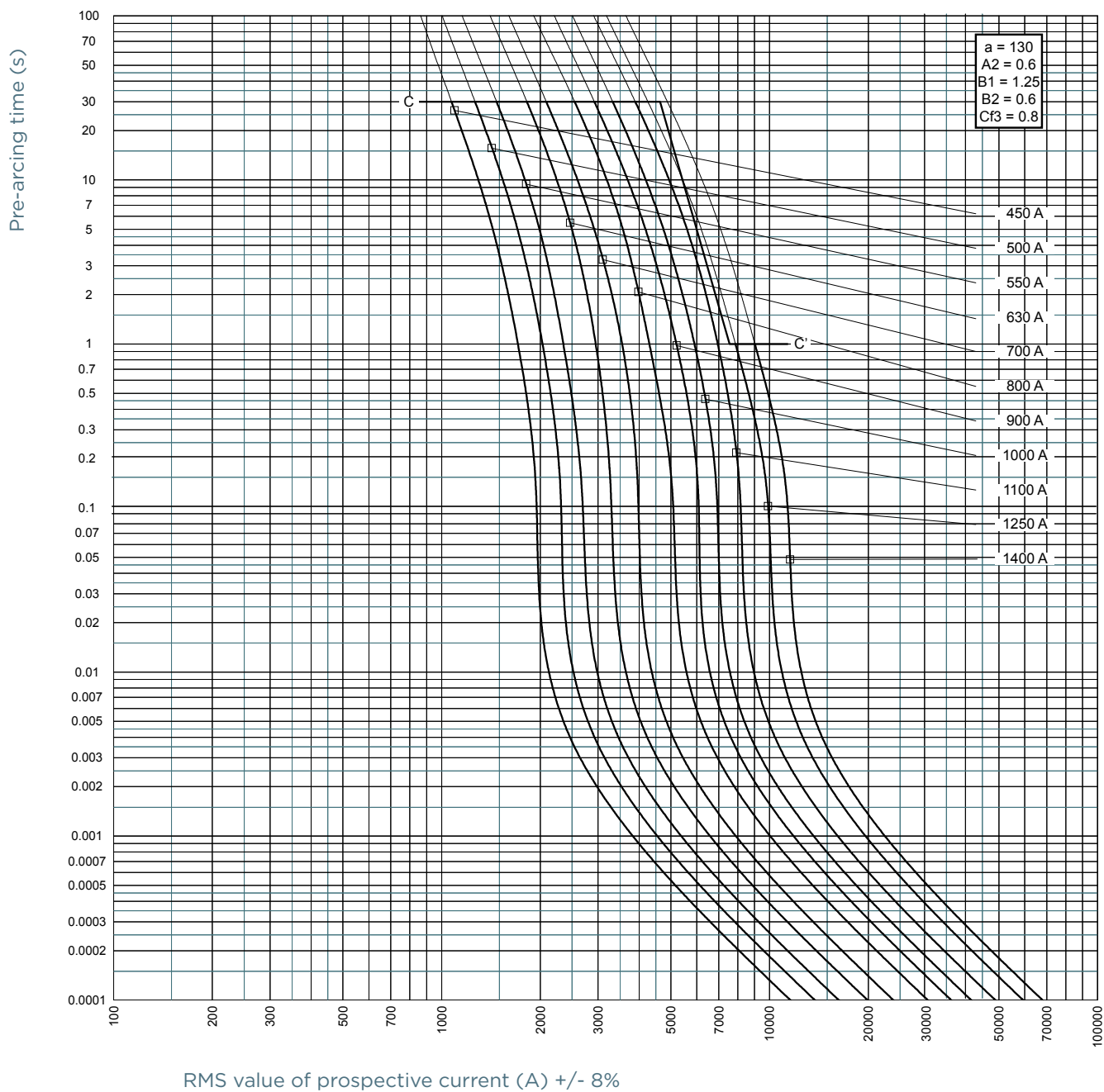
450 to 690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE

### Size 33 type TTI 1/2"-13 unified coarse threaded terminals

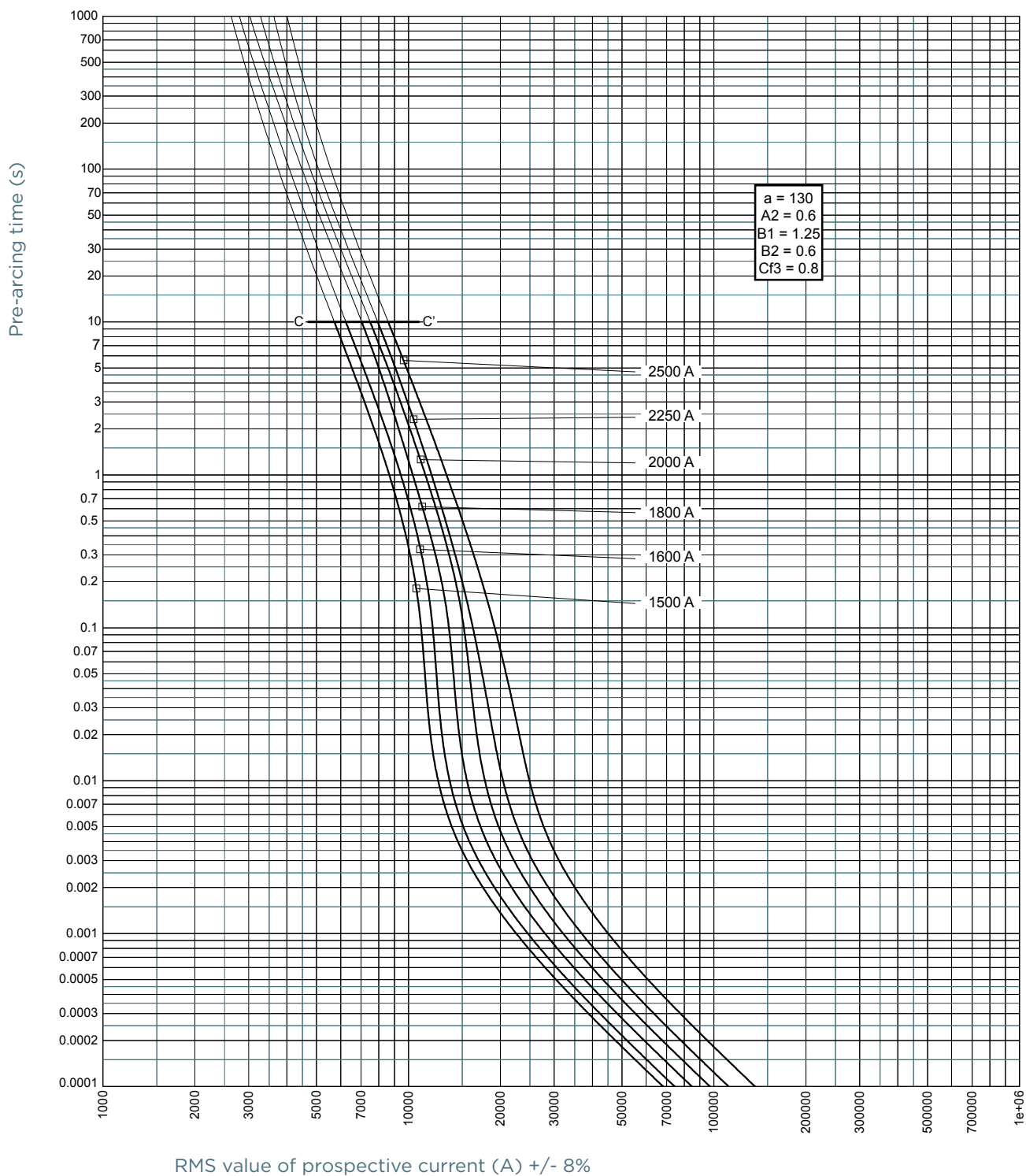
Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
<b>Standard Terminal</b>										
A070UD33TTI450	X302171	690 V	700 V	450 A	13.45 kA <sup>2</sup> s	87 kA <sup>2</sup> s	200 kA	84 W	0.894 kg	3
A070UD33TTI500	X300446	690 V	700 V	500 A	19 kA <sup>2</sup> s	110 kA <sup>2</sup> s	200 kA	105 W	0.894 kg	3
A070UD33TTI550	Y300447	690 V	700 V	550 A	27 kA <sup>2</sup> s	155 kA <sup>2</sup> s	200 kA	105 W	900 g	3
A070UD33TTI630	Z300448	690 V	700 V	630 A	40 kA <sup>2</sup> s	230 kA <sup>2</sup> s	200 kA	110 W	0.894 kg	3
A070UD33TTI700	A300449	690 V	700 V	700 A	57 kA <sup>2</sup> s	330 kA <sup>2</sup> s	200 kA	115 W	0.894 kg	3
A070UD33TTI800	T300443	690 V	700 V	800 A	93 kA <sup>2</sup> s	540 kA <sup>2</sup> s	200 kA	120 W	0.894 kg	3
A070UD33TTI900	B300450	690 V	700 V	900 A	130 kA <sup>2</sup> s	770 kA <sup>2</sup> s	200 kA	120 W	0.894 kg	3
A070UD33TTI1000	C300451	690 V	700 V	1000 A	170 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	135 W	0.894 kg	3
A070UD33TTI1100	D300452	690 V	700 V	1100 A	240 kA <sup>2</sup> s	1390 kA <sup>2</sup> s	200 kA	135 W	0.894 kg	3
<b>Reinforced Terminal</b>										
A070UD33TTI1250	E300453	690 V	700 V	1250 A	355 kA <sup>2</sup> s	2053 kA <sup>2</sup> s	200 kA	150 W	0.9333 kg	3
A070UD33TTI1400	F300454	690 V	700 V	1400 A	465 kA <sup>2</sup> s	2700 kA <sup>2</sup> s	200 kA	160 W	0.894 kg	3
A065UD33TTI1500	F302064	600 V	650 V	1500 A	470 kA <sup>2</sup> s	2500 kA <sup>2</sup> s	160 kA	210 W	935 g	3
A065UD33TTI1600	S301086	600 V	650 V	1600 A	555 kA <sup>2</sup> s	2900 kA <sup>2</sup> s	160 kA	210 W	0.9333 kg	3
A065UD33TTI1800	T301087	600 V	650 V	1800 A	720 kA <sup>2</sup> s	3870 kA <sup>2</sup> s	160 kA	225 W	0.9333 kg	3
A060UD33TTI2000	V301088	550 V	600 V	2000 A	950 kA <sup>2</sup> s	4500 kA <sup>2</sup> s	150 kA	250 W	0.9333 kg	3
A055UD33TTI2250	W301089	500 V	550 V	2250 A	1250 kA <sup>2</sup> s	5160 kA <sup>2</sup> s	130 kA	280 W	0.9333 kg	3
A050UD33TTI2500	Y300838	450 V	500 V	2500 A	1870 kA <sup>2</sup> s	6540 kA <sup>2</sup> s	110 kA	280 W	0.9333 kg	3

## TIME CURRENT CHARACTERISTIC CURVES

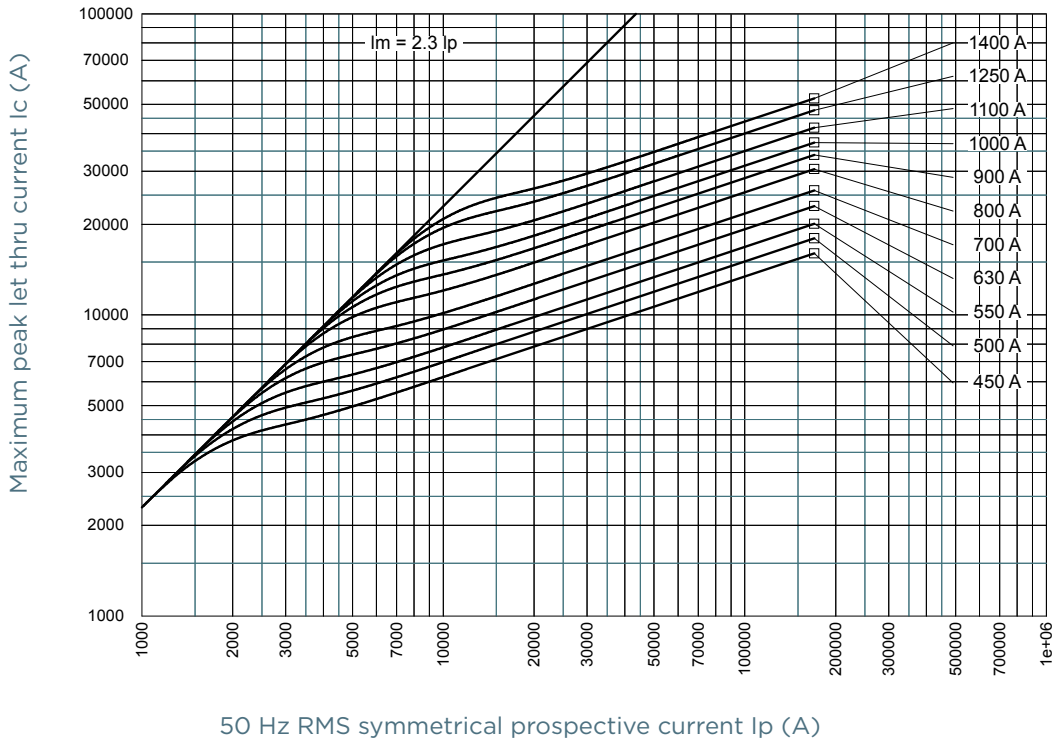


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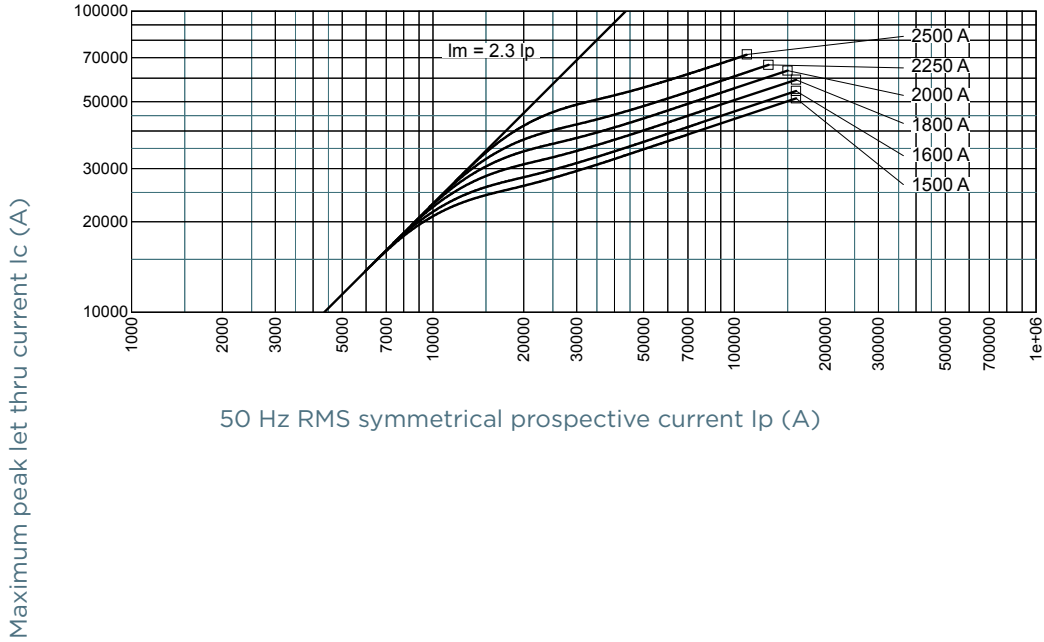
## TIME CURRENT CHARACTERISTIC CURVES



CUT-OFF CURRENT CHARACTERISTIC



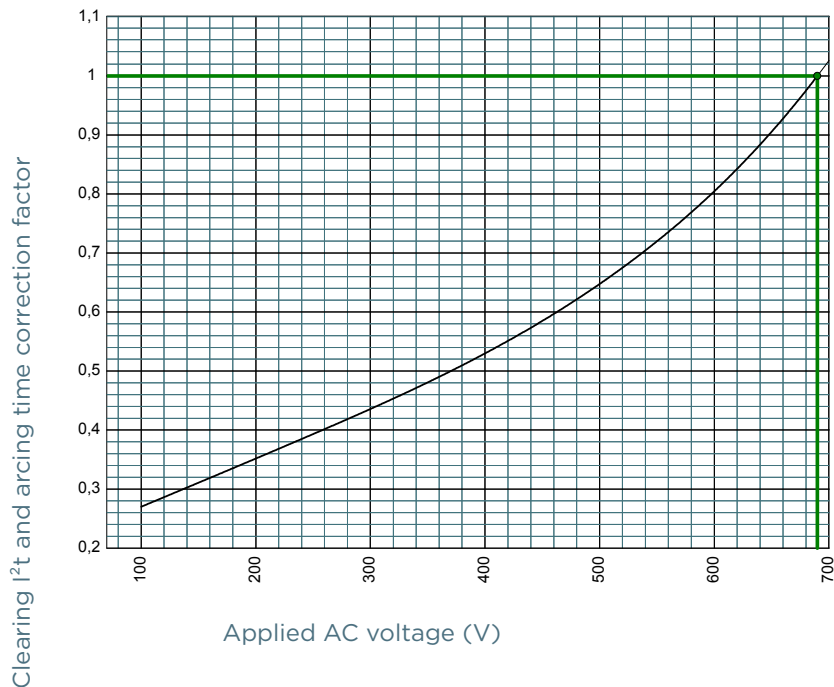
50 Hz RMS symmetrical prospective current  $I_p$  (A)



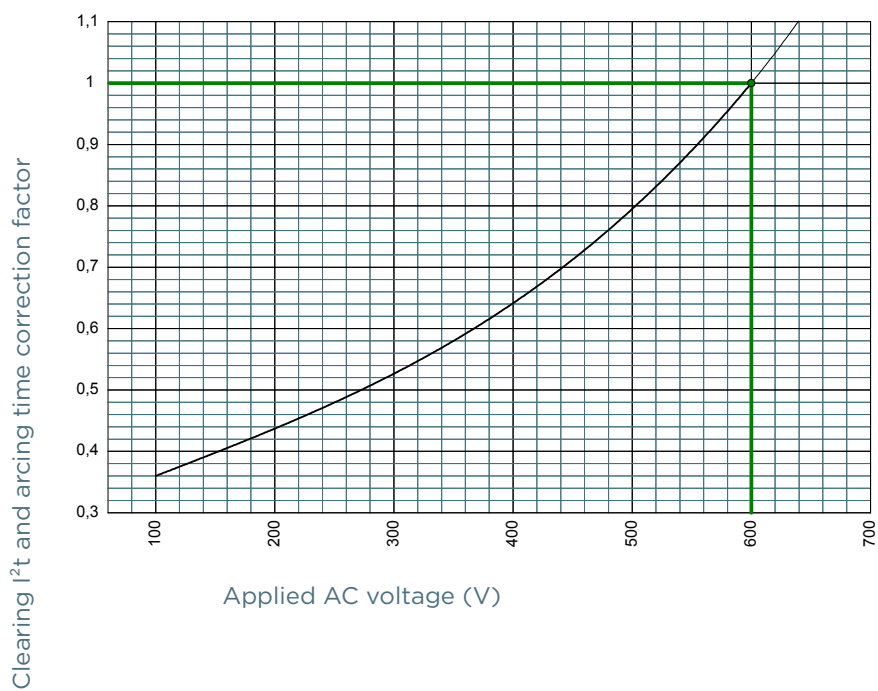
50 Hz RMS symmetrical prospective current  $I_p$  (A)

## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 33 690V

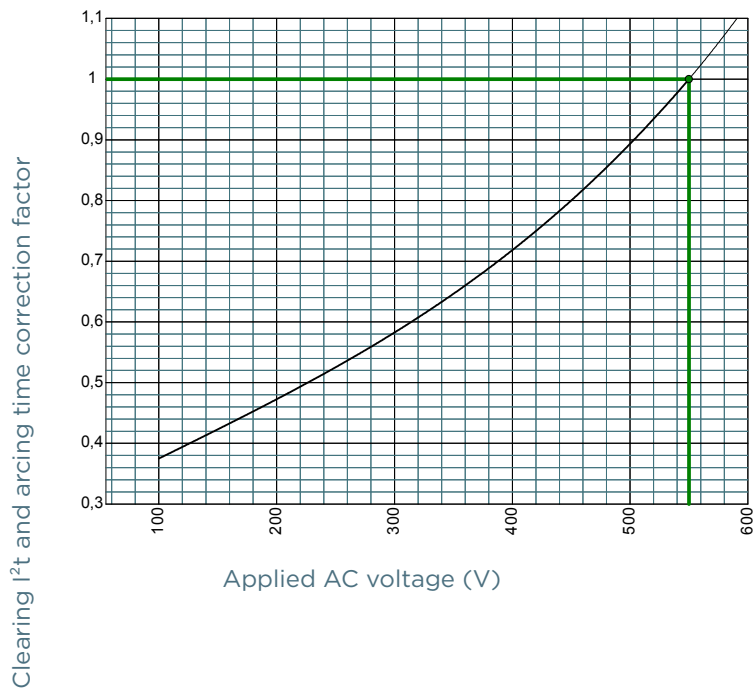


### Size 33 600V

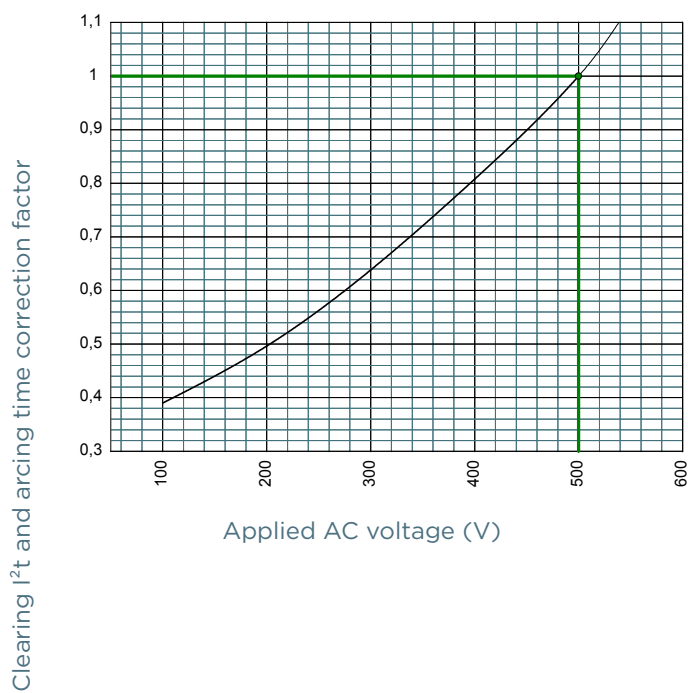


## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 33 550V

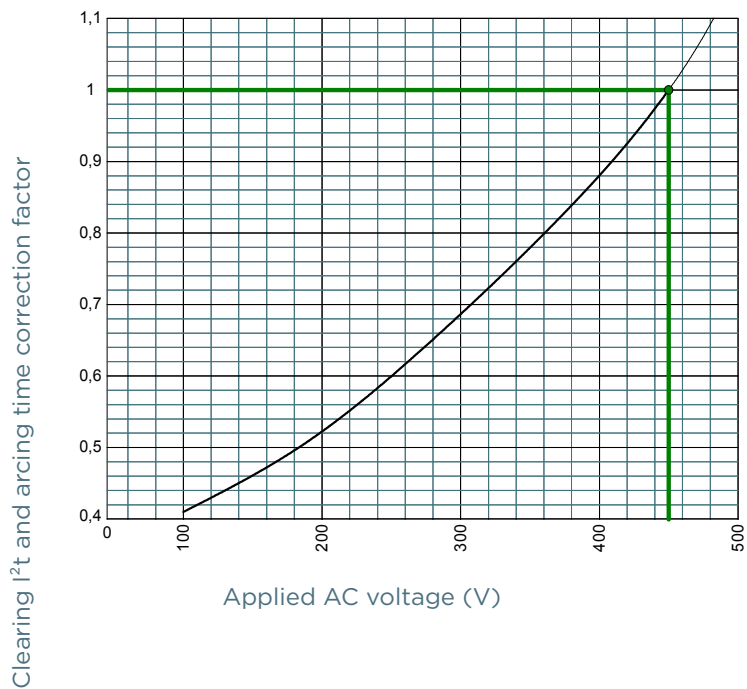


### Size 33 500V



## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 33 450V

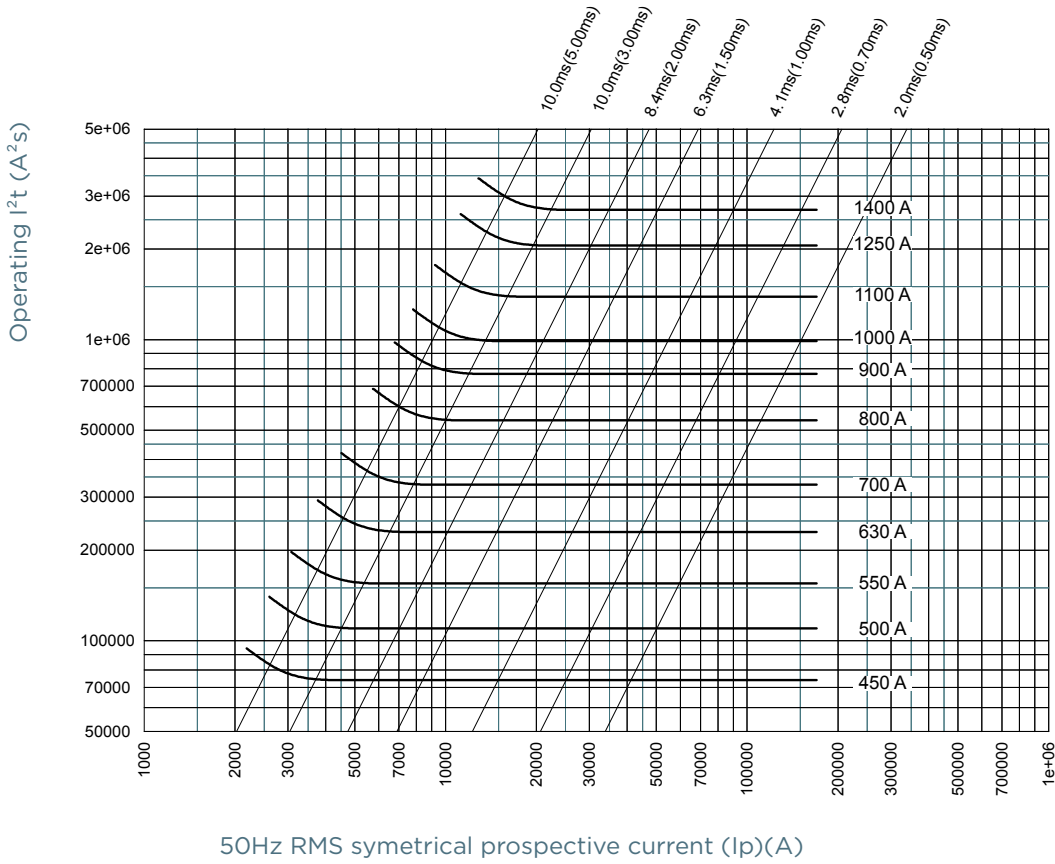


# Protistor® size 33 aR

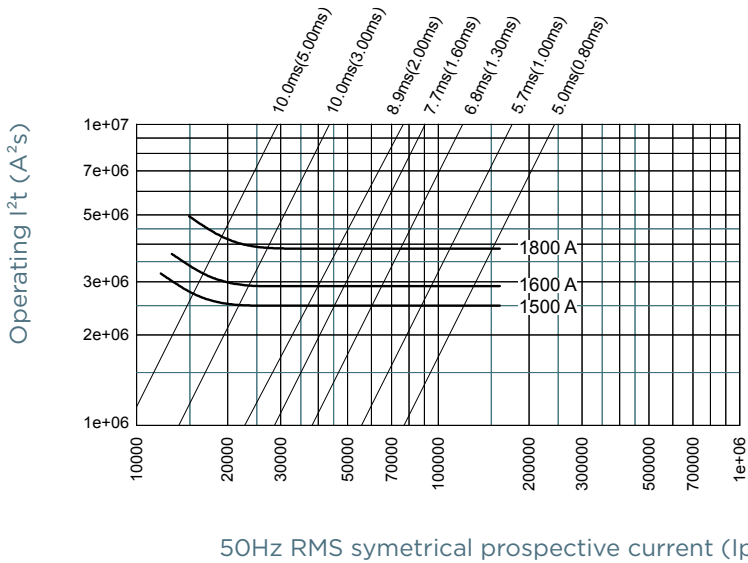
450 to 690VAC (IEC) / 700VAC (UL)

## CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

### Size 33 690V



### Size 33 600V



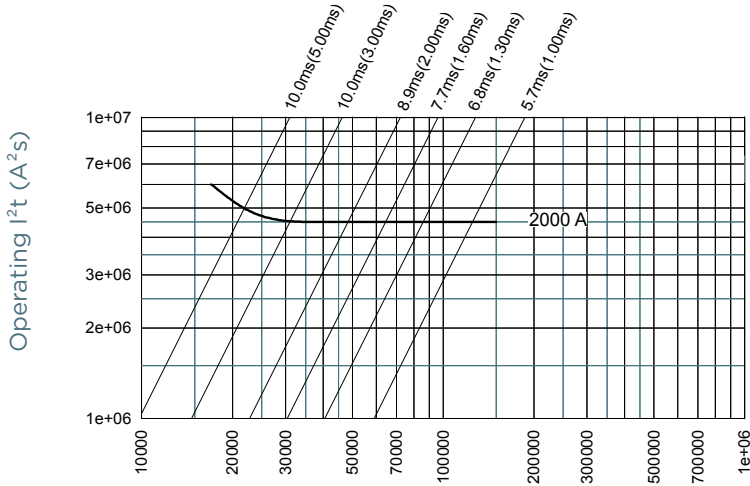
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# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

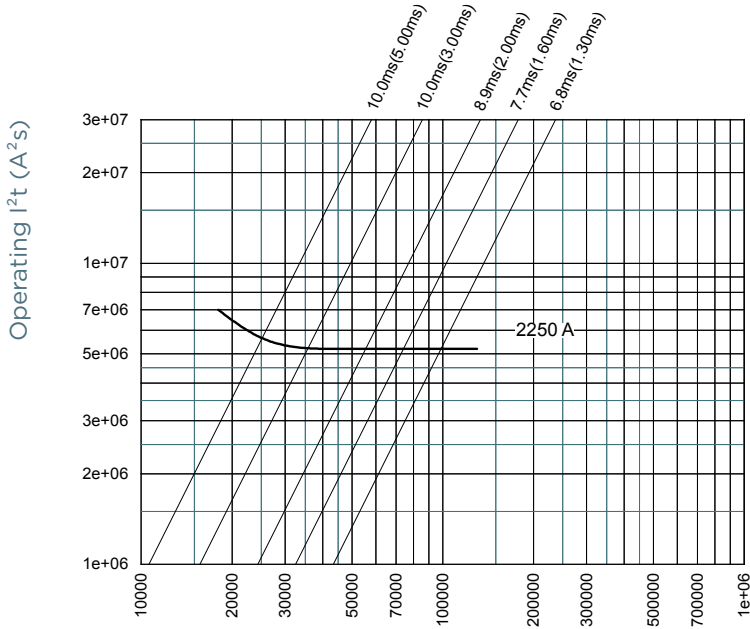
## CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

### Size 33 550V



50Hz RMS symmetrical prospective current (Ip)(A)

### Size 33 500V

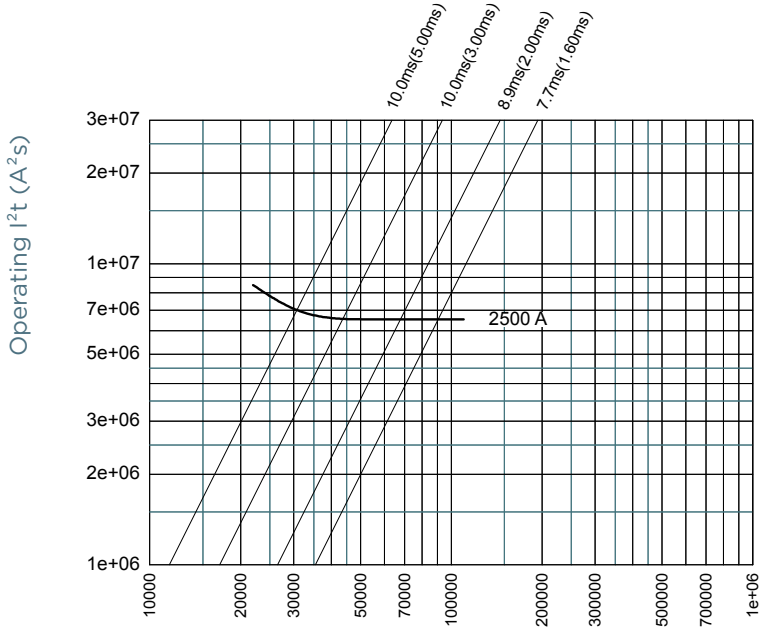


50Hz RMS symmetrical prospective current (Ip)(A)

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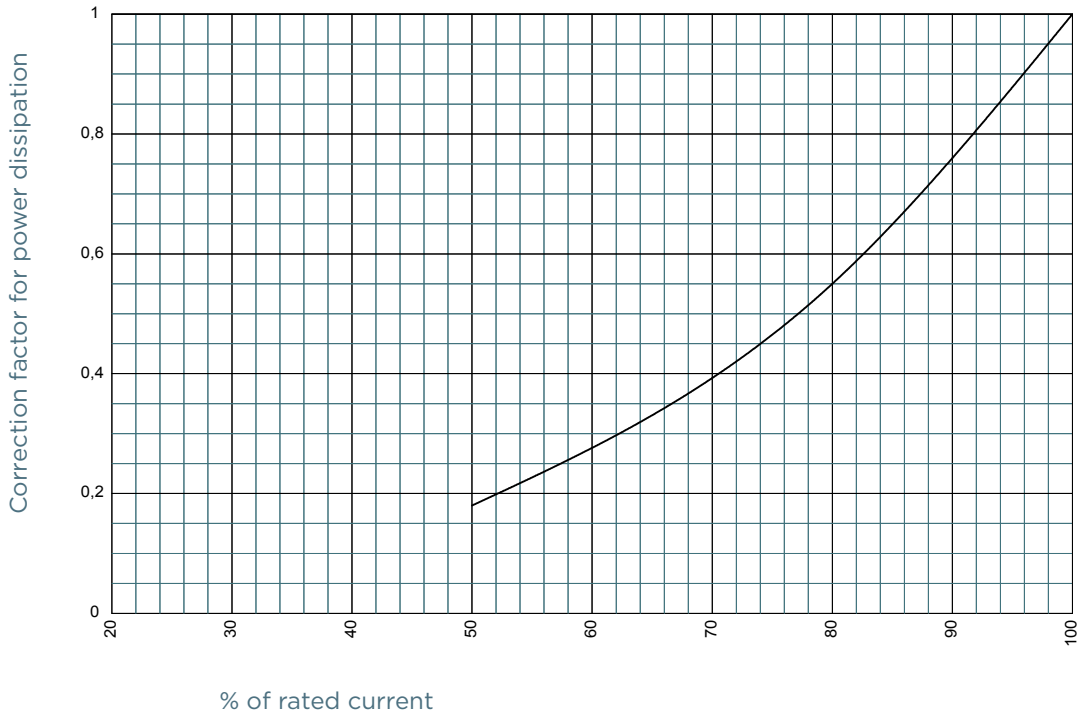
CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

Size 33 450V



50Hz RMS symmetrical prospective current (Ip)(A)

POWER DISSIPATION



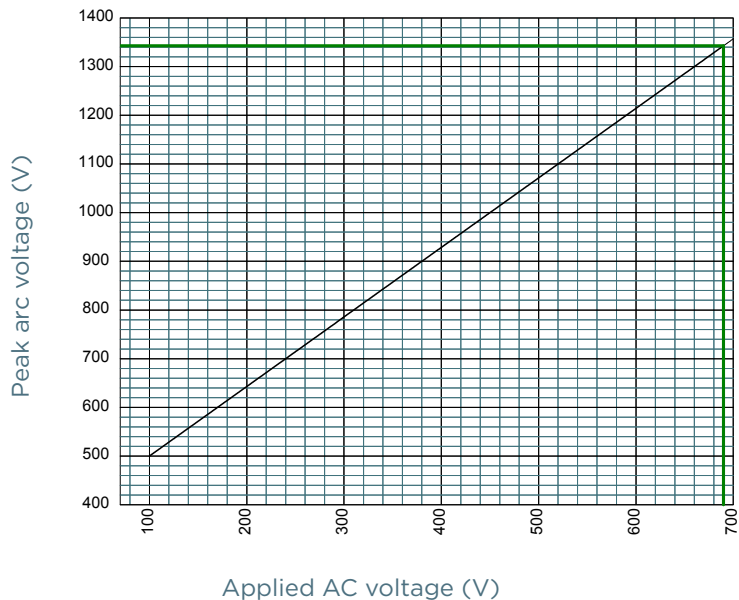
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

# Protistor® size 33 aR

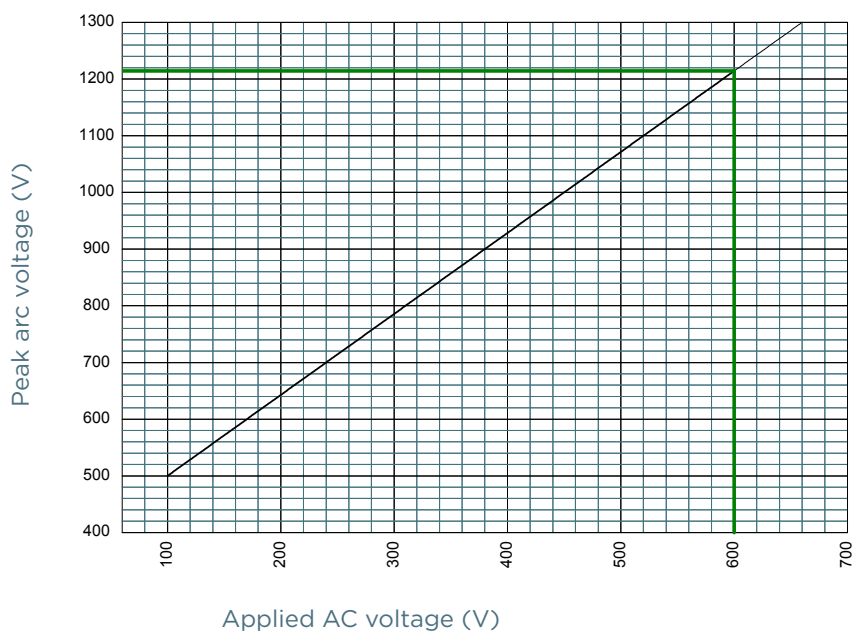
450 to 690VAC (IEC) / 700VAC (UL)

## PEAK ARC VOLTAGE

### Size 33 690V



### Size 33 600V

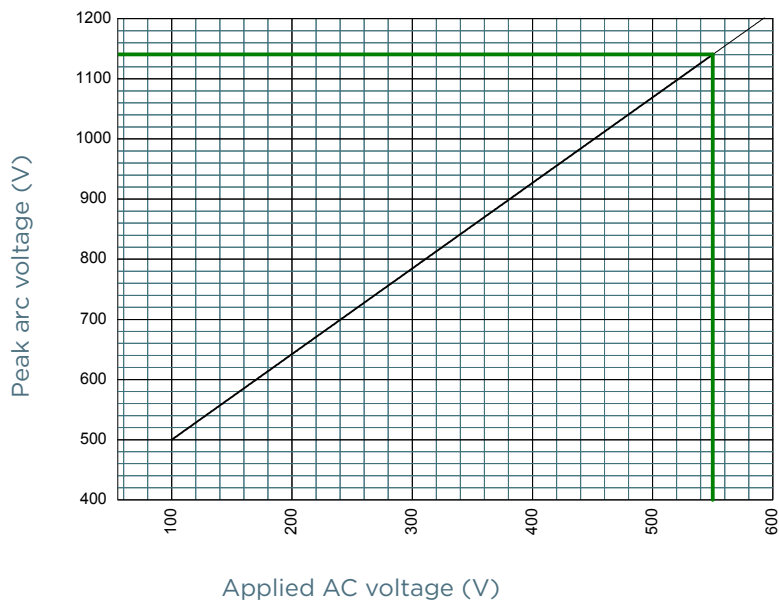


# Protistor® size 33 aR

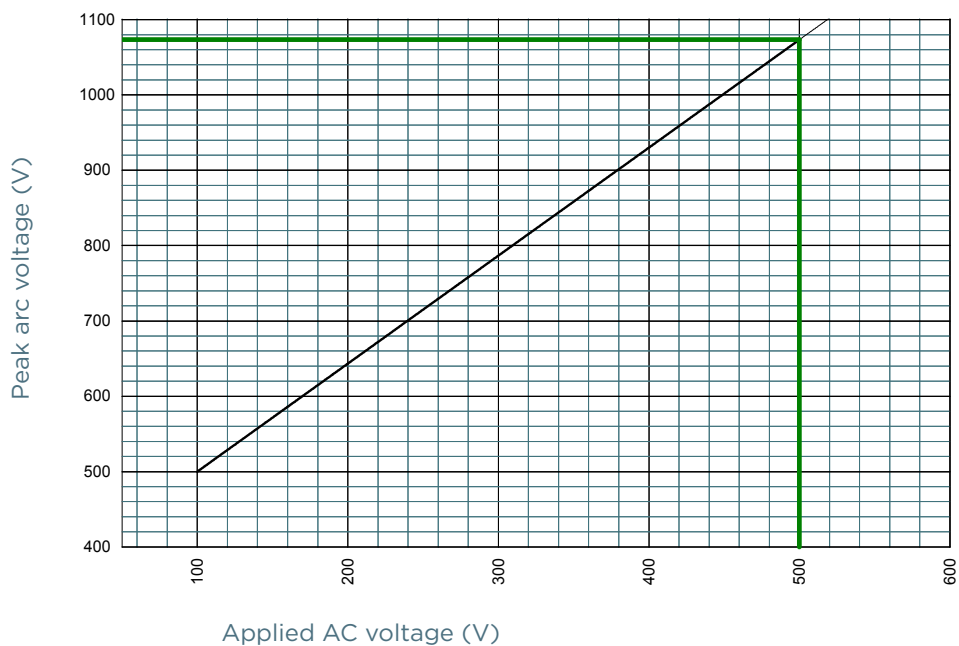
450 to 690VAC (IEC) / 700VAC (UL)

## PEAK ARC VOLTAGE

### Size 33 550V



### Size 33 500V

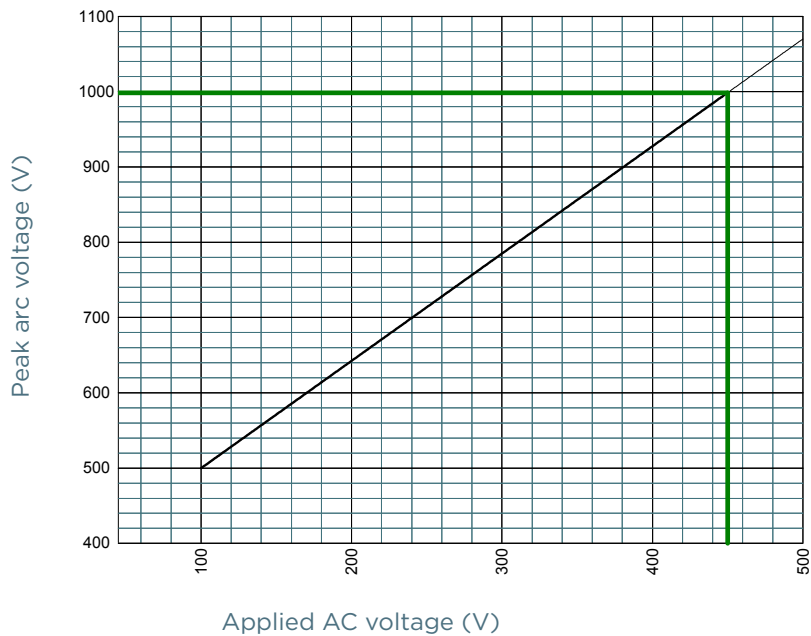


# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## PEAK ARC VOLTAGE

### Size 33 450V

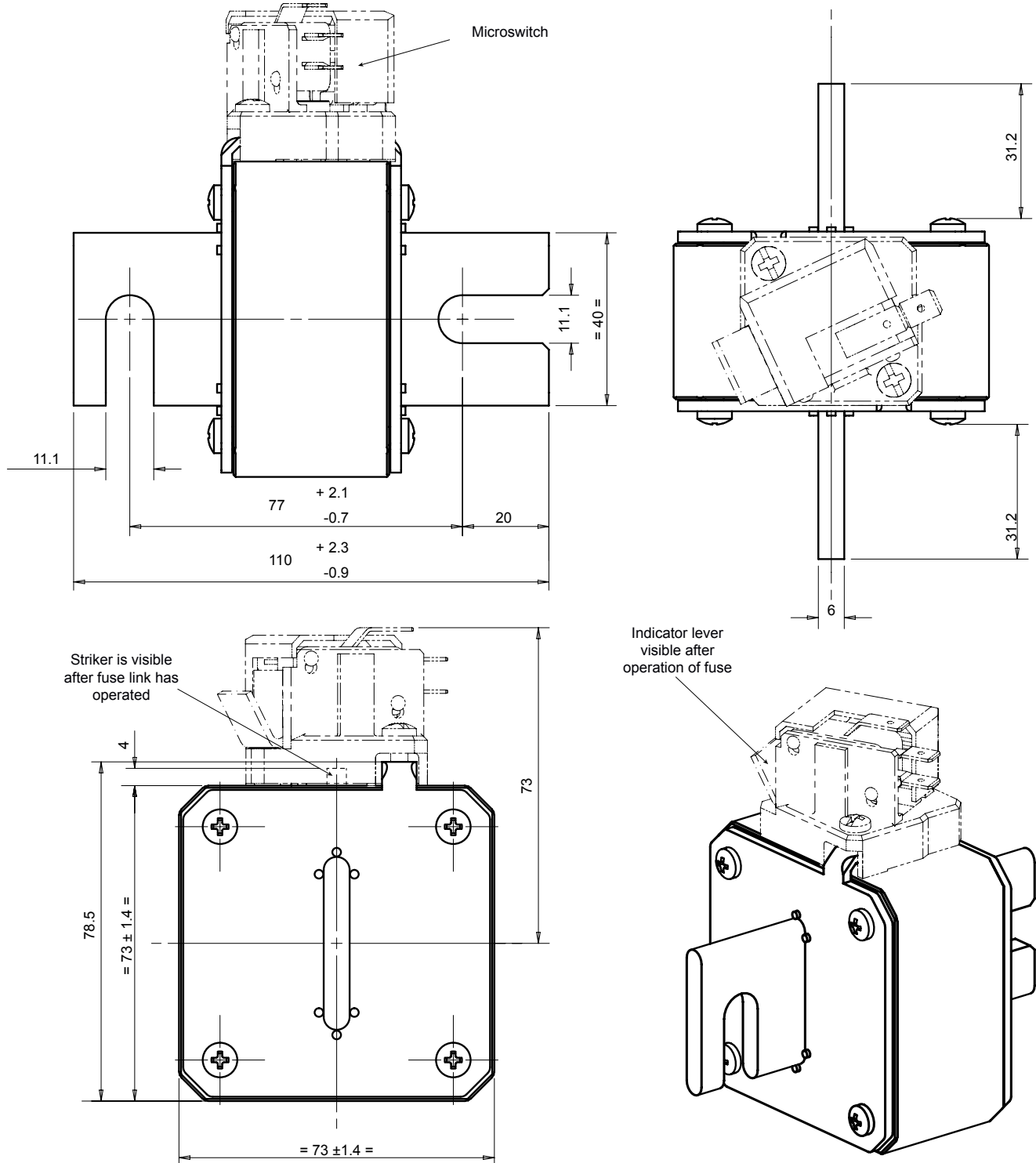


# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

size 33 type DIN 80 (102931)



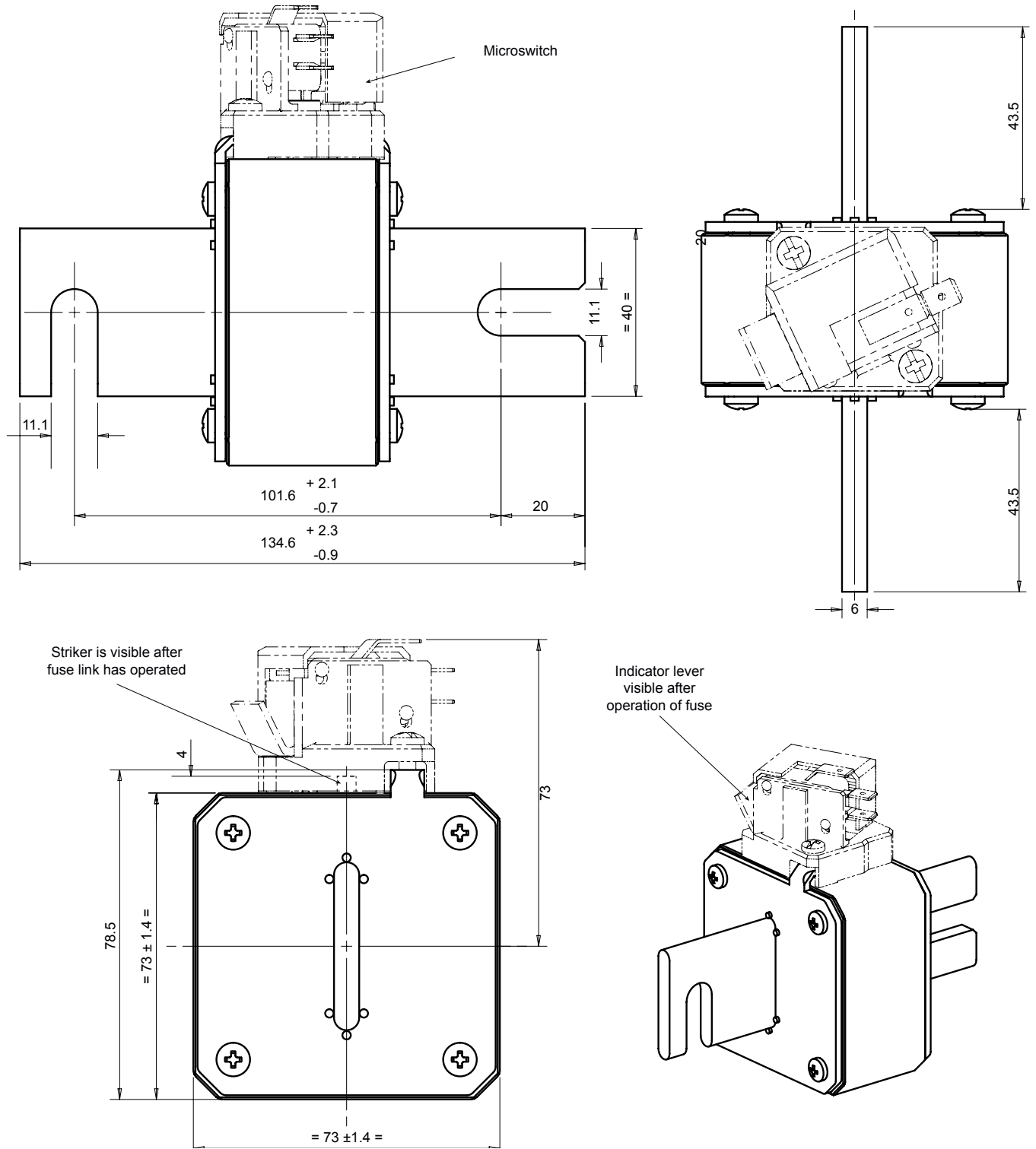
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# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

size 33 type DIN 110 (102932)



Dimensions in mm

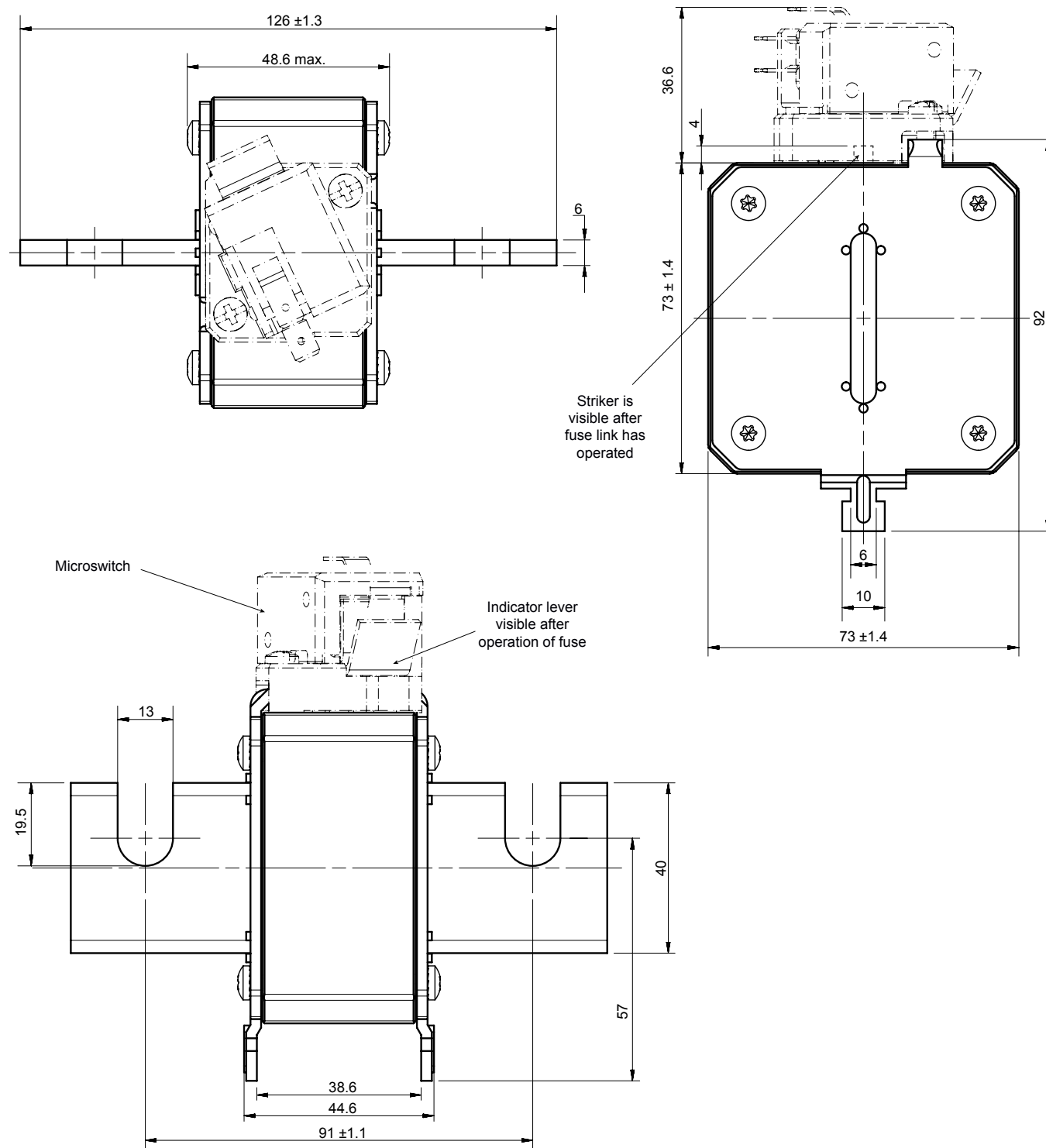
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# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

size 33 type EF (102930)



Dimensions in mm

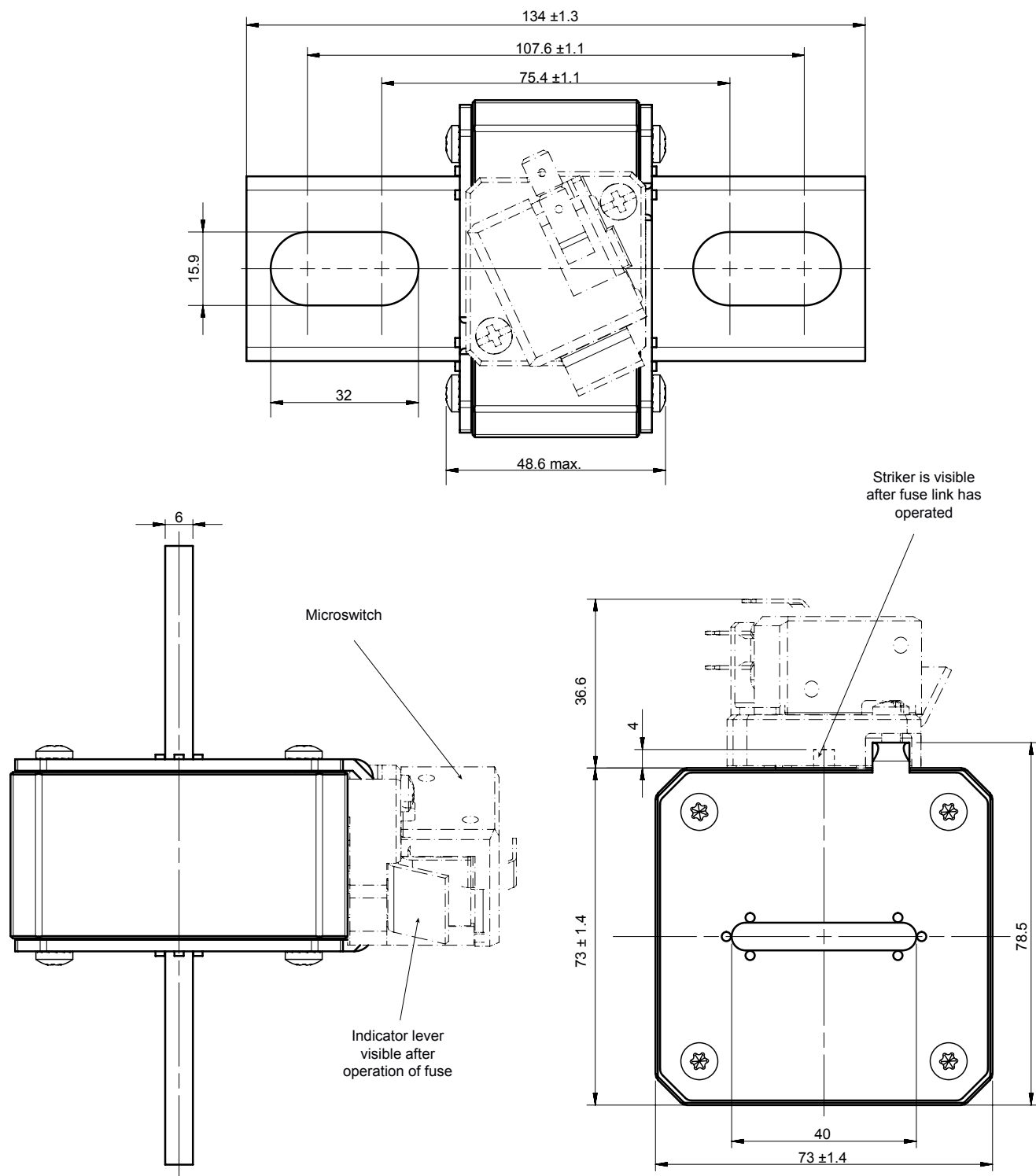
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# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

size 33 type KI (102929)



Dimensions in mm

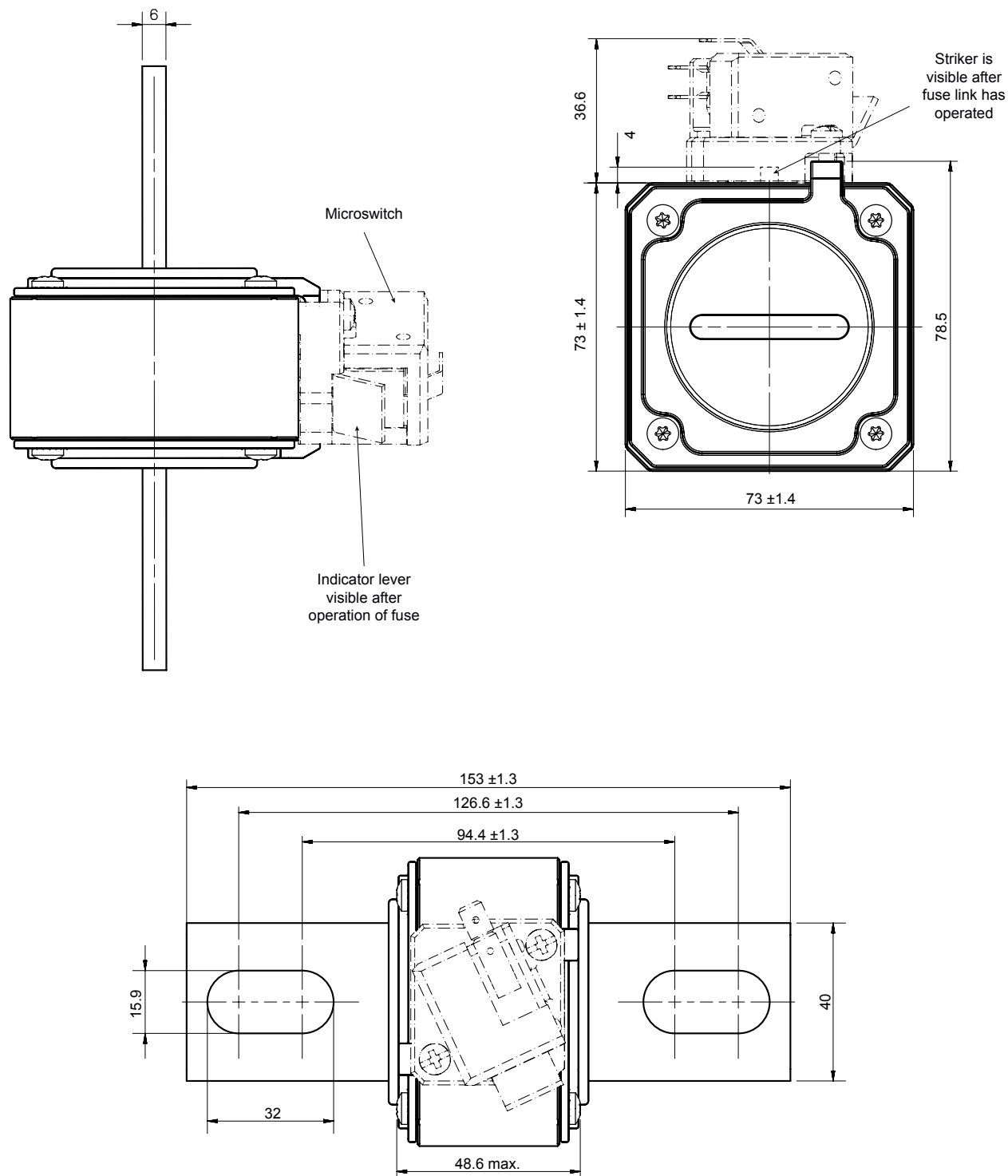
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# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

size 33 type LI reinforced (109524)



Dimensions in mm

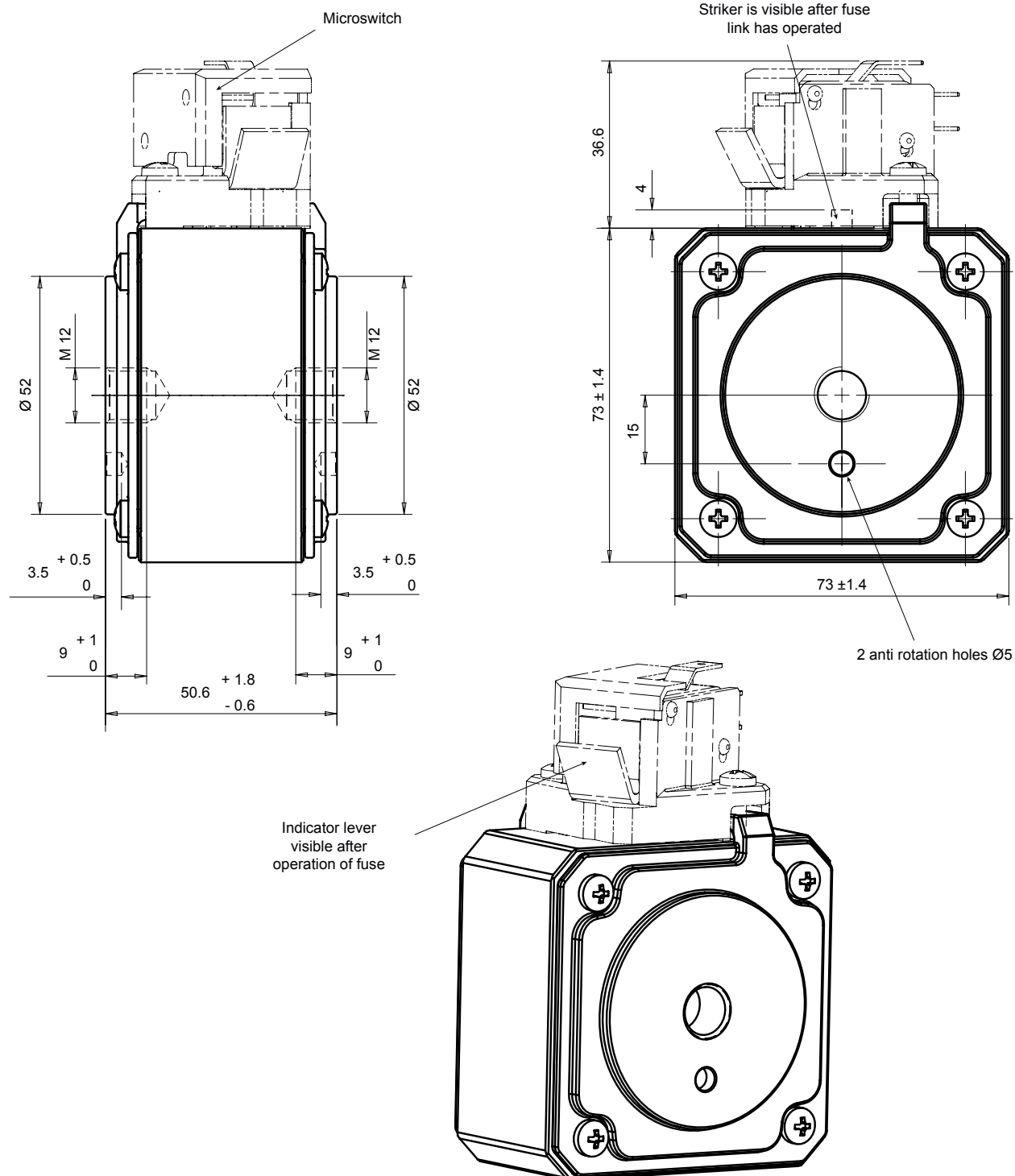
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# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

size 33 type TTF reinforced (107900)



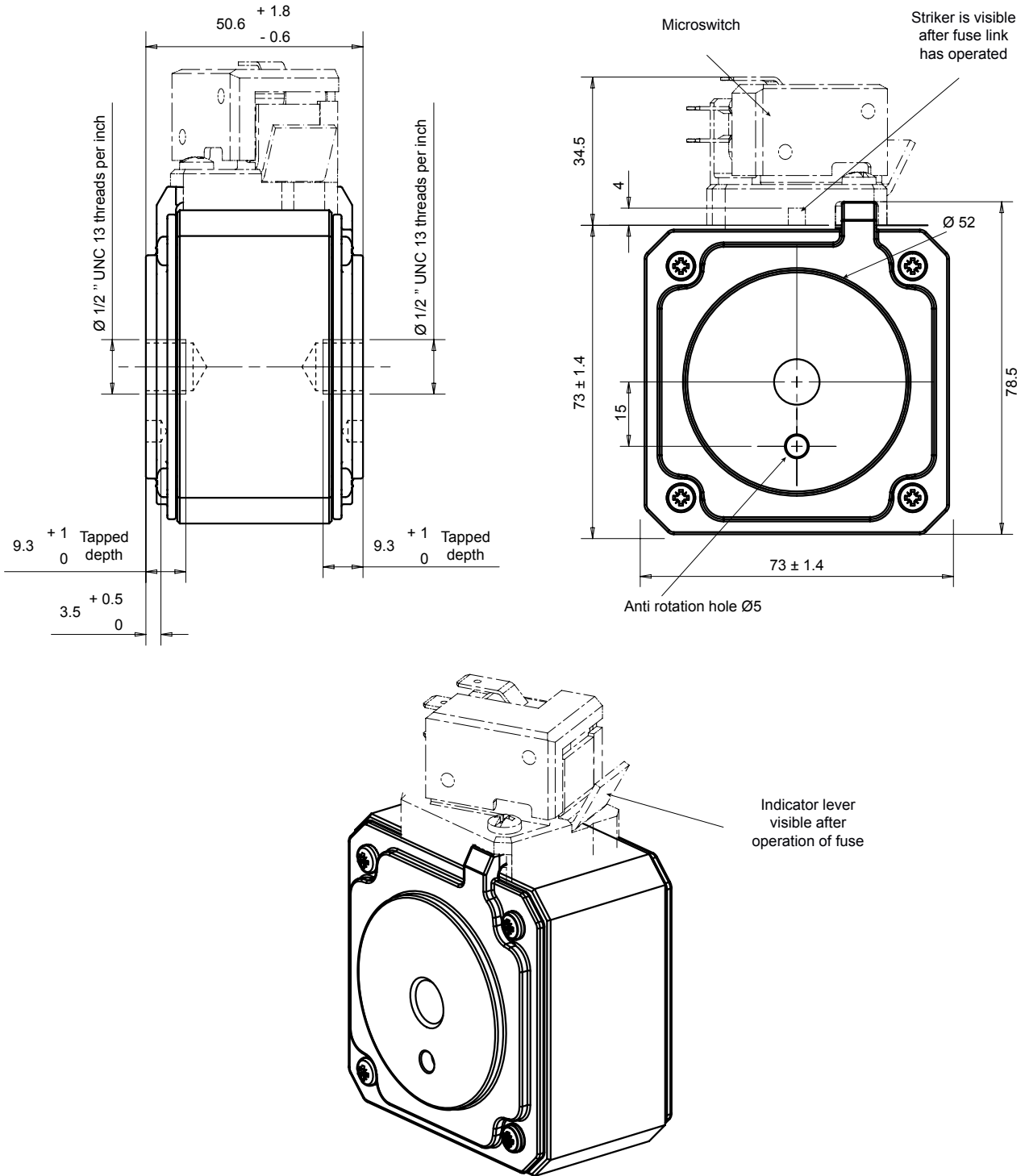
Dimensions in mm

# Protistor® size 33 aR

450 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

size 33 type TTI reinforced (108835)



Dimensions in mm

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# Protistor<sup>®</sup> size 2x32 and 2x33 aR

400 to 690VAC (IEC) / 700VAC (UL)

## SEMICONDUCTOR PROTECTION FUSES

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



The 690/700V Protistor<sup>®</sup> fuse-links provide maximum flexibility in equipment design and ultimate protection for today's power conversion equipment. These square body ultra-fast acting aR fuse-links are available in different body sizes, each size having multiple worldwide acceptable mounting styles.

They have been engineered to provide state-of-the-art protection for semiconductors: diodes, thyristors and IGBT devices. They are assembled with 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.

Each fuse-link can be equipped with a low voltage trip-indicator which can operate a field mountable microswitch.

## TECHNICAL DATA OVERVIEW

Voltage Range AC	400 ... 690 VAC
Ampere Range (A)	800 ... 5000 A
Speed/Characteristic	aR
I.R. AC	130 ... 200 kA
Product Size	2x32 and 2x33

## FEATURES & BENEFITS

- Multiple body sizes and terminals or blades combination
- aR Class according to IEC 60269-4 and VDE 636-23
- Very low  $I^2t$  for improved semiconductor protection
- Ultra fast acting
- Current limiting
- Superior cycling capability

## APPLICATIONS

- Protection of inverters, motor drives, UPS systems and similar 690V or less equipments.

## STANDARDS

- IEC 60269-4 Compliance
- UL/CSA Recognized E76491



# Protistor® size 2x32 and 2x33 aR

400 to 690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE

### Size 2x32 type TTF M10 threaded terminals with omega bar

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC232UD69V8CTF	T300305	690 V	700 V	800 A	61 kA <sup>2</sup> s	320 kA <sup>2</sup> s	170 kA	144 W	1.331 kg	1
PC232UD69V10CTF	T300213	690 V	700 V	1000 A	111 kA <sup>2</sup> s	590 kA <sup>2</sup> s	170 kA	165 W	1.331 kg	1
PC232UD69V13CTF	V300214	690 V	700 V	1250 A	218 kA <sup>2</sup> s	1100 kA <sup>2</sup> s	170 kA	190 W	1.331 kg	1
PC232UD69V14CTF	G300087	690 V	700 V	1400 A	307 kA <sup>2</sup> s	1600 kA <sup>2</sup> s	170 kA	200 W	1.331 kg	1

### Size 2x33 type M12 threaded terminals with omega bar

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC233UD69V13CTF	D300268	690 V	700 V	1250 A	159 kA <sup>2</sup> s	850 kA <sup>2</sup> s	170 kA	230 W	1.934 kg	1
PC233UD69V14CTF	E300269	690 V	700 V	1400 A	228 kA <sup>2</sup> s	1200 kA <sup>2</sup> s	170 kA	240 W	1.934 kg	1
PC233UD69V16CTF	F300270	690 V	700 V	1600 A	370 kA <sup>2</sup> s	1900 kA <sup>2</sup> s	170 kA	250 W	1.934 kg	1

### Size 2x33 type PLAF M10 threaded plates

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC36UD69V18CP11	B300427	690 V	700 V	1800 A	515 kA <sup>2</sup> s	2800 kA <sup>2</sup> s	170 kA	250 W	2.496 kg	1
PC36UD60V20CP11	R302235	600 V	650 V	2000 A	682 kA <sup>2</sup> s	3100 kA <sup>2</sup> s	160 kA	280 W	2.496 kg	1
PC36UD60V22CP11	Q302234	600 V	650 V	2200 A	957 kA <sup>2</sup> s	4400 kA <sup>2</sup> s	160 kA	280 W	2.496 kg	1
PC36UD60V25CP11	P302233	600 V	650 V	2500 A	1410 kA <sup>2</sup> s	6600 kA <sup>2</sup> s	160 kA	310 W	2.496 kg	1
PC36UD60V28CP11	N302232	600 V	650 V	2800 A	1855 kA <sup>2</sup> s	8800 kA <sup>2</sup> s	160 kA	330 W	2.496 kg	1
PC36UD55V30CP11	L301977	550 V	600 V	3000 A	1870 kA <sup>2</sup> s	9000 kA <sup>2</sup> s	150 kA	440 W	2500 g	1
PC36UD55V32CP11	M301978	550 V	600 V	3200 A	2220 kA <sup>2</sup> s	10800 kA <sup>2</sup> s	150 kA	455 W	2500 g	1
PC36UD50V36CP11	N301979	500 V	550 V	3600 A	2880 kA <sup>2</sup> s	12400 kA <sup>2</sup> s	130 kA	465 W	2500 g	1
PC36UD50V40CP11	P301980	500 V	550 V	4000 A	3790 kA <sup>2</sup> s	16200 kA <sup>2</sup> s	130 kA	515 W	2500 g	1
PC36UD40V45CP11	Q301981	400 V	500 V	4500 A	5000 kA <sup>2</sup> s	18600 kA <sup>2</sup> s	130 kA	560 W	2500 g	1
PC36UD40V50CP11	R301982	400 V	400 V	5000 A	7470 kA <sup>2</sup> s	23100 kA <sup>2</sup> s	200 kA	580 W	2.496 kg	1

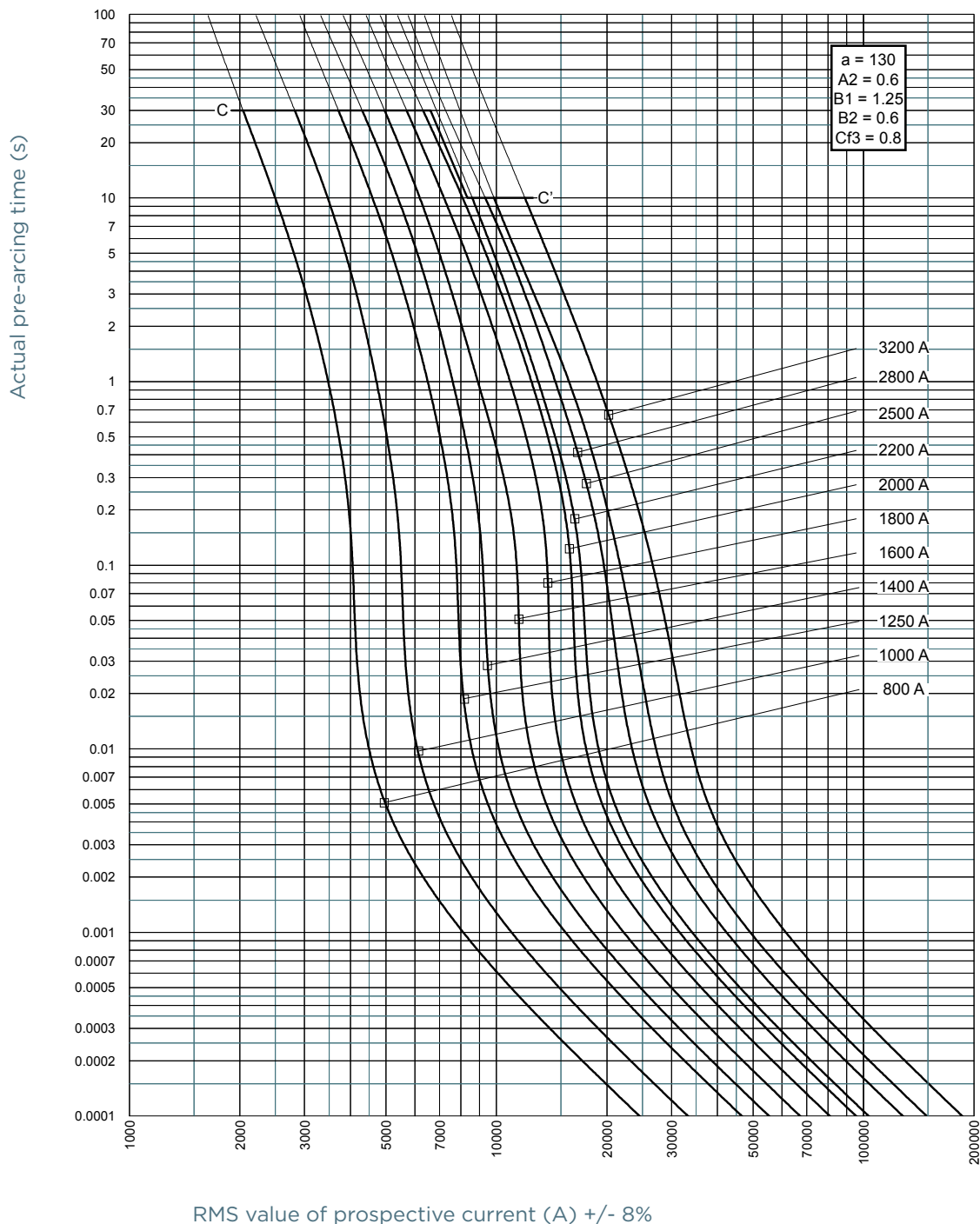
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# Protistor® size 2x32 and 2x33 aR

400 to 690VAC (IEC) / 700VAC (UL)

## TIME CURRENT CHARACTERISTIC CURVES

### Size 2x32



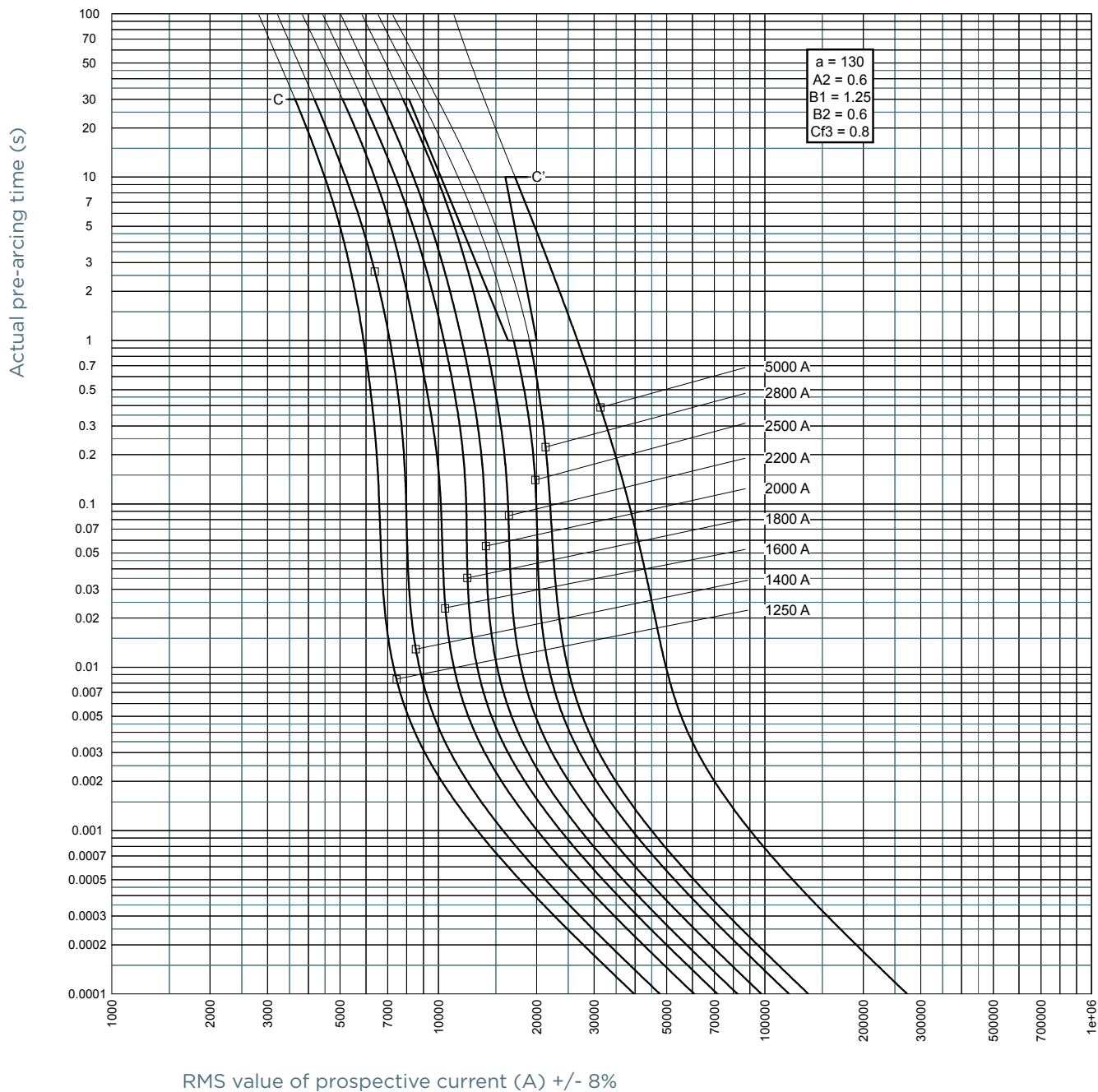
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# Protistor® size 2x32 and 2x33 aR

400 to 690VAC (IEC) / 700VAC (UL)

## TIME CURRENT CHARACTERISTIC CURVES

### Size 2x33

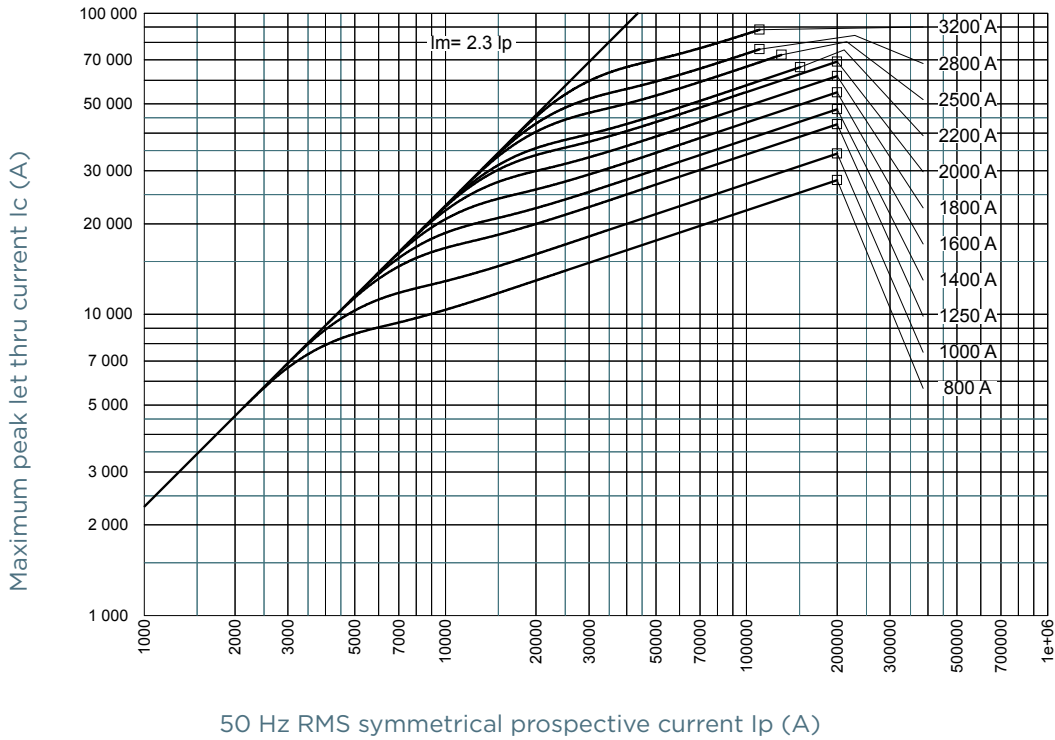


# Protistor® size 2x32 and 2x33 aR

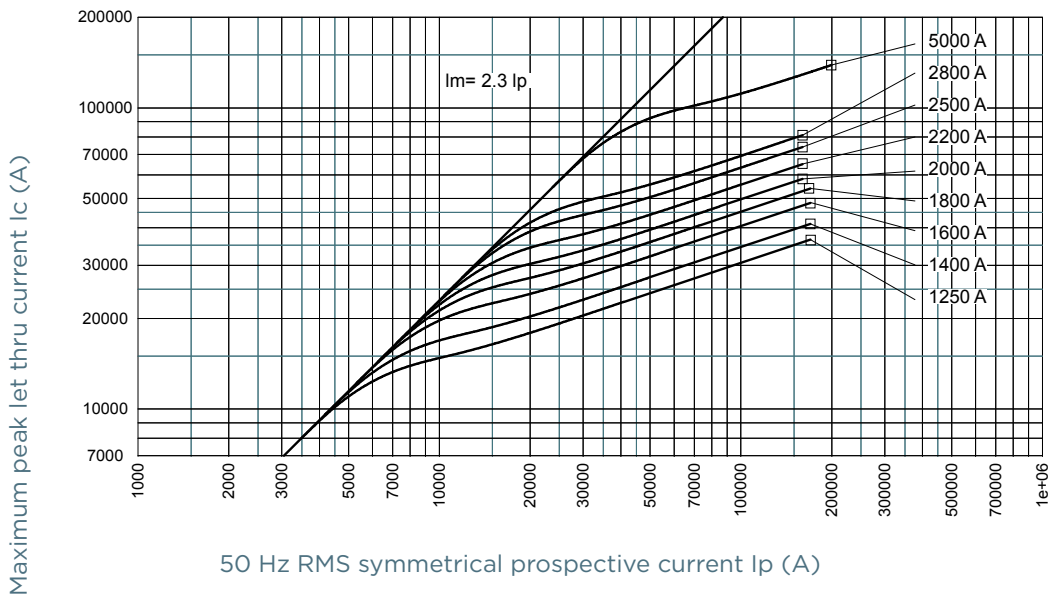
400 to 690VAC (IEC) / 700VAC (UL)

## CUT-OFF CURRENT CHARACTERISTIC

### Size 2x32



### Size 2x33



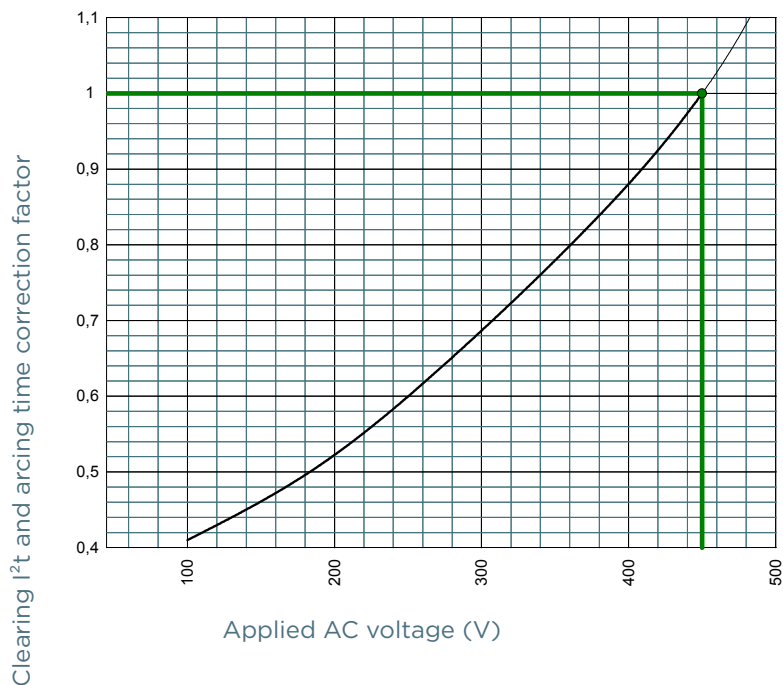
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# Protistor® size 2x32 and 2x33 aR

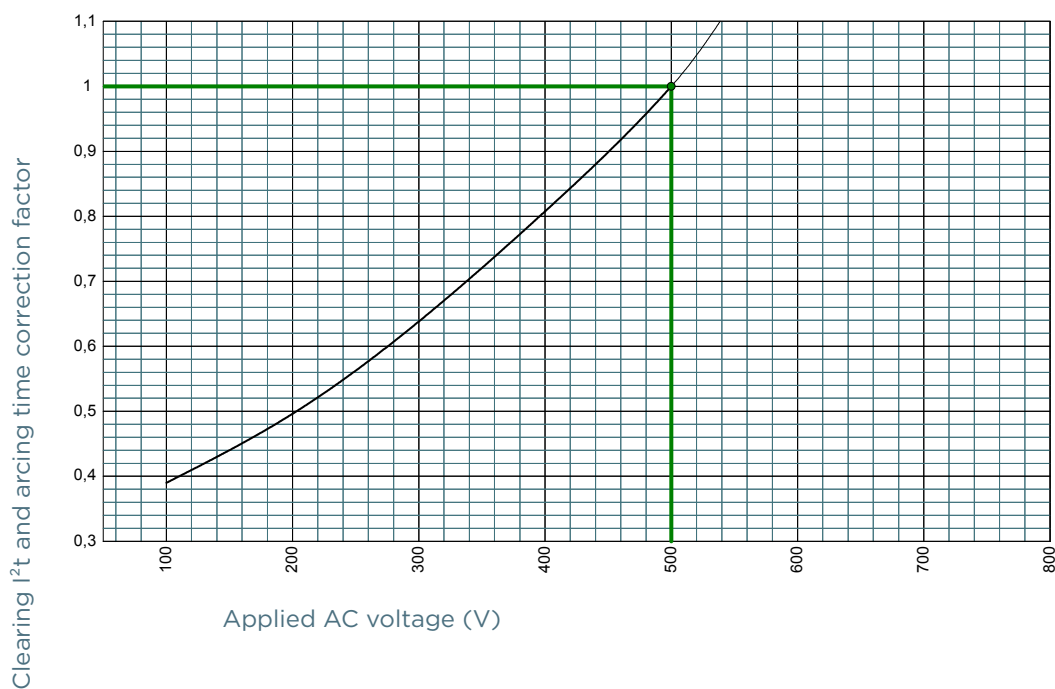
400 to 690VAC (IEC) / 700VAC (UL)

## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 2x32 450V



### Size 2x32 500V



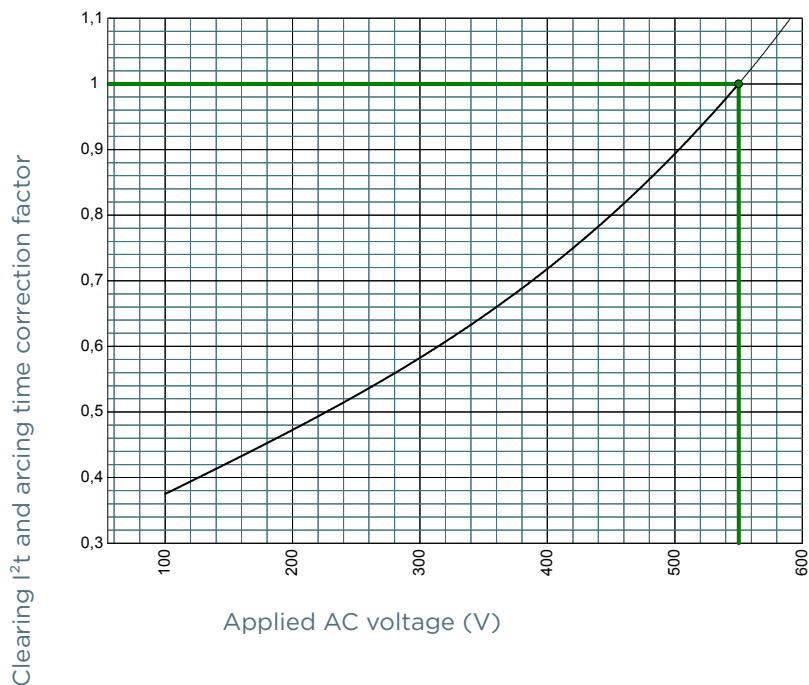
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# Protistor® size 2x32 and 2x33 aR

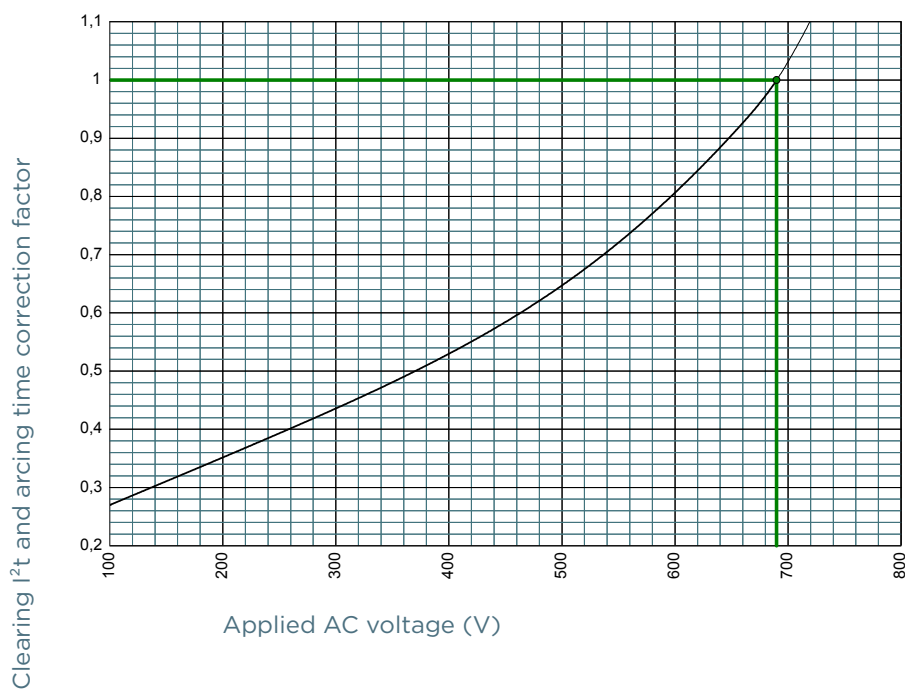
400 to 690VAC (IEC) / 700VAC (UL)

## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 2x32 550V



### Size 2x32 690V

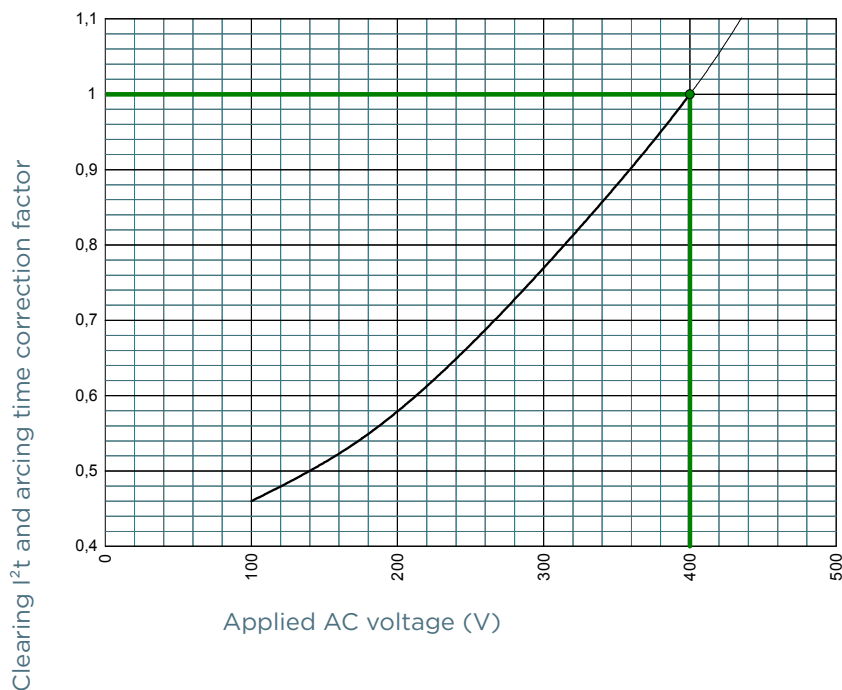


# Protistor® size 2x32 and 2x33 aR

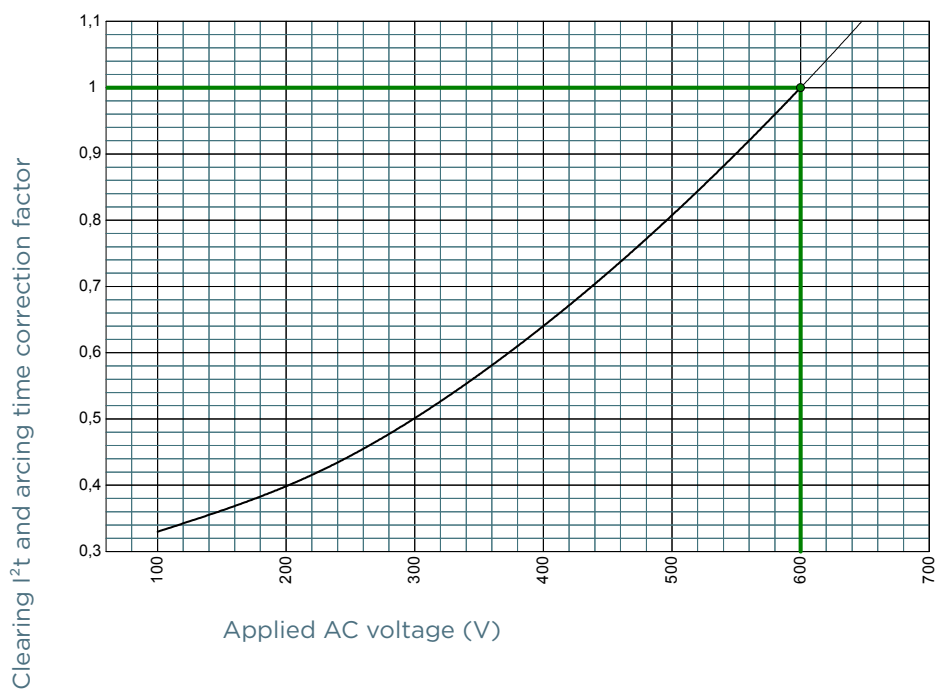
400 to 690VAC (IEC) / 700VAC (UL)

## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 2x33 400V



### Size 2x33 600V

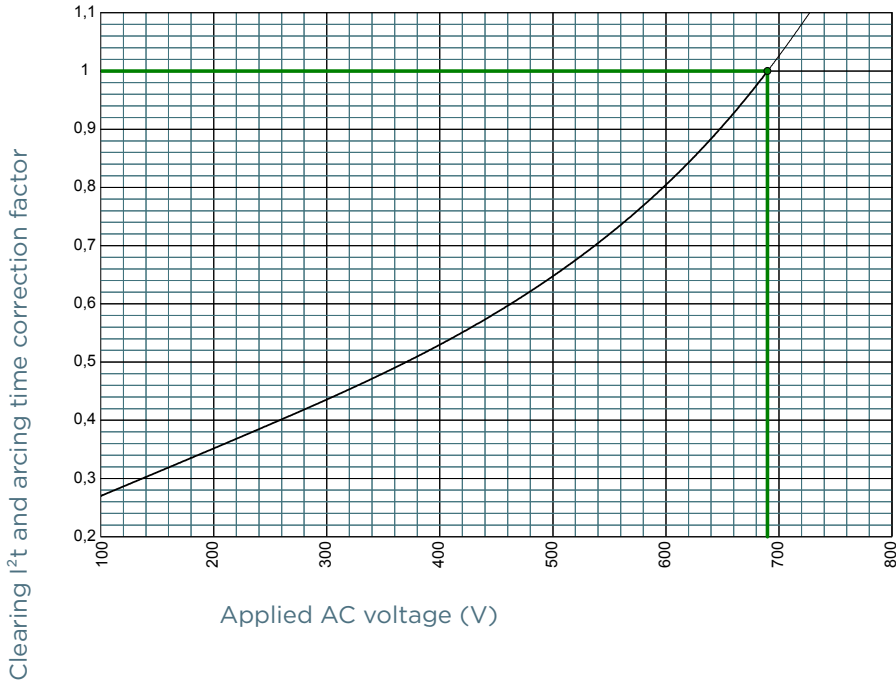


# Protistor® size 2x32 and 2x33 aR

400 to 690VAC (IEC) / 700VAC (UL)

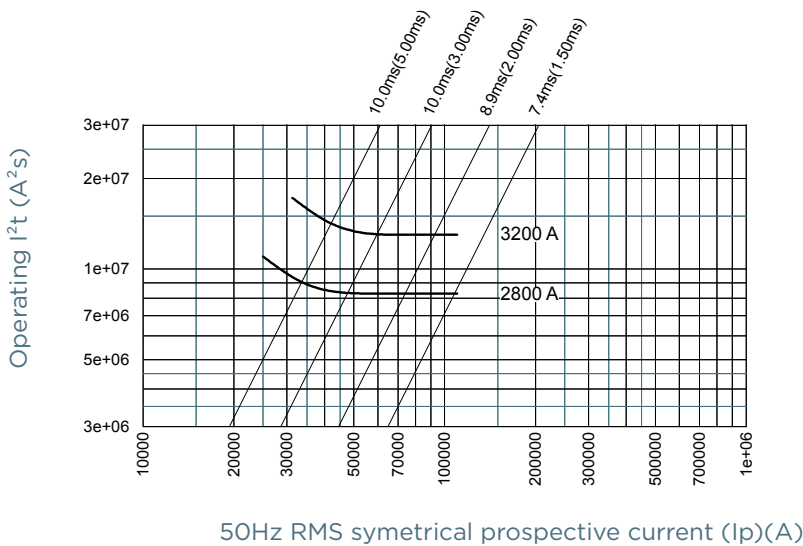
## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 2x33 690V



## CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

### Size 2x32 450V



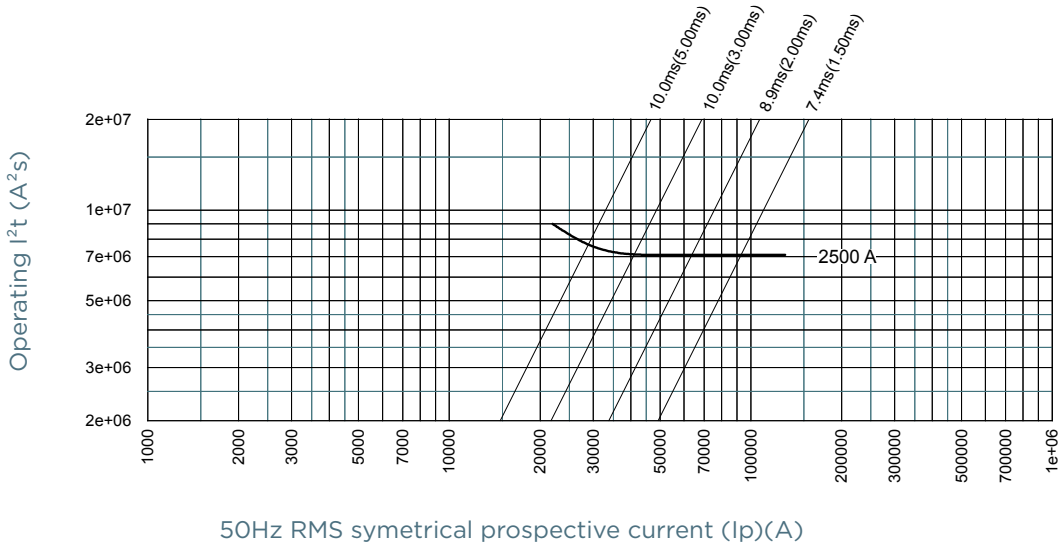
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# Protistor® size 2x32 and 2x33 aR

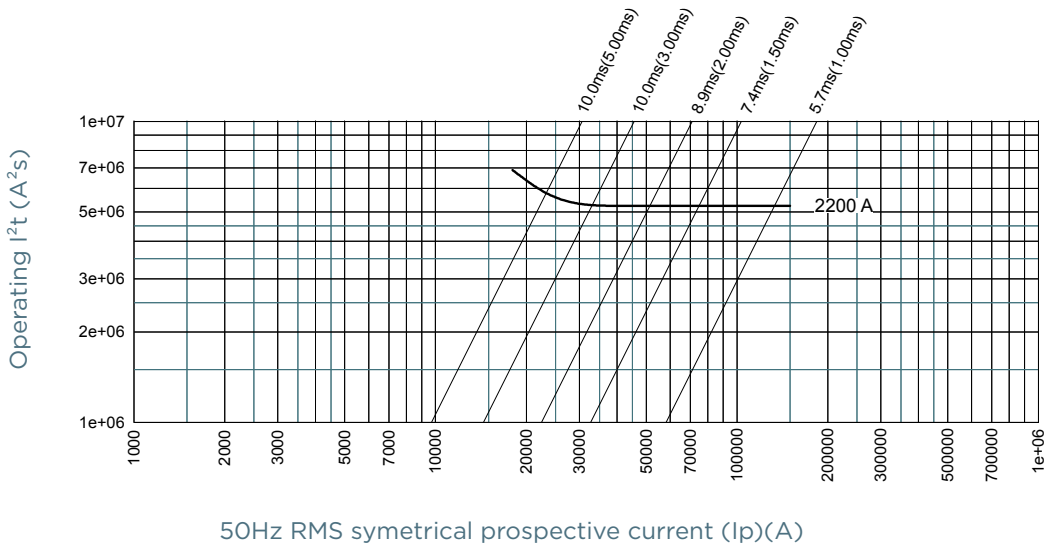
400 to 690VAC (IEC) / 700VAC (UL)

## CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

### Size 2x32 500V



### Size 2x32 550V



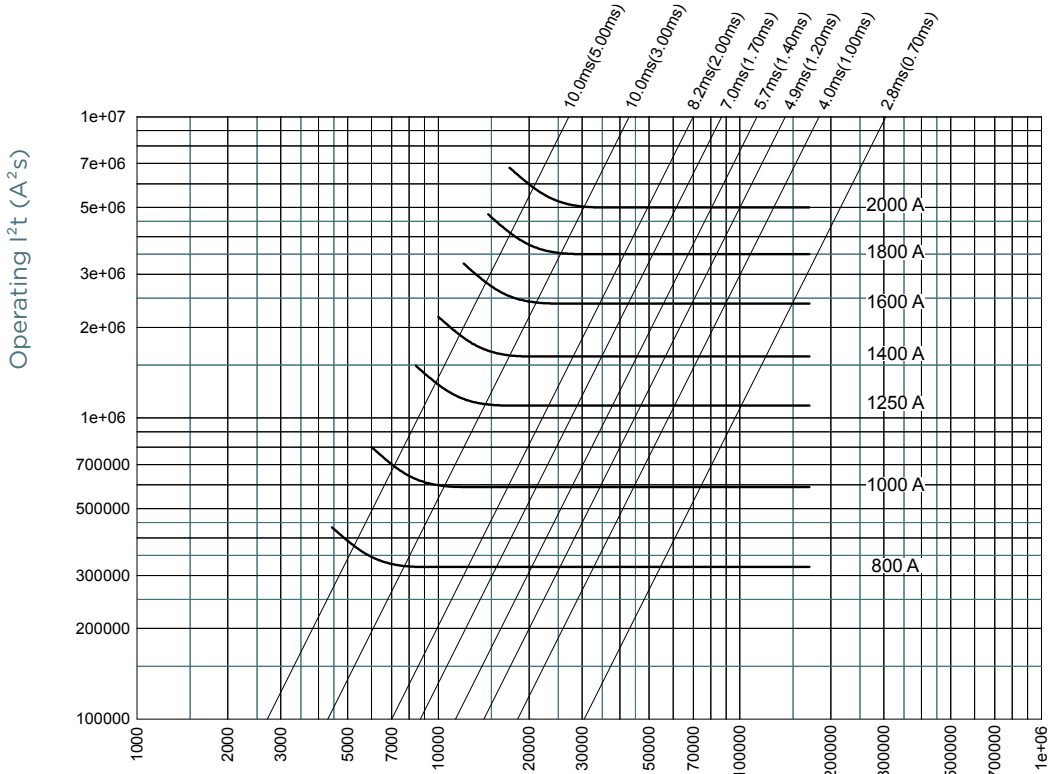
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# Protistor® size 2x32 and 2x33 aR

400 to 690VAC (IEC) / 700VAC (UL)

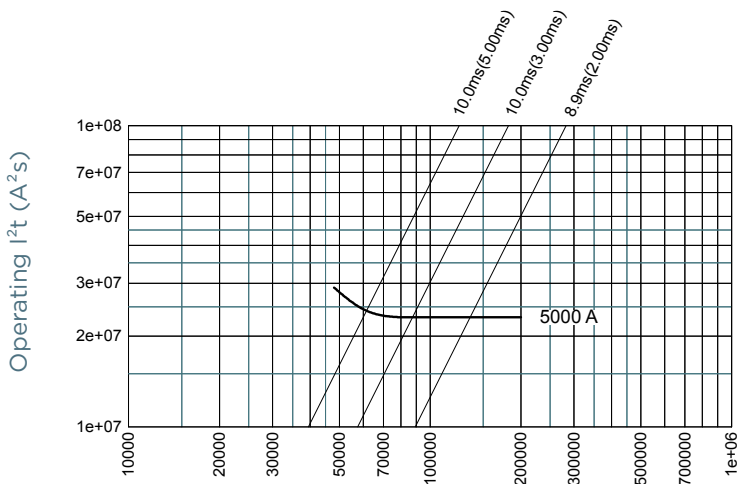
## CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

### Size 2x32 690V



50Hz RMS symmetrical prospective current (Ip)(A)

### Size 2x33 400V



50Hz RMS symmetrical prospective current (Ip)(A)

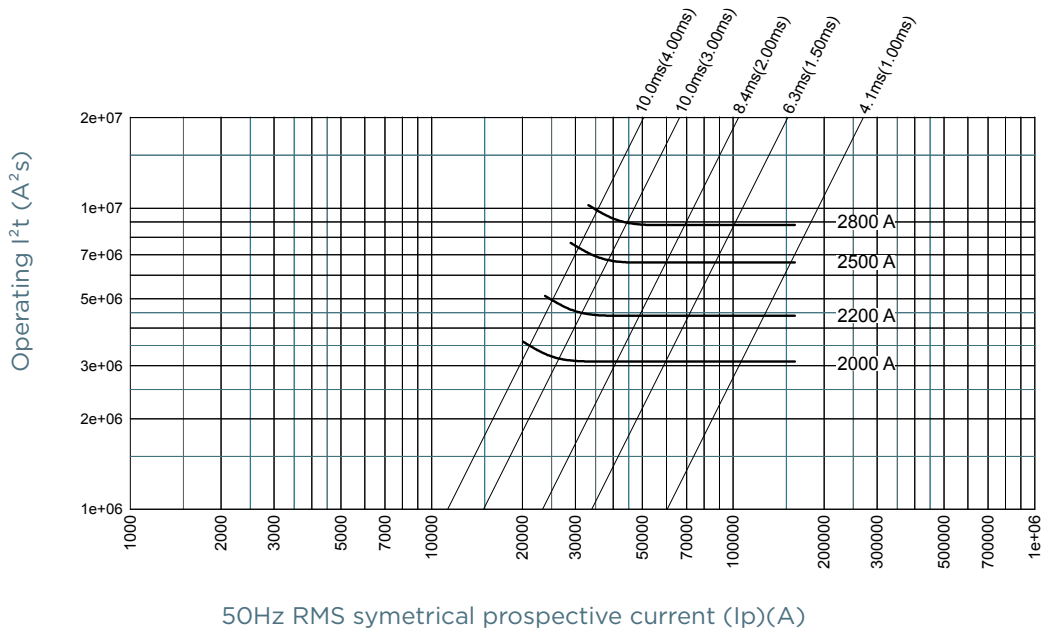
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

# Protistor® size 2x32 and 2x33 aR

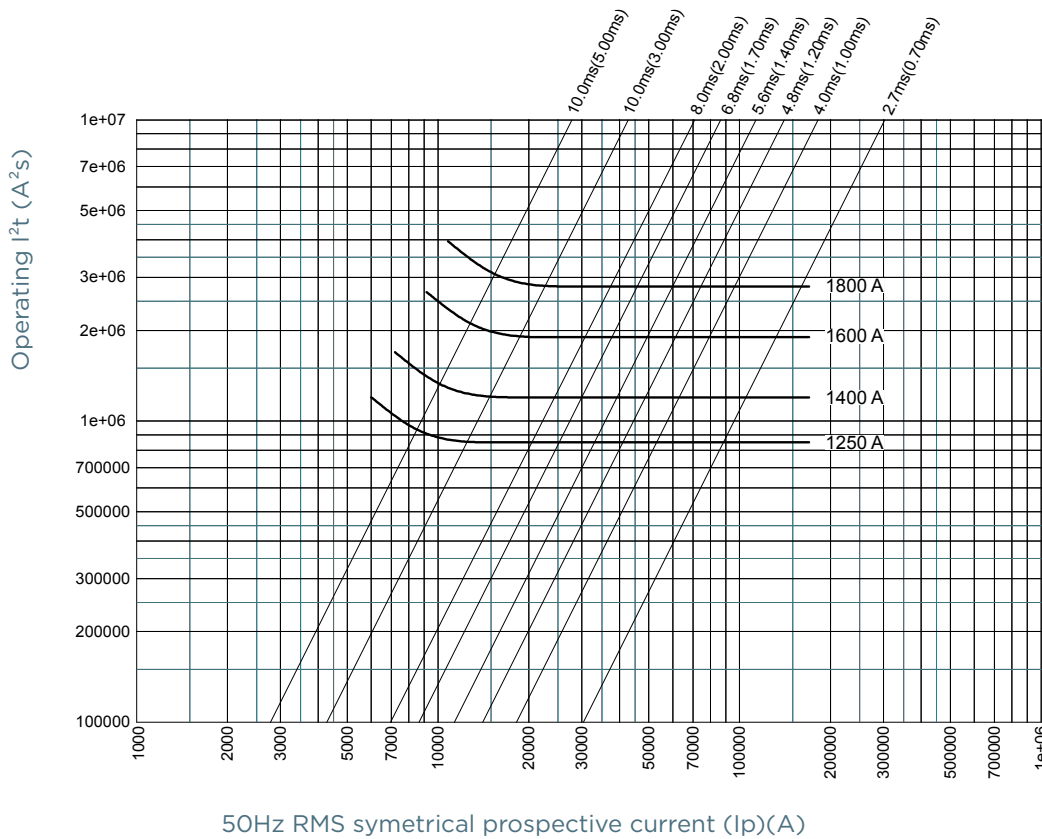
400 to 690VAC (IEC) / 700VAC (UL)

## CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

### Size 2x33 600V



### Size 2x33 690V



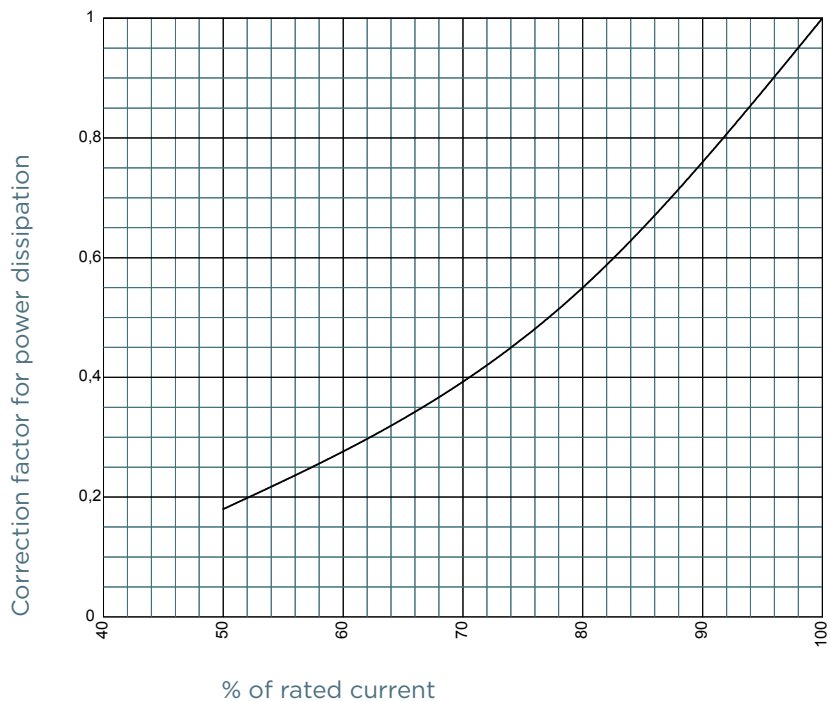
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# Protistor® size 2x32 and 2x33 aR

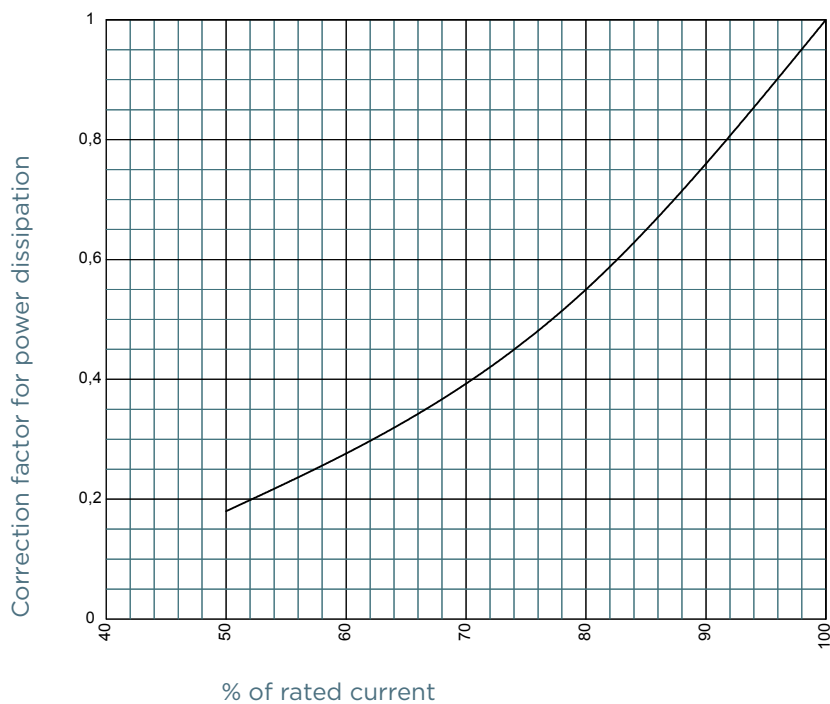
400 to 690VAC (IEC) / 700VAC (UL)

## POWER DISSIPATION

### Size 2x32



### Size 2x33



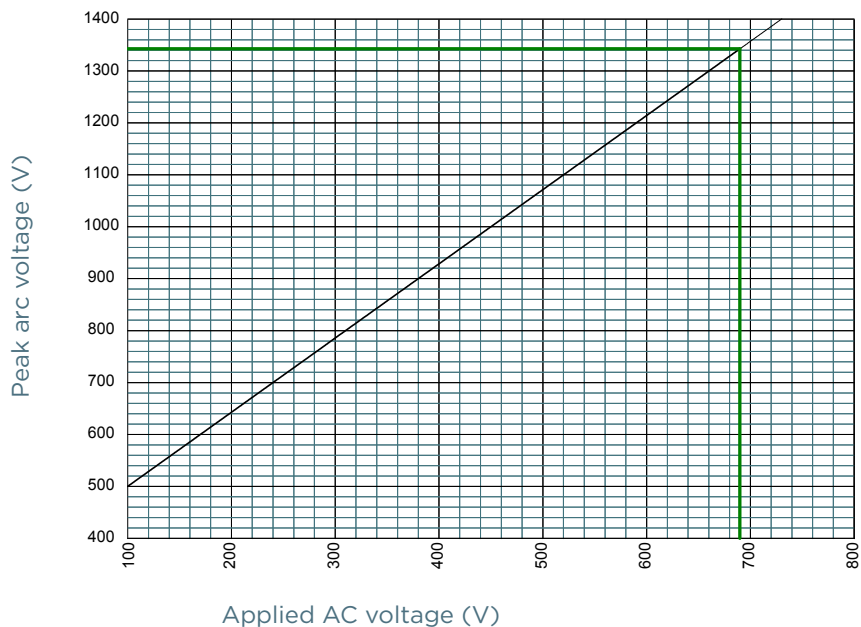
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# Protistor® size 2x32 and 2x33 aR

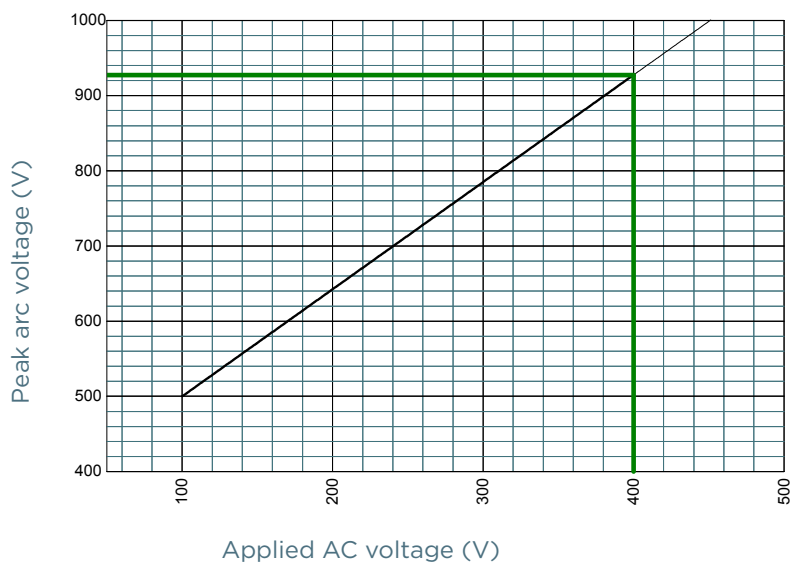
400 to 690VAC (IEC) / 700VAC (UL)

## PEAK ARC VOLTAGE

### Size 2x32



### Size 2x33

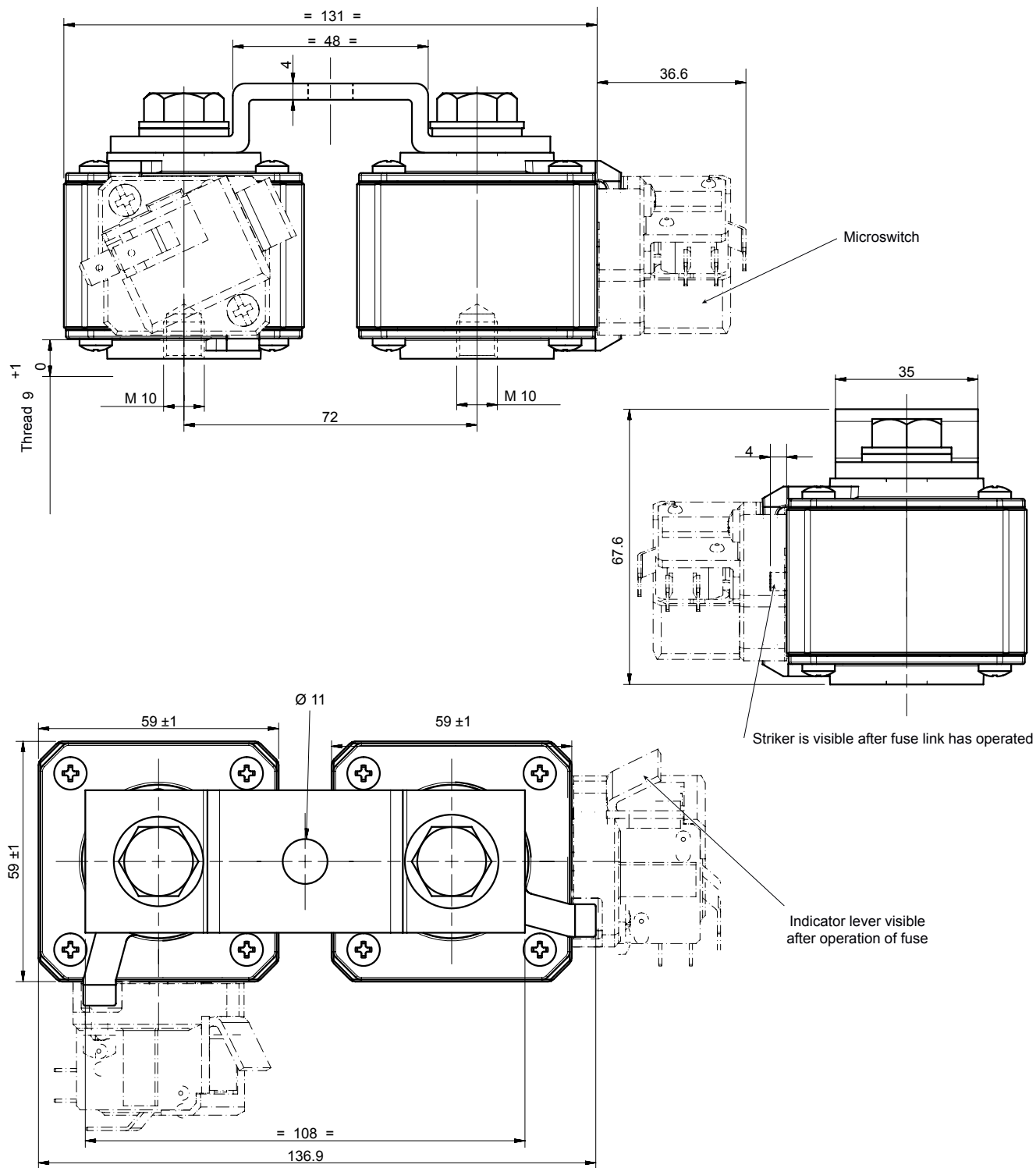


# Protistor® size 2x32 and 2x33 aR

400 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 2x32 aR TTF (102654)



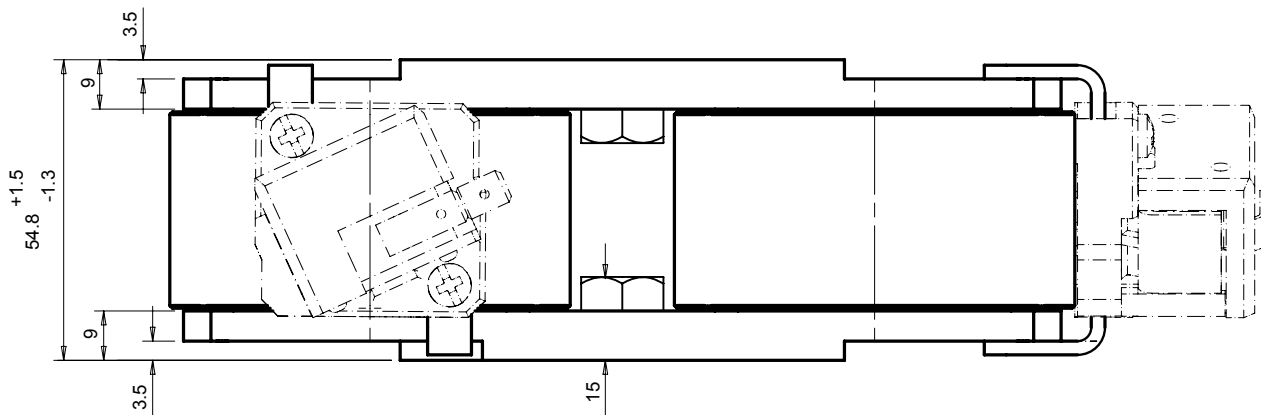
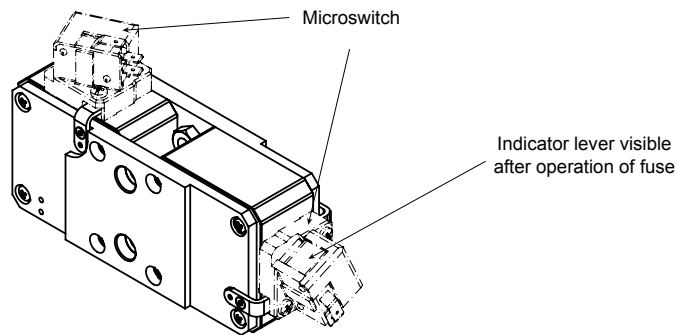
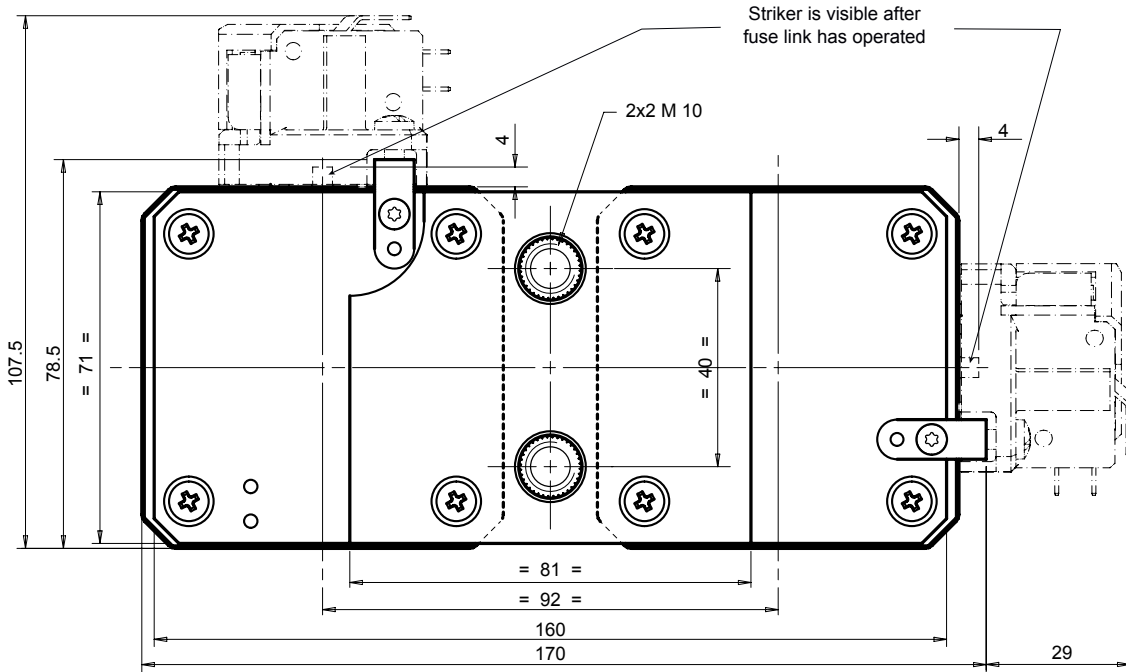
Dimensions in mm

# Protistor® size 2x32 and 2x33 aR

400 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 2x33 aR PLxF (105252)



Dimensions in mm

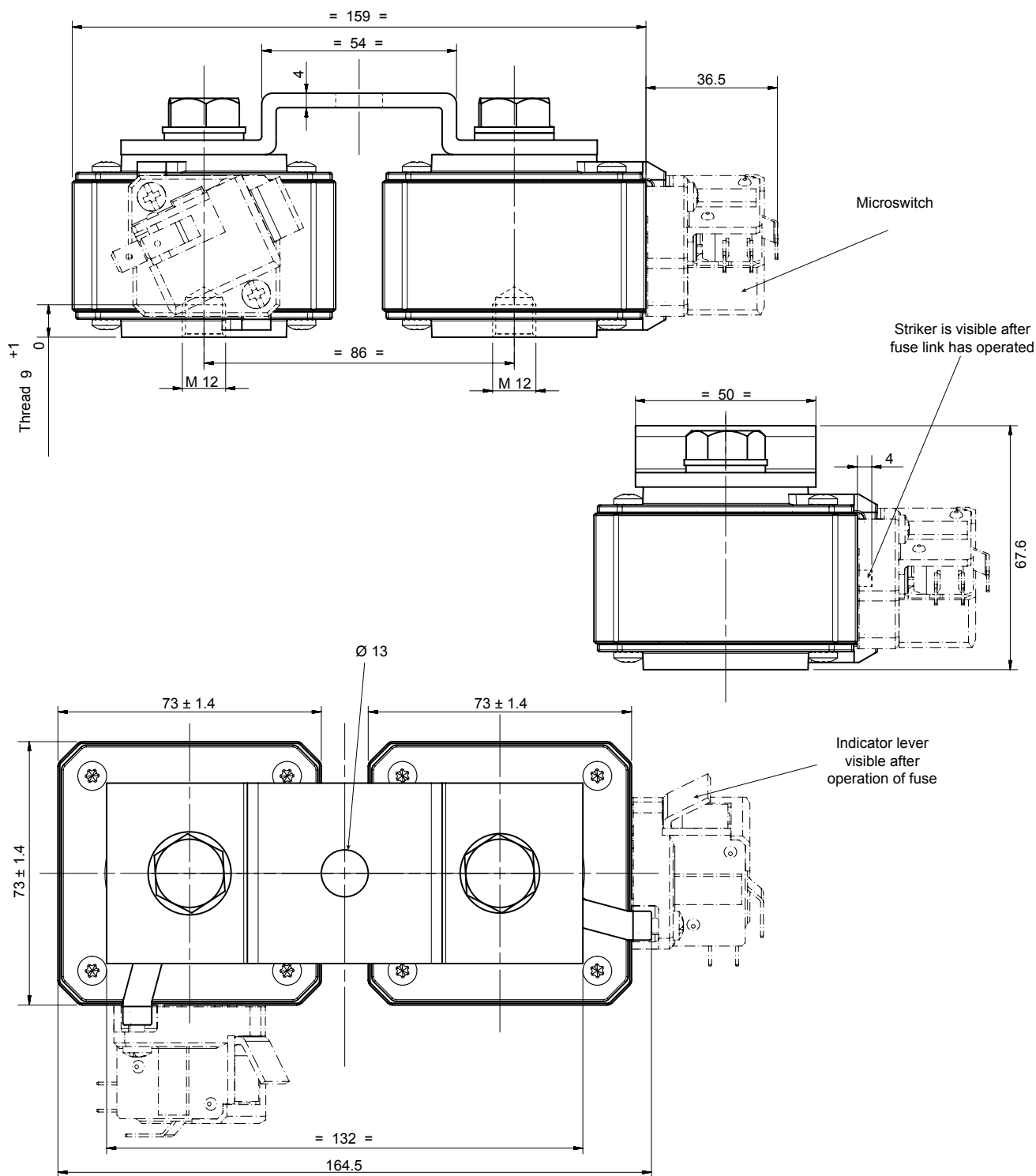
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

# Protistor® size 2x32 and 2x33 aR

400 to 690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

Size 2x33 aR TTF (102653)



Dimensions in mm

# Semiconductor & Special Protection

## Protistor® Square body fuse-links

### Size 44 aR 500 to 750VAC 1200 to 5750A

Data Sheet

The PSR-LR Protistor® fuse-links is a high performance range designed to provide the best flexibility in equipment design and ultimate protection for today's power conversion equipment.

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 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.



#### Benefits

- Ultra fast acting
- Highly Current limiting
- Very low  $I^2t$  for improved semiconductor protection
- Superior cycling capability
- aR Class according to VDE 636-23 and IEC 60269-4

#### Applications

Protection of inverters, UPS systems, motor drives and similar 750V or less equipment for standard 50/60Hz or specific low or high frequency applications.

#### Ratings

- 750V 1200 to 2400A
- 700V 2500 to 3000A
- 690V 3200 to 3500A
- 600V 3700 to 4200A
- 550V 4400 to 5000A
- 500V 5750A

#### Approvals

- UL/CSA Recognized Component
- AC: UL Guide No. E76491
- IEC 60269-4 Compliance
- RoHS Compliant



#### Related products

- Mounting accessories: Metric studs
- Monitoring: MC3E Microswitches

Packaging: 1 piece

# Semiconductor & Special Protection

## Protistor® Square body fuse-links

### Size 44 aR 500 to 750VAC 1200 to 5750A



Size	Rated Voltage (V)	Nominal Current (A)	Class	Catalog Number TTQF	Reference Number	Catalog Number PPASF	Reference Number PPASF
44	750	1200	aR	PC44UD75V12CTQ**	N229207**	PC44UD75V12CP1	*
44	750	1350	aR	PC44UD75V13CTQ**	E228854**	PC44UD75V13CP1	*
44	750	1600	aR	PC44UD75V16CTQ**	E229084**	PC44UD75V16CP1	*
44	750	1800	aR	PC44UD75V18CTQ**	C229266**	PC44UD75V18CP1	*
44	750	2000	aR	PC44UD75V20CTQ**	Y229078**	PC44UD75V20CP1**	R236386**
44	750	2200	aR	PC44UD75V22CTQ**	K235184**	PC44UD75V22CP1	*
44	750	2400	aR	PC44UD75V24CTQ**	W233906**	PC44UD75C24CP1**	F233685**
44	700	2500	aR	PC44UD70V25CTQ*/**	*/**	PC44UD70V25CP1	*
44	700	2700	aR	PC44UD70V27CTQ**	E239158**	PC44UD70V27CP1	*
44	700	3000	aR	PC44UD70V30CTQ**	M302829**	PC44UD70V30CP1**	S302857**
44	690	3200	aR	PC44UD69V32CTQ	S221805	PC44UD70V32CP1	E226738
44	690	3500	aR	PC44UD69V35CTQ	P232888	PC44UD69V35CP4	W221808
44	600	3700	aR	PC44UD60V37CTQ*	*	PC44UD60V37CP1*	*
44	600	4000	aR	PC44UD60V40CTQ	T228867	PC44UD60V40CP1	*
44	600	4200	aR	PC44UD60V42CTQ	R233902	PC44UD60V42CP1	*
44	550	4400	aR	PC44UD55V44CTQ	R221873	PC44UD55V44CP1	*
44	550	4700	aR	PC44UD55V47CTQ*	*	PC44UD55V47CP1*	*
44	550	5000	aR	PC44UD55V50CTQ	S221874	PC44UD55V50CP1	*
44	550	5500	aR	PC44UD55V55CTQ	-	PC44UD55V55CP1	P229668
44	500	5750	aR	PC44UD50V57CTQ	T221875	PC44UD50V57CP1	*

Size	Rated Voltage (V)	Nominal Current (A)	Breaking Capacity @ Rated Voltage (kA)	Pre-arcing I <sup>2</sup> t (A <sup>2</sup> s)	Clearing I <sup>2</sup> t @ Rated Voltage (A <sup>2</sup> s)	Watts Loss @ 100% In (W)
44	750	1200	215	109600	610000	285
44	750	1350	215	157900	890000	295
44	750	1600	215	289700	1600000	320
44	750	1800	215	417300	2320000	342
44	750	2000	215	580600	3250000	350
44	750	2200	215	741700	4100000	380
44	750	2400	215	987800	5500000	395
44	700	2500	200	1097000	5650000	405
44	700	2700	200	1348000	6900000	420
44	700	3000	200	1867000	9500000	440
44	690	3200	215	2221000	10500000	460
44	690	3500	215	3023000	14300000	480
44	600	3700	225	3472000	14200000	495
44	600	4000	225	4354000	18500000	510
44	600	4200	225	5000000	21200000	525
44	550	4400	227	6172000	24000000	540
44	550	4700	227	7525000	29000000	550
44	550	5000	227	9644000	37300000	570
44	550	5500	227	9644000	37300000	660
44	500	5750	230	13880000	49500000	650

\*For availability please consult us

\*\*Ratings UL Recognized at 700V

# Semiconductor & Special Protection

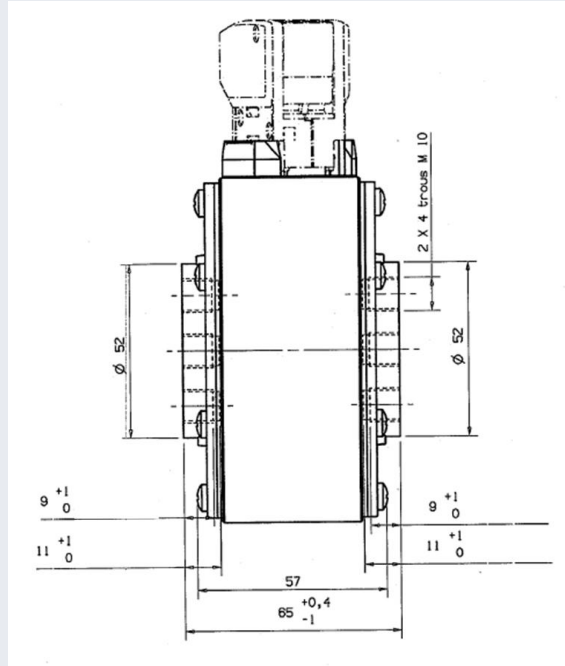
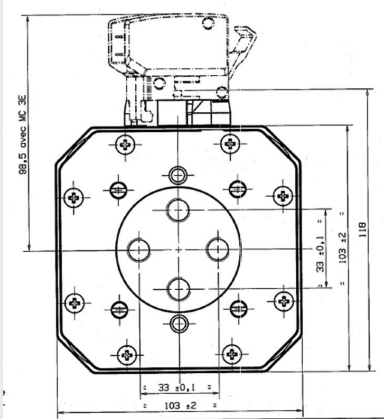
## Protistor® Square body fuse-links

Size 44 aR 500 to 750VAC 1200 to 5750A

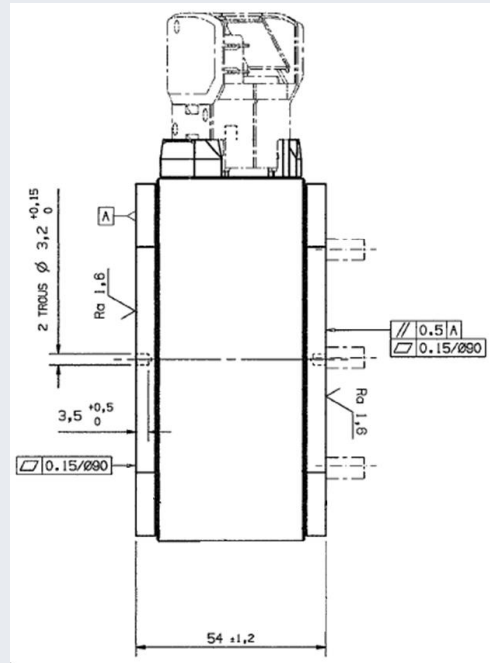
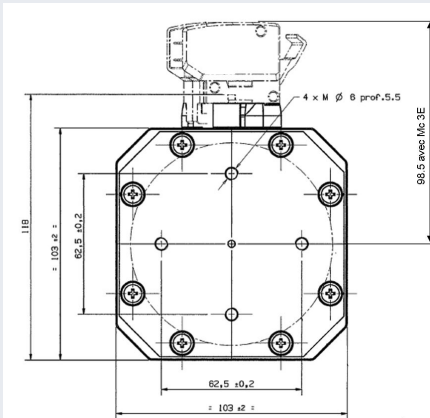


Dimensions (mm)

TTQF



PPASF



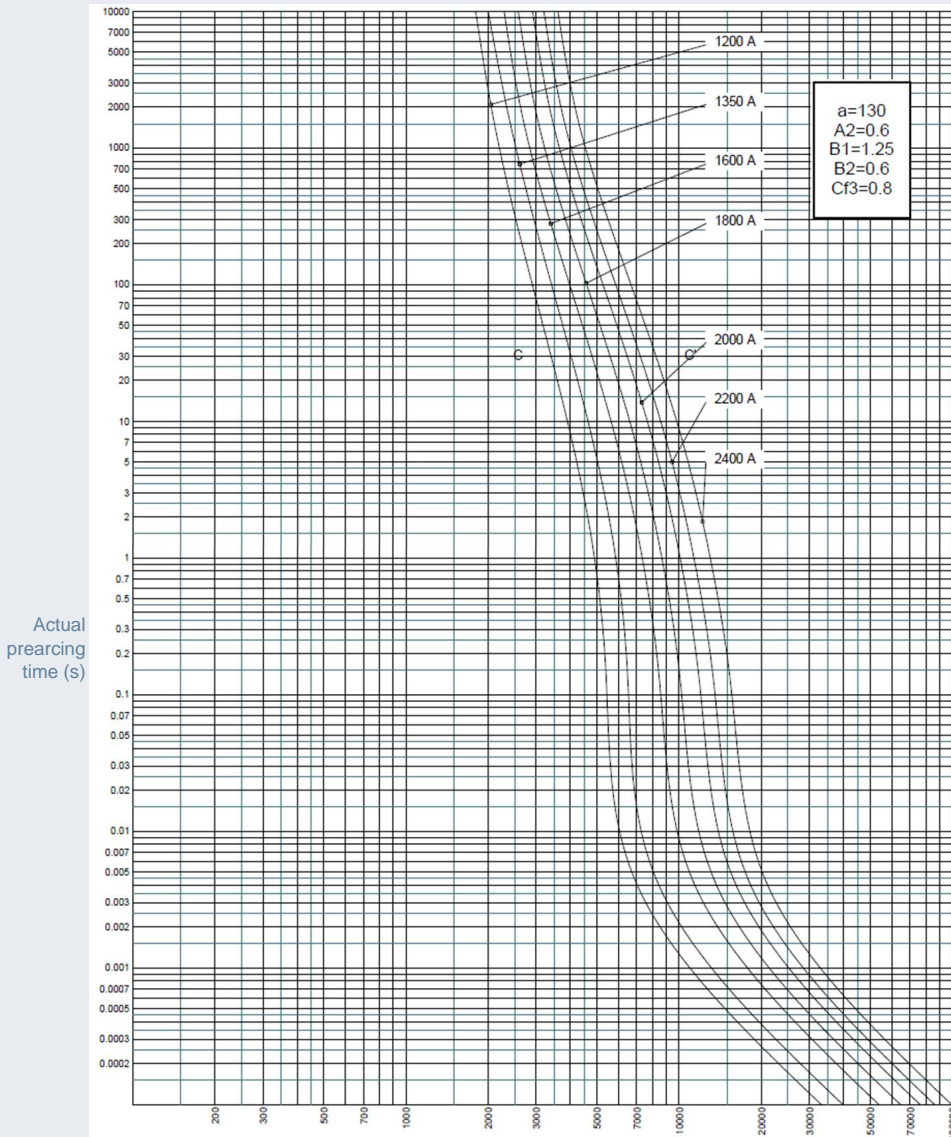
# Semiconductor & Special Protection

## Protistor® Square body fuse-links

### Size 44 aR 500 to 750VAC 1200 to 5750A

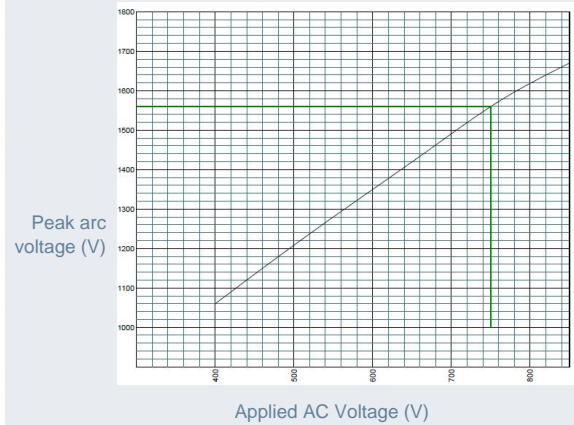


Time current characteristics  
750V 1200 to 2400A



rms value of prearc current (A) ± 10%

Peak arc voltage  
750V 1200 to 2400A



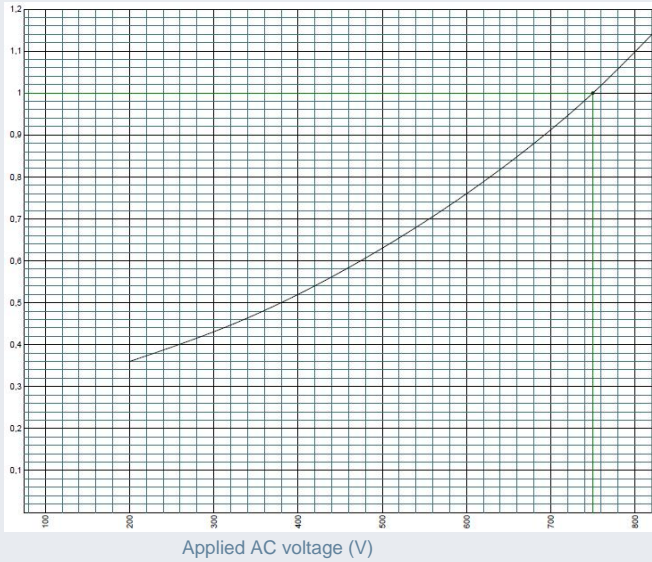
# Semiconductor & Special Protection

## Protistor® Square body fuse-links

### Size 44 aR 500 to 750VAC 1200 to 5750A

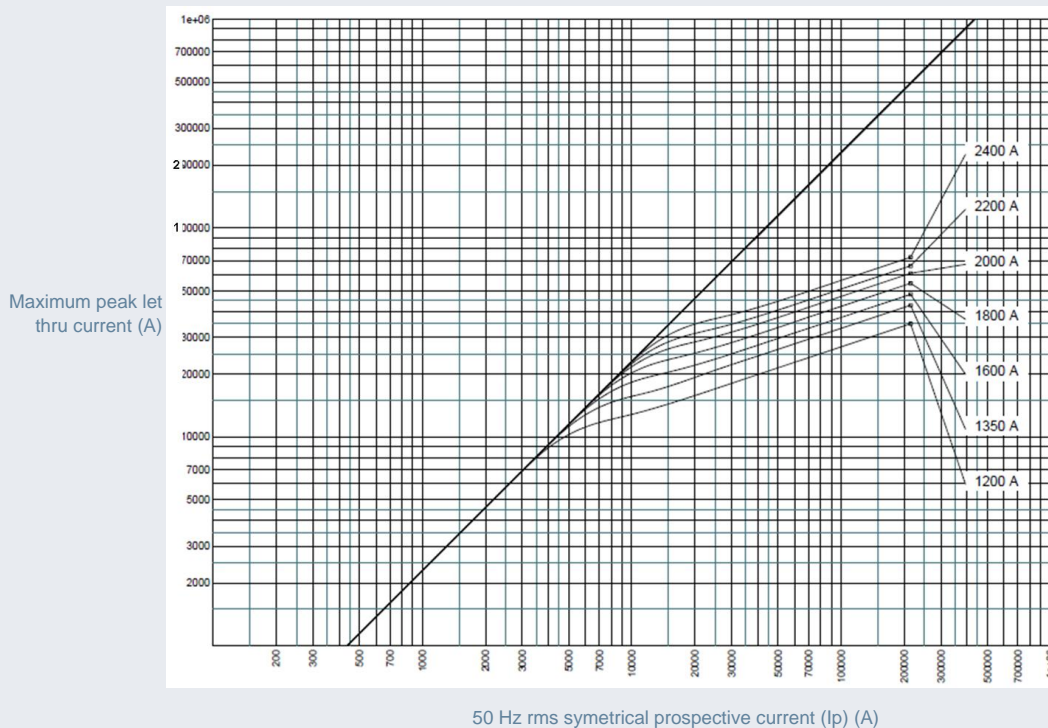


**I<sup>2</sup>t multiplier coefficient**  
750V 1200 to 2400A



Clearing I<sup>2</sup>t and arcing time correction factor

**Peak let thru characteristics**  
750V 1200 to 2400A



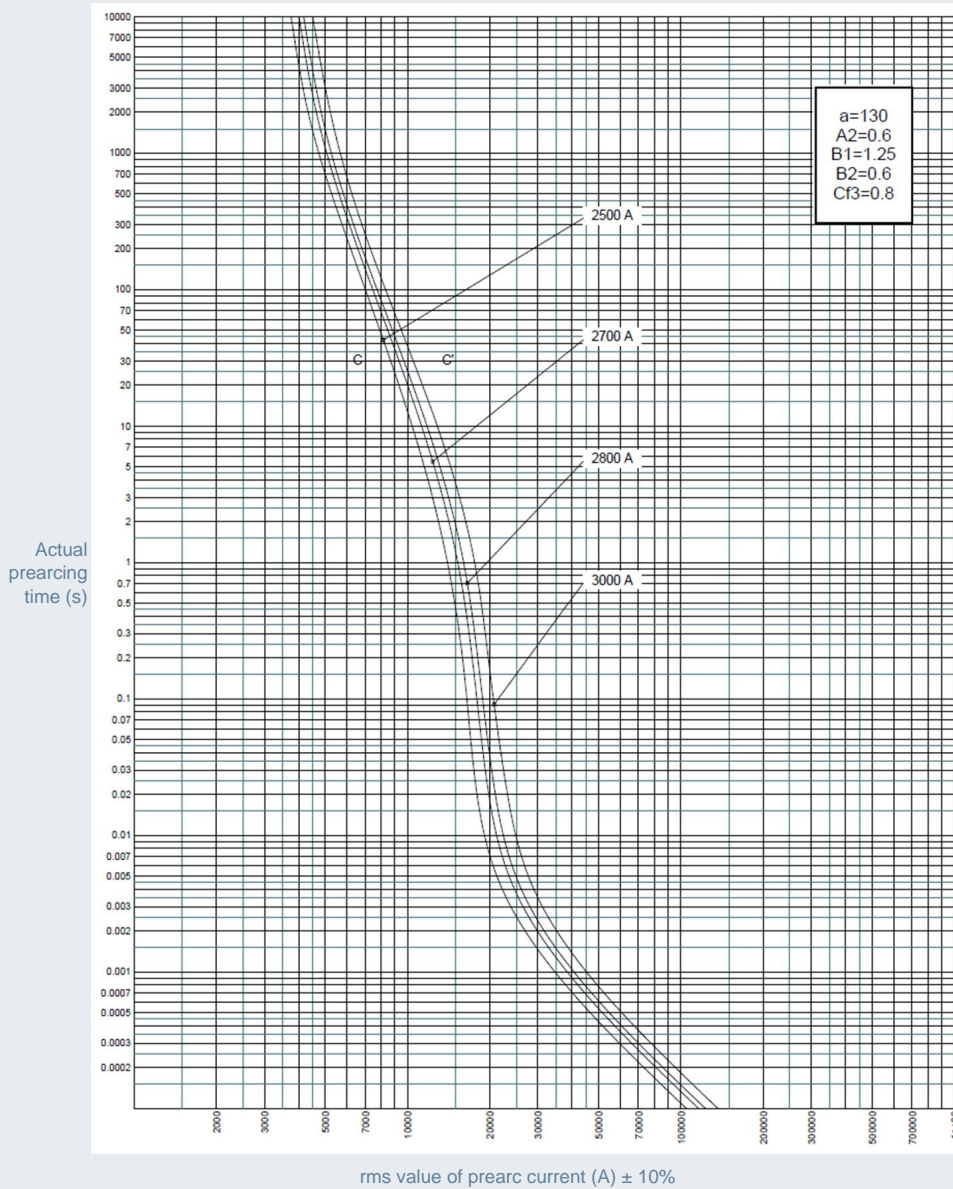
# Semiconductor & Special Protection

## Protistor® Square body fuse-links

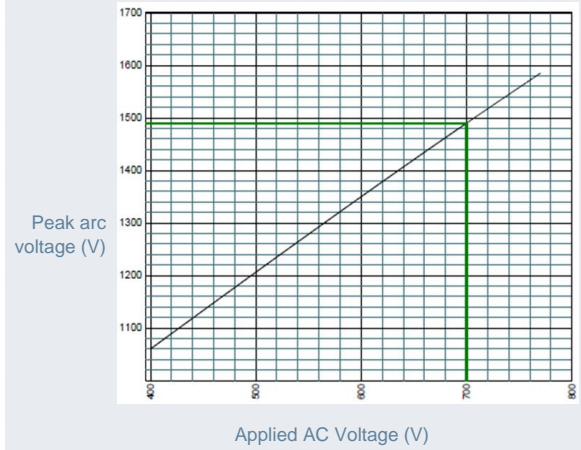
### Size 44 aR 500 to 750VAC 1200 to 5750A



Time current characteristics  
700V 2500 to 3000A



Peak arc voltage  
700V 2500 to 3000A



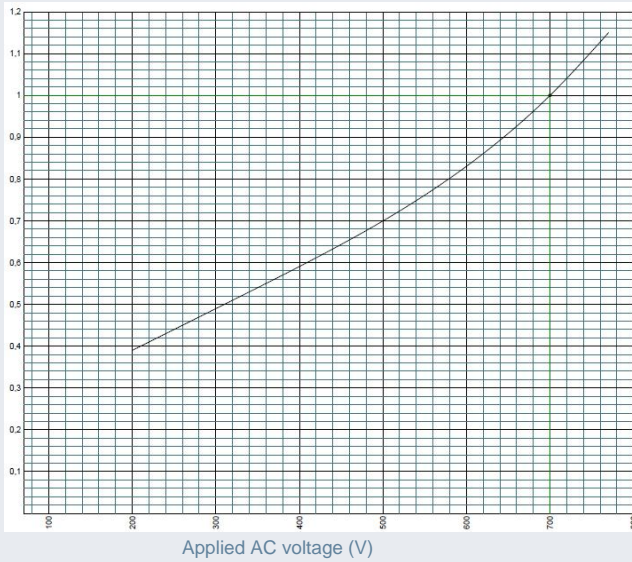
# Semiconductor & Special Protection

## Protistor® Square body fuse-links

### Size 44 aR 500 to 750VAC 1200 to 5750A

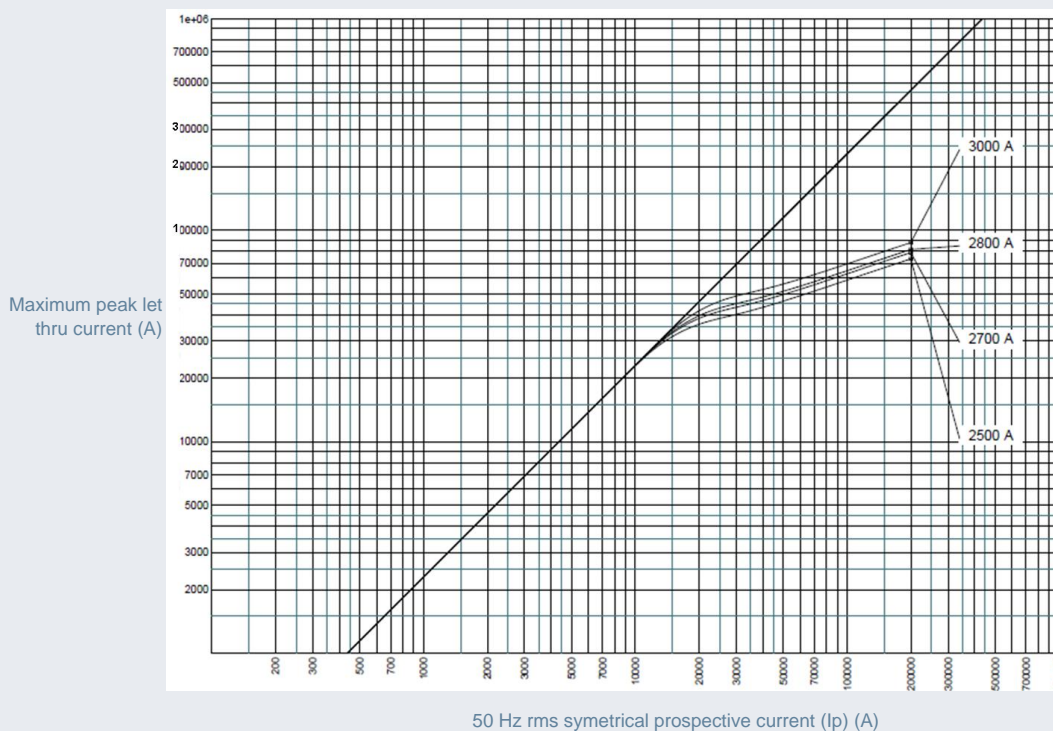


**I<sup>2</sup>t multiplier coefficient**  
700V 2500 to 3000A



Clearing I<sup>2</sup>t and arcing time correction factor

**Peak let thru characteristics**  
700V 2500 to 3000A



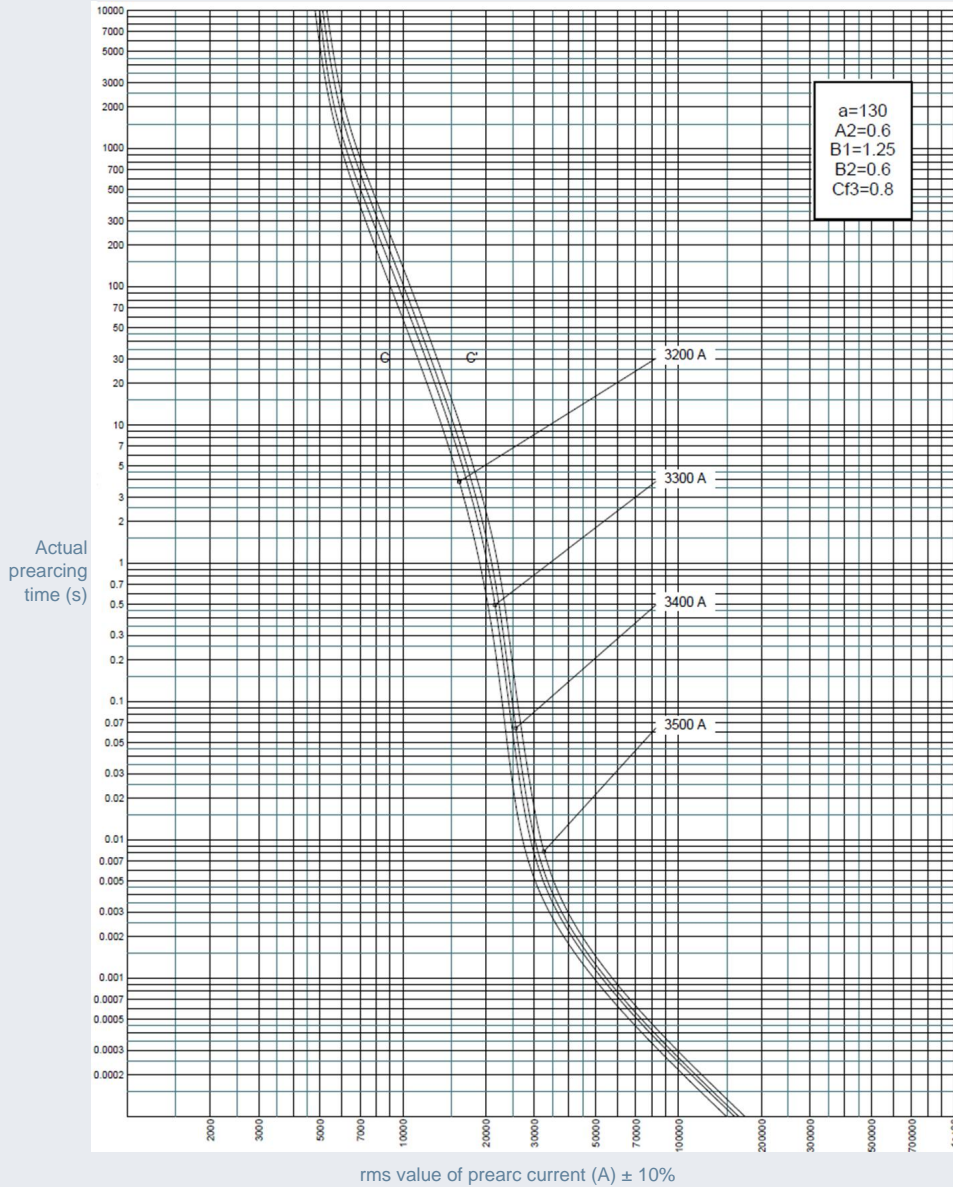
# Semiconductor & Special Protection

## Protistor® Square body fuse-links

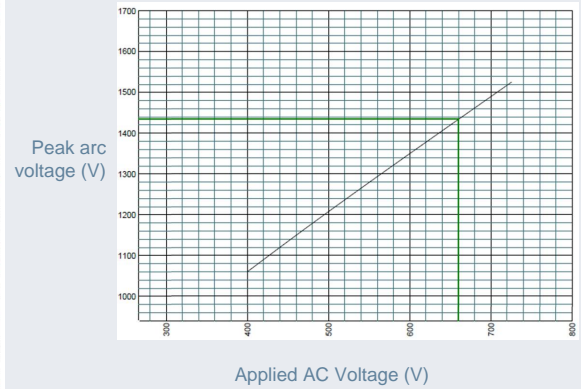
Size 44 aR 500 to 750VAC 1200 to 5750A



Time current characteristics  
690V 3200 to 3500A



Peak arc voltage  
690V 3200 to 3500A



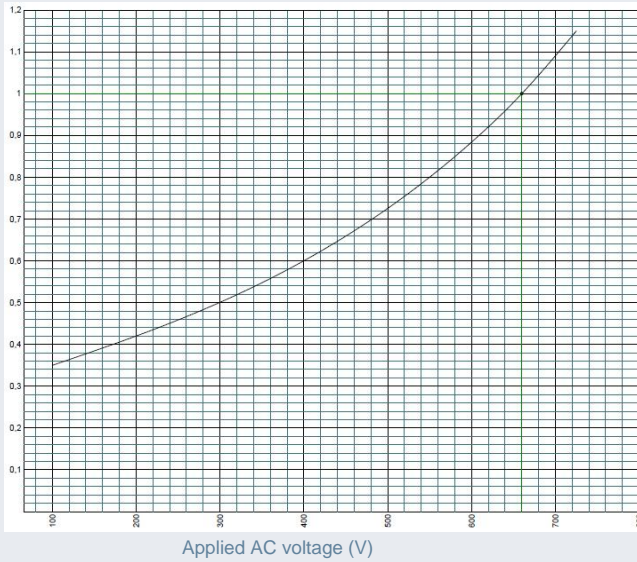
# Semiconductor & Special Protection

## Protistor® Square body fuse-links

### Size 44 aR 500 to 750VAC 1200 to 5750A

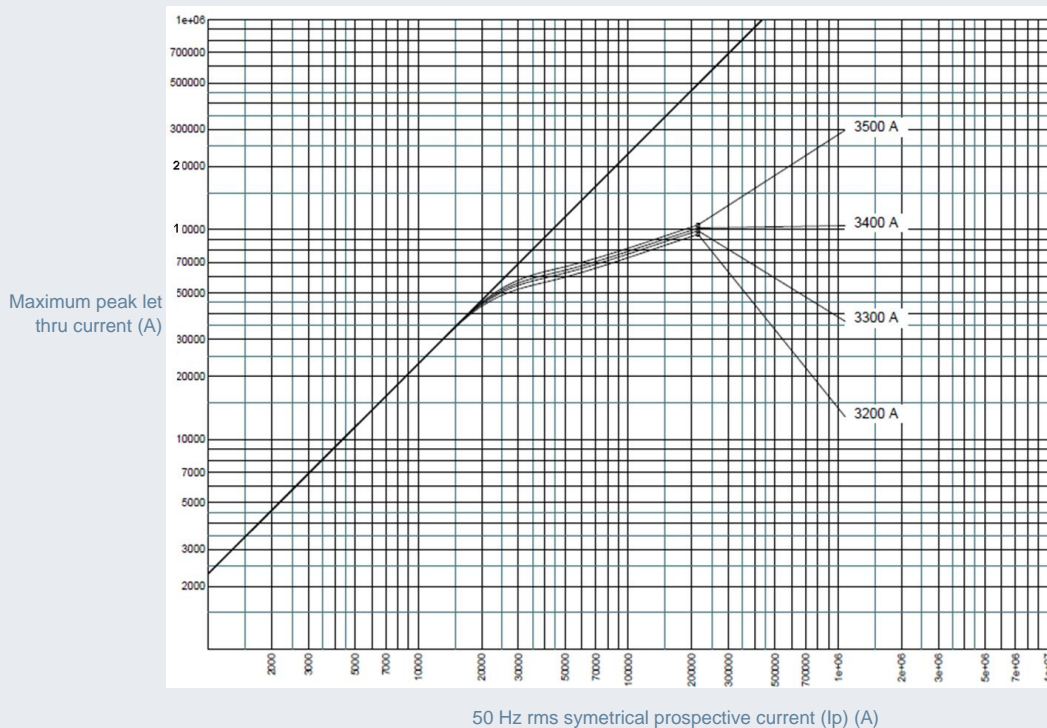


**I<sup>2</sup>t multiplier coefficient**  
690V 3200 to 3500A



Clearing I<sup>2</sup>t and arcing time correction factor

**Peak let thru characteristics**  
690V 3200 to 3500A



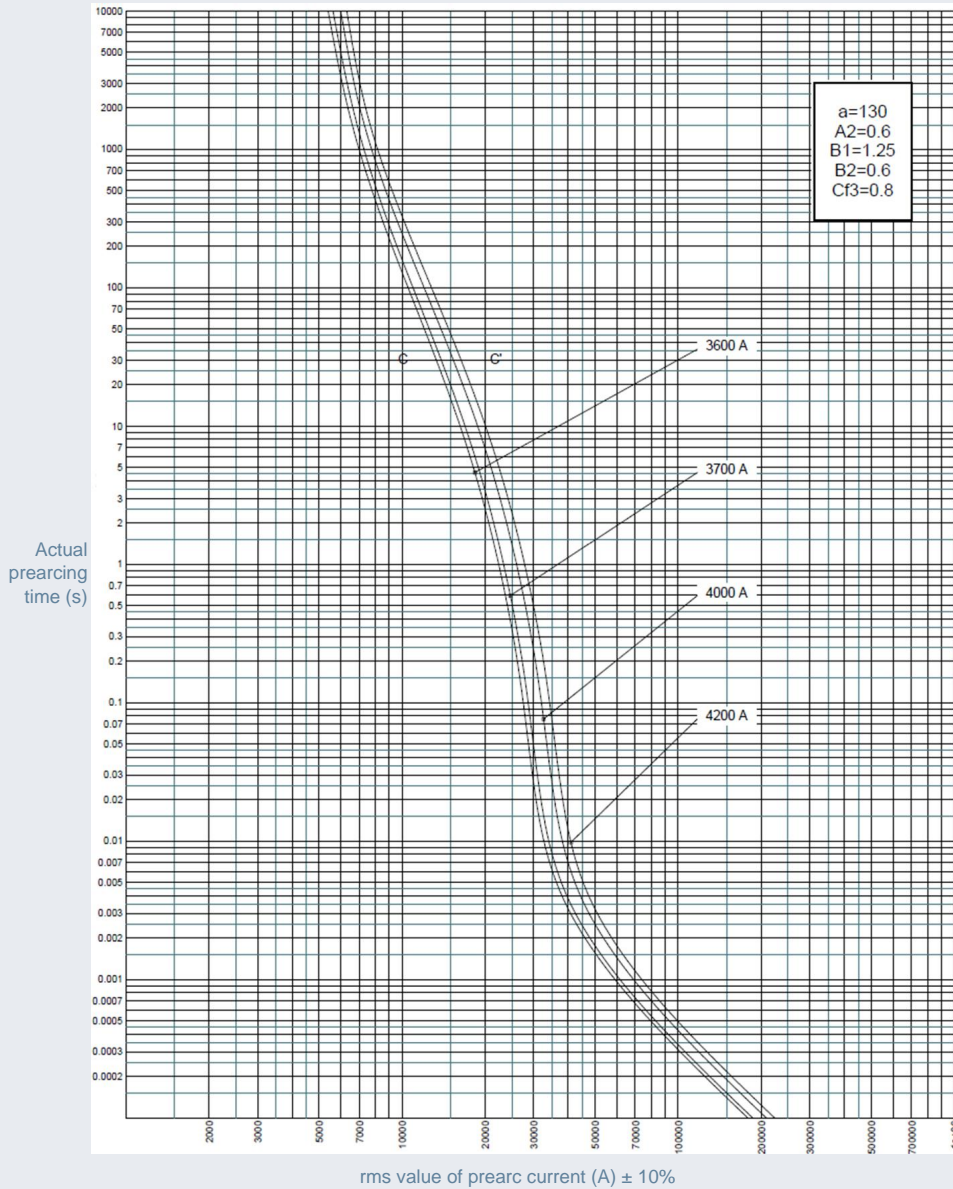
# Semiconductor & Special Protection

## Protistor® Square body fuse-links

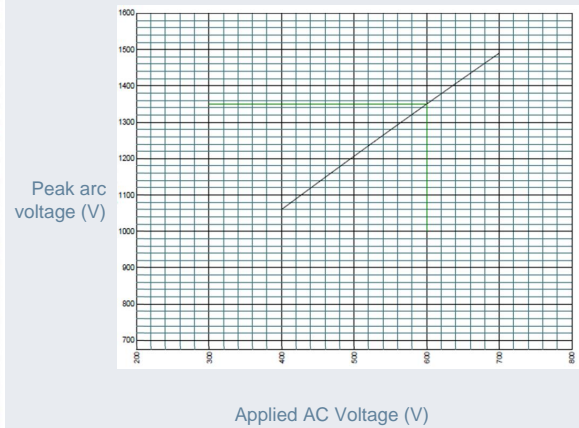
### Size 44 aR 500 to 750VAC 1200 to 5750A



Time current characteristics  
600V 3600 to 4200A



Peak arc voltage  
600V 3600 to 4200A



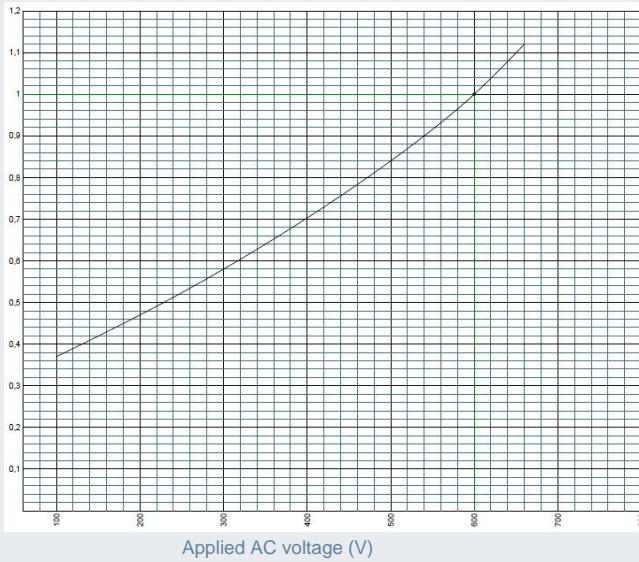
# Semiconductor & Special Protection

## Protistor® Square body fuse-links

### Size 44 aR 500 to 750VAC 1200 to 5750A

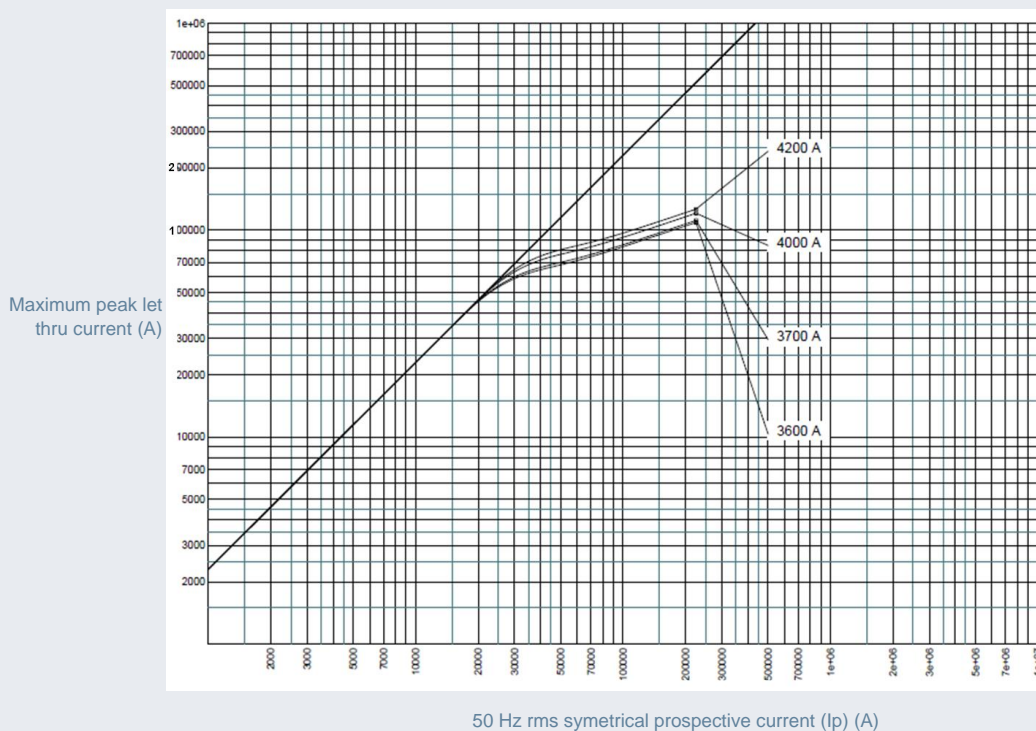


**I<sup>2</sup>t multiplier coefficient**  
600V 3600 to 4200A



Clearing I<sup>2</sup>t and arcing time correction factor

**Peak let thru characteristics**  
600V 3600 to 4200A



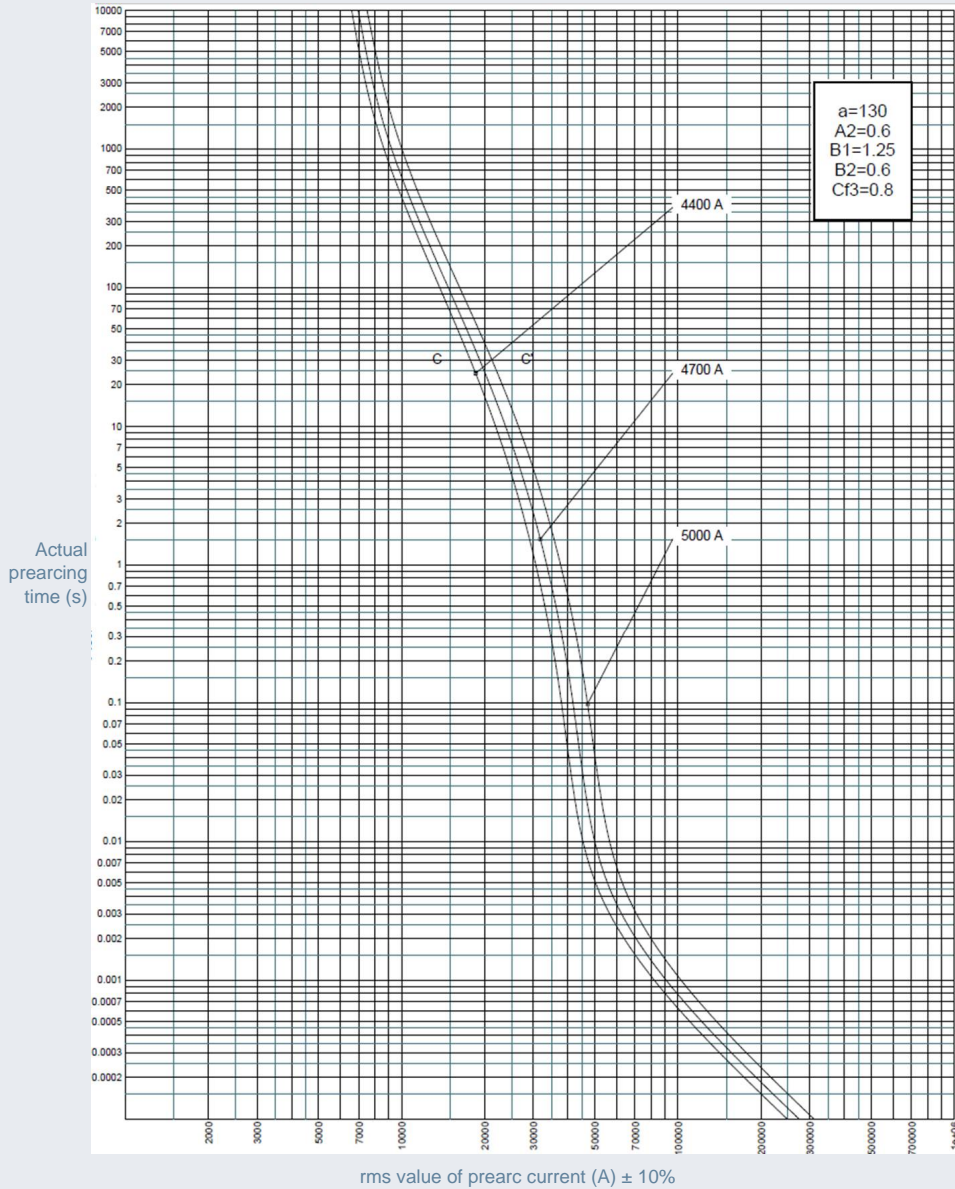
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## Protistor® Square body fuse-links

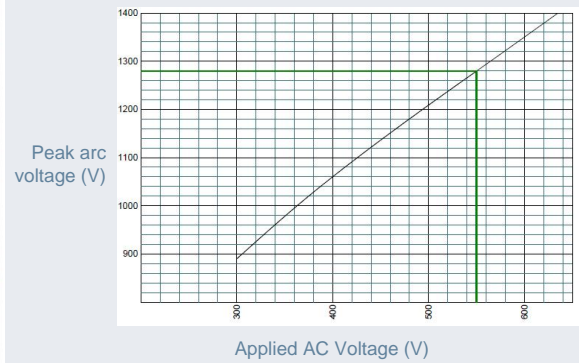
### Size 44 aR 500 to 750VAC 1200 to 5750A



Time current characteristics  
550V 4400 to 5000A



Peak arc voltage  
550V 4400 to 5000A



# Semiconductor & Special Protection

## Protistor® Square body fuse-links

Size 44 aR 500 to 750VAC 1200 to 5750A

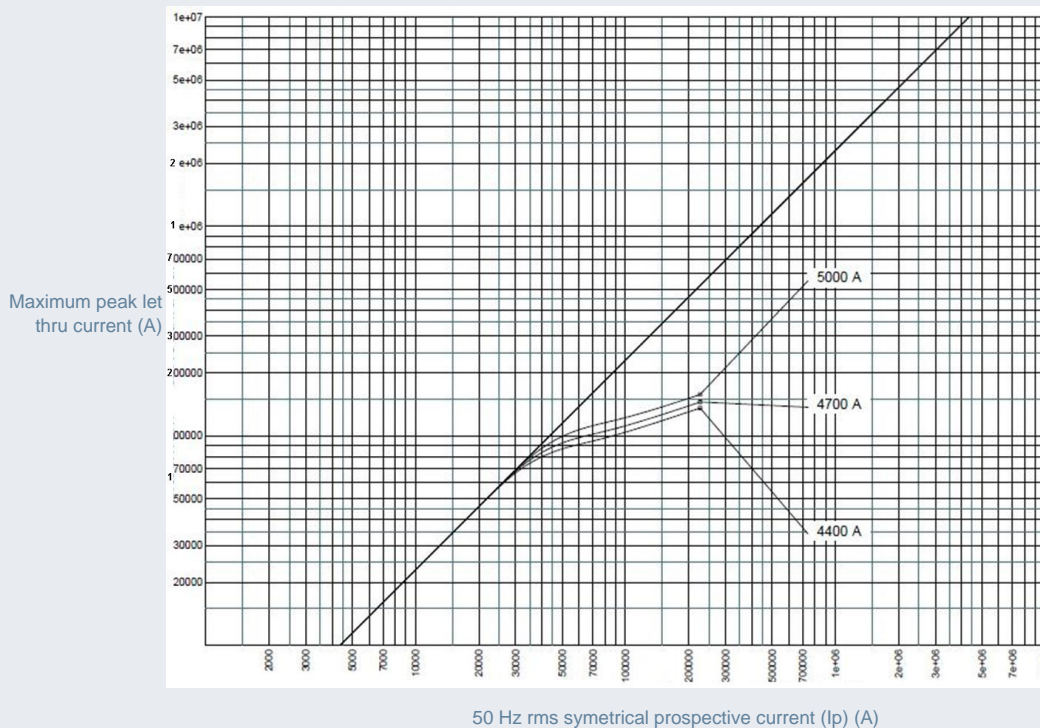


**I<sup>2</sup>t multiplier coefficient**  
550V 4400 to 5000A



Clearing I<sup>2</sup>t and arcing time correction factor

**Peak let thru characteristics**  
550V 4400 to 5000A



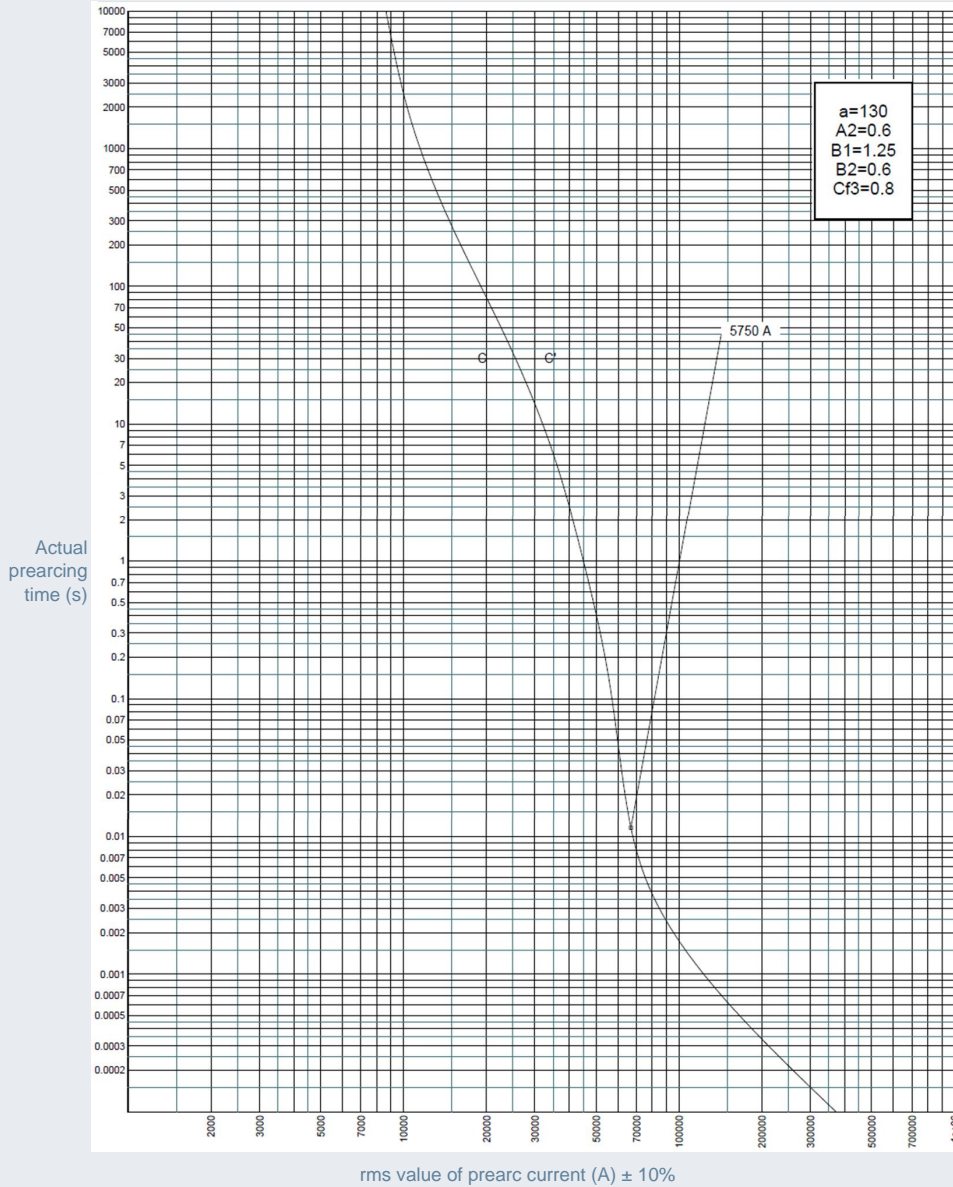
# Semiconductor & Special Protection

## Protistor® Square body fuse-links

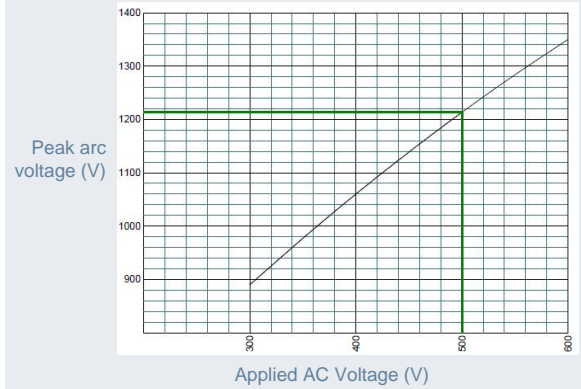
Size 44 aR 500 to 750VAC 1200 to 5750A



Time current characteristics  
500V 5750A



Peak arc voltage  
500V 5750A



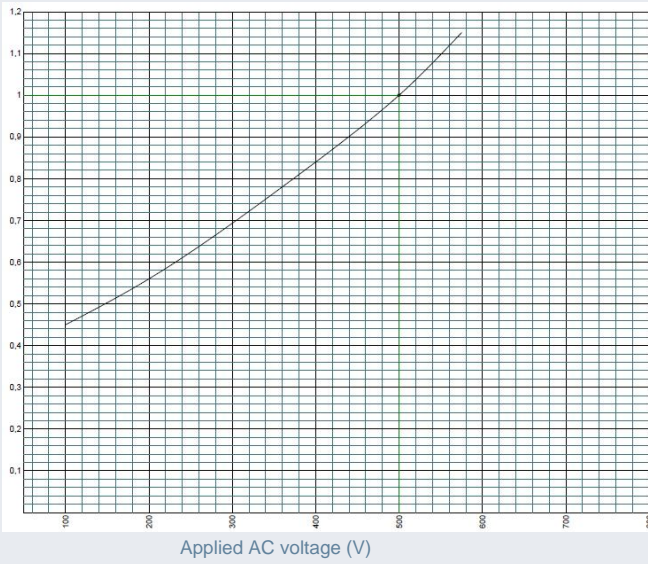
# Semiconductor & Special Protection

## Protistor® Square body fuse-links

### Size 44 aR 500 to 750VAC 1200 to 5750A



**I<sup>2</sup>t multiplier coefficient  
500V 5750A**



Clearing I<sup>2</sup>t and arcing time correction factor

**Peak let thru characteristics  
500V 5750A**

