

# Wkładki topikowe DIN80 NH 690V AC aR

**Typ:** DIN80 NH000-NH3

**Charakterystyka:** aR

**Prąd znamionowy:** 10-1400A

**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

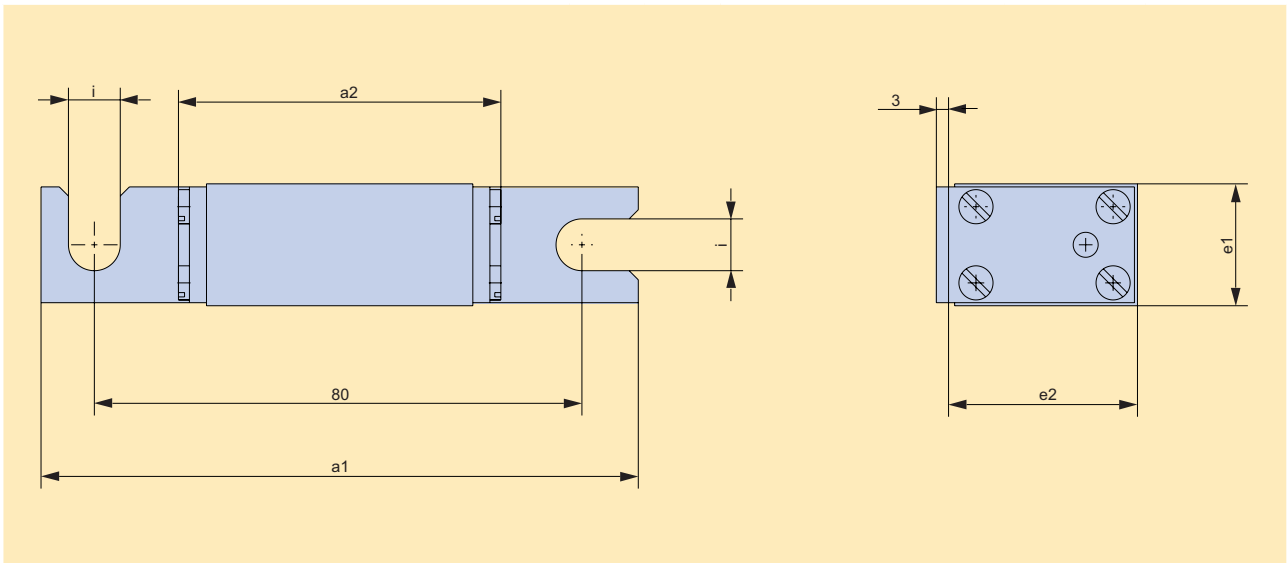
U <sub>n</sub>	Wielkość	I <sub>n</sub> [A]	Całk Joule`a wyłączenia I <sup>2</sup> t[A <sup>2</sup> s]	Całk Joule`a przedlukowa I <sup>2</sup> t[A <sup>2</sup> s]	Straty mocy P <sub>n</sub> [W]	Opakowanie	Typ	Wskaźnik	
								Wskaźnik górny	Przy górnym zaczepie (L)
								Nr artykułu	Nr artykułu
690V	00	10	26	4	3,0	3	S00C+/üf0/10A/690V	R5081753	R5081726
		16	50	8	4,0		S00C+/üf0/16A/690V	R5082253	R5082226
		20	110	11	5,0		S00C+/üf0/20A/690V	R5082453	R5082426
		25	200	38	6,0		S00C+/üf0/25A/690V	R5082653	R5082626
		32	330	49	7,0		S00C+/üf0/32A/690V	R5082953	R5082926
		35	550	64	7,9		S00C+/üf0/35A/690V	R5083153	R5083126
		40	600	110	8,8		S00C+/üf0/40A/690V	R5083453	R5083426
		50	1.200	175	10,0		S00C+/üf0/50A/690V	R5083553	R5083526
		63	1.700	300	13,0		S00C+/üf0/63A/690V	R5083853	R5083826
		80	2.900	490	17,0		S00C+/üf0/80A/690V	R5084153	R5084126
		100	5.500	800	20,0		S00C+/üf0/100A/690V	R5084353	R5084326
		125	10.500	1.400	27,5		S00C+/üf0/125A/690V	R5084653	R5084626
		160	18.000	3.200	32,0		S00C+/üf0/160A/690V	R5084953	R5084926
		200	31.000	4.000	38,0		S00C+/üf0/200A/690V	R5085253	R5085226
		250	57.000	7.800	43,0		S00C+/üf0/250A/690V	R5085653	R5085626
		315	81.000	10.800	54,0		S00C+/üf0/315A/690V	R5085953	R5085926
		350	90.000	11.300	60,0		S00üf0/350A/690V	R5086023	R5086026
500V		400	125.000	20.000	70,0	S00üf0/400A/500V	R5016223	R5016026	

Wkładki topikowe przykręcane aR 690V AC

U <sub>n</sub>	Wielkość	I <sub>n</sub> [A]	Całk. Joule`a wyłączenia I <sup>2</sup> t[A <sup>2</sup> s]	Całk. 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 z przodu
								Nr artykułu	Nr artykułu
690V	1	80	2.400	390	16,0	1	S1üf0/80/80A/690V	R1084123	R1084124
		100	4.600	700	20,0		S1üf0/80/100A/690V	R1084323	R1084324
		125	6.800	1.000	25,0		S1üf0/80/125A/690V	R1084623	R1084624
		160	10.500	1.700	32,0		S1üf0/80/160A/660V	R1084923	R1084924
		200	18.500	2.700	40,0		S1üf0/80/200A/690V	R1085223	R1085224
		250	31.000	5.000	50,0		S1üf0/80/250A/690V	R1085623	R1085624
		315	54.000	8.000	60,0		S1üf0/80/315A/690V	R1085923	R1085924
		350	72.000	11.000	63,0		S1üf0/80/350A/690V	R1086023	R1086024
		400	105.000	16.000	67,0		S1üf0/80/400A/690V	R1086223	R1086224
		450	155.000	22.000	71,0		S1üf0/80/450A/690V	R1086423	R1086424
		500	205.000	31.000	74,0		S1üf0/80/500A/690V	R1086623	R1086624
		550	190.000	36.000	86,0		S1üf0/80/550A/690V	R1086723	R1086724
		630	345.000	50.000	88,0		S1üf0/80/630A/690V	R1086923	R1086924
		710	480.000	63.000	91,0		S1üf0/80/710A/690V	R1087023	R1087024
		2	400	82.000	11.000		70,0	1	S2üf0/80/400A/690V
	450		125.000	17.500	74,0	S2üf0/80/450A/690V	R2086423		R2086424
	500		170.000	22.000	80,0	S2üf0/80/500A/690V	R2086623		R2086624
	550		190.000	36.000	86,0	S2üf0/80/550A/690V	R2086723		R2086724
	630		305.000	44.000	85,0	S2üf0/80/630A/690V	R2086923		R2086924
	710		480.000	63.000	91,0	S2üf0/80/710A/690V	R2087023		R2087024
	800		710.000	98.000	95,0	S2üf0/80/800A/690V	R2087223		R2087224
	900		920.000	178.000	115,0	S2üf0/80/900A/690V	R2087423		R2087424
	3	1000	1.300.000	235.000	124,0	3	S2üf0/80/1000A/690V	R2087623	R2087624
		630	240.000	33.000	101,0		S3üf0/80/630A/690V	R3086923	R3086924
		710	340.000	50.000	112,0		S3üf0/80/710A/690V	R3087023	R3087024
		800	510.000	71.000	118,0		S3üf0/80/800A/690V	R3087223	R3087224
		900	710.000	130.000	118,0		S3üf0/80/900A/690V	R3087423	R3087424
		1000	1.100.000	150.000	127,0		S3üf0/80/1000A/690V	R3087623	R3087624
		1250	2.300.000	310.000	150,0		S3üf0/80/1250A/690V	R3087923	R3087924
	1400	2.600.000	455.000	156,0	S3üf0/80/1400A/690V	R3088123	R3088124		

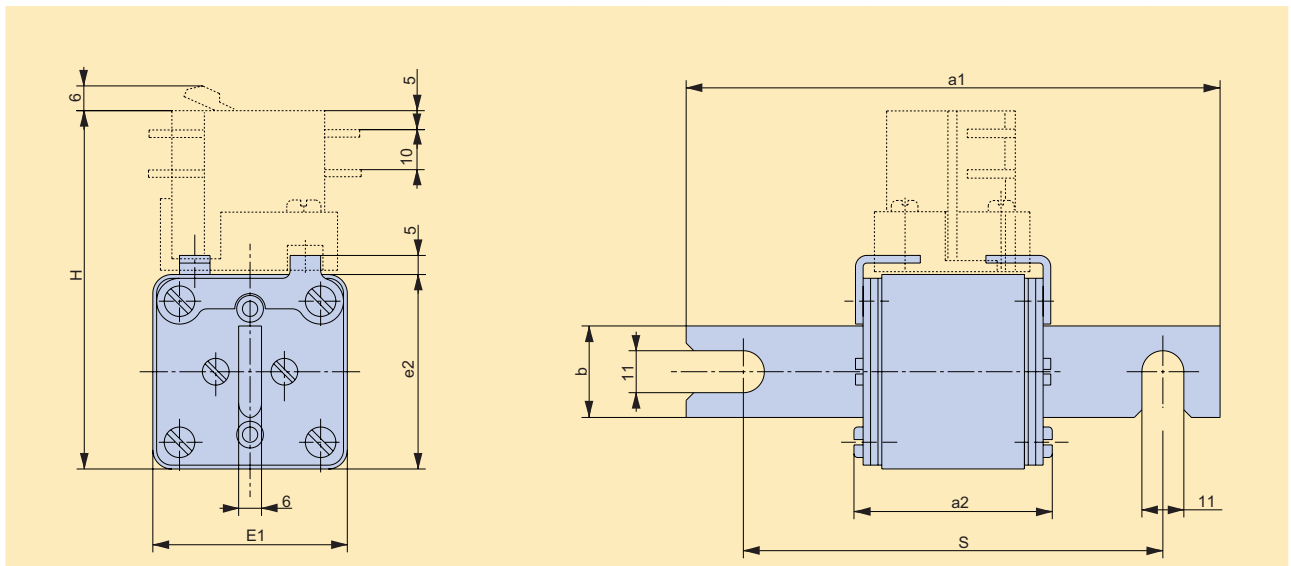
### Dane techniczne

Typ			S00C+üf0.../690V(L)	S00üf0.../690V(L)	
Wielkość			NH00		
Napięcie znamionowe	$U_n$	V	AC690	AC500	
Prąd znamionowy	$I_n$	A	10-315	350	400
Zwarciova zdolność wyłączenia	-	kA	100		
Charakterystyka			aR		
Normy			IEC/PN 60269-1 IEC/PN 60269-4 DIN VDE 0636-2		
Rozstaw otworów do przykręcenia	S		80	80	
Wymiary	a1	mm	101	105	
	a2		54	56	
	e1		21	29	
	e2		40	47	
	i		8,5	11	
Waga	-	g	150	250	

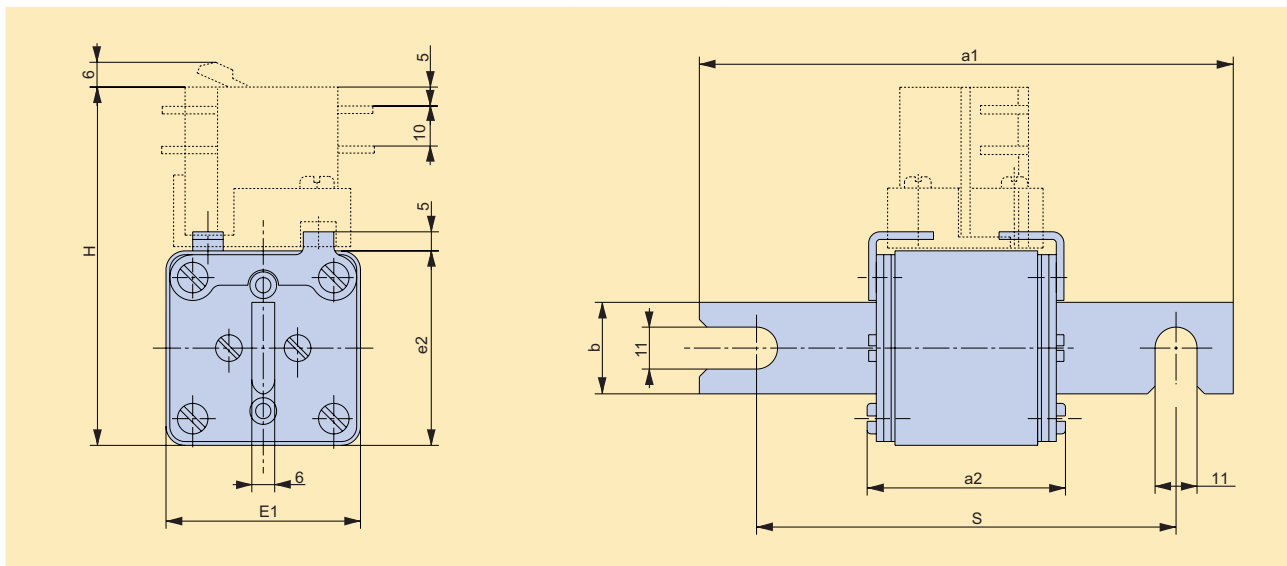


### Dane techniczne

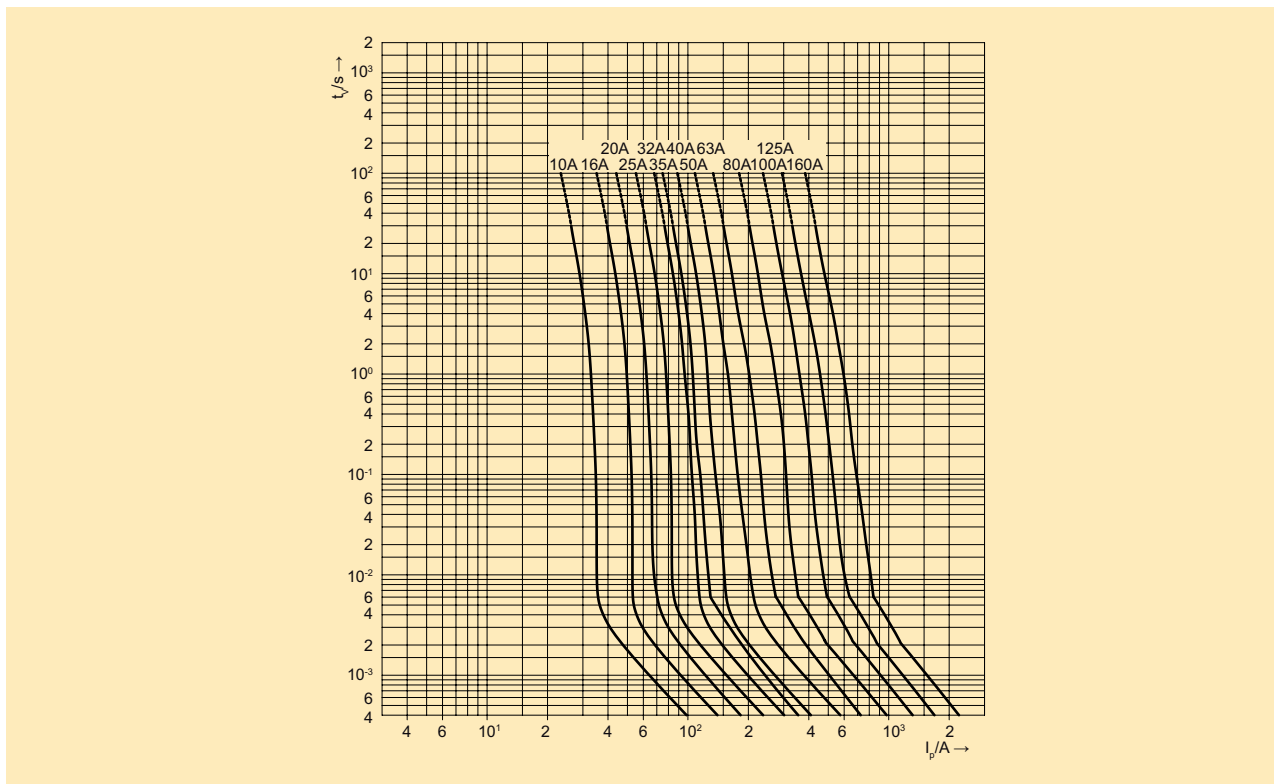
Typ			S1(M)üf0/80/.../690V	S2(M)üf0/80/.../690V
Wielkość			NH1	NH2
Napięcie znamionowe	$U_n$	V	AC690	AC690
Prąd znamionowy	$I_n$	A	80-710	400-1000
Zwarciova zdolność wyłączenia	-	kA	100	
Charakterystyka			aR	
Normy			IEC/PN 60269-1 IEC/PN 60269-4 DIN VDE 0636-2	
Rozstaw otworów do przykręcania	S	mm	80	80
Wymiary	a1	mm	110	110
	a2		52	52
	e1 e2		51	60
	b		24	30
	H		90	99
Waga	-	g	500	650



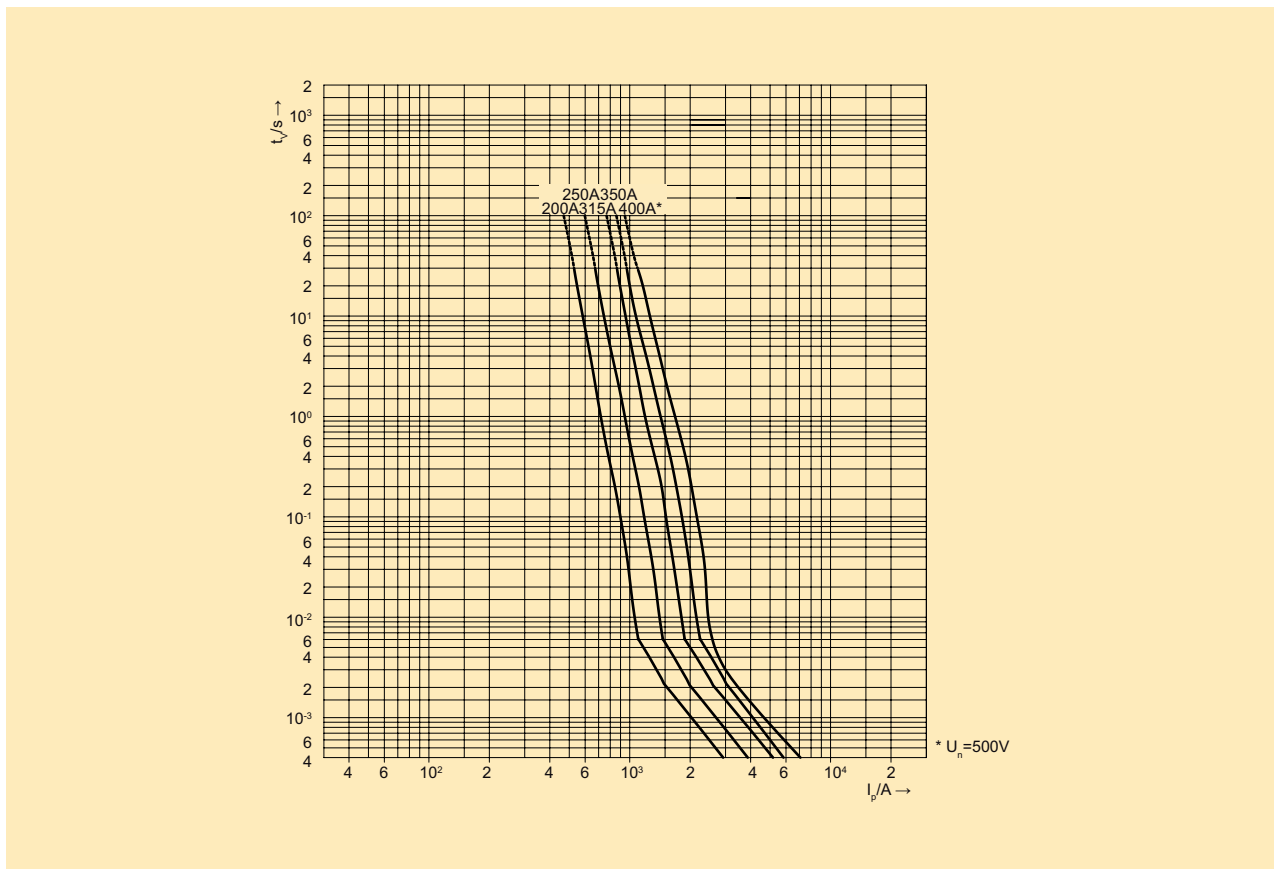
Typ			S3(M)üf0/80/.../690V
Wielkość			NH3
Napięcie znamionowe	$U_n$	V	AC690
Prąd znamionowy	$I_n$	A	630-1400
Zwarciova zdolność wyłączenia	-	kA	100
Charakterystyka			aR
Normy			IEC/PN 60269-1 IEC/PN 60269-4 DIN VDE 0636-2
Rozstaw otworów do przykręcania	S	mm	80
Wymiary	a1	mm	110
	a2		52
	e1 e2		75
	b		37
	H		114
Waga	-	g	850



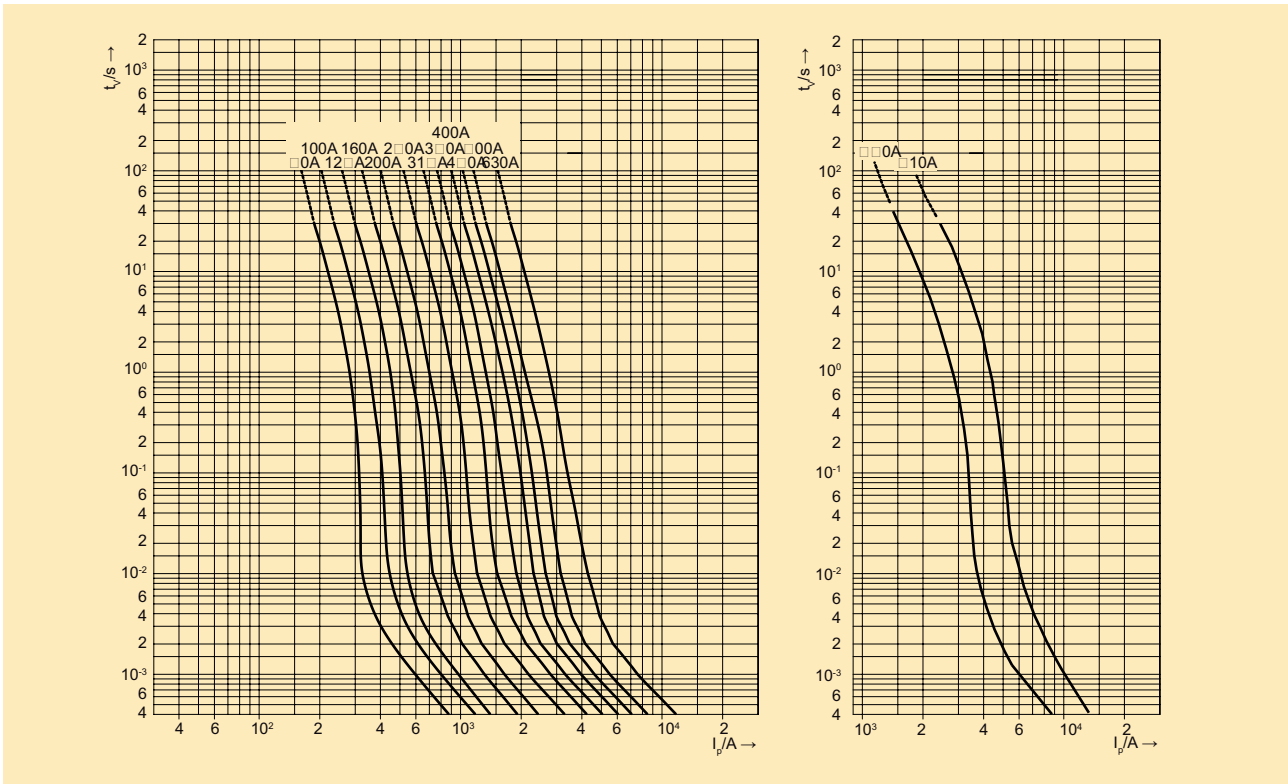
Charakterystyka czasowo-prądowa



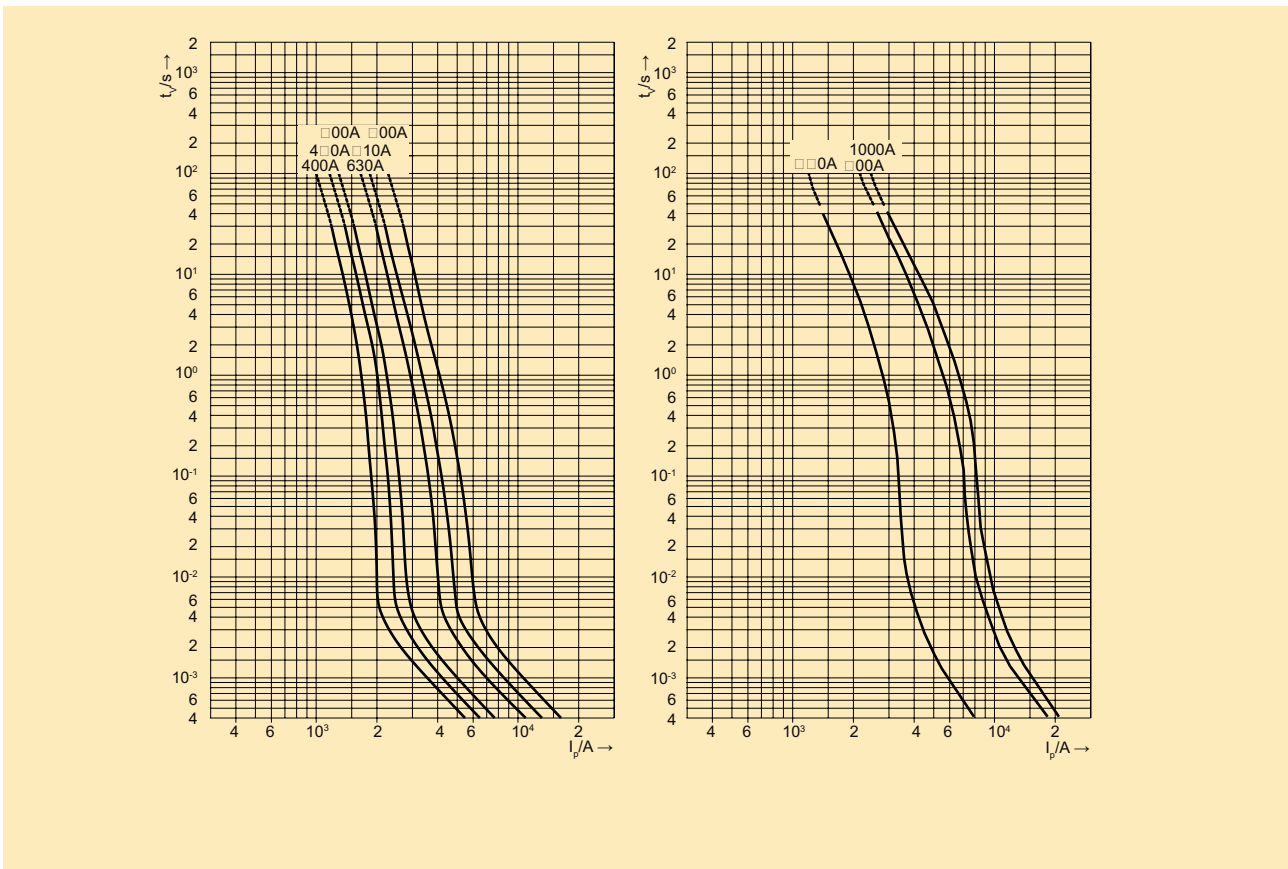
Charakterystyka czasowo-prądowa



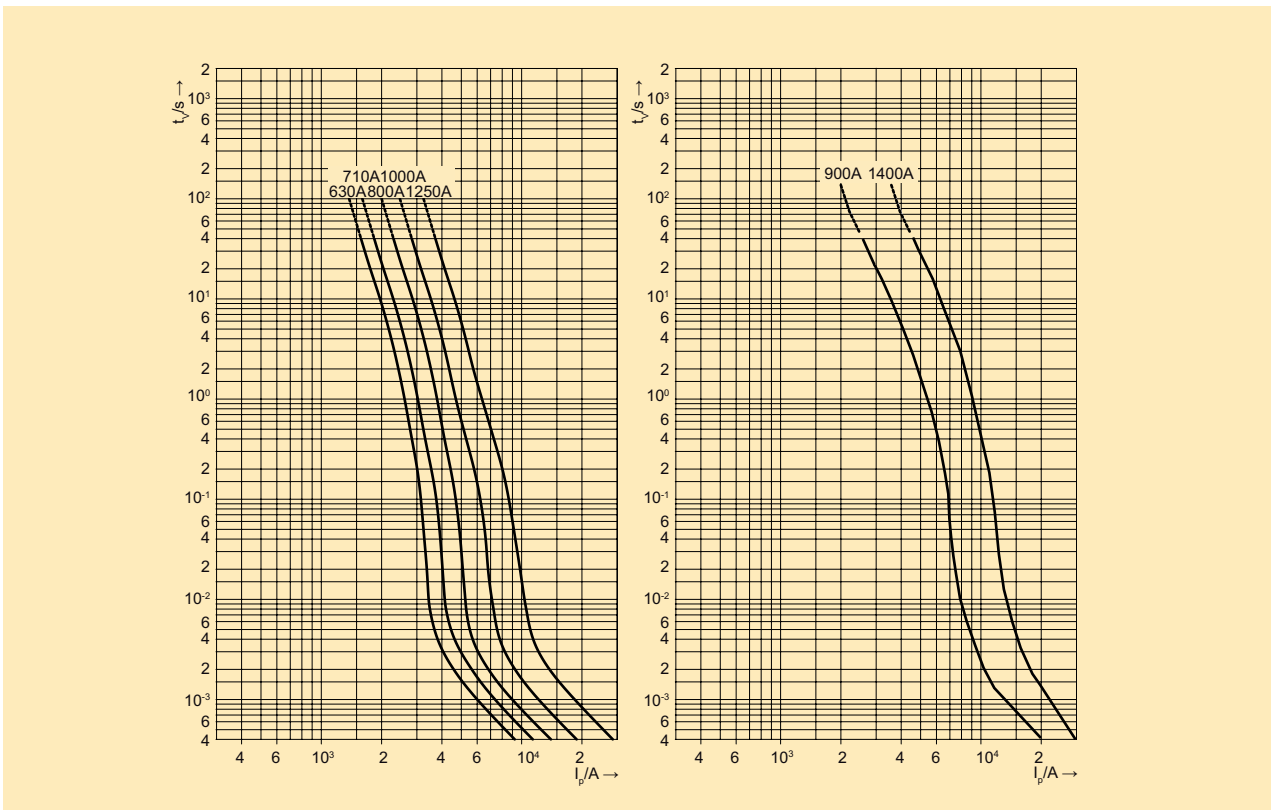
### Charakterystyka czasowo-prądowa



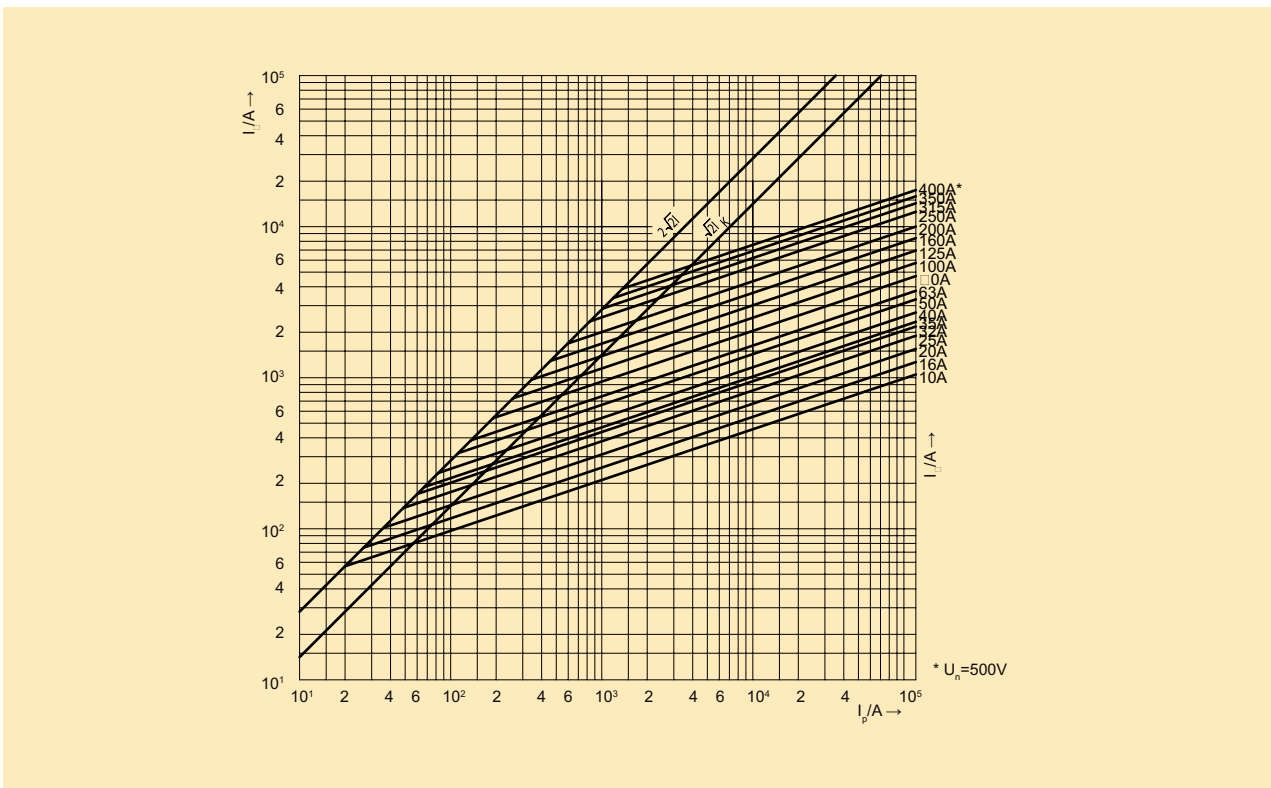
### Charakterystyka czasowo-prądowa



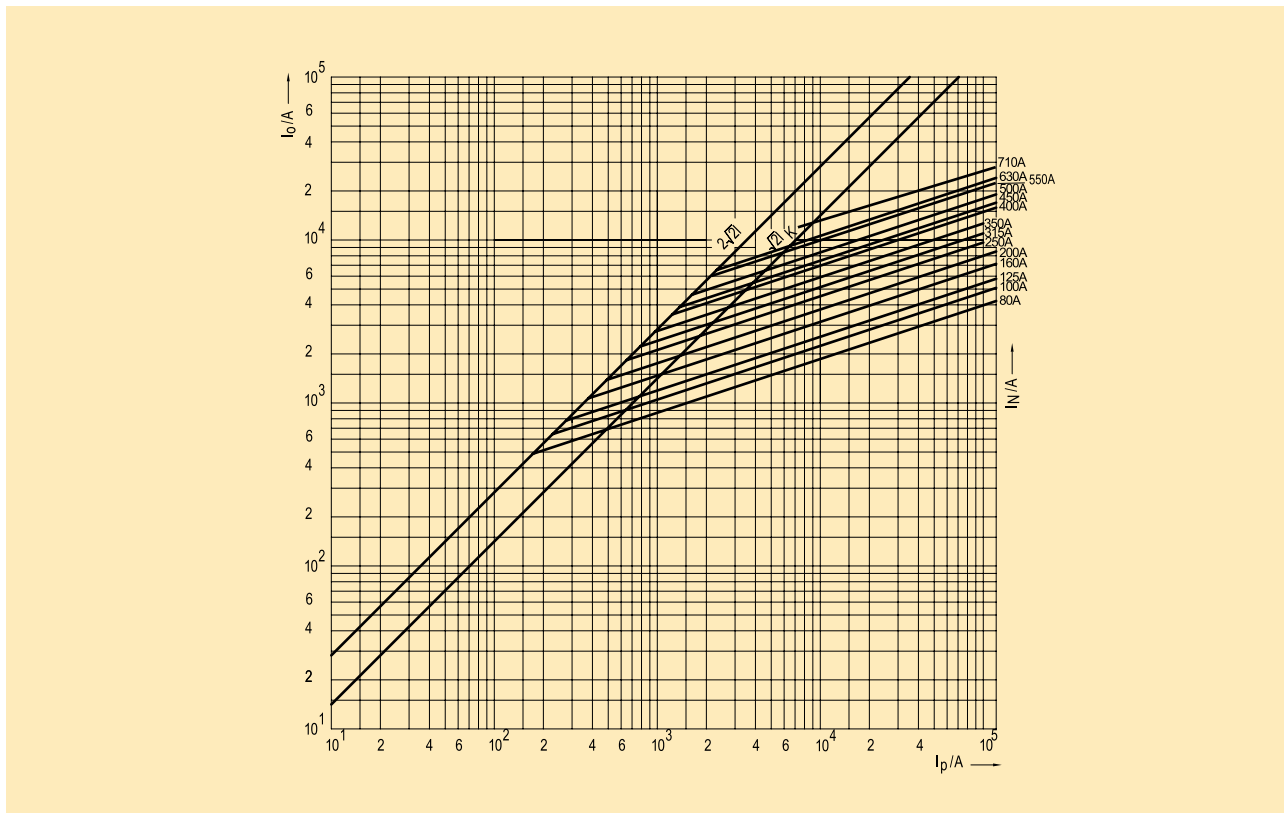
### Charakterystyka czasowo-prądowa



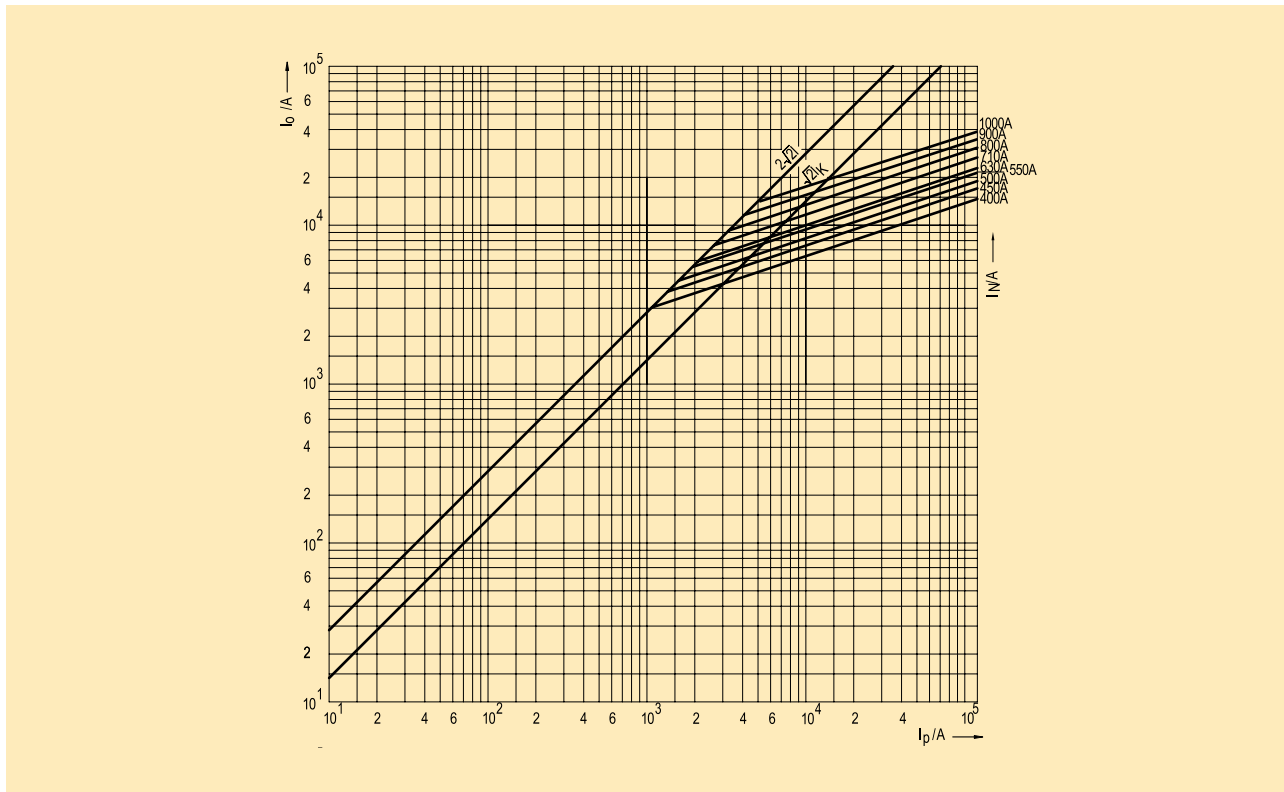
### Charakterystyka prądu ograniczonego



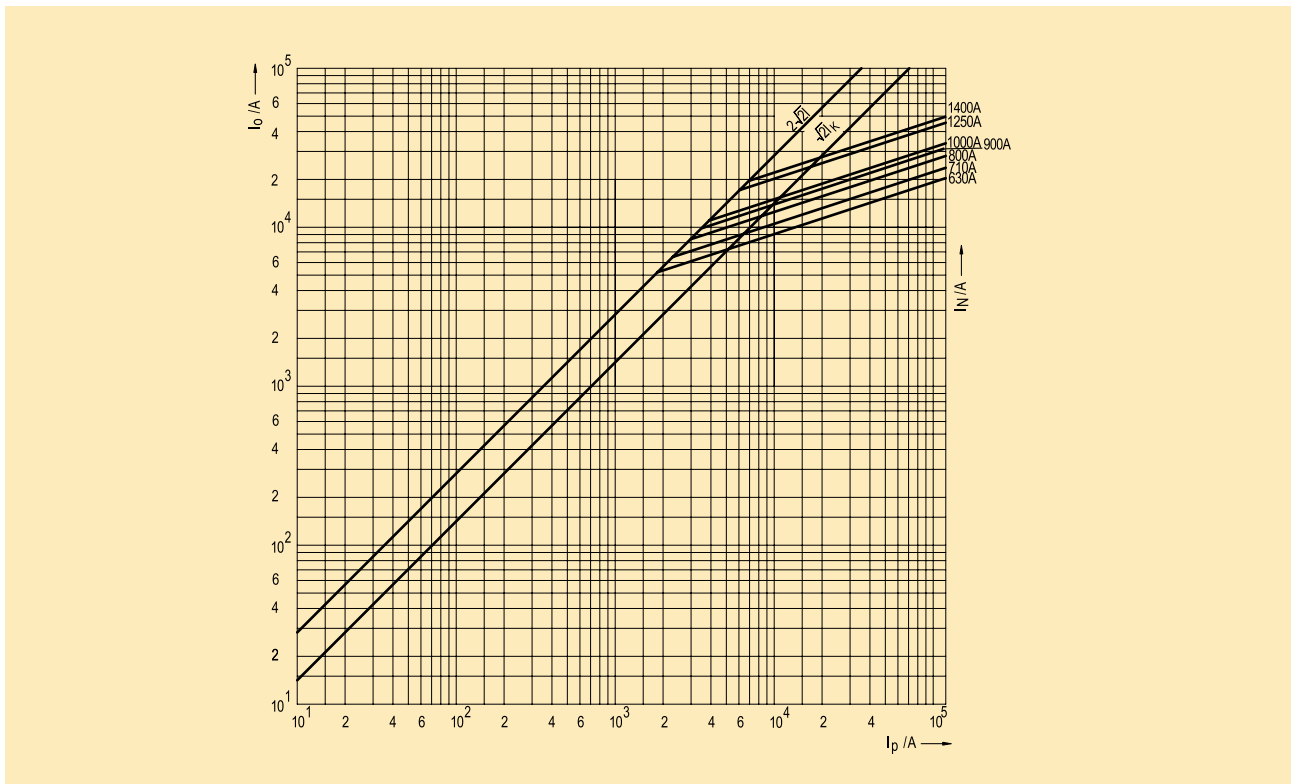
Charakterystyka prądu ograniczonego



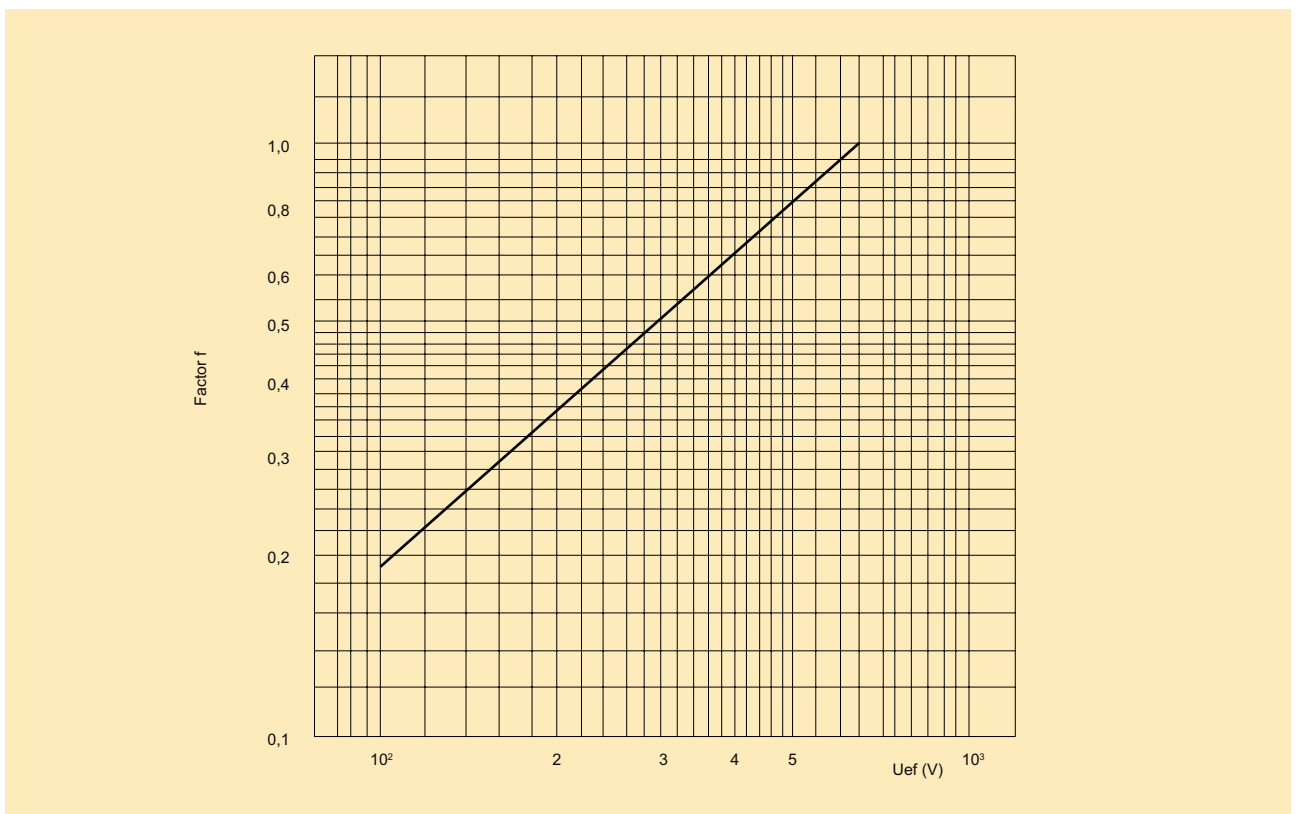
Charakterystyka prądu ograniczonego



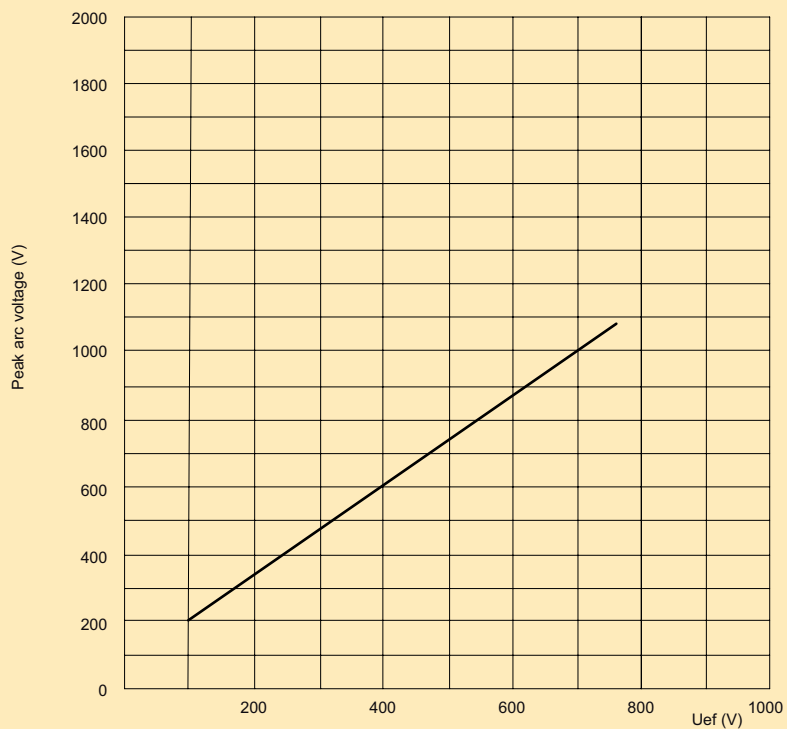
### Charakterystyka czasowo-prądowa



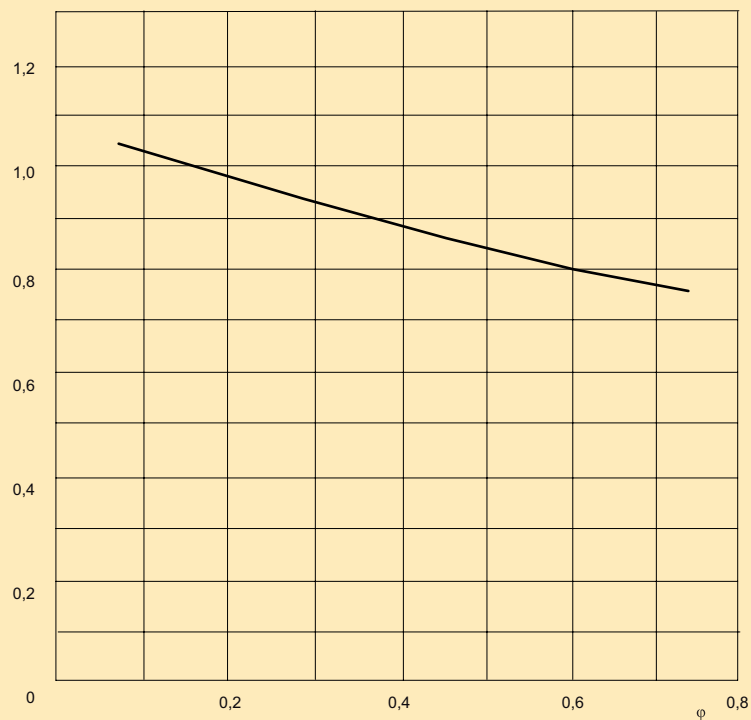
### Współczynnik korekcyjny dla określenia wartości całki wyłączenia



### Maksymalny spadek napięcia łuku



### Współczynnik korekcyjny dla wartości całki wyłączenia $I^2t$



# Protistor® size 000/00 aR

500 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 small power conversion equipment. These ultra-fast acting aR fuses 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	500 ... 690 VAC
Ampere Range (A)	16 ... 400 A
Size per Standard	000, 00
Speed/Characteristic	aR
I.R. AC (kA)	120 kA 200 kA

## FEATURES & BENEFITS

- aR Class according to IEC 60269-4 and VDE 636-23
- Very low  $I^2t$  for improved semiconductor protection
- Ultra fast acting
- 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 Component
- AC: UL Guide No. E76491



# Protistor® size 000/00 aR

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

## PRODUCT RANGE

### Size 000 DIN80, vertical body, without indicator

Catalog number	Reference number	Rated voltage AC (IEC)	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
DN000UB69V80	K330036	690 V	80 A	390 A <sup>2</sup> s	2500 A <sup>2</sup> s	200 kA	21 W	0.132 kg	6
DN000UB69V100	L330037	690 V	100 A	690 A <sup>2</sup> s	4200 A <sup>2</sup> s	200 kA	23 W	0.132 kg	6
DN000UB69V125	M330038	690 V	125 A	1310 A <sup>2</sup> s	8900 A <sup>2</sup> s	200 kA	26 W	0.132 kg	6
DN000UB69V160	N330039	690 V	160 A	2680 A <sup>2</sup> s	16000 A <sup>2</sup> s	200 kA	31 W	0.132 kg	6
DN000UB69V200	P330040	690 V	200 A	5250 A <sup>2</sup> s	31500 A <sup>2</sup> s	200 kA	36 W	44 g	6
DN000UB69V250	Q330041	690 V	250 A	9860 A <sup>2</sup> s	52000 A <sup>2</sup> s	200 kA	45 W	0.132 kg	6
DN000UB69V315	R330042	690 V	315 A	15420 A <sup>2</sup> s	82000 A <sup>2</sup> s	200 kA	58 W	0.132 kg	6
DN000UB50V350	V330114	500 V	350 A	22400 A <sup>2</sup> s	110000 A <sup>2</sup> s	120 kA	58 W	0.132 kg	6
DN000UB50V400	D330191	500 V	400 A	33180 A <sup>2</sup> s	160000 A <sup>2</sup> s	120 kA	66 W	0.132 kg	6

### Size 000 DIN80, vertical body, with indicator

Catalog number	Reference number	Rated voltage AC (IEC)	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
DN000UB69V80V	W330023	690 V	80 A	390 A <sup>2</sup> s	2500 A <sup>2</sup> s	200 kA	21 W	0.1253 kg	6
DN000UB69V100V	X330024	690 V	100 A	690 A <sup>2</sup> s	4200 A <sup>2</sup> s	200 kA	23 W	0.1253 kg	6
DN000UB69V125V	Y330025	690 V	125 A	1310 A <sup>2</sup> s	8900 A <sup>2</sup> s	200 kA	26 W	0.1253 kg	6
DN000UB69V160V	Z330026	690 V	160 A	2680 A <sup>2</sup> s	16000 A <sup>2</sup> s	200 kA	31 W	0.1253 kg	6
DN000UB69V200V	A330027	690 V	200 A	5250 A <sup>2</sup> s	31500 A <sup>2</sup> s	200 kA	36 W	0.1253 kg	6
DN000UB69V250V	B330028	690 V	250 A	9860 A <sup>2</sup> s	52000 A <sup>2</sup> s	200 kA	45 W	0.1253 kg	6
DN000UB69V315V	C330029	690 V	315 A	15420 A <sup>2</sup> s	82000 A <sup>2</sup> s	200 kA	58 W	0.1253 kg	6
DN000UB50V350V	W330115	500 V	350 A	22400 A <sup>2</sup> s	110000 A <sup>2</sup> s	120 kA	58 W	0.1253 kg	6
DN000UB50V400V	E330192	500 V	400 A	33180 A <sup>2</sup> s	160000 A <sup>2</sup> s	120 kA	66 W	0.13 kg	6

### Size 000 DIN80, vertical body, for monitoring micro-contact

Catalog number	Reference number	Rated voltage AC (IEC)	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
DN000UB69V80L	T330182	690 V	80 A	390 A <sup>2</sup> s	2500 A <sup>2</sup> s	200 kA	21 W	0.1283 kg	6
DN000UB69V100L	V330183	690 V	100 A	690 A <sup>2</sup> s	4200 A <sup>2</sup> s	200 kA	23 W	0.1283 kg	6
DN000UB69V125L	W330184	690 V	125 A	1310 A <sup>2</sup> s	8900 A <sup>2</sup> s	200 kA	26 W	0.1283 kg	6
DN000UB69V160L	X330185	690 V	160 A	2680 A <sup>2</sup> s	16000 A <sup>2</sup> s	200 kA	31 W	0.1283 kg	6
DN000UB69V200L	Y330186	690 V	200 A	5250 A <sup>2</sup> s	31500 A <sup>2</sup> s	200 kA	36 W	0.1283 kg	6
DN000UB69V250L	Z330187	690 V	250 A	9860 A <sup>2</sup> s	52000 A <sup>2</sup> s	200 kA	45 W	0.1283 kg	6
DN000UB69V315L	A330188	690 V	315 A	15420 A <sup>2</sup> s	82000 A <sup>2</sup> s	200 kA	58 W	0.1283 kg	6
DN000UB50V350L	B330189	500 V	350 A	22400 A <sup>2</sup> s	110000 A <sup>2</sup> s	120 kA	58 W	0.1283 kg	6
DN000UB69V400L	F330193	500 V	400 A	33180 A <sup>2</sup> s	160000 A <sup>2</sup> s	120 kA	66 W	0.1283 kg	6

### Size 000 BS88, horizontal body, without indicator

Catalog number	Reference number	Rated voltage AC (IEC)	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
BS000UB69V75	B330051	690 V	75 A	340 A <sup>2</sup> s	2250 A <sup>2</sup> s	200 kA	20.5 W	0.141 kg	3
BS000UB69V80	C330052	690 V	80 A	390 A <sup>2</sup> s	2500 A <sup>2</sup> s	200 kA	21 W	0.14 kg	3
BS000UB69V100	D330053	690 V	100 A	690 A <sup>2</sup> s	4200 A <sup>2</sup> s	200 kA	23 W	0.141 kg	3
BS000UB69V110	E330100	690 V	110 A	950 A <sup>2</sup> s	6800 A <sup>2</sup> s	200 kA	24.5 W	0.141 kg	3
BS000UB69V125	E330054	690 V	125 A	1310 A <sup>2</sup> s	8900 A <sup>2</sup> s	200 kA	26 W	0.141 kg	3
BS000UB69V160	F330055	690 V	160 A	2680 A <sup>2</sup> s	16000 A <sup>2</sup> s	200 kA	31 W	0.141 kg	3
BS000UB69V200	G330056	690 V	200 A	5250 A <sup>2</sup> s	31500 A <sup>2</sup> s	200 kA	36 W	0.141 kg	3
BS000UB69V250	H330057	690 V	250 A	9860 A <sup>2</sup> s	52000 A <sup>2</sup> s	200 kA	45 W	0.141 kg	3
BS000UB69V315	J330058	690 V	315 A	15420 A <sup>2</sup> s	82000 A <sup>2</sup> s	200 kA	58 W	0.141 kg	3
BS000UB50V350	X330116	500 V	350 A	22400 A <sup>2</sup> s	110000 A <sup>2</sup> s	120 kA	58 W	0.141 kg	3
BS000UB50V400	G330194	500 V	400 A	33180 A <sup>2</sup> s	160000 A <sup>2</sup> s	120 kA	66 W	0.141 kg	3

# Protistor® size 000/00 aR

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

## PRODUCT RANGE

### Size 000 BS88, horizontal body, with indicator

Catalog number	Reference number	Rated voltage AC (IEC)	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
BS000UB69V75P	H330126	690 V	75 A	340 A <sup>2</sup> s	2250 A <sup>2</sup> s	200 kA	20.5 W	0.155 kg	3
BS000UB69V80P	J330127	690 V	80 A	390 A <sup>2</sup> s	2500 A <sup>2</sup> s	200 kA	21 W	0.155 kg	3
BS000UB69V100P	K330128	690 V	100 A	690 A <sup>2</sup> s	4200 A <sup>2</sup> s	200 kA	23 W	0.1556 kg	3
BS000UB69V110P	L330129	690 V	110 A	950 A <sup>2</sup> s	6800 A <sup>2</sup> s	200 kA	24.5 W	0.155 kg	3
BS000UB69V125P	M330130	690 V	125 A	1310 A <sup>2</sup> s	8900 A <sup>2</sup> s	200 kA	26 W	0.1556 kg	3
BS000UB69V160P	P330132	690 V	160 A	2680 A <sup>2</sup> s	16000 A <sup>2</sup> s	200 kA	31 W	0.1556 kg	3
BS000UB69V200P	Q330133	690 V	200 A	5250 A <sup>2</sup> s	31500 A <sup>2</sup> s	200 kA	36 W	0.1556 kg	3
BS000UB69V250P	R330134	690 V	250 A	9860 A <sup>2</sup> s	52000 A <sup>2</sup> s	200 kA	45 W	0.155 kg	3
BS000UB50V315P	S330135	500 V	315 A	15420 A <sup>2</sup> s	82000 A <sup>2</sup> s	200 kA	58 W	0.1556 kg	3
BS000UB50V350P	T330136	500 V	350 A	22400 A <sup>2</sup> s	110000 A <sup>2</sup> s	120 kA	58 W	0.155 kg	3
BS000UB50V400P	H330195	500 V	400 A	33180 A <sup>2</sup> s	160000 A <sup>2</sup> s	120 kA	66 W	0.1556 kg	3

### Size 00 DIN80, vertical body, for monitoring micro-contact

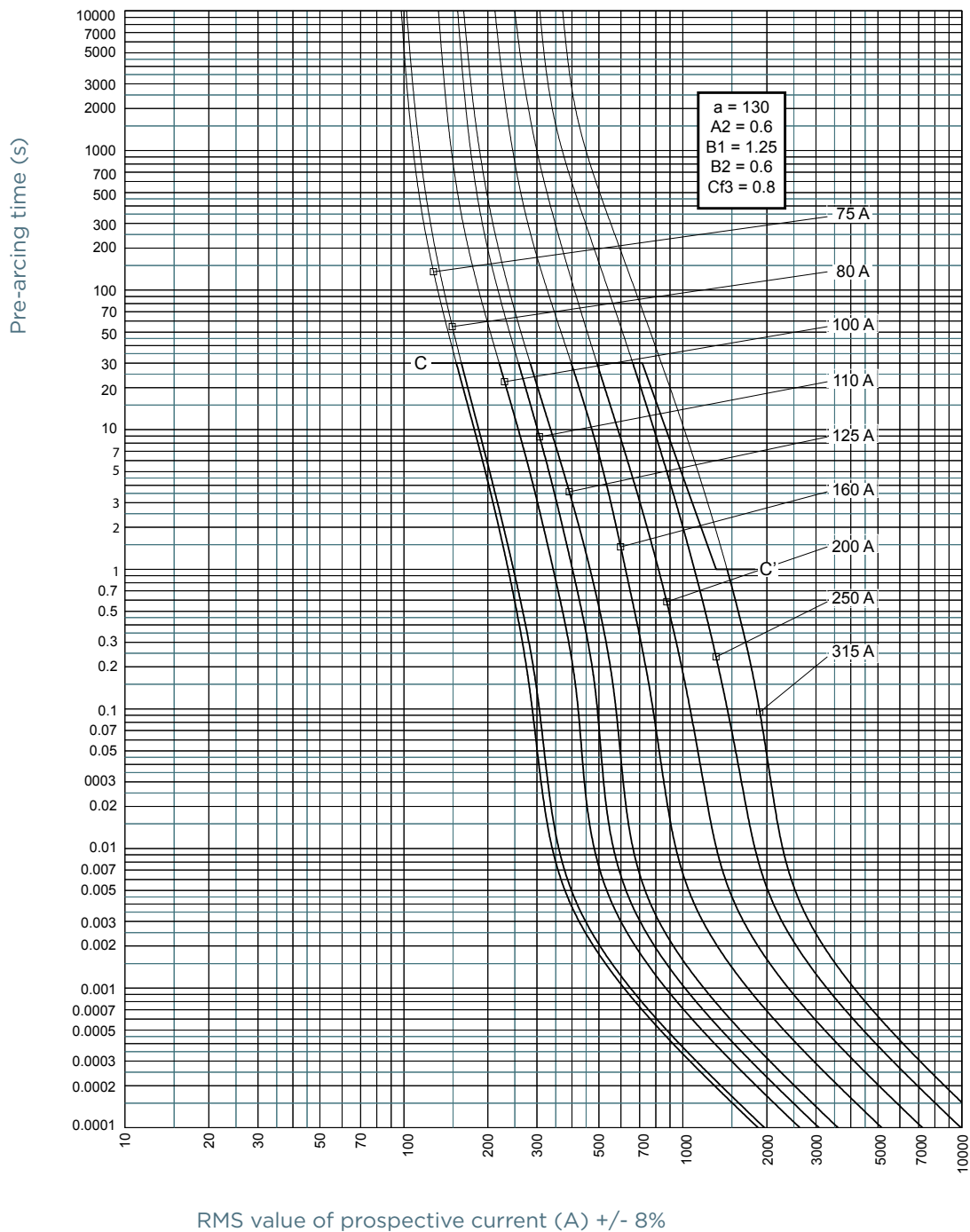
Catalog number	Reference number	Rated voltage AC (IEC)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
DN00UB69V16L	V330275	690 V	16 A	7 A <sup>2</sup> s	52 A <sup>2</sup> s	200 kA	7 W	200 g	3
DN00UB69V20L	T330274	690 V	20 A	10 A <sup>2</sup> s	75 A <sup>2</sup> s	200 kA	9 W	200 g	3
DN00UB69V25L	M330268	690 V	25 A	15 A <sup>2</sup> s	120 A <sup>2</sup> s	200 kA	11 W	200 g	3
DN00UB69V32L	N330269	690 V	32 A	32 A <sup>2</sup> s	210 A <sup>2</sup> s	200 kA	15 W	200 g	3
DN00UB69V40L	P330270	690 V	40 A	61 A <sup>2</sup> s	400 A <sup>2</sup> s	200 kA	18 W	200 g	3
DN00UB69V50L	Q330271	690 V	50 A	102 A <sup>2</sup> s	700 A <sup>2</sup> s	200 kA	21 W	200 g	3
DN00UB69V63L	R330272	690 V	63 A	177 A <sup>2</sup> s	1200 A <sup>2</sup> s	200 kA	23 W	200 g	3
DN00UB69V80L	D330237	690 V	80 A	390 A <sup>2</sup> s	2200 A <sup>2</sup> s	200 kA	25 W	200 g	3
DN00UB69V100L	E330238	690 V	100 A	692 A <sup>2</sup> s	3900 A <sup>2</sup> s	200 kA	28 W	200 g	3
DN00UB69V125L	F330239	690 V	125 A	1170 A <sup>2</sup> s	6600 A <sup>2</sup> s	200 kA	33 W	200 g	3
DN00UB69V160L	G330240	690 V	160 A	2680 A <sup>2</sup> s	14000 A <sup>2</sup> s	200 kA	36 W	200 g	3
DN00UB69V200L	H330241	690 V	200 A	4690 A <sup>2</sup> s	24000 A <sup>2</sup> s	200 kA	42 W	0.2026 kg	3
DN00UB69V250L	J330242	690 V	250 A	8300 A <sup>2</sup> s	42500 A <sup>2</sup> s	200 kA	50 W	0.2026 kg	3
DN00UB69V315L	K330243	690 V	315 A	17520 A <sup>2</sup> s	81000 A <sup>2</sup> s	200 kA	58 W	0.2066 kg	3
DN00UB69V350L	L330244	690 V	350 A	25450 A <sup>2</sup> s	118000 A <sup>2</sup> s	200 kA	60 W	0.2026 kg	3
DN00UB69V400L	M330245	690 V	400 A	33180 A <sup>2</sup> s	150000 A <sup>2</sup> s	200 kA	70 W	0.2026 kg	3

### Size 00 DIN110, vertical body, for monitoring micro-contact

Catalog number	Reference number	Rated voltage AC (IEC)	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
DN00UB69V80D1L	A330257	690 V	80 A	390 A <sup>2</sup> s	2200 A <sup>2</sup> s	200 kA	25 W	240 g	3
DN00UB69V100D1L	B330258	690 V	100 A	692 A <sup>2</sup> s	3900 A <sup>2</sup> s	200 kA	28 W	240 g	3
DN00UB69V125D1L	C330259	690 V	125 A	1170 A <sup>2</sup> s	6600 A <sup>2</sup> s	200 kA	33 W	240 g	3
DN00UB69V160D1L	D330260	690 V	160 A	2680 A <sup>2</sup> s	14000 A <sup>2</sup> s	200 kA	36 W	240 g	3
DN00UB69V200D1L	E330261	690 V	200 A	4690 A <sup>2</sup> s	24000 A <sup>2</sup> s	200 kA	42 W	240 g	3
DN00UB69V250D1L	F330262	690 V	250 A	8300 A <sup>2</sup> s	42500 A <sup>2</sup> s	200 kA	50 W	240 g	3
DN00UB69V315D1L	G330263	690 V	315 A	17520 A <sup>2</sup> s	81000 A <sup>2</sup> s	200 kA	58 W	240 g	3
DN00UB69V350D1L	H330264	690 V	350 A	25450 A <sup>2</sup> s	118000 A <sup>2</sup> s	200 kA	60 W	240 g	3
DN00UB69V400D1L	J330265	690 V	400 A	33180 A <sup>2</sup> s	150000 A <sup>2</sup> s	200 kA	70 W	240 g	3

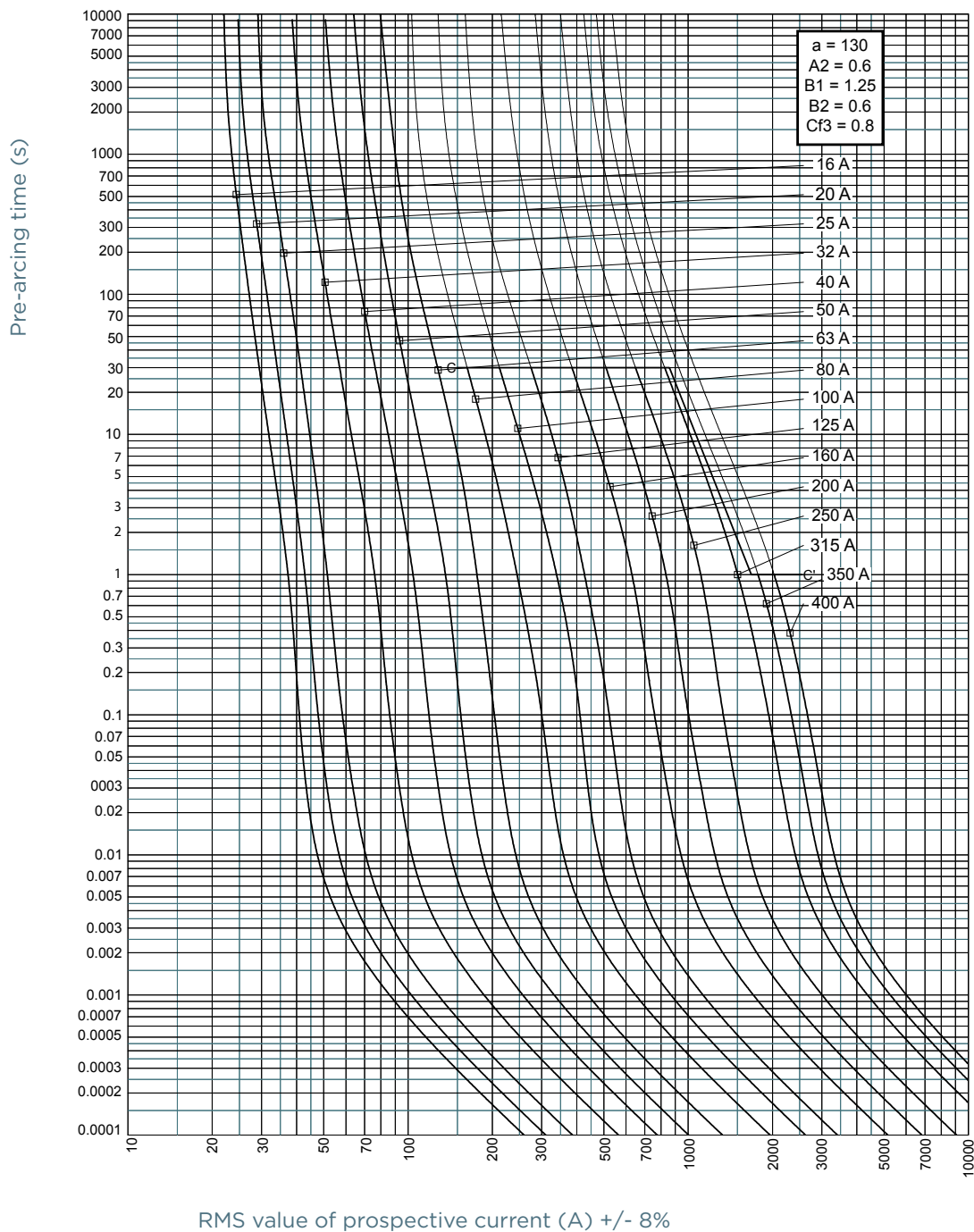
## TIME CURRENT CHARACTERISTIC CURVES

### Size 000



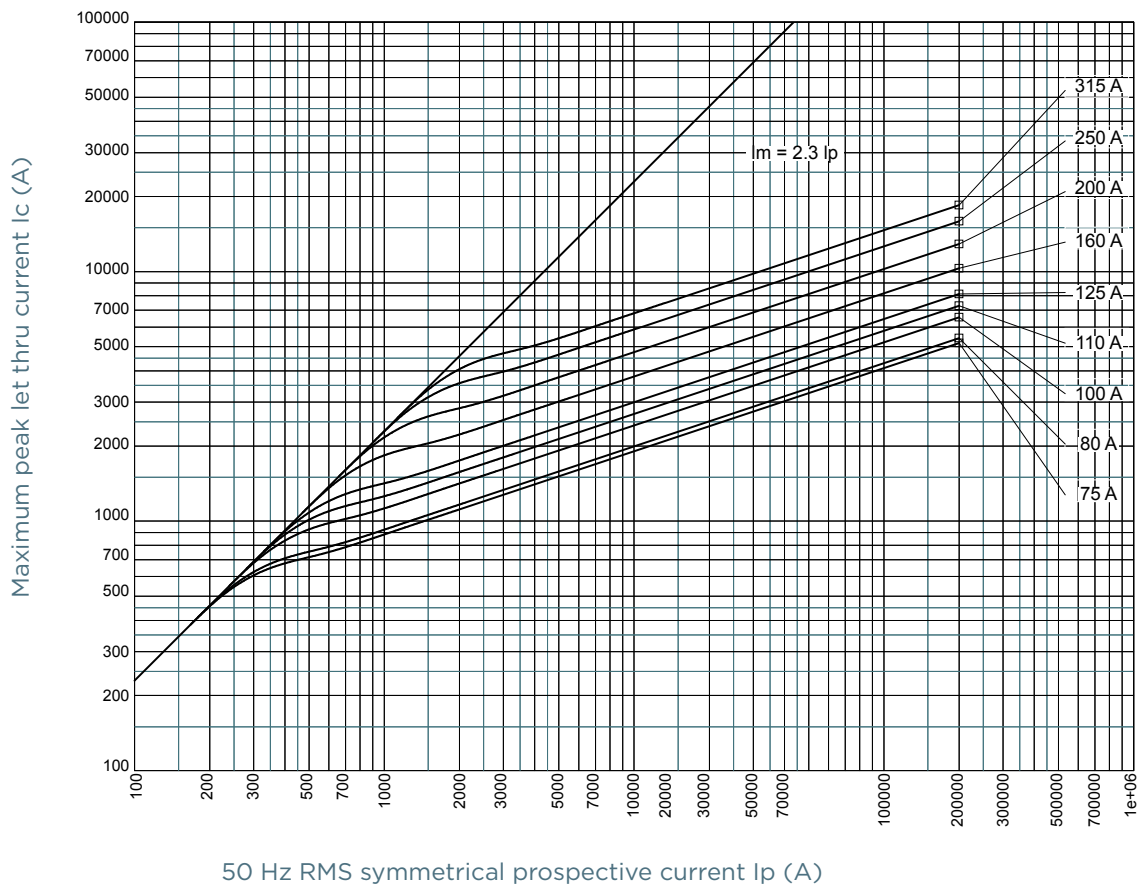
## TIME CURRENT CHARACTERISTIC CURVES

### Size 00



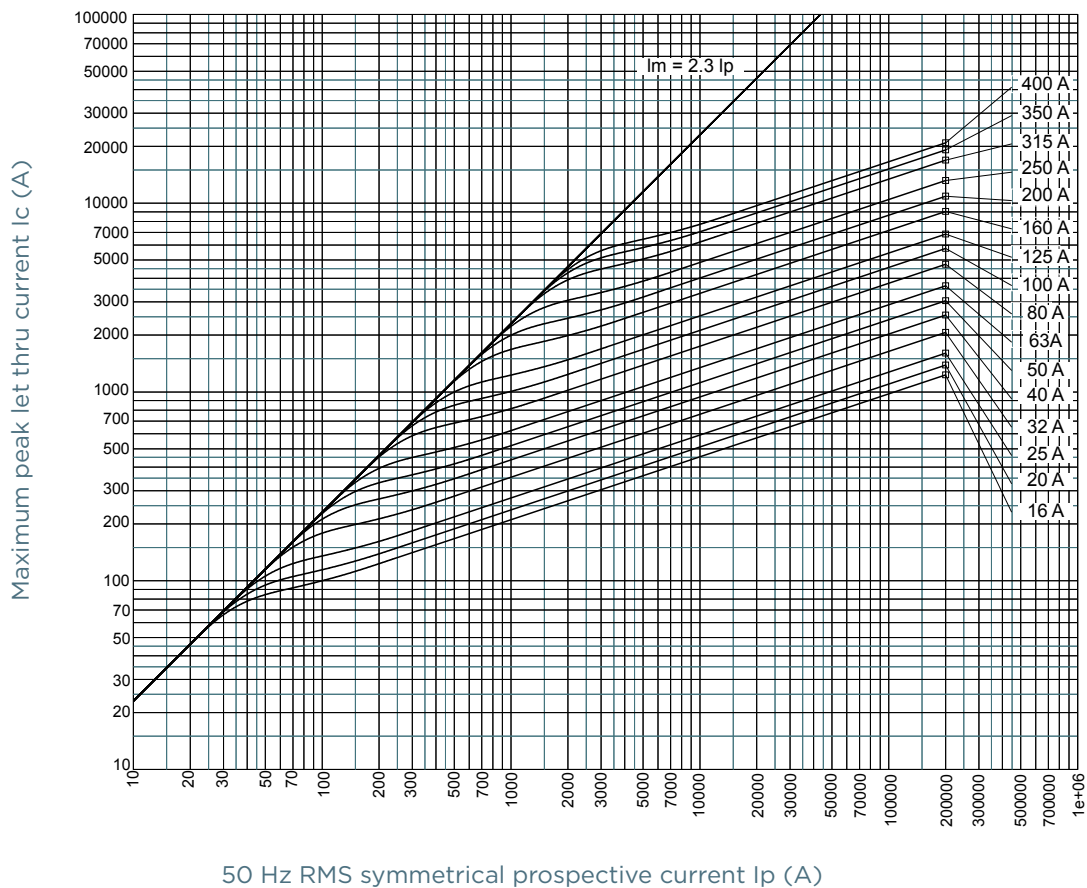
## CUT-OFF CURRENT CHARACTERISTIC

### Size 000



## CUT-OFF CURRENT CHARACTERISTIC

### Size 00

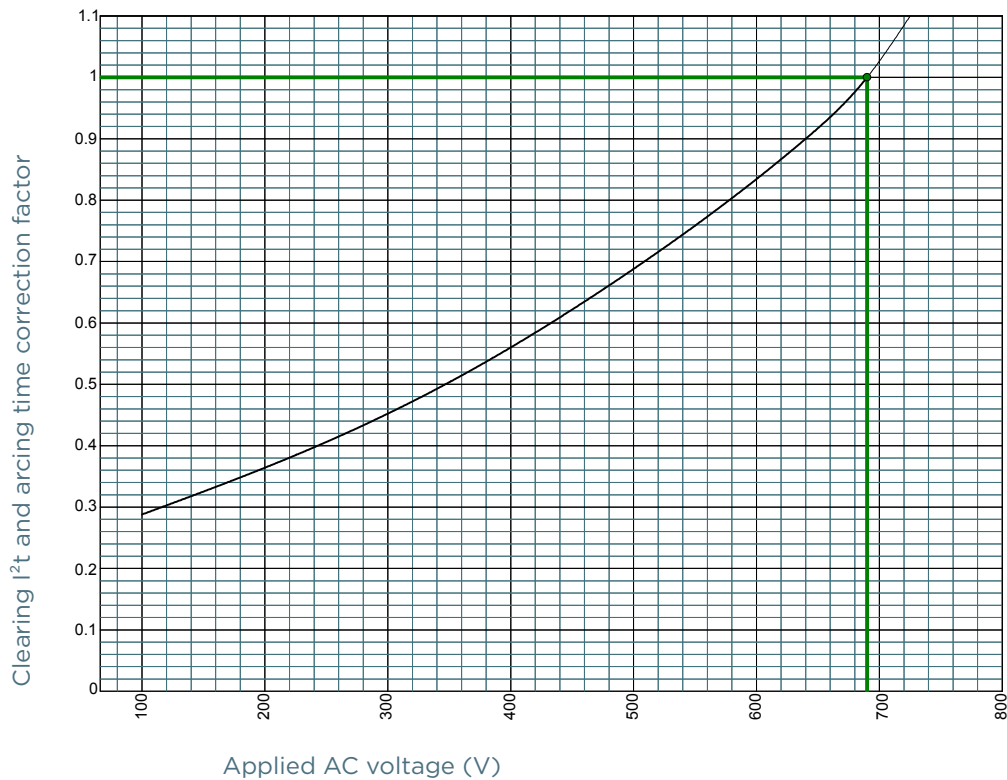


# Protistor® size 000/00 aR

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

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

### Size 000



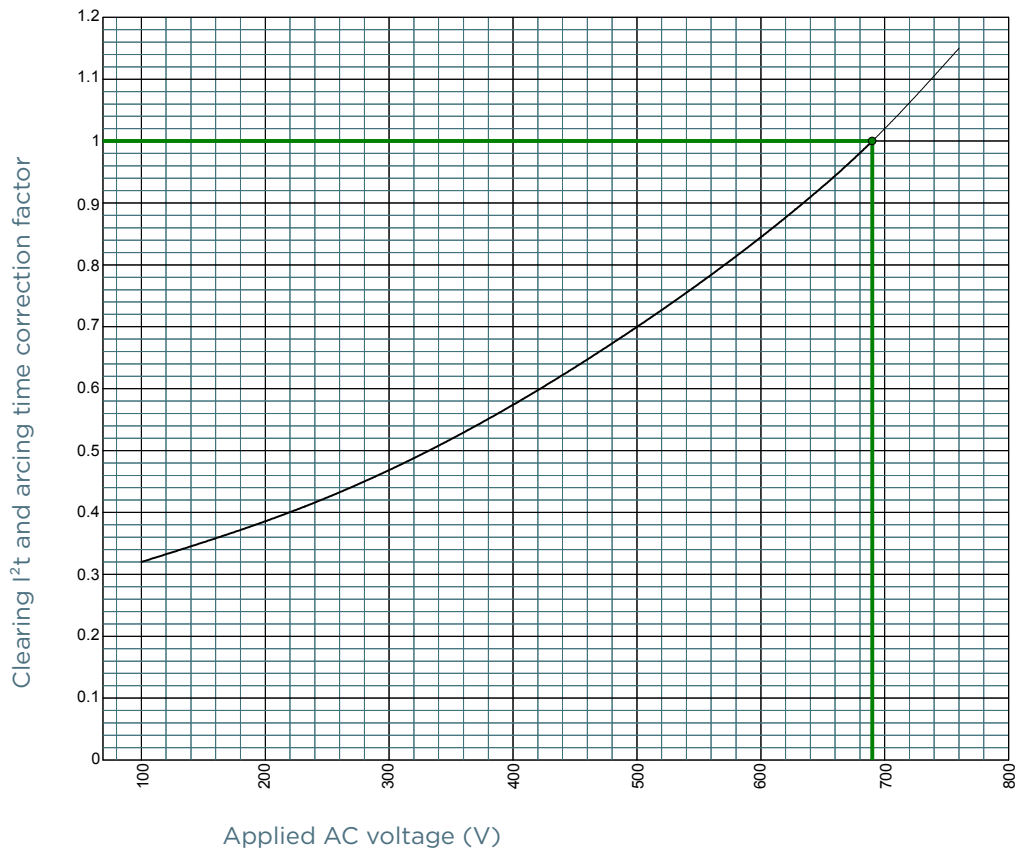
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# Protistor® size 000/00 aR

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

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

### Size 00



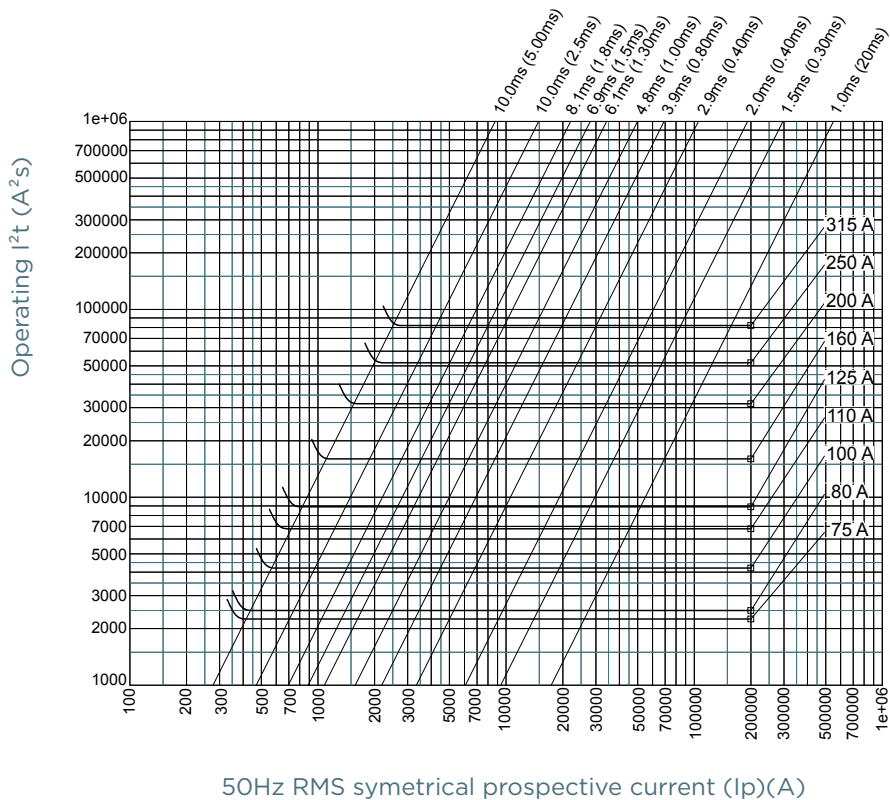
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# Protistor® size 000/00 aR

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

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

Size 000



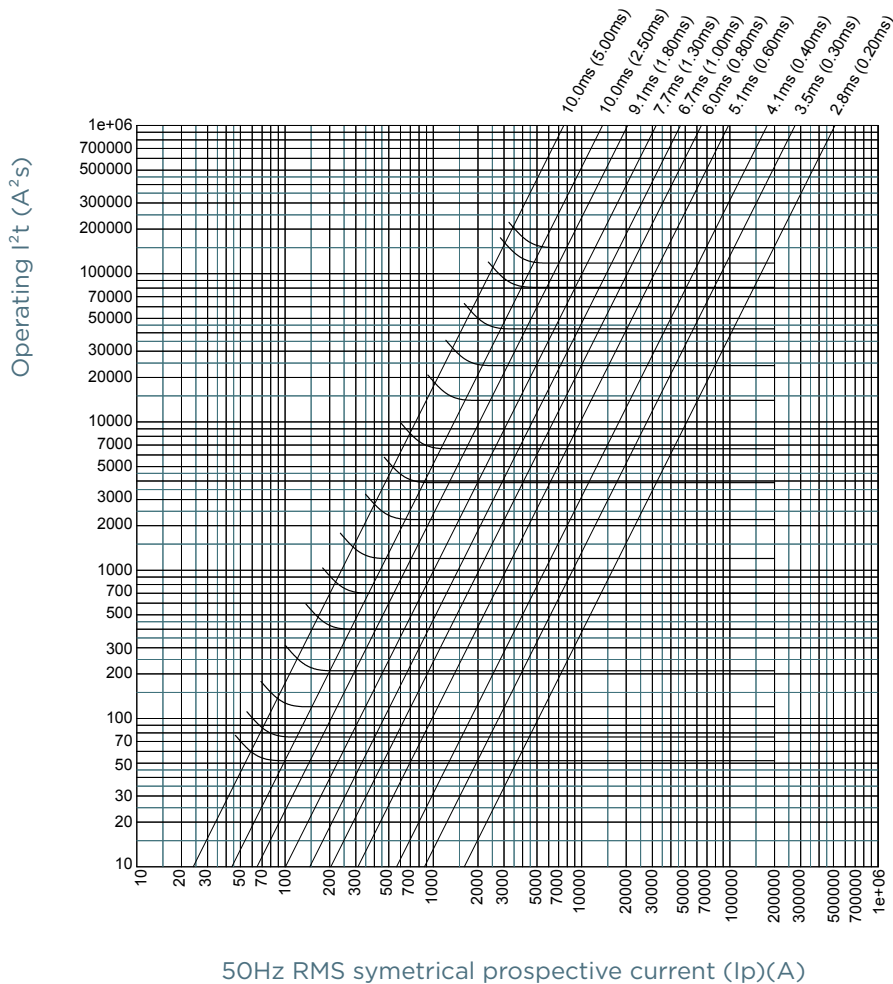
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# Protistor® size 000/00 aR

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

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

Size 00



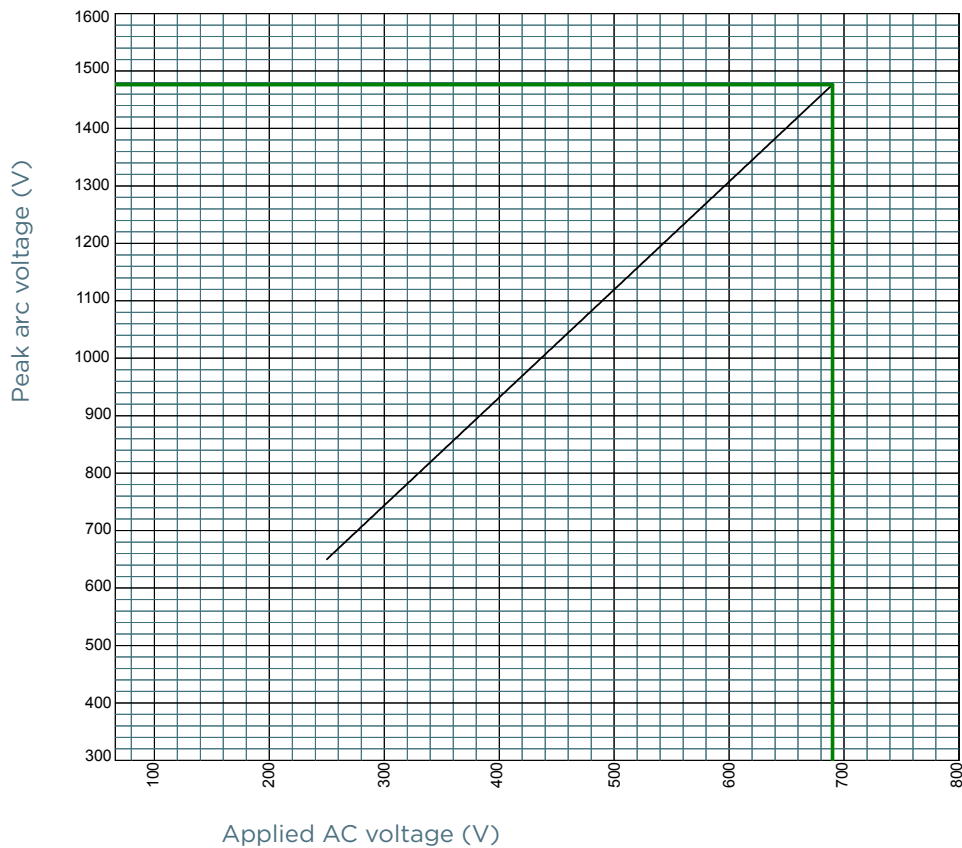
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# Protistor® size 000/00 aR

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

## PEAK ARC VOLTAGE

### Size 000



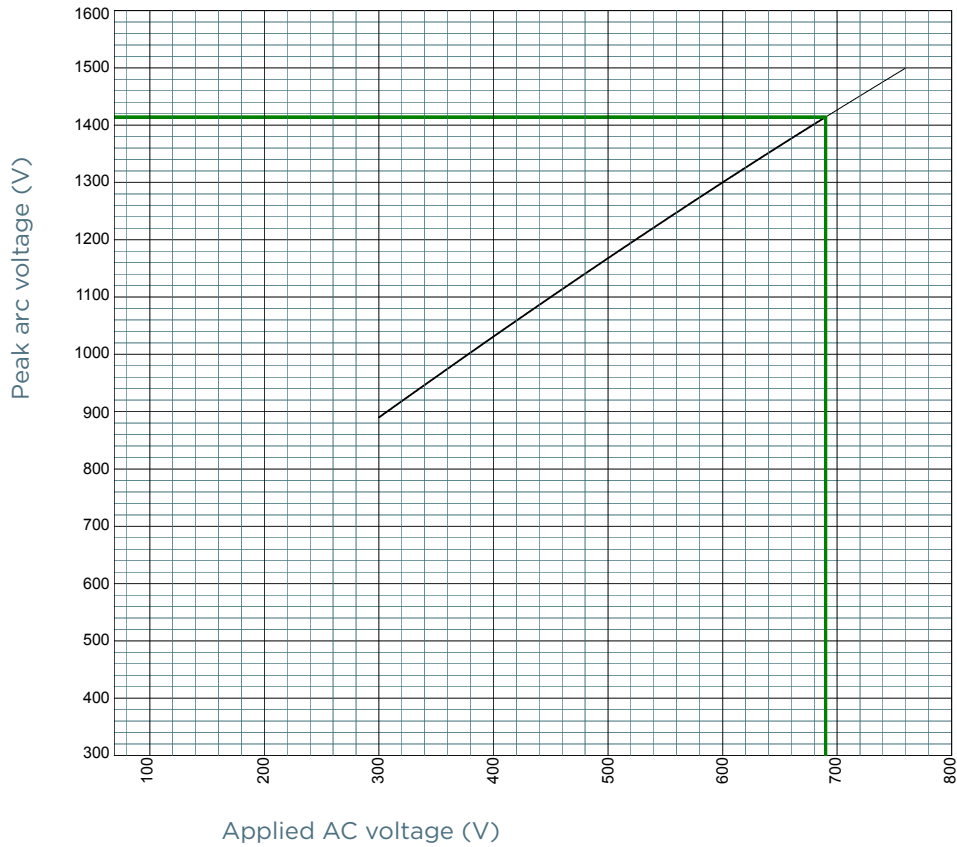
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# Protistor® size 000/00 aR

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

## PEAK ARC VOLTAGE

### Size 00



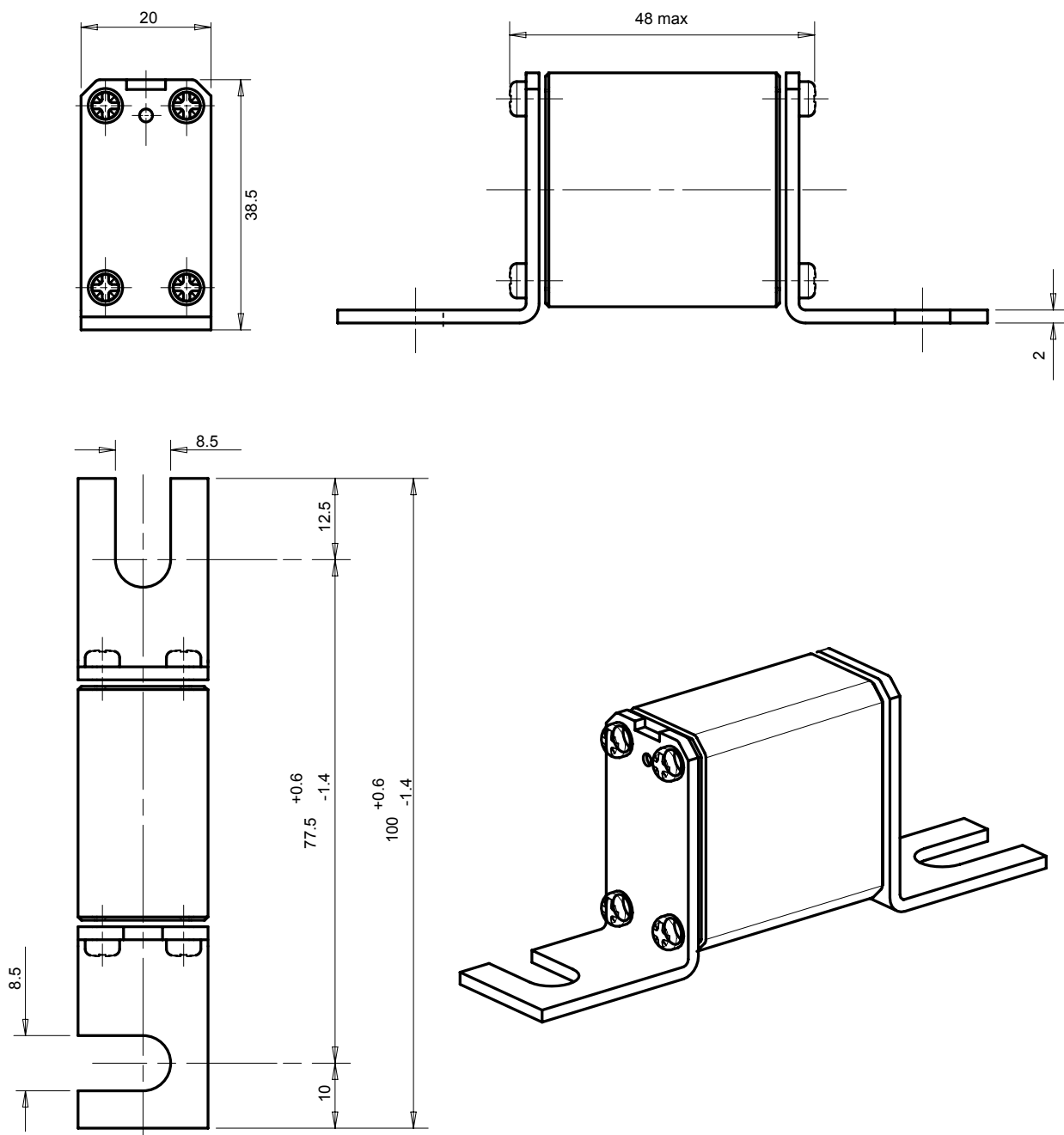
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# Protistor® size 000/00 aR

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

## DIMENSIONS

### Size 000 without indicator



Dimensions in mm

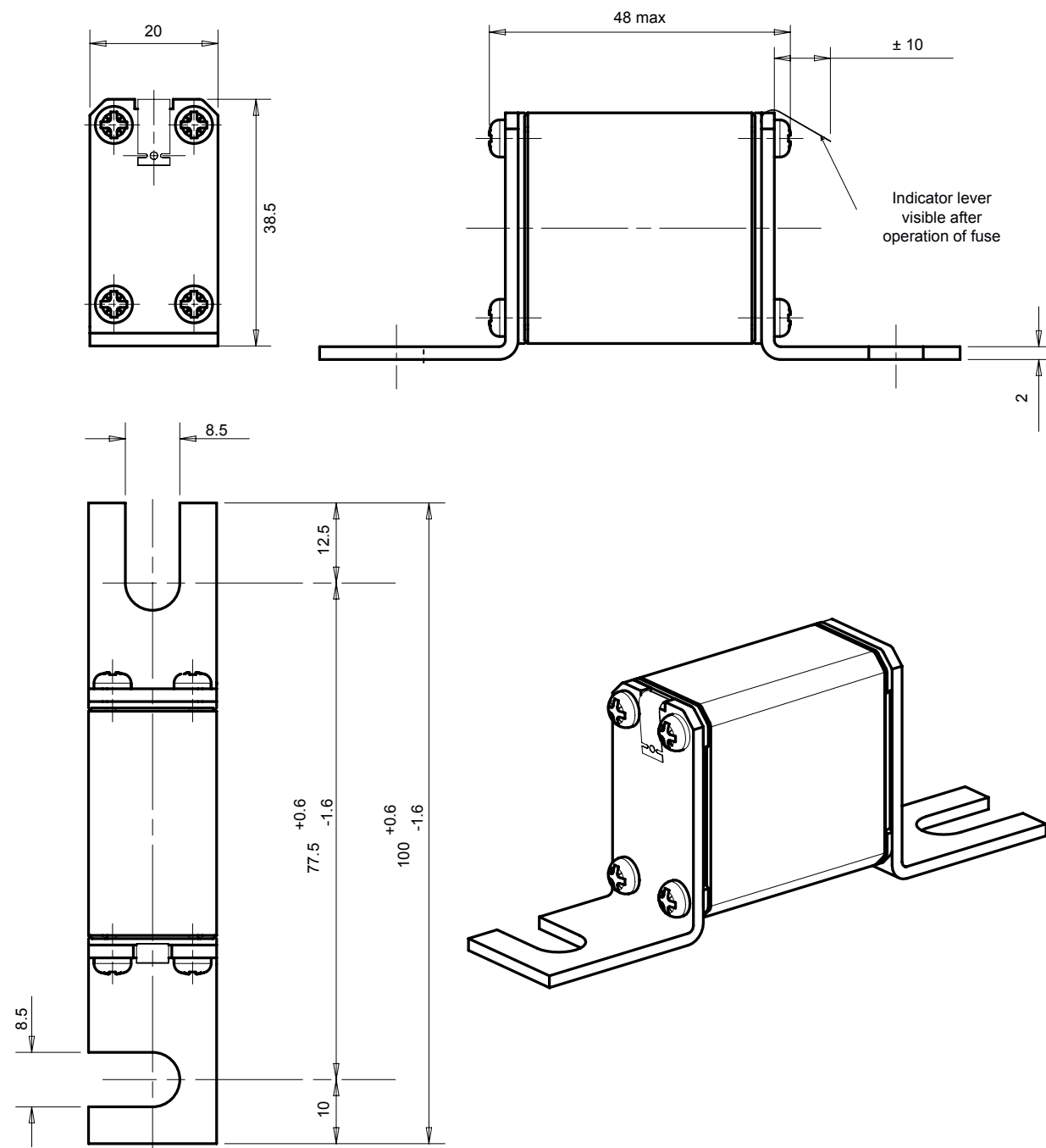
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

# Protistor® size 000/00 aR

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

## DIMENSIONS

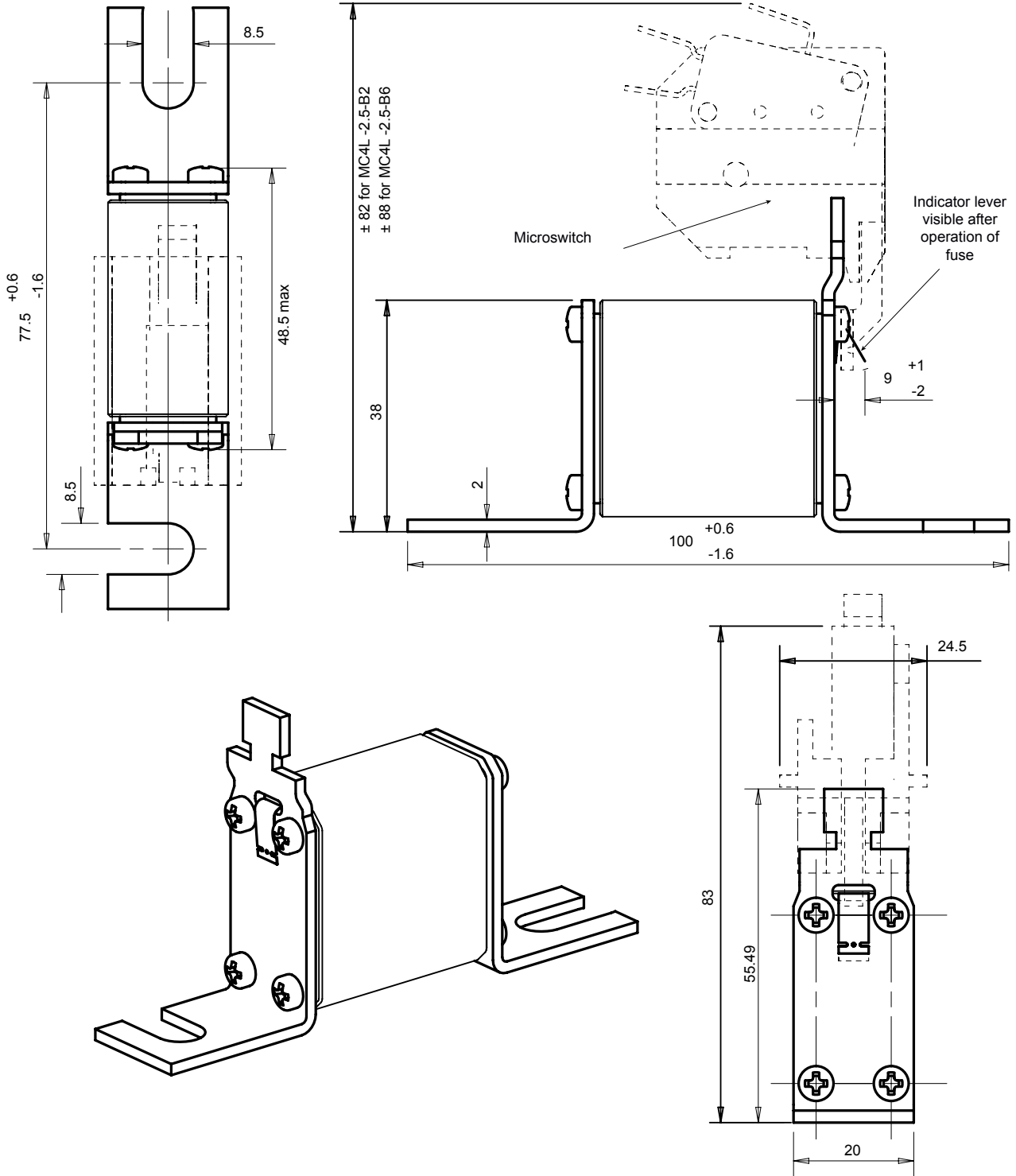
### Size 000 with indicator



Dimensions in mm

DIMENSIONS

Size 000 for monitoring micro-contact



Dimensions in mm

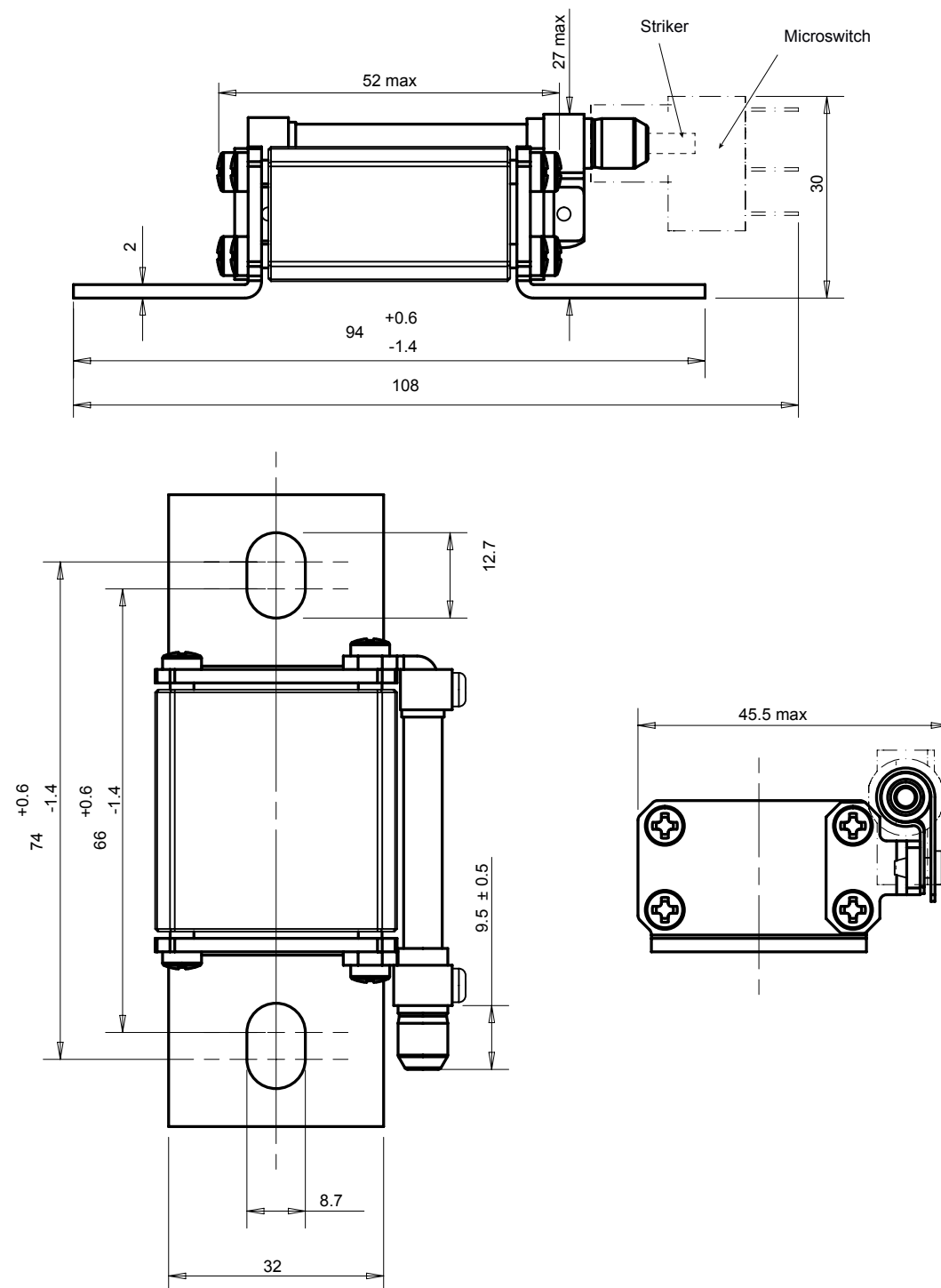
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

# Protistor® size 000/00 aR

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

## DIMENSIONS

### Size 000 BS88 with indicator



Dimensions in mm

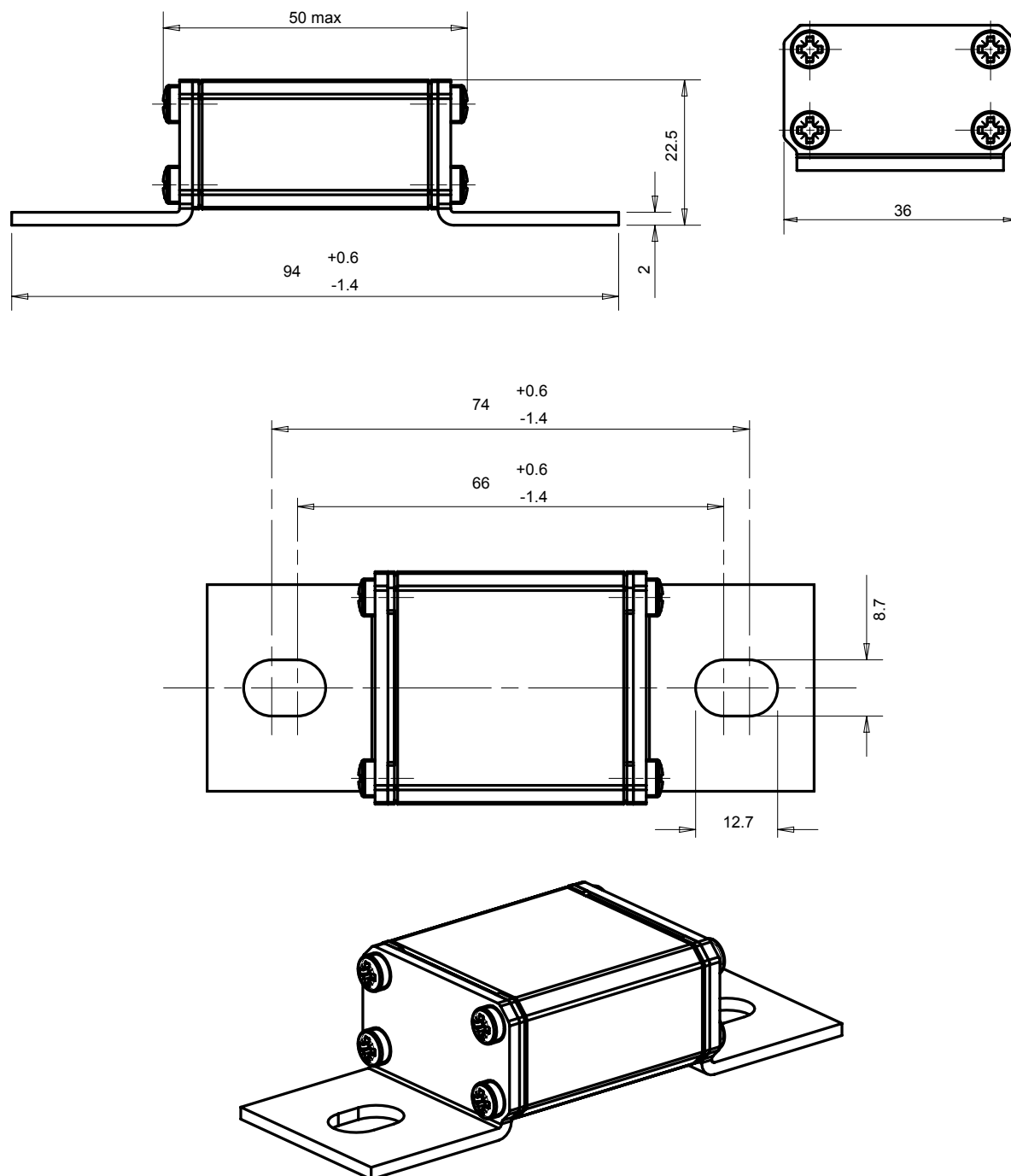
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# Protistor® size 000/00 aR

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

## DIMENSIONS

### Size 000 BS88 without indicator



Dimensions in mm

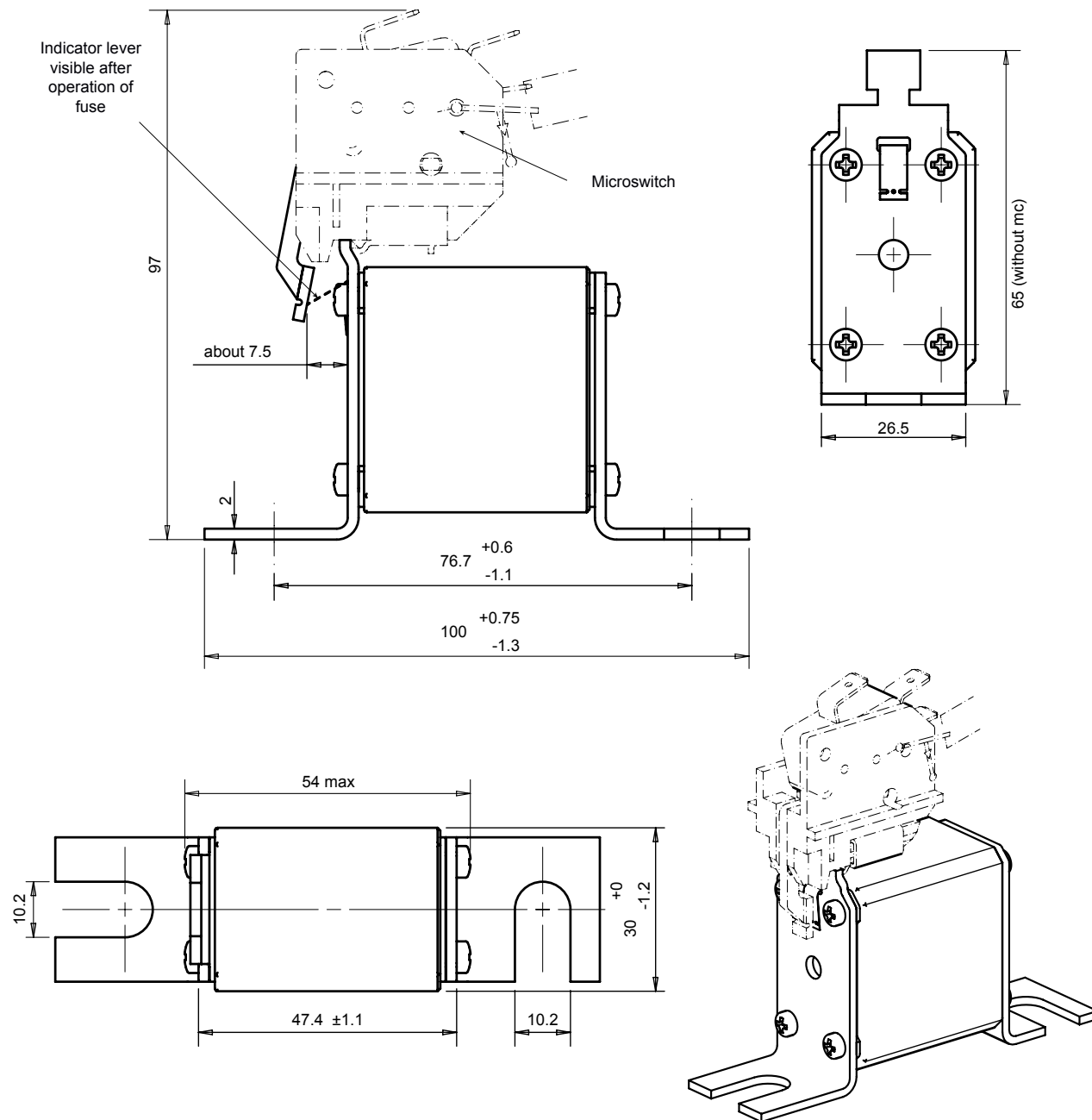
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

# Protistor® size 000/00 aR

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

## DIMENSIONS

### Size 00 DIN80 for monitoring micro-contact



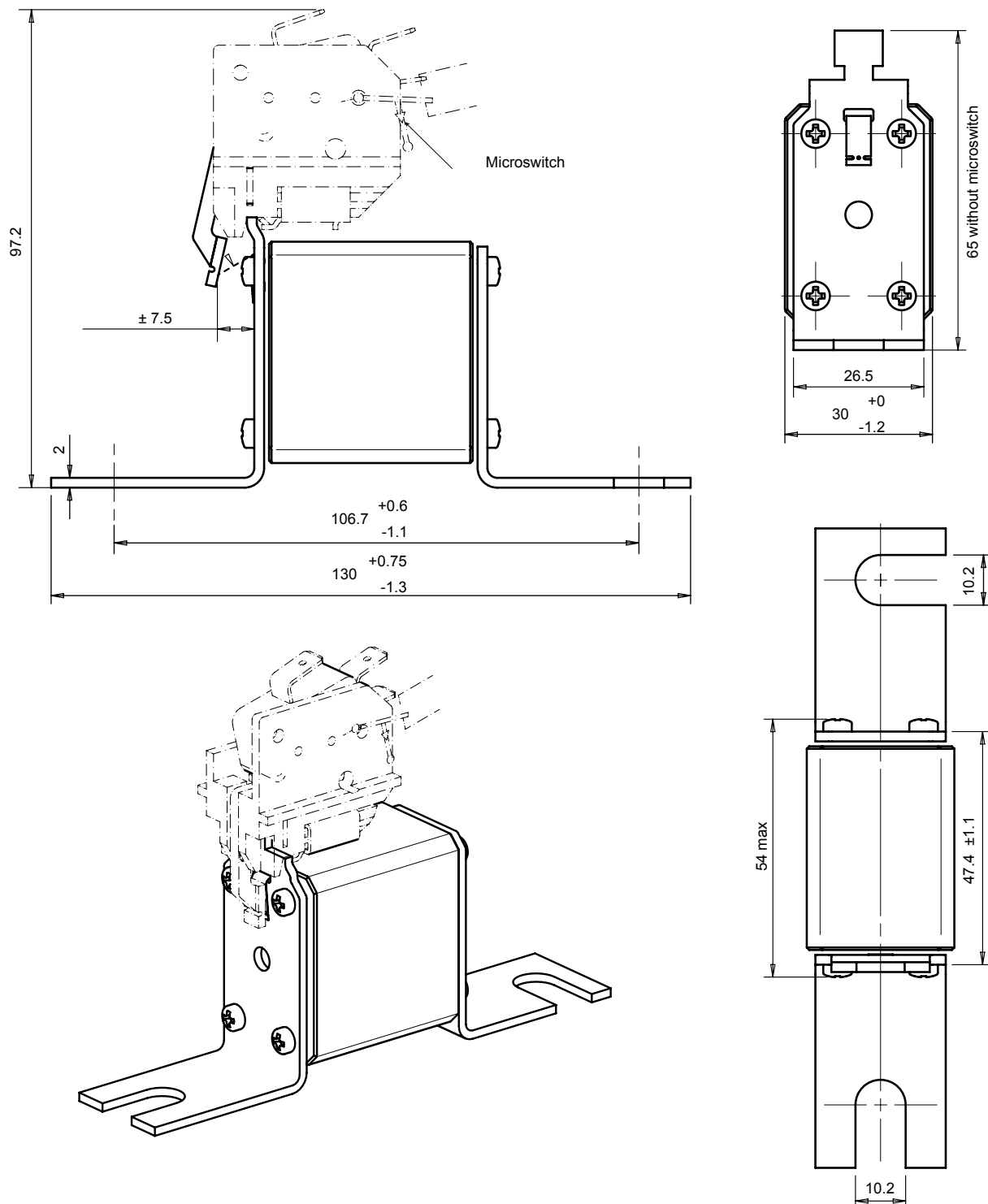
Dimensions in mm

# Protistor® size 000/00 aR

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

## DIMENSIONS

### Size 00 DIN110 for monitoring micro-contact



Dimensions in mm

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# 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

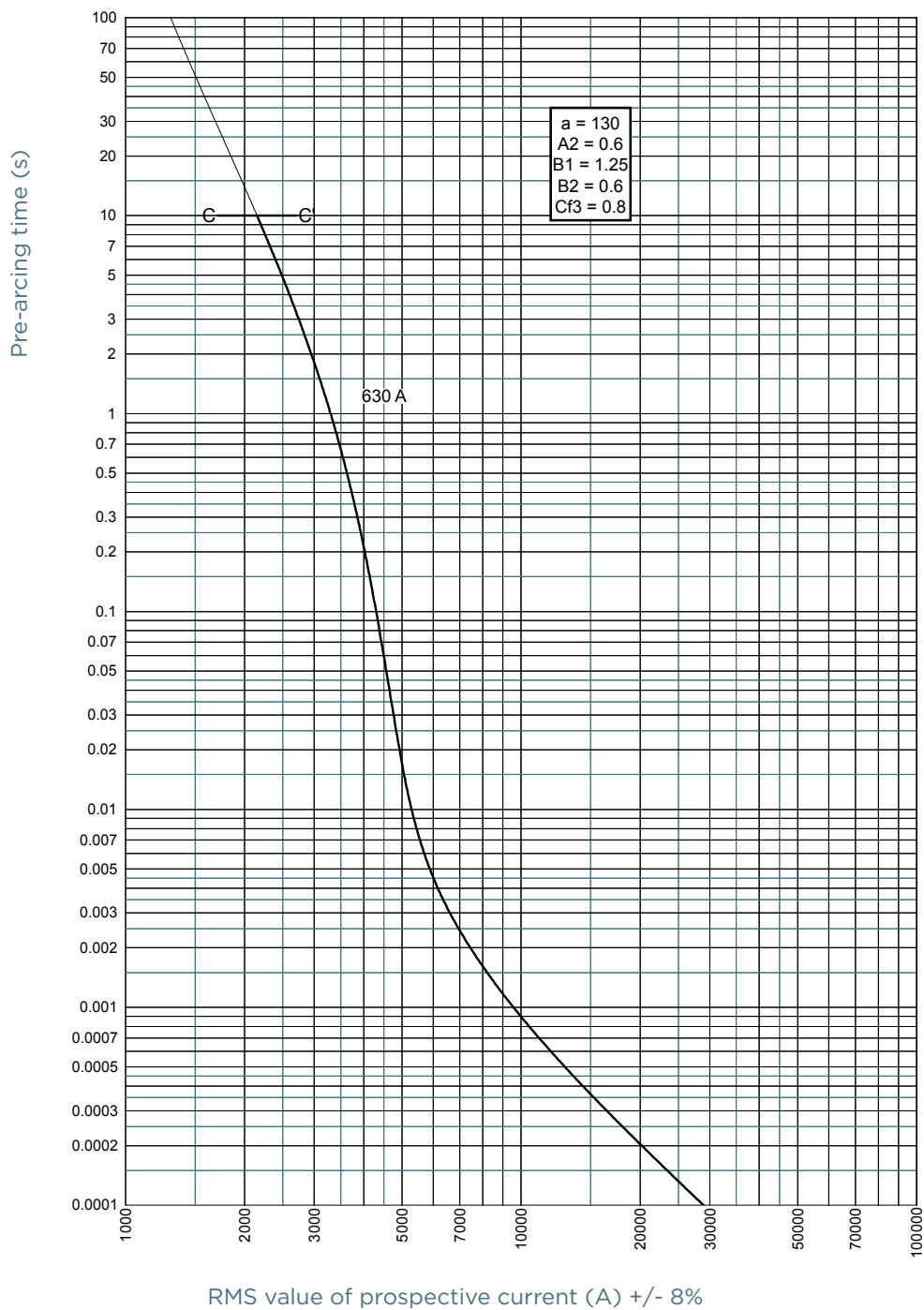
### Size 30 type EF blades for bolted connections

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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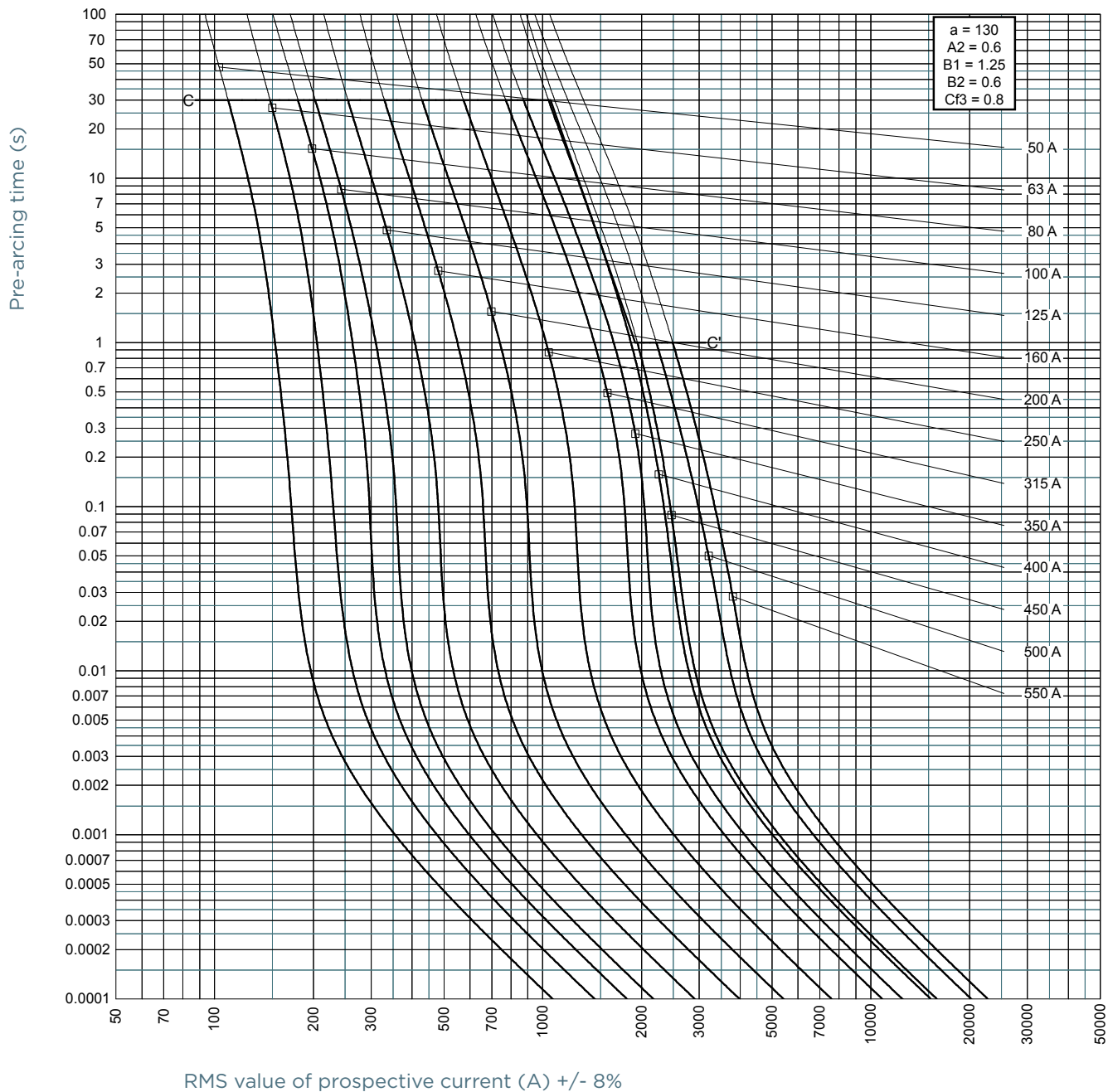
## TIME CURRENT CHARACTERISTIC CURVES

### Size 30 600V



## TIME CURRENT CHARACTERISTIC CURVES

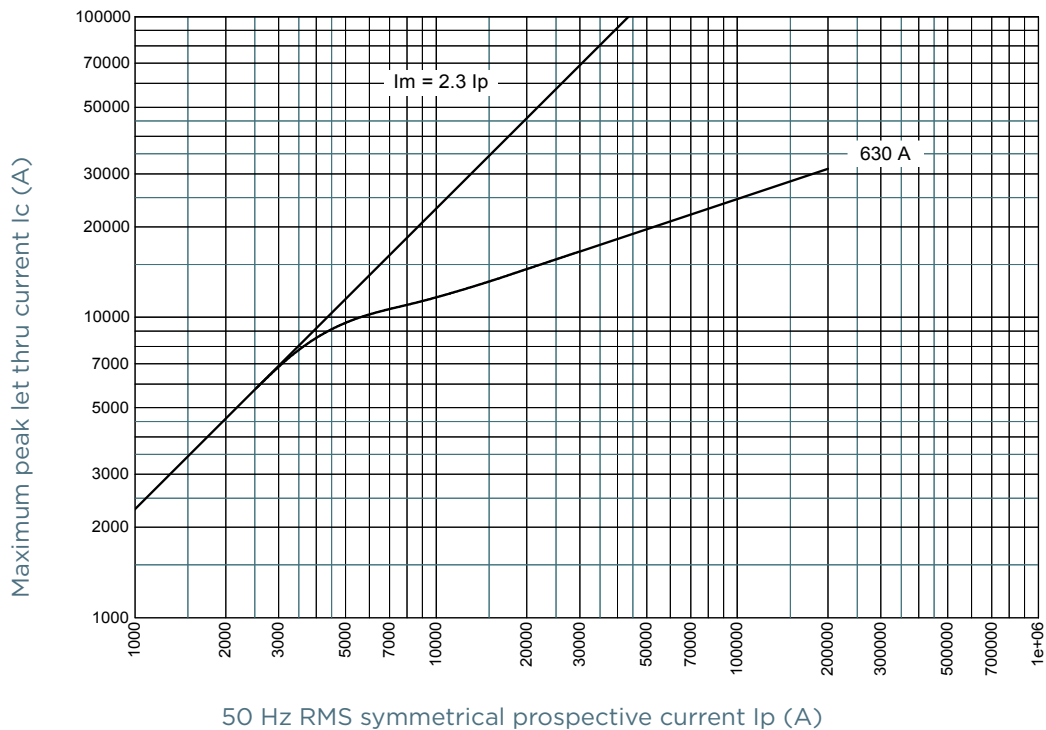
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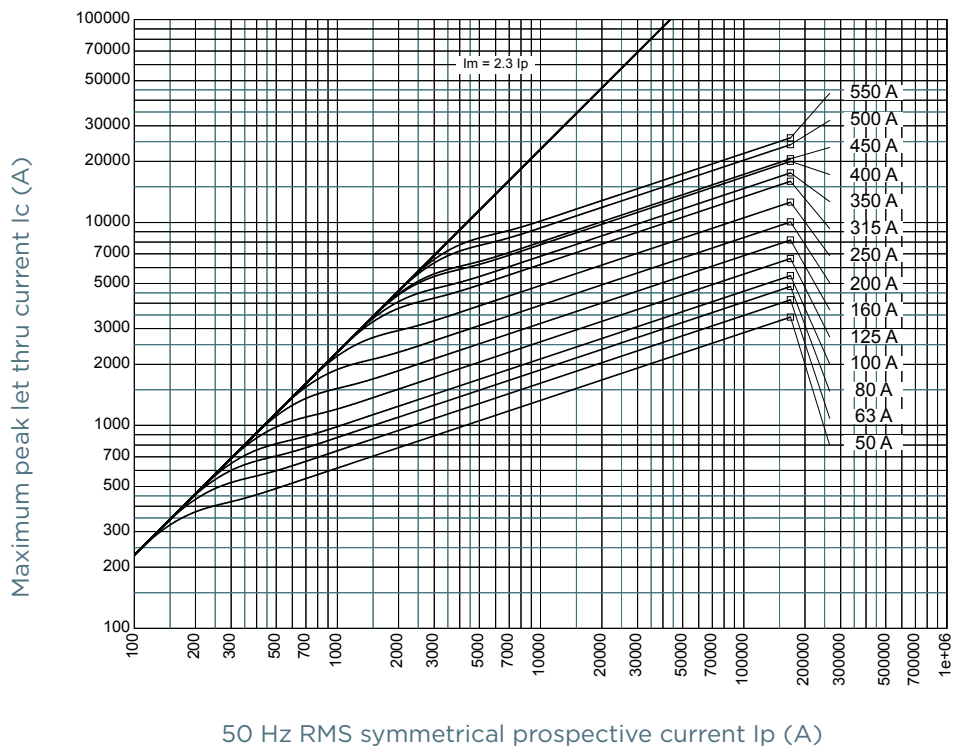
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## CUT-OFF CURRENT CHARACTERISTIC

### Size 30 600V

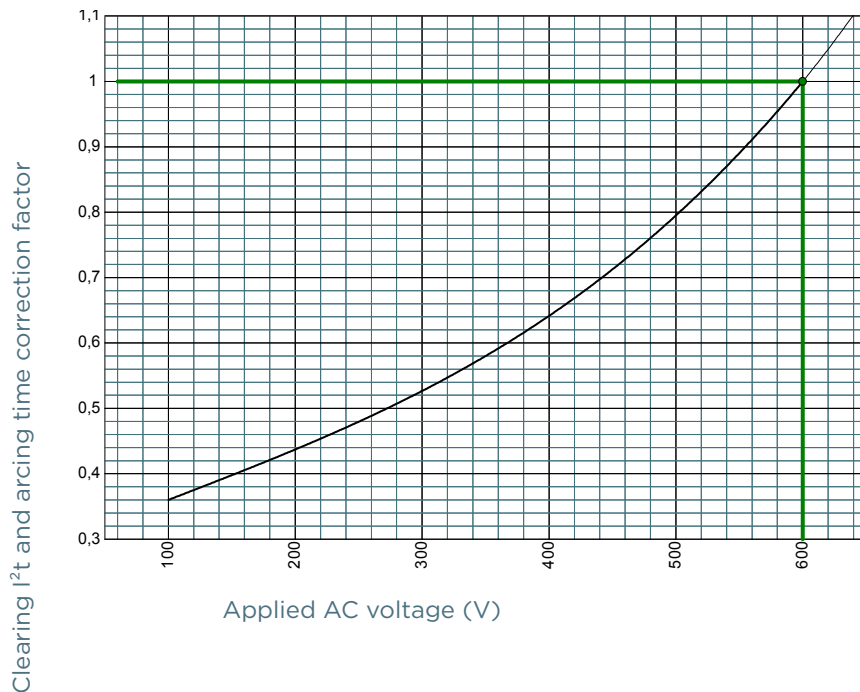


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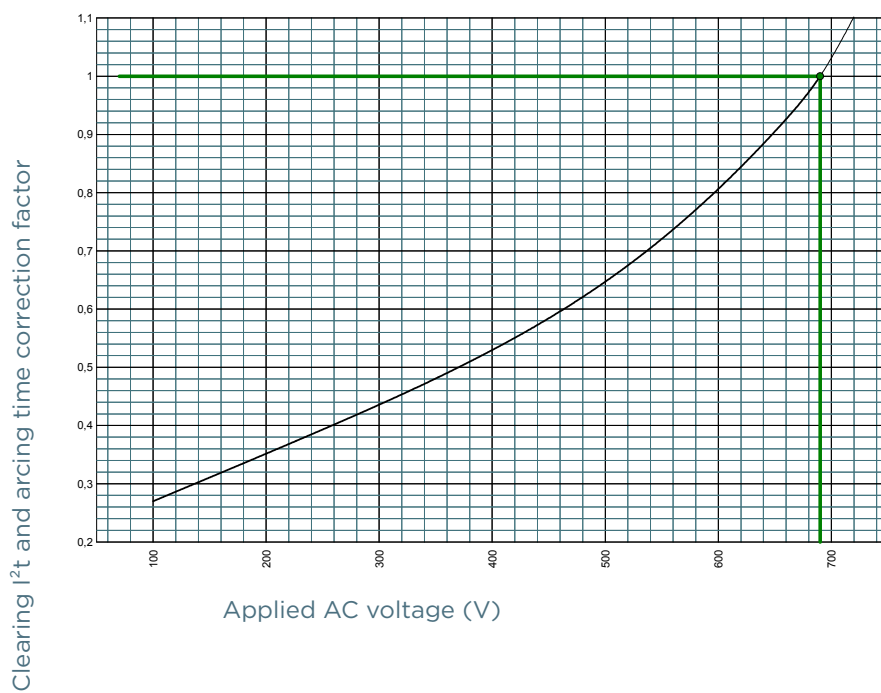


## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 30 600V



### Size 30 690V

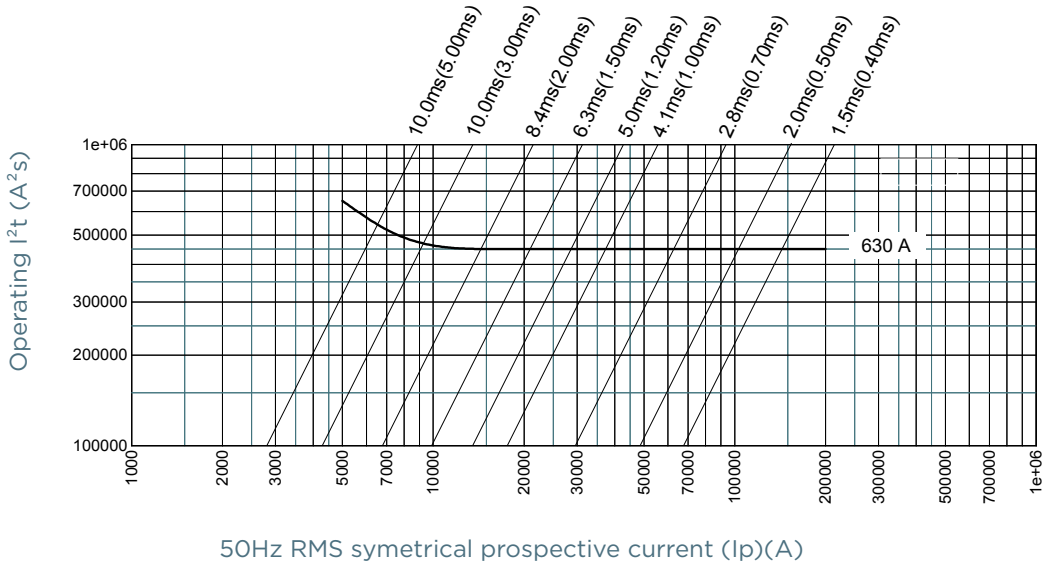


# Protistor® size 30 aR

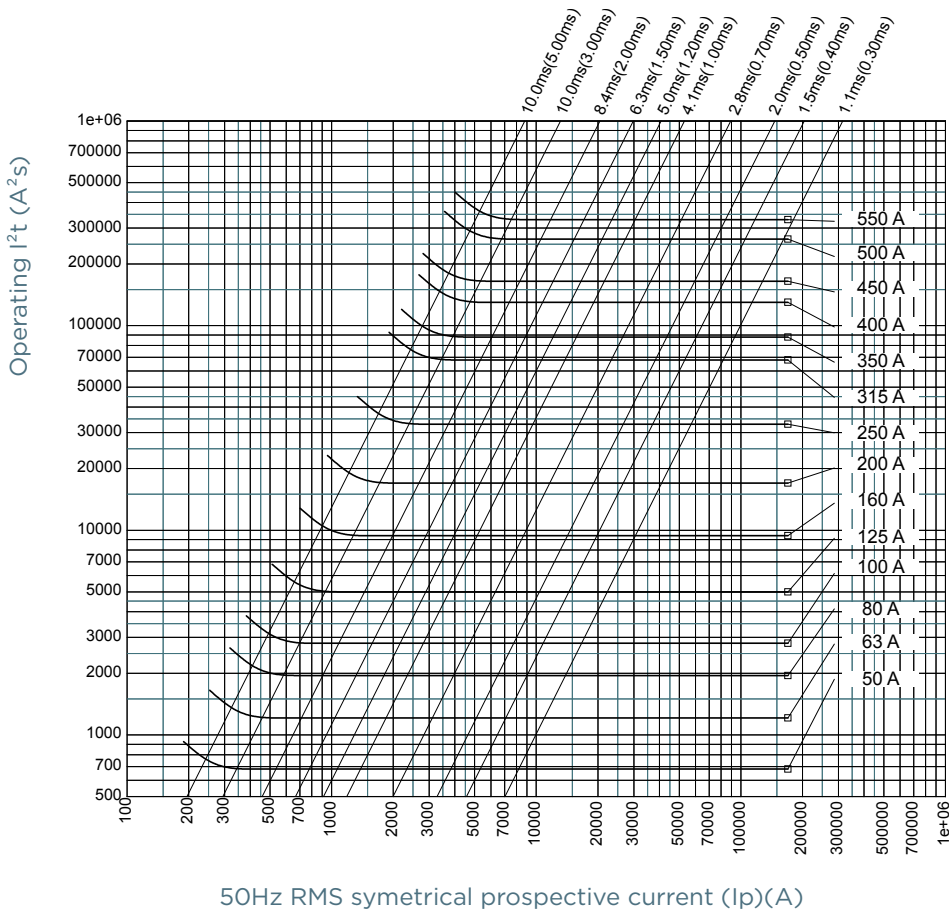
600 - 690VAC (IEC) / 700VAC (UL)

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

### Size 30 600V



### Size 30 690V



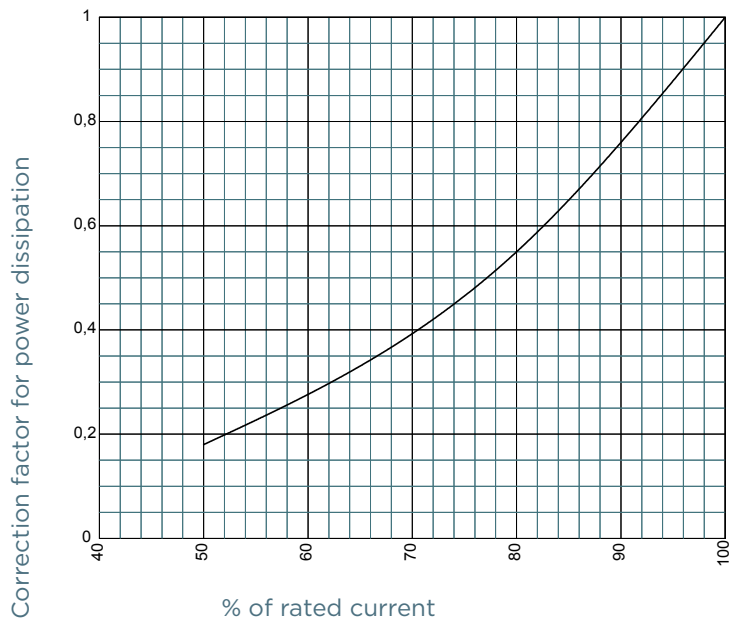
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# Protistor® size 30 aR

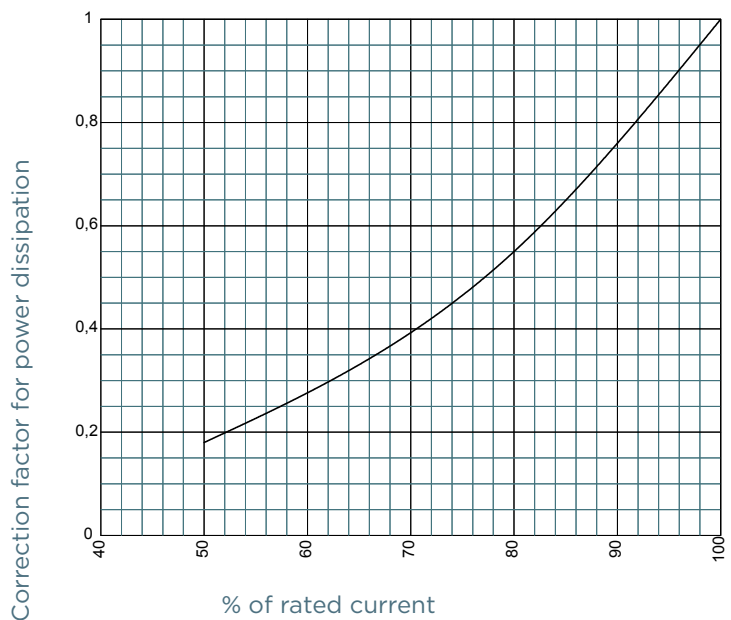
600 - 690VAC (IEC) / 700VAC (UL)

## POWER DISSIPATION

### Size 30 600V



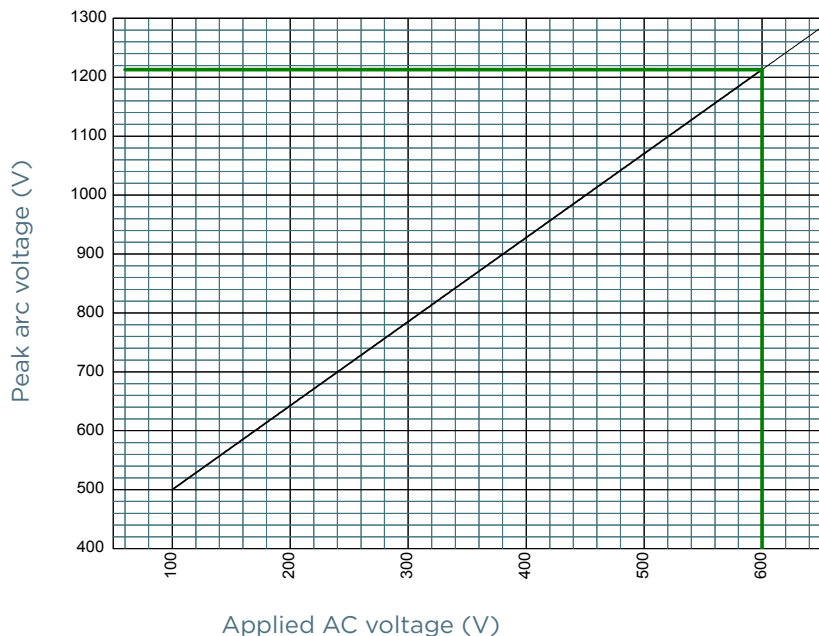
### Size 30 690V



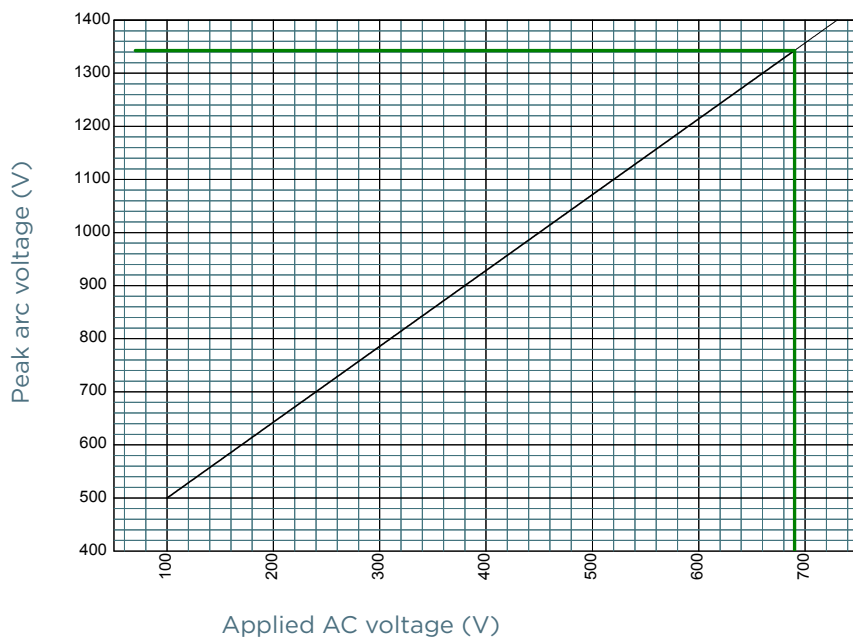
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## PEAK ARC VOLTAGE

### Size 30 600V



### Size 30 690V

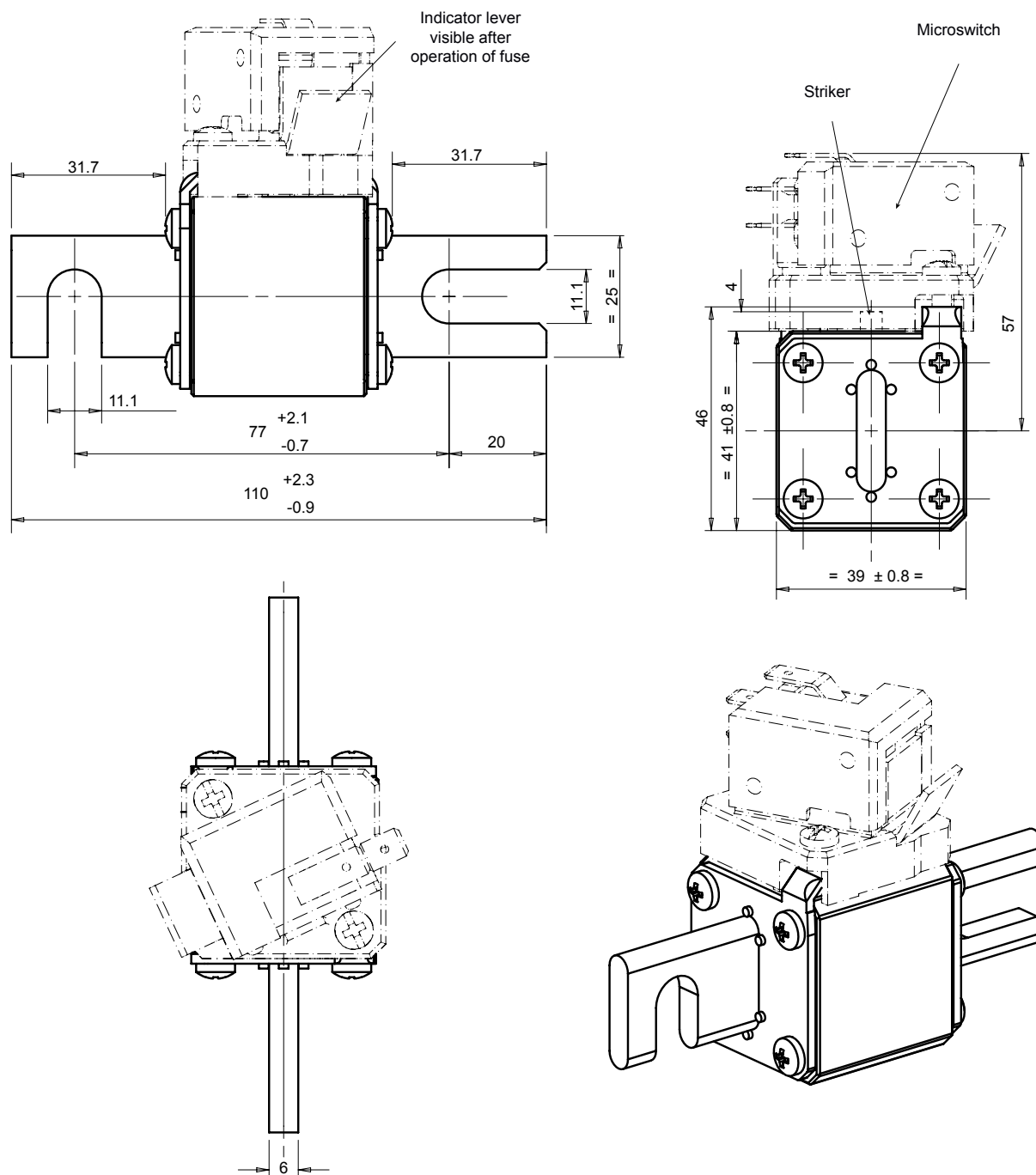


# Protistor® size 30 aR

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

## DIMENSIONS

Size 30 type DIN 80 (102936)



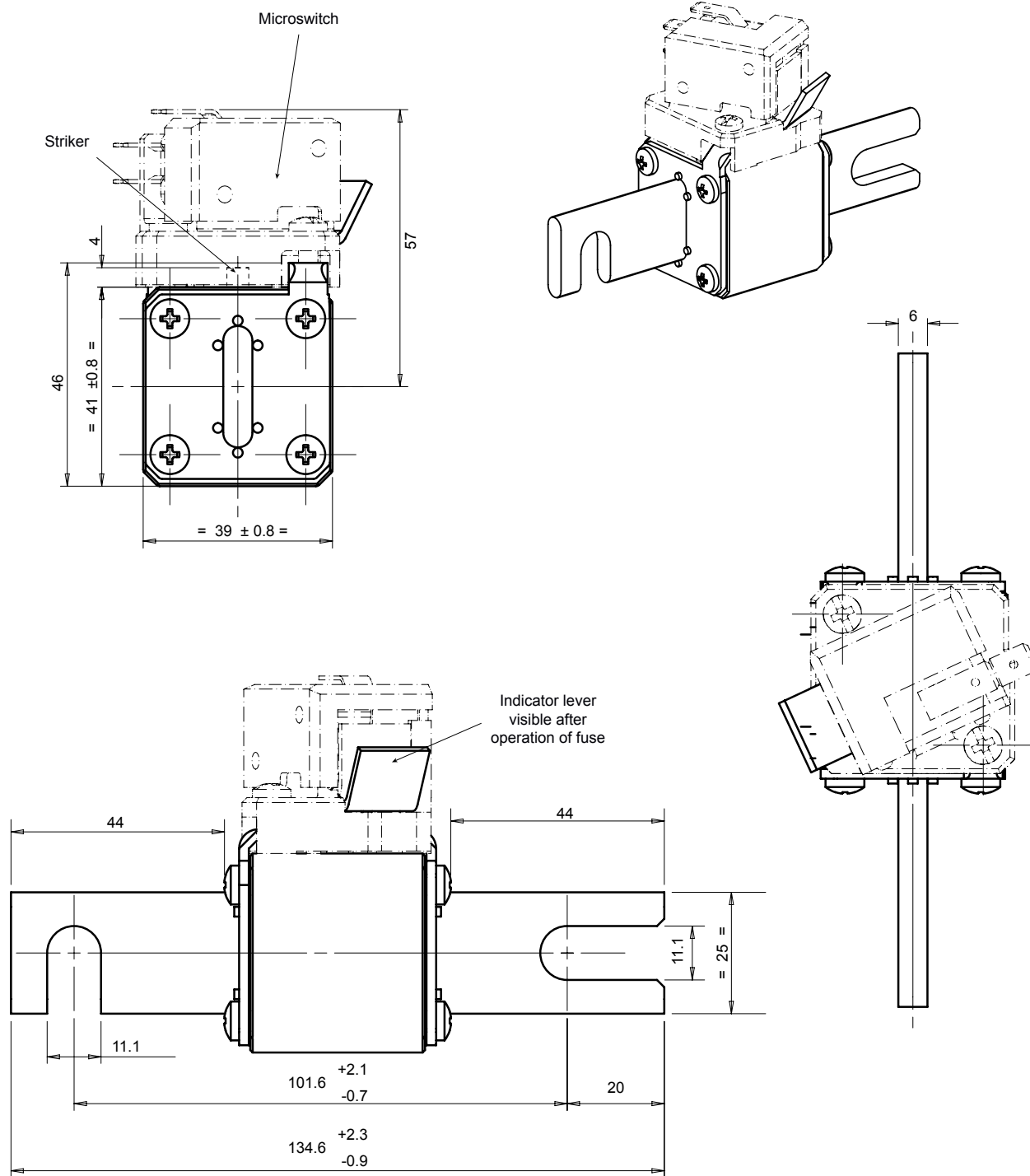
Dimensions in mm

# Protistor® size 30 aR

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

## DIMENSIONS

Size 30 type DIN 110 (102937)



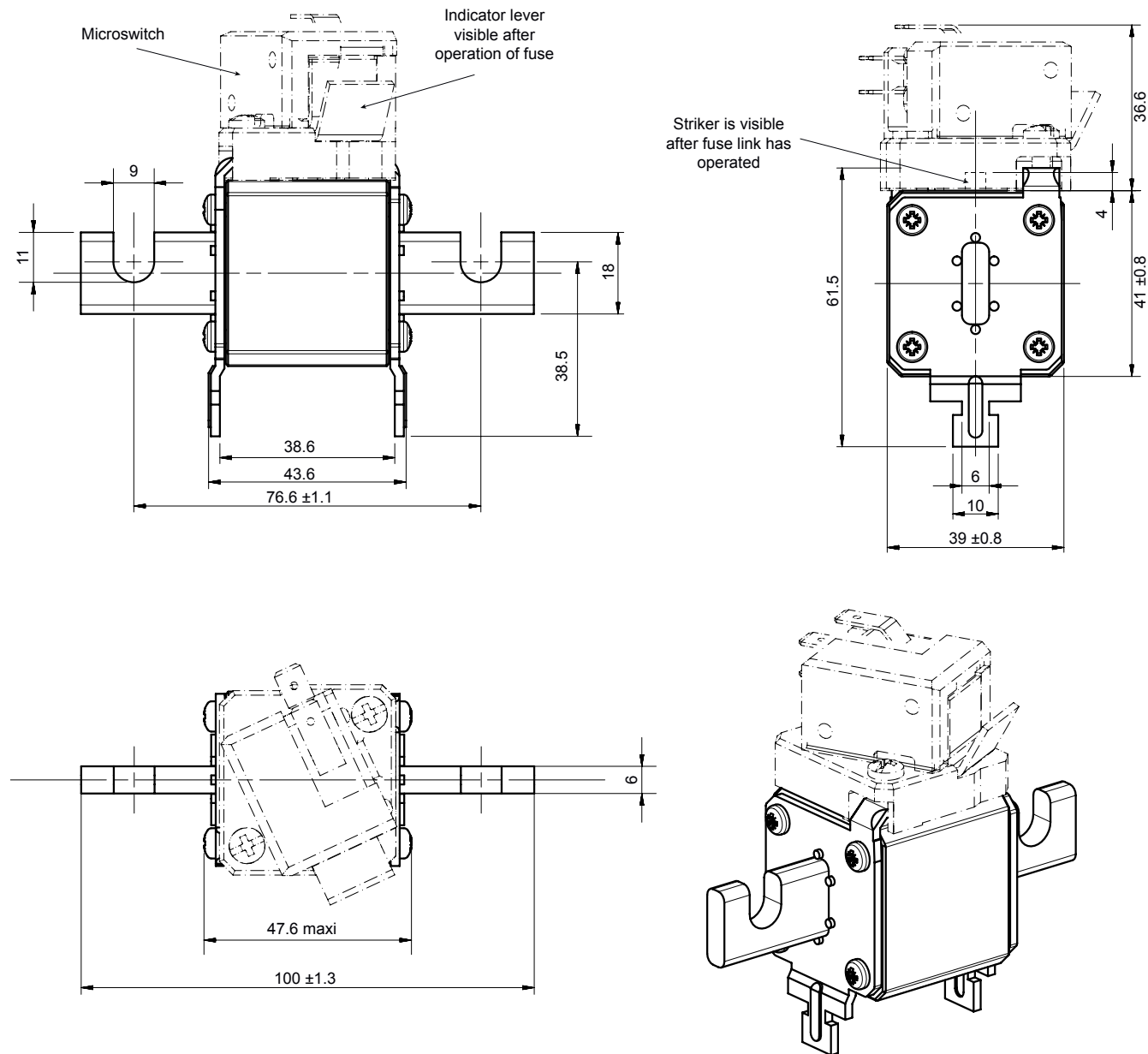
Dimensions in mm

# Protistor® size 30 aR

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

## DIMENSIONS

Size 30 type EF (102935)



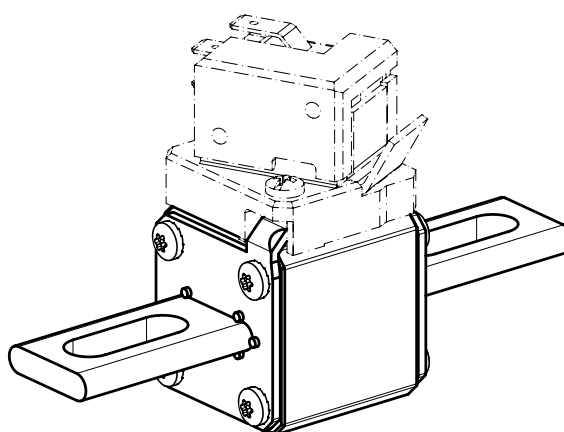
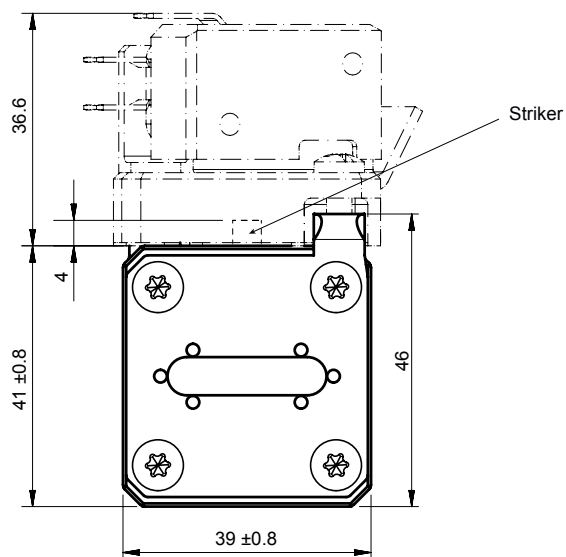
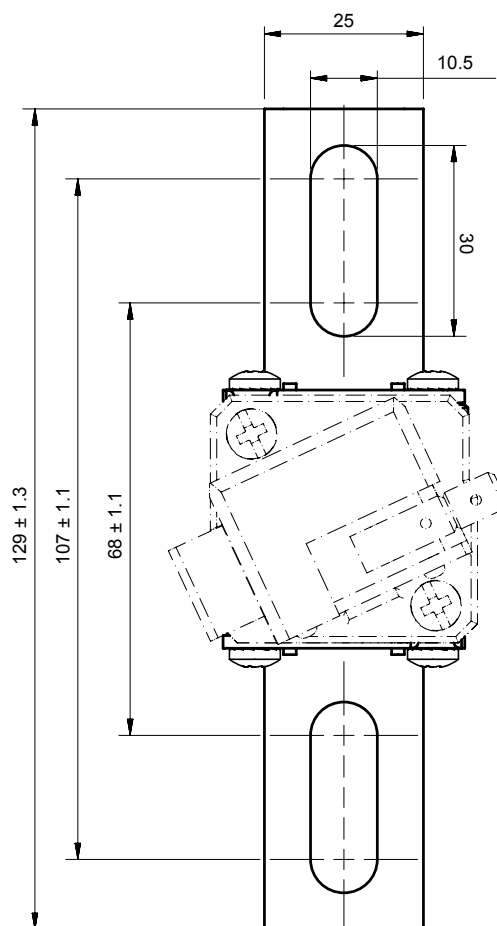
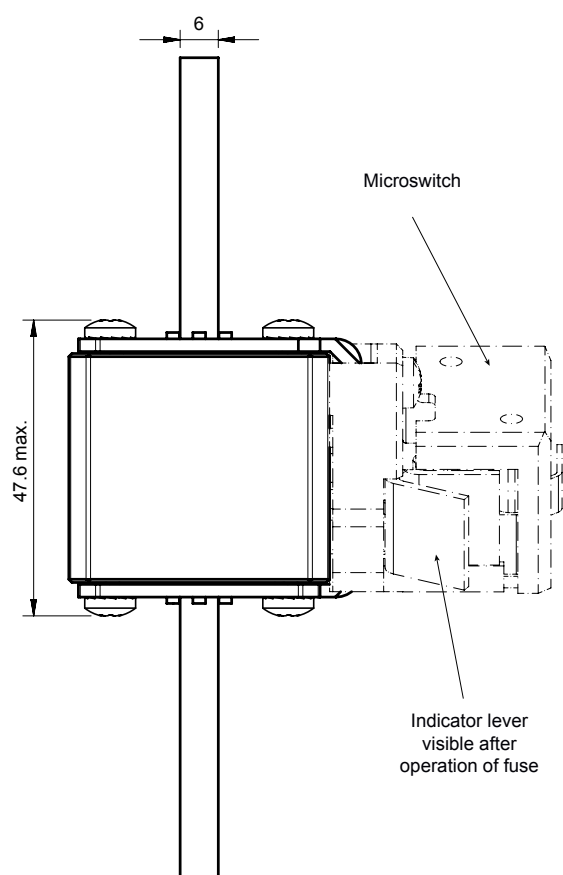
Dimensions in mm

# Protistor® size 30 aR

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

## DIMENSIONS

Size 30 type KI (102934)



Dimensions in mm

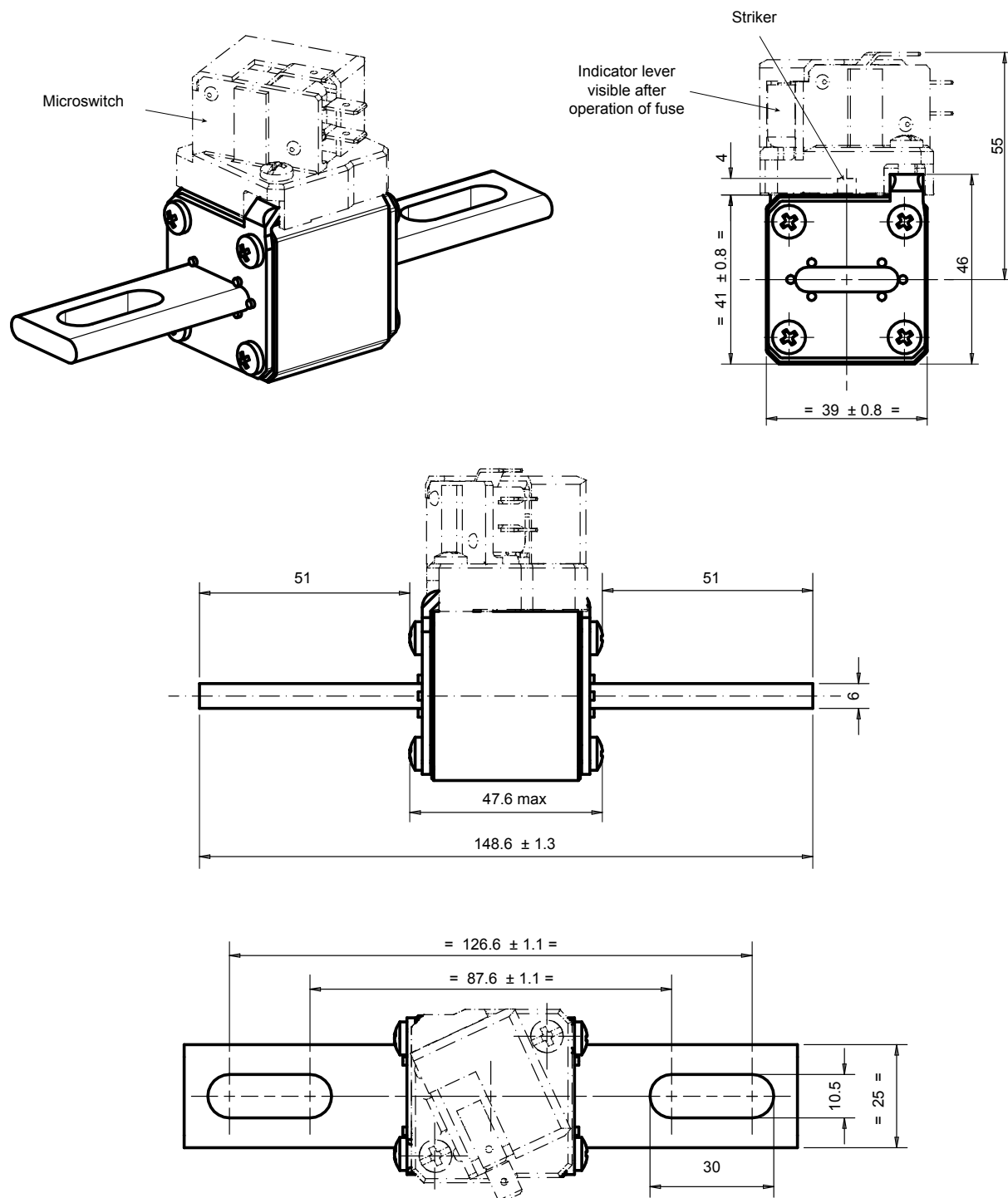
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# Protistor® size 30 aR

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

## DIMENSIONS

Size 30 type LI (102933)



Dimensions in mm

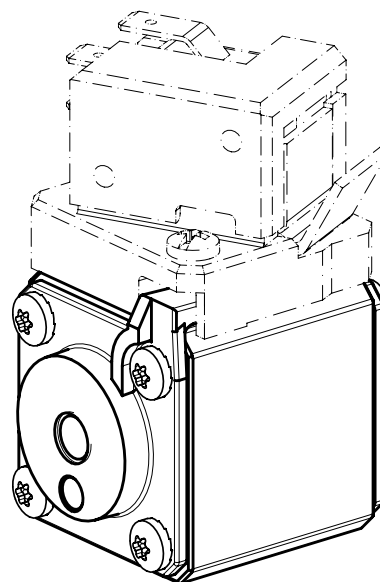
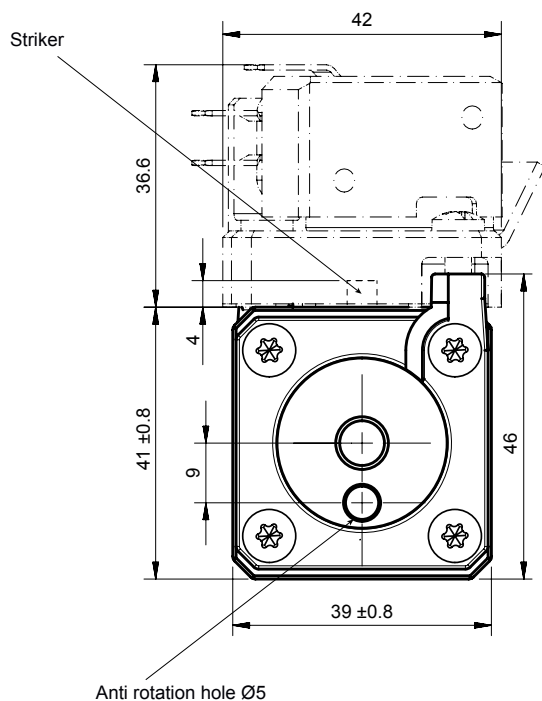
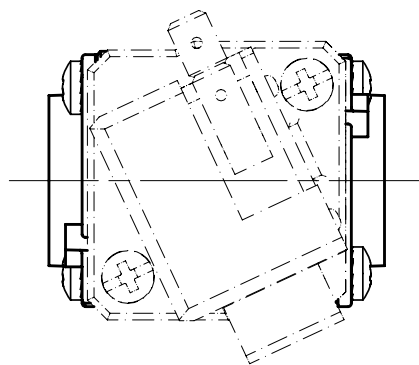
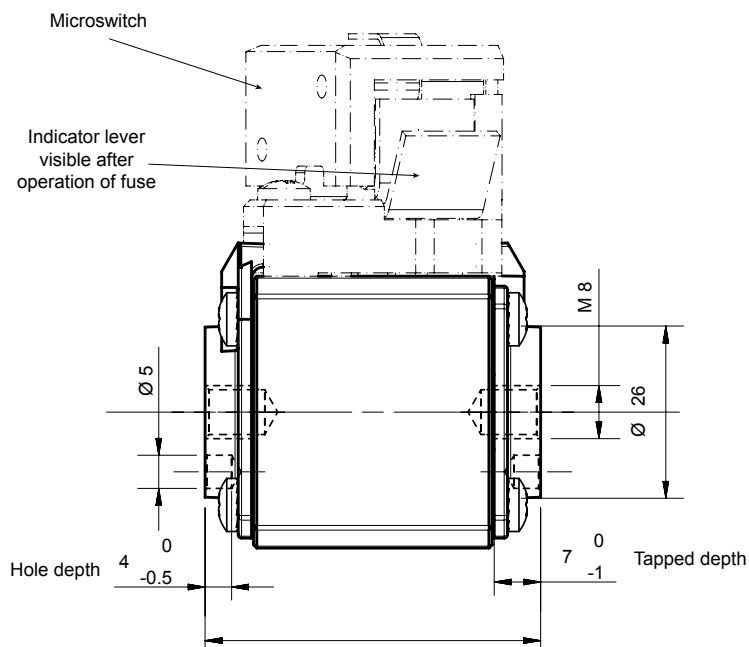
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# Protistor® size 30 aR

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

## DIMENSIONS

Size 30 type TTF (102920)



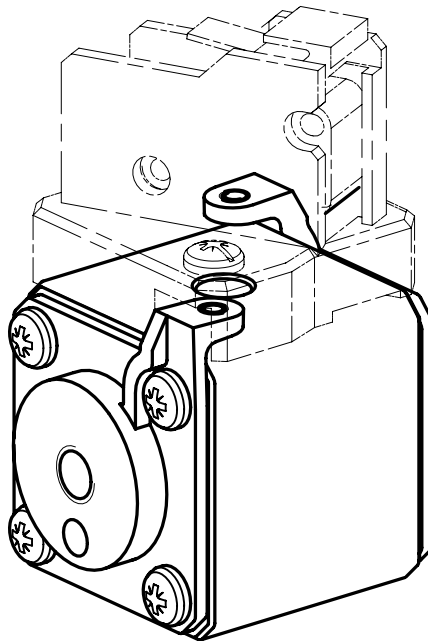
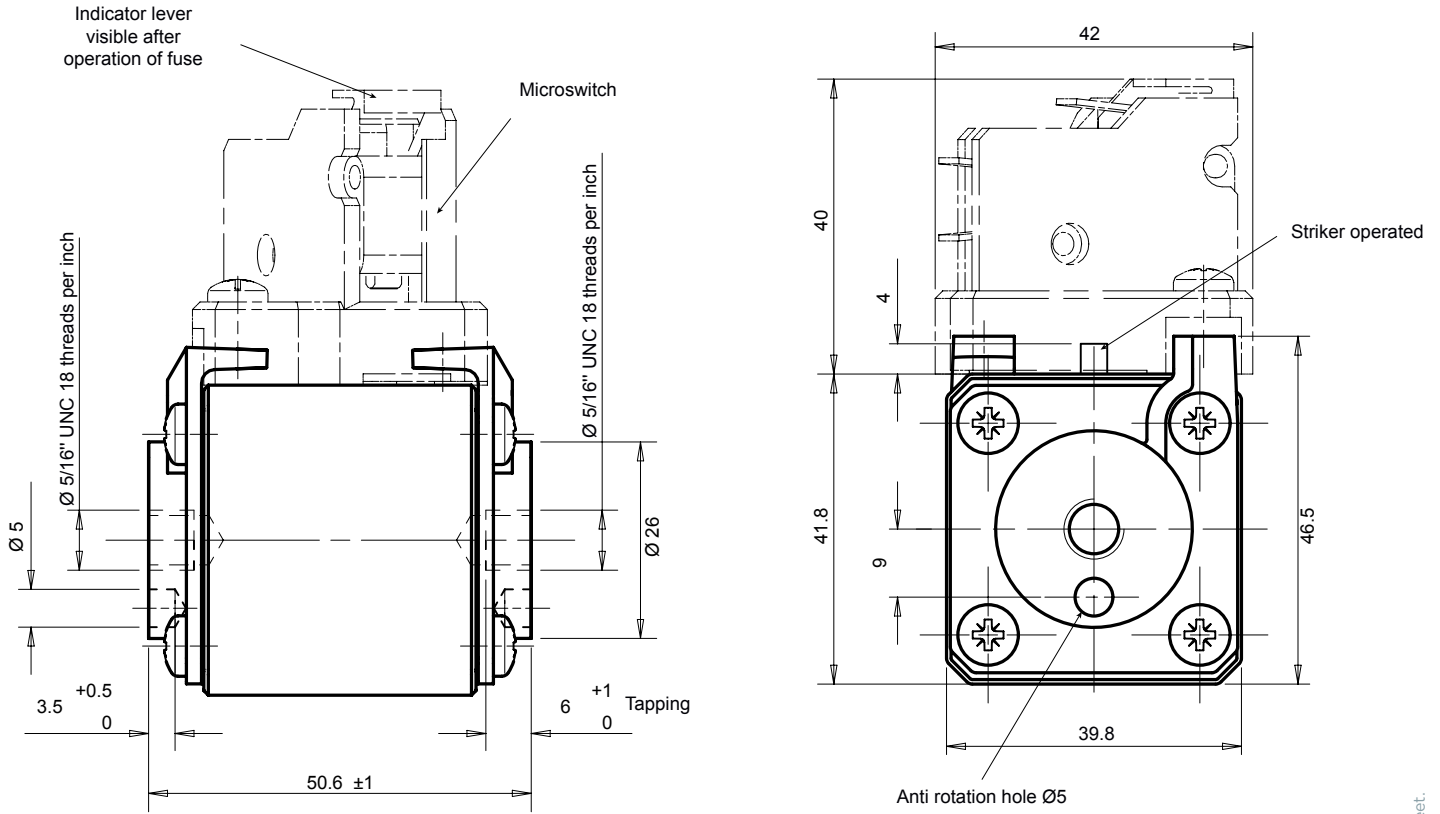
Dimensions in mm

# 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

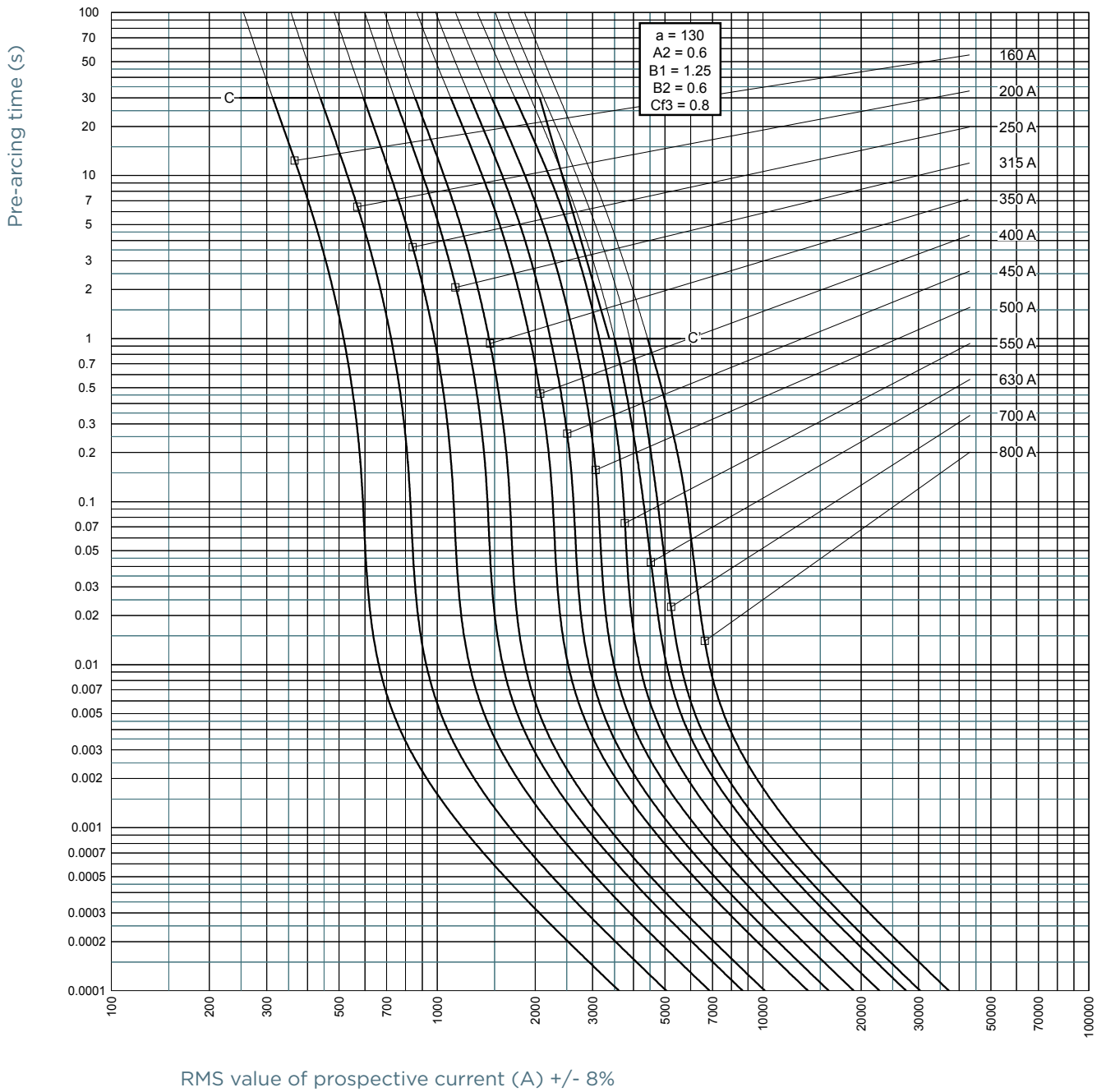


PC31UD69V700EF

### Size 31 for type EF blade bolted connections

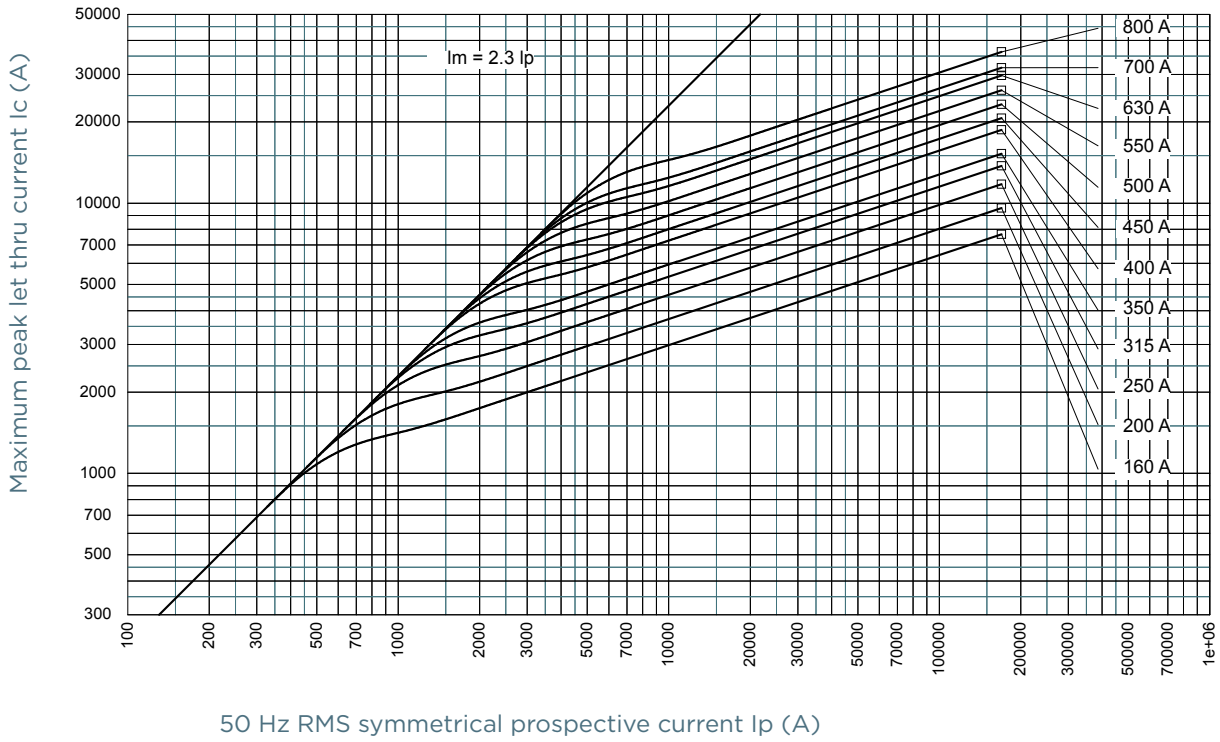
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PC31UD69V160EF	B301922	690 V	700 V	160 A	1300 A <sup>2</sup> s	7700 A <sup>2</sup> s	170 kA	35 W	430 g	3
PC31UD69V200EF	C300037	690 V	700 V	200 A	2600 A <sup>2</sup> s	15000 A <sup>2</sup> s	170 kA	45 W	0.4043 kg	3
PC31UD69V250EF	D300038	690 V	700 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

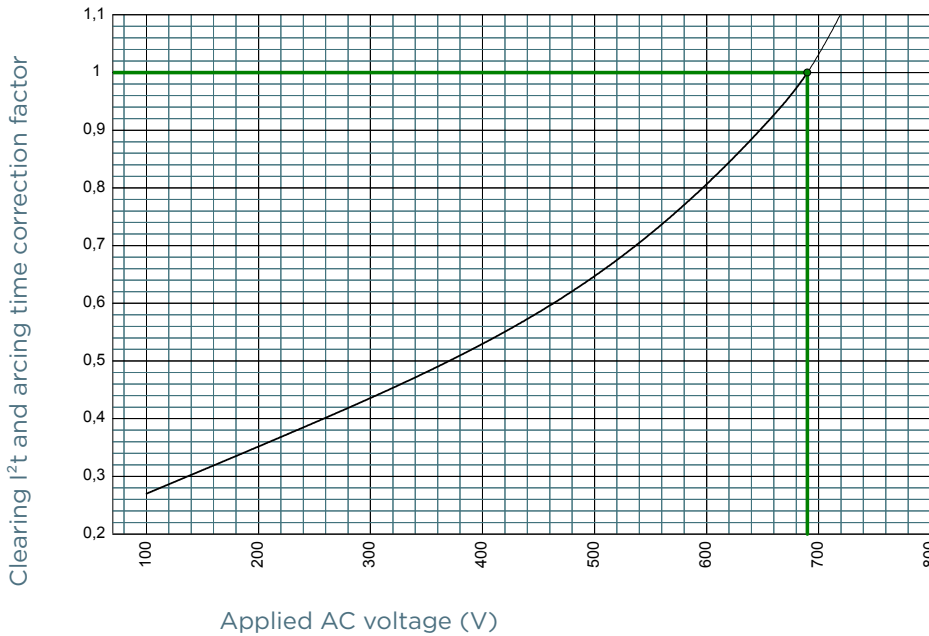


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CUT-OFF CURRENT CHARACTERISTIC

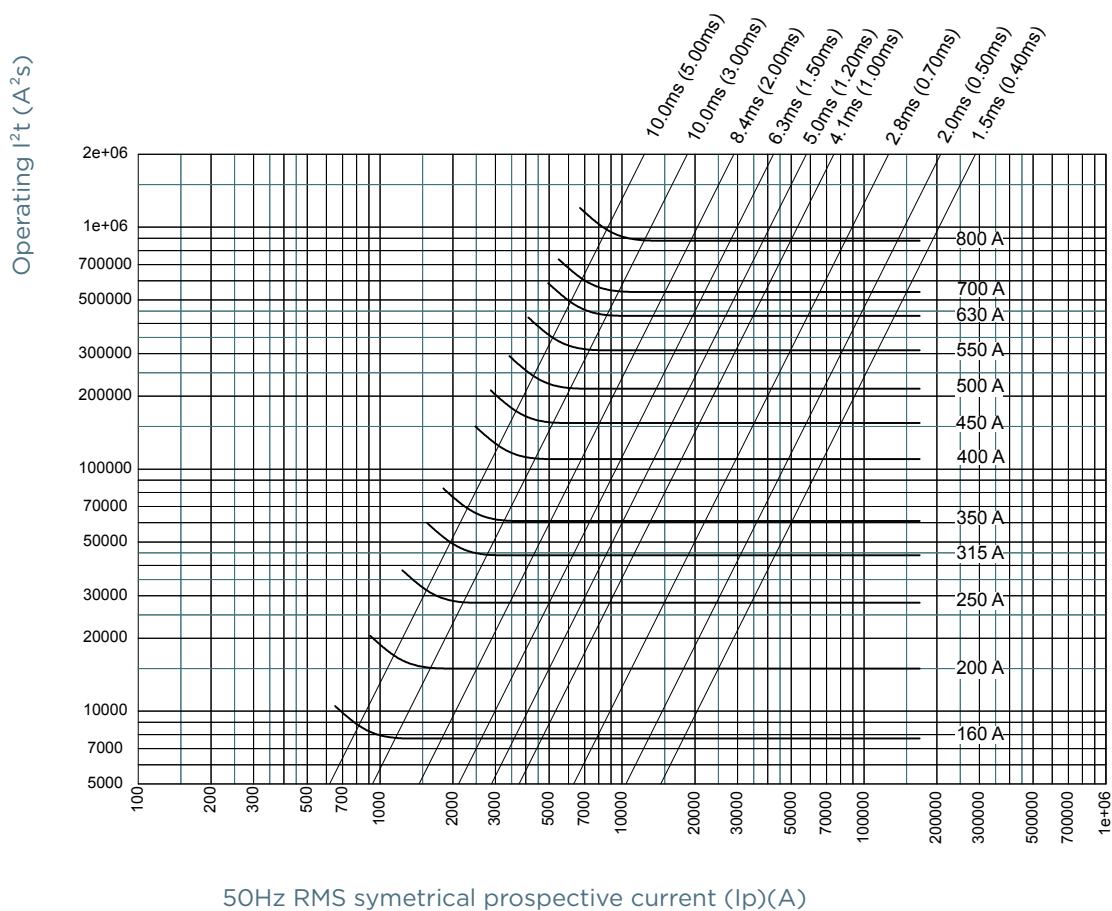


$I^2T$  MULTIPLIER COEFFICIENT

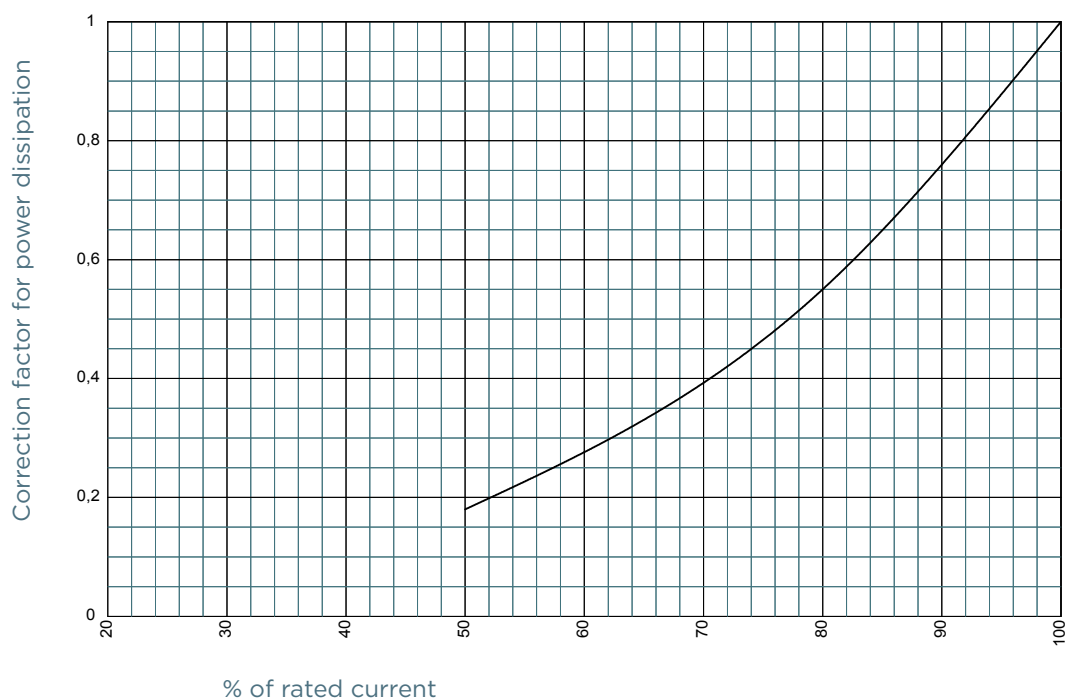


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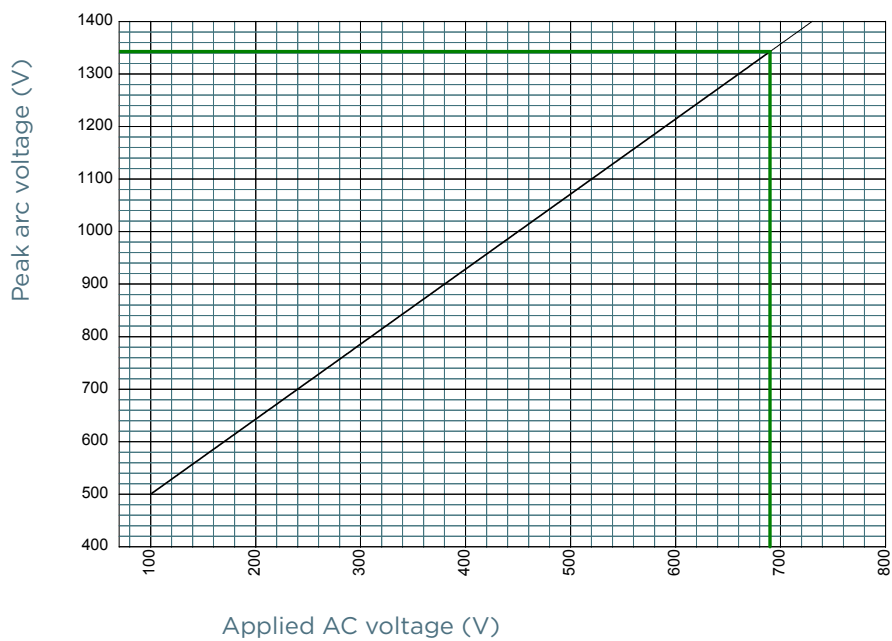
## CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE



## POWER DISSIPATION



## PEAK ARC VOLTAGE

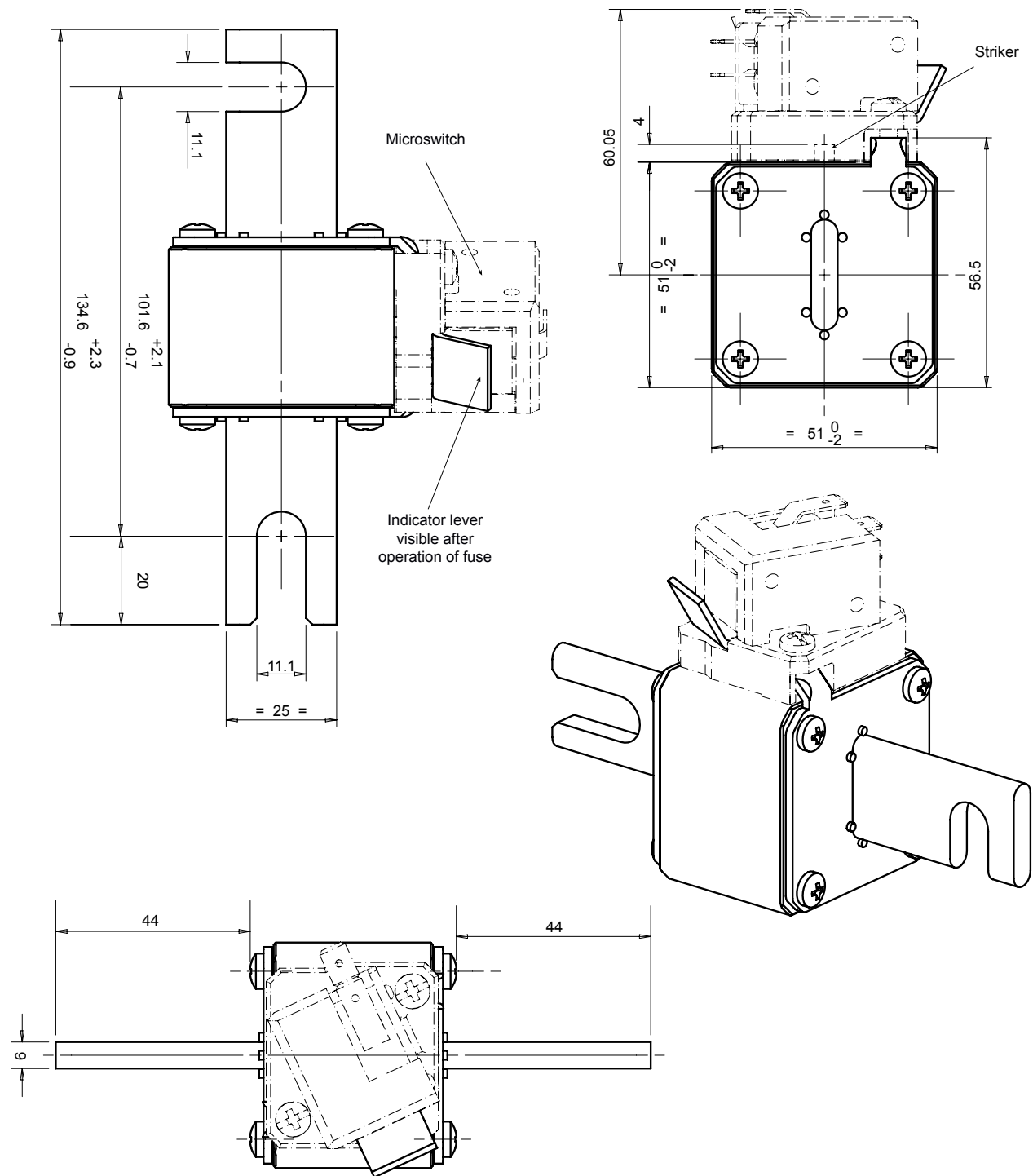


# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

### Size 31 type DIN 110



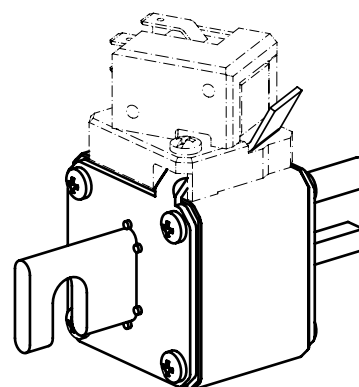
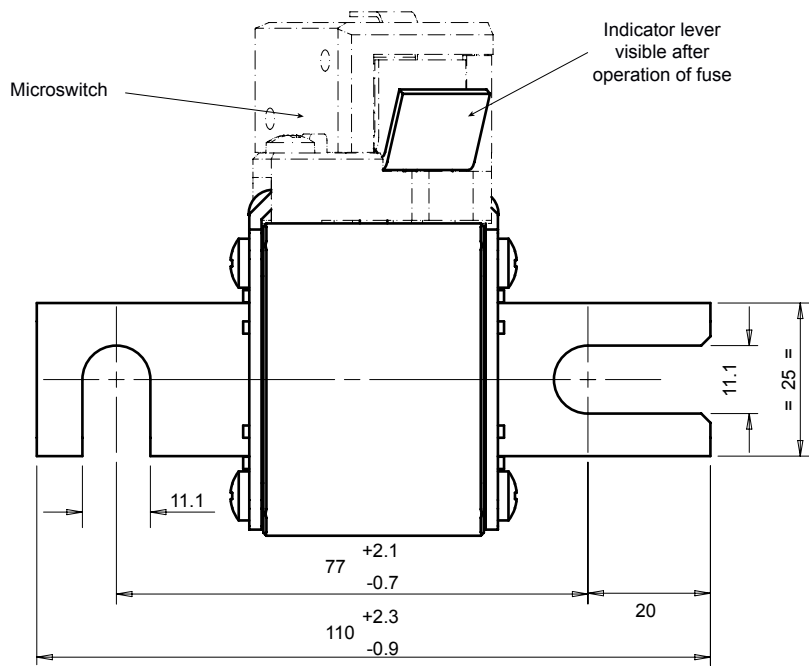
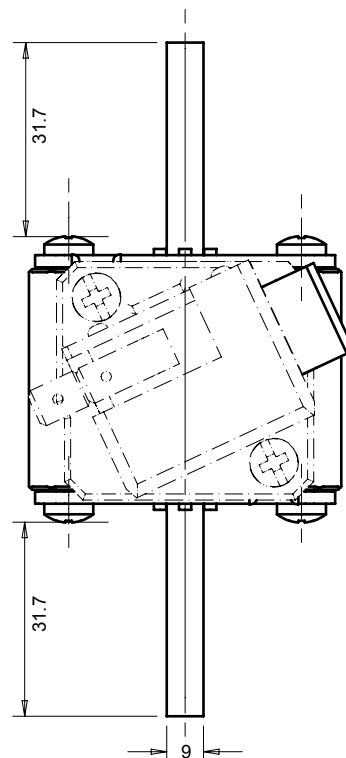
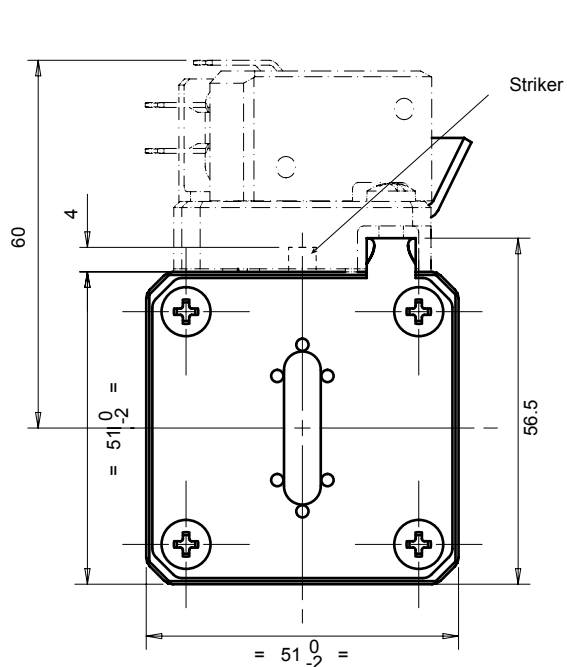
Dimensions in mm

# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

### Size 31 type DIN 80



Dimensions in mm

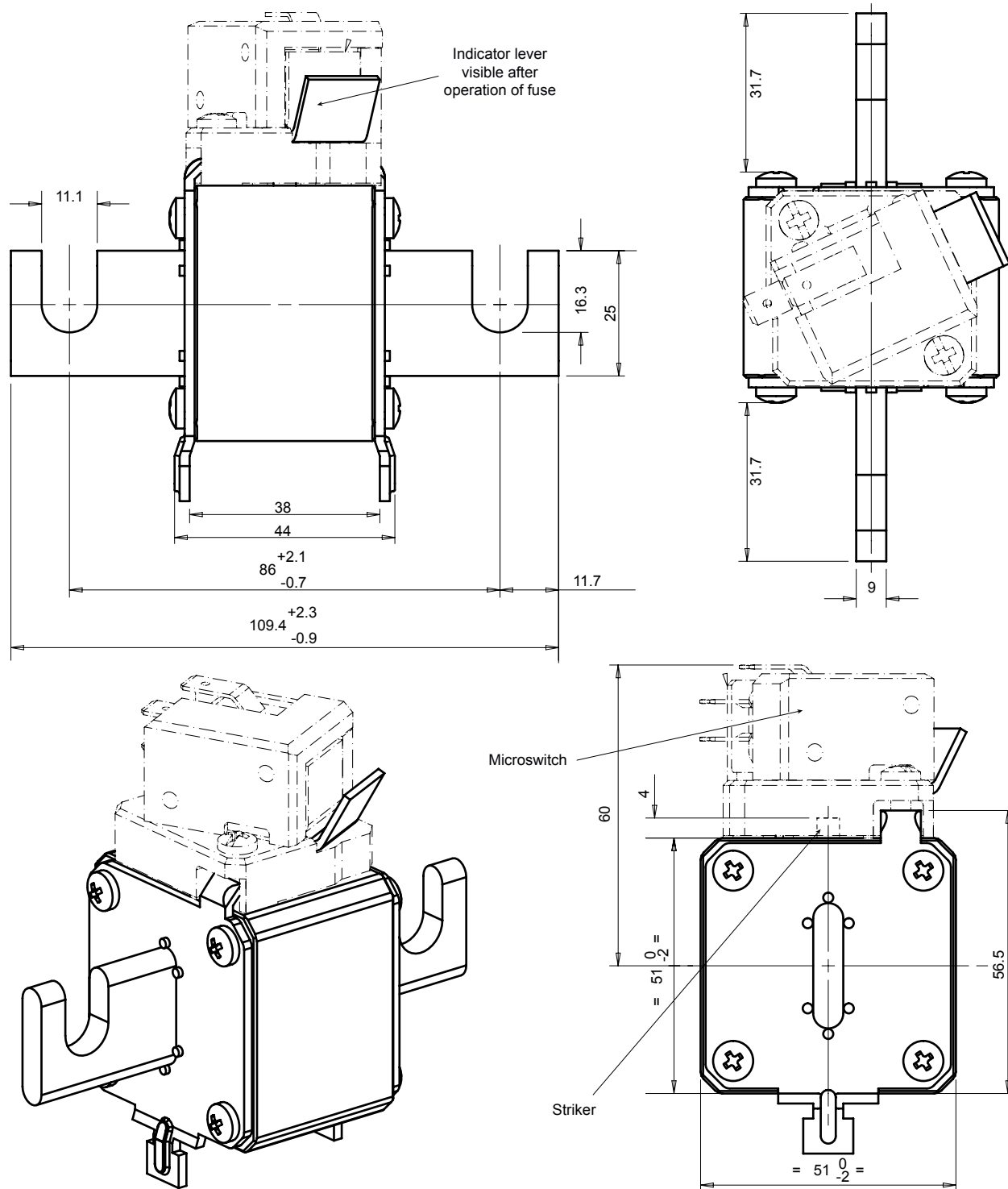
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# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

### Size 31 type EF



Dimensions in mm

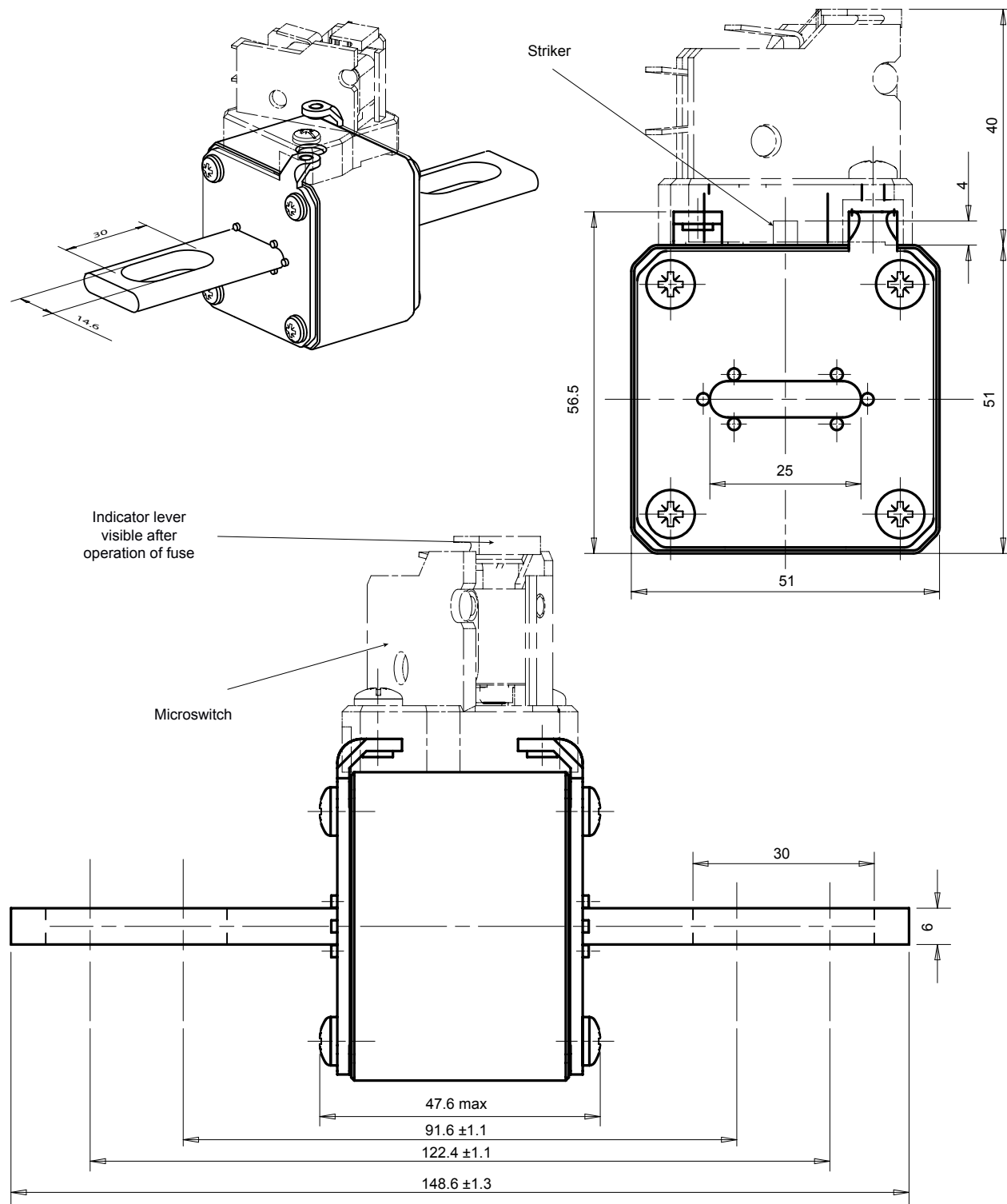
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# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

### Size 31 type LI



Dimensions in mm

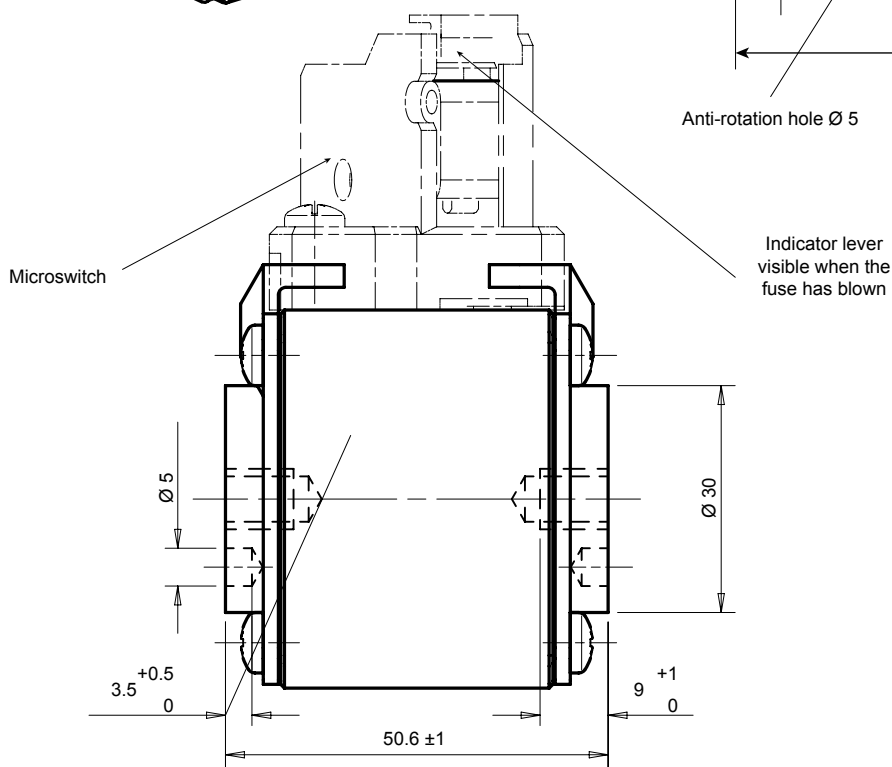
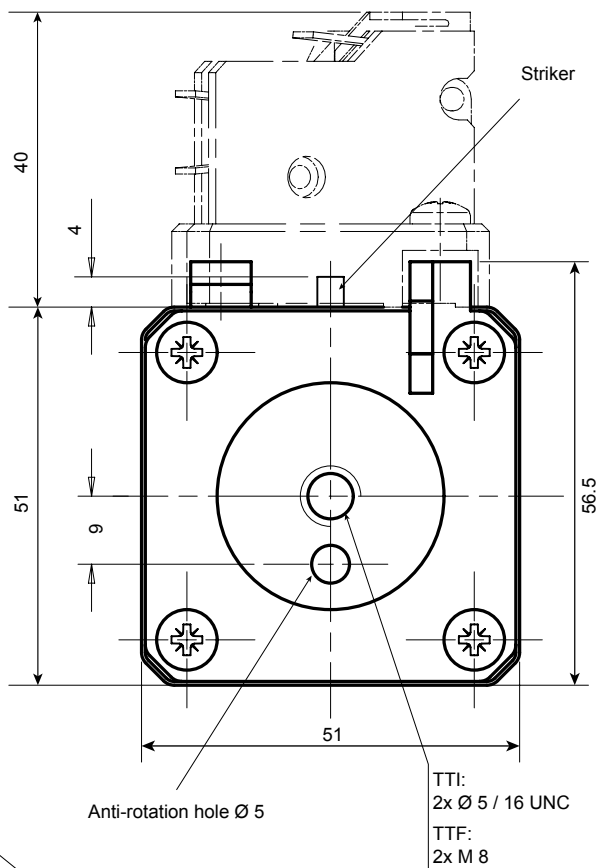
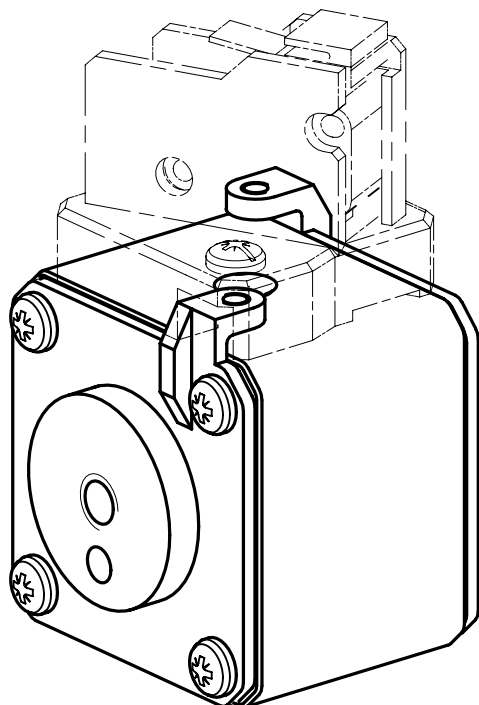
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# Protistor® size 31 aR

690VAC (IEC) / 700VAC (UL)

## DIMENSIONS

### Size 31 type TTF & TTI



Dimensions in mm

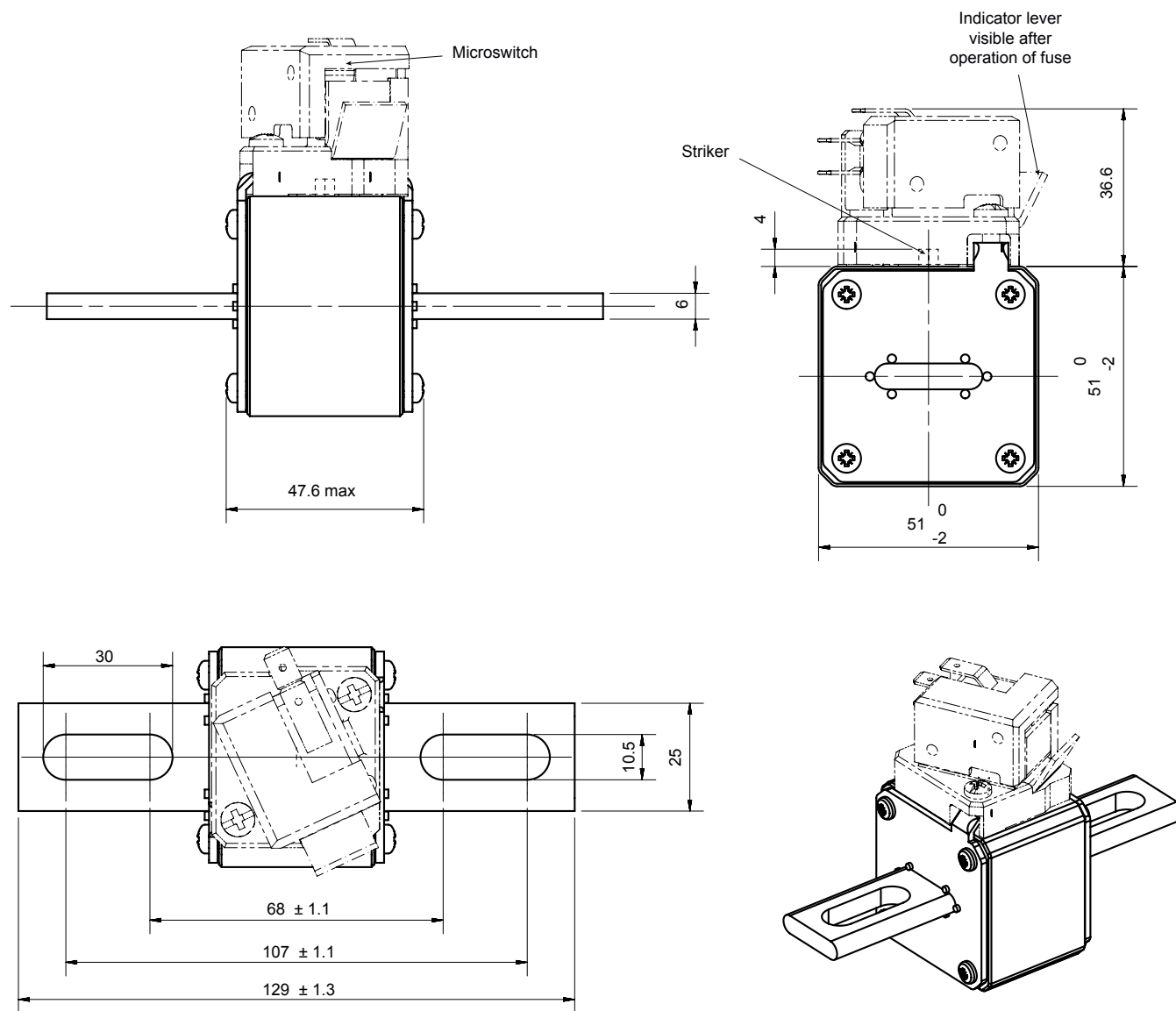
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# Protistor® size 31 aR

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

# Protistor® size 32 aR

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

## PRODUCT RANGE

### Size 32 type LI long slotted blades

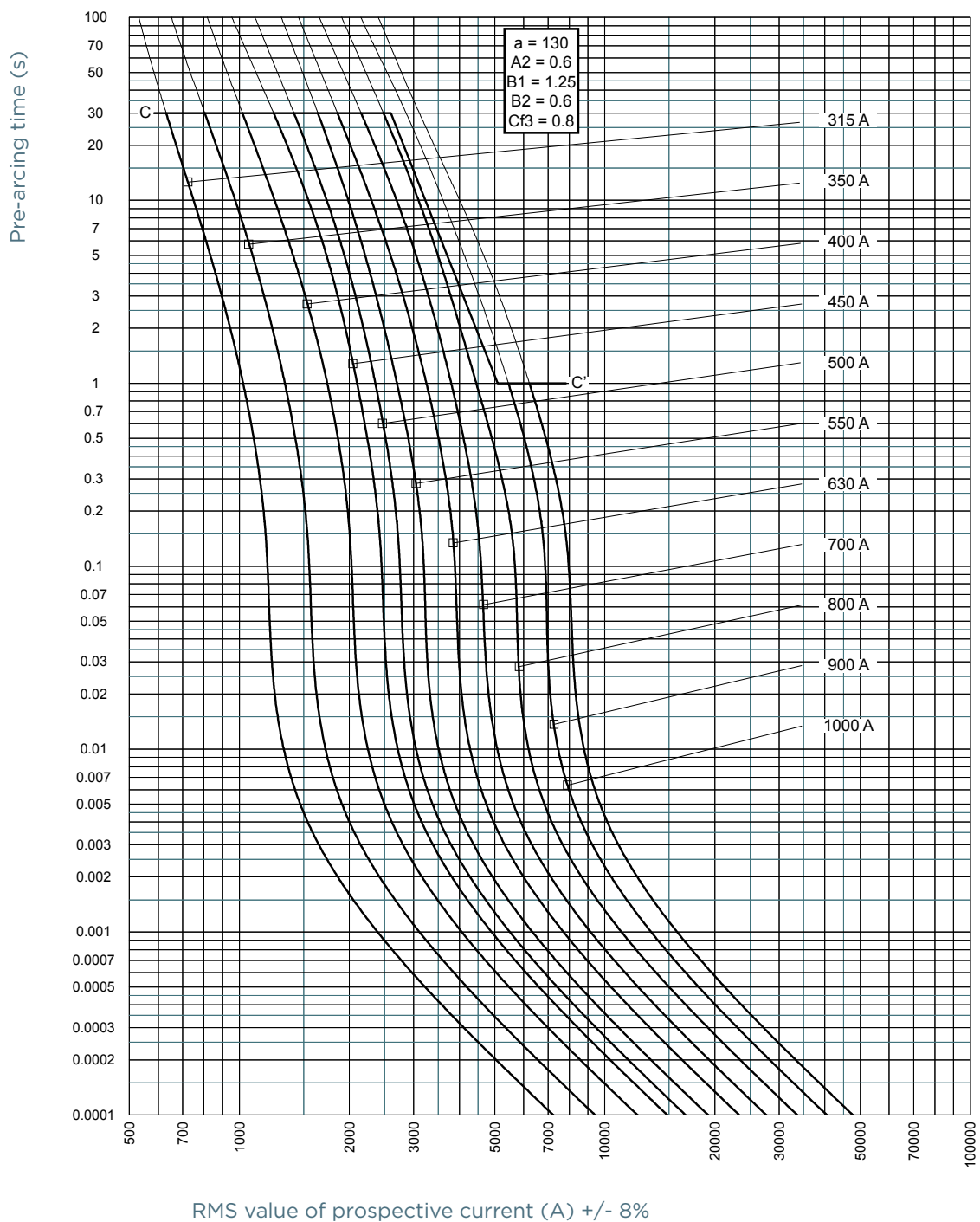
Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
A070UD32LI315	R302166	690 V	700 V	315 A	5.2 kA <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

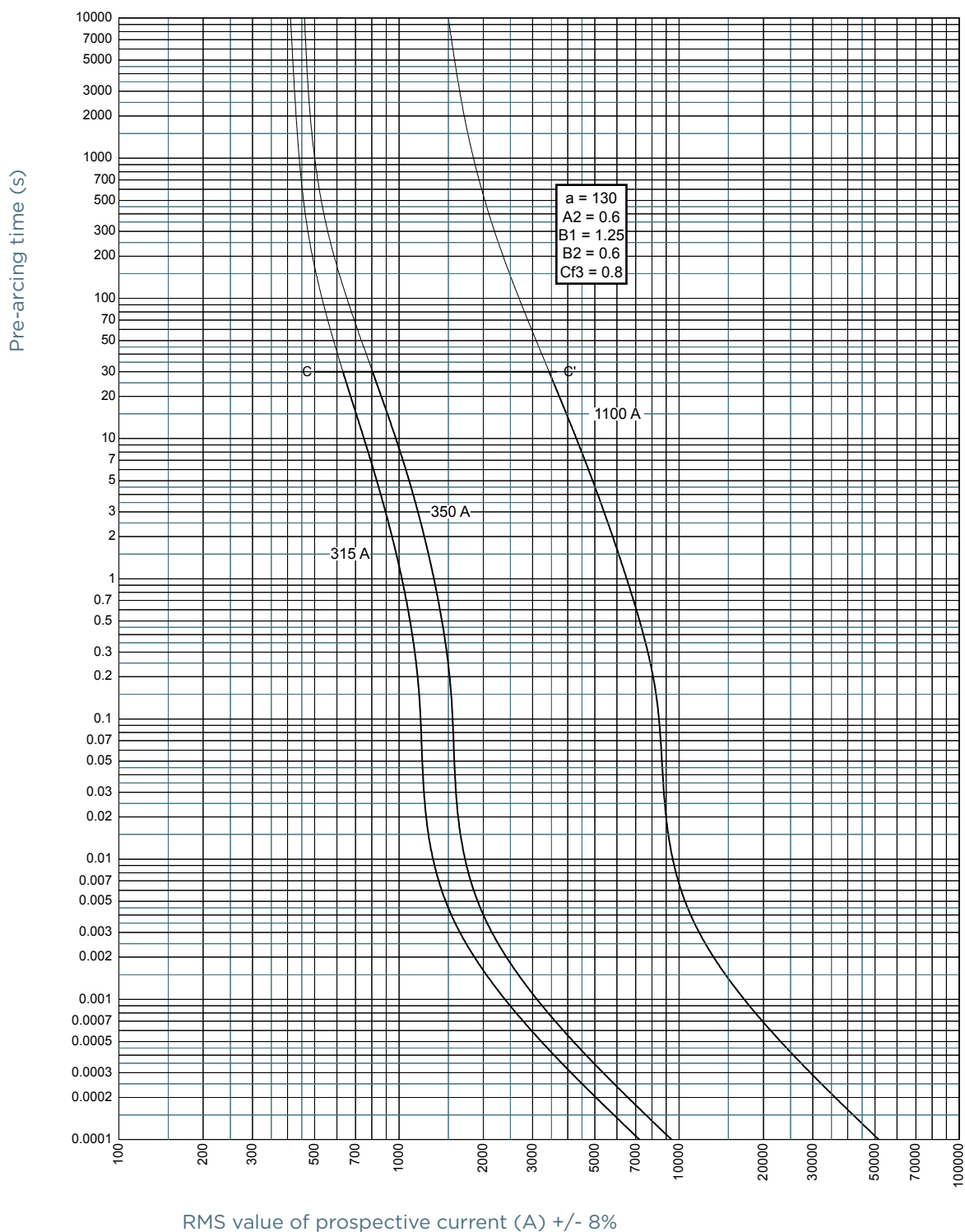
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PC32UD69V400EF	V300168	690 V	700 V	400 A	15 kA <sup>2</sup> s	90 kA <sup>2</sup> s	200 kA	75 W	0.5716 kg	3
PC32UD69V450EF	W300169	690 V	700 V	450 A	22 kA <sup>2</sup> s	130 kA <sup>2</sup> s	200 kA	80 W	0.5716 kg	3
PC32UD69V500EF	X300170	690 V	700 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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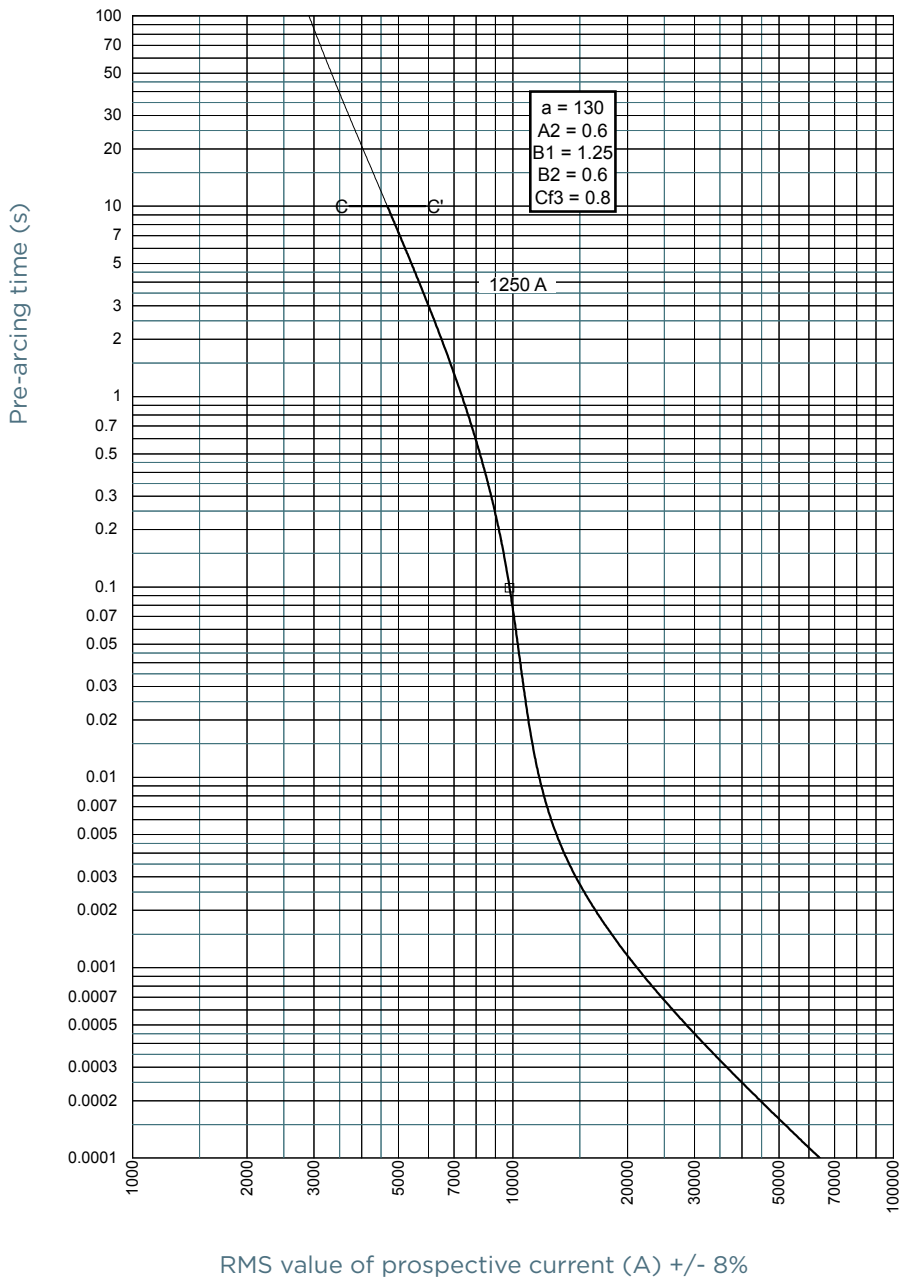
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## TIME CURRENT CHARACTERISTIC CURVES

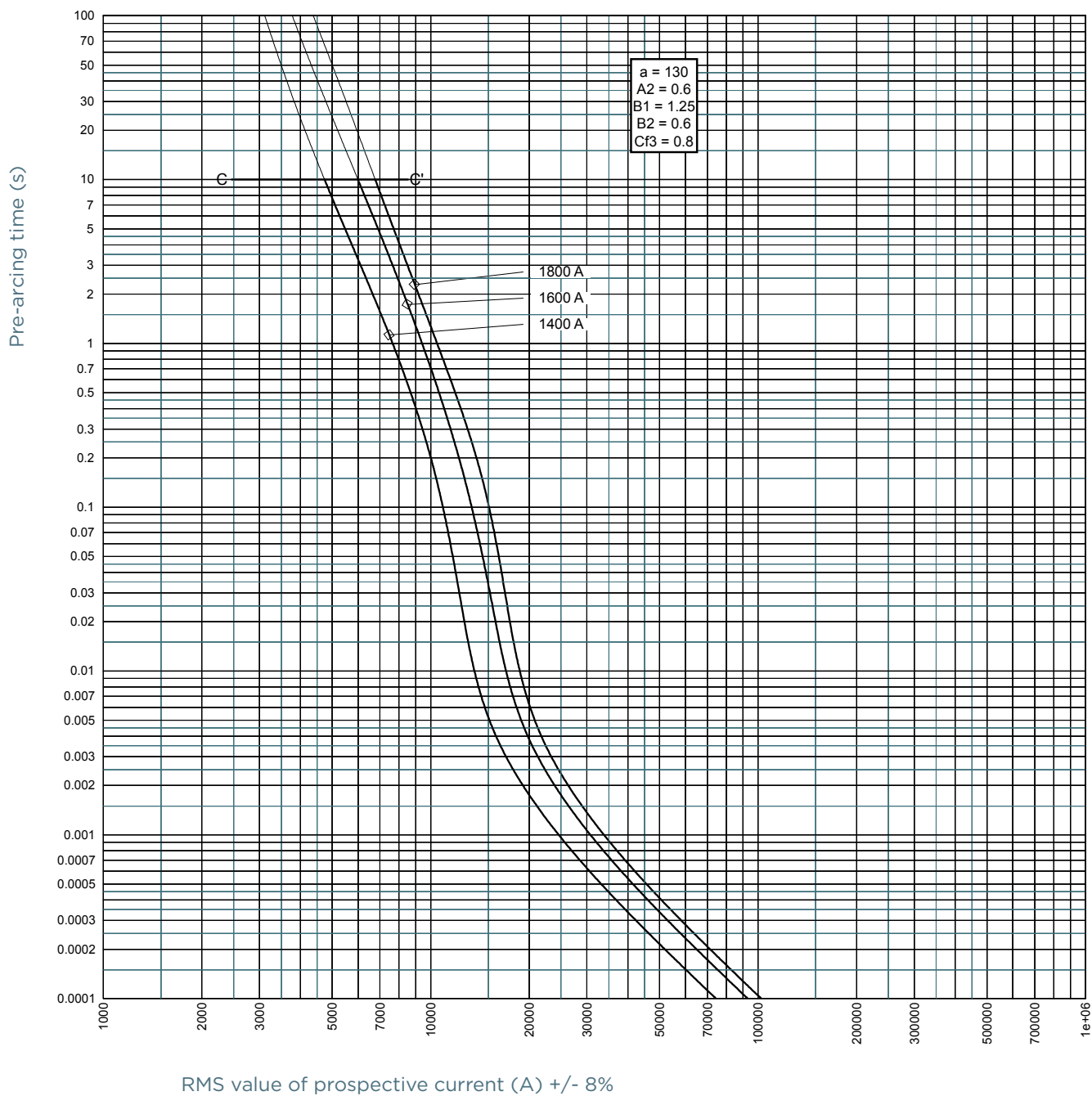


TIME CURRENT CHARACTERISTIC CURVES

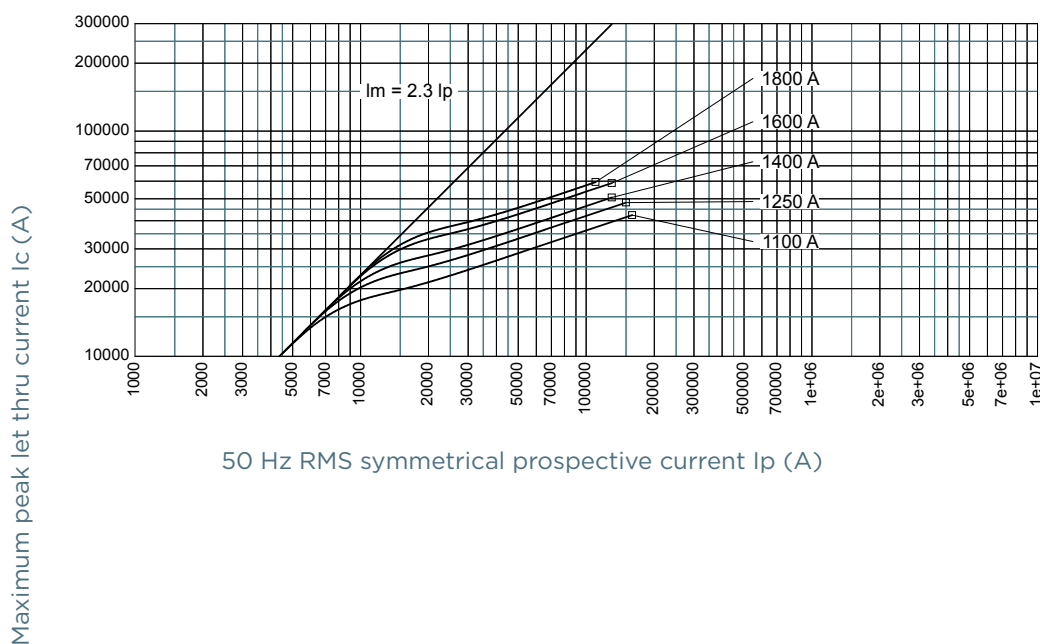
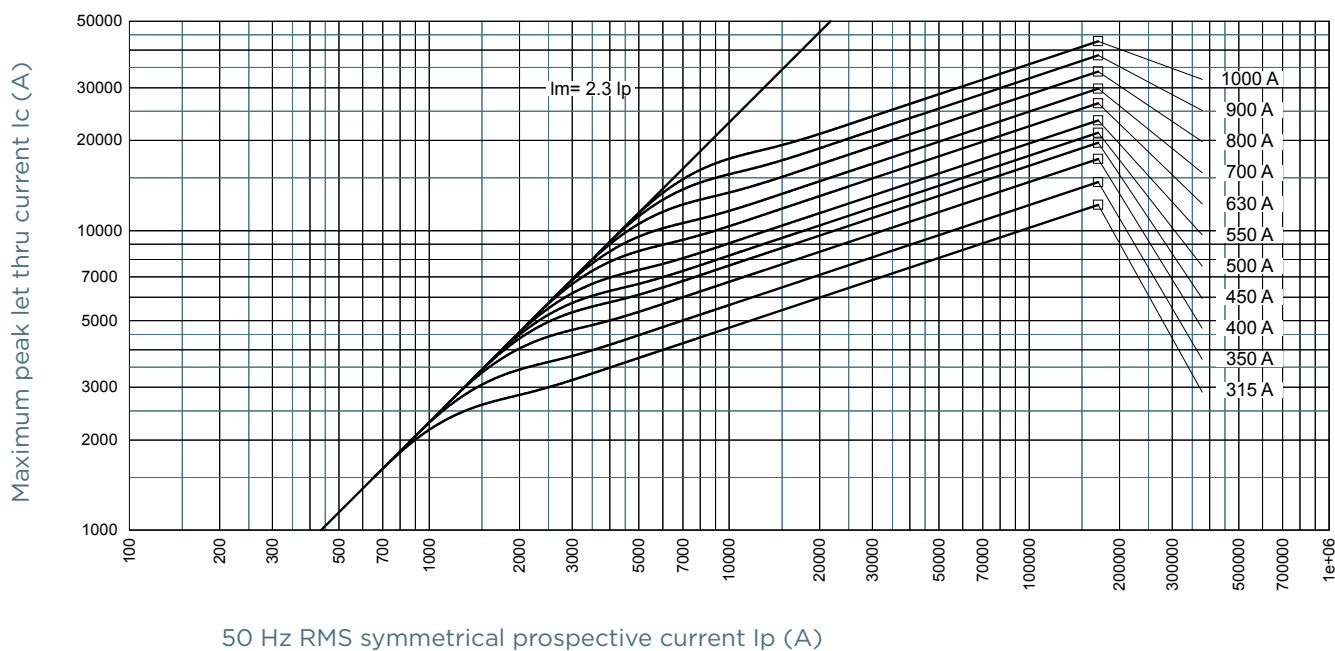


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## TIME CURRENT CHARACTERISTIC CURVES

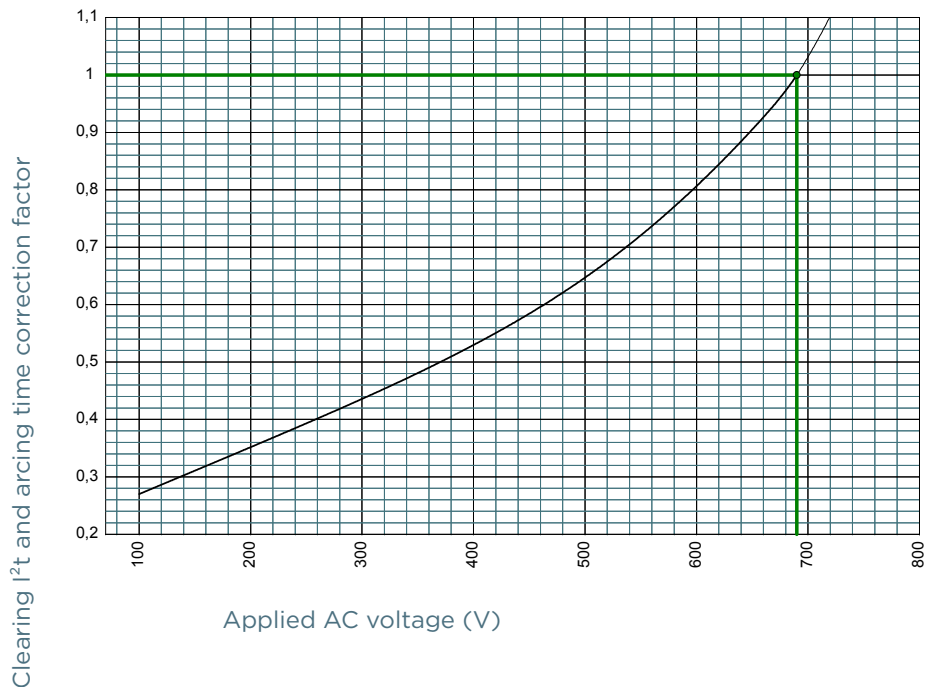


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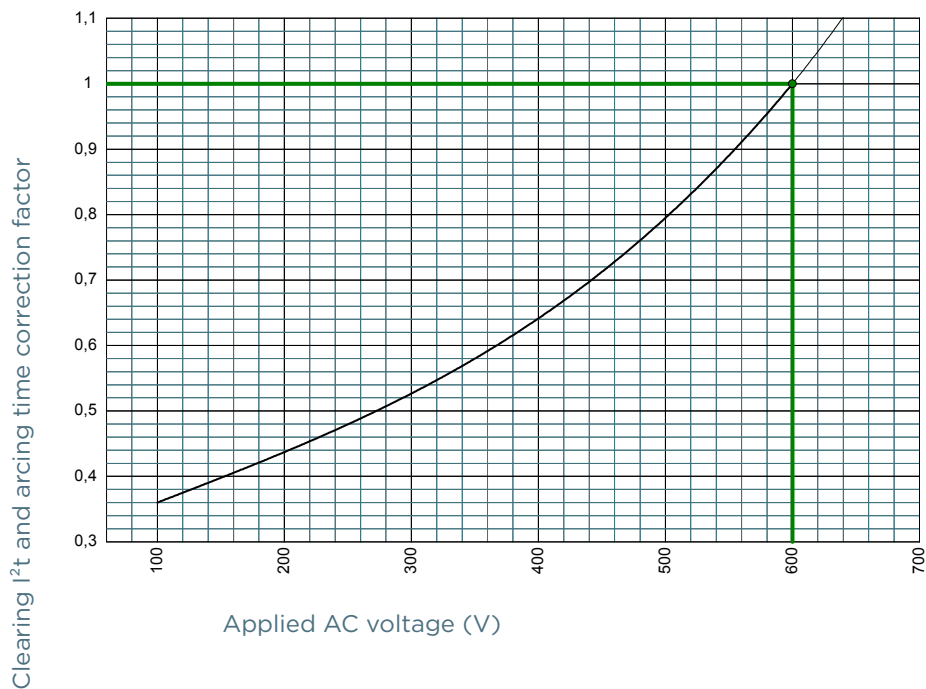


## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 32 690V

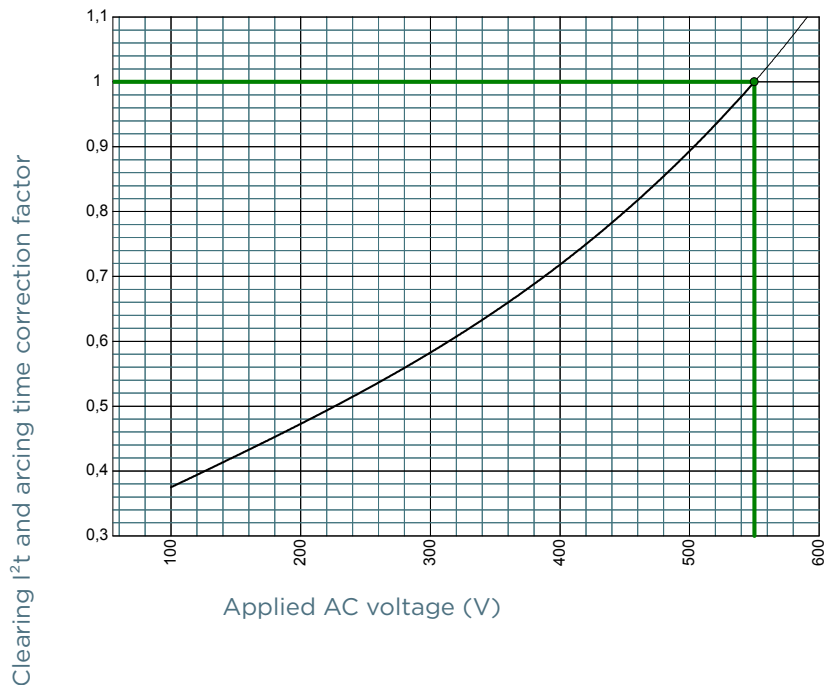


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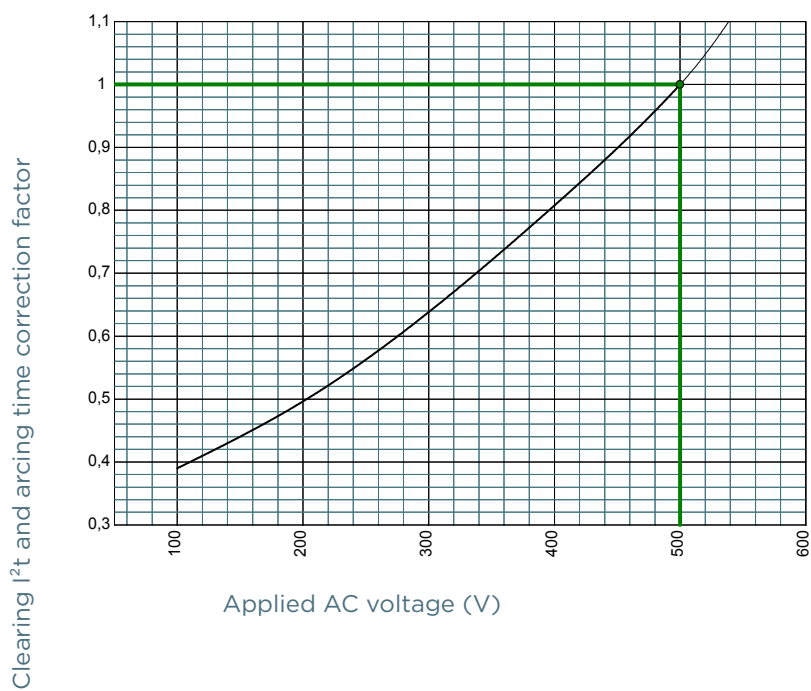


## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 32 550V

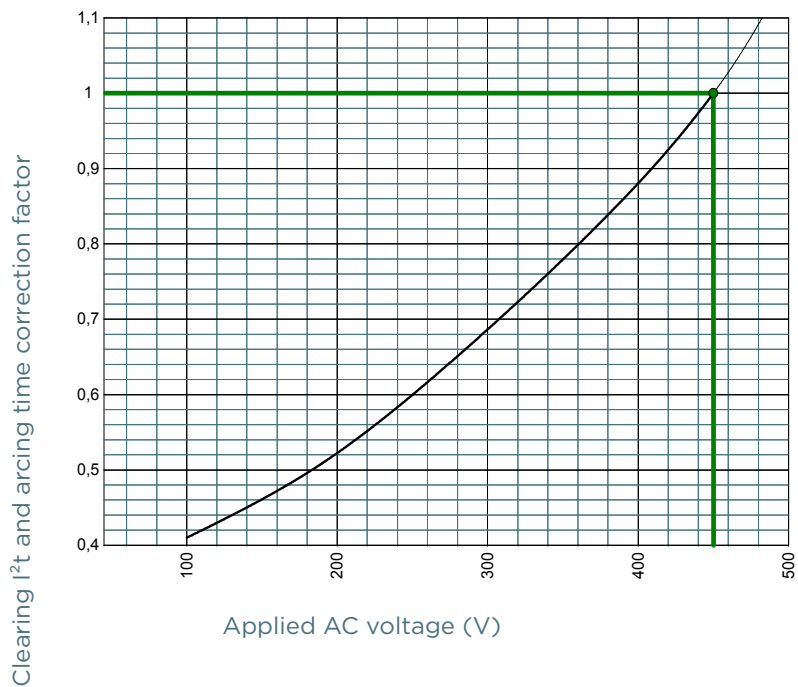


### Size 32 500V



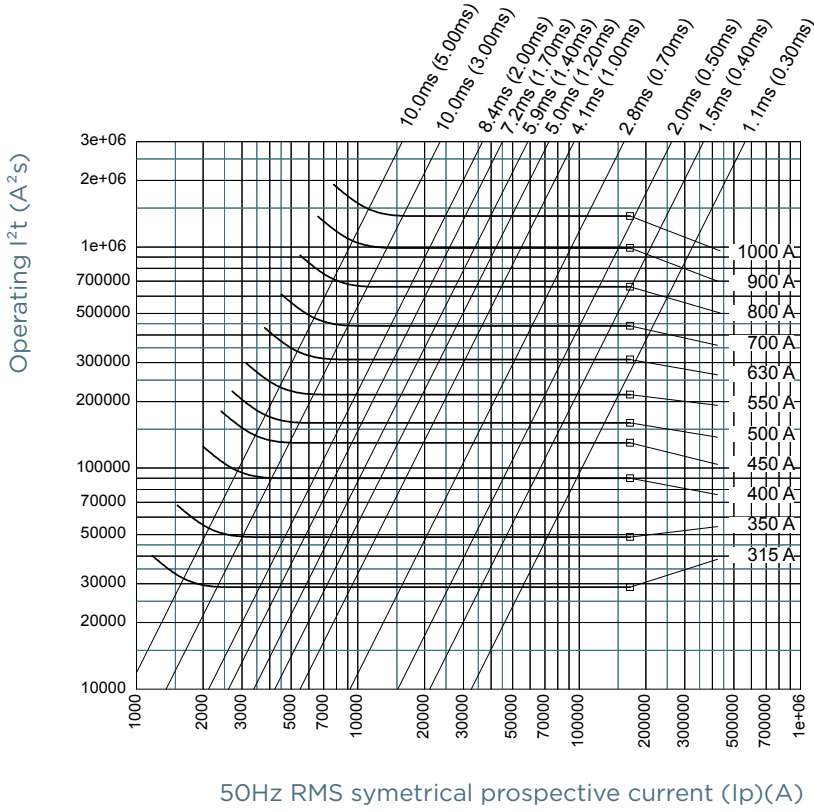
## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 32 450V

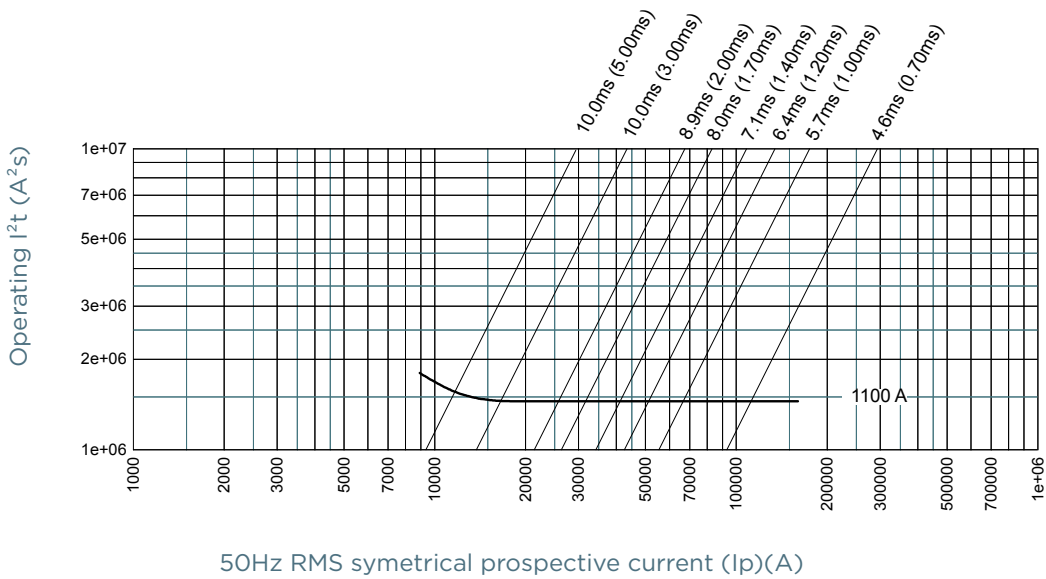


CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

Size 32 690V



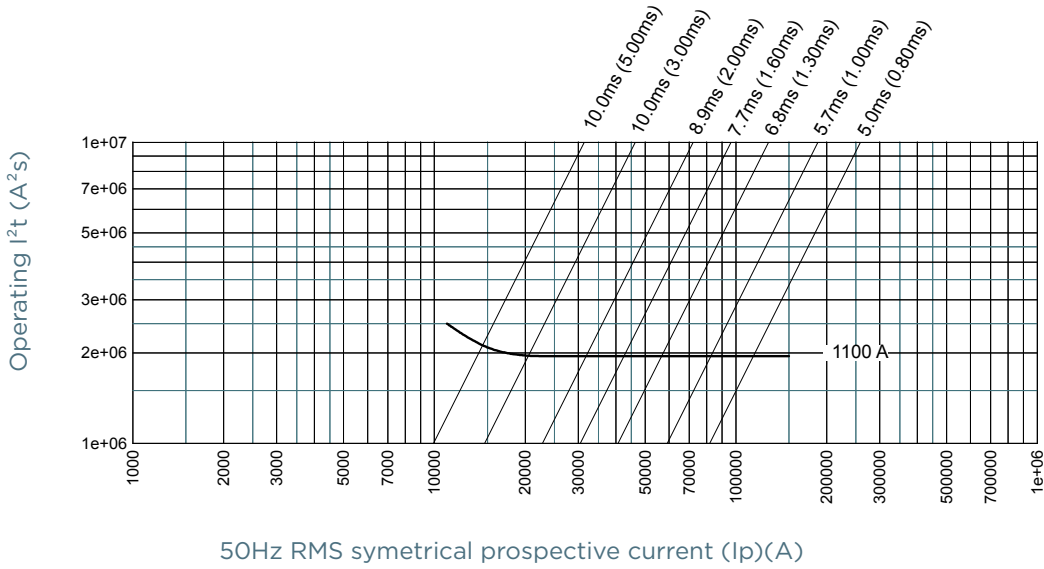
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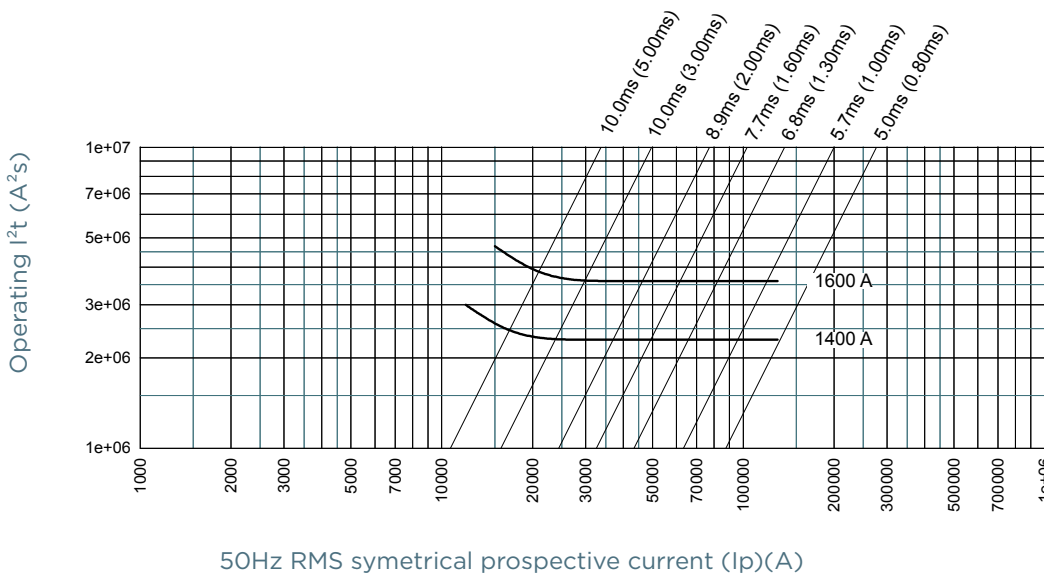
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CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

Size 32 550V

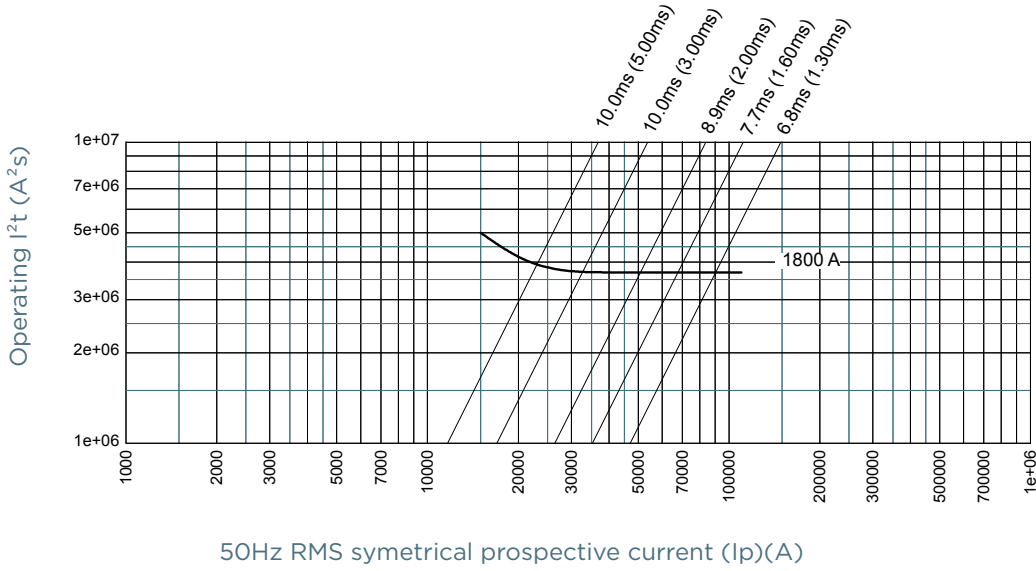


Size 32 500V

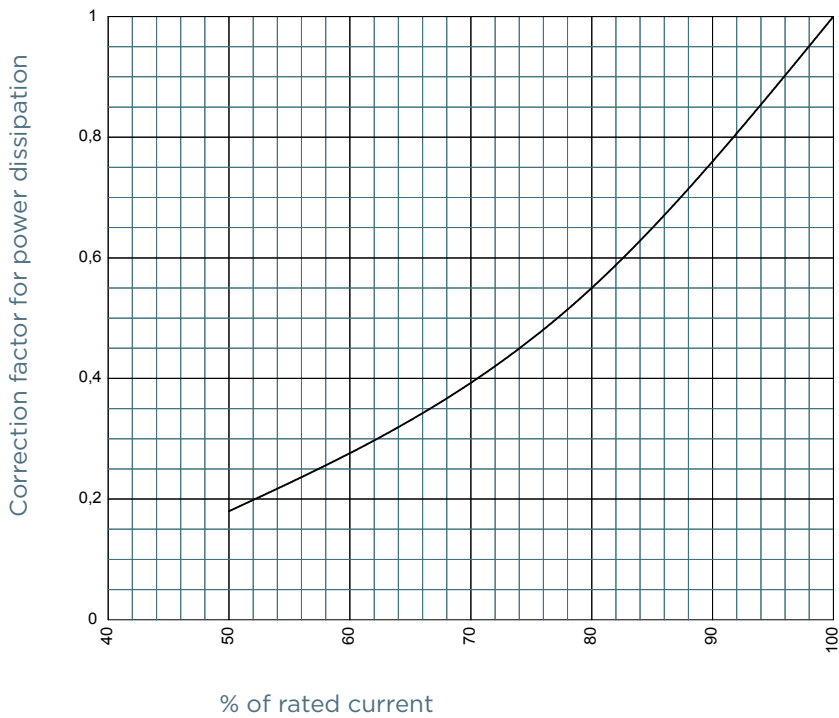


CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

Size 32 450V



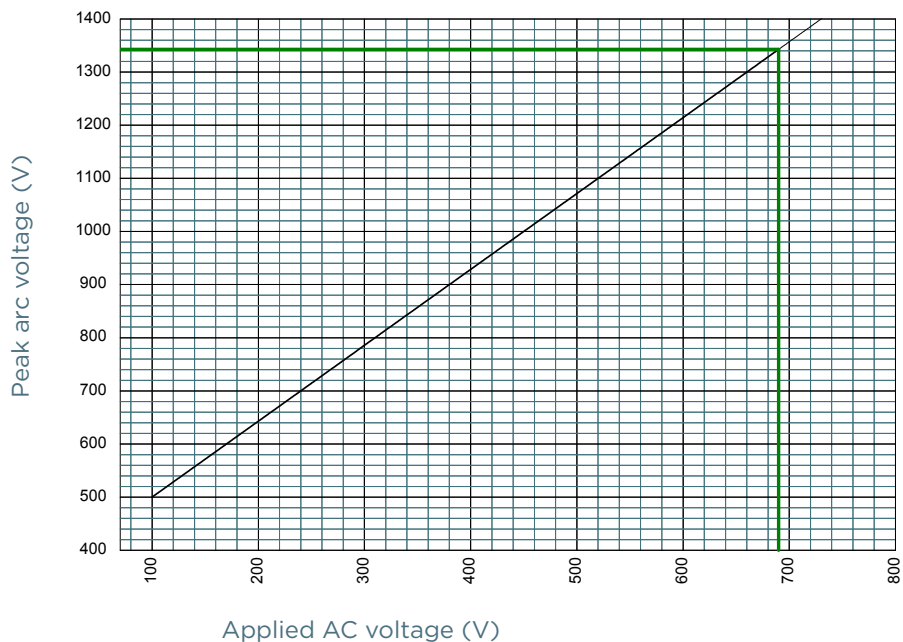
POWER DISSIPATION



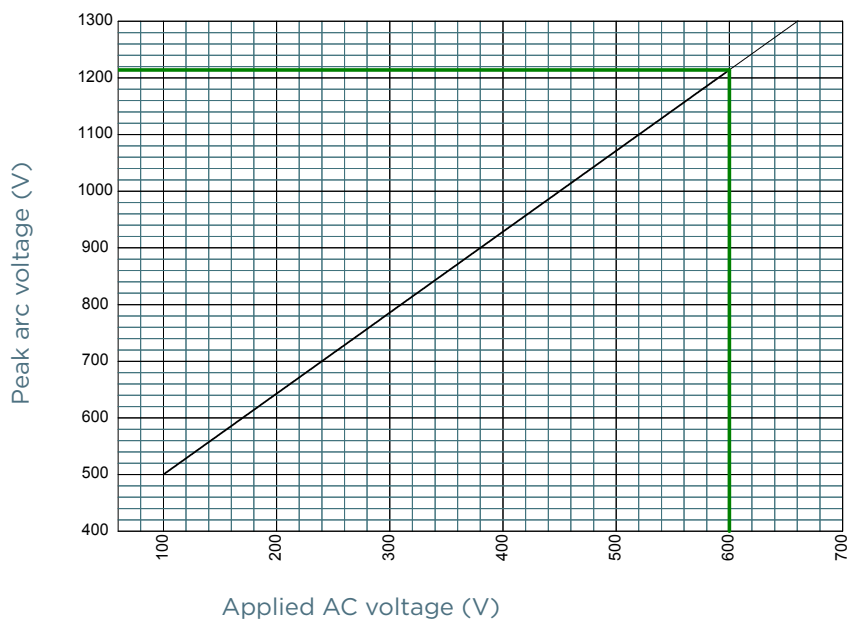
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## PEAK ARC VOLTAGE

### Size 32 690V

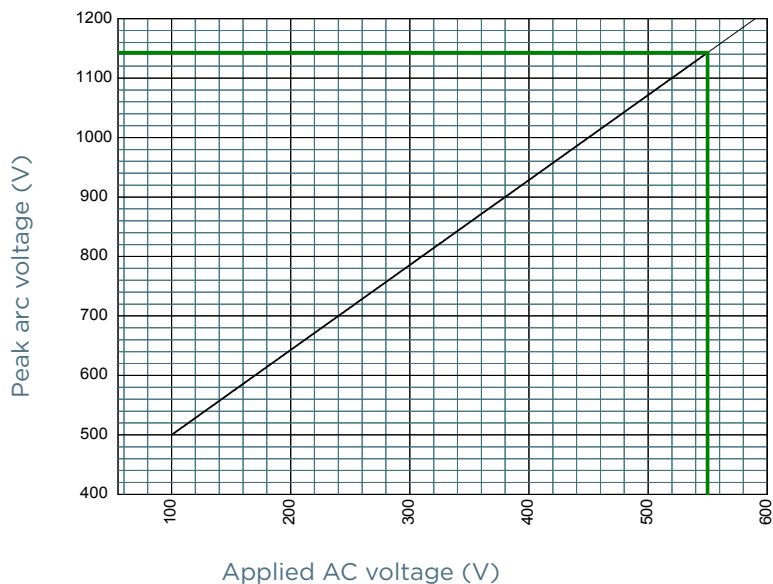


### Size 32 600V

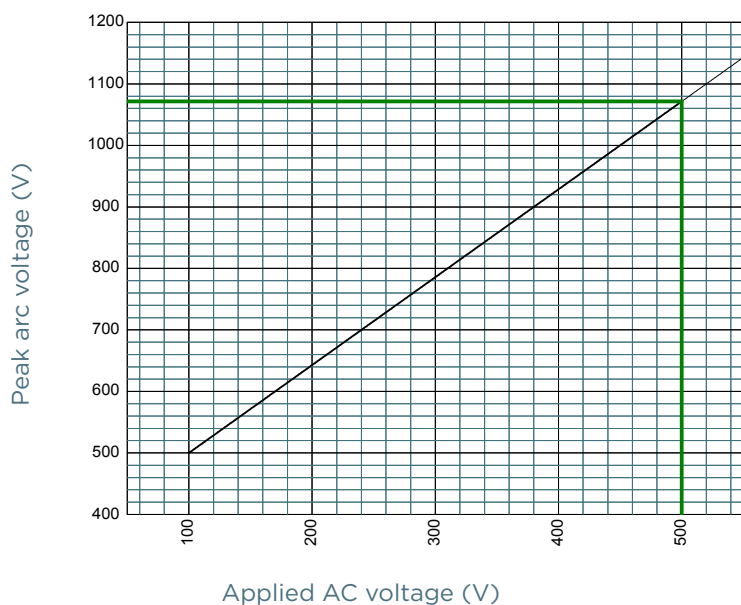


## PEAK ARC VOLTAGE

### Size 32 550V

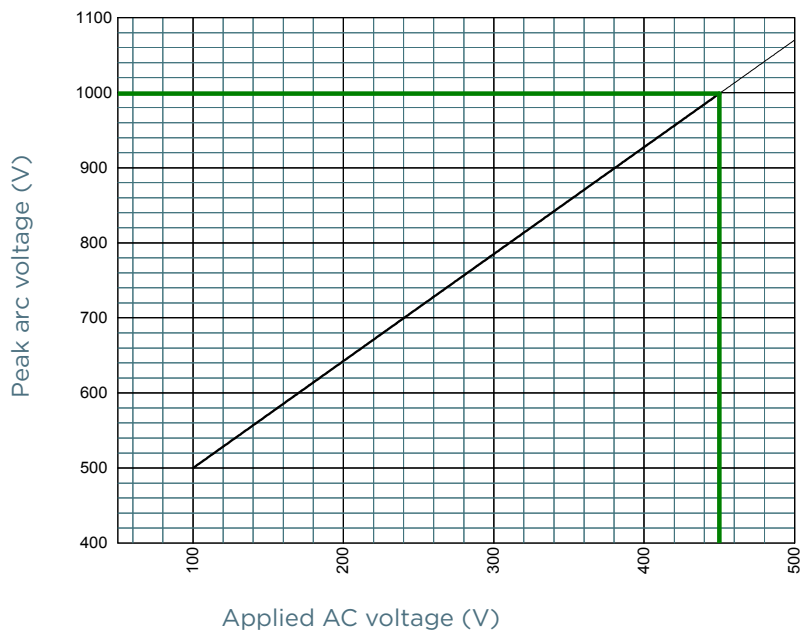


### Size 32 500V



## PEAK ARC VOLTAGE

### Size 32 450V

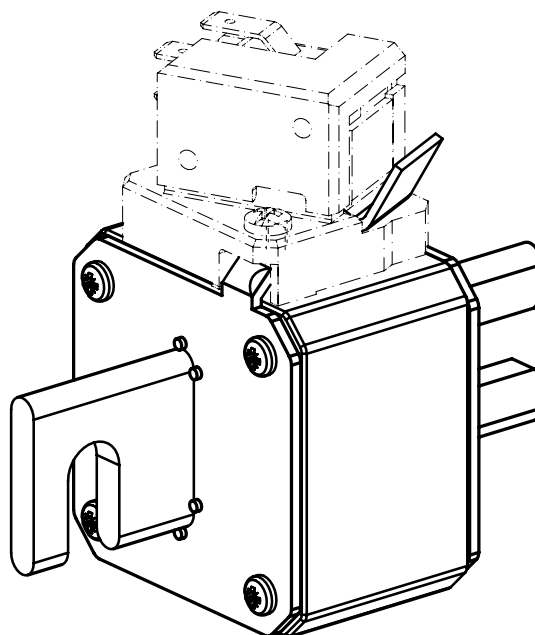
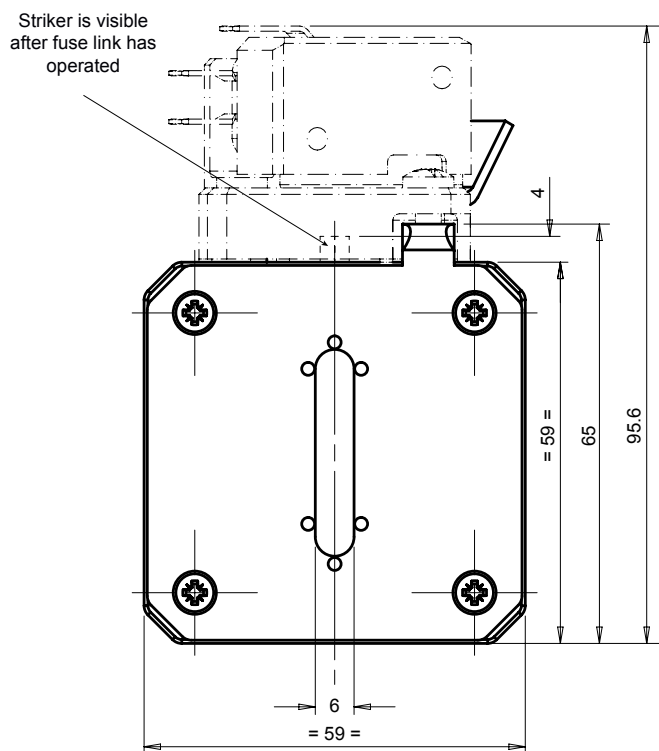
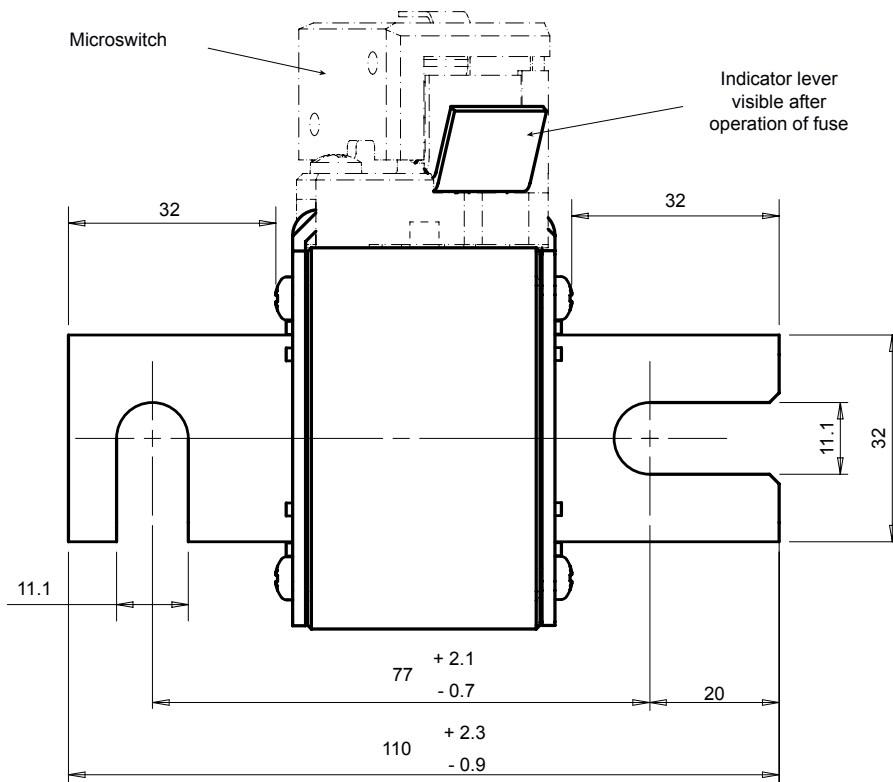


# Protistor® size 32 aR

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

## DIMENSIONS

Size 32 type DIN 80 (102923)



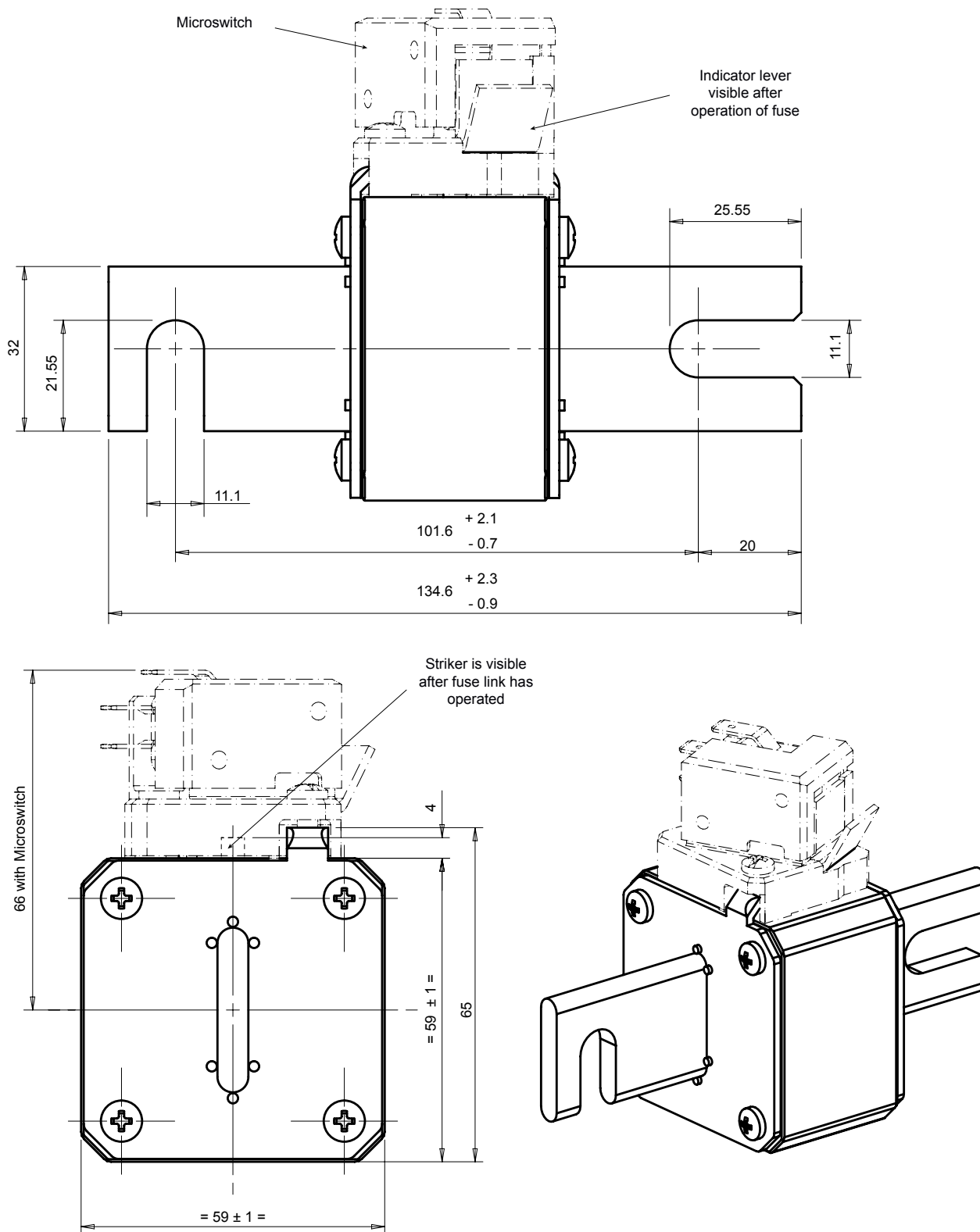
Dimensions in mm

# Protistor® size 32 aR

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

## DIMENSIONS

Size 32 type DIN 110 (102922)



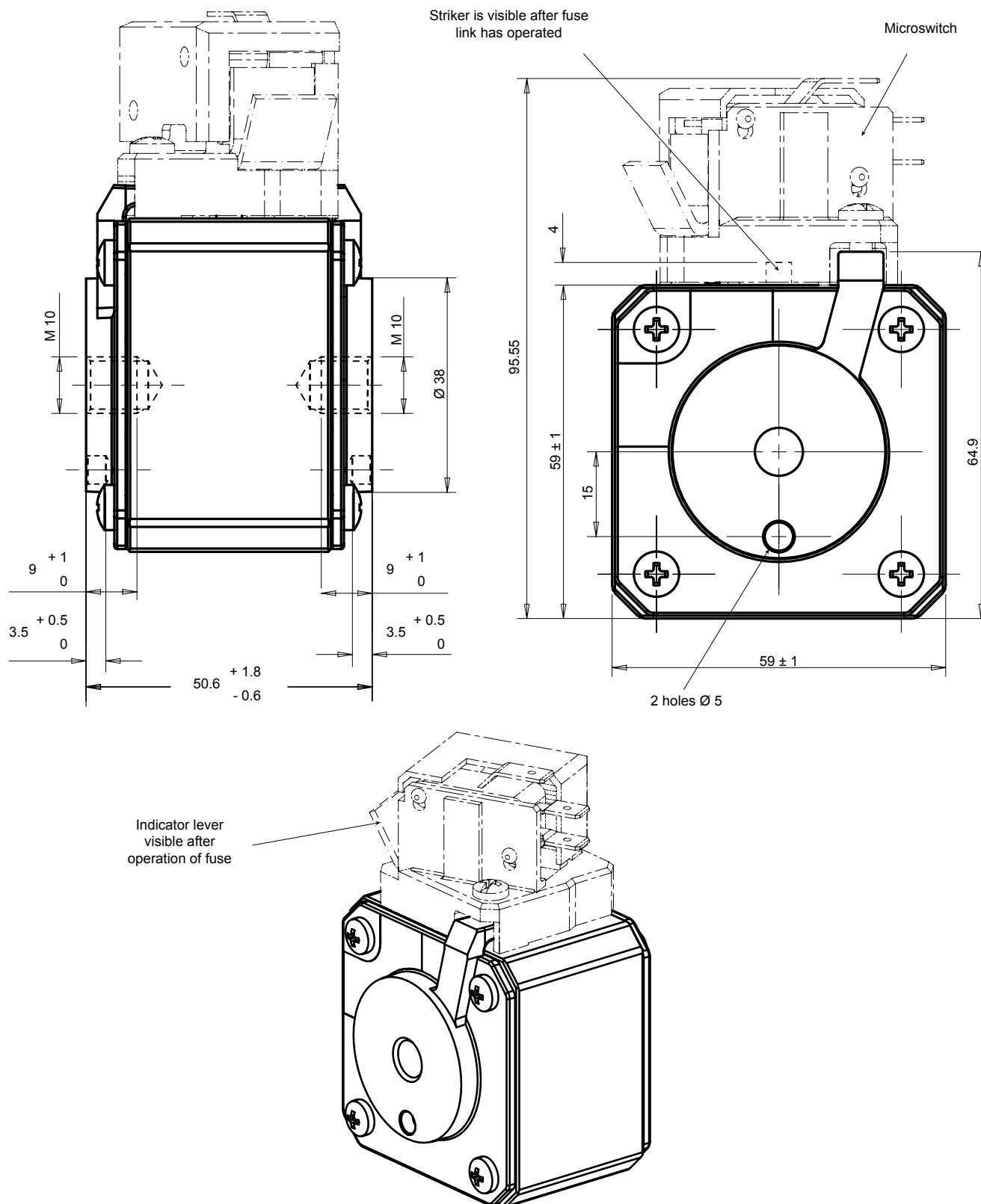
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# Protistor® size 32 aR

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

## DIMENSIONS

Size 32 type TTF (102756)



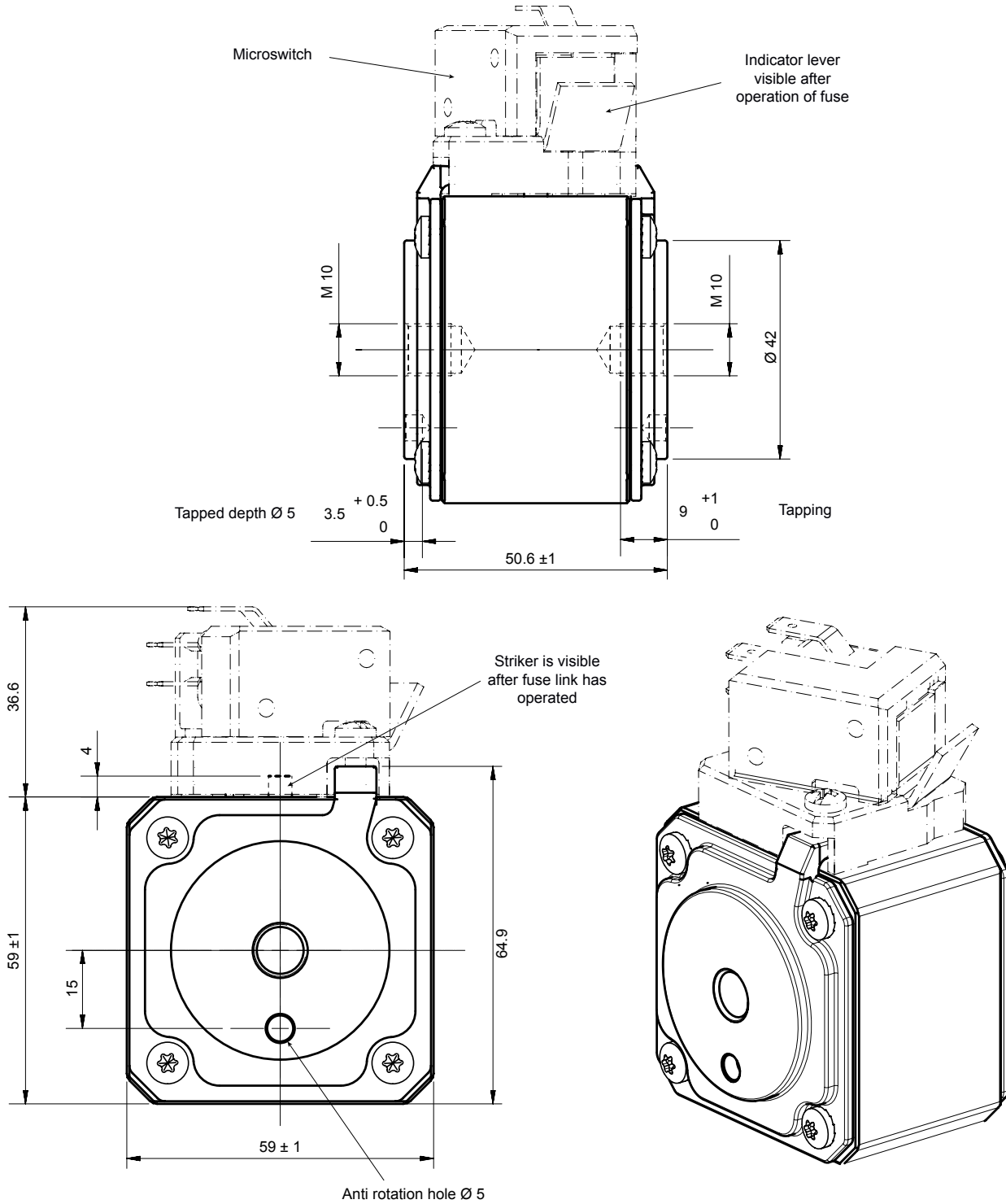
Dimensions in mm

# Protistor® size 32 aR

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

## DIMENSIONS

Size 32 type TTF reinforced (108188)



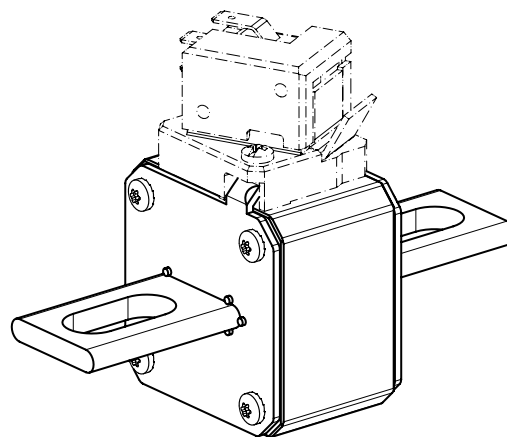
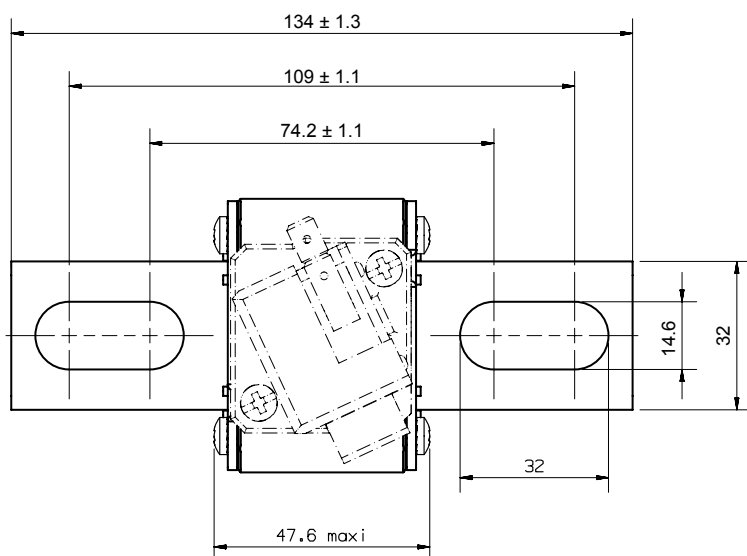
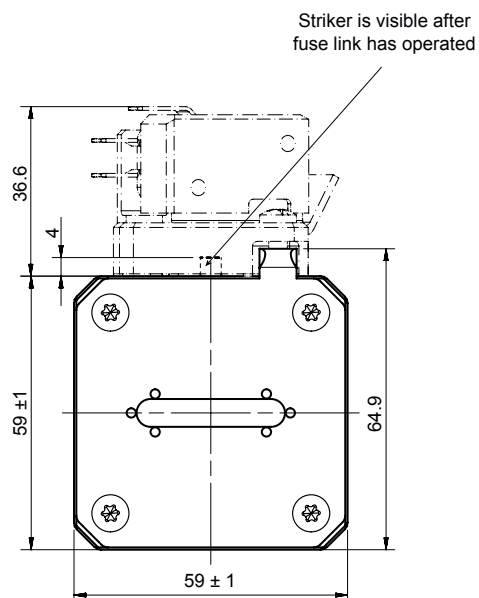
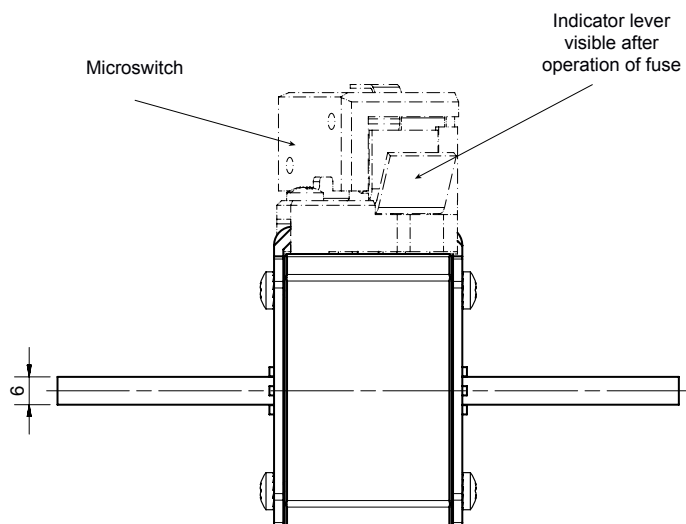
Dimensions in mm

# Protistor® size 32 aR

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

## DIMENSIONS

Size 32 type KI (102925)



Dimensions in mm

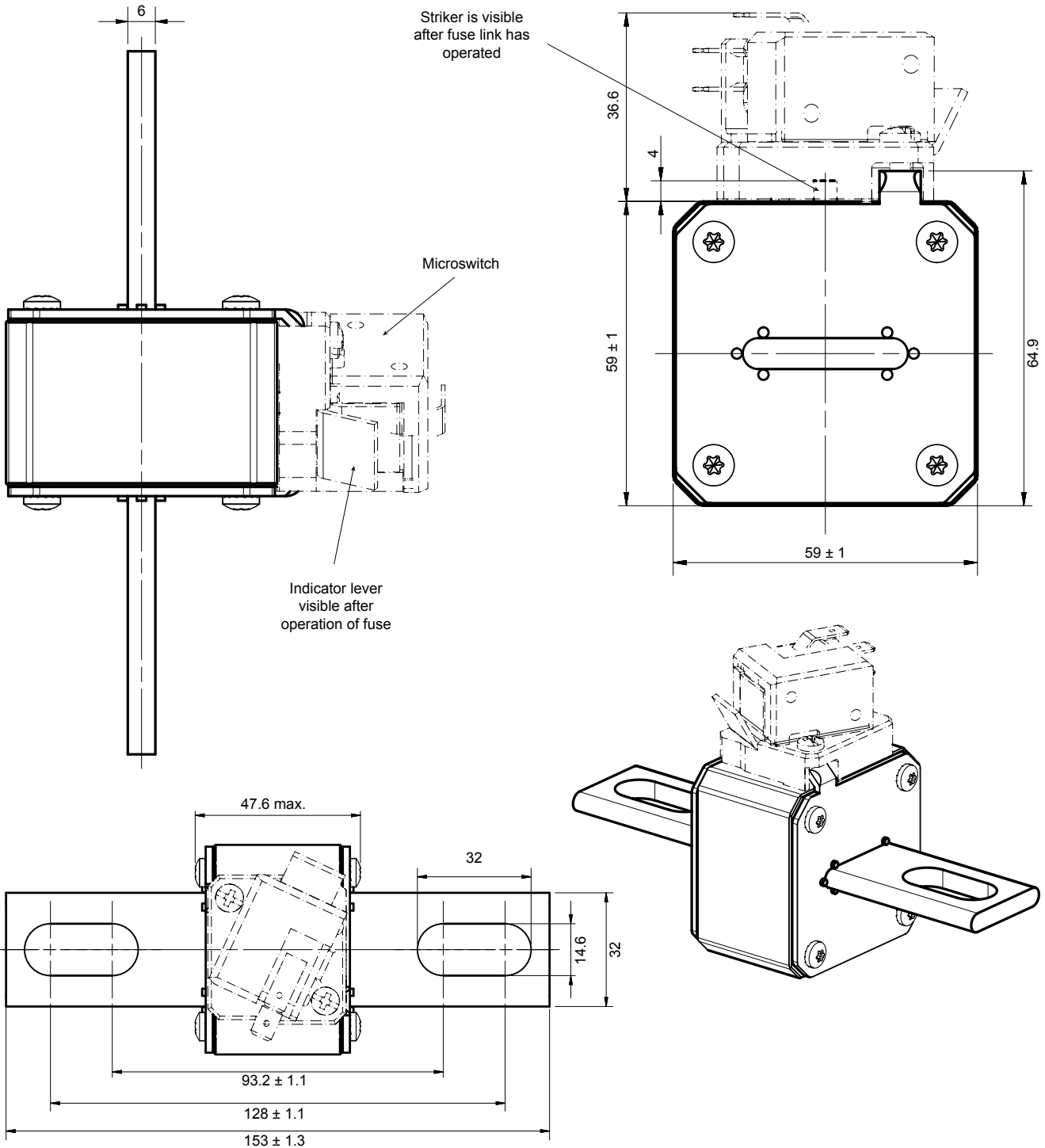
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# Protistor® size 32 aR

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

## DIMENSIONS

Size 32 type LI (102926)



Dimensions in mm

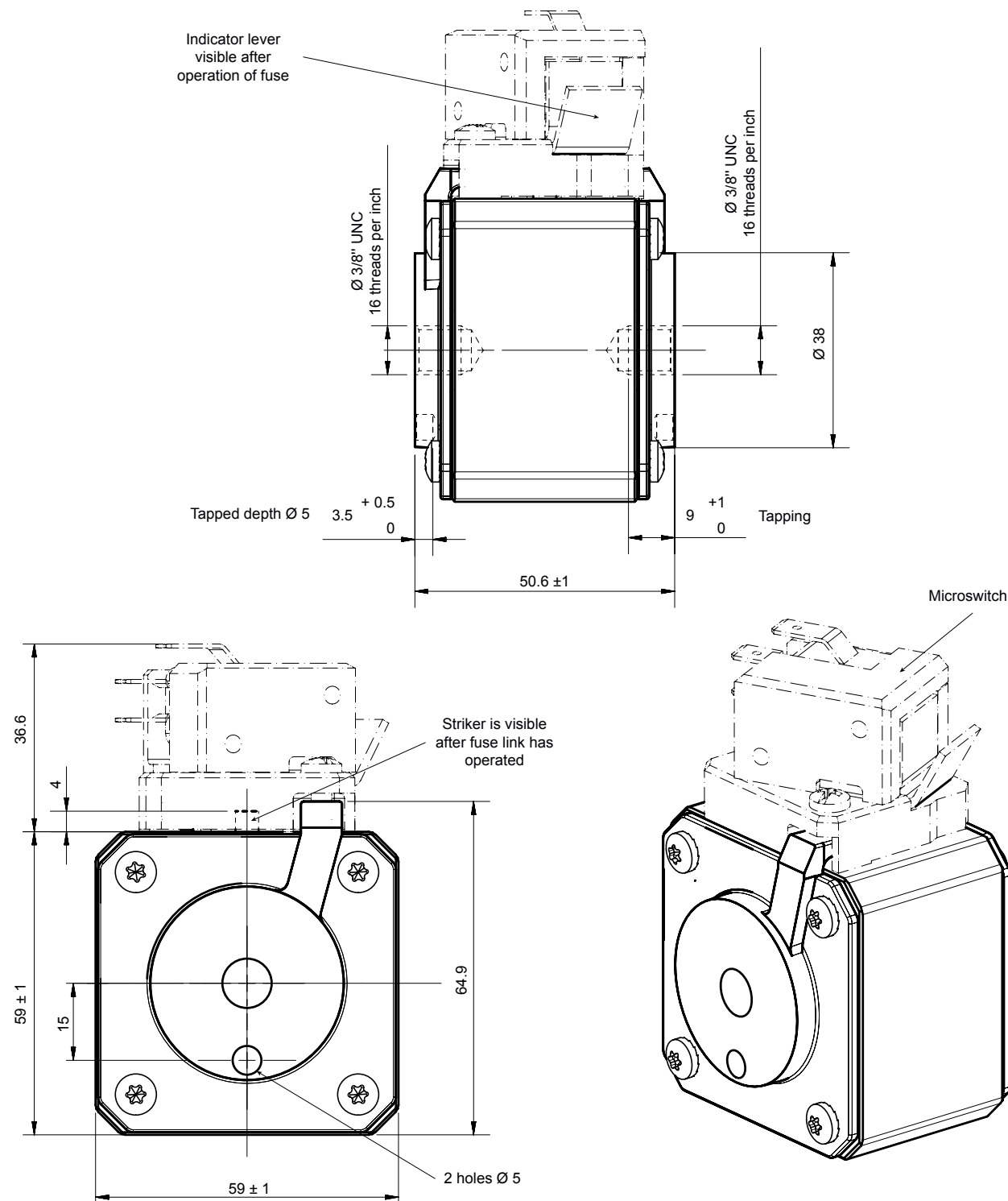
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# Protistor® size 32 aR

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

## DIMENSIONS

Size 32 type TTI (107302)



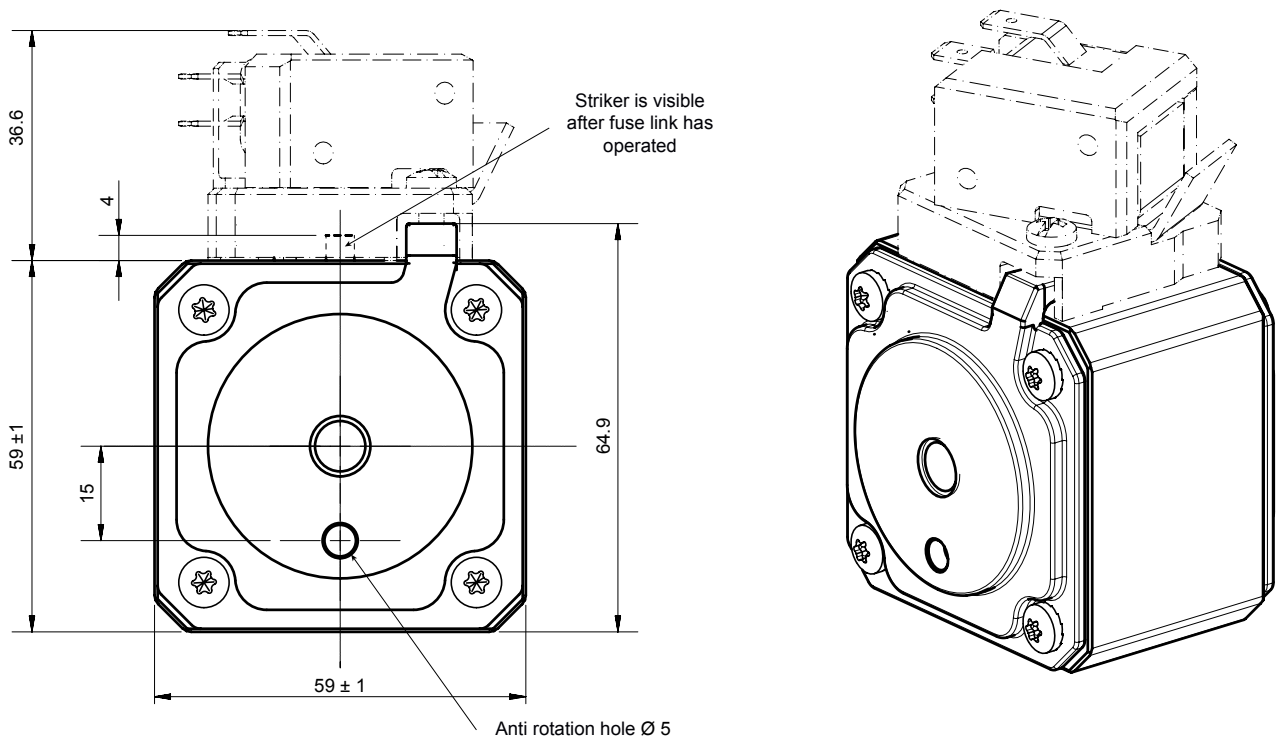
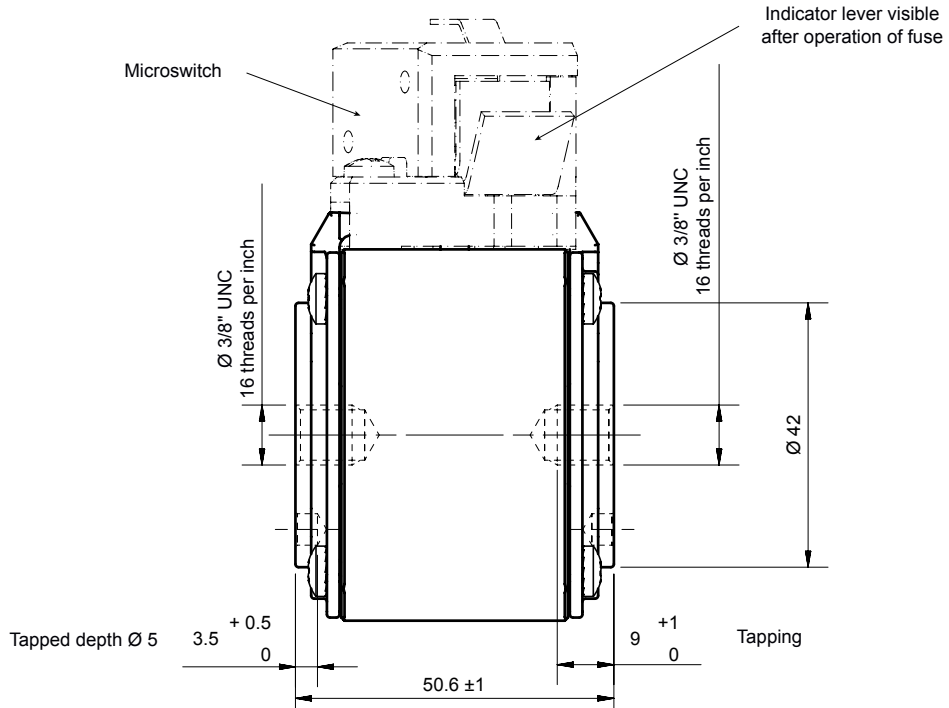
Dimensions in mm

# Protistor® size 32 aR

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

## DIMENSIONS

Size 32 type TTI reinforced (108833)



Dimensions in mm

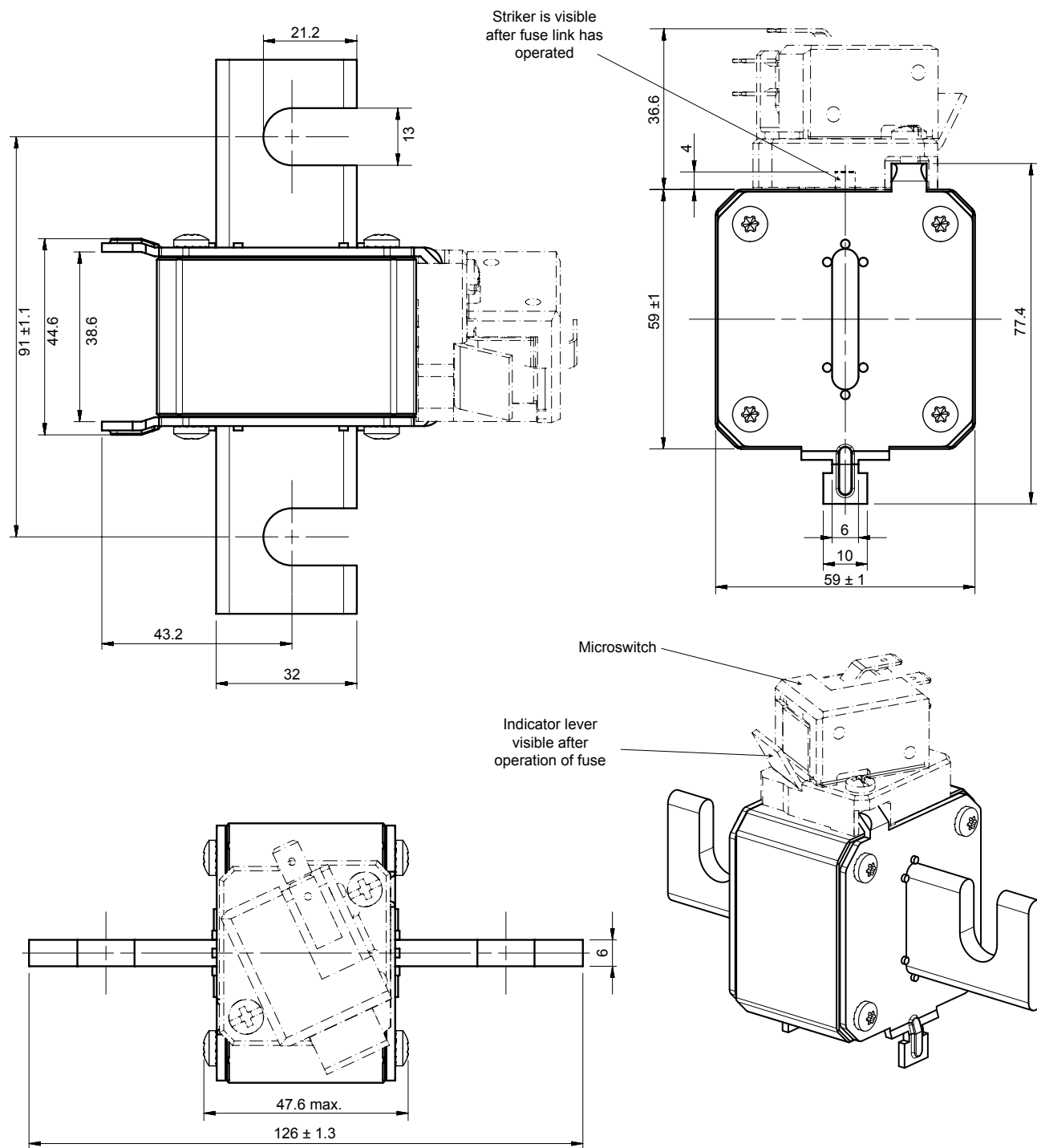
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# Protistor® size 32 aR

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

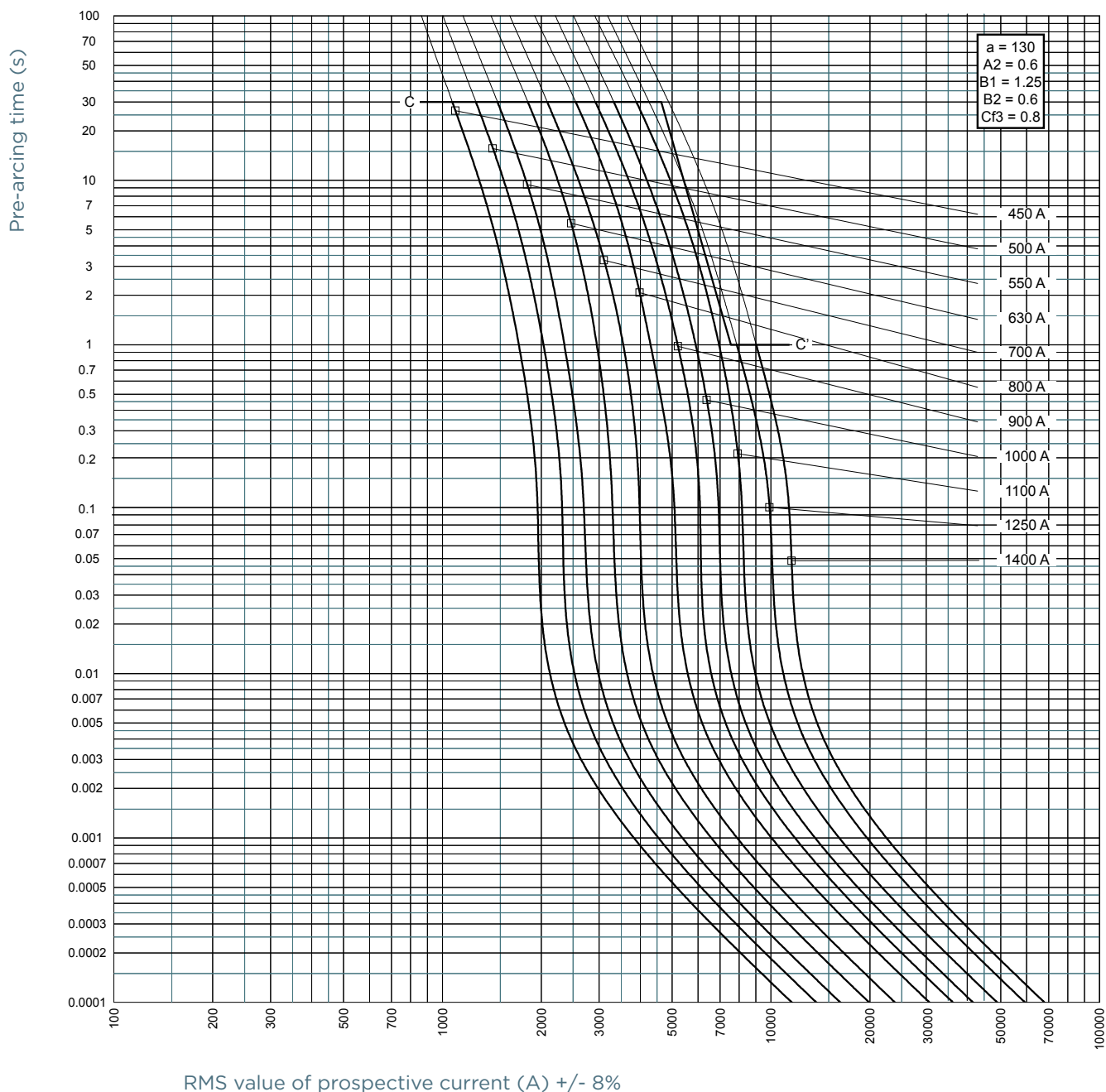
450 to 690VAC (IEC) / 700VAC (UL)

## PRODUCT RANGE

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

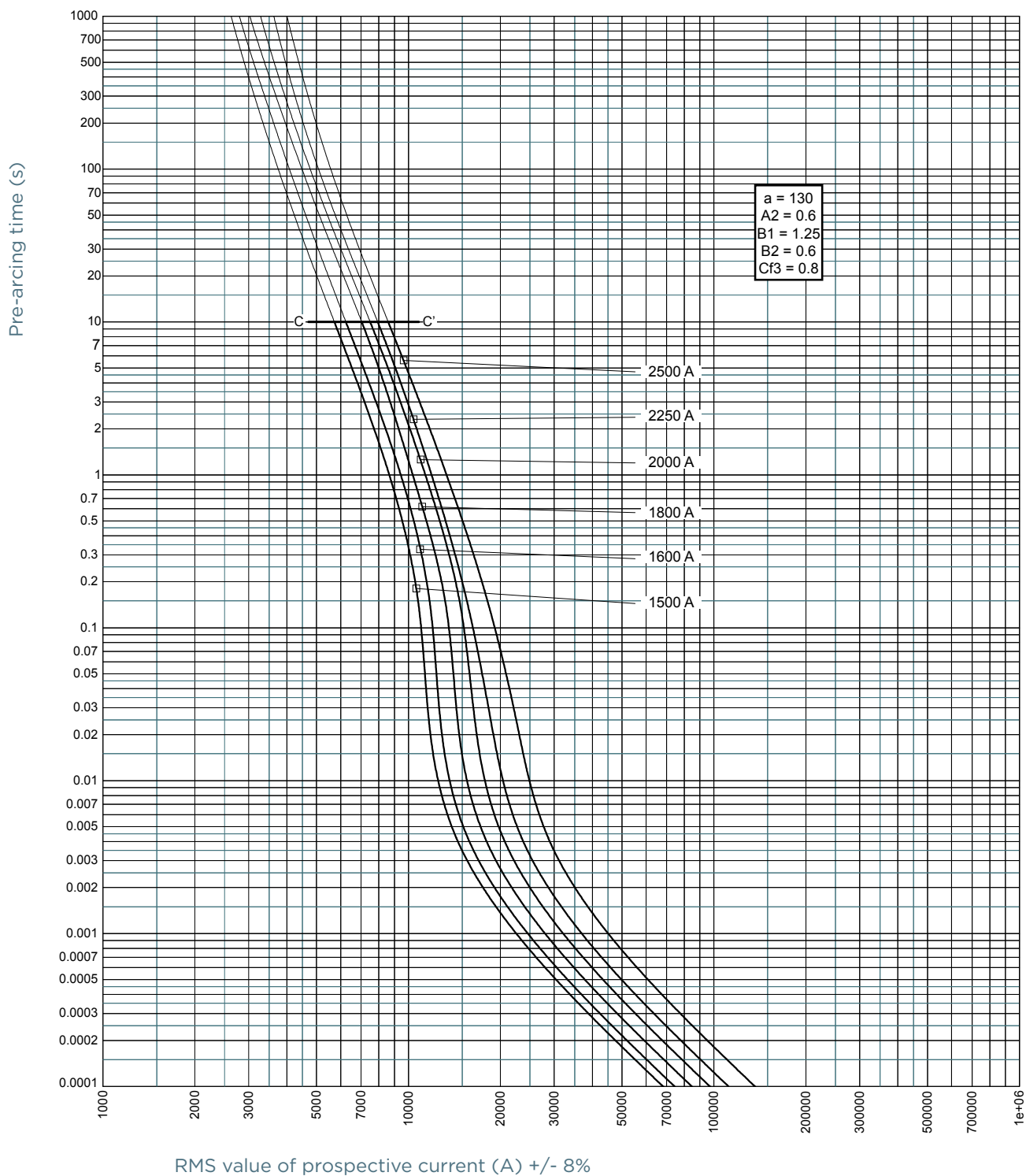
Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
<b>Standard Terminal</b>										
A070UD33TTI450	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

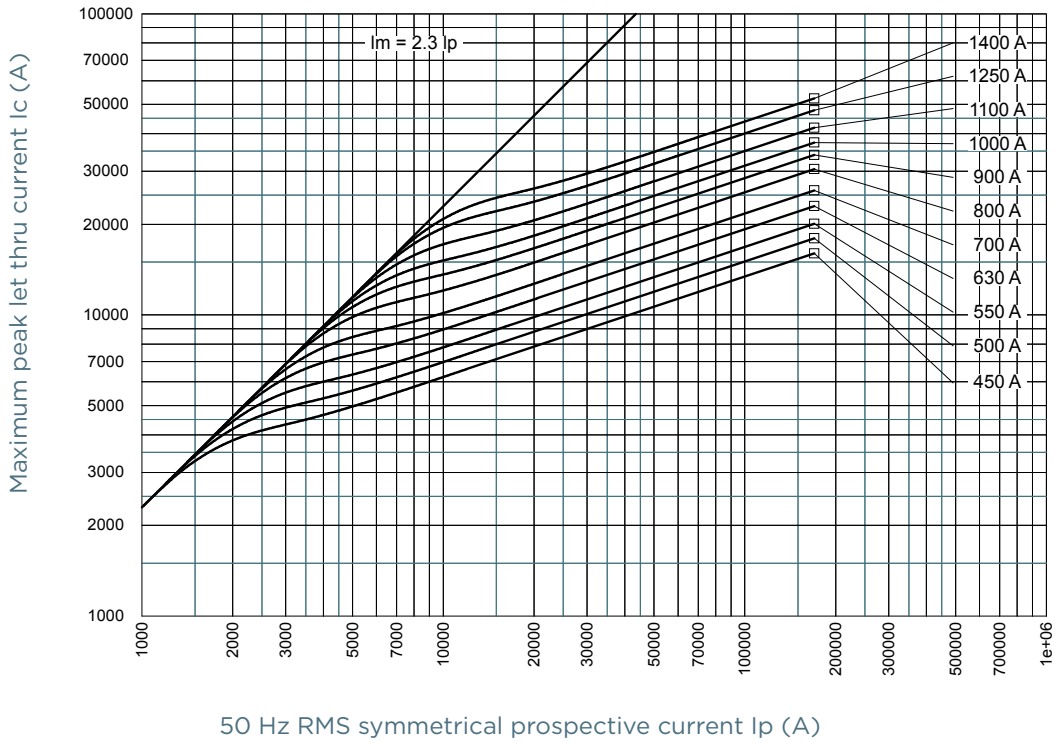


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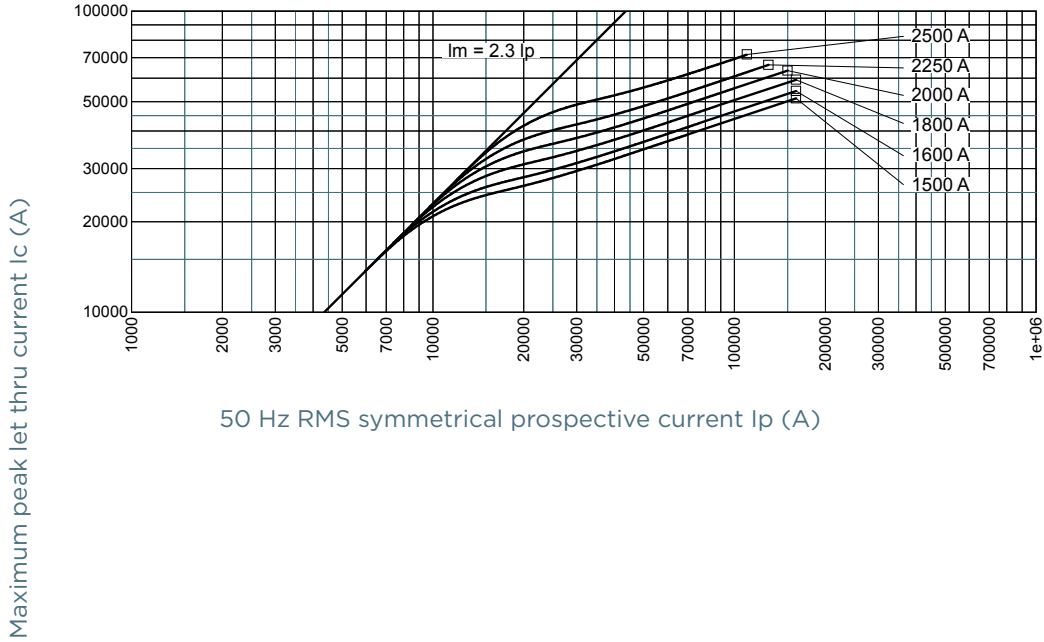
## TIME CURRENT CHARACTERISTIC CURVES



CUT-OFF CURRENT CHARACTERISTIC



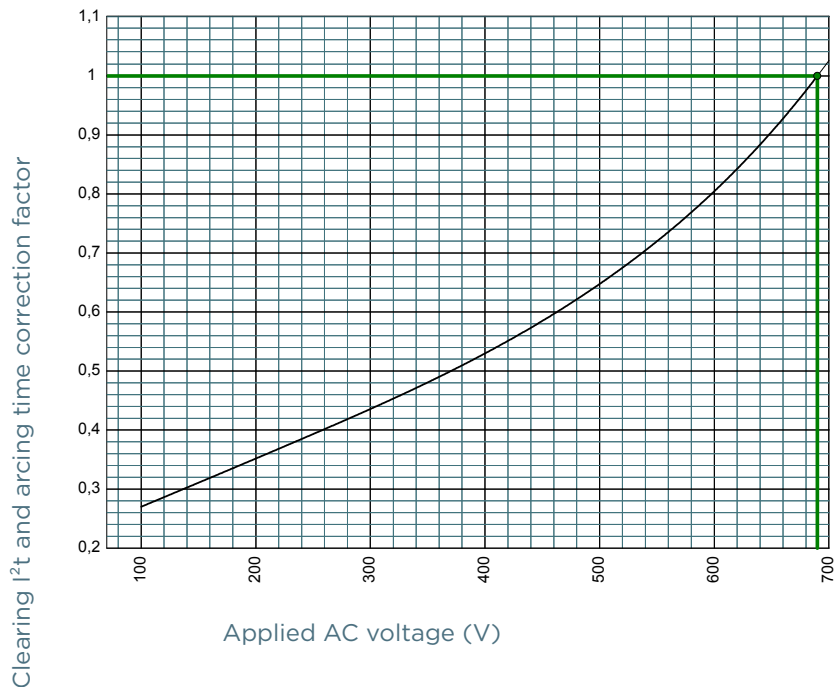
50 Hz RMS symmetrical prospective current  $I_p$  (A)



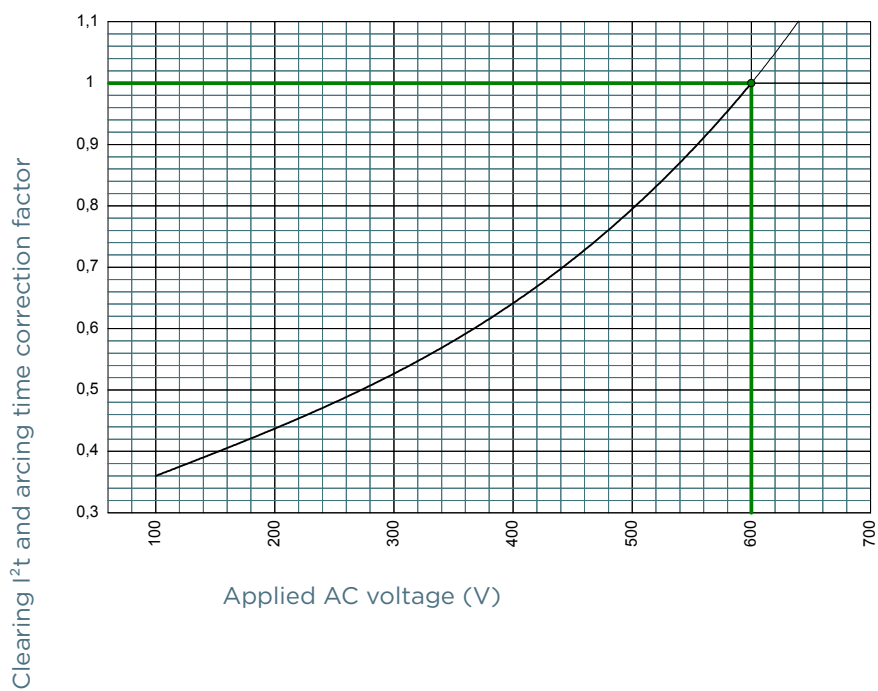
50 Hz RMS symmetrical prospective current  $I_p$  (A)

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

### Size 33 690V

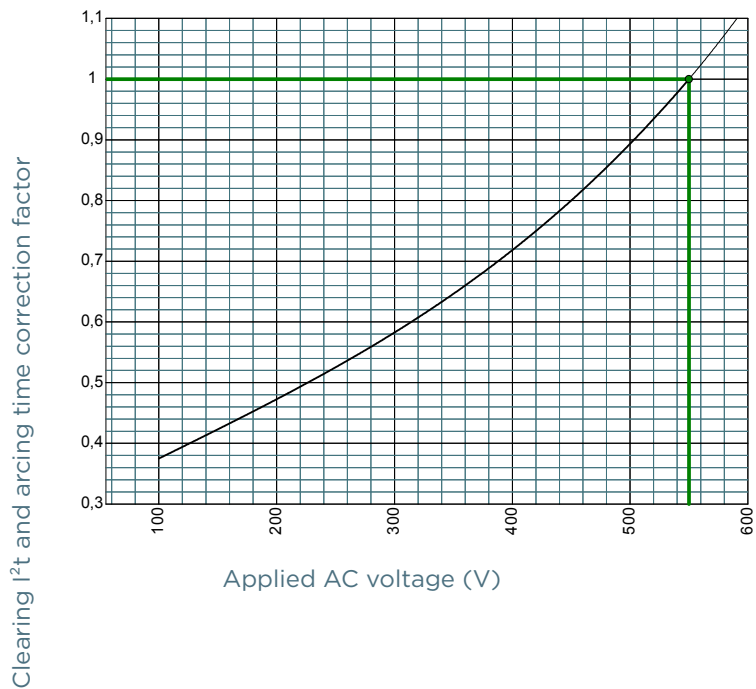


### Size 33 600V

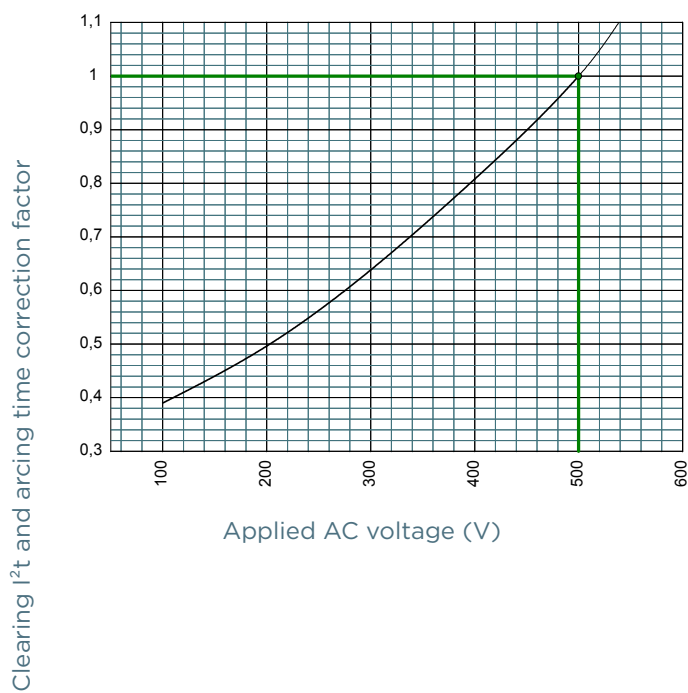


## I<sup>2</sup>T MULTIPLIER COEFFICIENT

### Size 33 550V

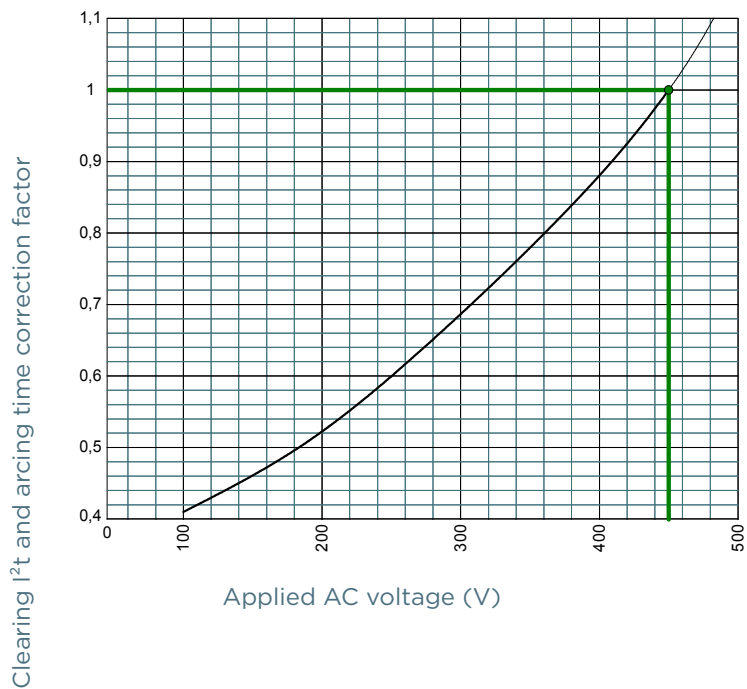


### Size 33 500V



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

### Size 33 450V

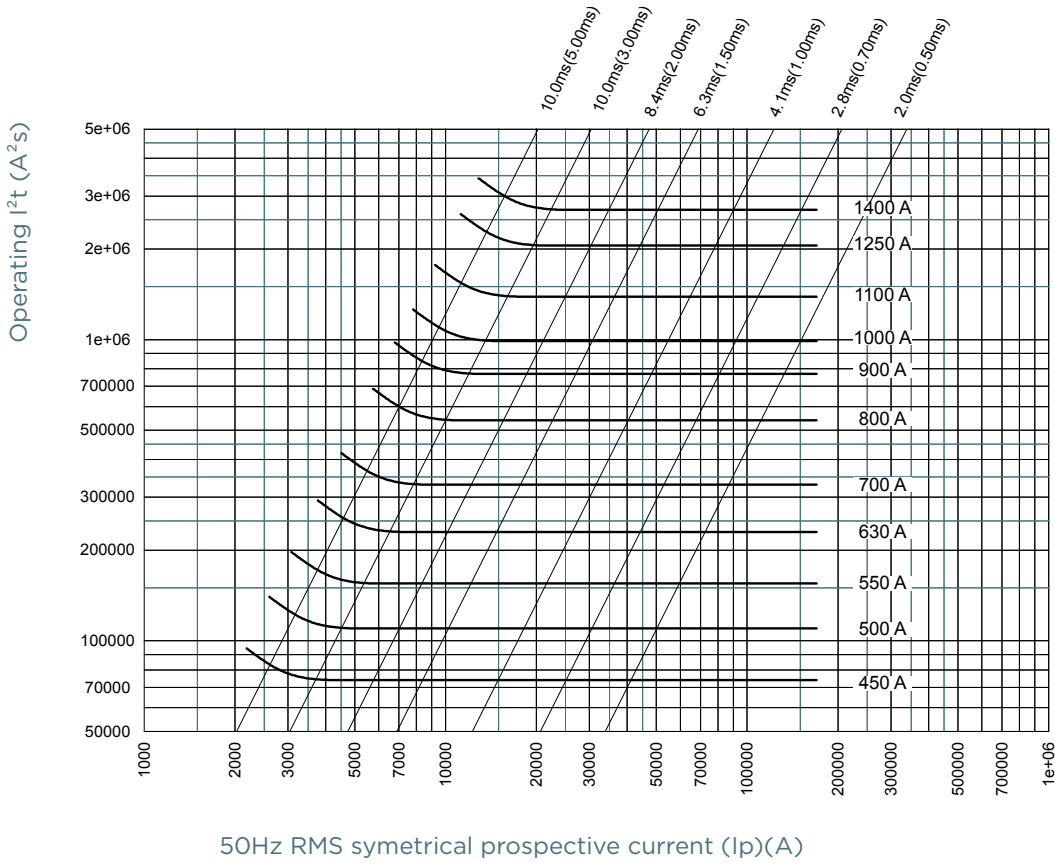


# Protistor® size 33 aR

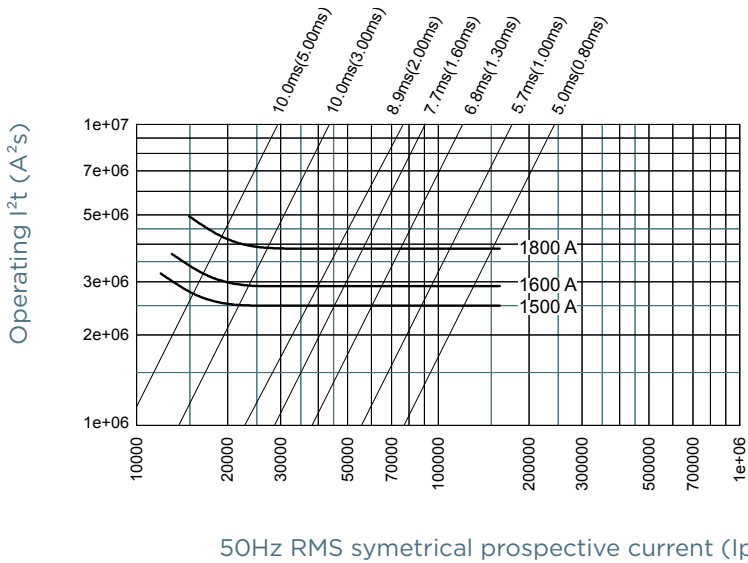
450 to 690VAC (IEC) / 700VAC (UL)

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

### Size 33 690V



### Size 33 600V



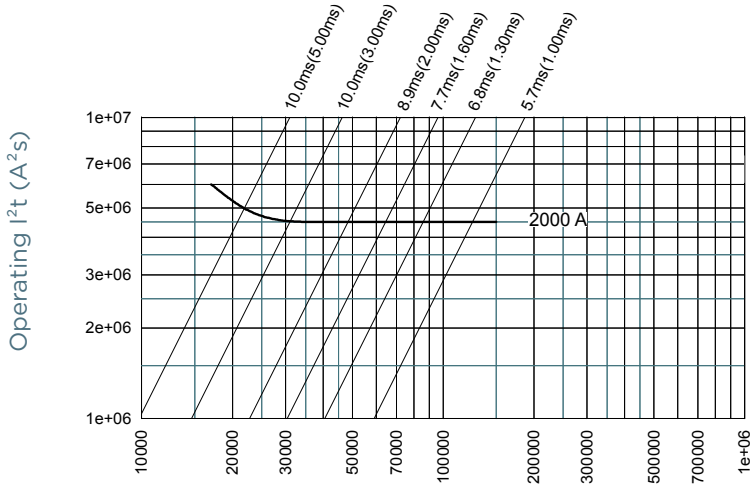
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# Protistor® size 33 aR

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

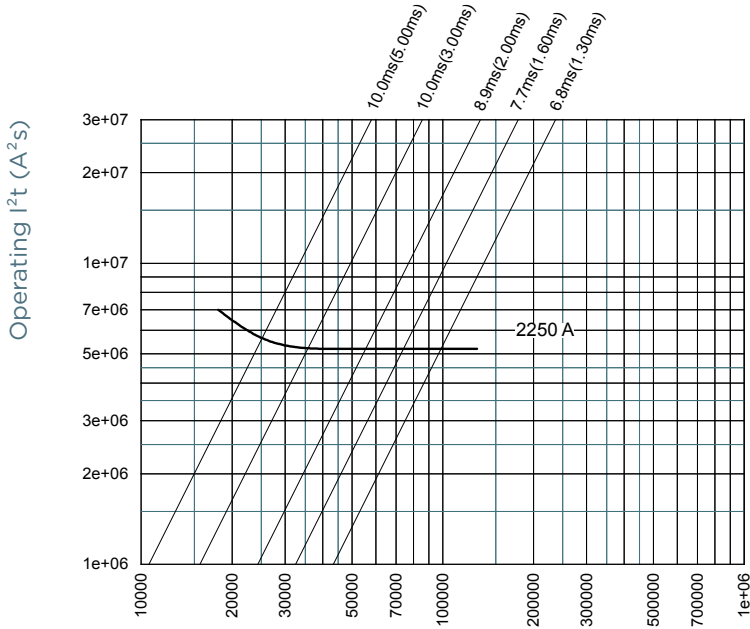
## CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

### Size 33 550V



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

### Size 33 500V

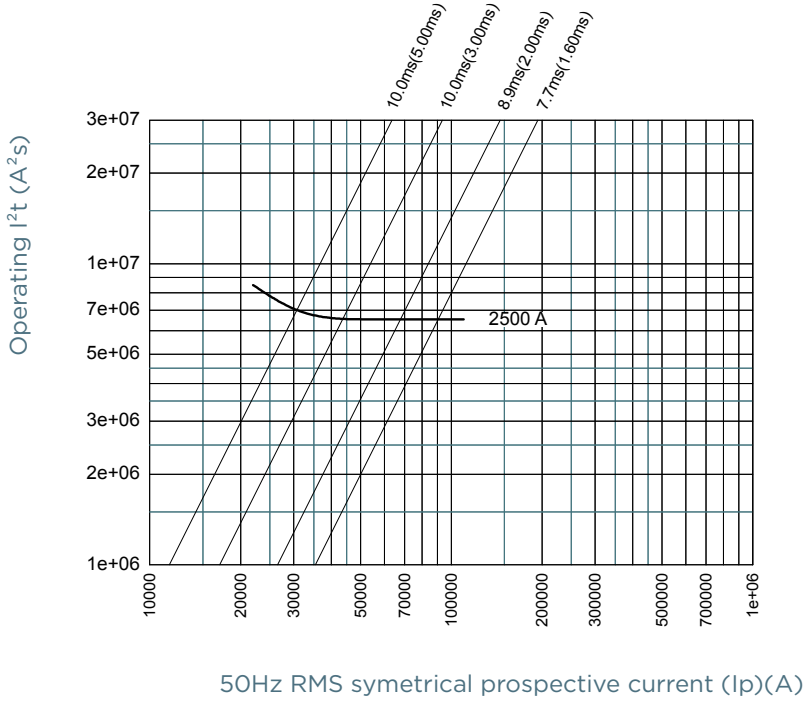


50Hz RMS symmetrical prospective current (Ip)(A)

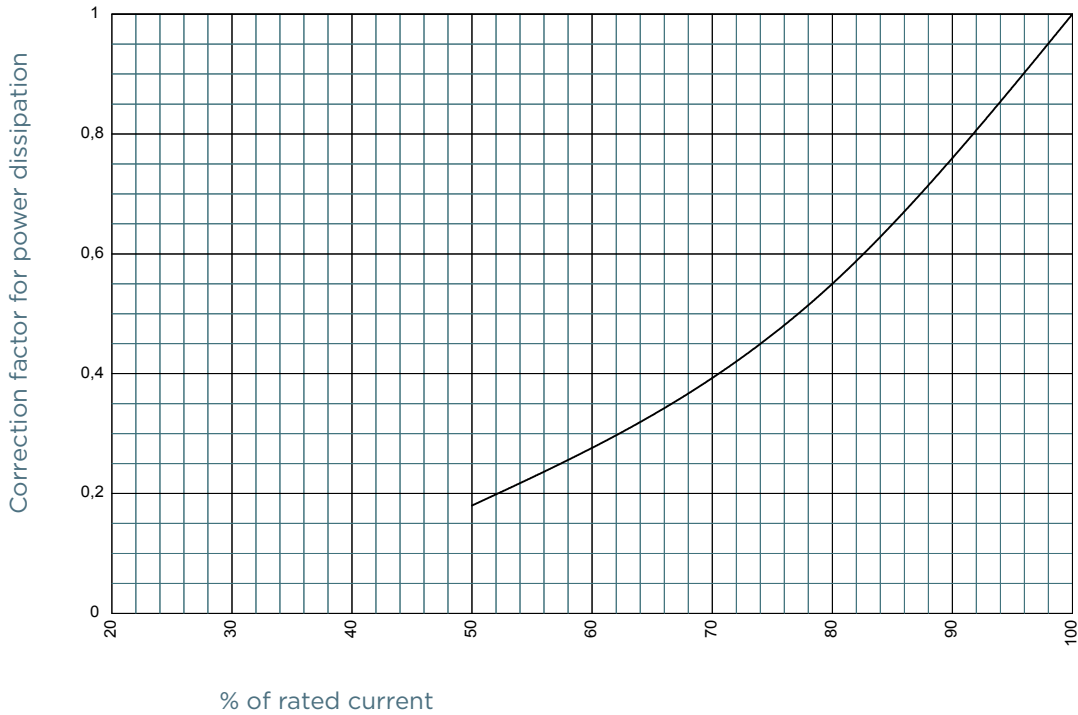
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## CHARACTERISTICS TOTAL I<sup>2</sup>T CURVE

Size 33 450V



## POWER DISSIPATION

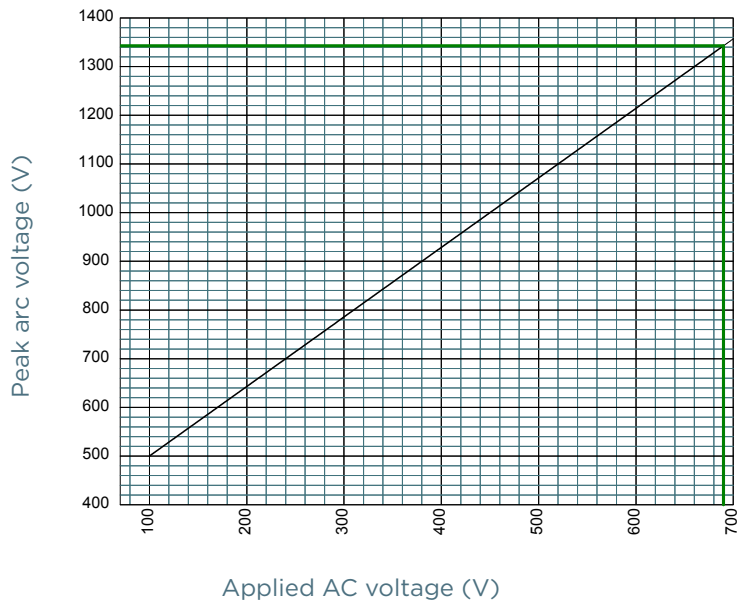


# Protistor® size 33 aR

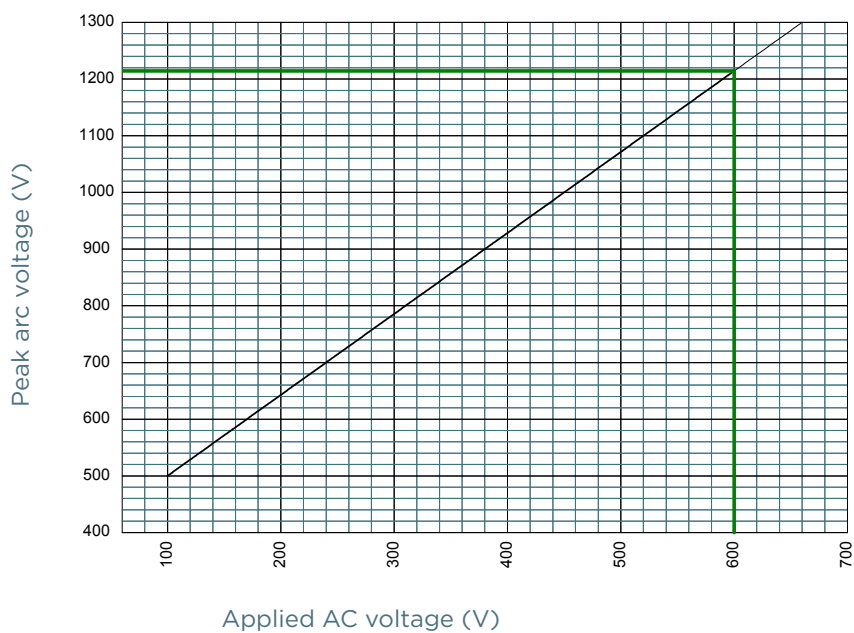
450 to 690VAC (IEC) / 700VAC (UL)

## PEAK ARC VOLTAGE

### Size 33 690V



### Size 33 600V

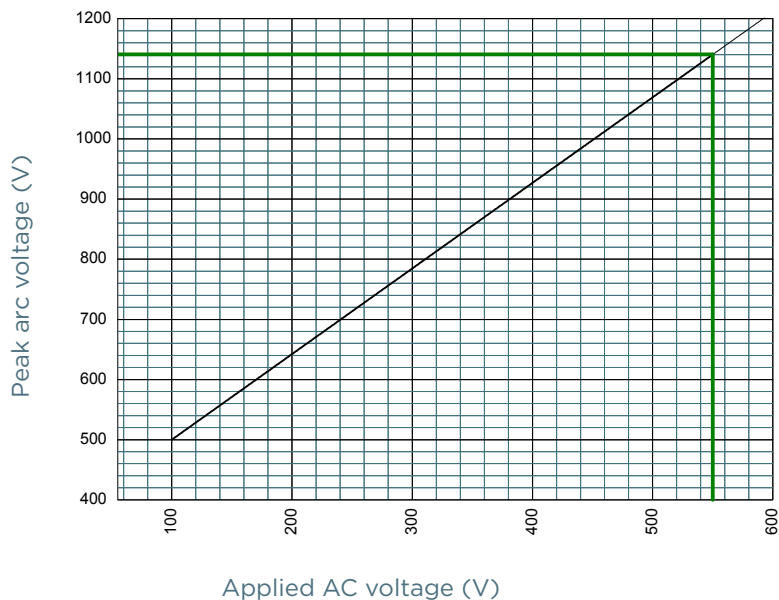


# Protistor® size 33 aR

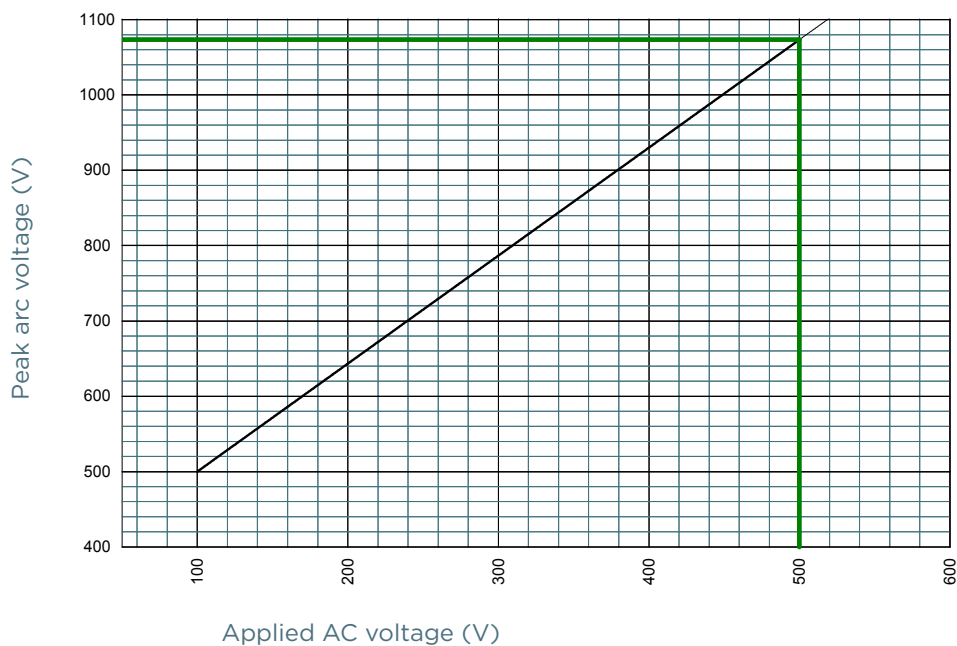
450 to 690VAC (IEC) / 700VAC (UL)

## PEAK ARC VOLTAGE

### Size 33 550V



### Size 33 500V

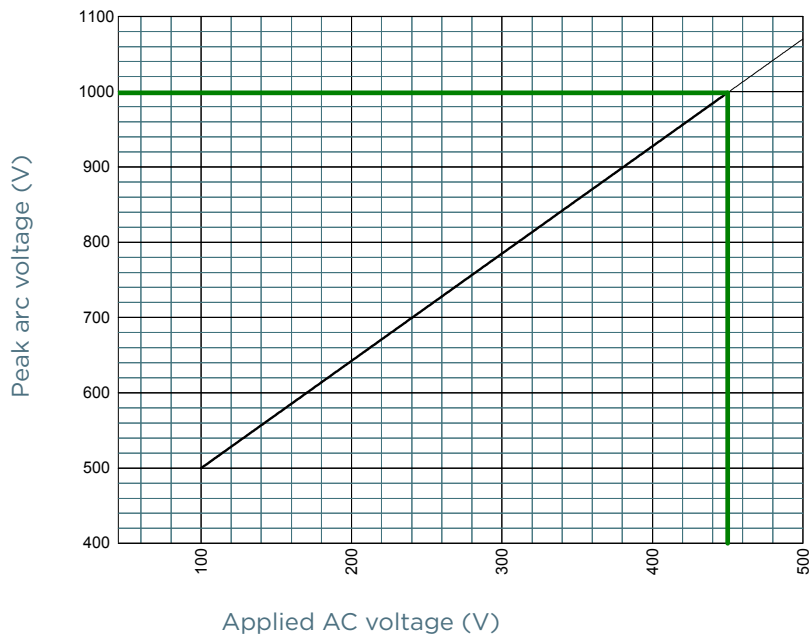


# Protistor® size 33 aR

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

## PEAK ARC VOLTAGE

### Size 33 450V

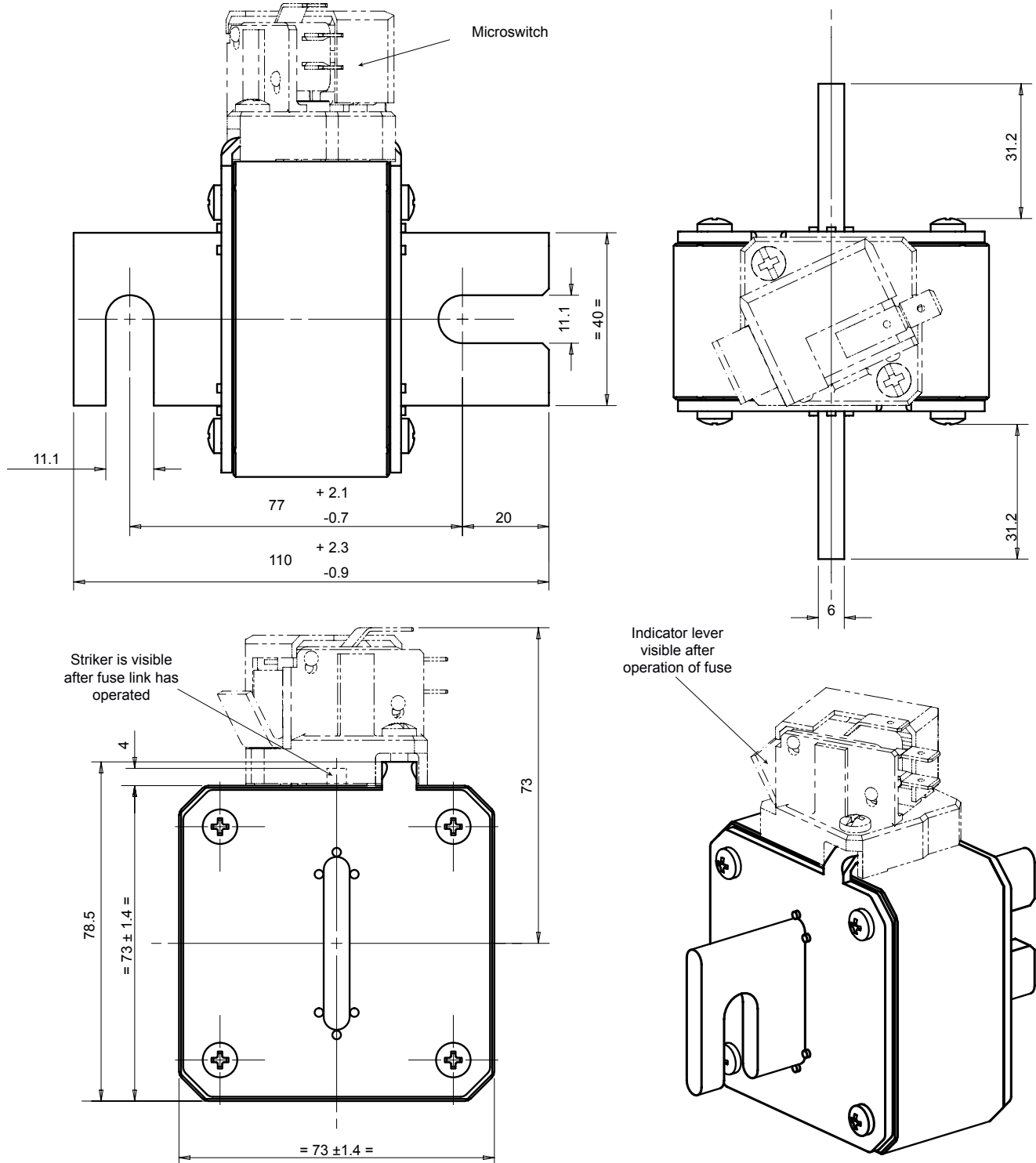


# Protistor® size 33 aR

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

## DIMENSIONS

size 33 type DIN 80 (102931)



Dimensions in mm

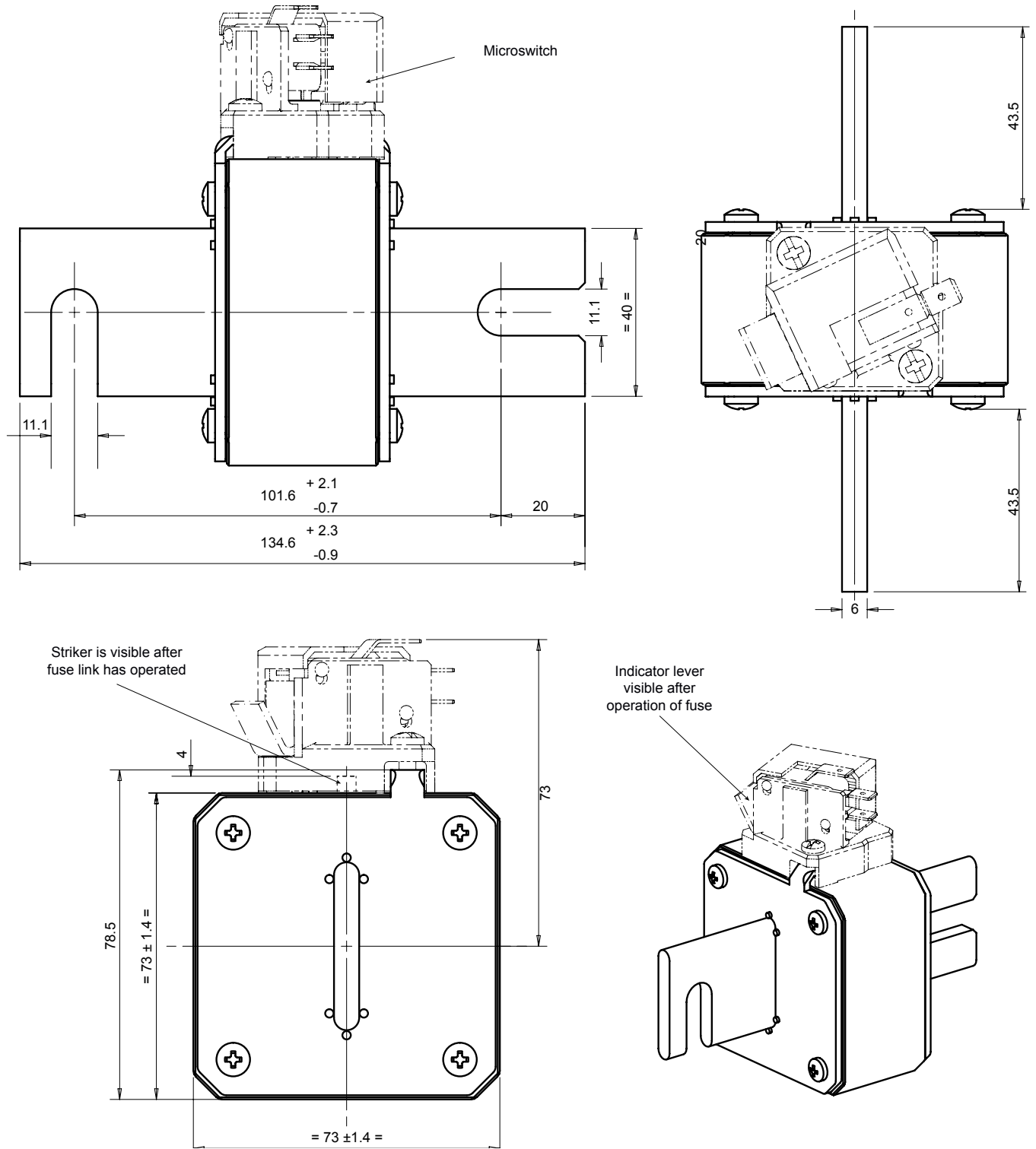
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# Protistor® size 33 aR

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

## DIMENSIONS

size 33 type DIN 110 (102932)



Dimensions in mm

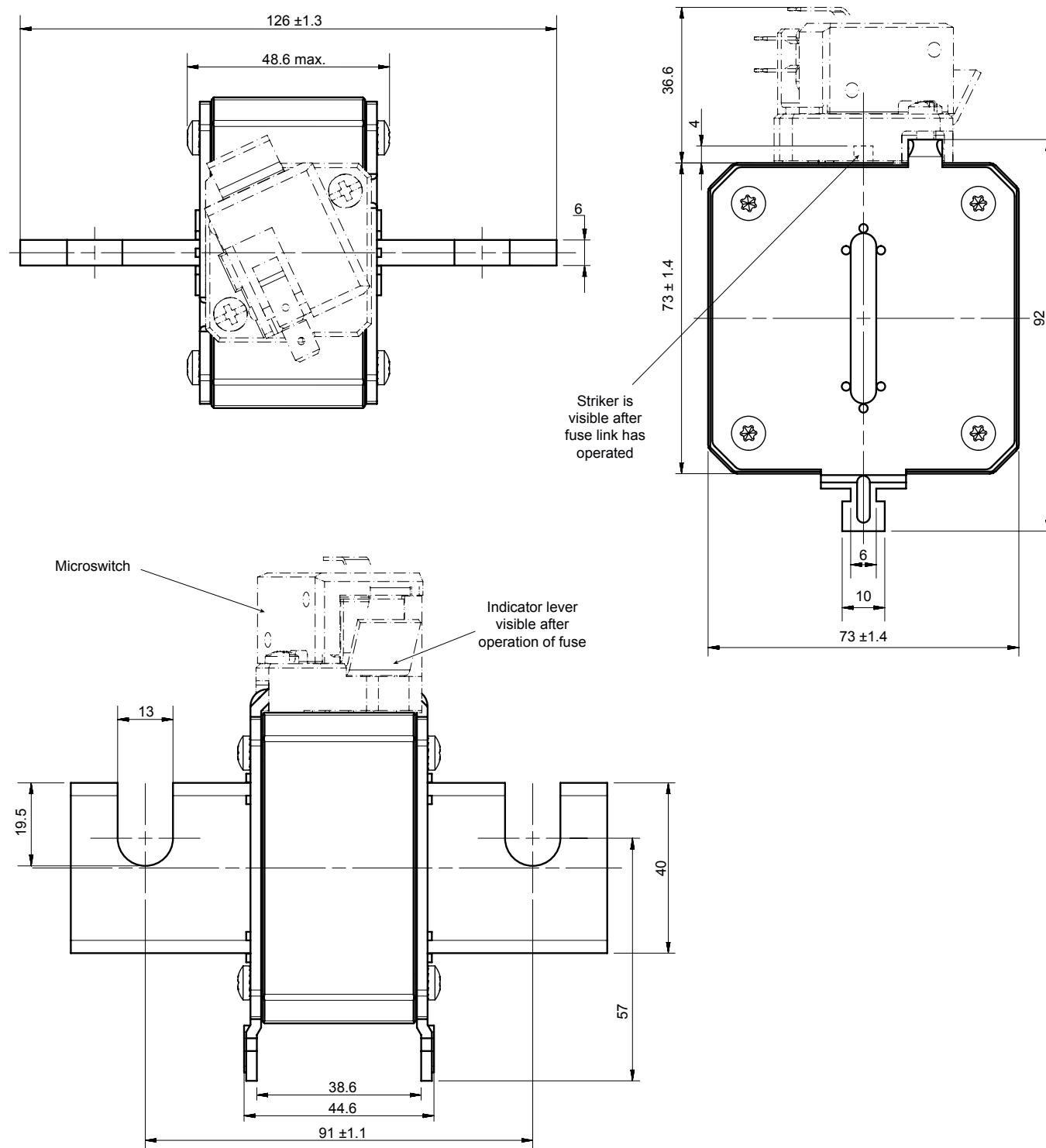
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# Protistor® size 33 aR

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

## DIMENSIONS

size 33 type EF (102930)



Dimensions in mm

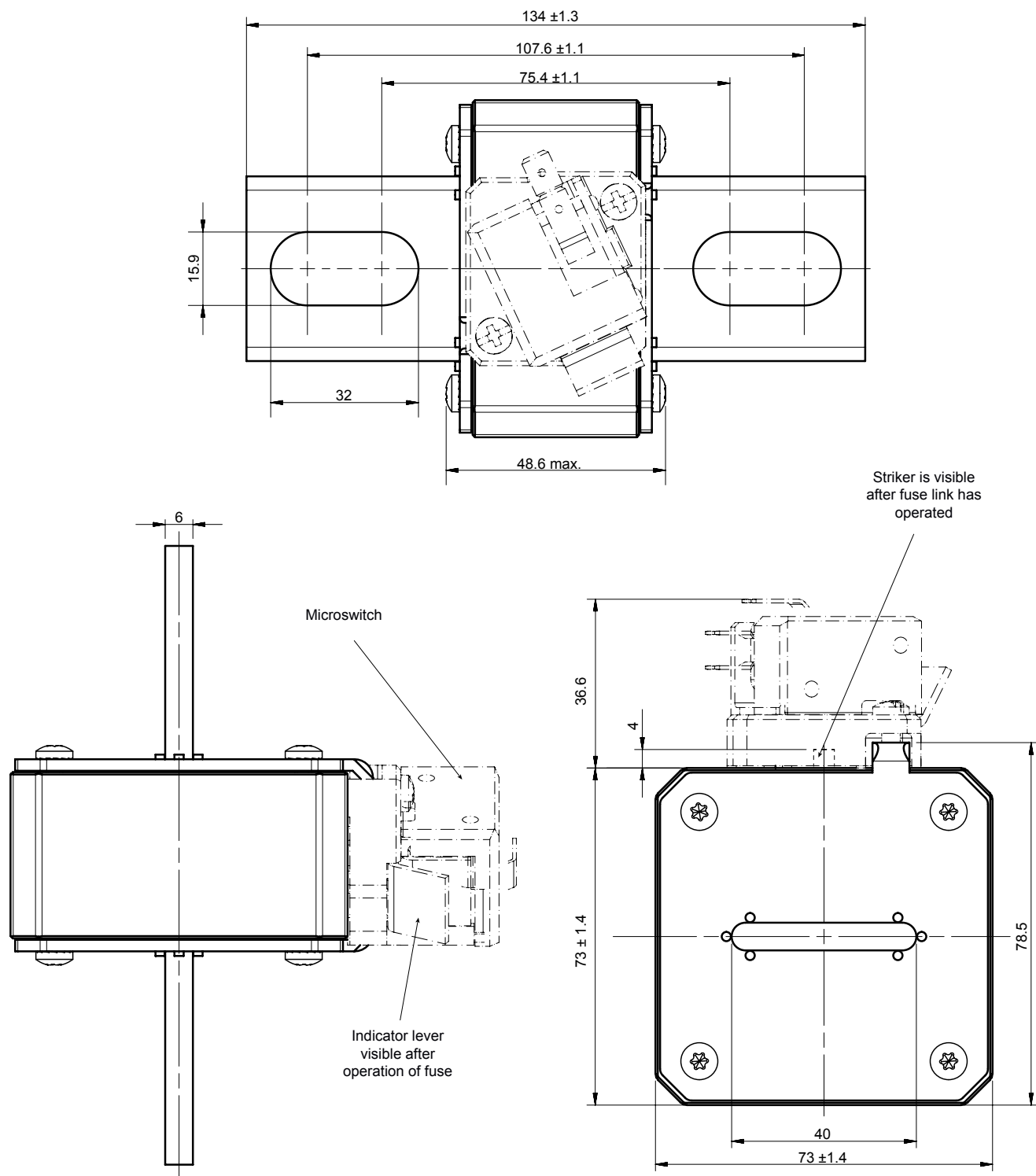
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# Protistor® size 33 aR

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

## DIMENSIONS

size 33 type KI (102929)



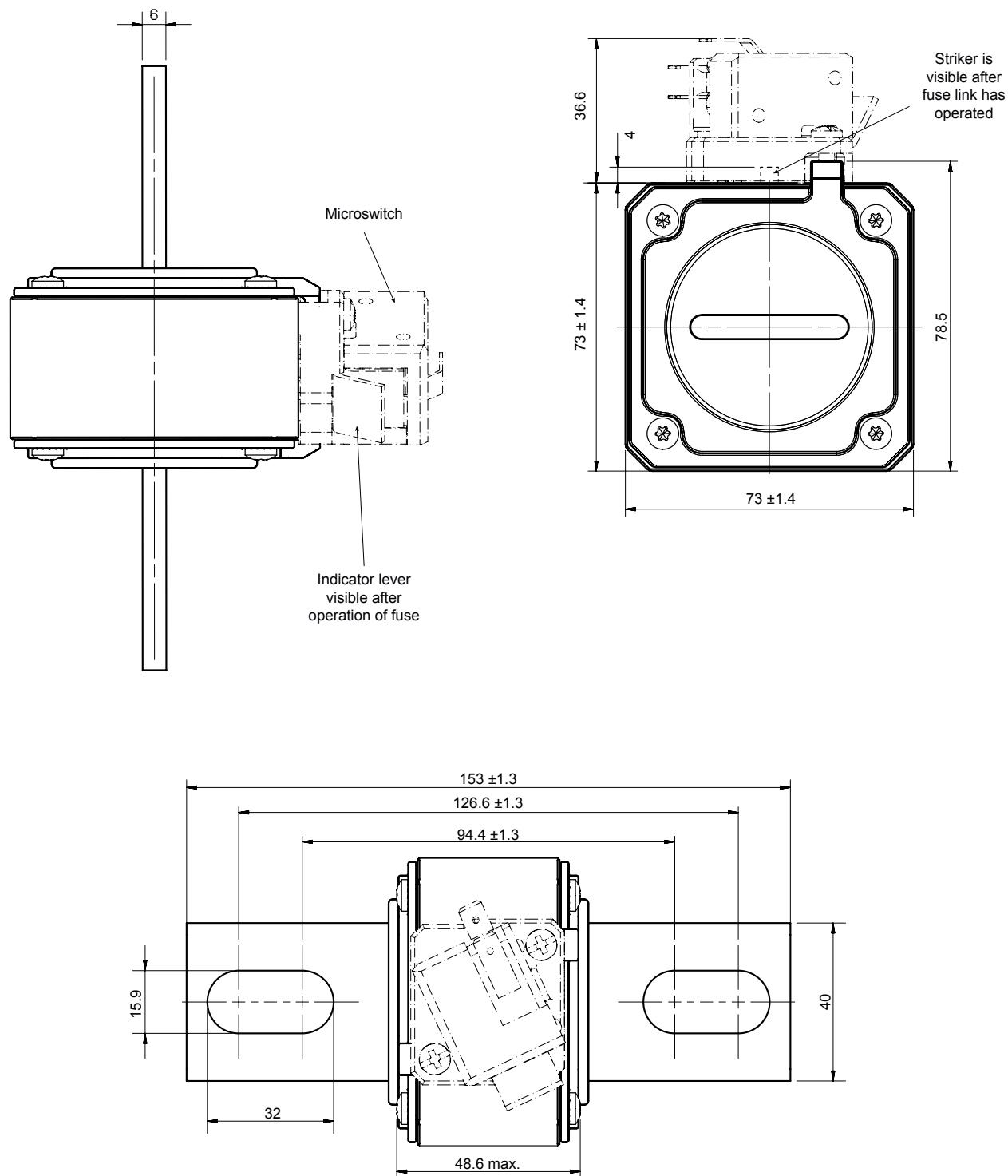
Dimensions in mm

# Protistor® size 33 aR

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

## DIMENSIONS

size 33 type LI reinforced (109524)



Dimensions in mm

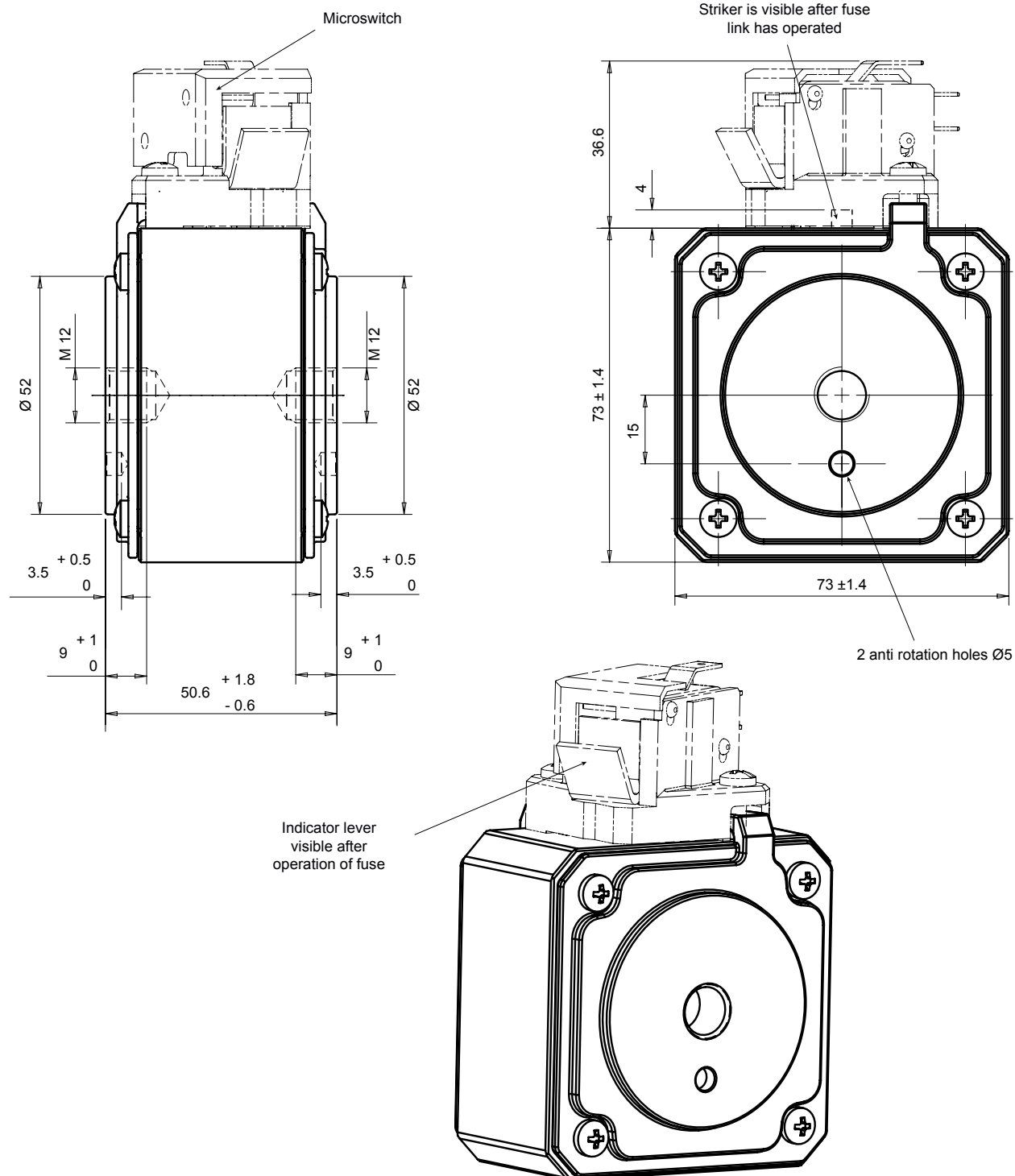
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# Protistor® size 33 aR

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

## DIMENSIONS

size 33 type TTF reinforced (107900)



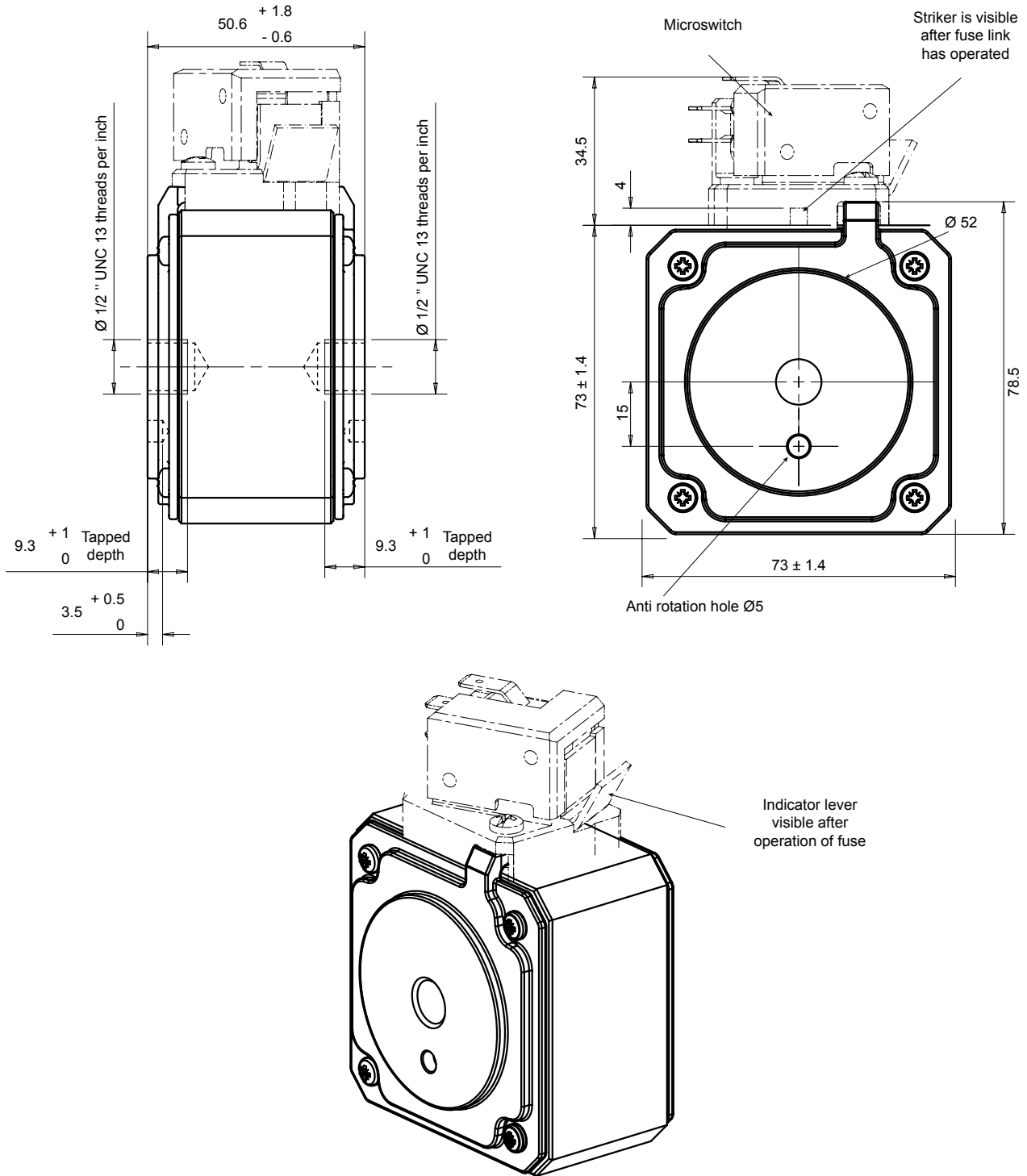
Dimensions in mm

# Protistor® size 33 aR

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

## DIMENSIONS

size 33 type TTI reinforced (108835)



Dimensions in mm

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