

Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

SEMICONDUCTOR PROTECTION FUSES

SQUARE BODY HIGH-SPEED FUSE-LINKS AC & DC PROTECTION



The 690V 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

Rated voltage AC (IEC / UL)	500...690 VAC
Rated voltage DC (UL)	320...500VDC : please see Product Range table
Ampere Range (A)	16 ... 400 A
Size per Standard	000, 00
Speed/Characteristic	aR
I.R. AC (IEC/UL)	120 to 200kA

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
- cURus Recognized Component
- AC: UL Guide No. E76491



Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

PRODUCT RANGE



DN000UB69V315

Size 000 DIN80, vertical body, without indicator

Catalog number	Item number	Rated voltage AC (IEC / UL)	Rated voltage DC (UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
DN000UB69V80	K330036	690 V	500 V	80 A	390 A ² s	2500 A ² s	200 kA	21 W	6	0.13 kg
DN000UB69V100	L330037	690 V	500 V	100 A	690 A ² s	4200 A ² s	200 kA	23 W	6	0.13 kg
DN000UB69V125	M330038	690 V	500 V	125 A	1310 A ² s	8900 A ² s	200 kA	26 W	6	0.13 kg
DN000UB69V160	N330039	690 V	500 V	160 A	2680 A ² s	16000 A ² s	200 kA	31 W	6	0.13 kg
DN000UB69V200	P330040	690 V	500 V	200 A	5250 A ² s	31500 A ² s	200 kA	36 W	6	0.13 kg
DN000UB69V250	Q330041	690 V	500 V	250 A	9860 A ² s	52000 A ² s	200 kA	45 W	6	0.13 kg
DN000UB69V315	R330042	690 V	500 V	315 A	15420 A ² s	82000 A ² s	200 kA	58 W	6	0.13 kg
DN000UB50V350	V330114	500 V	320 V	350 A	22400 A ² s	110000 A ² s	120 kA	58 W	6	0.13 kg
DN000UB50V400	D330191	500 V	320 V	400 A	33180 A ² s	160000 A ² s	120 kA	66 W	6	0.13 kg



DN000UB69V160V

Size 000 DIN80, vertical body, with indicator

Catalog number	Item number	Rated voltage AC (IEC / UL)	Rated voltage DC (UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
DN000UB69V80V	W330023	690 V	320 V	80 A	390 A ² s	2500 A ² s	200 kA	21 W	6	0.13 kg
DN000UB69V100V	X330024	690 V	320 V	100 A	690 A ² s	4200 A ² s	200 kA	23 W	6	0.13 kg
DN000UB69V125V	Y330025	690 V	320 V	125 A	1310 A ² s	8900 A ² s	200 kA	26 W	6	0.13 kg
DN000UB69V160V	Z330026	690 V	320 V	160 A	2680 A ² s	16000 A ² s	200 kA	31 W	6	0.13 kg
DN000UB69V200V	A330027	690 V	320 V	200 A	5250 A ² s	31500 A ² s	200 kA	36 W	6	0.13 kg
DN000UB69V250V	B330028	690 V	320 V	250 A	9860 A ² s	52000 A ² s	200 kA	45 W	6	0.13 kg
DN000UB69V315V	C330029	690 V	320 V	315 A	15420 A ² s	82000 A ² s	200 kA	58 W	6	0.13 kg
DN000UB50V350V	W330115	500 V	320 V	350 A	22400 A ² s	110000 A ² s	120 kA	58 W	6	0.13 kg
DN000UB50V400V	E330192	500 V	320 V	400 A	33180 A ² s	160000 A ² s	120 kA	66 W	6	0.13 kg

Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

PRODUCT RANGE



DN000UB50V400L

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

Catalog number	Item number	Rated voltage AC (IEC / UL)	Rated voltage DC (UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
DN000UB69V80L	T330182	690 V	500 V	80 A	390 A ² s	2500 A ² s	200 kA	21 W	6	0.13 kg
DN000UB69V100L	V330183	690 V	500 V	100 A	690 A ² s	4200 A ² s	200 kA	23 W	6	0.13 kg
DN000UB69V125L	W330184	690 V	500 V	125 A	1310 A ² s	8900 A ² s	200 kA	26 W	6	0.13 kg
DN000UB69V160L	X330185	690 V	500 V	160 A	2680 A ² s	16000 A ² s	200 kA	31 W	6	0.13 kg
DN000UB69V200L	Y330186	690 V	500 V	200 A	5250 A ² s	31500 A ² s	200 kA	36 W	6	0.13 kg
DN000UB69V250L	Z330187	690 V	500 V	250 A	9860 A ² s	52000 A ² s	200 kA	45 W	6	0.13 kg
DN000UB69V315L	A330188	690 V	500 V	315 A	15420 A ² s	82000 A ² s	200 kA	58 W	6	0.13 kg
DN000UB50V350L	B330189	500 V	320 V	350 A	22400 A ² s	110000 A ² s	120 kA	58 W	6	0.13 kg
DN000UB50V400L	F330193	500 V	320 V	400 A	33180 A ² s	160000 A ² s	120 kA	66 W	6	0.13 kg



BS000UB50V400

Size 000 BS88, horizontal body, without indicator

Catalog number	Item number	Rated voltage AC (IEC / UL)	Rated voltage DC (UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
BS000UB69V75	B330051	690 V ¹	500 V	75 A	340 A ² s	2250 A ² s	200 kA	20.5 W	3	0.14 kg
BS000UB69V80	C330052	690 V ¹	500 V	80 A	390 A ² s	2500 A ² s	200 kA	21 W	3	0.14 kg
BS000UB69V100	D330053	690 V ¹	500 V	100 A	690 A ² s	4200 A ² s	200 kA	23 W	3	0.14 kg
BS000UB69V110	E330100	690 V ¹	500 V	110 A	950 A ² s	6800 A ² s	200 kA	24.5 W	3	0.14 kg
BS000UB69V125	E330054	690 V ¹	500 V	125 A	1310 A ² s	8900 A ² s	200 kA	26 W	3	0.14 kg
BS000UB69V160	F330055	690 V ¹	500 V	160 A	2680 A ² s	16000 A ² s	200 kA	31 W	3	0.14 kg
BS000UB69V200	G330056	690 V ¹	500 V	200 A	5250 A ² s	31500 A ² s	200 kA	36 W	3	0.14 kg
BS000UB69V250	H330057	690 V	500 V	250 A	9860 A ² s	52000 A ² s	200 kA	45 W	3	0.14 kg
BS000UB69V315	J330058	690 V	500 V	315 A	15420 A ² s	82000 A ² s	200 kA	58 W	3	0.14 kg
BS000UB50V350	X330116	500 V	320 V	350 A	22400 A ² s	110000 A ² s	120 kA	58 W	3	0.14 kg
BS000UB50V400	G330194	500 V	320 V	400 A	33180 A ² s	160000 A ² s	120 kA	66 W	3	0.14 kg

¹For DC BUS applications: UL recognized qualified at 600VDC, capable of interrupting circuits having an available current between 20 to 55 kA, with a time constant not exceeding 12 ms.

Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

PRODUCT RANGE



BS000UB69V315P

Size 000 BS88, horizontal body, with indicator

Catalog number	Item number	Rated voltage AC (IEC / UL)	Rated voltage DC (UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
BS000UB69V75P	H330126	690 V	500 V	75 A	340 A ² s	2250 A ² s	200 kA	20.5 W	3	0.16 kg
BS000UB69V80P	J330127	690 V	500 V	80 A	390 A ² s	2500 A ² s	200 kA	21 W	3	0.16 kg
BS000UB69V100P	K330128	690 V	500 V	100 A	690 A ² s	4200 A ² s	200 kA	23 W	3	0.16 kg
BS000UB69V110P	L330129	690 V	500 V	110 A	950 A ² s	6800 A ² s	200 kA	24.5 W	3	0.16 kg
BS000UB69V125P	M330130	690 V	500 V	125 A	1310 A ² s	8900 A ² s	200 kA	26 W	3	0.16 kg
BS000UB69V160P	P330132	690 V	500 V	160 A	2680 A ² s	16000 A ² s	200 kA	31 W	3	0.16 kg
BS000UB69V200P	Q330133	690 V	500 V	200 A	5250 A ² s	31500 A ² s	200 kA	36 W	3	0.16 kg
BS000UB69V250P	R330134	690 V	500 V	250 A	9860 A ² s	52000 A ² s	200 kA	45 W	3	0.16 kg
BS000UB69V315P	S330135	690 V	500 V	315 A	15420 A ² s	82000 A ² s	200 kA	58 W	3	0.16 kg
BS000UB50V350P	T330136	500 V	320 V	350 A	22400 A ² s	110000 A ² s	120 kA	58 W	3	0.16 kg
BS000UB50V400P	H330195	500 V	320 V	400 A	33180 A ² s	160000 A ² s	120 kA	66 W	3	0.16 kg



DN00UB69V400L

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

Catalog number	Item number	Rated voltage AC (IEC / UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
DN00UB69V16L	V330275	690 V	16 A	7 A ² s	52 A ² s	200 kA	7 W	3	0.20 kg
DN00UB69V20L	T330274	690 V	20 A	10 A ² s	75 A ² s	200 kA	9 W	3	0.20 kg
DN00UB69V25L	M330268	690 V	25 A	15 A ² s	120 A ² s	200 kA	11 W	3	0.20 kg
DN00UB69V32L	N330269	690 V	32 A	32 A ² s	210 A ² s	200 kA	15 W	3	0.20 kg
DN00UB69V40L	P330270	690 V	40 A	61 A ² s	400 A ² s	200 kA	18 W	3	0.20 kg
DN00UB69V50L	Q330271	690 V	50 A	102 A ² s	700 A ² s	200 kA	21 W	3	0.20 kg
DN00UB69V63L	R330272	690 V	63 A	177 A ² s	1200 A ² s	200 kA	23 W	3	0.20 kg
DN00UB69V80L	D330237	690 V	80 A	390 A ² s	2200 A ² s	200 kA	25 W	3	0.20 kg
DN00UB69V100L	E330238	690 V	100 A	692 A ² s	3900 A ² s	200 kA	28 W	3	0.20 kg
DN00UB69V125L	F330239	690 V	125 A	1170 A ² s	6600 A ² s	200 kA	33 W	3	0.20 kg
DN00UB69V160L	G330240	690 V	160 A	2680 A ² s	14000 A ² s	200 kA	36 W	3	0.20 kg
DN00UB69V200L	H330241	690 V	200 A	4690 A ² s	24000 A ² s	200 kA	42 W	3	0.20 kg
DN00UB69V250L	J330242	690 V	250 A	8300 A ² s	42500 A ² s	200 kA	50 W	3	0.20 kg
DN00UB69V315L	K330243	690 V	315 A	17520 A ² s	81000 A ² s	200 kA	58 W	3	0.20 kg
DN00UB69V350L	L330244	690 V	350 A	25450 A ² s	118000 A ² s	200 kA	60 W	3	0.20 kg
DN00UB69V400L	M330245	690 V	400 A	33180 A ² s	150000 A ² s	200 kA	70 W	3	0.20 kg

Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

PRODUCT RANGE



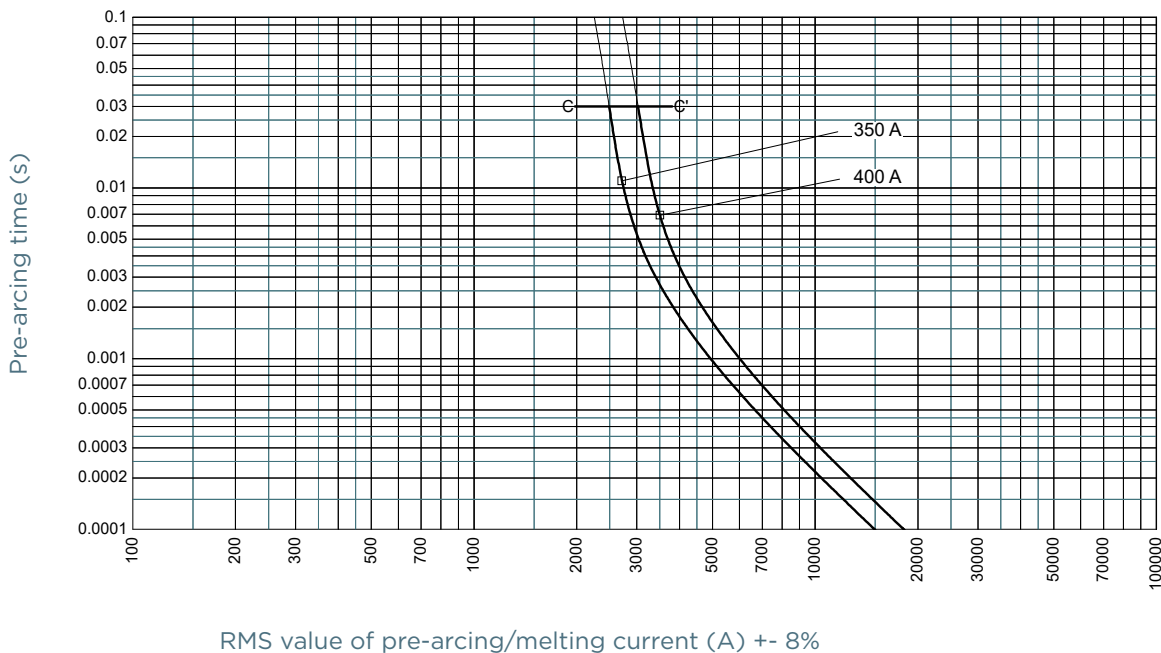
DN00UB69V400DL

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

Catalog number	Item number	Rated voltage AC (IEC / UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
DN00UB69V80D1L	A330257	690 V	80 A	390 A ² s	2200 A ² s	200 kA	25 W	3	0.24 kg
DN00UB69V100D1L	B330258	690 V	100 A	692 A ² s	3900 A ² s	200 kA	28 W	3	0.24 kg
DN00UB69V125D1L	C330259	690 V	125 A	1170 A ² s	6600 A ² s	200 kA	33 W	3	0.24 kg
DN00UB69V160D1L	D330260	690 V	160 A	2680 A ² s	14000 A ² s	200 kA	36 W	3	0.24 kg
DN00UB69V200D1L	E330261	690 V	200 A	4690 A ² s	24000 A ² s	200 kA	42 W	3	0.24 kg
DN00UB69V250D1L	F330262	690 V	250 A	8300 A ² s	42500 A ² s	200 kA	50 W	3	0.24 kg
DN00UB69V315D1L	G330263	690 V	315 A	17520 A ² s	81000 A ² s	200 kA	58 W	3	0.24 kg
DN00UB69V350D1L	H330264	690 V	350 A	25450 A ² s	118000 A ² s	200 kA	60 W	3	0.24 kg
DN00UB69V400D1L	J330265	690 V	400 A	33180 A ² s	150000 A ² s	200 kA	70 W	3	0.24 kg

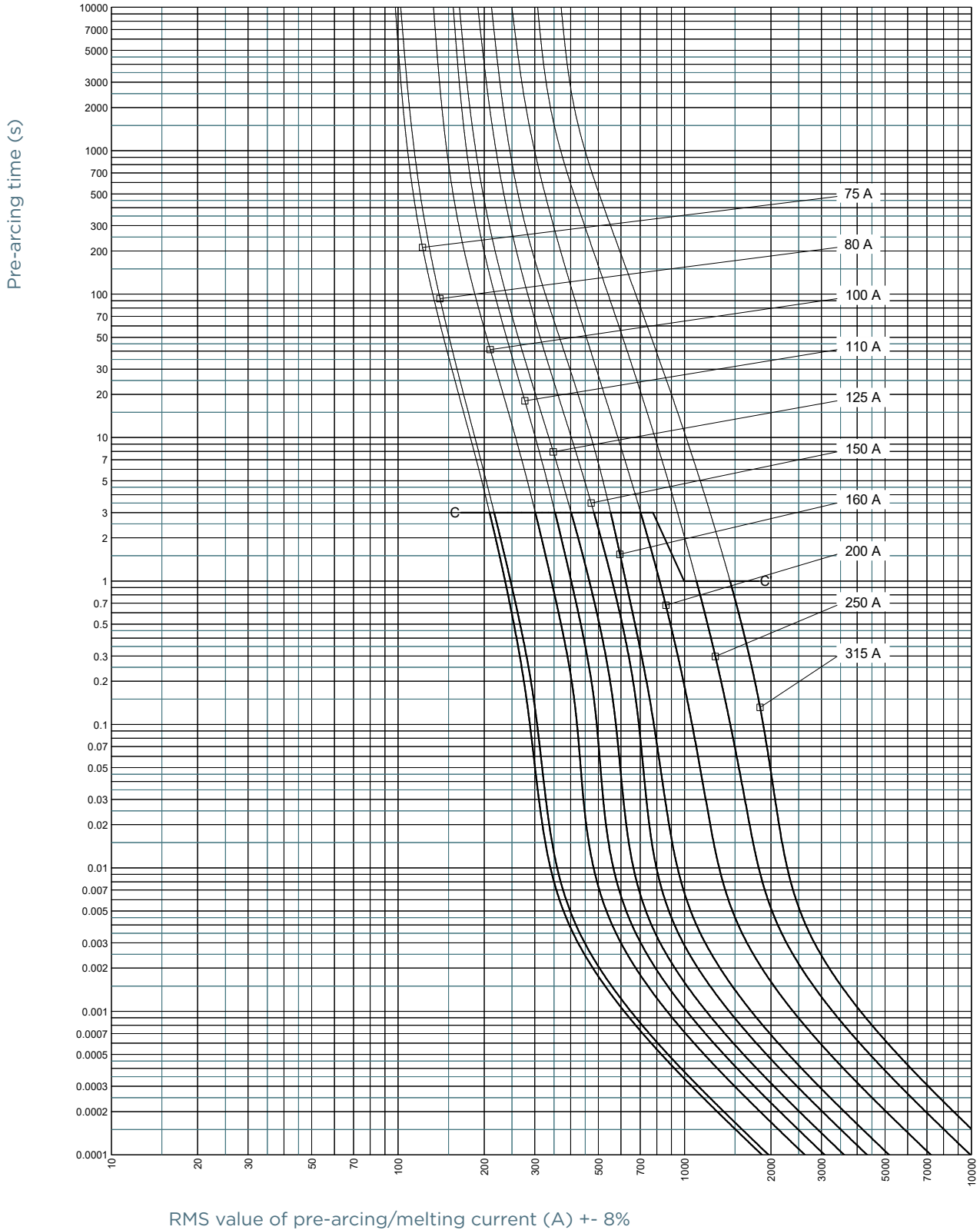
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Size 000, 500VAC



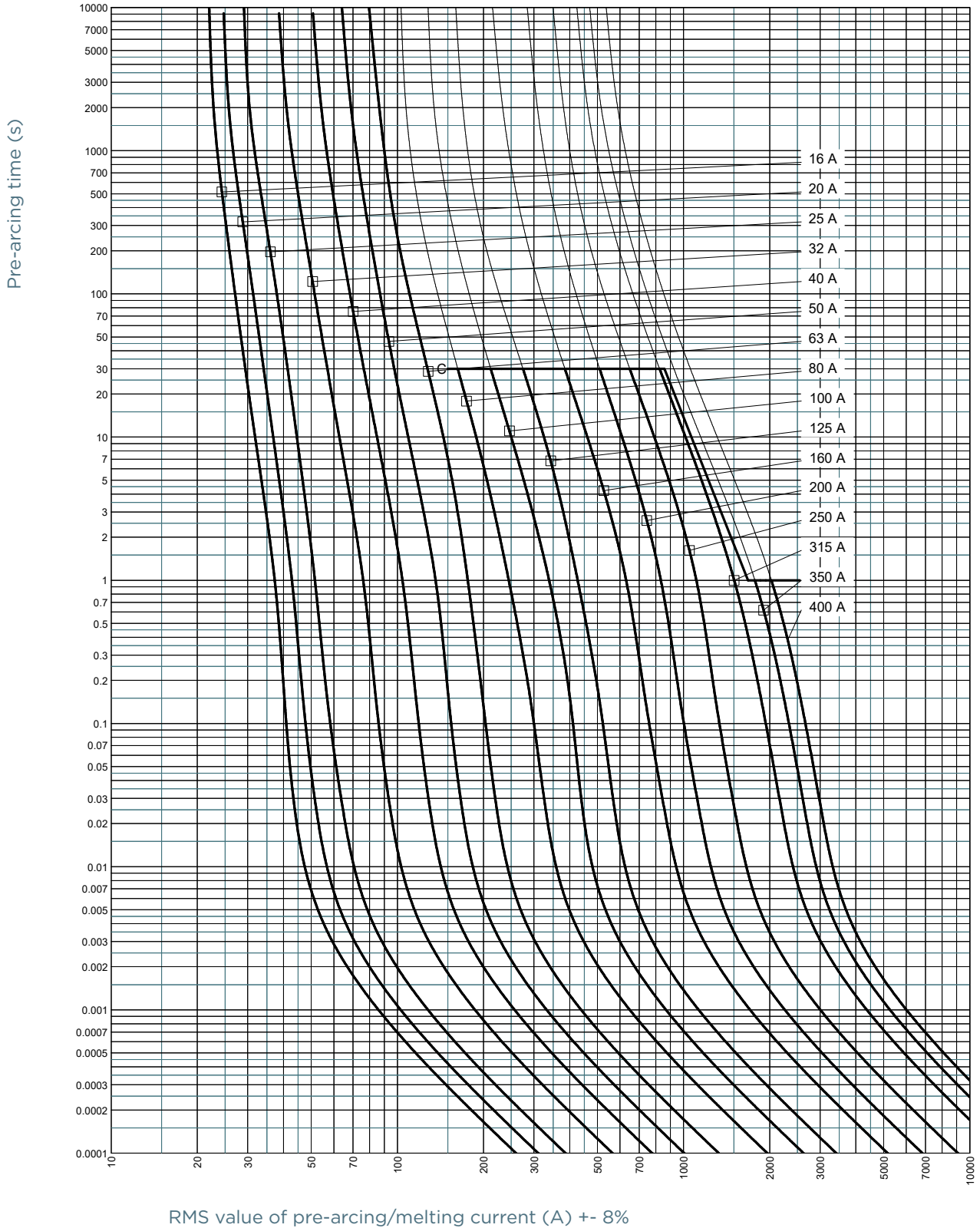
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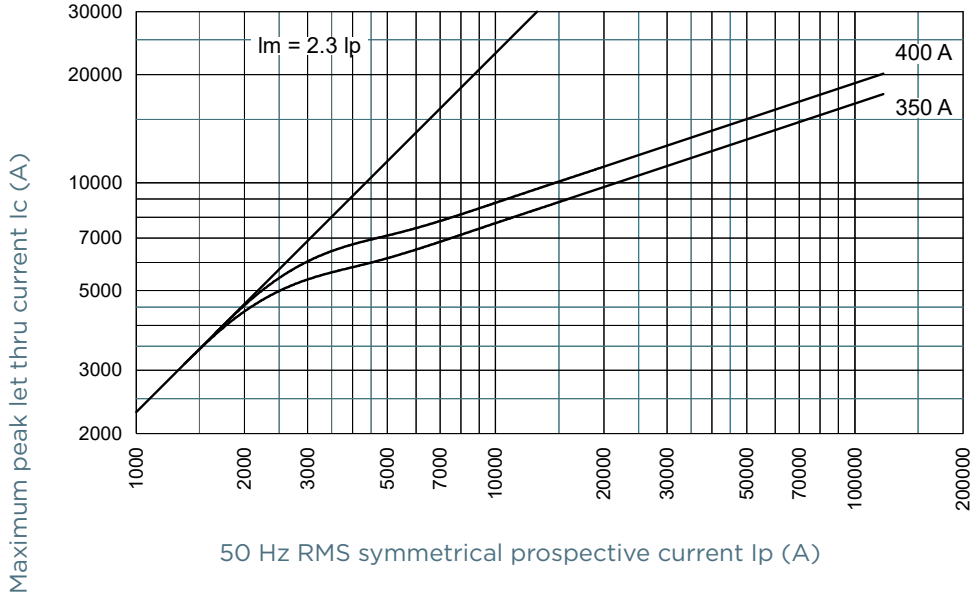
TIME CURRENT CHARACTERISTIC CURVES

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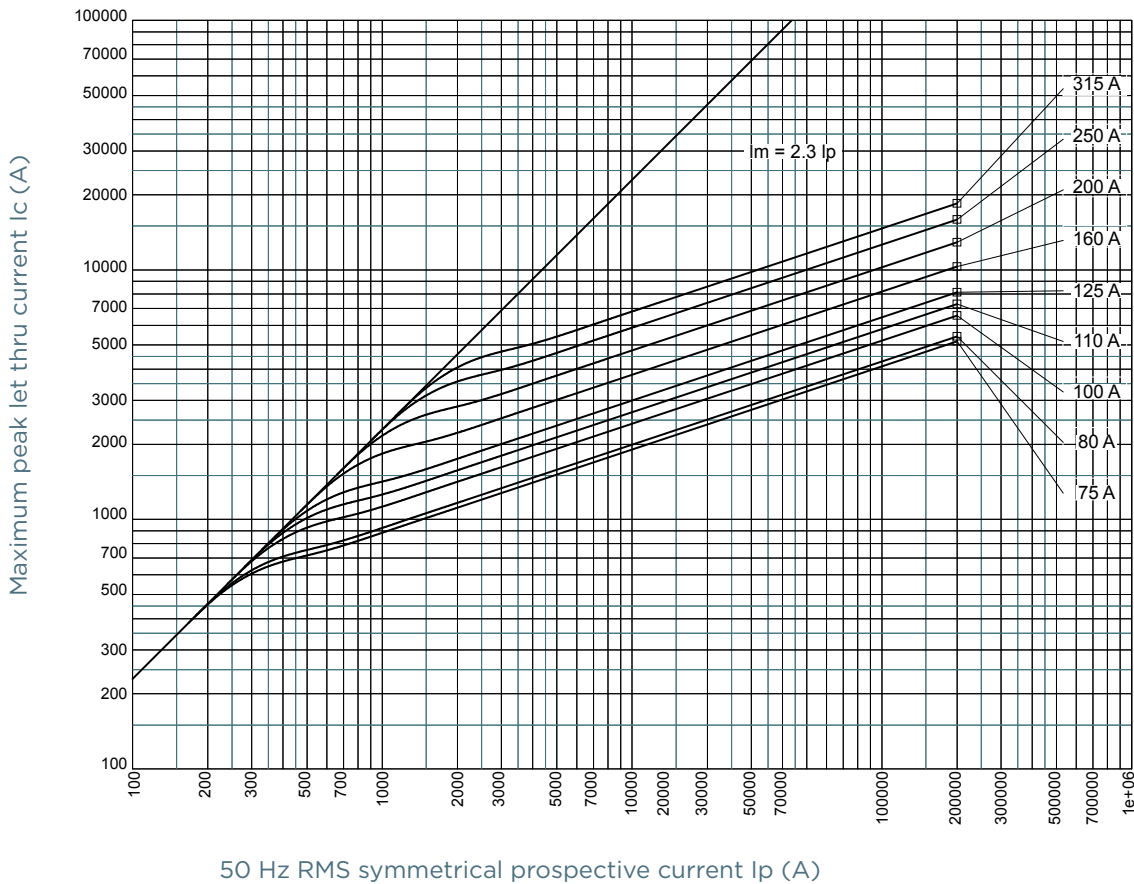


CUT-OFF CURRENT CHARACTERISTIC

Size 000, 500VAC

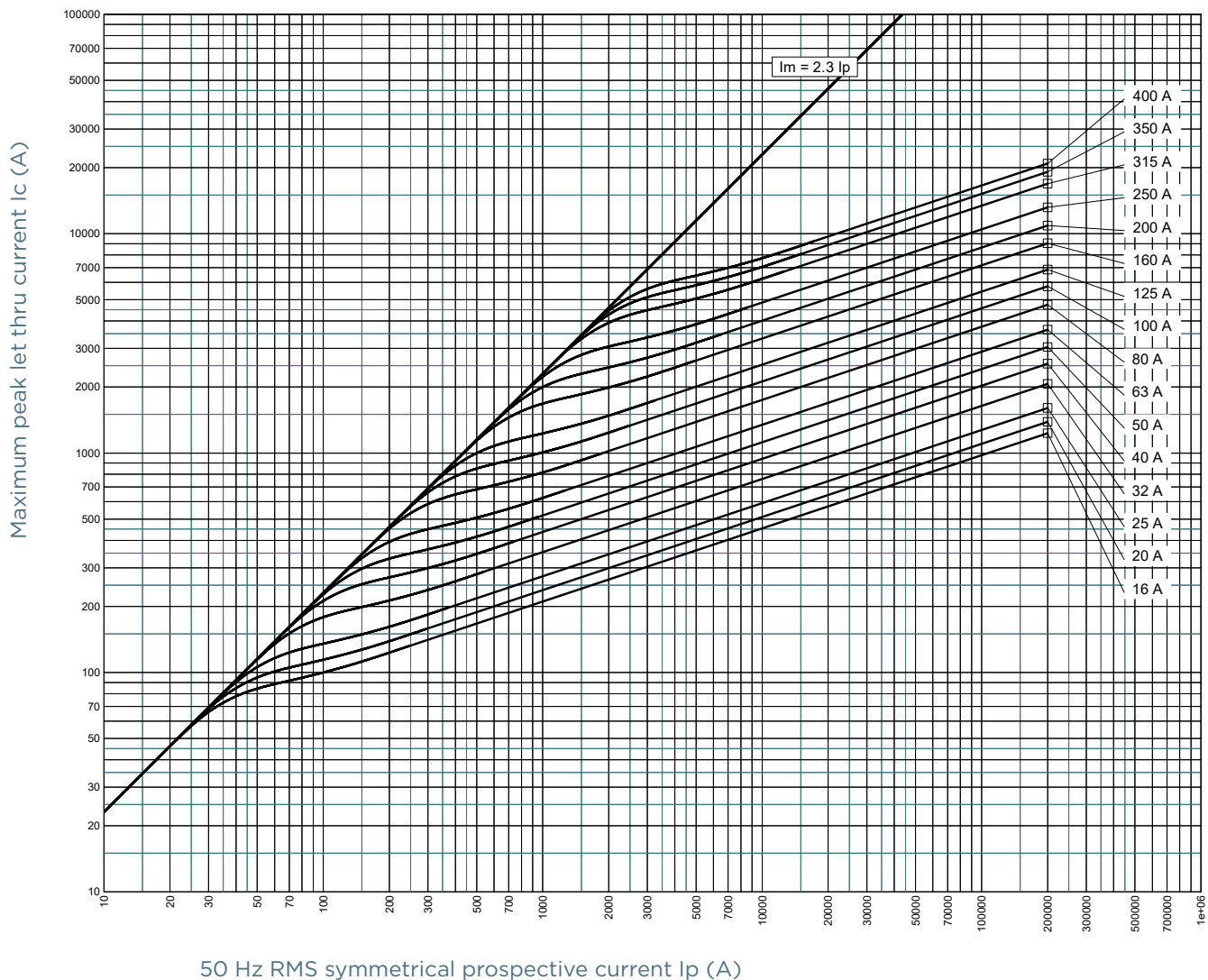


Size 000, 690VAC



CUT-OFF CURRENT CHARACTERISTIC

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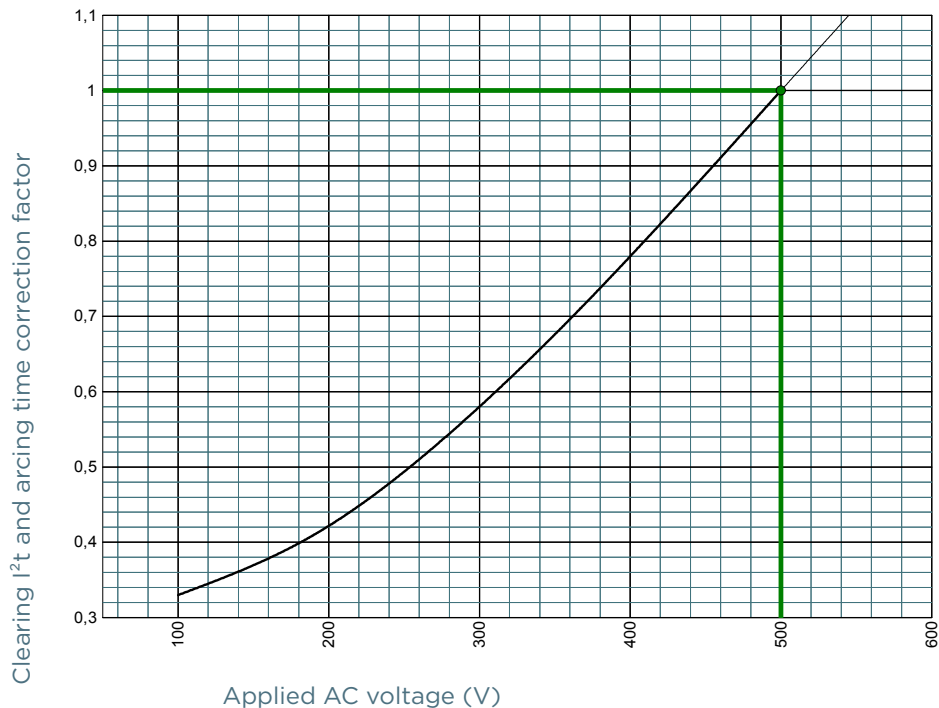


Protistor® size 000/00 aR

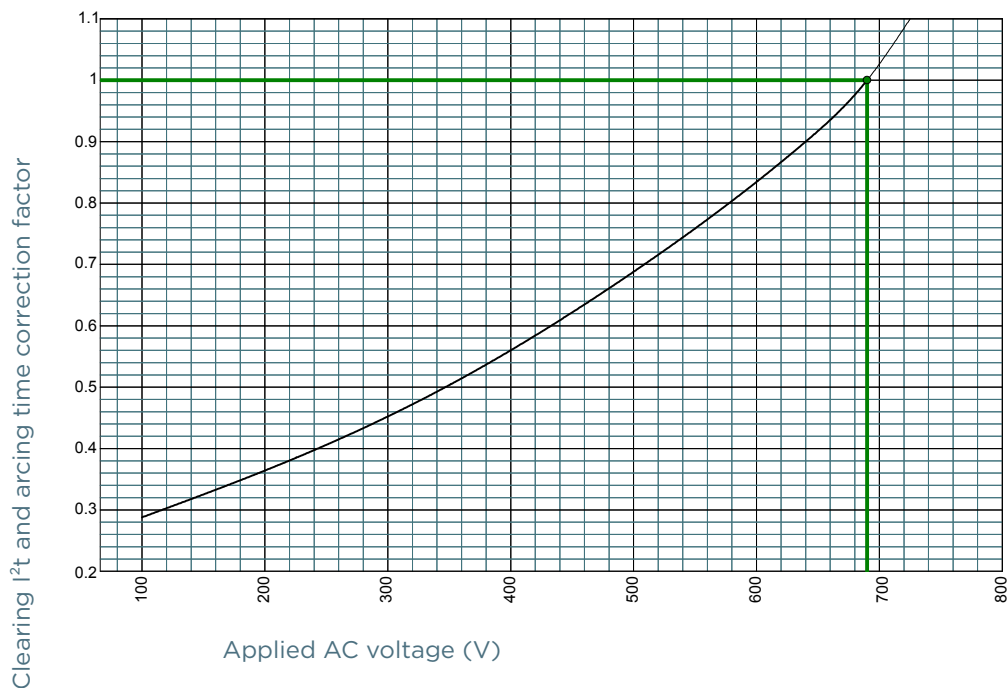
500 to 690VAC (IEC / UL) / 600VDC (UL)

I²T MULTIPLIER COEFFICIENT

Size 000, 500VAC

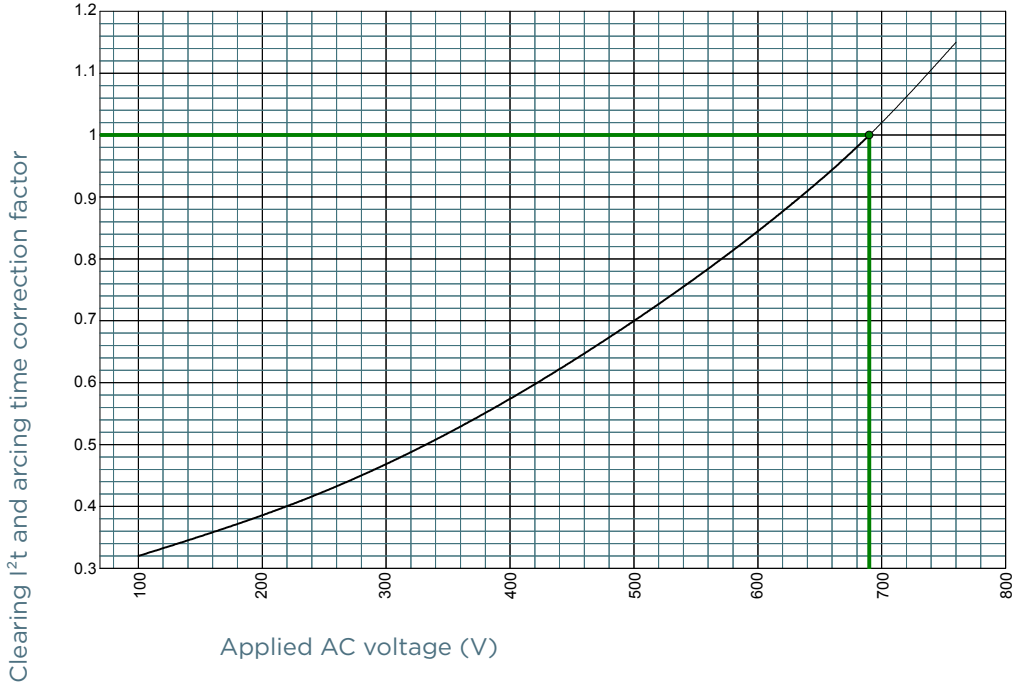


Size 000, 690VAC



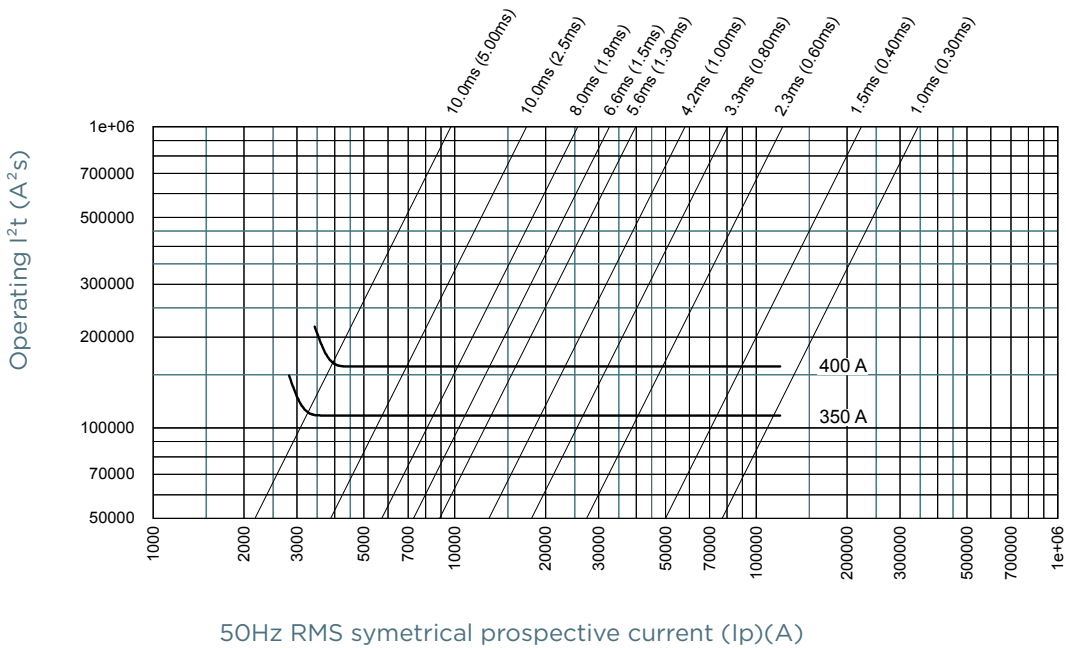
I²T MULTIPLIER COEFFICIENT

Size 00, 690VAC



CHARACTERISTICS TOTAL I²T CURVE

Size 000, 500VAC

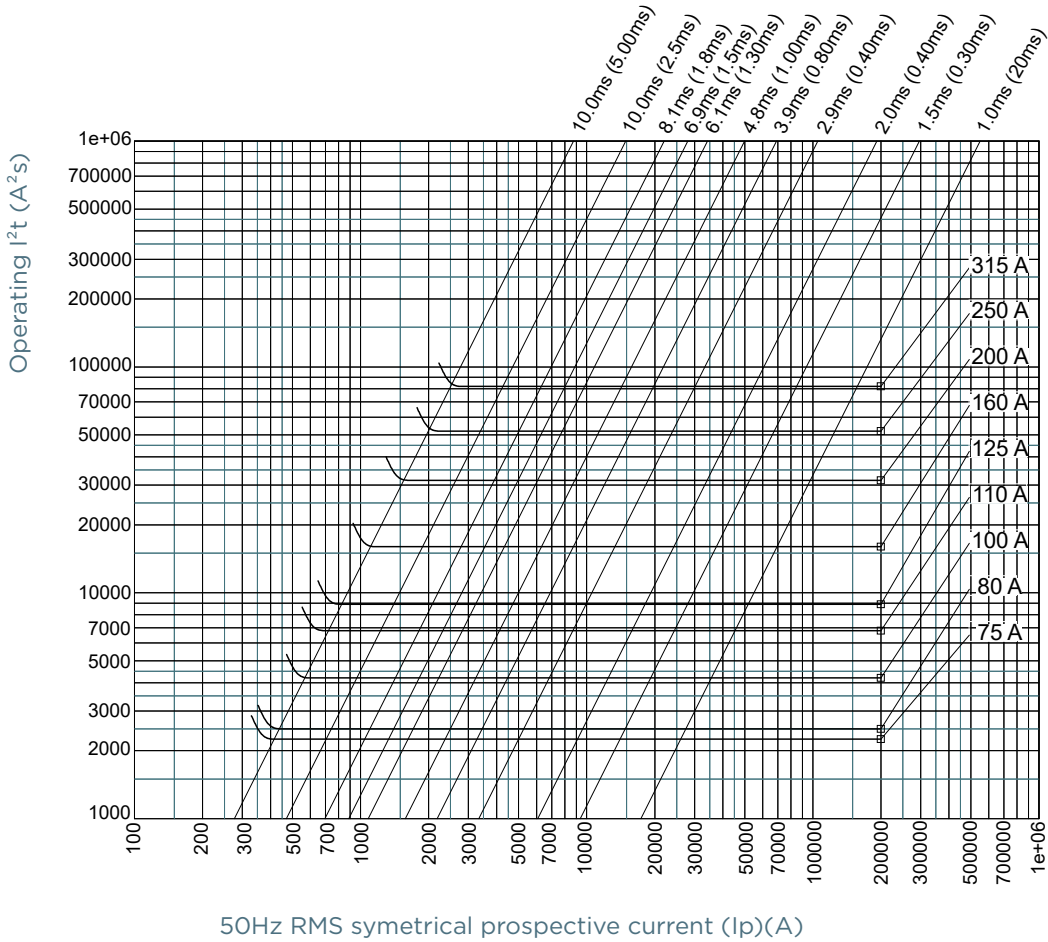


Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

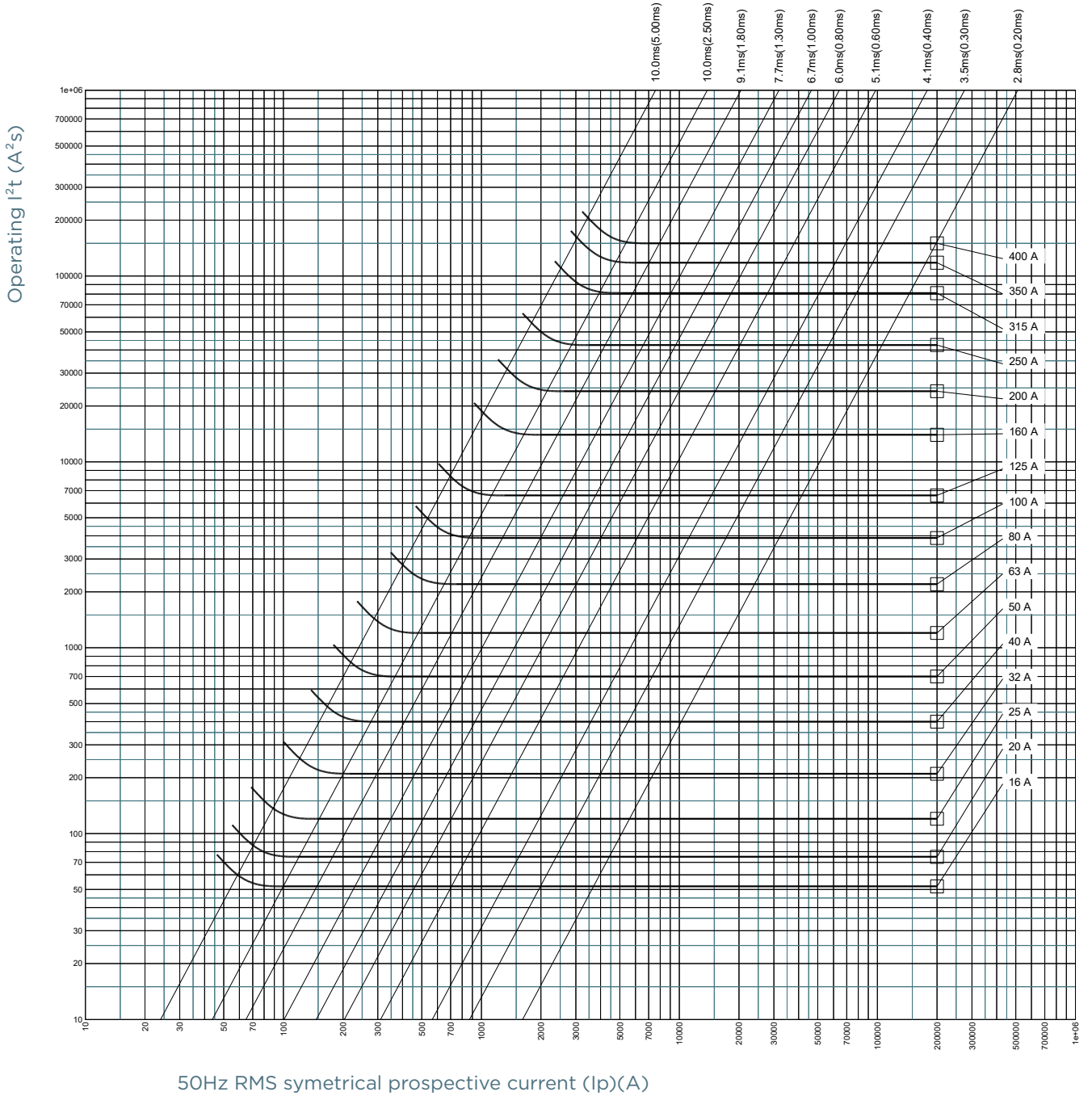
CHARACTERISTICS TOTAL I²T CURVE

Size 000, 690VAC



CHARACTERISTICS TOTAL I²T CURVE

Size 00, 690VAC

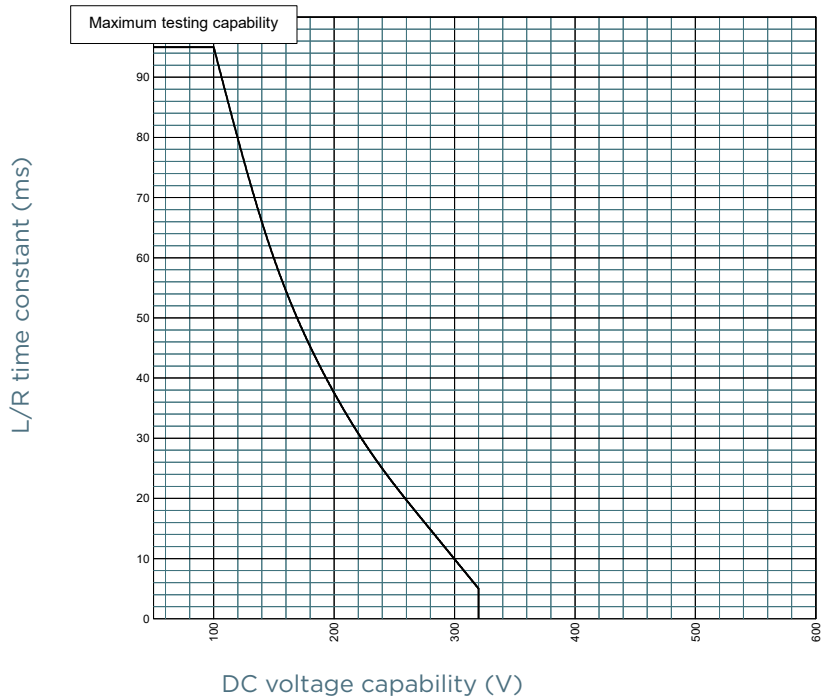


Protistor® size 000/00 aR

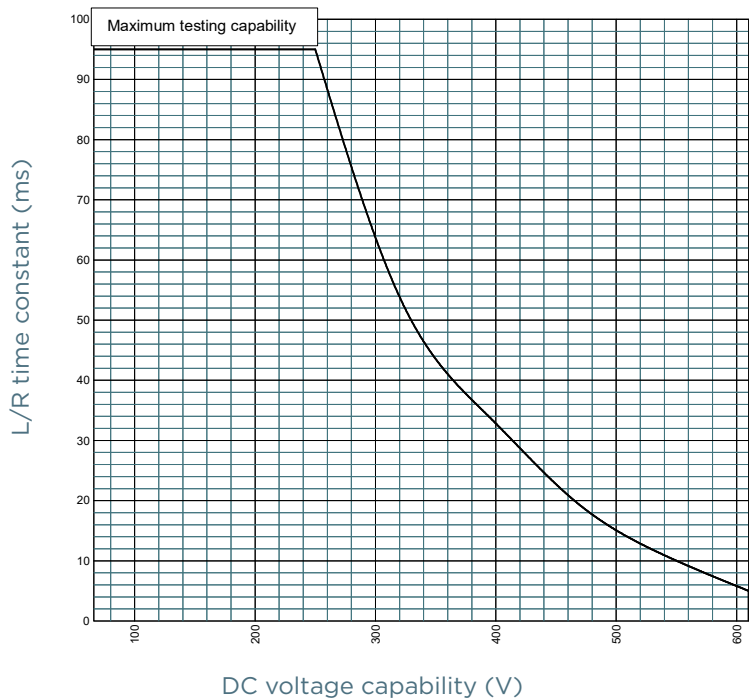
500 to 690VAC (IEC / UL) / 600VDC (UL)

L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

Size 000, 500VAC



Size 000, 690VAC

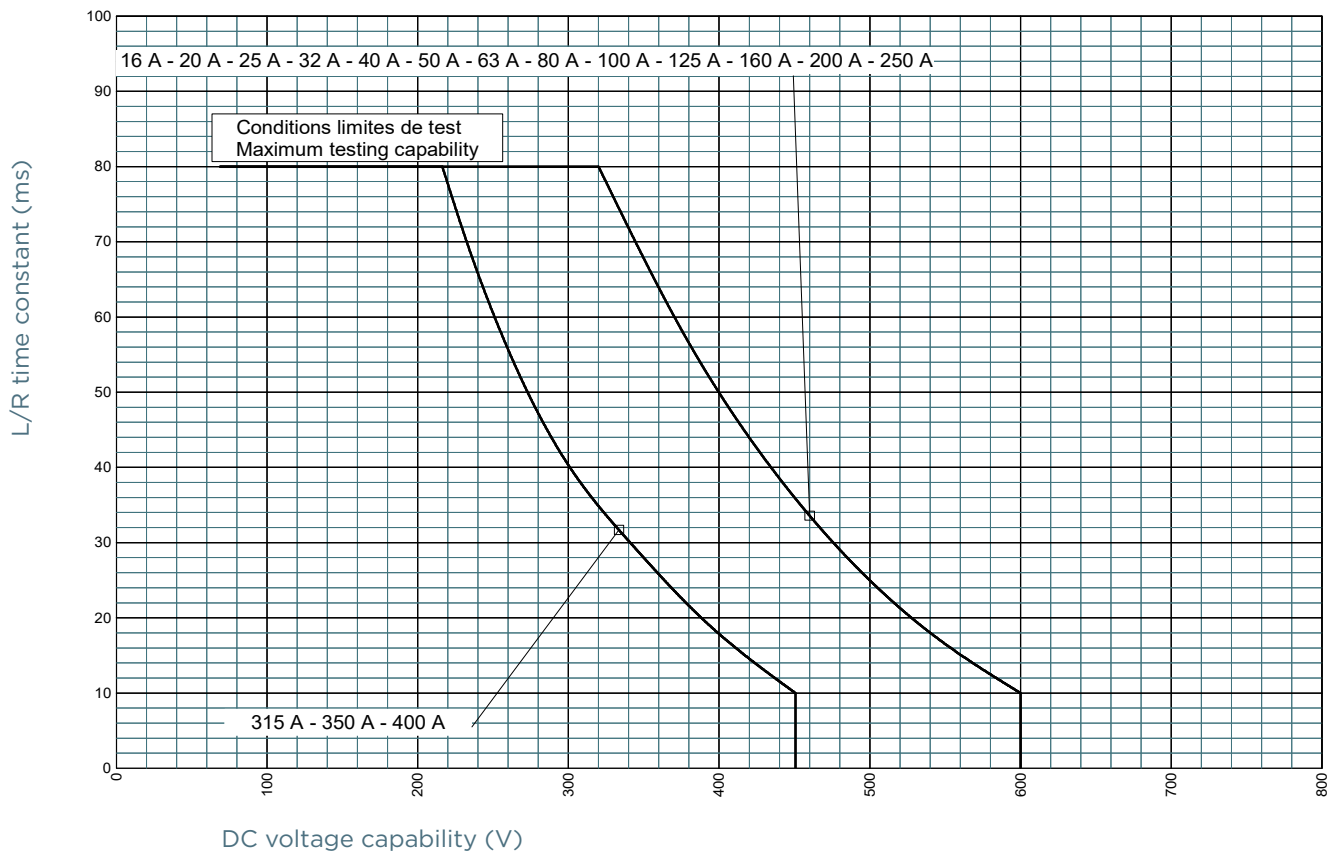


Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

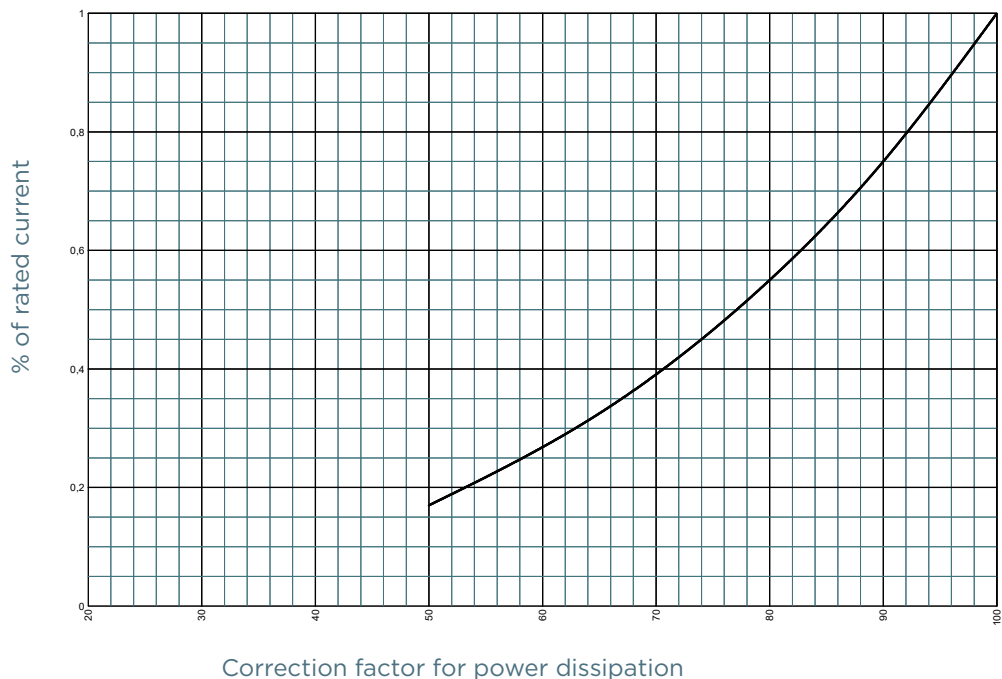
L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

Size 00, 690VAC

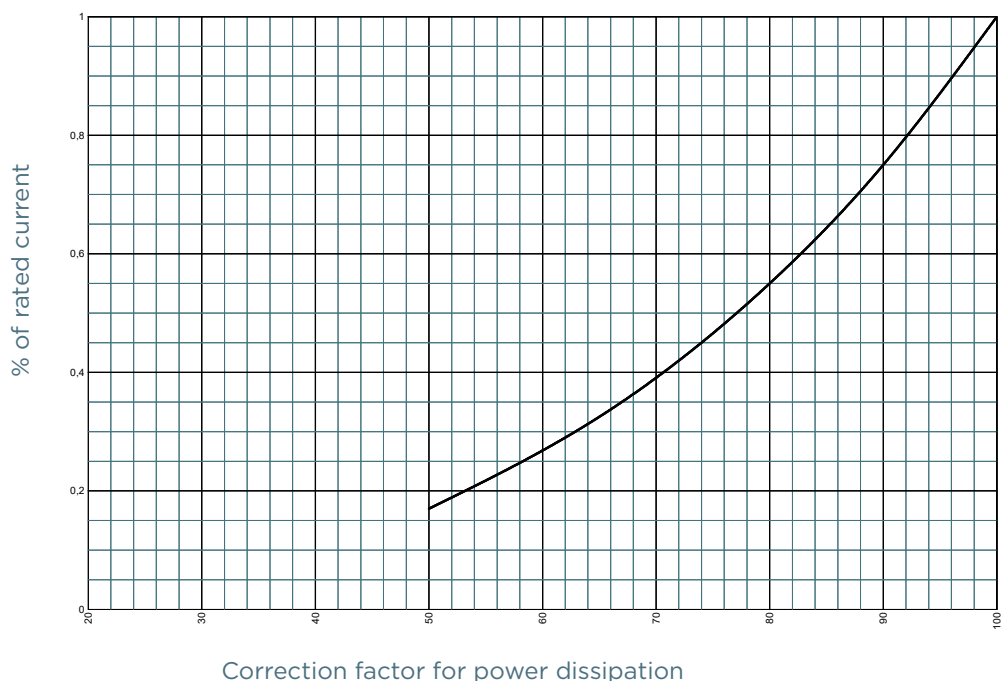


POWER DISSIPATION

Size 000, 500VAC

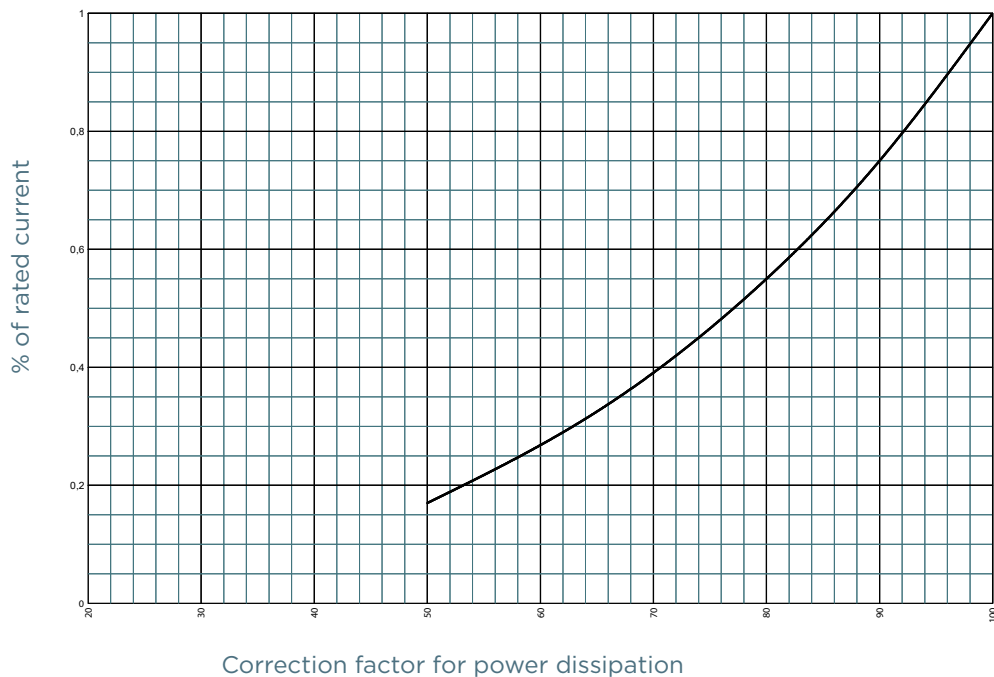


Size 000, 690VAC



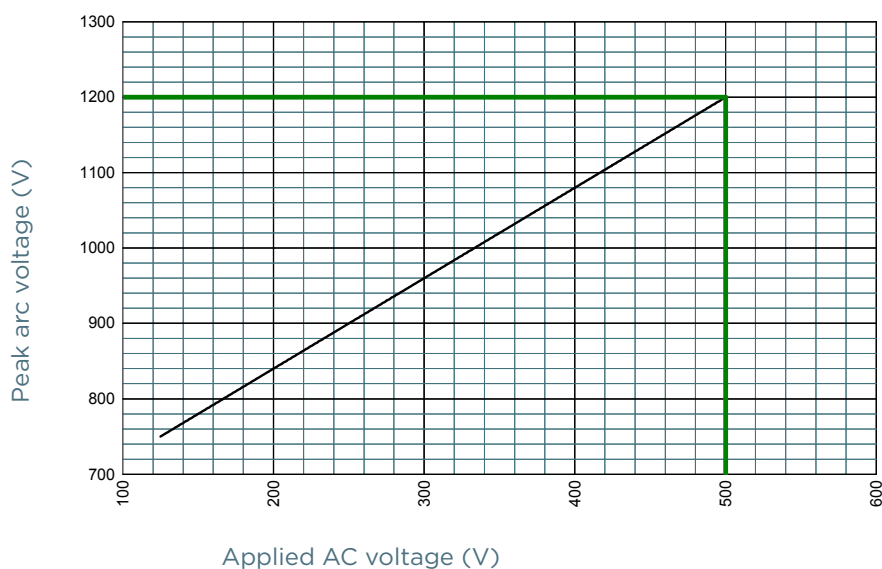
POWER DISSIPATION

Size 00, 690VAC



PEAK ARC VOLTAGE

Size 000, 500VAC

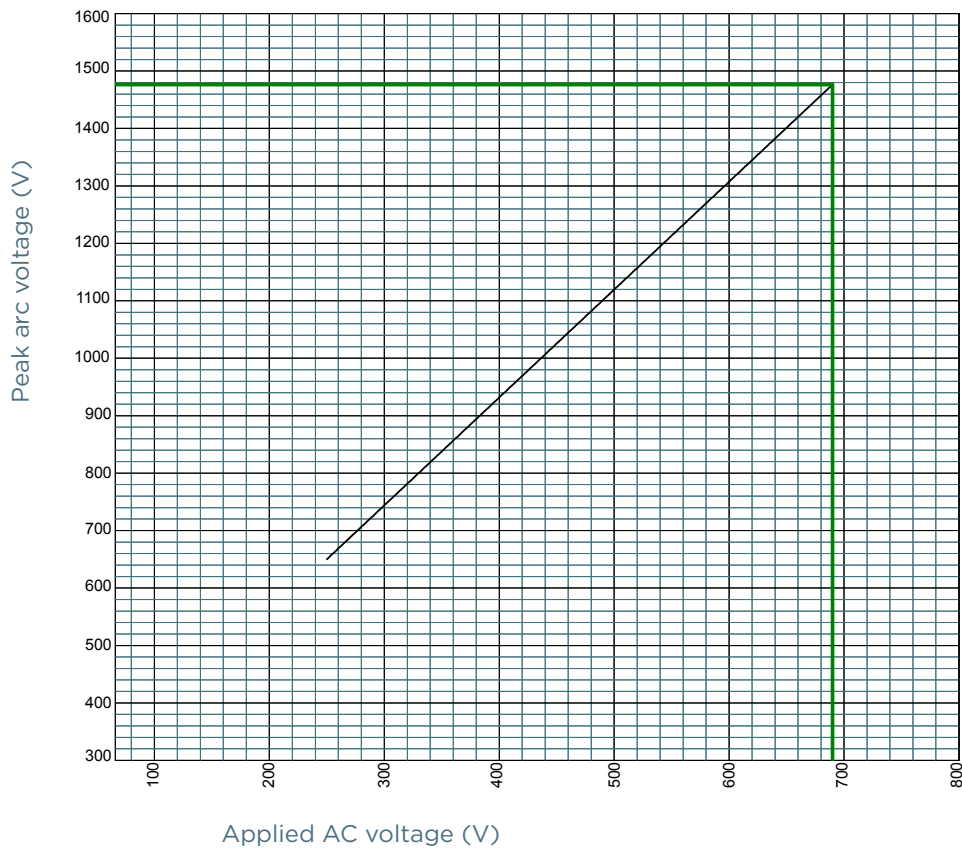


Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

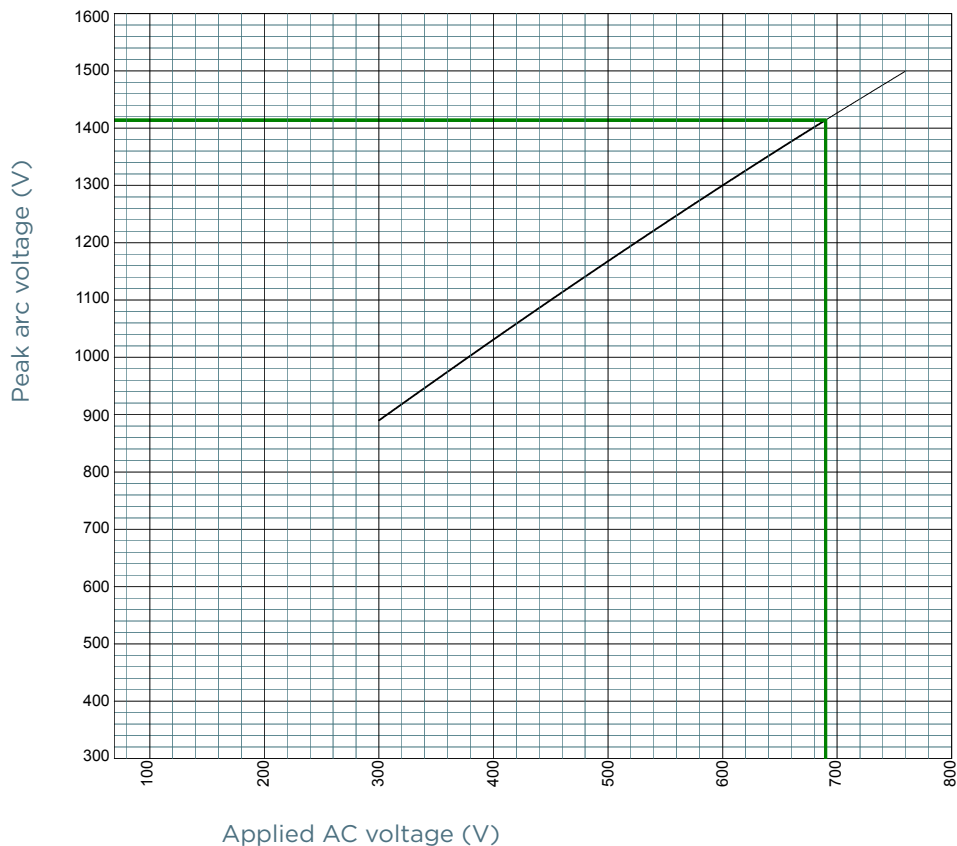
PEAK ARC VOLTAGE

Size 000, 690VAC



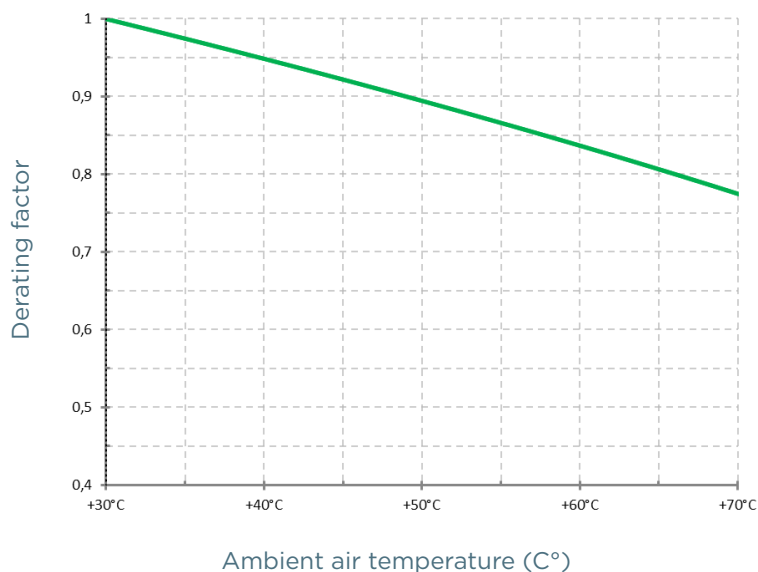
PEAK ARC VOLTAGE

Size 00, 690VAC



TEMPERATURE DERATING

Derating factor of rated current according to ambient air temperature (C°)

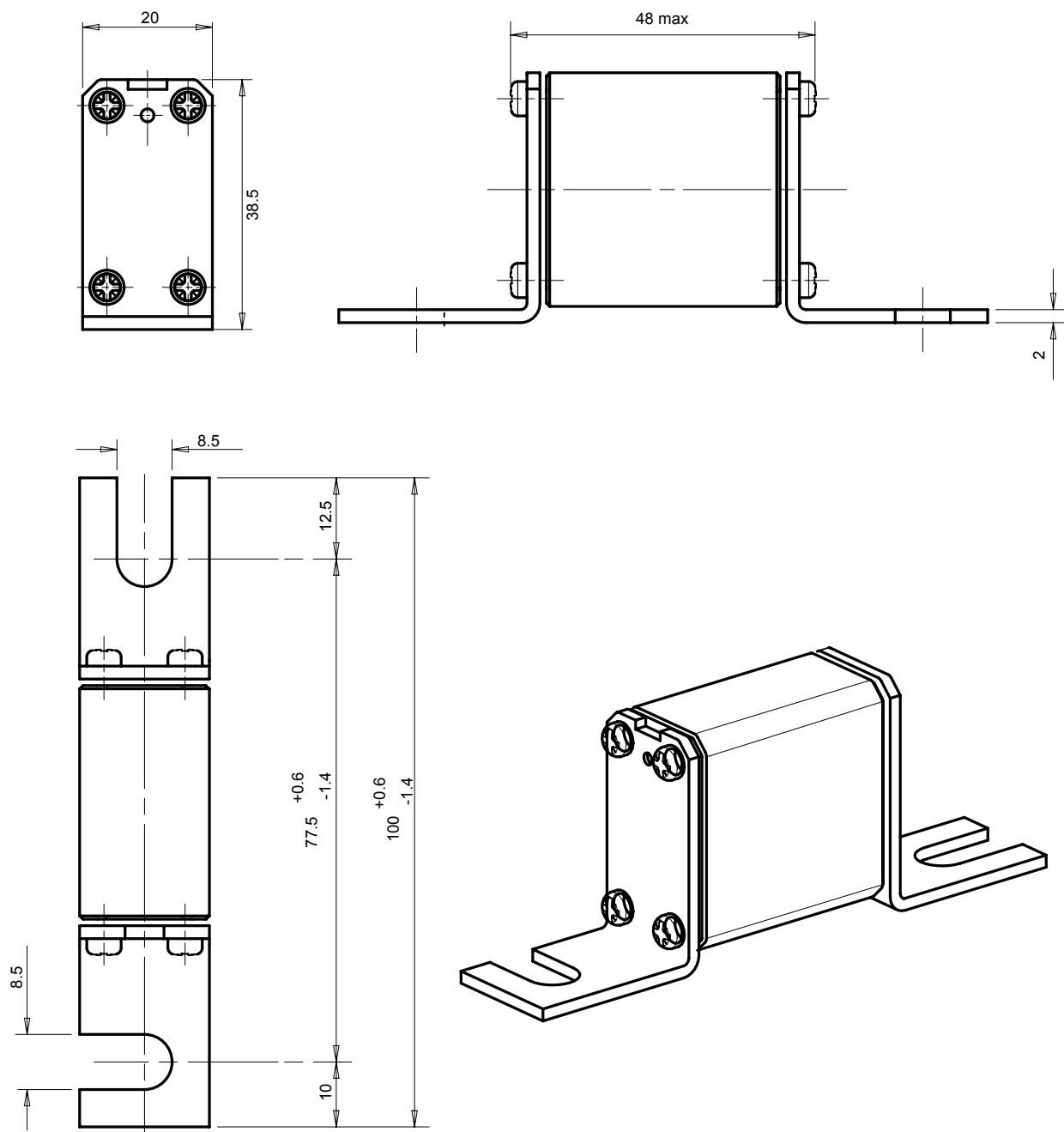


Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

DIMENSIONS

Size 000 without indicator



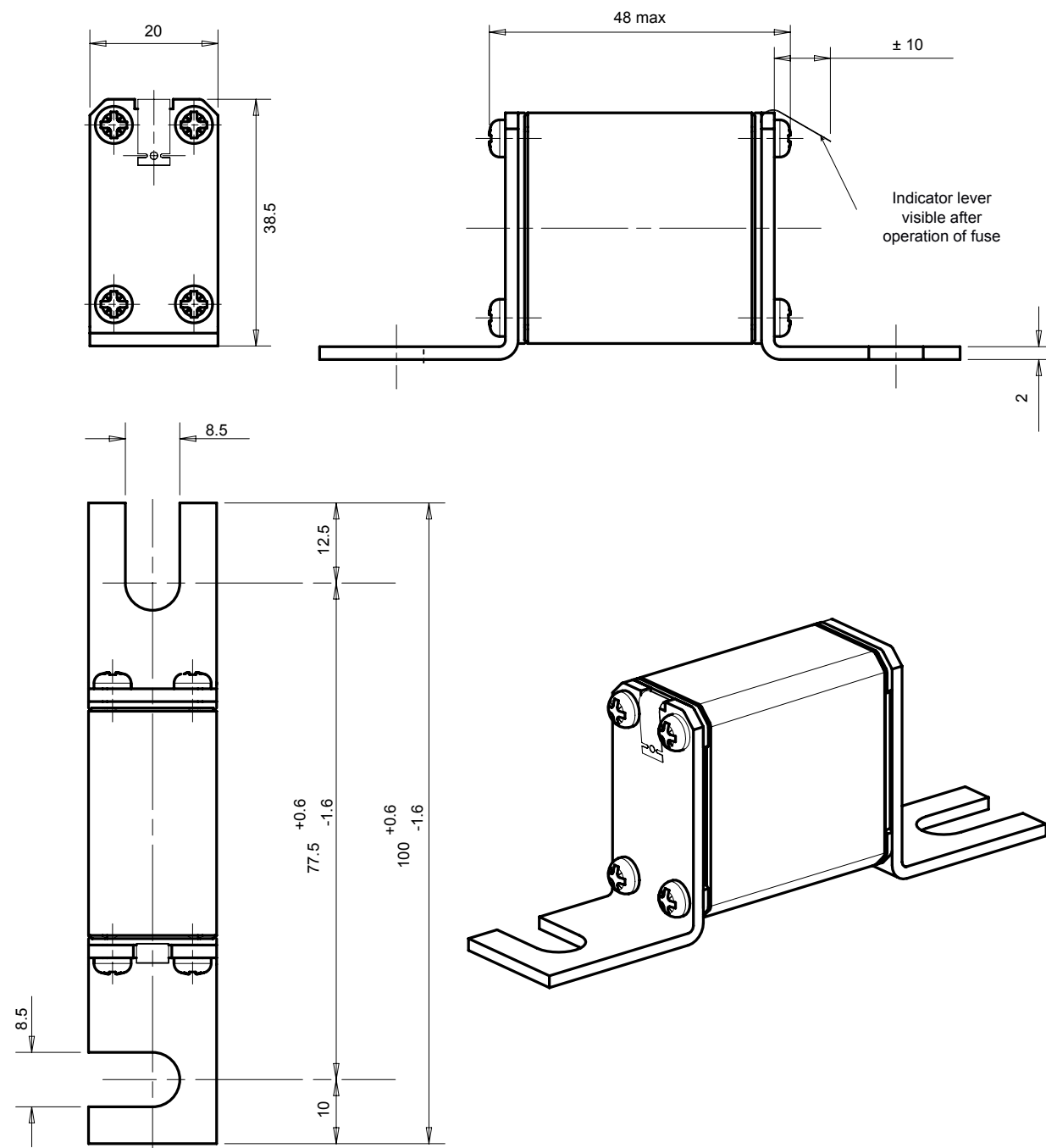
Dimensions in mm

Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

DIMENSIONS

Size 000 with indicator



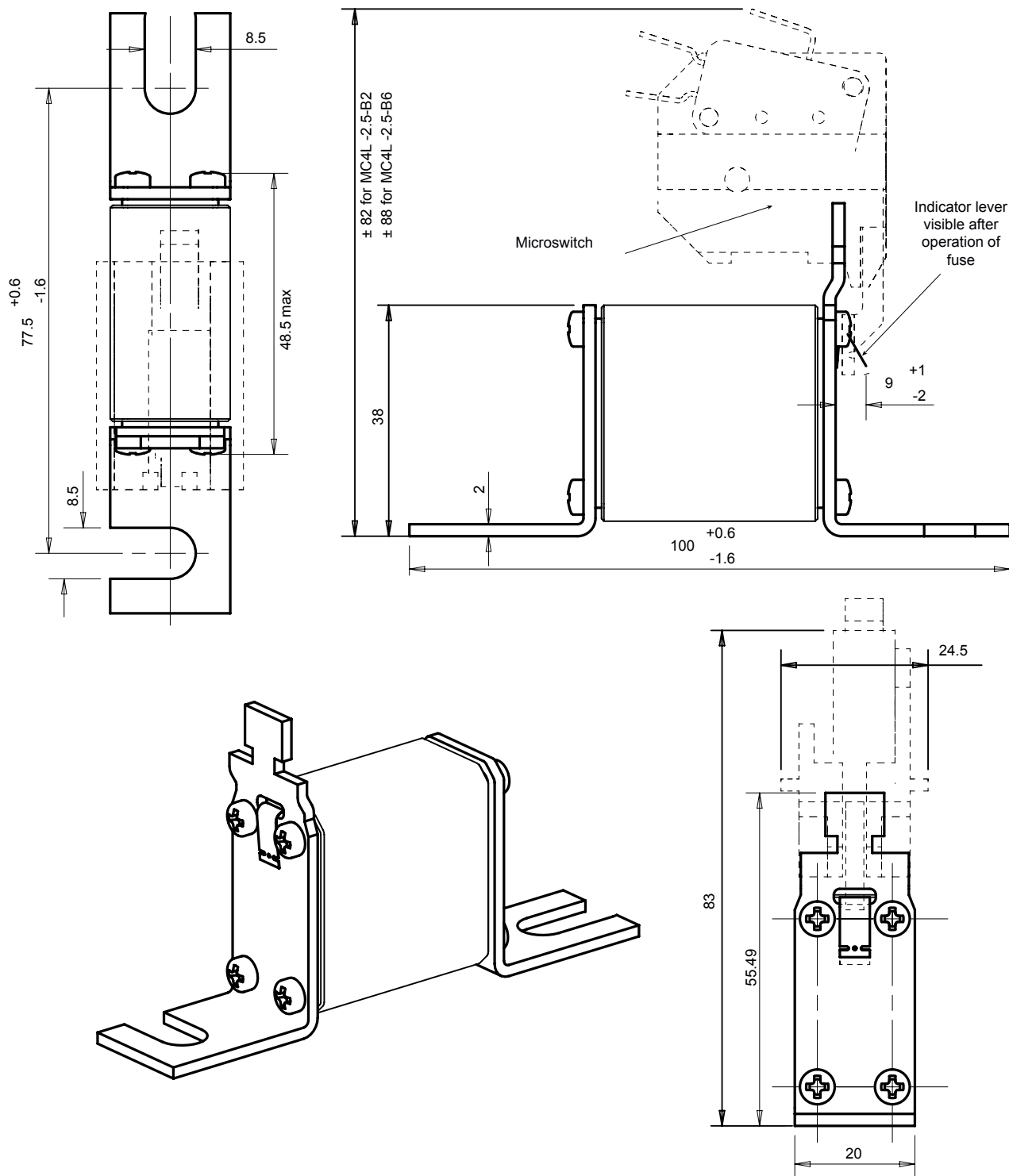
Dimensions in mm

Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

DIMENSIONS

Size 000 for monitoring micro-contact



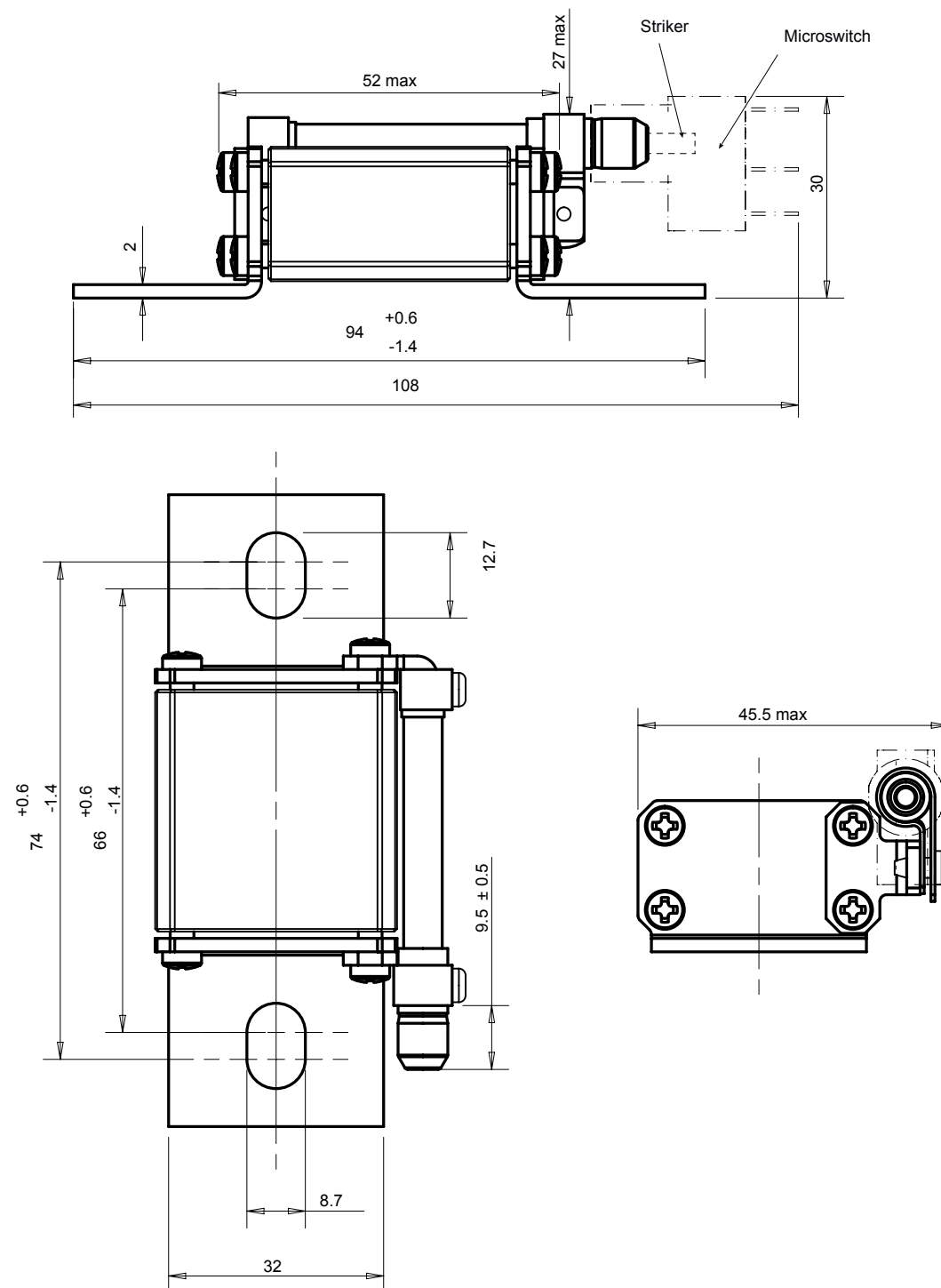
Dimensions in mm

Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

DIMENSIONS

Size 000 BS88 with indicator



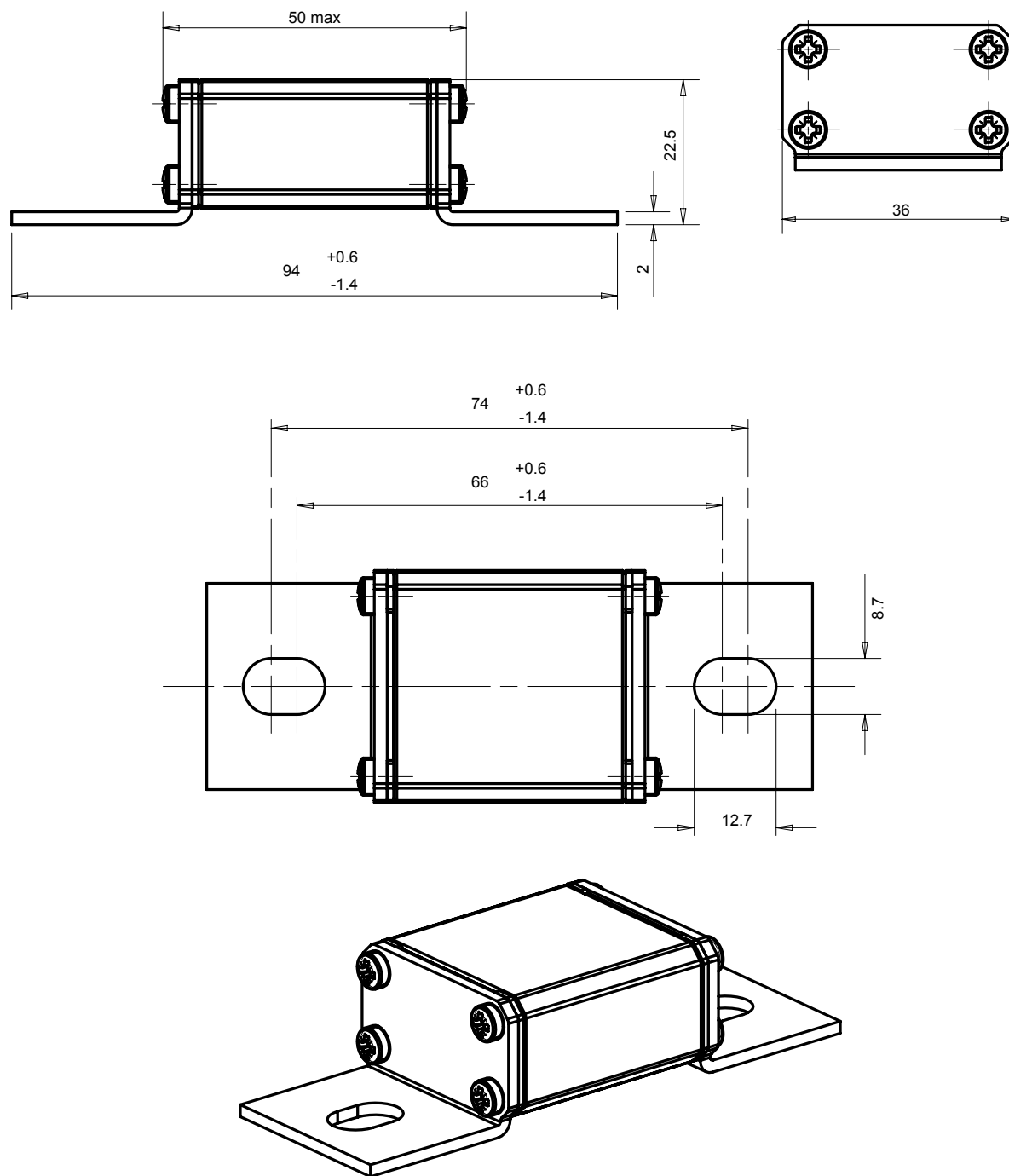
Dimensions in mm

Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

DIMENSIONS

Size 000 BS88 without indicator



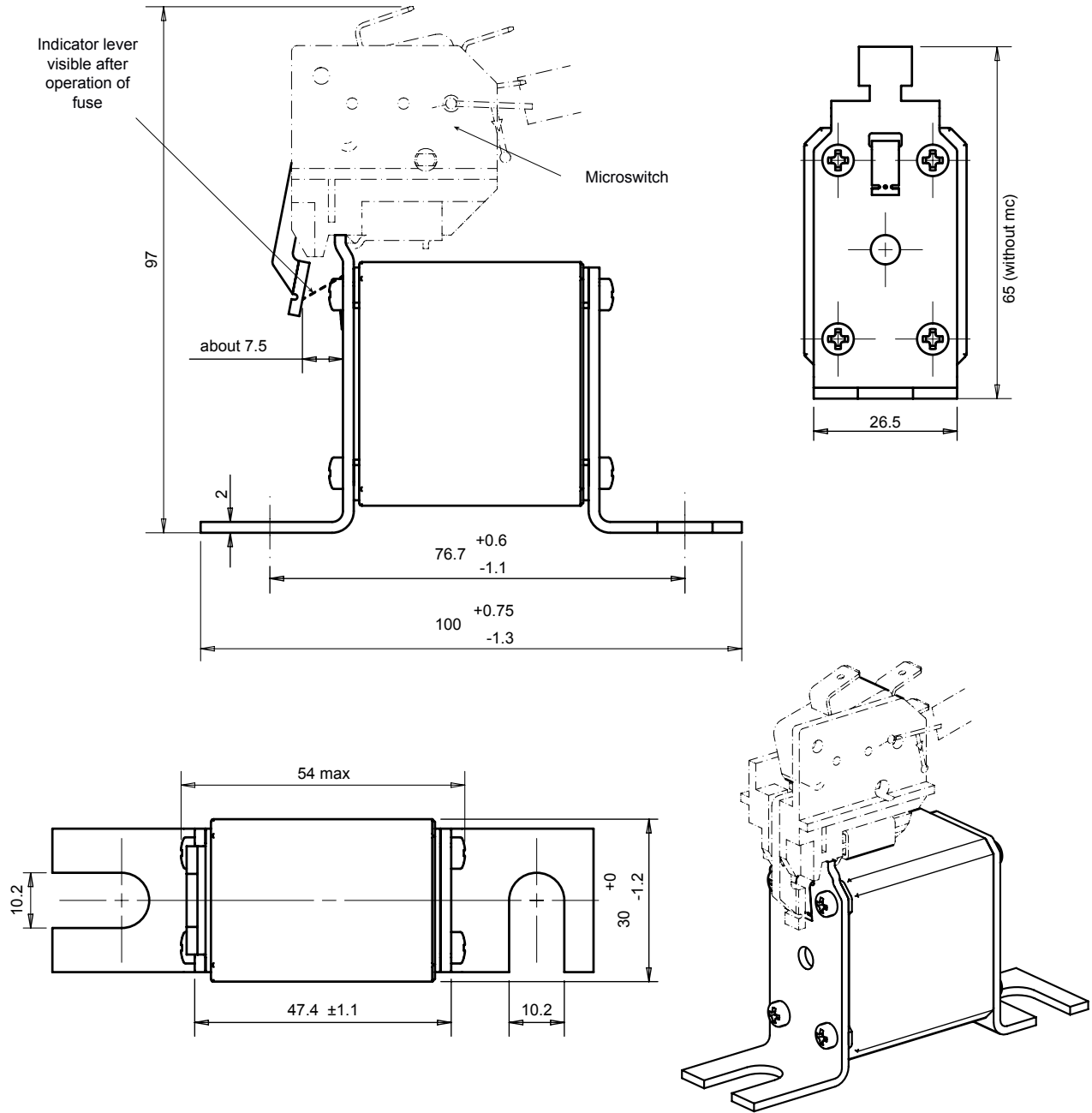
Dimensions in mm

Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

DIMENSIONS

Size 00 DIN80 for monitoring micro-contact



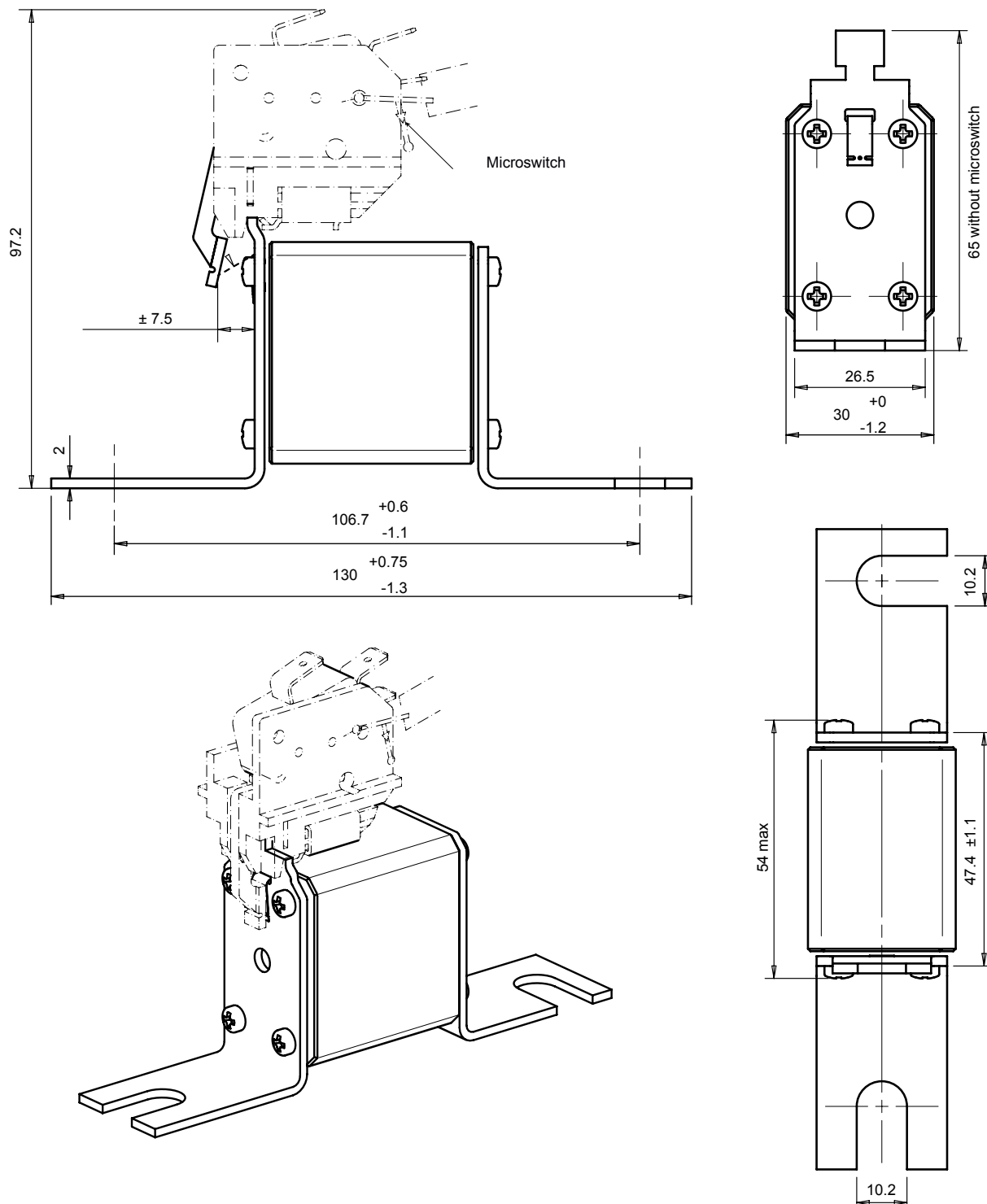
Dimensions in mm

Protistor® size 000/00 aR

500 to 690VAC (IEC / UL) / 600VDC (UL)

DIMENSIONS

Size 00 DIN110 for monitoring micro-contact



Dimensions in mm