

Protistor® size 70 aR

1100 to 1250VAC (IEC) / 1300VAC (UL)

SEMICONDUCTOR PROTECTION FUSES

SQUARE BODY HIGH-SPEED FUSE-LINKS AC PROTECTION



The 1250/1300V 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, GTO's and IGBT devices. Fuses are assembled with pure silver, die-cut elements embedded in solidified sand, which helps control arcing characteristics for a lower I^2t and high interrupting rating level. All contact surfaces are silver plated and all hardware is non-magnetic.

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

TECHNICAL DATA OVERVIEW

Voltage Range AC	1100 ... 1250 VAC
Ampere Range (A)	50 ... 500 A
Speed/Characteristic	aR
I.R. AC (IEC)	100 kA
Product Size	70

FEATURES & BENEFITS

- Multiple body sizes and terminals or blades combination
- aR Class according to VDE 636-23 and IEC 60269-4
- Very low I^2t for improved semiconductor protection
- Ultra fast acting
- Current limiting
- Superior cycling capability
- Increased technical performances: higher ratings and reduction in volume and weight

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 70 aR

1100 to 1250VAC (IEC) / 1300VAC (UL)

PRODUCT RANGE

Size 70 type TTI 5/16"-18 unified coarse threaded terminals

Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (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
A130UD70TTI63	Q301015	1250 V	1300 V	63 A	210 A ² s	1680 A ² s	100 kA	26 W	3	0.35 kg
A130UD70TTI80	R301016	1250 V	1300 V	80 A	470 A ² s	3780 A ² s	100 kA	27 W	3	0.35 kg
A130UD70TTI100	S301017	1250 V	1300 V	100 A	830 A ² s	6750 A ² s	100 kA	30 W	3	0.35 kg
A130UD70TTI125	T301018	1250 V	1300 V	125 A	1310 A ² s	10500 A ² s	100 kA	38 W	3	0.35 kg
A130UD70TTI160	V301019	1250 V	1300 V	160 A	2570 A ² s	21000 A ² s	100 kA	45 W	3	0.35 kg
A130UD70TTI200	W301020	1250 V	1300 V	200 A	4730 A ² s	38000 A ² s	100 kA	54 W	3	0.35 kg
A130UD70TTI250	X301021	1250 V	1300 V	250 A	9580 A ² s	77000 A ² s	100 kA	58 W	3	0.35 kg
A130UD70TTI280	Y301022	1200 V	1300 V	280 A	14200 A ² s	106000 A ² s	100 kA	61 W	3	0.35 kg
A130UD70TTI315	Z301023	1200 V	1300 V	315 A	20000 A ² s	149000 A ² s	100 kA	66 W	3	0.35 kg
A120UD70TTI350	A301024	1100 V	1200 V	350 A	27800 A ² s	180000 A ² s	100 kA	68 W	3	0.35 kg



PC70UD13C200TF

Size 70 type TTF M8 threaded terminals

Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (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
PC70UD13C50TF	C301095	1250 V	1300 V	50 A	120 A ² s	980 A ² s	100 kA	16 W	3	0.34 kg
PC70UD13C63TF	M300483	1250 V	1300 V	63 A	210 A ² s	1680 A ² s	100 kA	26 W	3	0.34 kg
PC70UD13C80TF	N300484	1250 V	1300 V	80 A	470 A ² s	3780 A ² s	100 kA	27 W	3	0.34 kg
PC70UD13C100TF	P300485	1250 V	1300 V	100 A	830 A ² s	6750 A ² s	100 kA	30 W	3	0.34 kg
PC70UD13C125TF	Q300486	1250 V	1300 V	125 A	1310 A ² s	10500 A ² s	100 kA	38 W	3	0.34 kg
PC70UD13C160TF	R300487	1250 V	1300 V	160 A	2570 A ² s	21000 A ² s	100 kA	45 W	3	0.34 kg
PC70UD13C200TF	S300488	1250 V	1300 V	200 A	4730 A ² s	38000 A ² s	100 kA	54 W	3	0.34 kg
PC70UD13C250TF	T300489	1250 V	1300 V	250 A	9580 A ² s	77000 A ² s	100 kA	58 W	3	0.34 kg
PC70UD12C280TF	N300714	1200 V	1300 V	280 A	14200 A ² s	106000 A ² s	100 kA	61 W	3	0.34 kg
PC70UD12C315TF	V300490	1200 V	1300 V	315 A	20000 A ² s	149000 A ² s	100 kA	66 W	3	0.34 kg
PC70UD11C350TF	W300491	1100 V	1200 V	350 A	27800 A ² s	180000 A ² s	100 kA	68 W	3	0.34 kg
PC70UD11C400TF	E300867	1100 V	1200 V	400 A	38700 A ² s	254000 A ² s	100 kA	81 W	3	0.34 kg
PC70UD11C450TF	H301284	1100 V	1200 V	450 A	61700 A ² s	405000 A ² s	100 kA	82 W	3	0.34 kg
PC70UD10C500TF	J301285	1000 V	1100 V	500 A	84000 A ² s	483000 A ² s	100 kA	83 W	3	0.34 kg

Size 70 type long slotted blades

Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (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
A130UD70LI063	W300652	1250 V	1300 V	63 A	210 A ² s	1680 A ² s	100 kA	26 W	3	0.38 kg
A130UD70LI080	X300653	1250 V	1300 V	80 A	470 A ² s	3780 A ² s	100 kA	27 W	3	0.38 kg
A130UD70LI100	Y300654	1250 V	1300 V	100 A	830 A ² s	6750 A ² s	100 kA	30 W	3	0.38 kg
A130UD70LI125	Z300655	1250 V	1300 V	125 A	1310 A ² s	10500 A ² s	100 kA	38 W	3	0.38 kg
A130UD70LI160	A300656	1250 V	1300 V	160 A	2570 A ² s	21000 A ² s	100 kA	45 W	3	0.38 kg
A130UD70LI200	B300657	1250 V	1300 V	200 A	4730 A ² s	38000 A ² s	100 kA	56 W	3	0.38 kg
A130UD70LI250	C300658	1250 V	1300 V	250 A	9580 A ² s	77000 A ² s	100 kA	61 W	3	0.33 kg
A130UD70LI280	Q300716	1200 V	1300 V	280 A	14200 A ² s	106000 A ² s	100 kA	64 W	3	0.38 kg
A130UD70LI315	D300659	1200 V	1300 V	315 A	20000 A ² s	149000 A ² s	100 kA	72 W	3	0.38 kg
A120UD70LI350	E300660	1100 V	1200 V	350 A	27800 A ² s	180000 A ² s	100 kA	75 W	3	0.38 kg

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Protistor® size 70 aR

1100 to 1250VAC (IEC) / 1300VAC (UL)

PRODUCT RANGE

Size 70 type NH style blade contacts

Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (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
PC70UD13C50PA	J301423	1250 V	1300 V	50 A	120 A ² s	980 A ² s	100 kA	16 W	3	0.36 kg
PC70UD13C63PA	A301185	1250 V	1300 V	63 A	210 A ² s	1680 A ² s	100 kA	26 W	3	0.36 kg
PC70UD13C80PA	M301242	1250 V	1300 V	80 A	470 A ² s	3780 A ² s	100 kA	27 W	3	0.36 kg
PC70UD13C100PA	J301124	1250 V	1300 V	100 A	830 A ² s	6750 A ² s	100 kA	30 W	3	0.36 kg
PC70UD13C125PA	K301125	1250 V	1300 V	125 A	1310 A ² s	10500 A ² s	100 kA	38 W	3	0.36 kg
PC70UD13C160PA	D301188	1250 V	1300 V	160 A	2570 A ² s	21000 A ² s	100 kA	45 W	3	0.36 kg
PC70UD13C200PA	Z300839	1250 V	1300 V	200 A	4730 A ² s	38000 A ² s	100 kA	56 W	3	0.36 kg

Size 70 for bolted connections

Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (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
PC70UD13C63EF	P300600	1250 V	1300 V	63 A	210 A ² s	1680 A ² s	100 kA	26 W	3	0.36 kg
PC70UD13C80EF	Q300601	1250 V	1300 V	80 A	470 A ² s	3780 A ² s	100 kA	27 W	3	0.36 kg
PC70UD13C100EF	R300602	1250 V	1300 V	100 A	830 A ² s	6750 A ² s	100 kA	30 W	3	0.36 kg
PC70UD13C125EF	S300603	1250 V	1300 V	125 A	1310 A ² s	10500 A ² s	100 kA	38 W	3	0.36 kg
PC70UD13C160EF	T300604	1250 V	1300 V	160 A	2570 A ² s	21000 A ² s	100 kA	45 W	3	0.36 kg
PC70UD13C200EF	V300605	1250 V	1300 V	200 A	4730 A ² s	38000 A ² s	100 kA	56 W	3	0.36 kg
PC70UD13C250EF	W300606	1250 V	1300 V	250 A	9580 A ² s	77000 A ² s	100 kA	61 W	3	0.36 kg
PC70UD12C280EF	L300712	1200 V	1300 V	280 A	14200 A ² s	106000 A ² s	100 kA	64 W	3	0.36 kg
PC70UD12C315EF	X300607	1200 V	1300 V	315 A	20000 A ² s	149000 A ² s	100 kA	72 W	3	0.36 kg
PC70UD11C350EF	Y300608	1100 V	1200 V	350 A	27800 A ² s	180000 A ² s	100 kA	75 W	3	0.36 kg

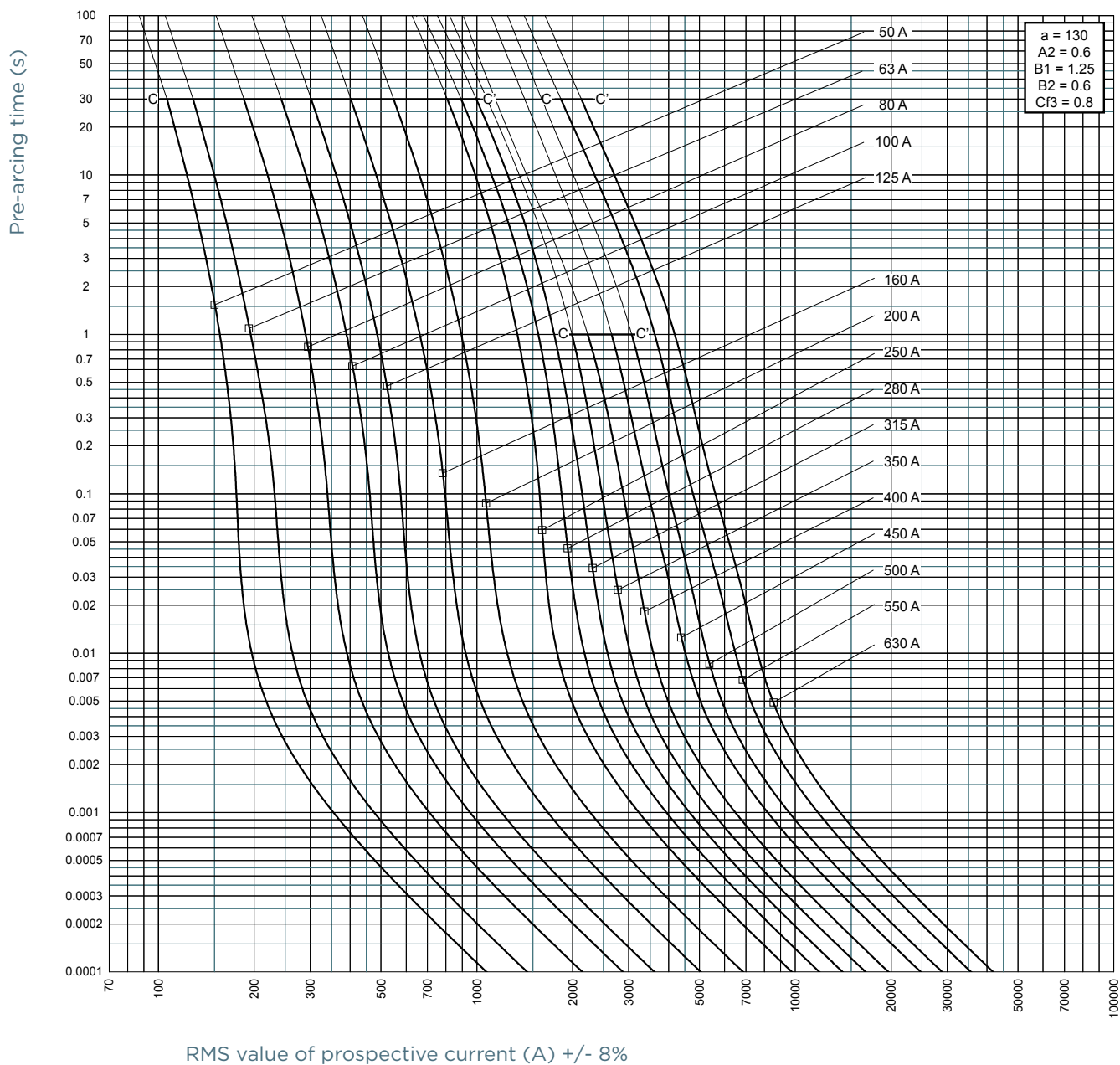


PC70UD13C200D1A

Size 70 type DIN110

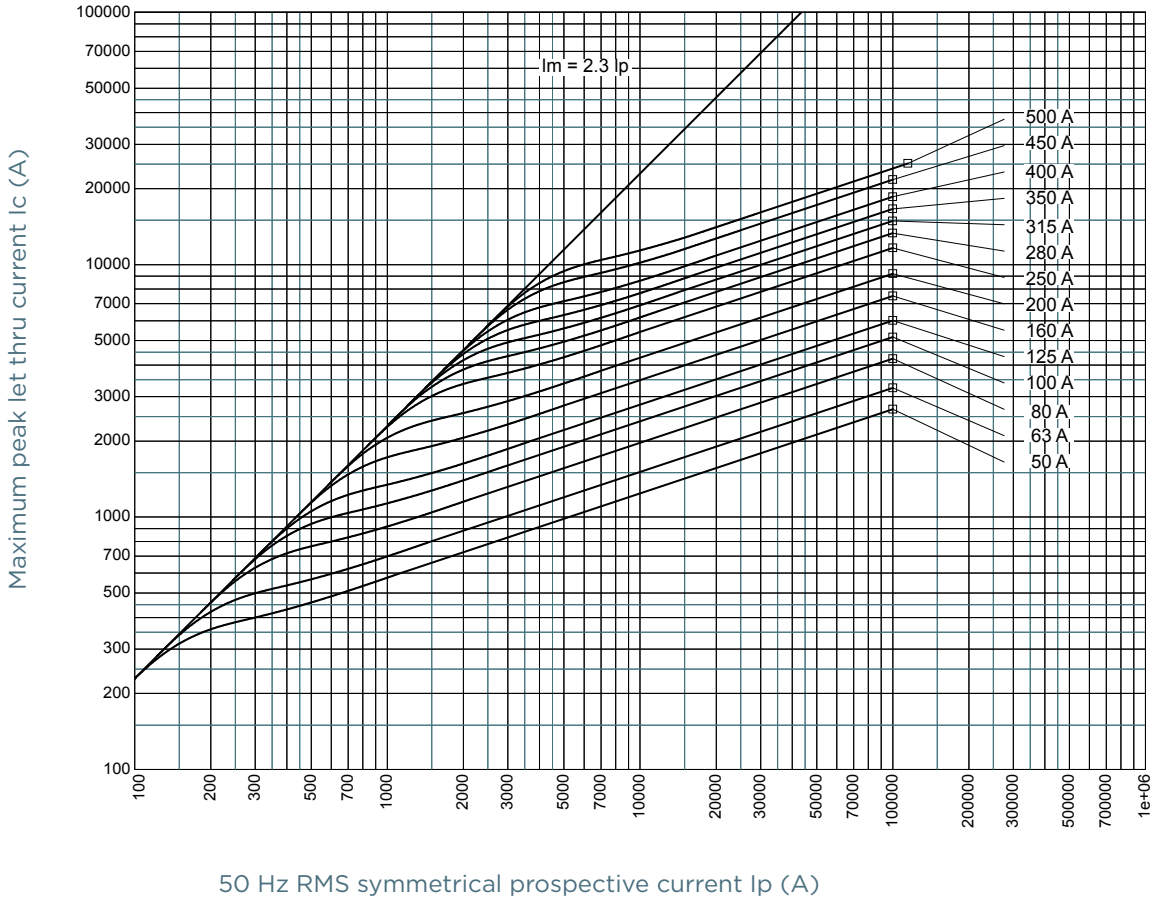
Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
PC70UD13C63D1A	V300536	1250 V	1300 V	63 A	210 A ² s	1680 A ² s	100 kA	26 W	3	0.36 kg
PC70UD13C80D1A	W300537	1250 V	1300 V	80 A	470 A ² s	3780 A ² s	100 kA	27 W	3	0.36 kg
PC70UD13C100D1A	X300538	1250 V	1300 V	100 A	830 A ² s	6750 A ² s	100 kA	30 W	3	0.36 kg
PC70UD13C125D1A	Y300539	1250 V	1300 V	125 A	1310 A ² s	10500 A ² s	100 kA	38 W	3	0.36 kg
PC70UD13C160D1A	Z300540	1250 V	1300 V	160 A	2570 A ² s	21000 A ² s	100 kA	45 W	3	0.36 kg
PC70UD13C200D1A	A300541	1250 V	1300 V	200 A	4730 A ² s	38000 A ² s	100 kA	56 W	3	0.36 kg
PC70UD13C250D1A	B300542	1250 V	1300 V	250 A	9580 A ² s	77000 A ² s	100 kA	61 W	3	0.36 kg
PC70UD12C280D1A	J300710	1200 V	1300 V	280 A	14200 A ² s	106000 A ² s	100 kA	64 W	3	0.36 kg
PC70UD12C315D1A	C300543	1200 V	1300 V	315 A	20000 A ² s	149000 A ² s	100 kA	72 W	3	0.36 kg
PC70UD11C350D1A	D300544	1100 V	1200 V	350 A	27800 A ² s	180000 A ² s	100 kA	75 W	3	0.36 kg

TIME CURRENT CHARACTERISTIC CURVES

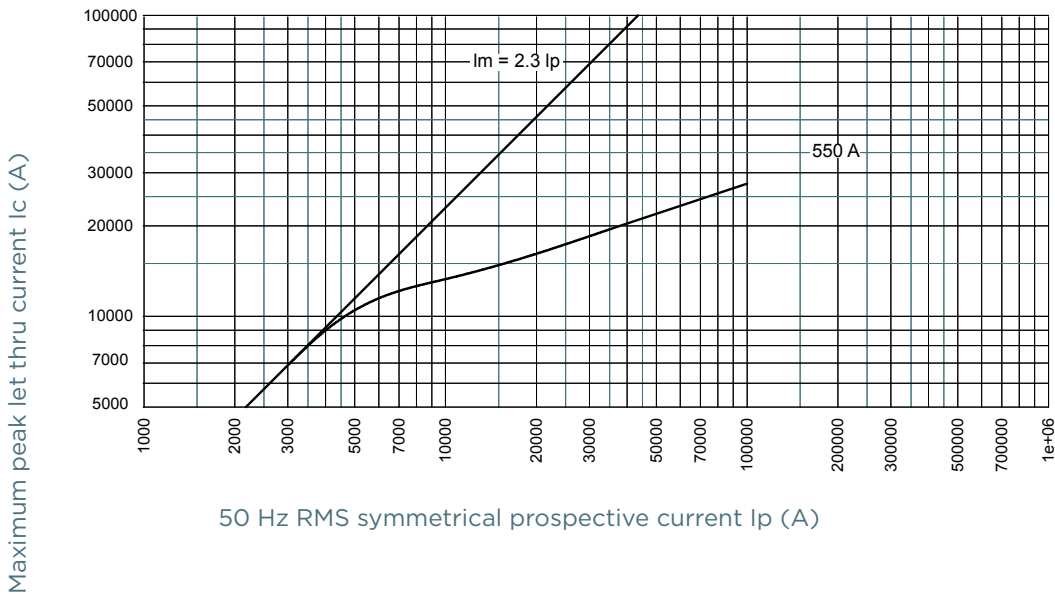


CUT-OFF CURRENT CHARACTERISTIC

Size 70 1250V 500A...250A, 1200V 280A...315A, 1100V 350A...450A, 1000V 500A

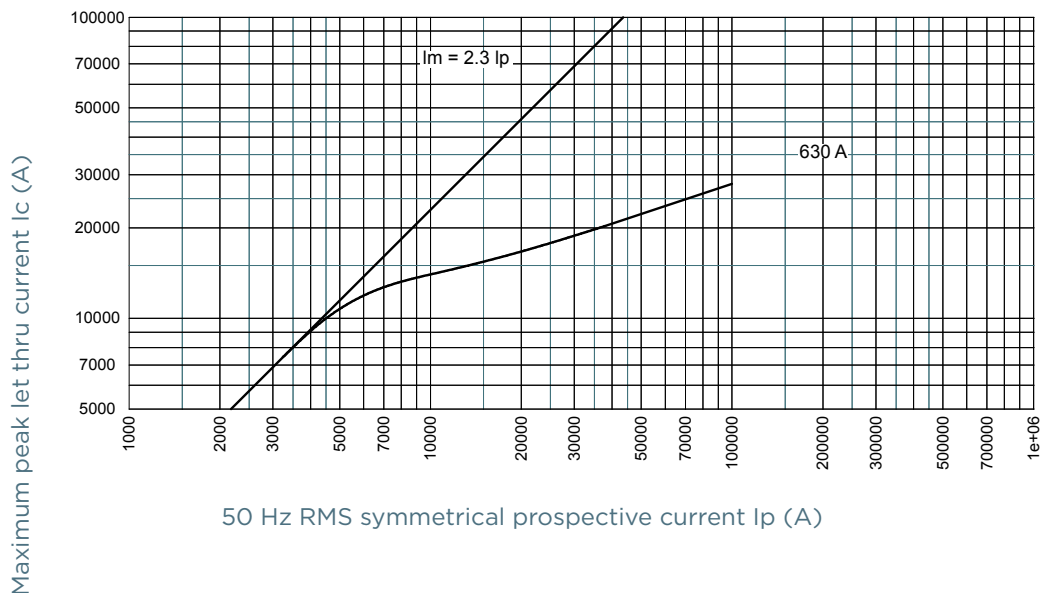


Size 70 800V



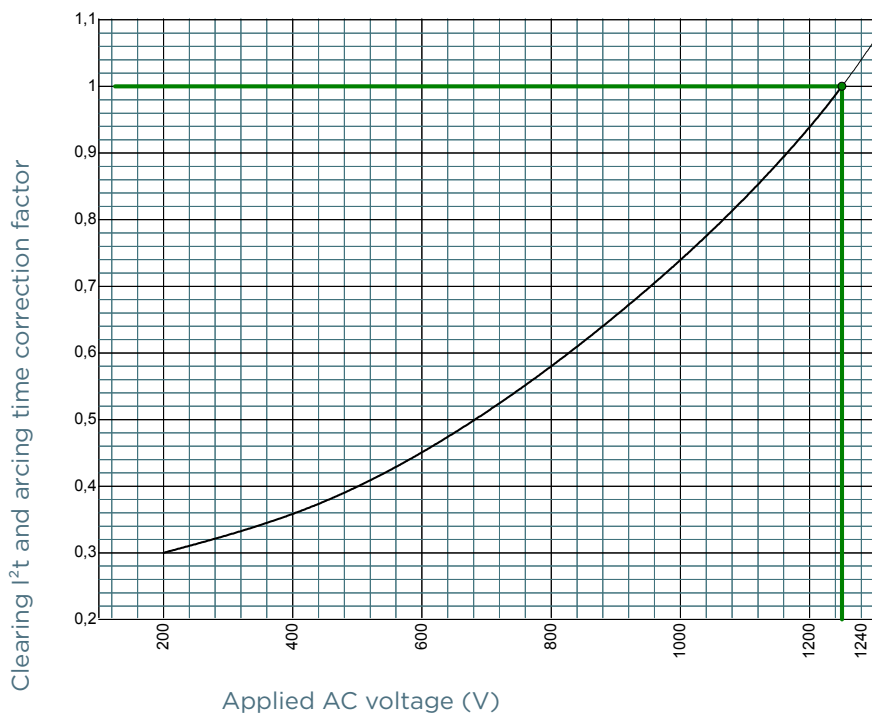
CUT-OFF CURRENT CHARACTERISTIC

Size 70 750V



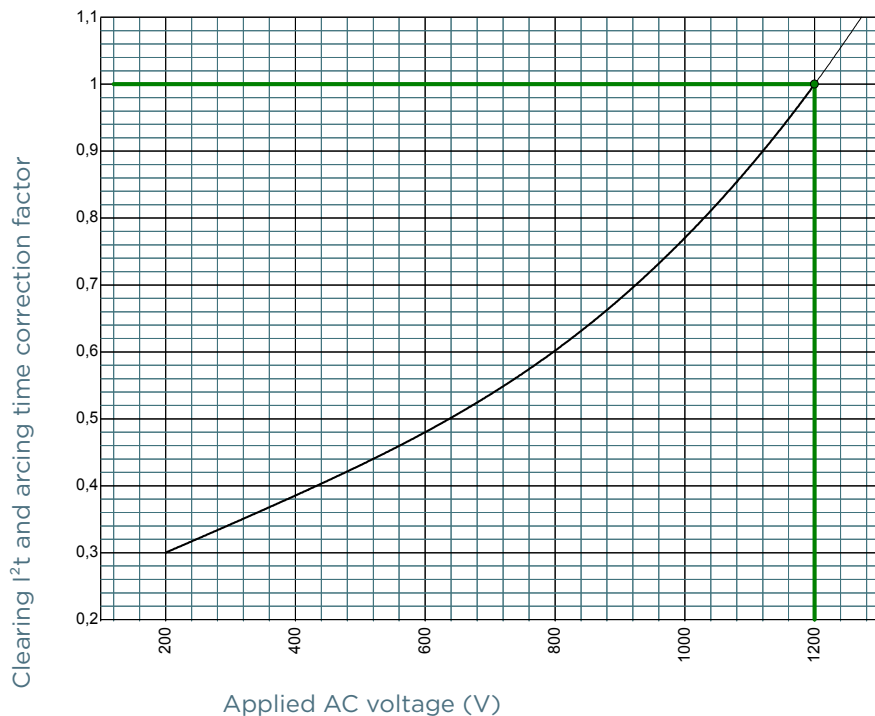
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Size 70 1250V

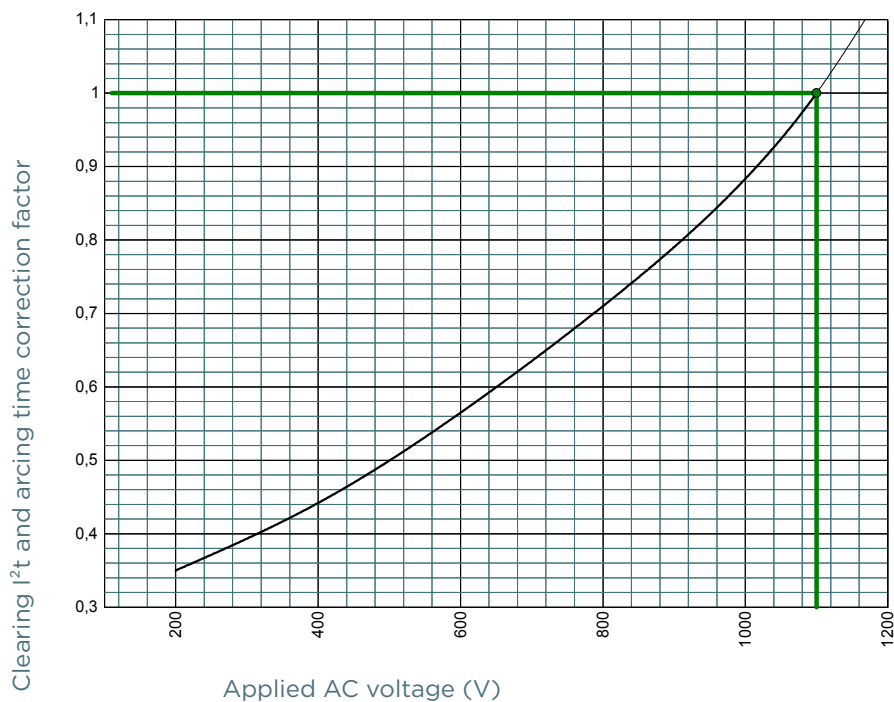


I²T MULTIPLIER COEFFICIENT

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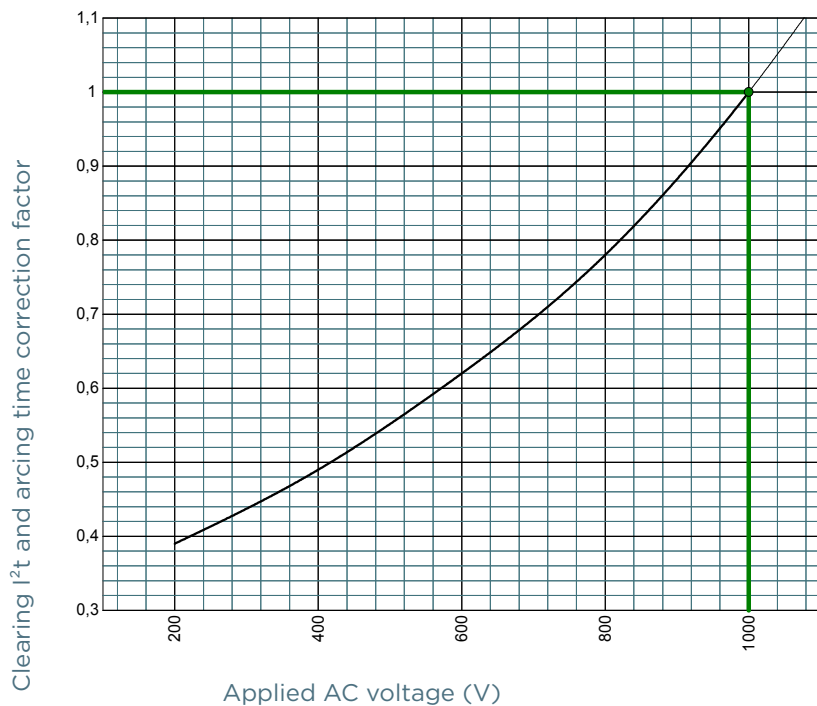


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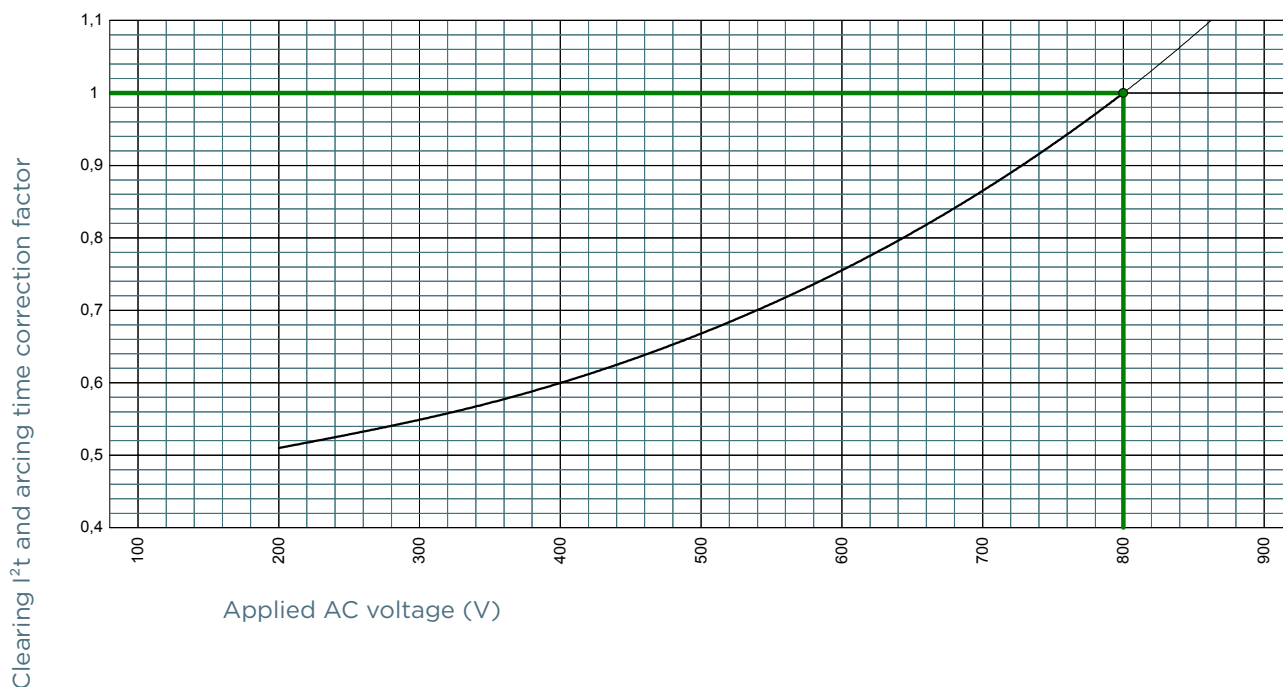


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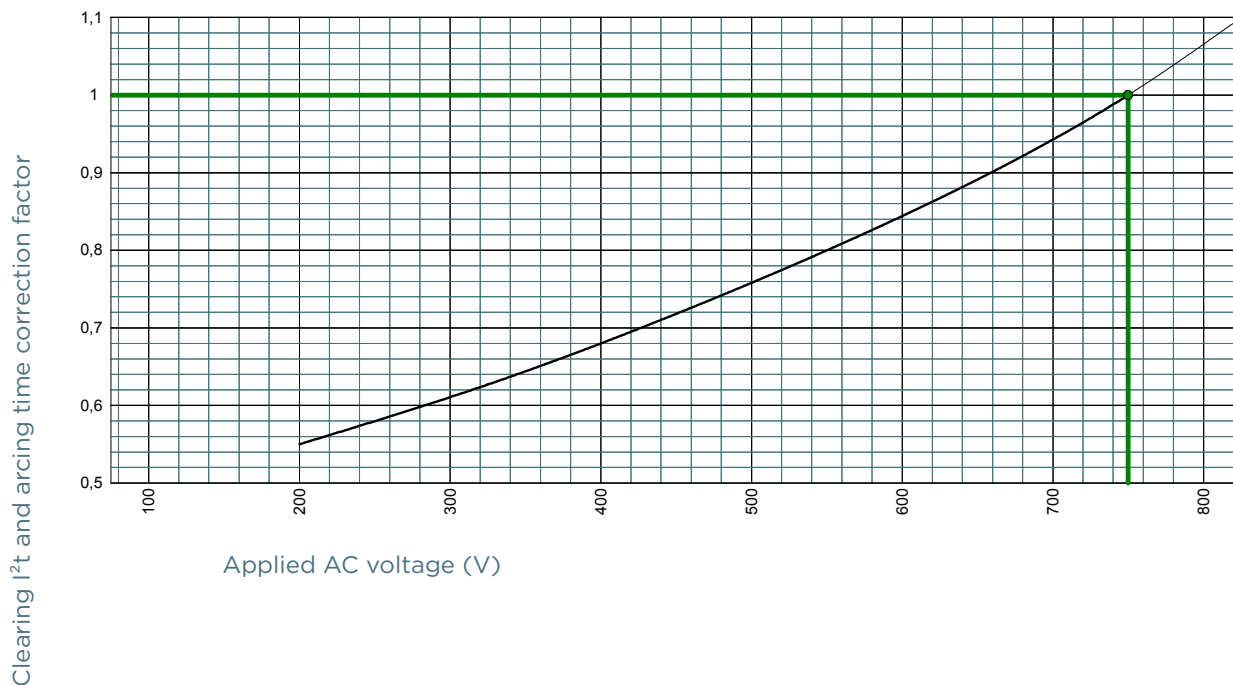


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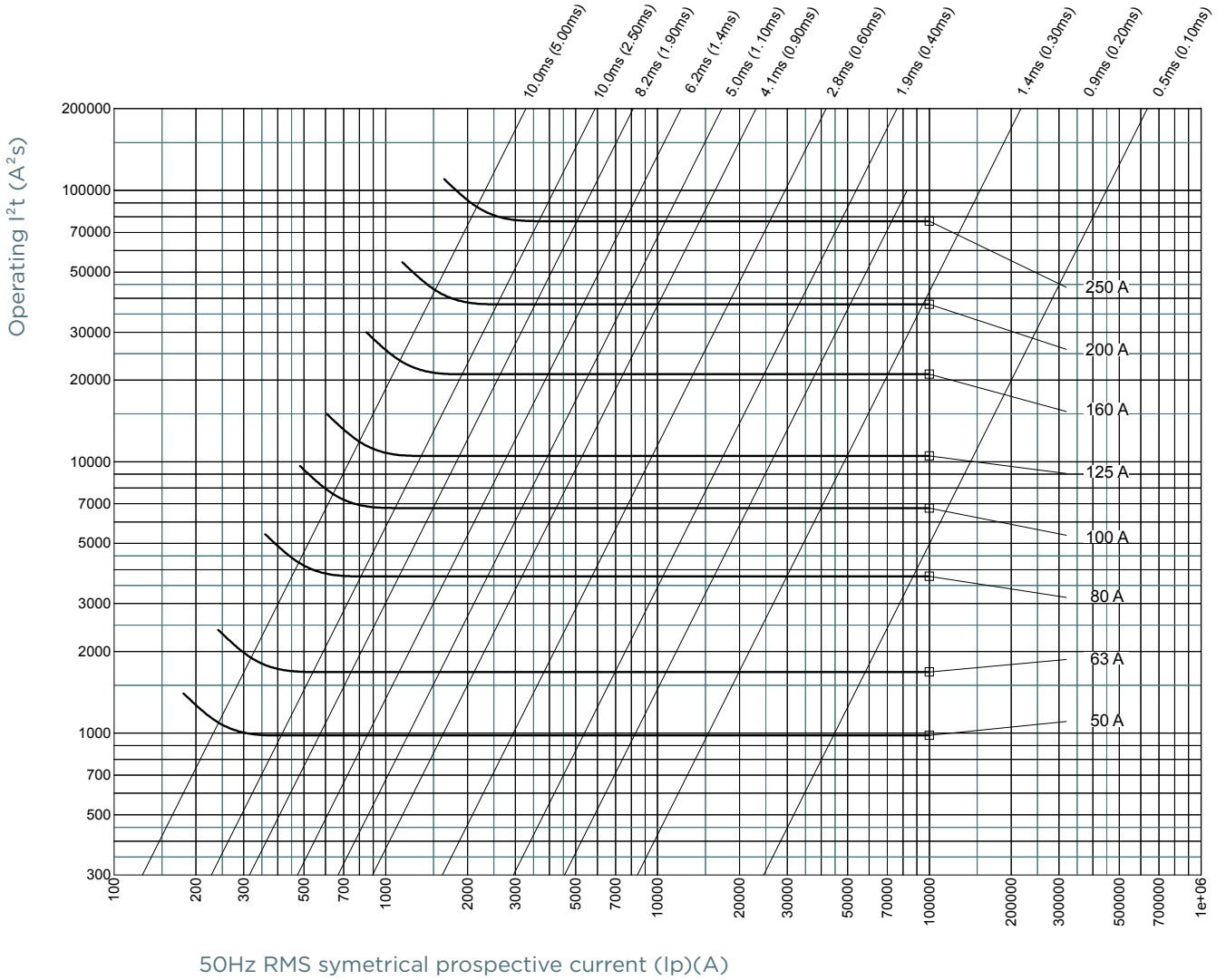
I²T MULTIPLIER COEFFICIENT

Size 70 750V



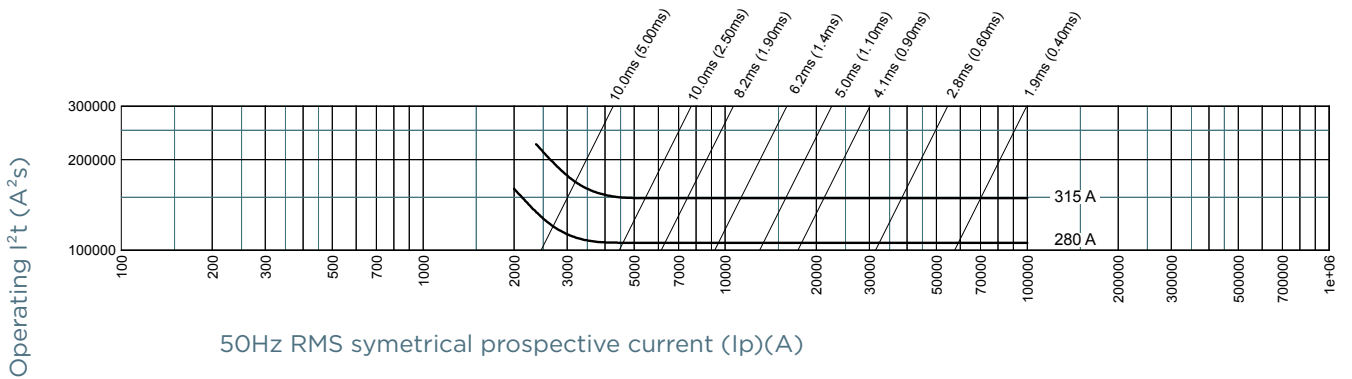
CHARACTERISTICS TOTAL I²T CURVE

Size 70 1250V



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

Size 70 1200V

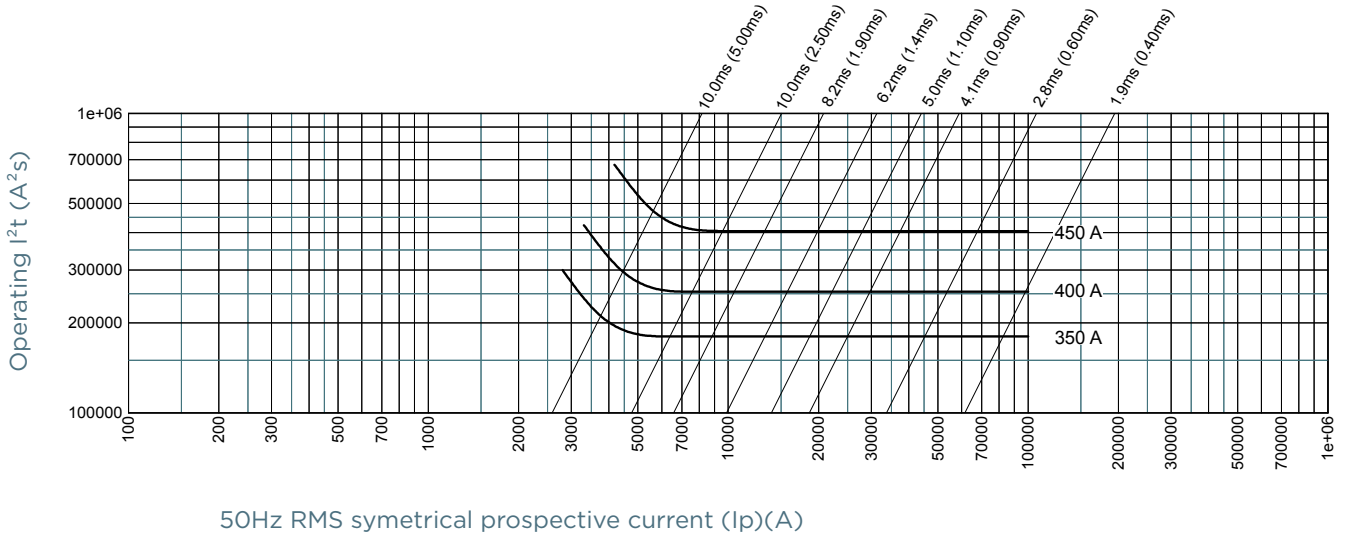


50Hz RMS symmetrical prospective current (Ip)(A)

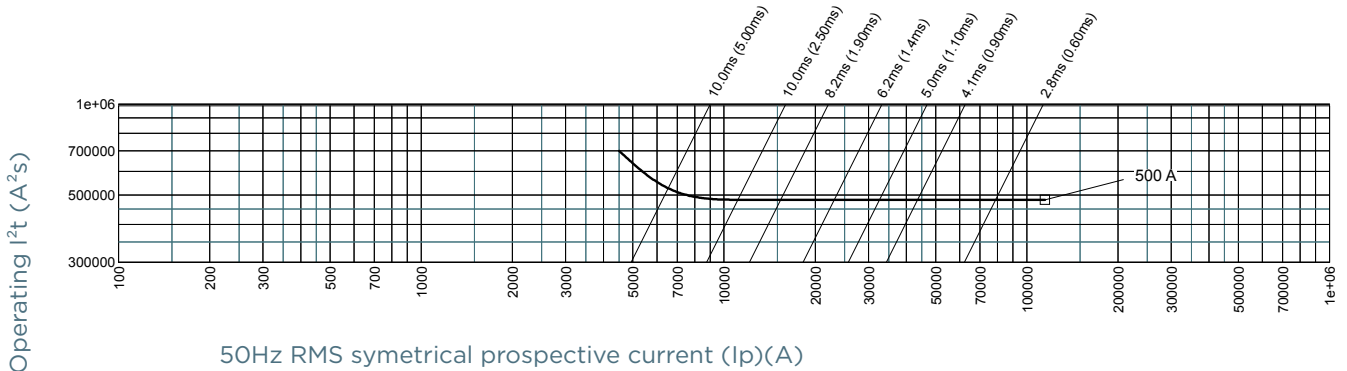
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CHARACTERISTICS TOTAL I²T CURVE

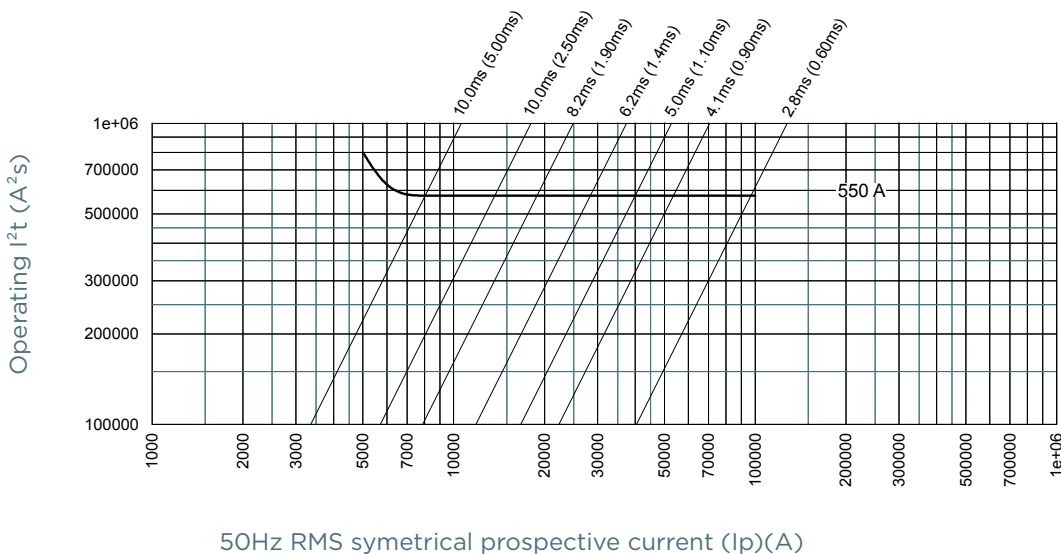
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Size 70 1000V

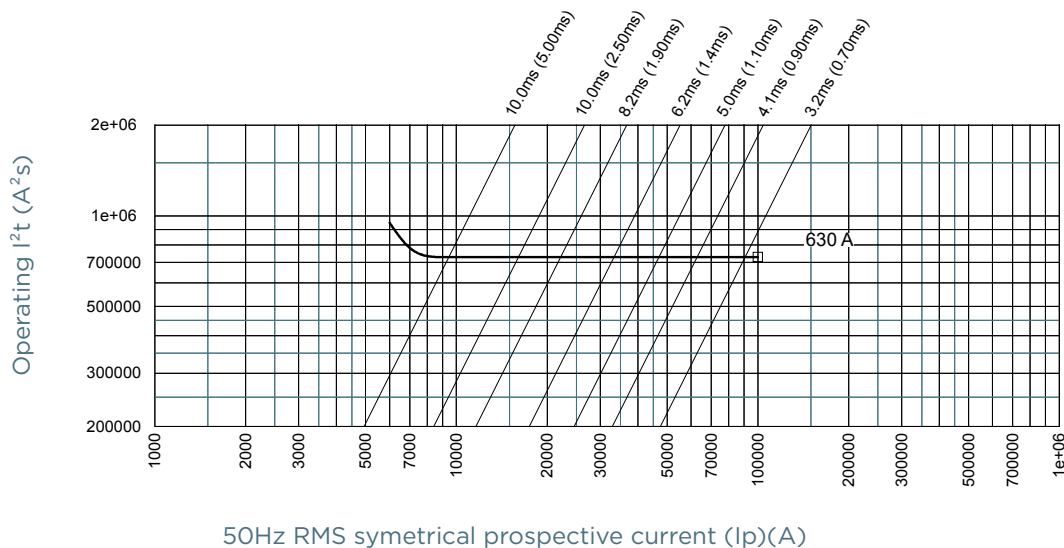


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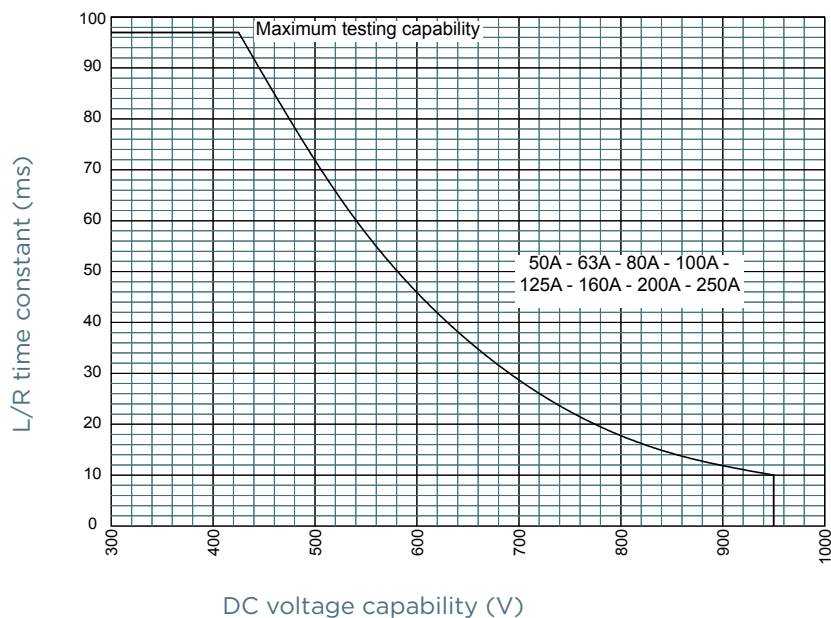
CHARACTERISTICS TOTAL I²T CURVE

Size 70 750V



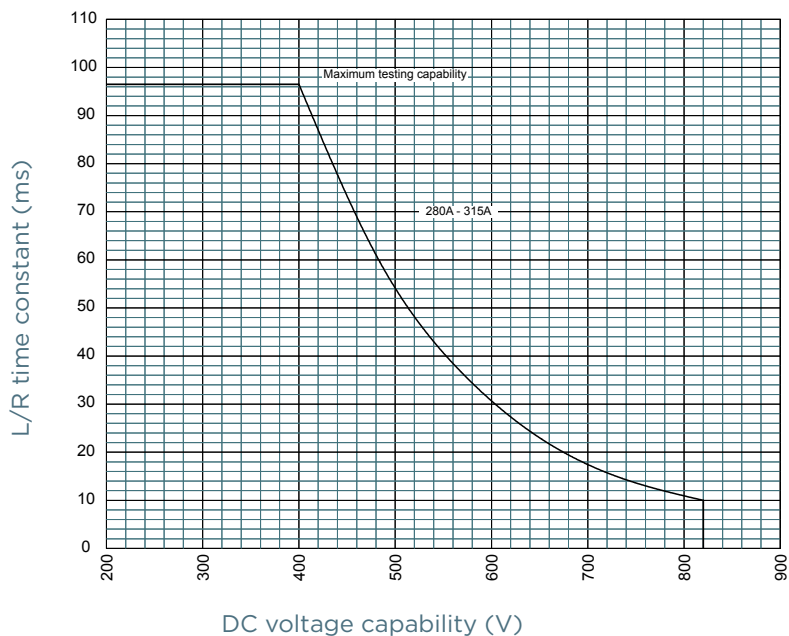
L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

Size 70 1250V

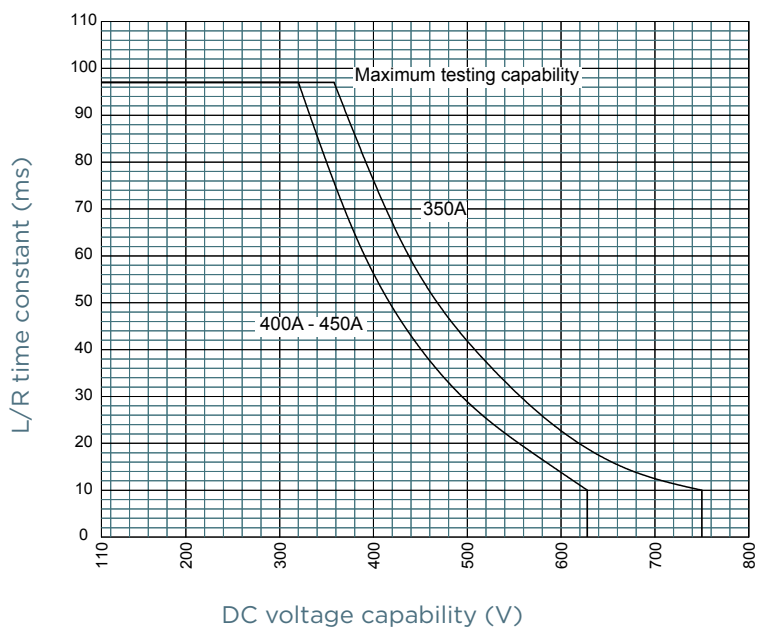


L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

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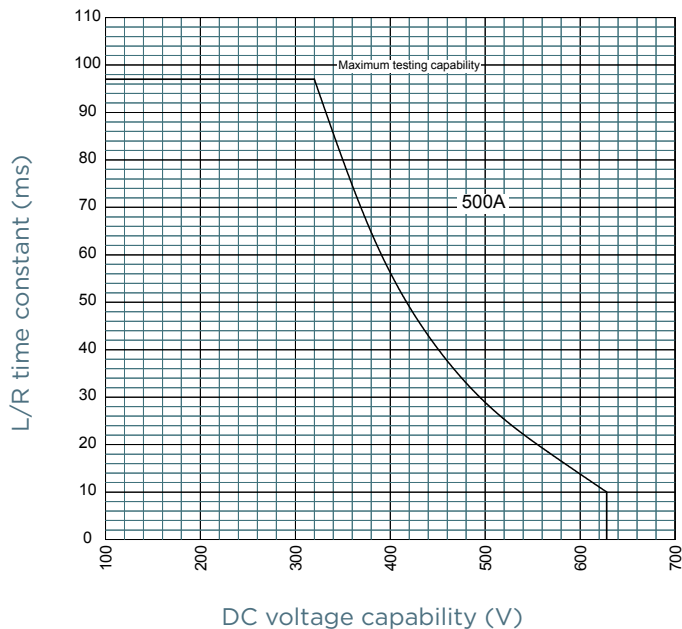


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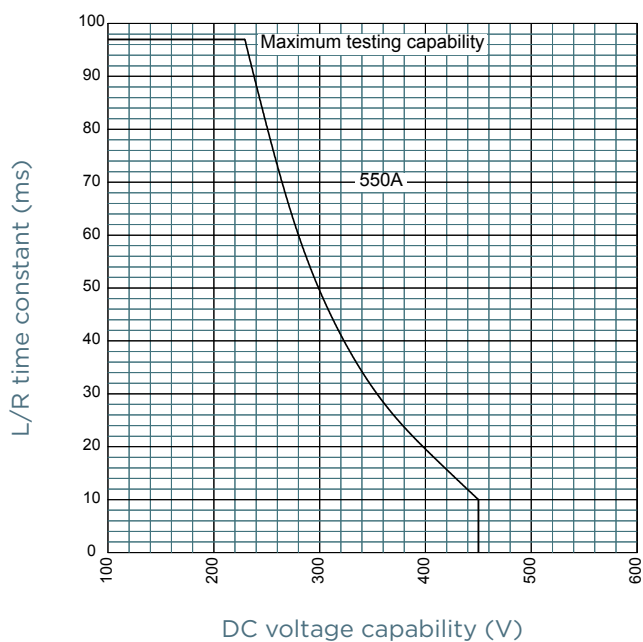


L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

Size 70 1000V

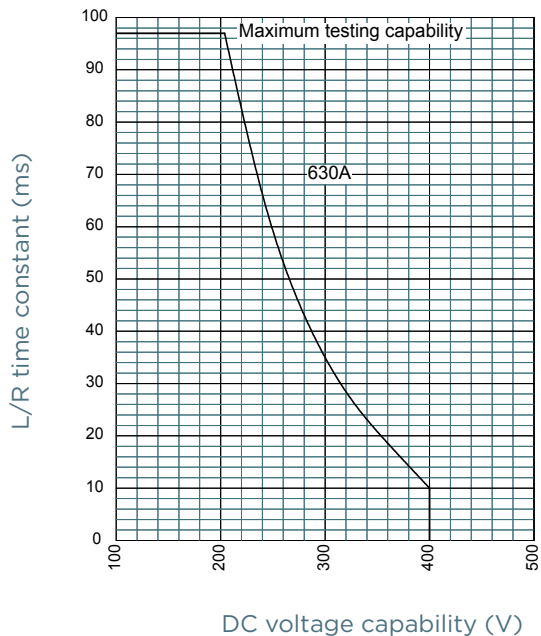


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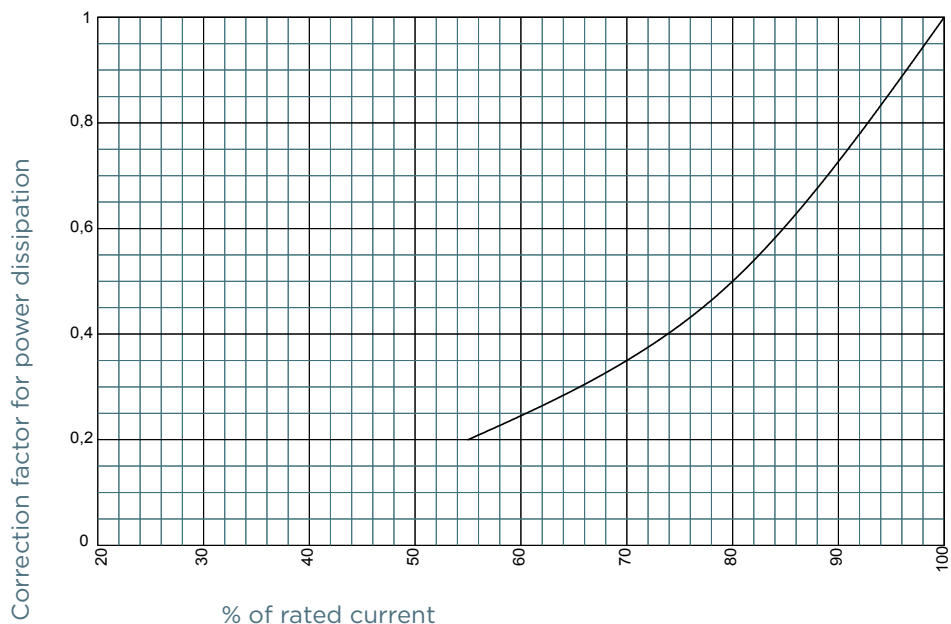
L/R TIME CONSTANT VS DC VOLTAGE CAPABILITY

Size 70 750V



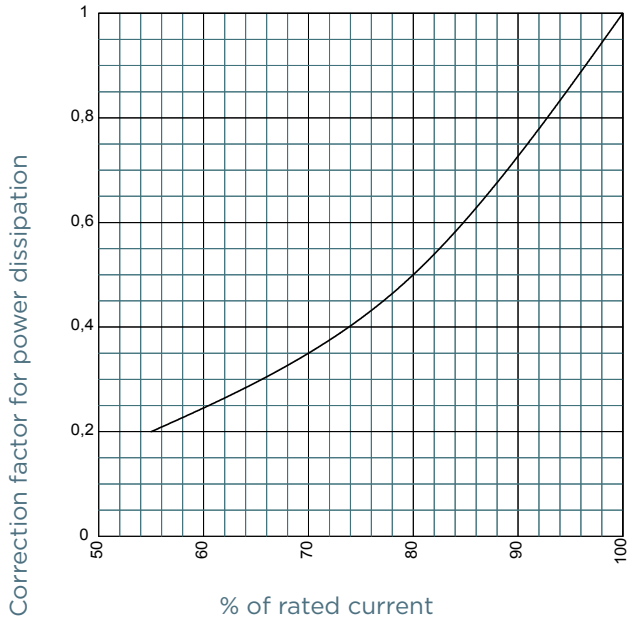
POWER DISSIPATION

Size 70 1250V

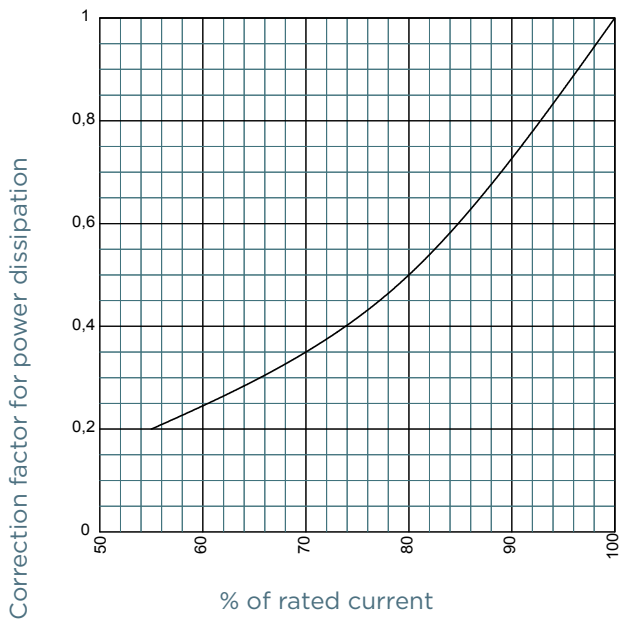


POWER DISSIPATION

Size 70 1200V

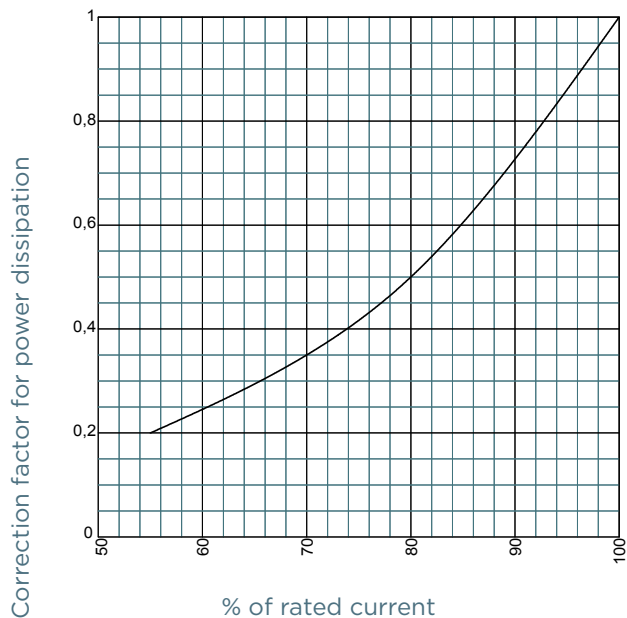


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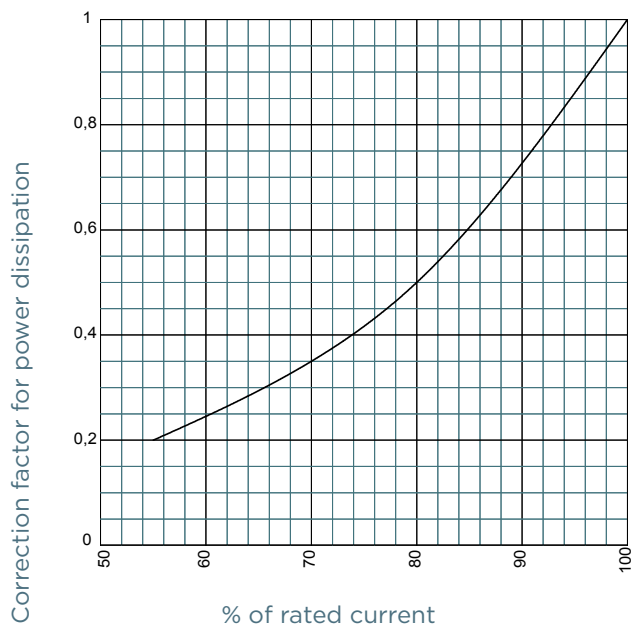


POWER DISSIPATION

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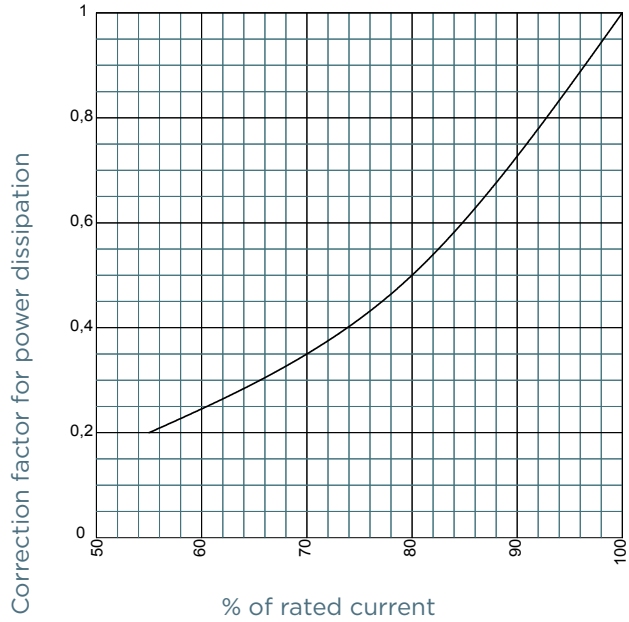


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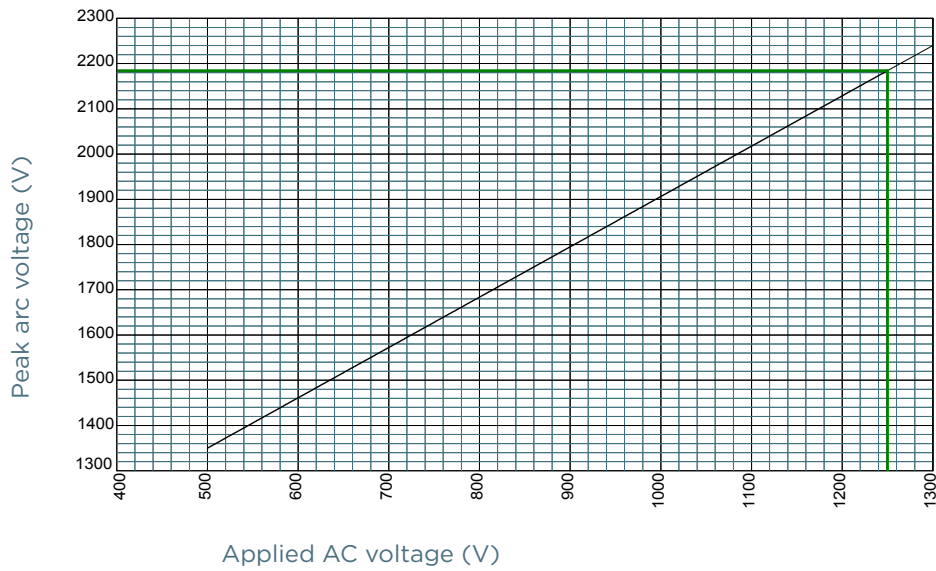
POWER DISSIPATION

Size 70 750V



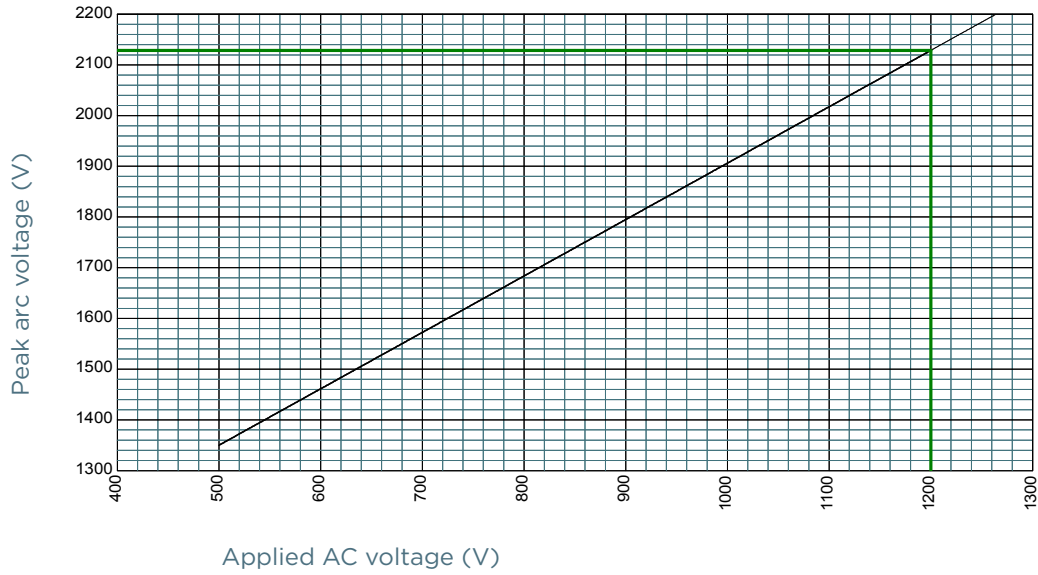
PEAK ARC VOLTAGE

Size 70 1250V

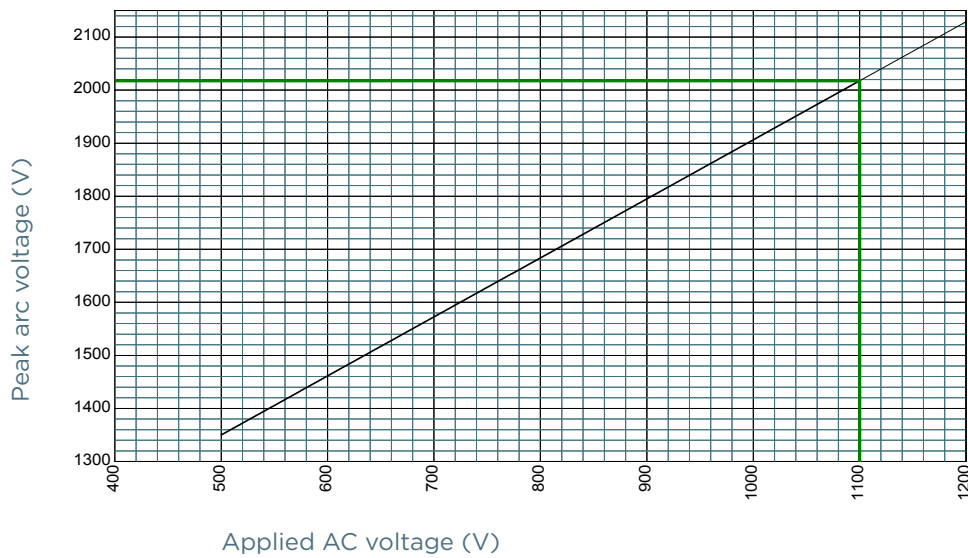


PEAK ARC VOLTAGE

Size 70 1200V

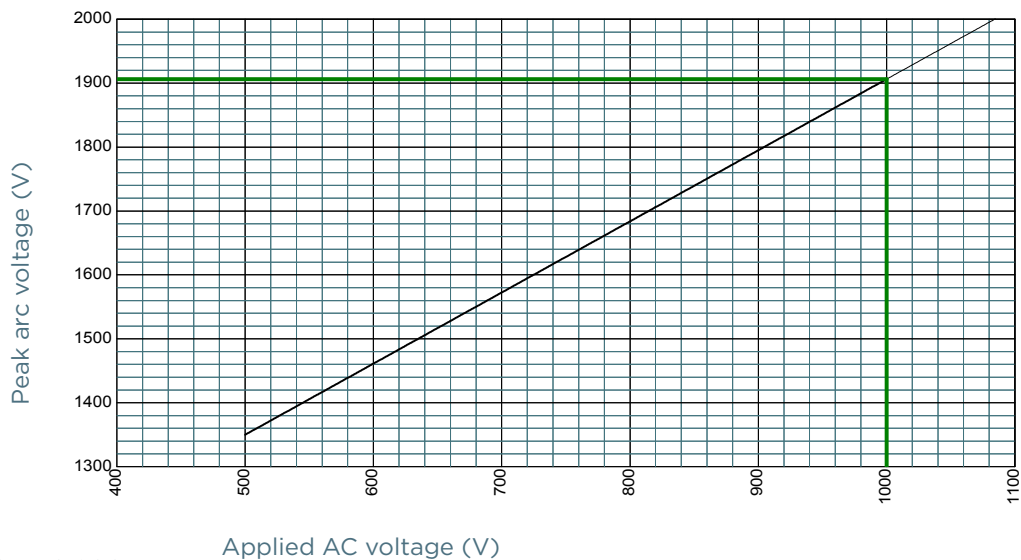


Size 70 1100V

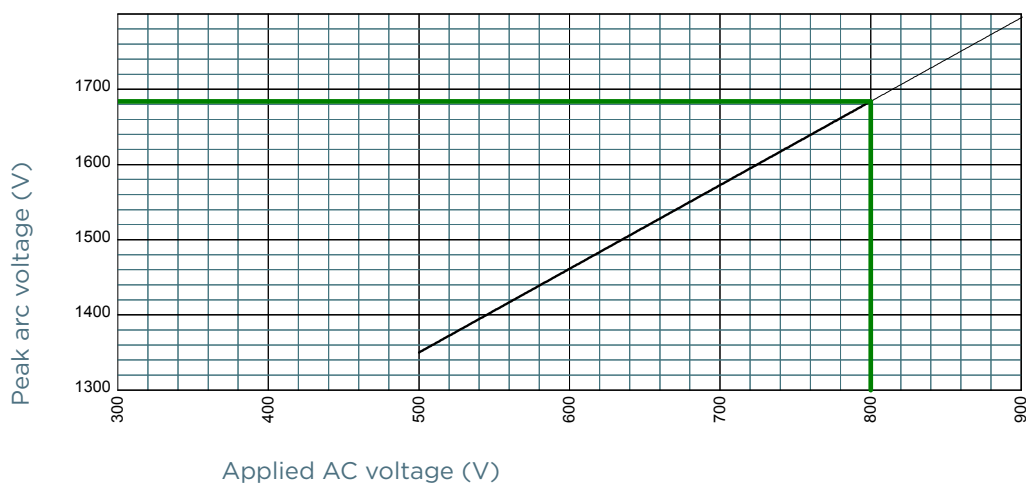


PEAK ARC VOLTAGE

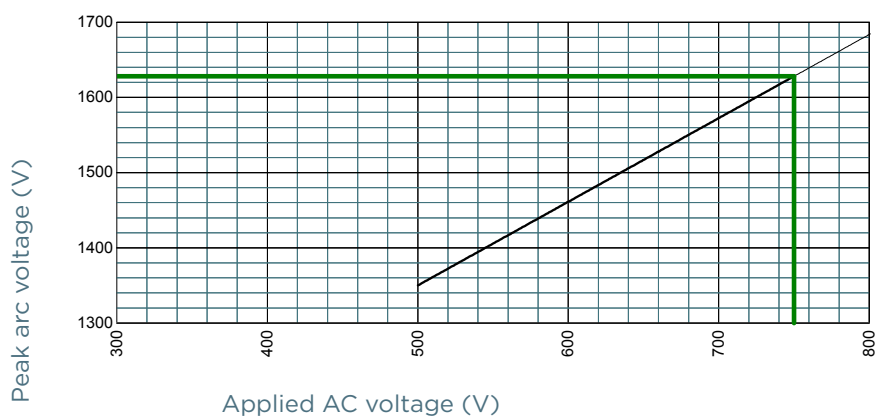
Size 70 1000V



Size 70 800V



Size 70 750V

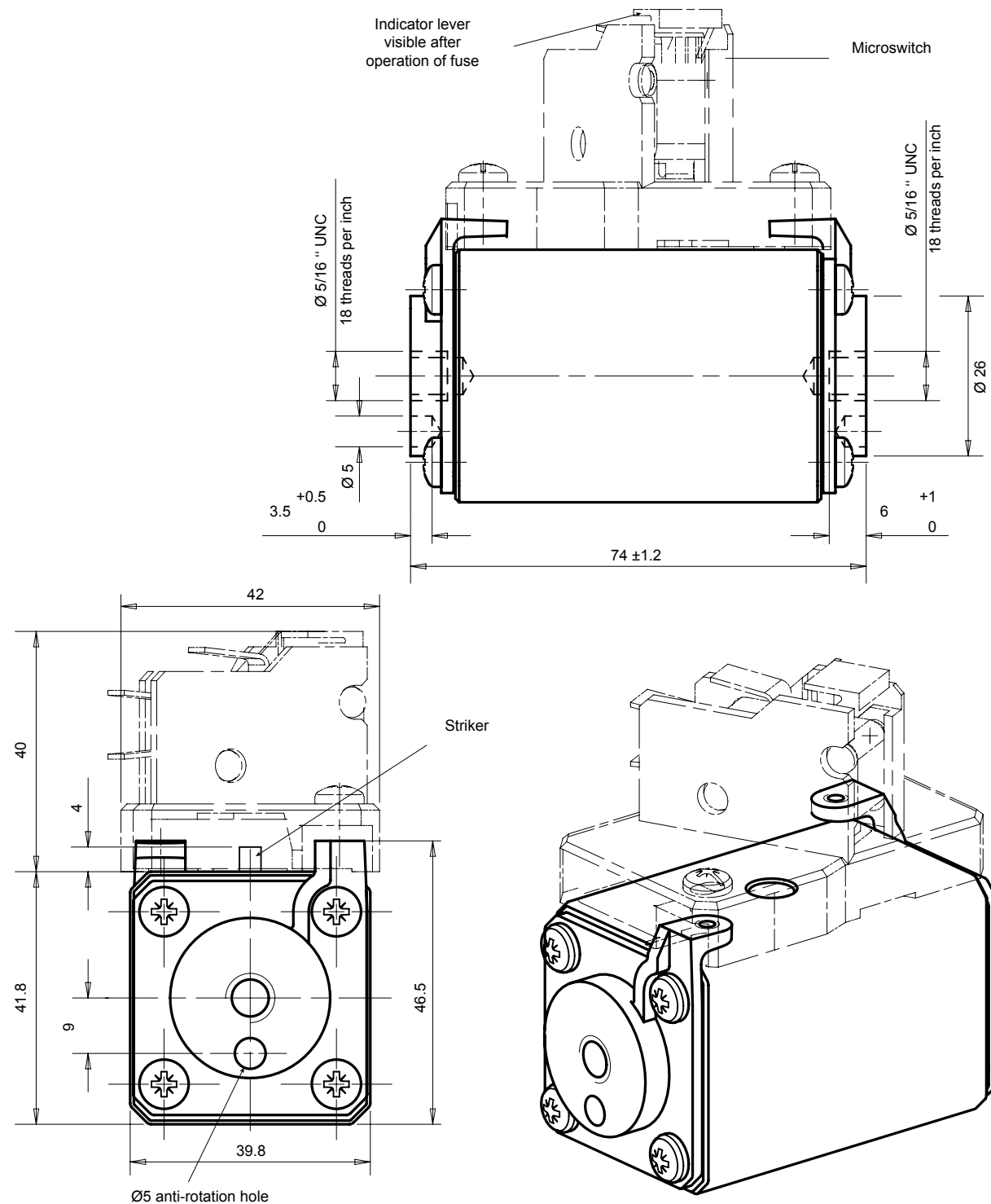


Protistor® size 70 aR

1100 to 1250VAC (IEC) / 1300VAC (UL)

DIMENSIONS

Size 70 aR TTI (109497)



Dimensions in mm

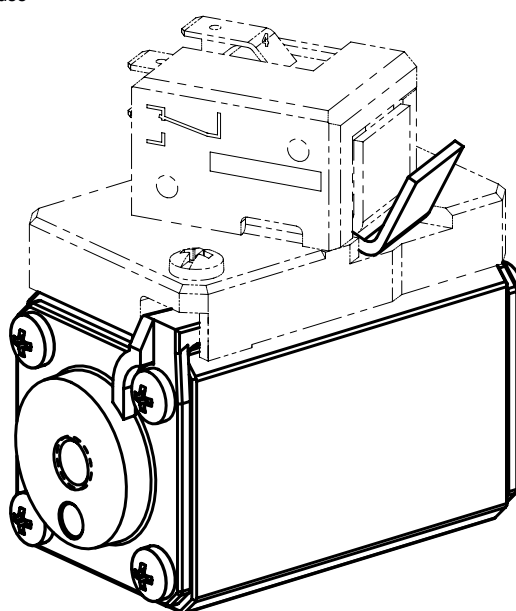
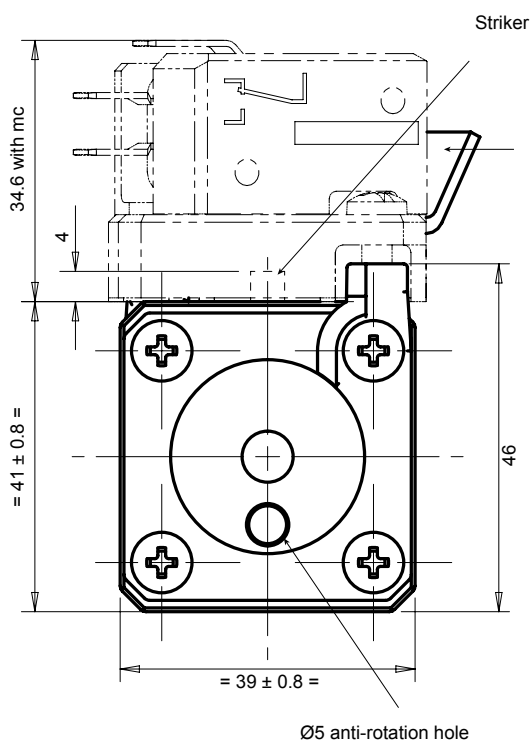
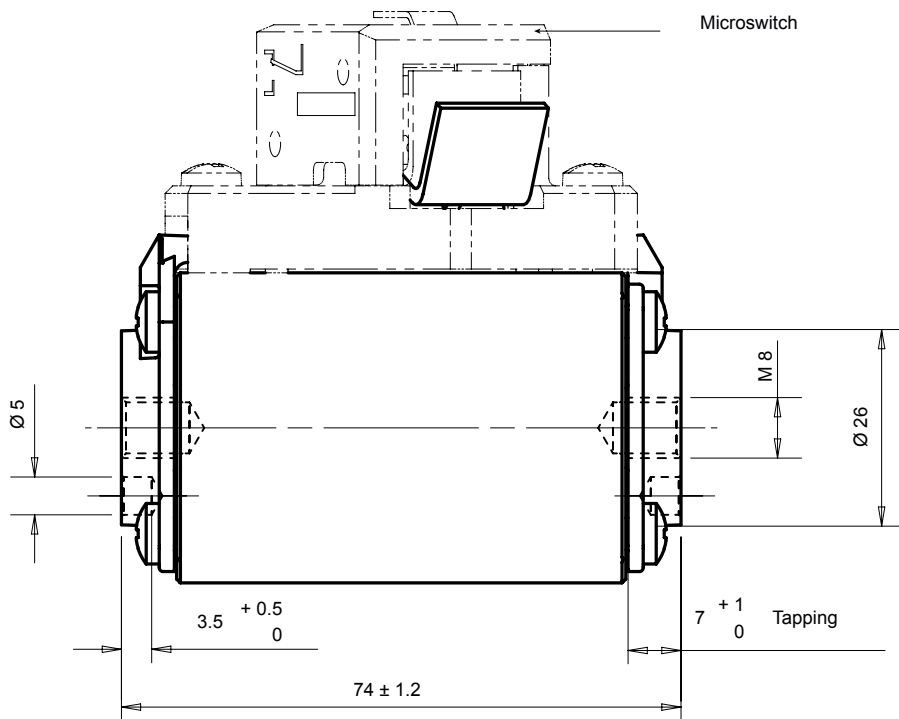
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Protistor® size 70 aR

1100 to 1250VAC (IEC) / 1300VAC (UL)

DIMENSIONS

Size 70 aR TTF (105698)



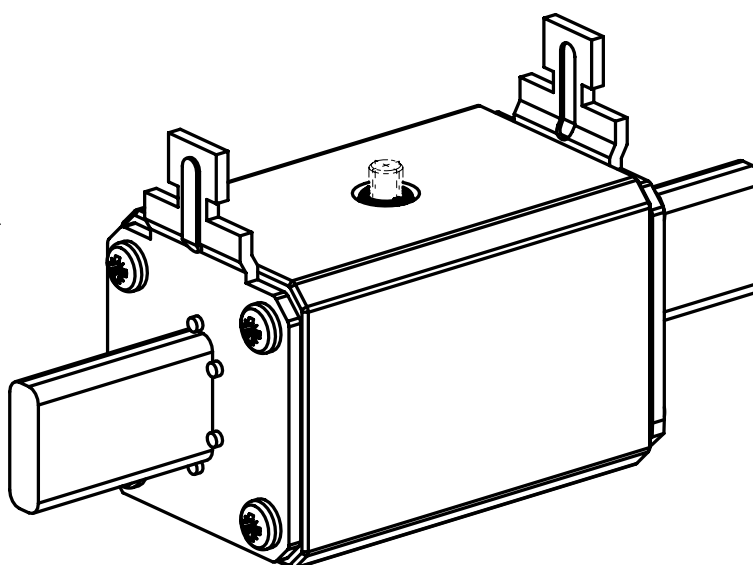
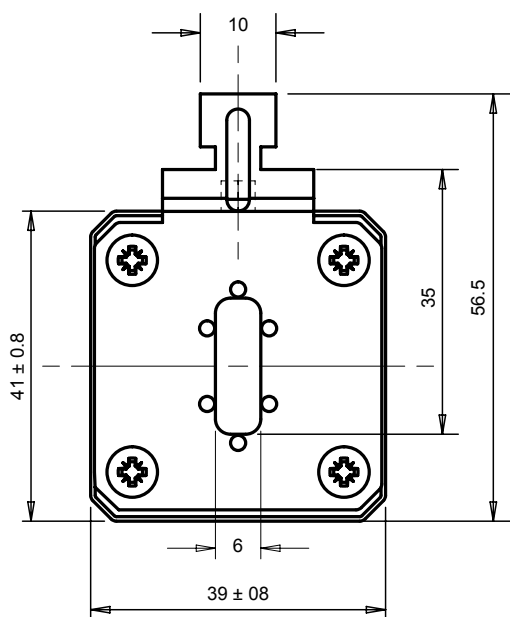
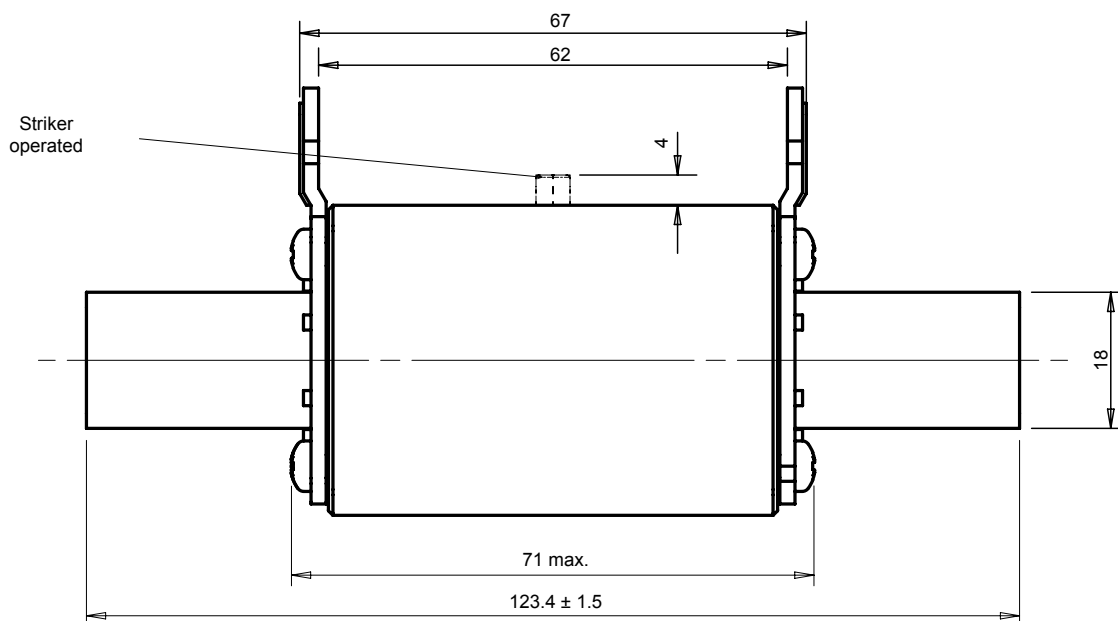
Dimensions in mm

Protistor® size 70 aR

1100 to 1250VAC (IEC) / 1300VAC (UL)

DIMENSIONS

Size 70 aR NH (107129)



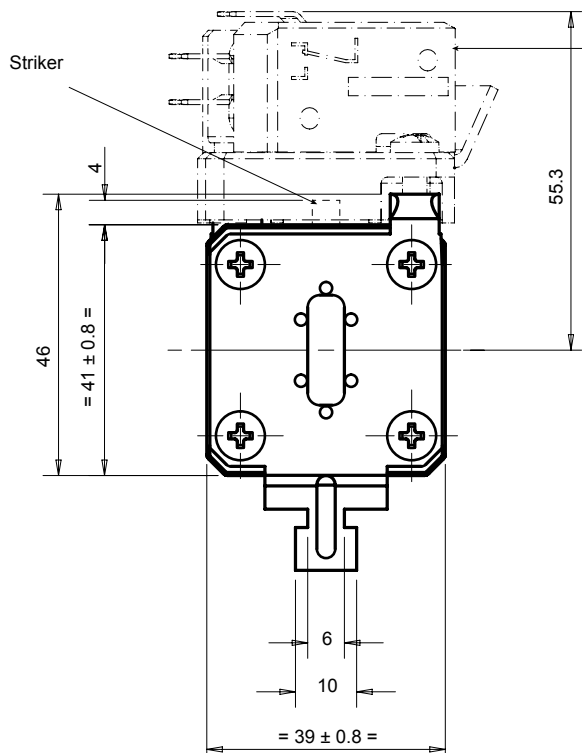
Dimensions in mm

Protistor® size 70 aR

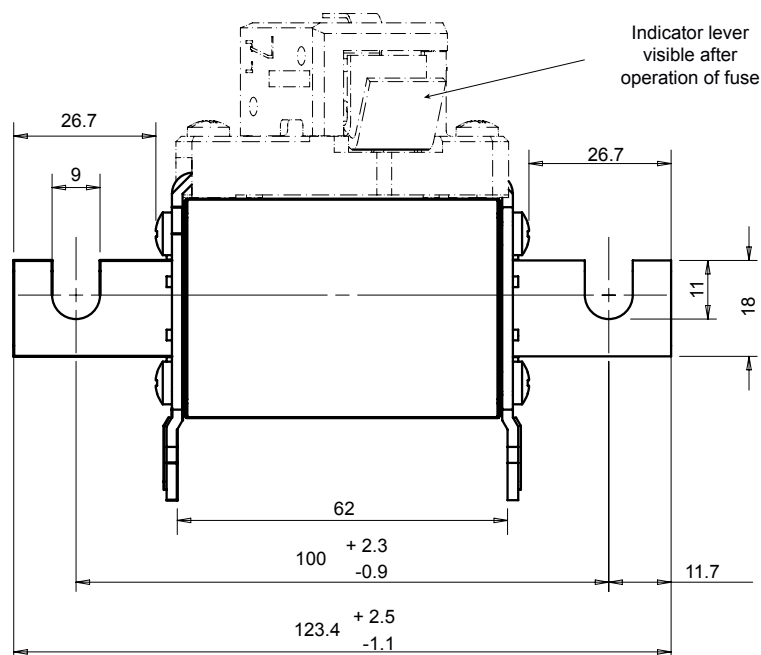
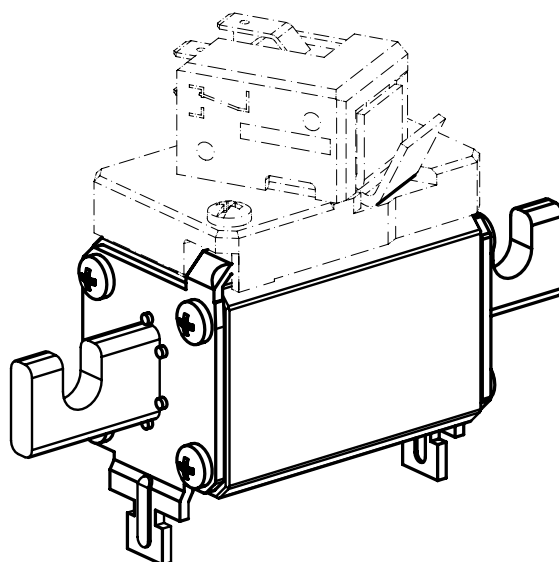
1100 to 1250VAC (IEC) / 1300VAC (UL)

DIMENSIONS

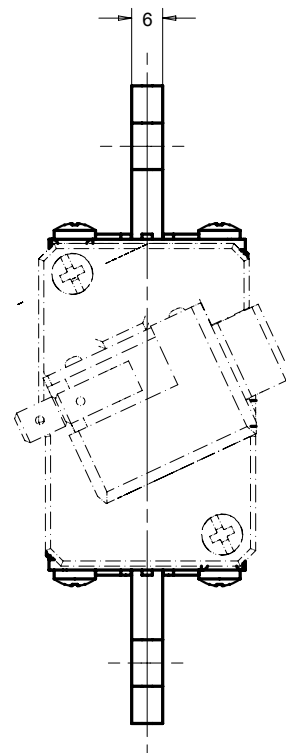
Size 70 aR EF (105879)



Microswitch



Indicator lever visible after operation of fuse



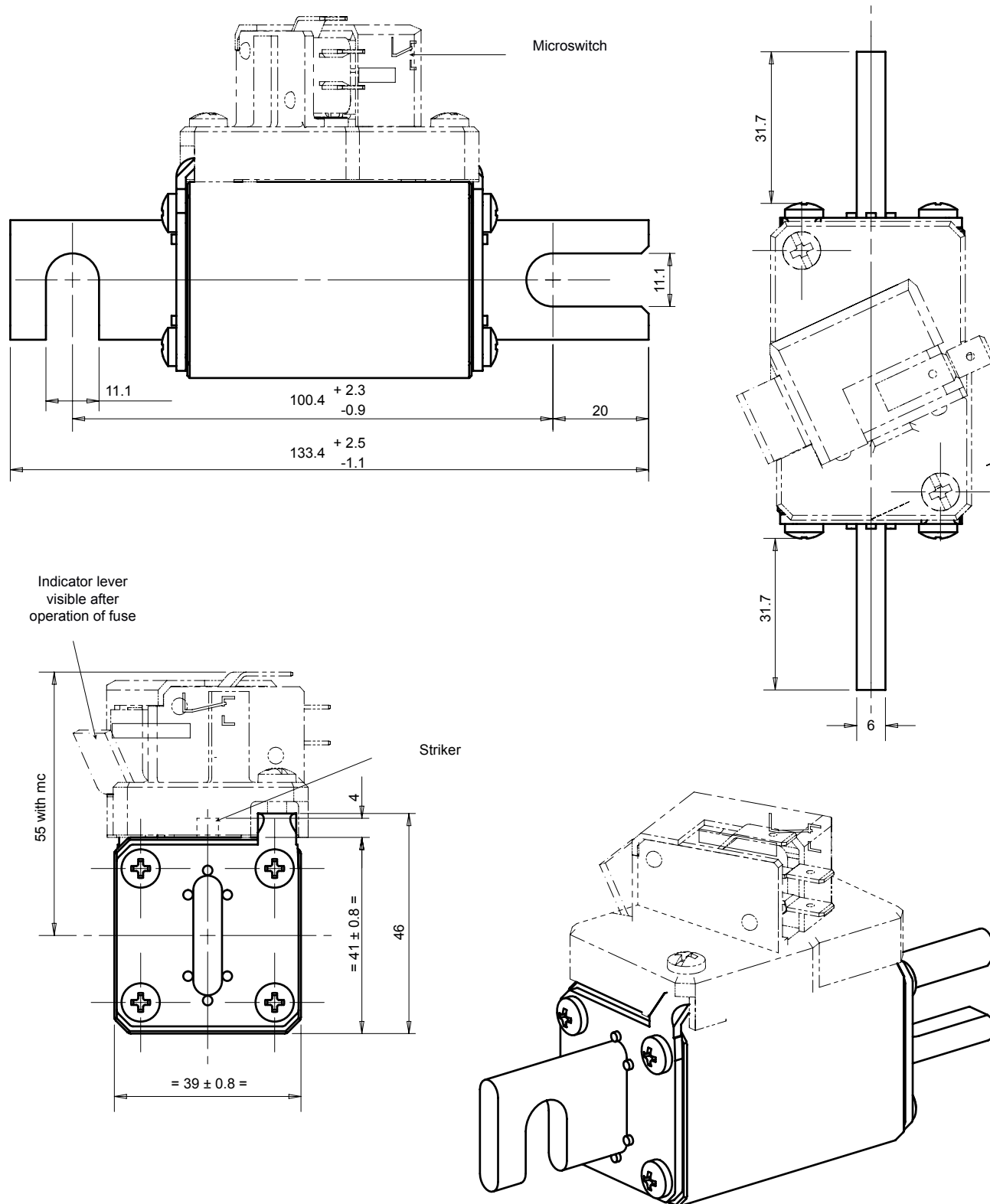
Dimensions in mm

Protistor® size 70 aR

1100 to 1250VAC (IEC) / 1300VAC (UL)

DIMENSIONS

Size 70 aR DIN 110 (105711)



Dimensions in mm

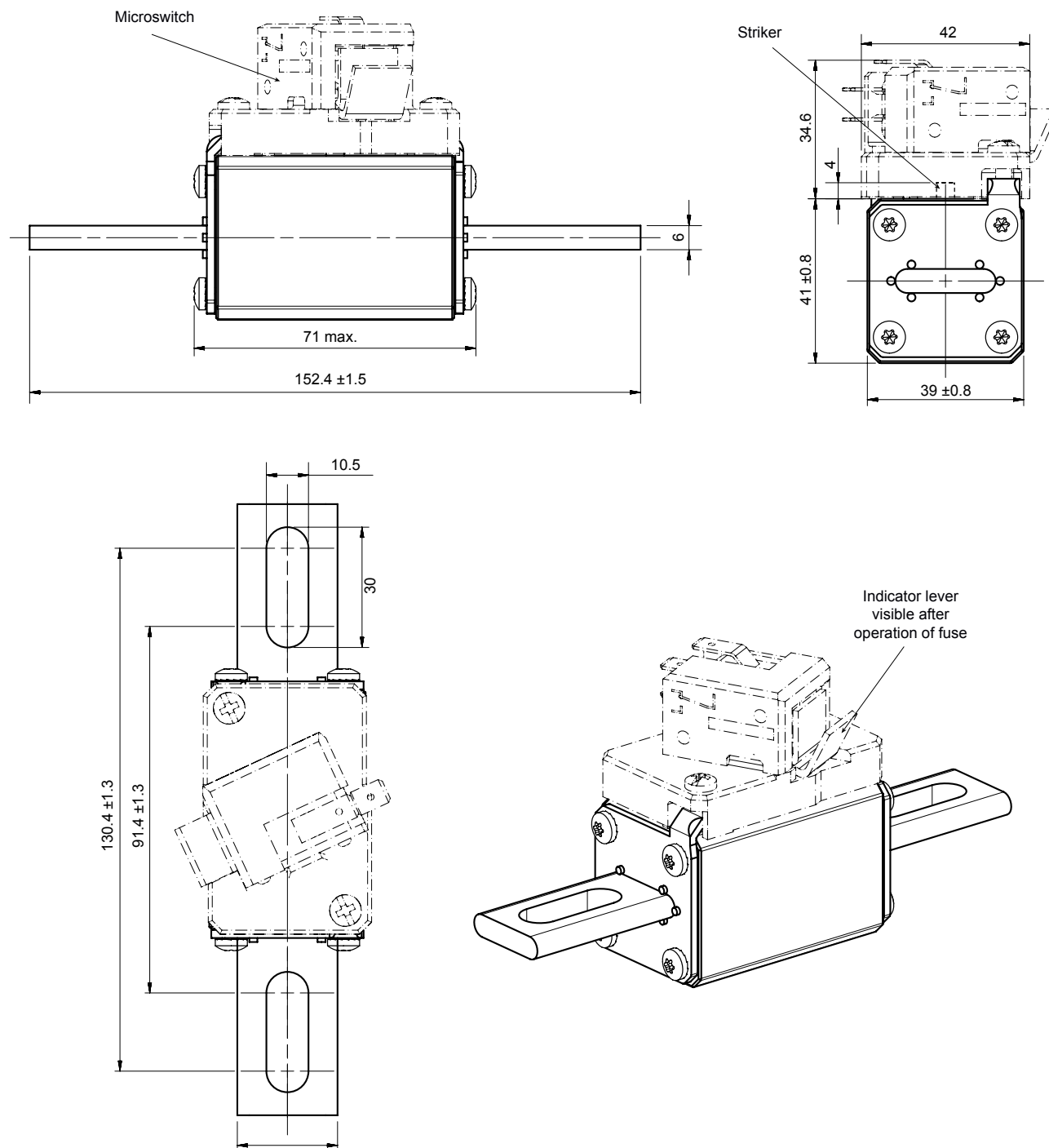
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Protistor® size 70 aR

1100 to 1250VAC (IEC) / 1300VAC (UL)

DIMENSIONS

Size 70 aR LI (105921)



Dimensions in mm

Protistor® size 70 aR

1100 to 1250VAC (IEC) / 1300VAC (UL)

APPENDIX

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A130UD70TTI125	T301018	A130URD70TTI0125	2
A130UD70TTI160	V301019	A 130 URD 70 TTI 0160	2
A130UD70TTI200	W301020	A130URD70TTI0200	2
A130UD70TTI250	X301021	A 130 URD 70 TTI 0250	2
A130UD70TTI280	Y301022	A130URD70TTI0280	2
A130UD70TTI315	Z301023	A 130 URD 70 TTI 0315	2
A120UD70TTI350	A301024	A 120 URD 70 TTI 0350	2
PC70UD13C50TF	C301095	12,5 URD 70 TT F 0050	2
PC70UD13C63TF	M300483	12,5 URD 70 TT F 0063	2
PC70UD13C80TF	N300484	12,5 URD 70 TT F 0080	2
PC70UD13C100TF	P300485	12,5 URD 70 TT F 0100	2
PC70UD13C125TF	Q300486	12,5 URD 70 TT F 0125	2
PC70UD13C160TF	R300487	12,5 URD 70 TT F 0160	2
PC70UD13C200TF	S300488	12,5 URD 70 TT F 0200	2
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PC70UD11C350TF	W300491	11 URD 70 TT F 0350	2
PC70UD11C400TF	E300867	11 URD 70 TT F 0400	2
PC70UD11C450TF	H301284	11 URD 70 TT F 0450	2
PC70UD10C500TF	J301285	10 URD 70 TT F 0500	2
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A130UD70LI100	Y300654	A 130 URD 70 LI 0100	2
A130UD70LI125	Z300655	A 130 URD 70 LI 0125	2
A130UD70LI160	A300656	A 130 URD 70 LI 0160	2
A130UD70LI200	B300657	A 130 URD 70 LI 0200	2
A130UD70LI250	C300658	A 130 URD 70 LI 0250	2
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Protistor® size 70 aR

1100 to 1250VAC (IEC) / 1300VAC (UL)

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PC70UD12C280D1A	J300710	12 URD 70 D11 A 0280	3
PC70UD12C315D1A	C300543	12 URD 70 D11 A 0315	3
PC70UD11C350D1A	D300544	11 URD 70 D11 A 0350	3