

Protistor® size 72 aR

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

SEMICONDUCTOR PROTECTION FUSES

SQUARE BODY HIGH-SPEED FUSE-LINKS AC PROTECTION



These 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 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.

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	850 ... 1250 VAC
Ampere Range (A)	250 ... 1000 A
Speed/Characteristic	aR
I.R. AC (IEC)	100 kA 120 kA
Product Size	72

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



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

Protistor® size 72 aR

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

PRODUCT RANGE

Size 72 type TTI 3/8"-16 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
A130UD72TTI280	N301036	1250 V	1300 V	280 A	10.3 kA ² s	85 kA ² s	100 kA	72 W	3	0.85 kg
A130UD72TTI315	P301037	1250 V	1300 V	315 A	15.1 kA ² s	125 kA ² s	100 kA	76 W	3	0.85 kg
A130UD72TTI350	Q301038	1250 V	1300 V	350 A	21 kA ² s	170 kA ² s	100 kA	77 W	3	0.85 kg
A130UD72TTI400	R301039	1250 V	1300 V	400 A	32.8 kA ² s	270 kA ² s	100 kA	80 W	3	0.85 kg
A130UD72TTI450	S301040	1250 V	1300 V	450 A	44.2 kA ² s	360 kA ² s	100 kA	87 W	3	0.85 kg
A130UD72TTI500	T301041	1250 V	1300 V	500 A	57.1 kA ² s	465 kA ² s	100 kA	94 W	3	0.85 kg
A130UD72TTI550	V301042	1250 V	1300 V	550 A	68 kA ² s	550 kA ² s	100 kA	110 W	3	0.85 kg
A130UD72TTI630	W301043	1250 V	1300 V	630 A	106.3 kA ² s	860 kA ² s	100 kA	113 W	3	0.85 kg
A120UD72TTI700	X301044	1100 V	1200 V	700 A	141.9 kA ² s	920 kA ² s	100 kA	140 W	3	0.85 kg
A120UD72TTI800	Y301045	1100 V	1200 V	800 A	215.1 kA ² s	1400 kA ² s	100 kA	146 W	3	0.85 kg



PC72UD13C630TF

Size 72 type TTF M10 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
PC72UD13C315TF	Z300494	1250 V	1300 V	315 A	15.1 kA ² s	125 kA ² s	100 kA	76 W	3	0.8 kg
PC72UD13C350TF	A300495	1250 V	1300 V	350 A	21 kA ² s	170 kA ² s	100 kA	77 W	3	0.8 kg
PC72UD13C400TF	B300496	1250 V	1300 V	400 A	32.8 kA ² s	270 kA ² s	100 kA	80 W	3	0.8 kg
PC72UD13C450TF	C300497	1250 V	1300 V	450 A	44.2 kA ² s	360 kA ² s	100 kA	89 W	3	0.8 kg
PC72UD13C500TF	D300498	1250 V	1300 V	500 A	57.1 kA ² s	465 kA ² s	100 kA	98 W	3	0.8 kg
PC72UD13C550TF	E300499	1250 V	1300 V	550 A	68 kA ² s	550 kA ² s	100 kA	110 W	3	0.8 kg
PC72UD13C630TF	F300500	1250 V	1300 V	630 A	106.3 kA ² s	860 kA ² s	100 kA	113 W	3	0.8 kg
PC72UD11C700TF	G300501	1100 V	1200 V	700 A	141.9 kA ² s	920 kA ² s	100 kA	140 W	3	0.8 kg
PC72UD11C800TF	H300502	1100 V	1200 V	800 A	215.1 kA ² s	1400 kA ² s	100 kA	146 W	3	0.8 kg
PC72UD10C900TF	G300869	1000 V	1100 V	900 A	312 kA ² s	1800 kA ² s	120 kA	152 W	3	0.8 kg
PC72UD85V1000TF	T301294	850 V	900 V	1000 A	439 kA ² s	2150 kA ² s	100 kA	136 W	3	0.8 kg

Size 72 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
A130UD72LI280	Q300670	1250 V	1300 V	280 A	10.3 kA ² s	85 kA ² s	100 kA	72 W	3	0.72 kg
A130UD72LI315	R300671	1250 V	1300 V	315 A	15.1 kA ² s	125 kA ² s	100 kA	76 W	3	0.72 kg
A130UD72LI350	S300672	1250 V	1300 V	350 A	21 kA ² s	170 kA ² s	100 kA	77 W	3	0.72 kg
A130UD72LI400	T300673	1250 V	1300 V	400 A	32.8 kA ² s	270 kA ² s	100 kA	80 W	3	0.72 kg
A130UD72LI450	V300674	1250 V	1300 V	450 A	44.2 kA ² s	360 kA ² s	100 kA	89 W	3	0.72 kg
A130UD72LI500	W300675	1250 V	1300 V	500 A	57.1 kA ² s	465 kA ² s	100 kA	98 W	3	0.72 kg
A130UD72LI550	X300676	1250 V	1300 V	550 A	68 kA ² s	550 kA ² s	100 kA	120 W	3	0.72 kg
A120UD72LI630	Y300677	1100 V	1200 V	630 A	106.3 kA ² s	690 kA ² s	100 kA	125 W	3	0.72 kg
A110UD72LI700	Z300678	1000 V	1100 V	700 A	141.9 kA ² s	815 kA ² s	120 kA	140 W	3	0.72 kg
A110UD72LI800	A300679	1000 V	1100 V	800 A	215.1 kA ² s	1240 kA ² s	120 kA	146 W	3	0.72 kg

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

Protistor® size 72 aR

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

PRODUCT RANGE

Size 72 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
PC72UD13C315PA	H301836	1250 V	1300 V	315 A	15.1 kA ² s	125 kA ² s	100 kA	76 W	3	0.78 kg
PC72UD13C400PA	B300841	1250 V	1300 V	400 A	32.8 kA ² s	270 kA ² s	100 kA	80 W	3	0.78 kg
PC72UD13C450PA	C300842	1250 V	1300 V	450 A	44.2 kA ² s	360 kA ² s	100 kA	89 W	3	0.78 kg
PC72UD13C500PA	P302716	1250 V	1300 V	500 A	57.1 kA ² s	465 kA ² s	100 kA	98 W	3	0.78 kg
PC72UD11C630PA	N301220	1100 V	1200 V	630 A	106.3 kA ² s	690 kA ² s	100 kA	125 W	3	0.78 kg
PC72UD10C800PA	M302047	1000 V	1100 V	800 A	215.1 kA ² s	1240 kA ² s	120 kA	146 W	3	0.78 kg

Size 72 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
PC72UD13C280EF	J300618	1250 V	1300 V	280 A	10.3 kA ² s	85 kA ² s	100 kA	72 W	3	0.76 kg
PC72UD13C315EF	K300619	1250 V	1300 V	315 A	15.1 kA ² s	125 kA ² s	100 kA	76 W	3	0.76 kg
PC72UD13C350EF	L300620	1250 V	1300 V	350 A	21 kA ² s	170 kA ² s	100 kA	77 W	3	0.76 kg
PC72UD13C400EF	M300621	1250 V	1300 V	400 A	32.8 kA ² s	270 kA ² s	100 kA	80 W	3	0.76 kg
PC72UD13C450EF	N300622	1250 V	1300 V	450 A	44.2 kA ² s	360 kA ² s	100 kA	89 W	3	0.76 kg
PC72UD13C500EF	P300623	1250 V	1300 V	500 A	57.1 kA ² s	465 kA ² s	100 kA	98 W	3	0.76 kg
PC72UD11C630EF	R300625	1100 V	1200 V	630 A	106.3 kA ² s	690 kA ² s	100 kA	125 W	3	0.76 kg
PC72UD10C700EF	S300626	1000 V	1100 V	700 A	141.9 kA ² s	815 kA ² s	100 kA	140 W	3	0.76 kg
PC72UD10C800EF	T300627	1000 V	1100 V	800 A	215.1 kA ² s	1240 kA ² s	120 kA	146 W	3	0.76 kg



PC72UD13C550D1A

Size 72 type DIN110

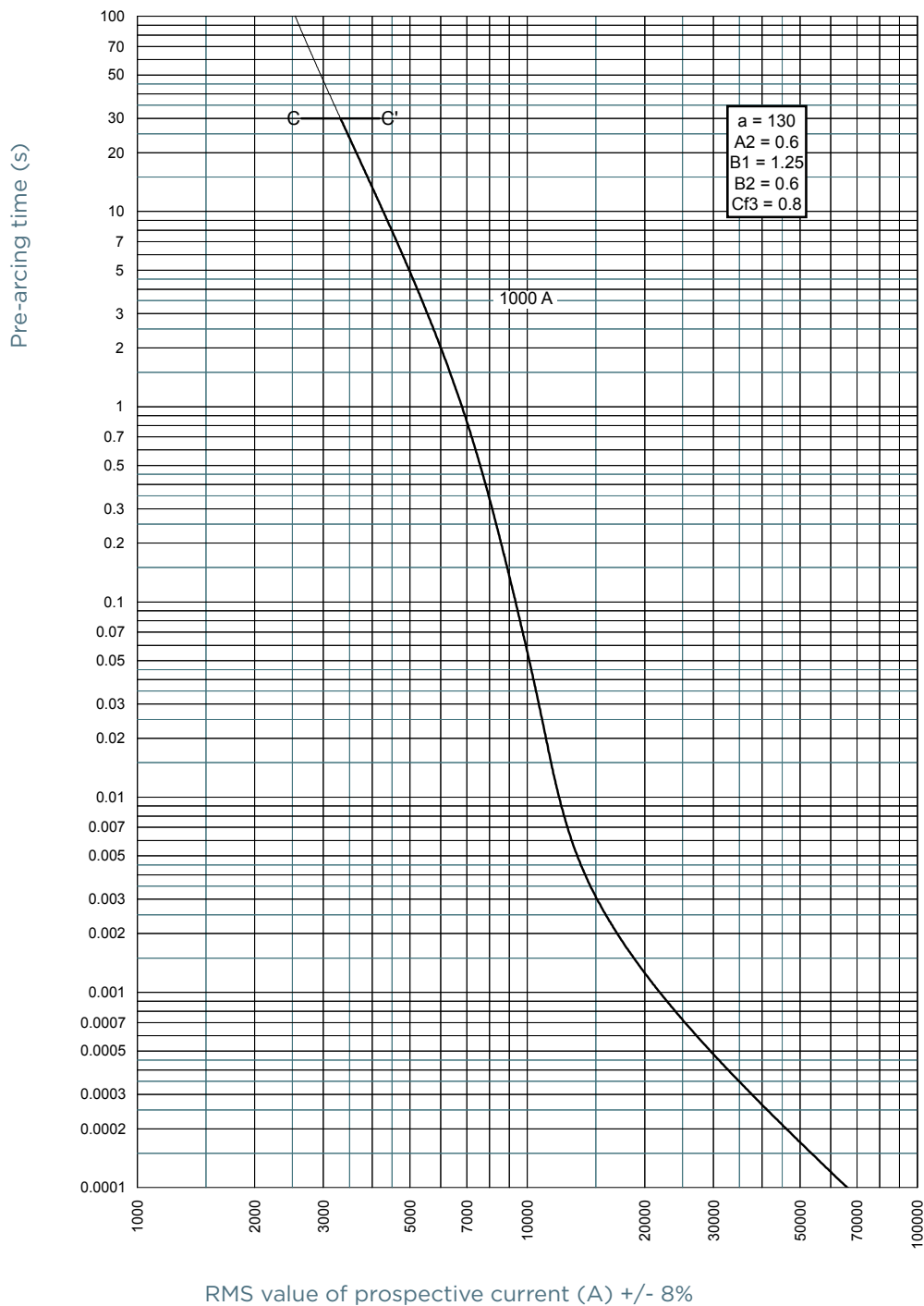
Catalog number	Item number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I _n	Pre-arcing I ² t	Clearing I ² t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I _n	Package	Weight
PC72UD13C280D1A	P300554	1250 V	1300 V	280 A	10.3 kA ² s	85 kA ² s	100 kA	72 W	3	0.70 kg
PC72UD13C315D1A	Q300555	1250 V	1300 V	315 A	15.1 kA ² s	125 kA ² s	100 kA	76 W	3	0.70 kg
PC72UD13C350D1A	R300556	1250 V	1300 V	350 A	21 kA ² s	170 kA ² s	100 kA	77 W	3	0.70 kg
PC72UD13C400D1A	S300557	1250 V	1300 V	400 A	32.8 kA ² s	270 kA ² s	100 kA	80 W	3	0.70 kg
PC72UD13C450D1A	T300558	1250 V	1300 V	450 A	44.2 kA ² s	360 kA ² s	100 kA	89 W	3	0.70 kg
PC72UD13C500D1A	V300559	1250 V	1300 V	500 A	57.1 kA ² s	465 kA ² s	100 kA	98 W	3	0.70 kg
PC72UD13C550D1A	W300560	1250 V	1300 V	550 A	68 kA ² s	550 kA ² s	100 kA	120 W	3	0.70 kg
PC72UD11C630D1A	X300561	1100 V	1200 V	630 A	106.3 kA ² s	690 kA ² s	100 kA	125 W	3	0.70 kg
PC72UD10C700D1A	Y300562	1000 V	1100 V	700 A	141.9 kA ² s	815 kA ² s	100 kA	140 W	3	0.70 kg
PC72UD10C800D1A	Z300563	1000 V	1100 V	800 A	215.1 kA ² s	1240 kA ² s	120 kA	146 W	3	0.70 kg

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



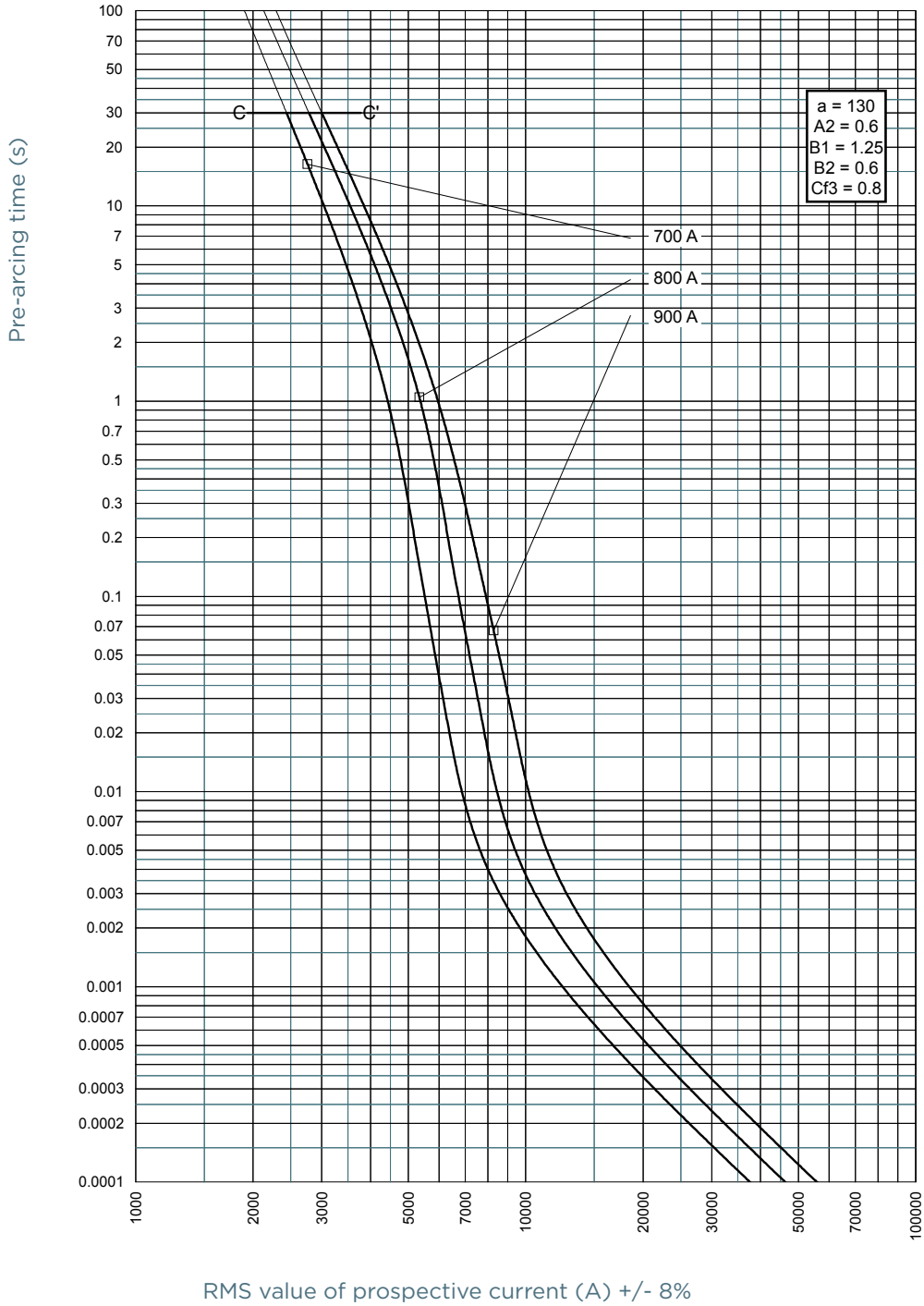
TIME CURRENT CHARACTERISTIC CURVES

Size 72 aR 850V



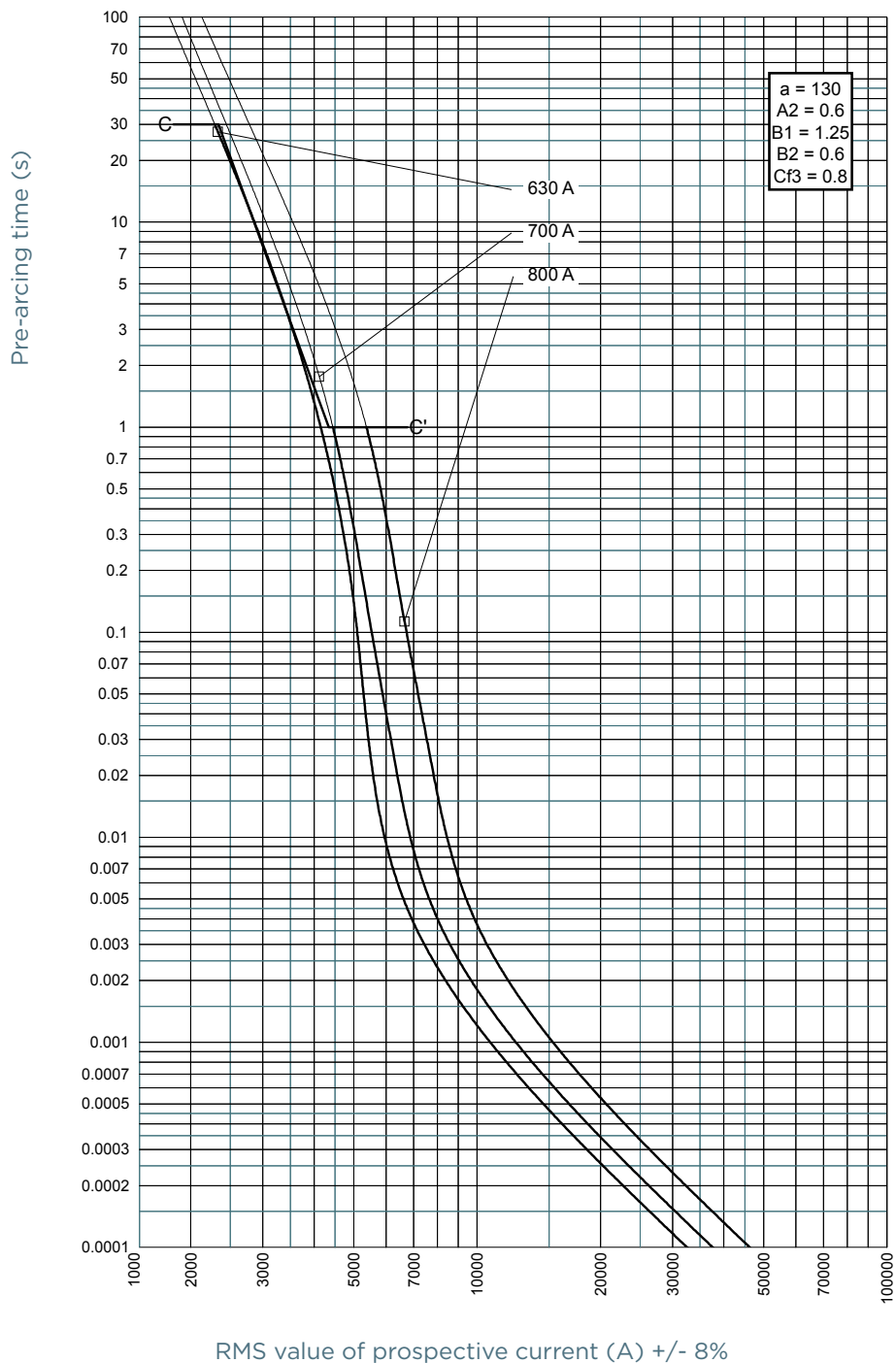
TIME CURRENT CHARACTERISTIC CURVES

Size 72 aR 1000V



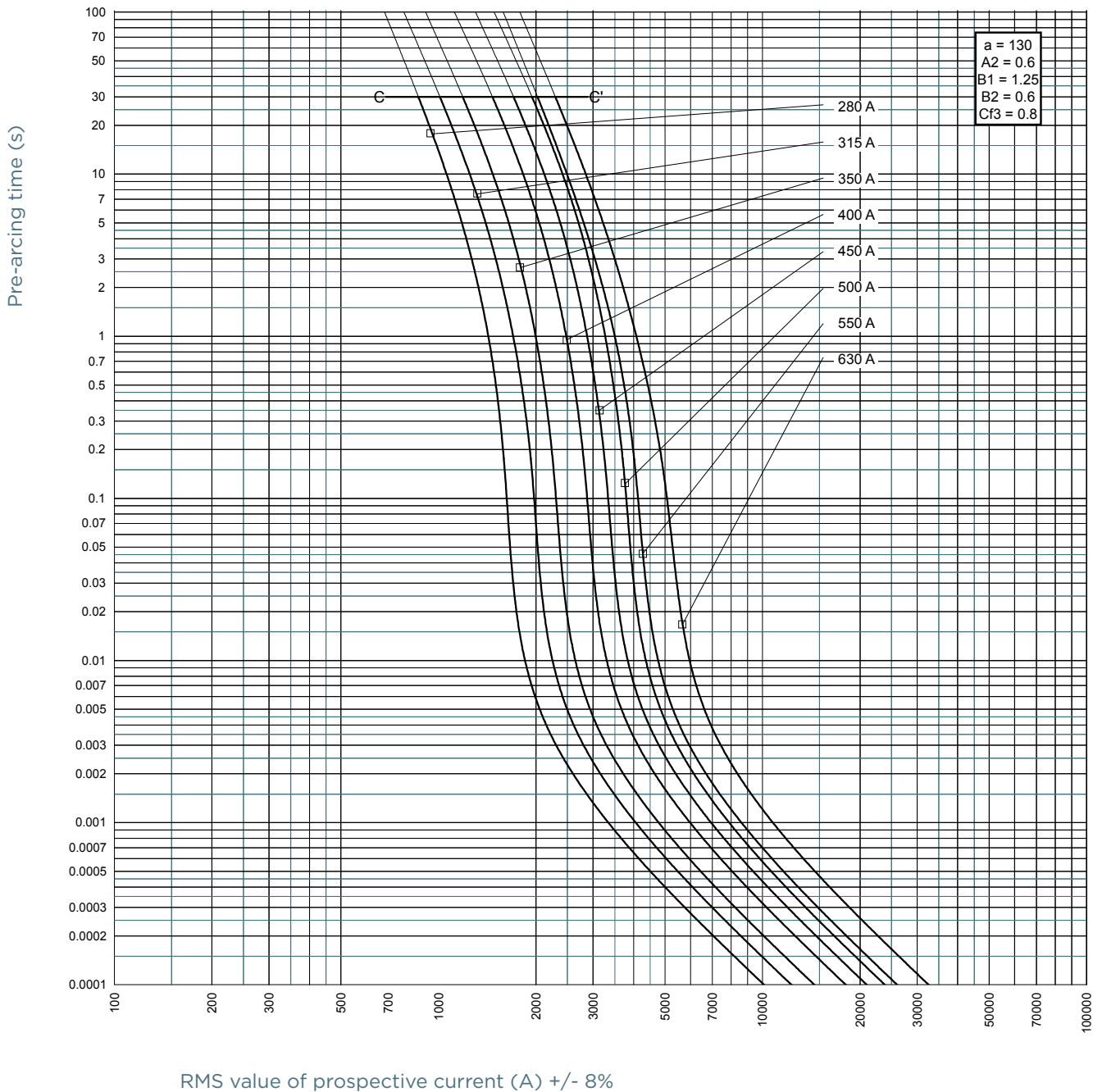
TIME CURRENT CHARACTERISTIC CURVES

Size 72 aR 1100V



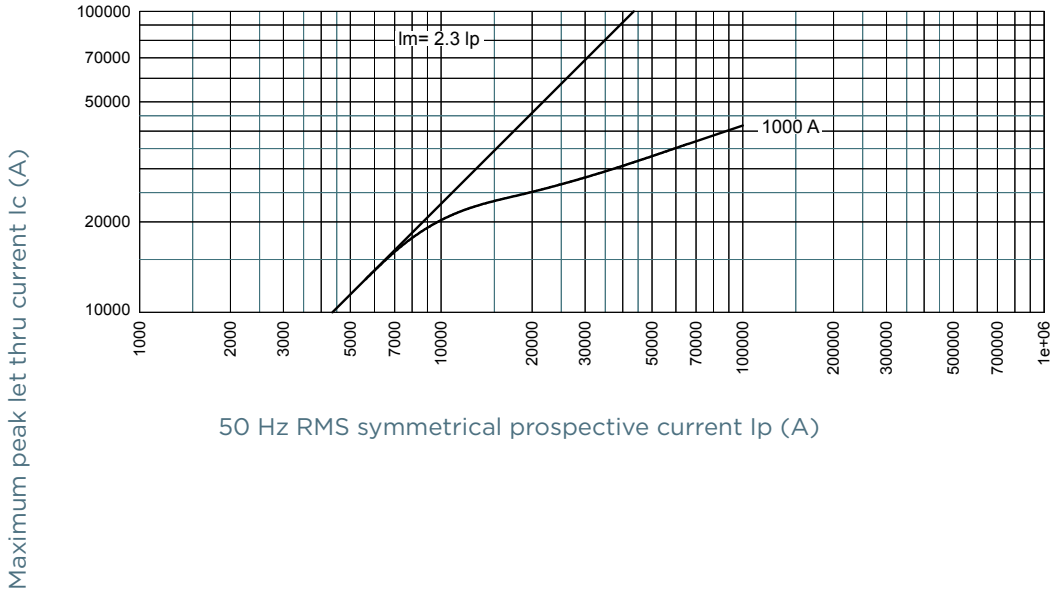
TIME CURRENT CHARACTERISTIC CURVES

Size 72 aR 1250V

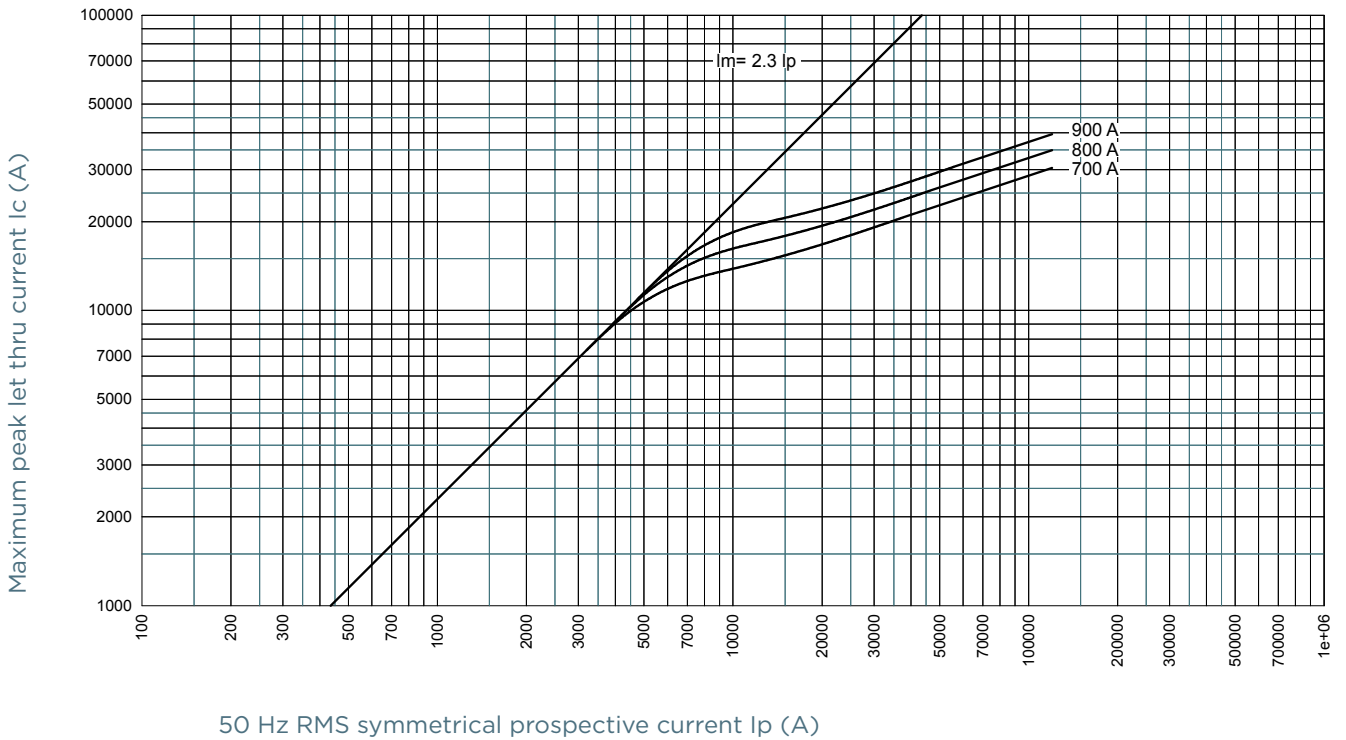


CUT-OFF CURRENT CHARACTERISTIC

Size 72 aR 850V

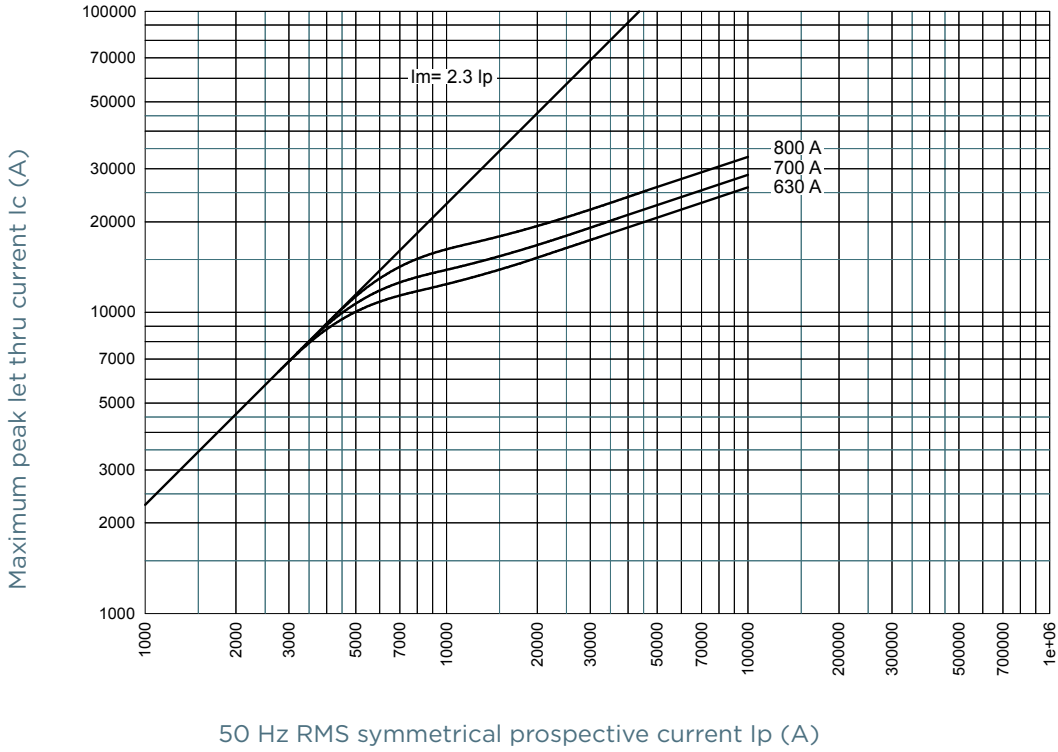


Size 72 aR 1000V

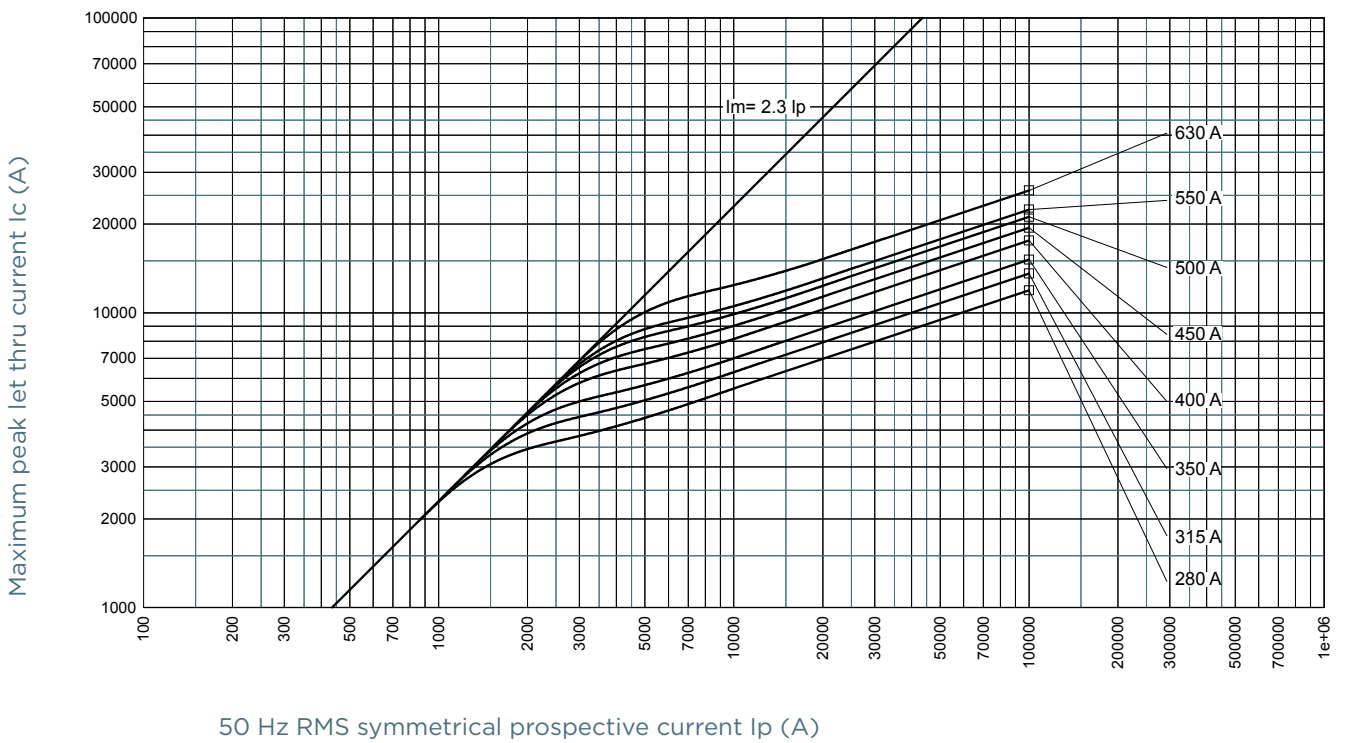


CUT-OFF CURRENT CHARACTERISTIC

Size 72 aR 1100V

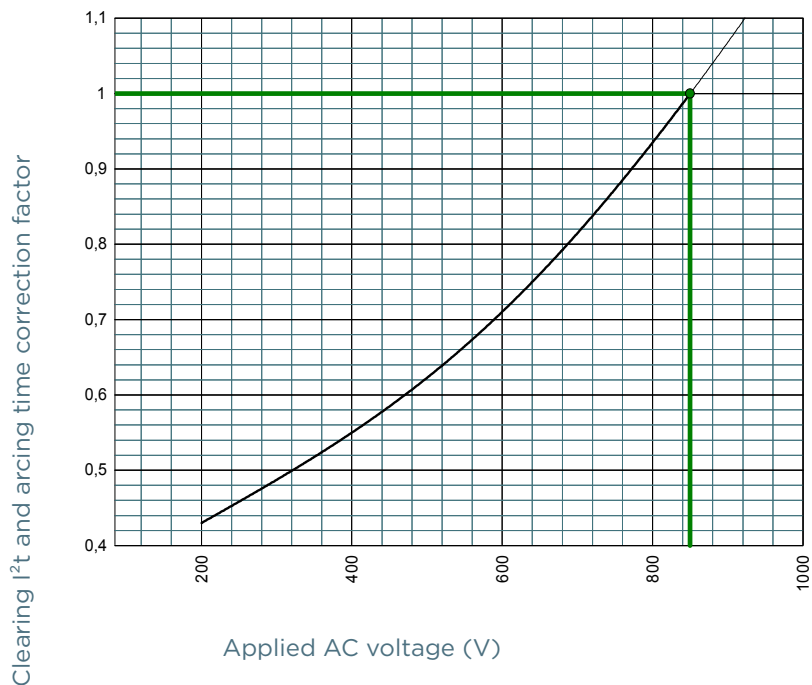


Size 72 aR 1250V

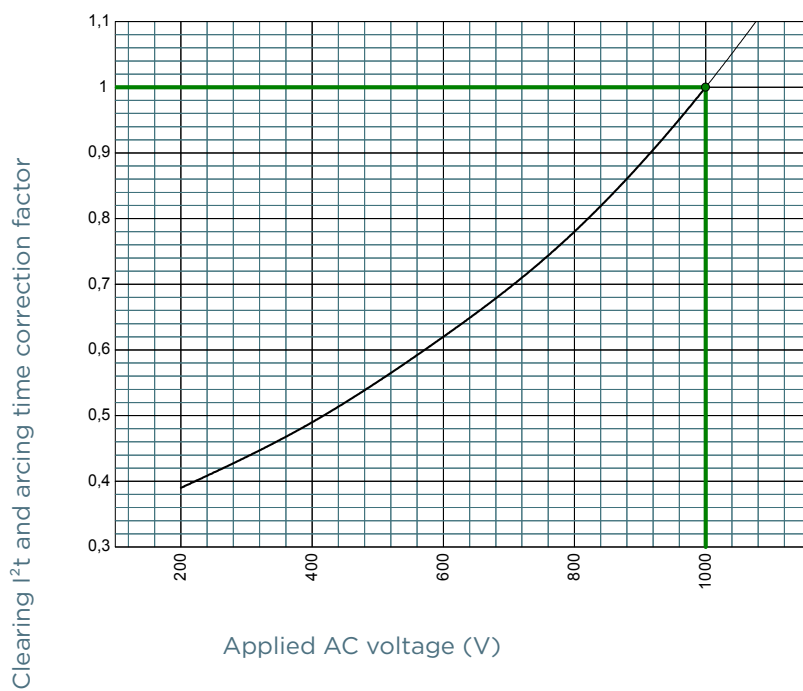


I²T MULTIPLIER COEFFICIENT

Size 72 aR 850V

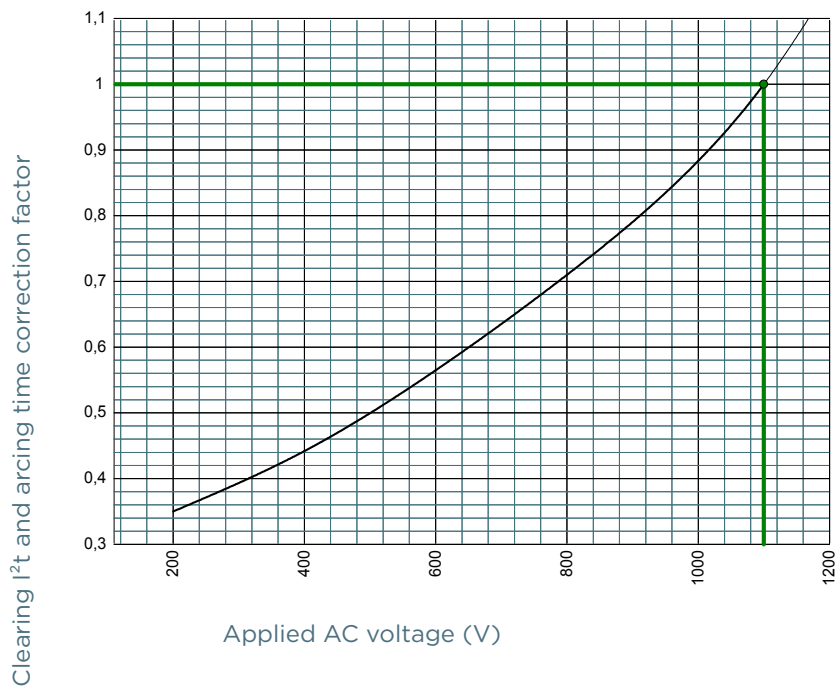


Size 72 aR 1000V

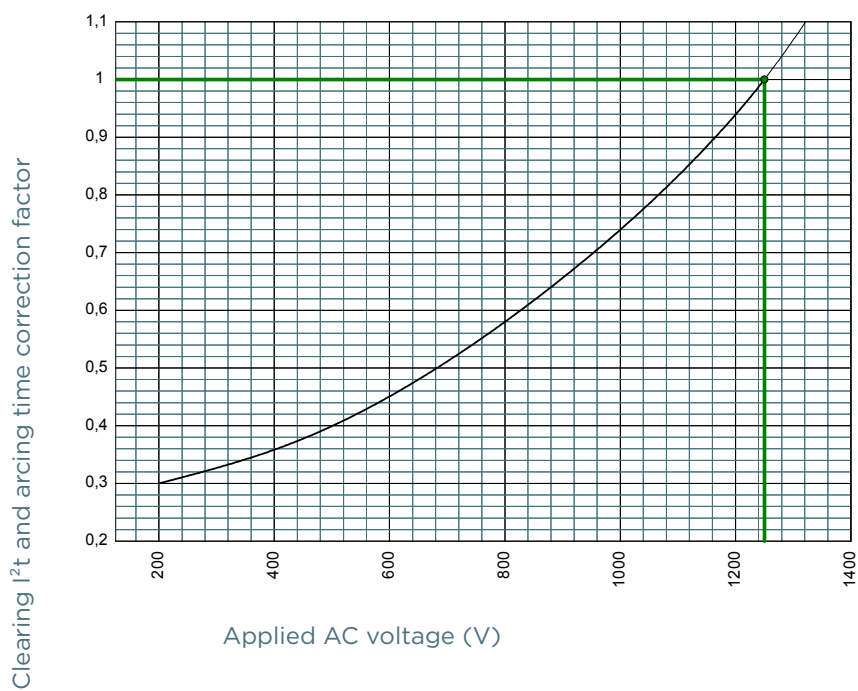


I²T MULTIPLIER COEFFICIENT

Size 72 aR 1100V

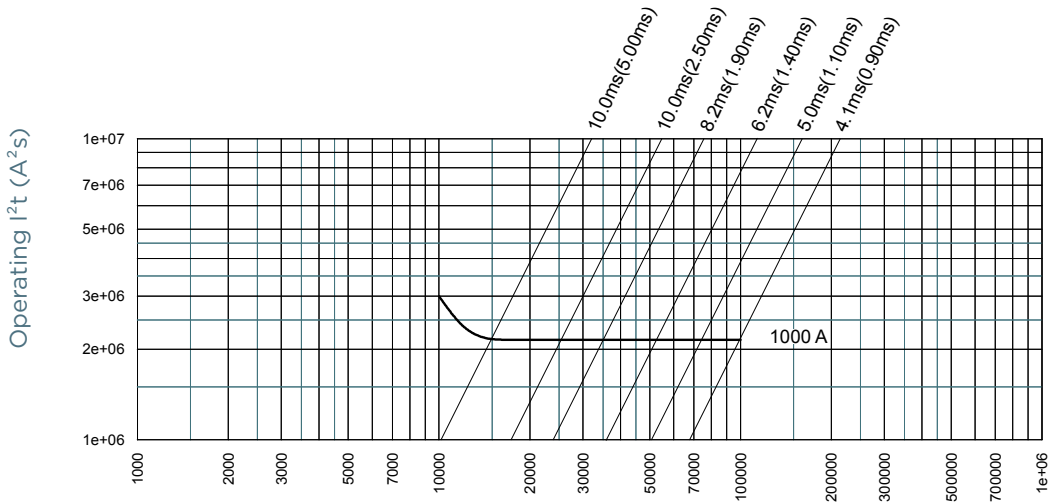


Size 72 aR 1250V



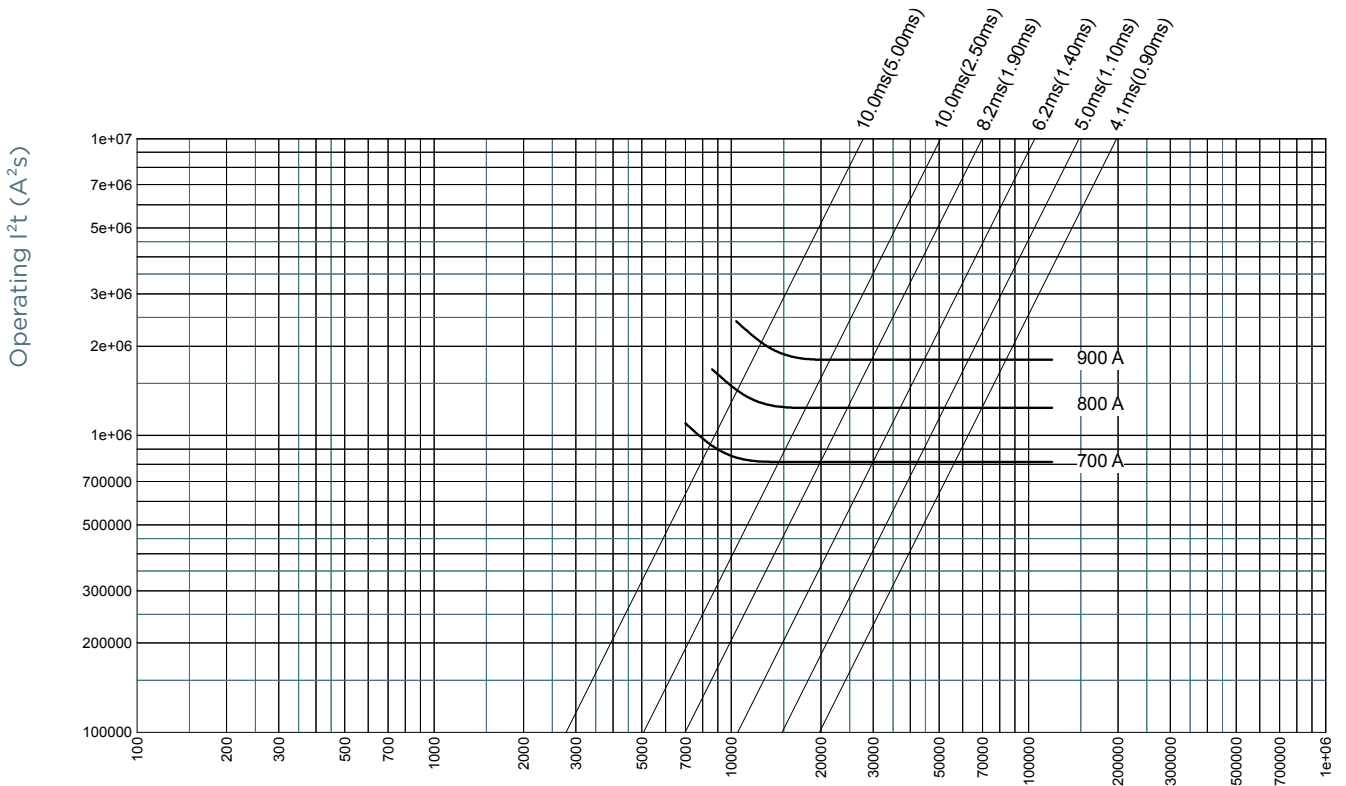
CHARACTERISTICS TOTAL I²T CURVE

Size 72 aR 850V



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

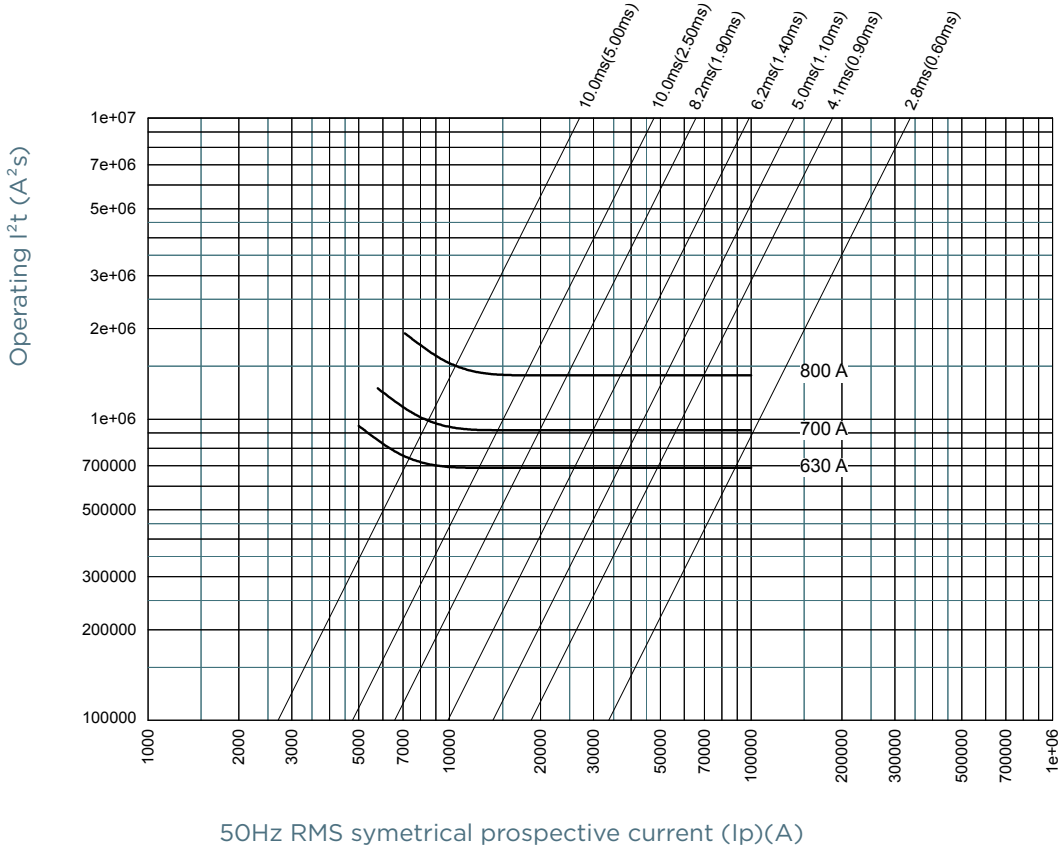
Size 72 aR 1000V



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

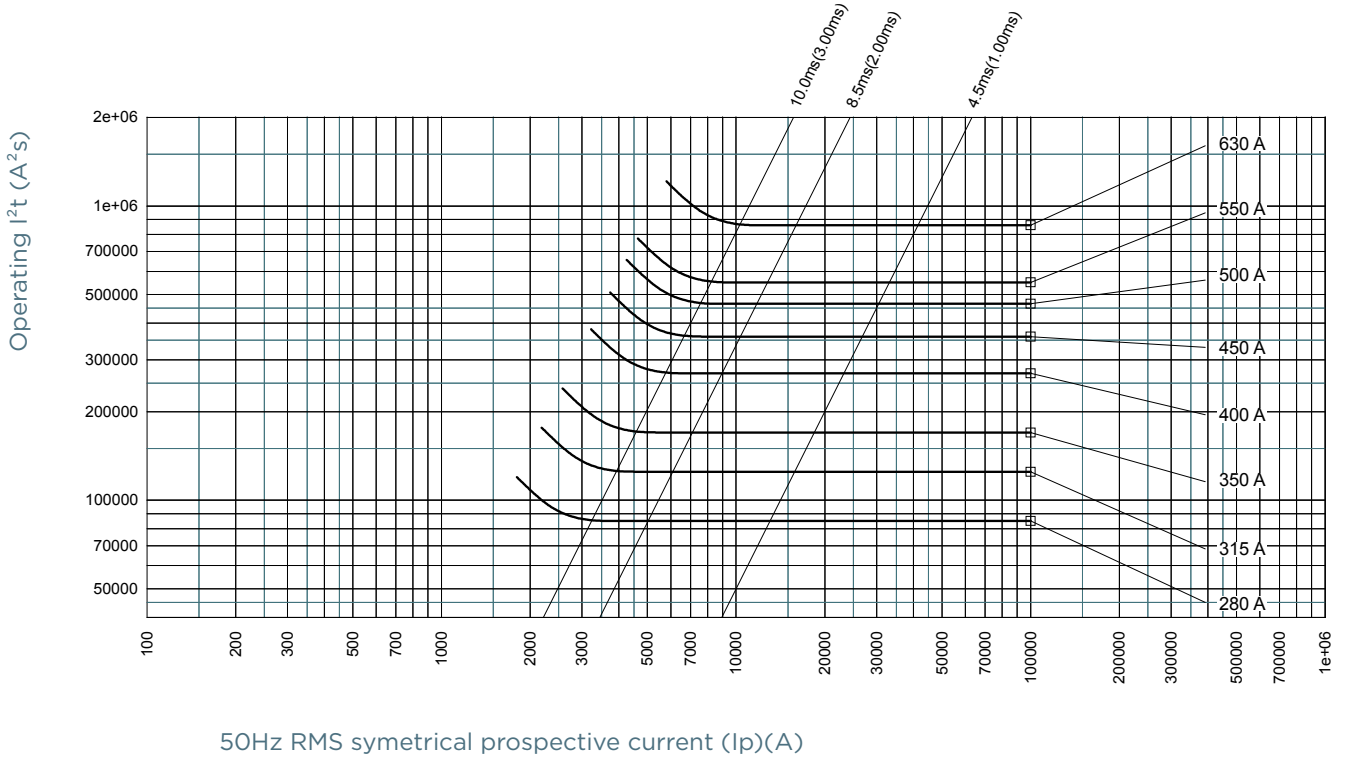
CHARACTERISTICS TOTAL I²T CURVE

Size 72 aR 1100V



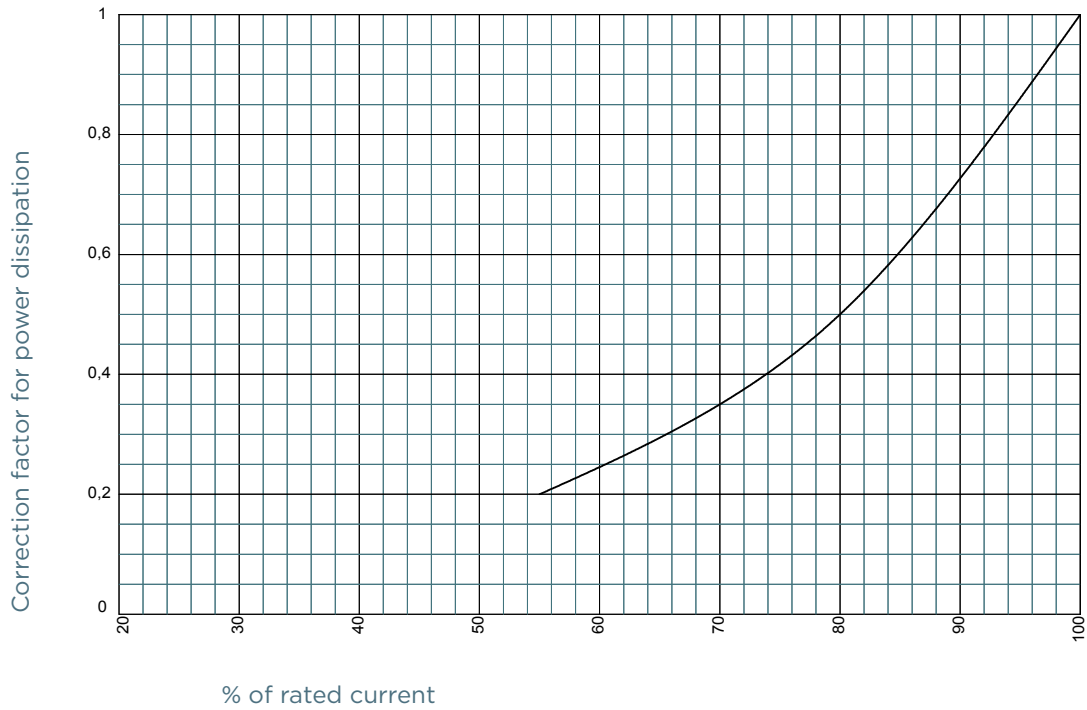
CHARACTERISTICS TOTAL I²T CURVE

Size 72 aR 1250V

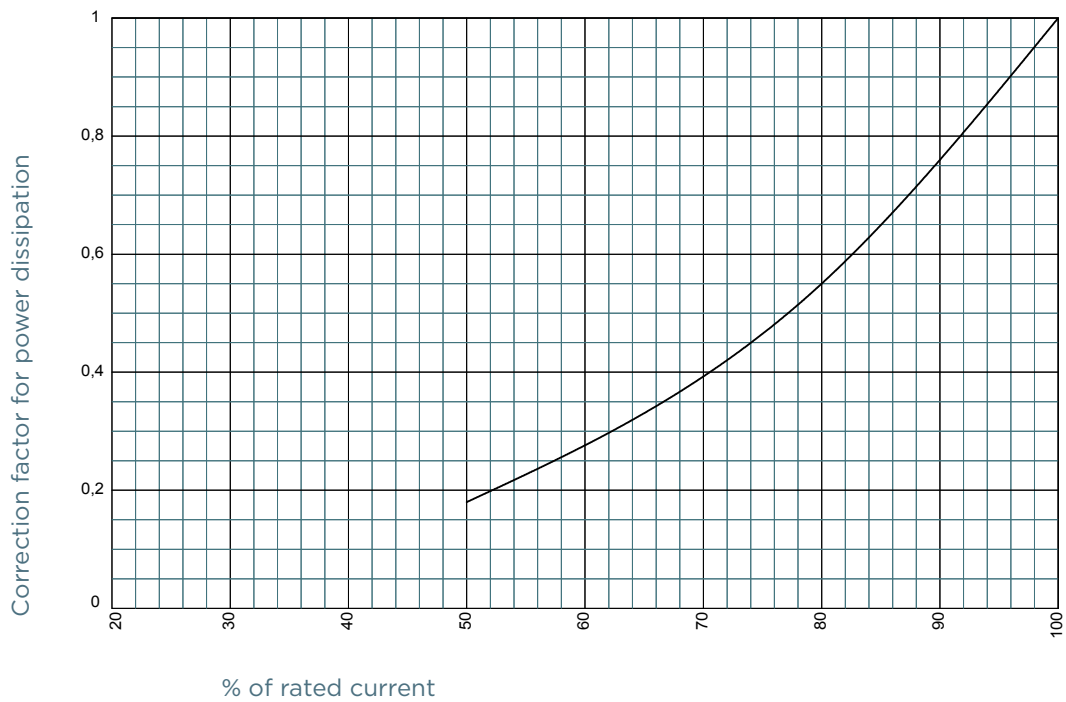


POWER DISSIPATION

Size 72 aR 850V - 1000V - 1100V

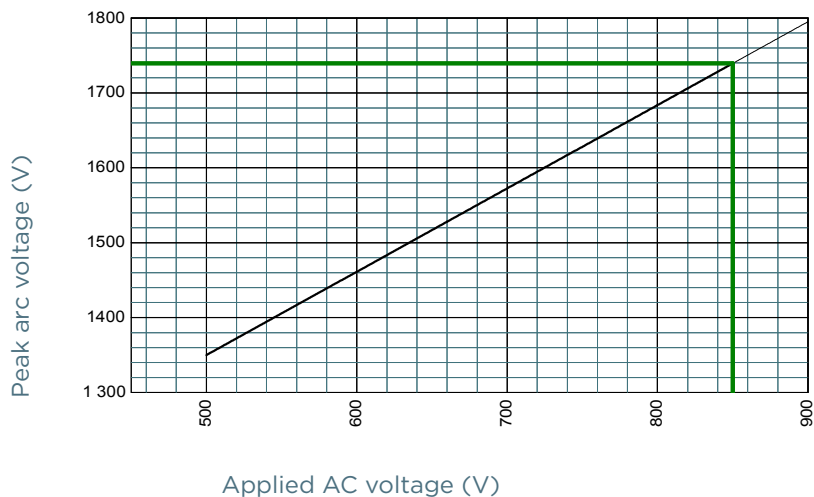


Size 72 aR 1250V

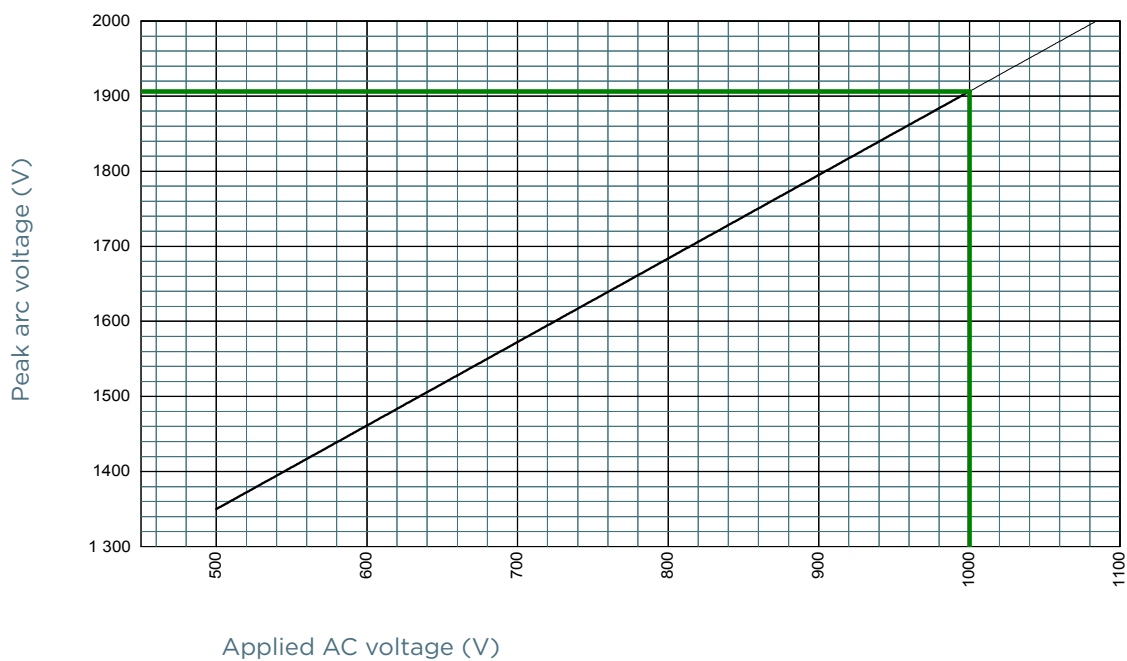


PEAK ARC VOLTAGE

Size 72 aR 850V

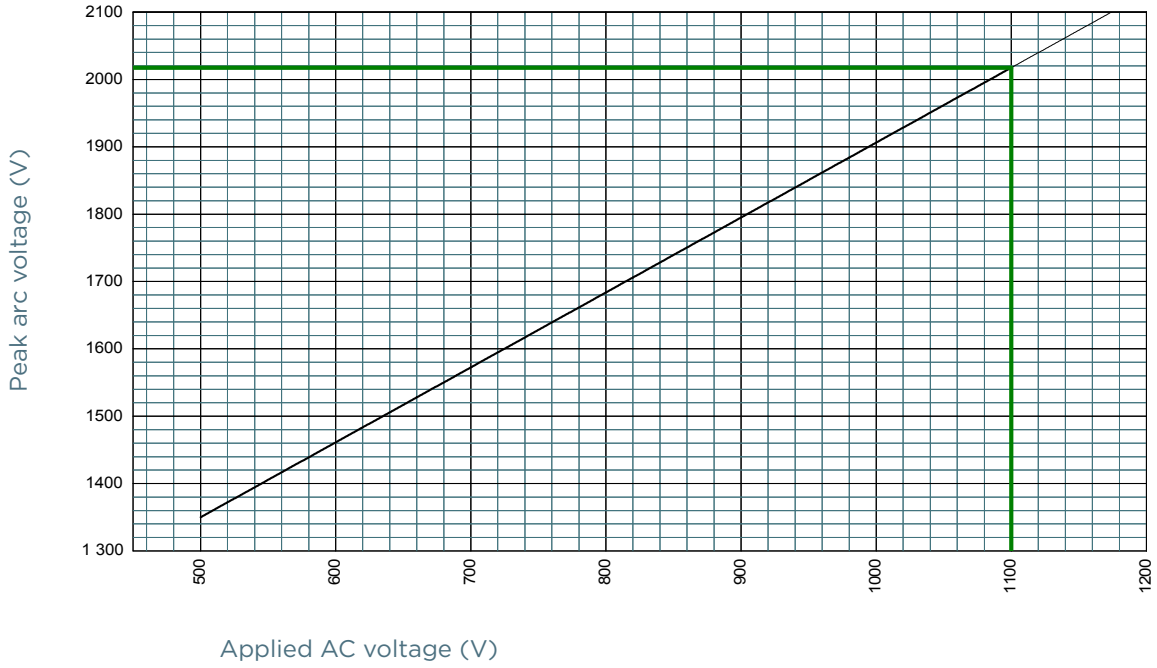


Size 72 aR 1000V

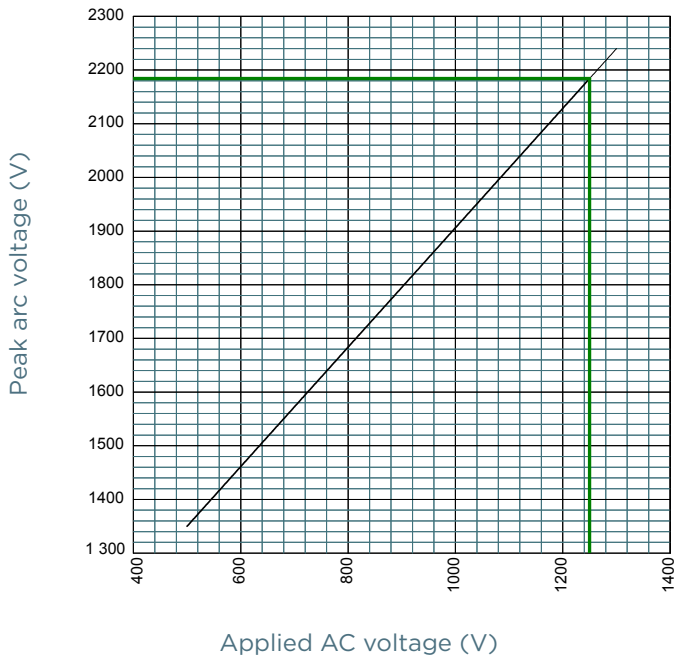


PEAK ARC VOLTAGE

Size 72 aR 1100V



Size 72 aR 1250V

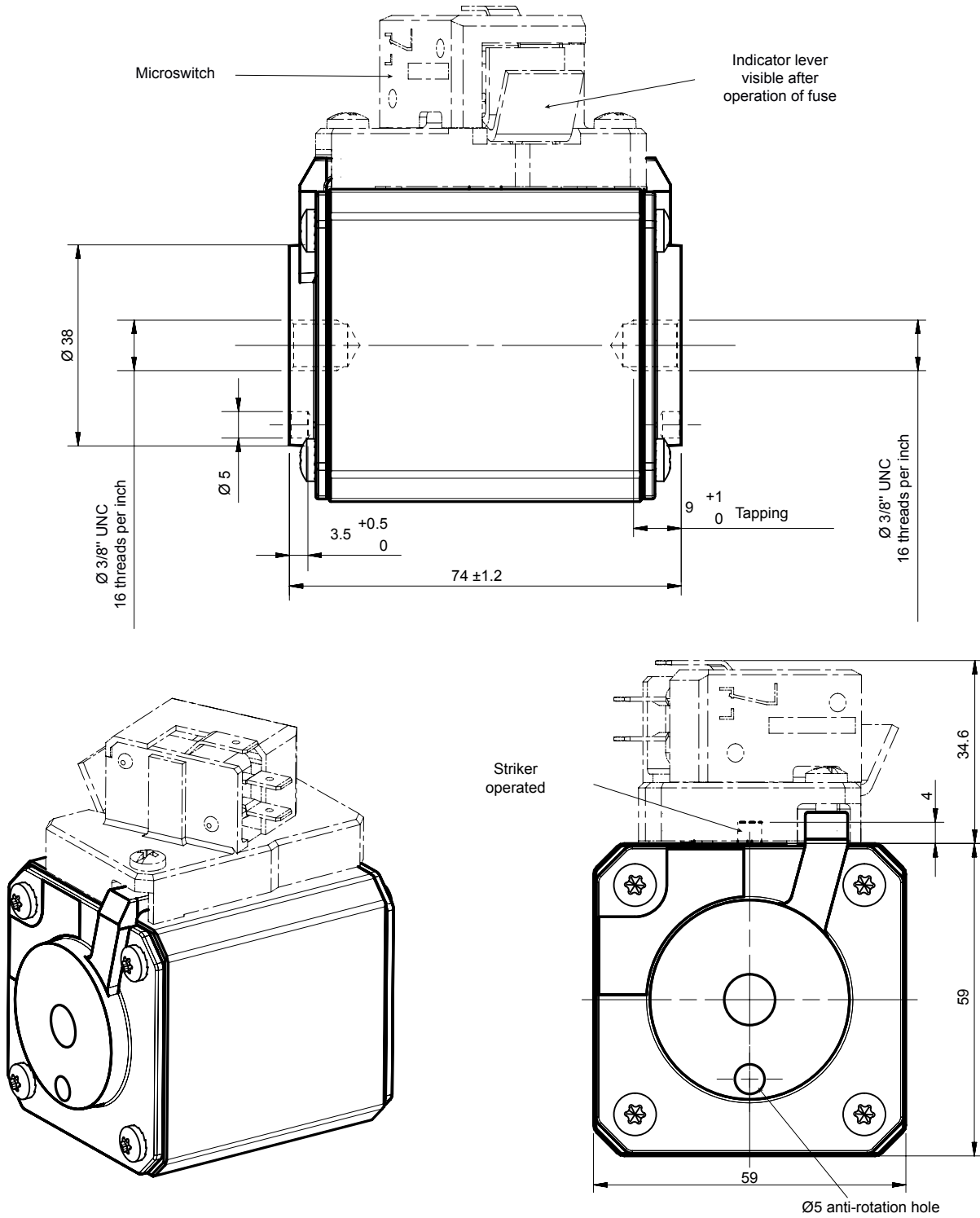


Protistor® size 72 aR

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

DIMENSIONS

Size 72 aR type TTI (109499)



Dimensions in mm

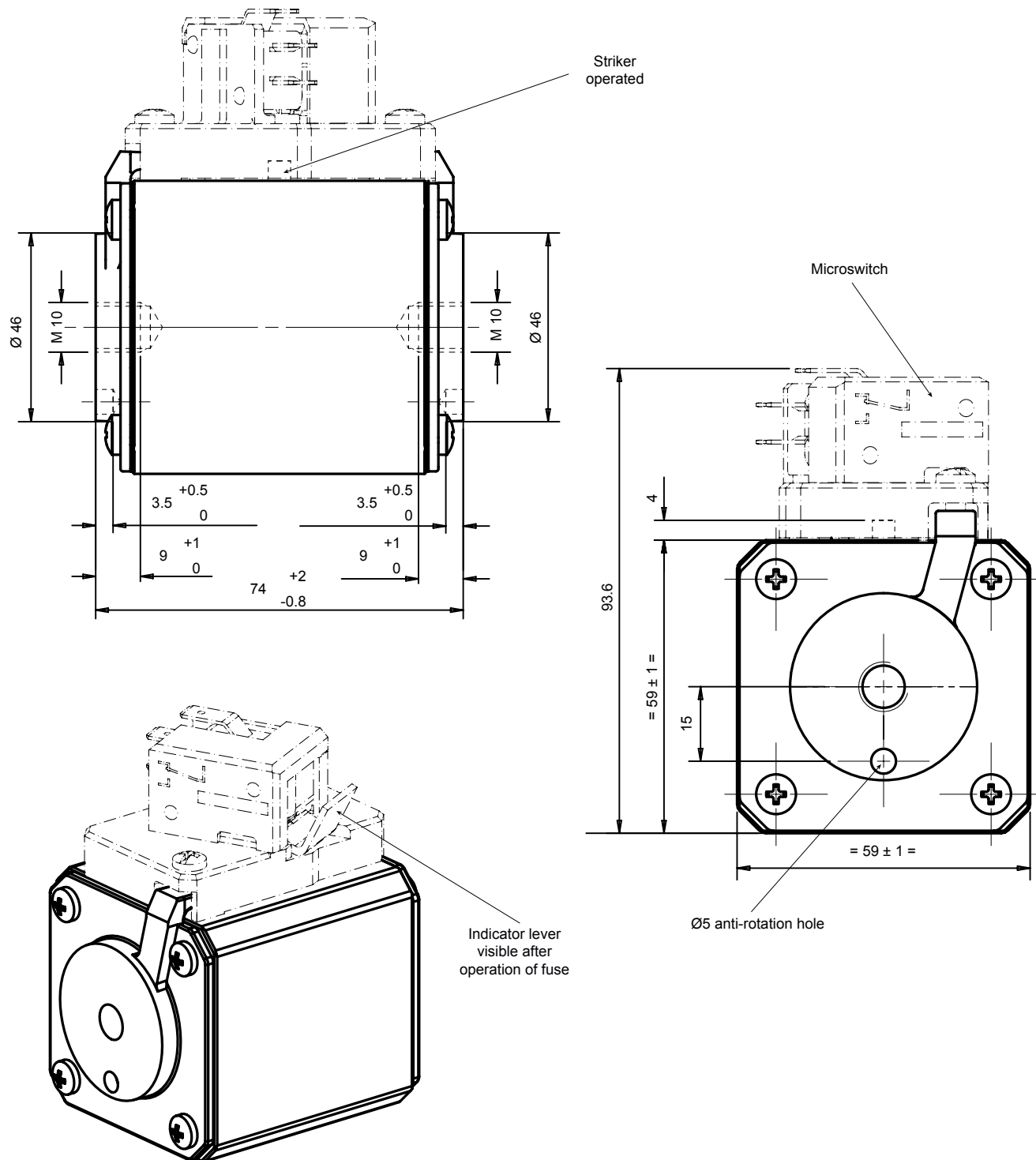
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

Protistor® size 72 aR

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

DIMENSIONS

Size 72 aR type TTF (105700)



Dimensions in mm

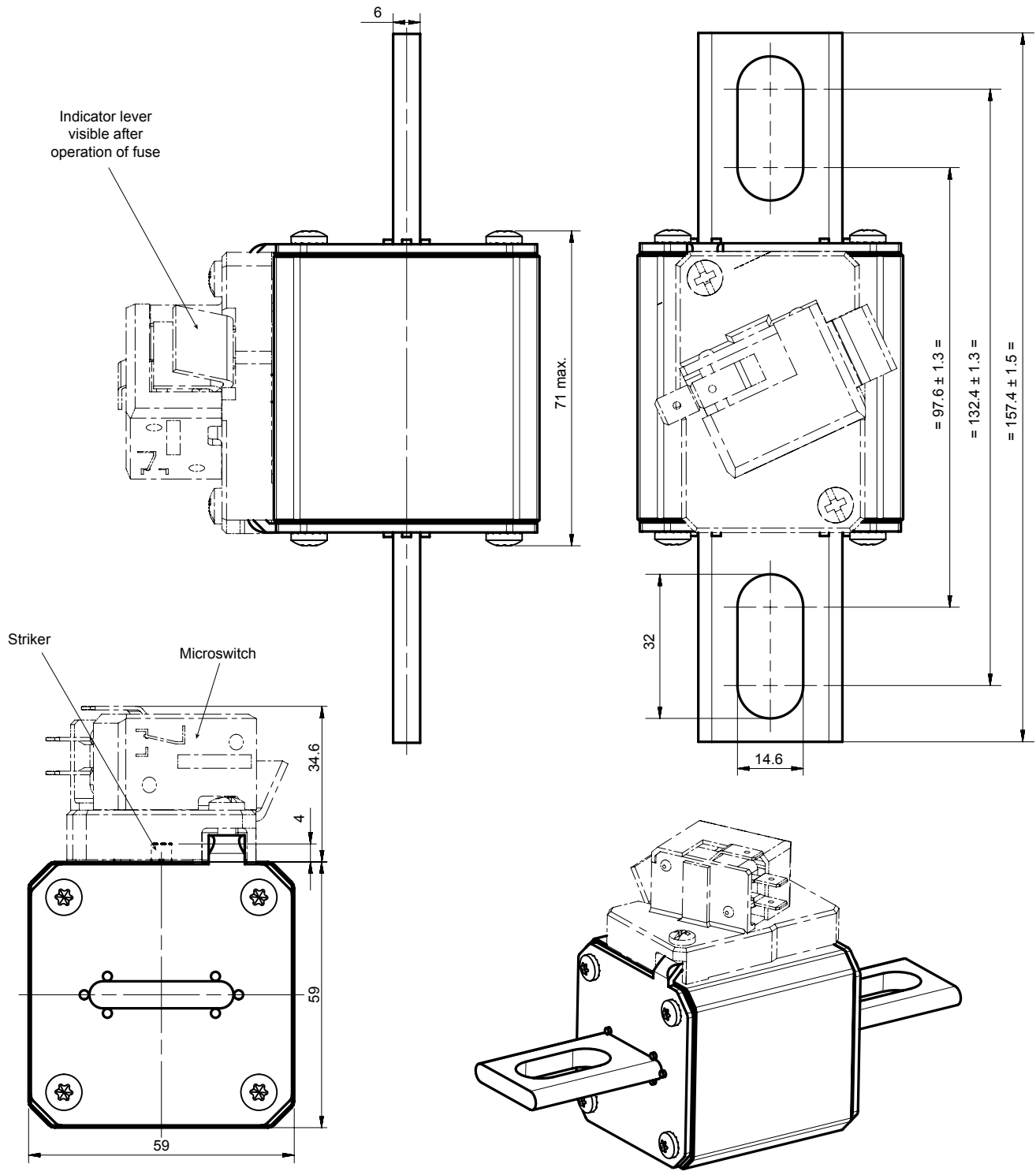
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

Protistor® size 72 aR

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

DIMENSIONS

Size 72 aR type LI (105923)



Dimensions in mm

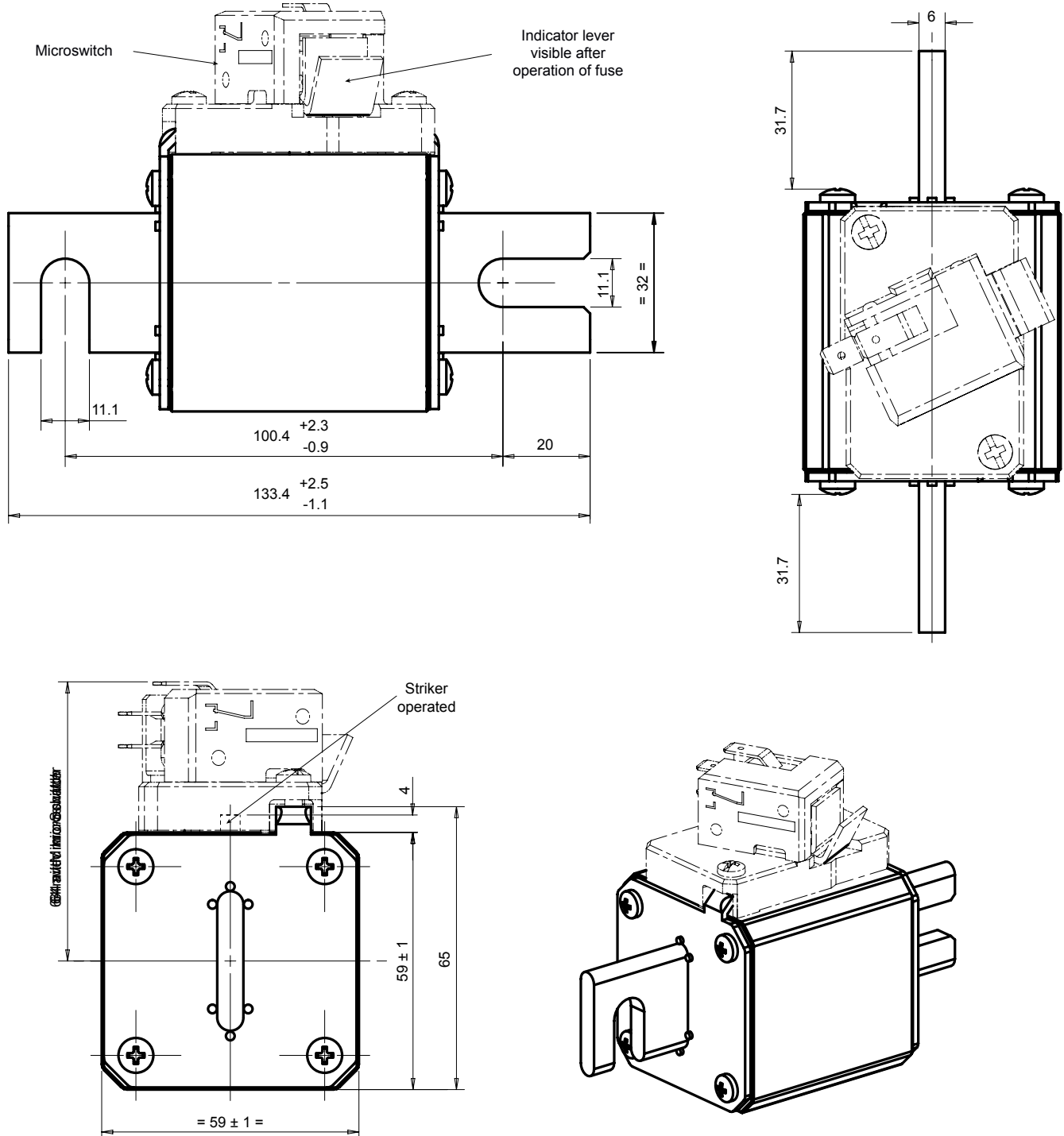
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

Protistor® size 72 aR

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

DIMENSIONS

Size 72 aR type DIN 110 (105713)



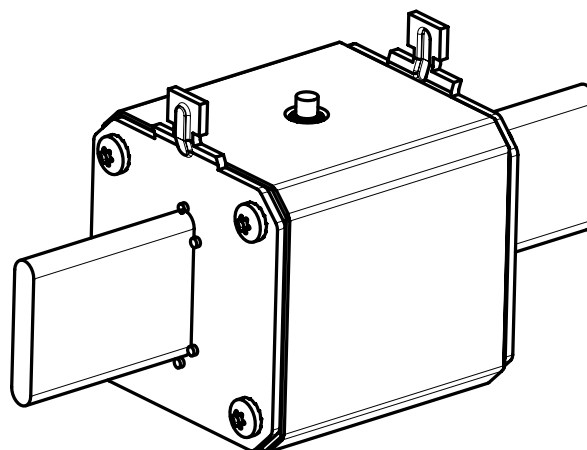
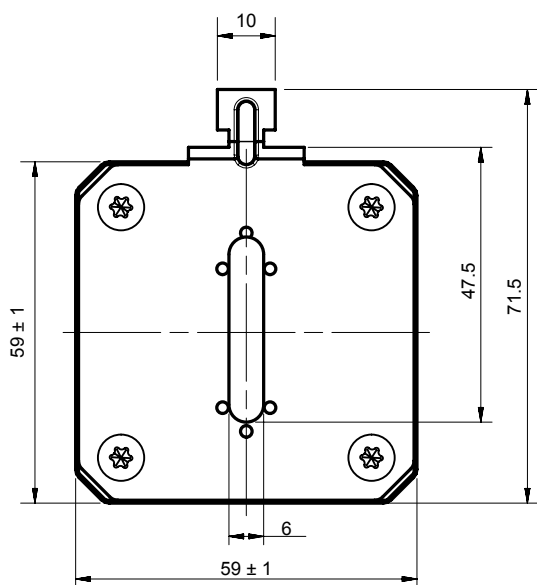
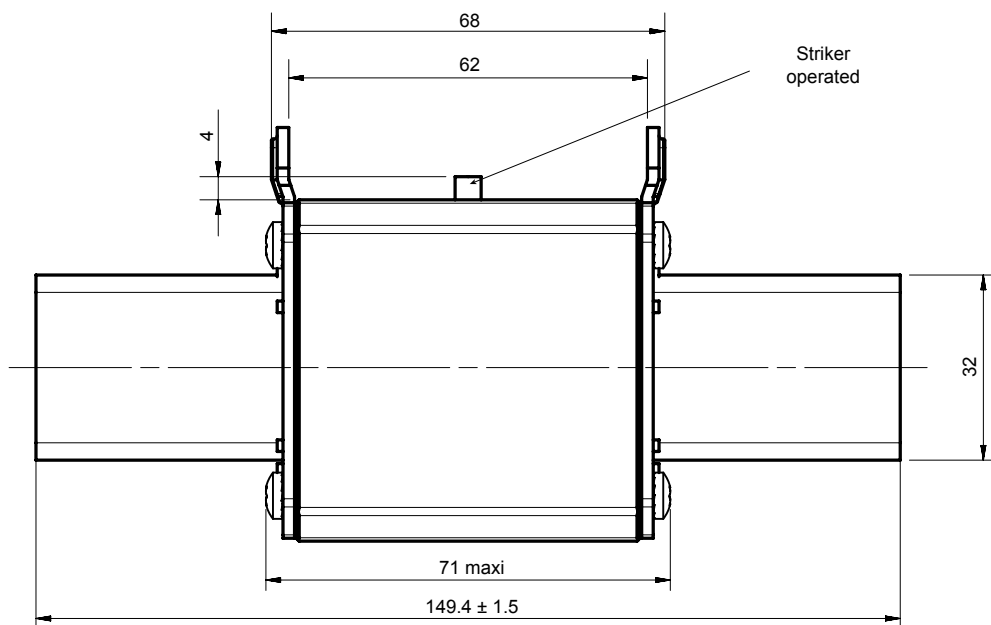
MERSEN reserves the right to change, update or correct, without notice, any information contained in this datasheet.

Protistor® size 72 aR

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

DIMENSIONS

Size 72 aR type PA (107131)



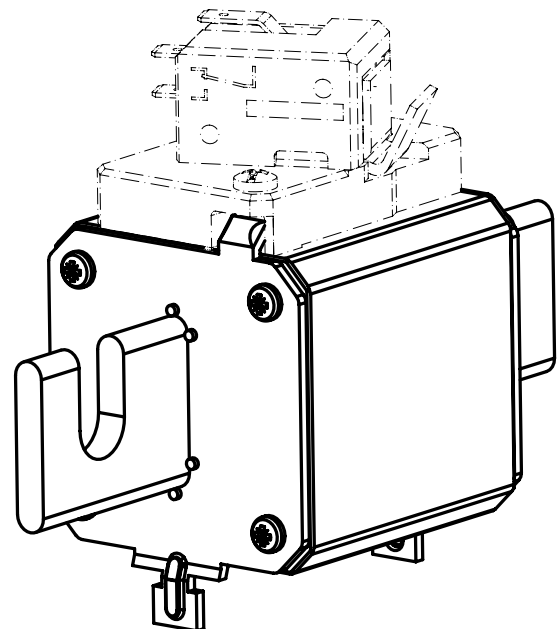
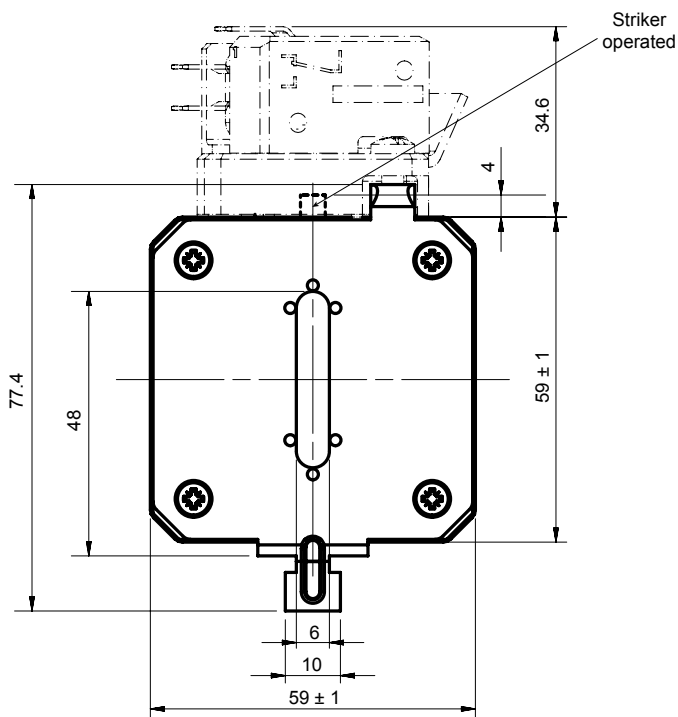
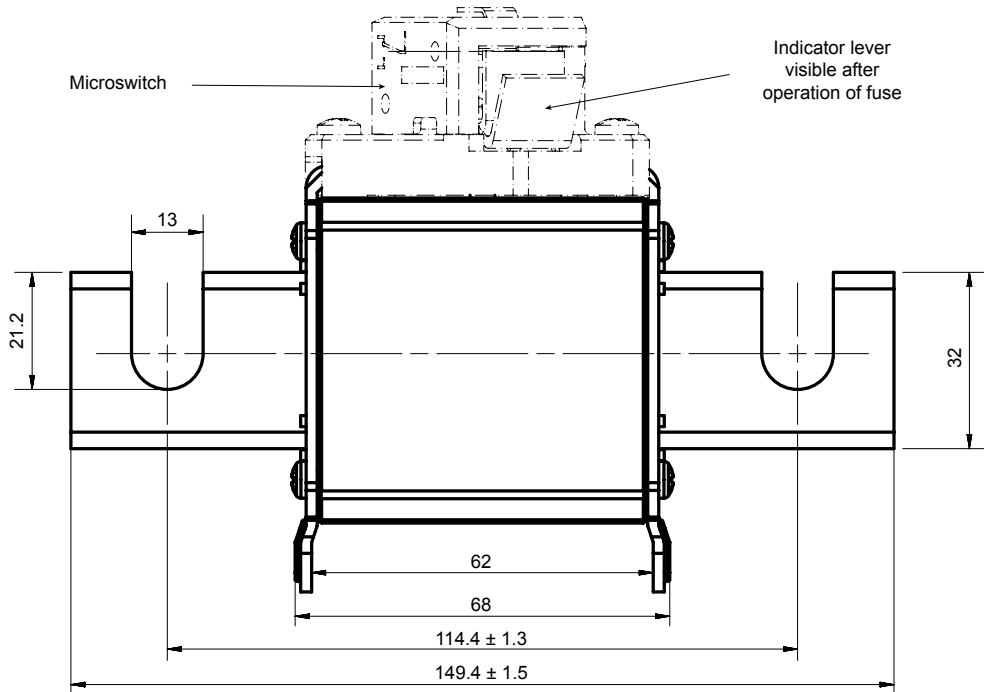
Dimensions in mm

Protistor® size 72 aR

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

DIMENSIONS

Size 72 aR type EF (105881)



Dimensions in mm

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

Protistor® size 72 aR

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

APPENDIX

A130UD72TTI280	N301036	A130URD72TTI0280	2
A130UD72TTI315	P301037	A 130 URD 72 TTI 0315	2
A130UD72TTI350	Q301038	A130URD72TTI0350	2
A130UD72TTI400	R301039	A 130 URD 72 TTI 0400	2
A130UD72TTI450	S301040	A 130 URD 72 TTI 0450	2
A130UD72TTI500	T301041	A 130 URD 72 TTI 0500	2
A130UD72TTI550	V301042	A130URD72TTI0550	2
A130UD72TTI630	W301043	A 130 URD 72 TTI 0630	2
A120UD72TTI700	X301044	A 120 URD 72 TTI 0700	2
A120UD72TTI800	Y301045	A 120 URD 72 TTI 0800	2
PC72UD13C315TF	Z300494	12,5 URD 72 TTF 0315	2
PC72UD13C350TF	A300495	12,5 URD 72 TTF 0350	2
PC72UD13C400TF	B300496	12,5 URD 72 TTF 0400	2
PC72UD13C450TF	C300497	12,5 URD 72 TTF 0450	2
PC72UD13C500TF	D300498	12,5 URD 72 TTF 0500	2
PC72UD13C550TF	E300499	12,5 URD 72 TTF 0550	2
PC72UD13C630TF	F300500	12,5 URD 72 TTF 0630	2
PC72UD11C700TF	G300501	11 URD 72 TTF 0700	2
PC72UD11C800TF	H300502	11 URD 72 TTF 0800	2
PC72UD10C900TF	G300869	10 URD 72 TTF 0900	2
PC72UD85V1000TF	T301294	8,5 URD 72 TTF 1000	2
A130UD72LI280	Q300670	A130URD72LI0280	2
A130UD72LI315	R300671	A 130 URD 72 LI 0315	2
A130UD72LI350	S300672	A130URD72LI0350	2
A130UD72LI400	T300673	A 130 URD 72 LI 0400	2
A130UD72LI450	V300674	A 130 URD 72 LI 0450	2
A130UD72LI500	W300675	A 130 URD 72 LI 0500	2
A130UD72LI550	X300676	A 130 URD 72 LI 0550	2
A120UD72LI630	Y300677	A 120 URD 72 LI 0630	2
A110UD72LI700	Z300678	A 110 URD 72 LI 0700	2
A110UD72LI800	A300679	A 110 URD 72 LI 0800	2
PC72UD13C315PA	H301836	12,5 URD 72 PA 0315	3
PC72UD13C400PA	B300841	12,5 URD 72 PA 0400	3
PC72UD13C450PA	C300842	12,5 URD 72 PA 0450	3
PC72UD13C500PA	P302716	12,5 URD 72 PA 0500	3
PC72UD11C630PA	N301220	11 URD 72 PA 0630	3
PC72UD10C800PA	M302047	10 URD 72 PA 0800	3
PC72UD13C280EF	J300618	12,5 URD 72 EF 0280	3
PC72UD13C315EF	K300619	12,5 URD 72 EF 0315	3
PC72UD13C350EF	L300620	12,5 URD 72 EF 0350	3
PC72UD13C400EF	M300621	12,5 URD 72 EF 0400	3
PC72UD13C450EF	N300622	12,5 URD 72 EF 0450	3
PC72UD13C500EF	P300623	12,5 URD 72 EF 0500	3
PC72UD11C630EF	R300625	11 URD 72 EF 0630	3
PC72UD10C700EF	S300626	10 URD 72 EF 0700	3
PC72UD10C800EF	T300627	10 URD 72 EF 0800	3
PC72UD13C280D1A	P300554	12,5 URD 72 D11 A 0280	3
PC72UD13C315D1A	Q300555	12,5 URD 72 D11 A 0315	3
PC72UD13C350D1A	R300556	12,5 URD 72 D11 A 0350	3
PC72UD13C400D1A	S300557	12,5 URD 72 D11 A 0400	3
PC72UD13C450D1A	T300558	12,5 URD 72 D11 A 0450	3
PC72UD13C500D1A	V300559	12,5 URD 72 D11 A 0500	3
PC72UD13C550D1A	W300560	12,5 URD 72 D11 A 0550	3
PC72UD11C630D1A	X300561	11 URD 72 D11 A 0630	3
PC72UD10C700D1A	Y300562	10 URD 72 D11 A 0700	3
PC72UD10C800D1A	Z300563	10 URD 72 D11 A 0800	3

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

