

# Protistor® size 73 aR

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

## 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.

### Features Benefits

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

### Applications

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

### Technical data overview

Voltage Range AC	600 ... 1250 VAC
Ampere Range (A)	315 ... 1800 A
Speed/Characteristic	aR
I.R. AC	100 ... 185 kA
Product Size	73



### Standards

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



# Protistor® size 73 aR

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



## Product range

### Size 73 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
A130UD73TTI315	Z301046	1250 V	1300 V	315 A	12 kA <sup>2</sup> s	95 kA <sup>2</sup> s	100 kA	84 W	1250 g	1
A130UD73TTI350	A301047	1250 V	1300 V	350 A	17 kA <sup>2</sup> s	140 kA <sup>2</sup> s	100 kA	86 W	1250 g	1
A130UD73TTI400	B301048	1250 V	1300 V	400 A	25 kA <sup>2</sup> s	205 kA <sup>2</sup> s	100 kA	93 W	1250 g	1
A130UD73TTI450	C301049	1250 V	1300 V	450 A	35.5 kA <sup>2</sup> s	290 kA <sup>2</sup> s	100 kA	99 W	1250 g	1
A130UD73TTI500	D301050	1250 V	1300 V	500 A	44 kA <sup>2</sup> s	360 kA <sup>2</sup> s	100 kA	112 W	1250 g	1
A130UD73TTI550	E301051	1250 V	1300 V	550 A	57 kA <sup>2</sup> s	465 kA <sup>2</sup> s	100 kA	116 W	1250 g	1
A130UD73TTI630	F301052	1250 V	1300 V	630 A	84 kA <sup>2</sup> s	680 kA <sup>2</sup> s	100 kA	125 W	1250 g	1
A130UD73TTI700	G301053	1250 V	1300 V	700 A	114 kA <sup>2</sup> s	900 kA <sup>2</sup> s	100 kA	135 W	1250 g	1
A130UD73TTI800	H301054	1250 V	1300 V	800 A	189 kA <sup>2</sup> s	1530 kA <sup>2</sup> s	100 kA	136 W	1250 g	1
A130UD73TTI900	J301055	1200 V	1300 V	900 A	250 kA <sup>2</sup> s	1870 kA <sup>2</sup> s	100 kA	150 W	1250 g	1
A110UD73TTI1000	K301056	1000 V	1100 V	1000 A	370 kA <sup>2</sup> s	2130 kA <sup>2</sup> s	120 kA	152 W	1250 g	1
A100UD73TTI1100	L301057	950 V	1000 V	1100 A	445 kA <sup>2</sup> s	2430 kA <sup>2</sup> s	110 kA	168 W	1250 g	1
A100UD73TTI1250	M301058	900 V	1000 V	1250 A	585 kA <sup>2</sup> s	3080 kA <sup>2</sup> s	110 kA	186 W	1250 g	1
A090UD73TTI1400	N301059	850 V	900 V	1400 A	755 kA <sup>2</sup> s	3700 kA <sup>2</sup> s	185 kA	210 W	1250 g	1
A070UD73TTI1600	Q300877	690 V	700 V	1600 A	1430 kA <sup>2</sup> s	5740 kA <sup>2</sup> s	185 kA	203 W	1250 g	1
A065UD73TTI1800	R300878	600 V	650 V	1800 A	2040 kA <sup>2</sup> s	7150 kA <sup>2</sup> s	120 kA	206 W	1250 g	1



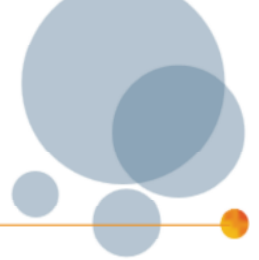
### Size 73 type TTF M12 threaded terminals

PC73UD10C1000TF

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
PC73UD13C315TF	J300503	1250 V	1300 V	315 A	12 kA <sup>2</sup> s	95 kA <sup>2</sup> s	100 kA	84 W	1250 g	1
PC73UD13C350TF	K300504	1250 V	1300 V	350 A	17 kA <sup>2</sup> s	140 kA <sup>2</sup> s	100 kA	86 W	1106 g	1
PC73UD13C400TF	L300505	1250 V	1300 V	400 A	25 kA <sup>2</sup> s	205 kA <sup>2</sup> s	100 kA	93 W	1106 g	1
PC73UD13C450TF	M300506	1250 V	1300 V	450 A	35.5 kA <sup>2</sup> s	290 kA <sup>2</sup> s	100 kA	99 W	1106 g	1
PC73UD13C500TF	N300507	1250 V	1300 V	500 A	44 kA <sup>2</sup> s	360 kA <sup>2</sup> s	100 kA	112 W	1106 g	1
PC73UD13C550TF	P300508	1250 V	1300 V	550 A	57 kA <sup>2</sup> s	465 kA <sup>2</sup> s	100 kA	116 W	1106 g	1
PC73UD13C630TF	Q300509	1250 V	1300 V	630 A	84 kA <sup>2</sup> s	680 kA <sup>2</sup> s	100 kA	125 W	1106 g	1
PC73UD13C700TF	R300510	1250 V	1300 V	700 A	114 kA <sup>2</sup> s	900 kA <sup>2</sup> s	100 kA	135 W	1106 g	1
PC73UD13C800TF	S300511	1250 V	1300 V	800 A	189 kA <sup>2</sup> s	1530 kA <sup>2</sup> s	100 kA	136 W	1106 g	1
PC73UD12C900TF	T300512	1200 V	1300 V	900 A	250 kA <sup>2</sup> s	1870 kA <sup>2</sup> s	100 kA	1510 W	1220 g	1
PC73UD10C1000TF	V300513	1000 V	1100 V	1000 A	370 kA <sup>2</sup> s	2130 kA <sup>2</sup> s	120 kA	152 W	1220 g	1
PC73UD95V11CTF	W300514	950 V	1000 V	1100 A	445 kA <sup>2</sup> s	2430 kA <sup>2</sup> s	110 kA	168 W	1220 g	1
PC73UD90V13CTF	T300696	900 V	1000 V	1250 A	585 kA <sup>2</sup> s	3080 kA <sup>2</sup> s	110 kA	186 W	1220 g	1
PC73UD85V14CTF	S300718	850 V	900 V	1400 A	755 kA <sup>2</sup> s	3700 kA <sup>2</sup> s	185 kA	210 W	1220 g	1
PC73UD69V16CTF	B301301	690 V	700 V	1600 A	1430 kA <sup>2</sup> s	5740 kA <sup>2</sup> s	185 kA	203 W	1220 g	1
PC73UD60V18CTF	C301302	600 V	650 V	1800 A	2040 kA <sup>2</sup> s	7150 kA <sup>2</sup> s	120 kA	206 W	1220 g	1

# Protistor® size 73 aR

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



## Product range

### Size 73 type 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
A130UD73LI315	B300680	1250 V	1300 V	315 A	12 kA <sup>2</sup> s	95 kA <sup>2</sup> s	100 kA	84 W	1250 g	1
A130UD73LI350	C300681	1250 V	1300 V	350 A	17 kA <sup>2</sup> s	140 kA <sup>2</sup> s	100 kA	86 W	1250 g	1
A130UD73LI400	D300682	1250 V	1300 V	400 A	25 kA <sup>2</sup> s	205 kA <sup>2</sup> s	100 kA	93 W	1250 g	1
A130UD73LI450	E300683	1250 V	1300 V	450 A	35.5 kA <sup>2</sup> s	290 kA <sup>2</sup> s	100 kA	100 W	1250 g	1
A120UD73LI500	F300684	1250 V	1300 V	500 A	44 kA <sup>2</sup> s	360 kA <sup>2</sup> s	100 kA	112 W	1250 g	1
A130UD73LI550	G300685	1250 V	1300 V	550 A	57 kA <sup>2</sup> s	465 kA <sup>2</sup> s	100 kA	120 W	1250 g	1
A130UD73LI630	H300686	1250 V	1300 V	630 A	84 kA <sup>2</sup> s	680 kA <sup>2</sup> s	100 kA	132 W	1250 g	1
A130UD73LI700	J300687	1200 V	1300 V	700 A	110 kA <sup>2</sup> s	900 kA <sup>2</sup> s	100 kA	146 W	1363 g	1
A120UD73LI800	K300688	1100 V	1200 V	800 A	190 kA <sup>2</sup> s	1230 kA <sup>2</sup> s	100 kA	148 W	1250 g	1
A110UD73LI900	L300689	1000 V	1100 V	900 A	250 kA <sup>2</sup> s	1440 kA <sup>2</sup> s	120 kA	170 W	1250 g	1
A100UD73LI1000	M300690	900 V	1000 V	1000 A	370 kA <sup>2</sup> s	1920 kA <sup>2</sup> s	110 kA	174 W	1160 g	1
A100UD73LI1100	N300691	900 V	1000 V	1100 A	445 kA <sup>2</sup> s	2280 kA <sup>2</sup> s	110 kA	208 W	1363 g	1
A100UD73LI1250	J301193	900 V	1000 V	1250 A	585 kA <sup>2</sup> s	3080 kA <sup>2</sup> s	110 kA	234 W	1250 g	1
A90UD73LI1400	K301194	850 V	900 V	1400 A	755 kA <sup>2</sup> s	3700 kA <sup>2</sup> s	100 kA	260 W	1250 g	1

### Size 73 type NH style blade contacts

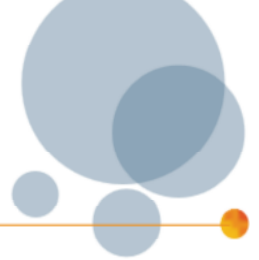
Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
PC73UD13C450PA	X302976	1250 V	1300 V	450 A	35.5 kA <sup>2</sup> s	290 kA <sup>2</sup> s	100 kA	100 W	1160 g	3
PC73UD13C500PA	S302719	1250 V	1300 V	500 A	44 kA <sup>2</sup> s	360 kA <sup>2</sup> s	100 kA	112 W	1160 g	3
PC73UD13C550PA	Y302977	1250 V	1300 V	550 A	57 kA <sup>2</sup> s	465 kA <sup>2</sup> s	100 kA	120 W	1160 g	3
PC73UD13C630PA	D300843	1250 V	1300 V	630 A	84 kA <sup>2</sup> s	680 kA <sup>2</sup> s	100 kA	132 W	1160 g	3
PC73UD12C700PA	B301784	1200 V	1300 V	700 A	110 kA <sup>2</sup> s	900 kA <sup>2</sup> s	100 kA	146 W	1160 g	3
<b>PC73UD11C800PA</b>	<b>Z301966</b>	<b>1100 V</b>	<b>1200 V</b>	<b>800 A</b>	<b>190 kA<sup>2</sup>s</b>	<b>1230 kA<sup>2</sup>s</b>	<b>100 kA</b>	<b>148 W</b>	<b>1160 g</b>	<b>3</b>
PC73UD10C900PA	F302685	1000 V	1100 V	900 A	250 kA <sup>2</sup> s	1440 kA <sup>2</sup> s	120 kA	170 W	1160 g	3
PC73UD90V10CPA	R302718	900 V	1000 V	1000 A	370 kA <sup>2</sup> s	1920 kA <sup>2</sup> s	110 kA	174 W	1160 g	3
PC73UD90V11CPA	Q302717	900 V	1000 V	1100 A	445 kA <sup>2</sup> s	2280 kA <sup>2</sup> s	110 kA	208 W	1160 g	3
PC73UD85V14CPA	G302686	900 V	1000 V	1250 A	585 kA <sup>2</sup> s	3080 kA <sup>2</sup> s	110 kA	234 W	1160 g	3
A090UD73PA1400	G302709	850 V	900 V	1400 A	755 kA <sup>2</sup> s	3700 kA <sup>2</sup> s	100 kA	260 W	1160 g	3

### Size 73 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 I <sub>n</sub>	Weight	Package
PC73UD13C315EF	V300628	1250 V	1300 V	315 A	12 kA <sup>2</sup> s	95 kA <sup>2</sup> s	100 kA	84 W	1110 g	1
PC73UD13C350EF	W300629	1250 V	1300 V	350 A	17 kA <sup>2</sup> s	140 kA <sup>2</sup> s	100 kA	86 W	1150 g	1
PC73UD13C400EF	X300630	1250 V	1300 V	400 A	25 kA <sup>2</sup> s	205 kA <sup>2</sup> s	100 kA	93 W	1150 g	1
PC73UD13C450EF	Y300631	1250 V	1300 V	450 A	35.5 kA <sup>2</sup> s	290 kA <sup>2</sup> s	100 kA	100 W	1150 g	1
PC73UD13C500EF	Z300632	1250 V	1300 V	500 A	44 kA <sup>2</sup> s	360 kA <sup>2</sup> s	100 kA	112 W	1110 g	1
PC73UD13C550EF	A300633	1250 V	1300 V	550 A	57 kA <sup>2</sup> s	465 kA <sup>2</sup> s	100 kA	120 W	1110 g	1
PC73UD13C630EF	B300634	1250 V	1300 V	630 A	84 kA <sup>2</sup> s	680 kA <sup>2</sup> s	100 kA	132 W	1110 g	1
PC73UD12C700EF	C300635	1200 V	1300 V	700 A	110 kA <sup>2</sup> s	900 kA <sup>2</sup> s	100 kA	146 W	1150 g	1
PC73UD11C800EF	D300636	1100 V	1200 V	800 A	190 kA <sup>2</sup> s	1230 kA <sup>2</sup> s	100 kA	148 W	1110 g	1
PC73UD10C900EF	E300637	1000 V	1100 V	900 A	250 kA <sup>2</sup> s	1440 kA <sup>2</sup> s	120 kA	170 W	1110 g	1
PC73UD90V10CEF	F300638	900 V	1000 V	1000 A	370 kA <sup>2</sup> s	1920 kA <sup>2</sup> s	110 kA	174 W	1110 g	1
PC73UD90V11CEF	G300639	900 V	1000 V	1100 A	445 kA <sup>2</sup> s	2280 kA <sup>2</sup> s	110 kA	208 W	1150 g	1

# Protistor® size 73 aR

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



## Product range



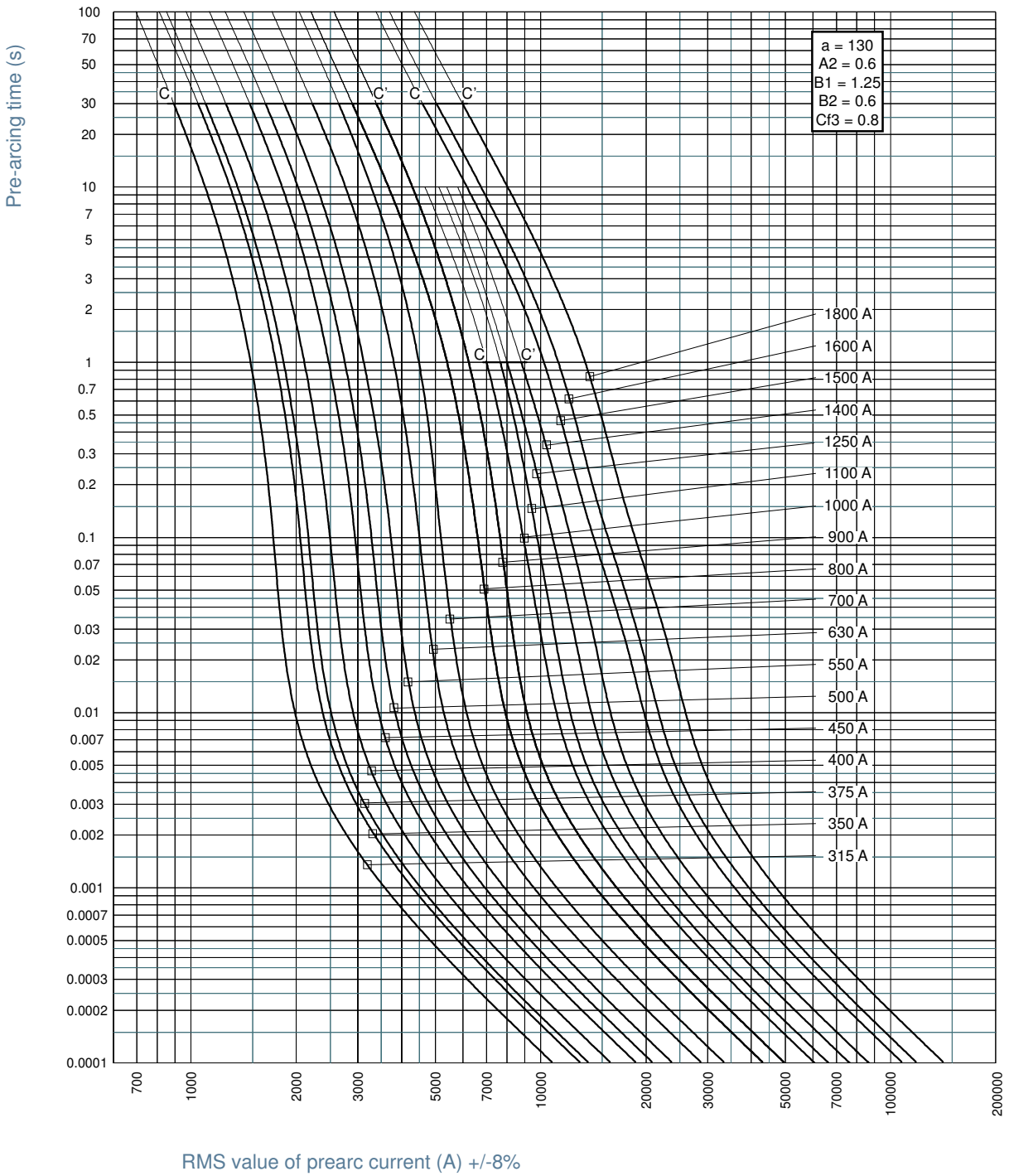
PC73UD90V11CD1A

### Size 73 type DIN110

Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current $I_n$	Pre-arcing $I^2t$	Clearing $I^2t$ at Rated Voltage	Rated breaking capacity AC	Power dissipation at $I_n$	Weight	Package
PC73UD13C315D1A	A300564	1250 V	1300 V	315 A	12 kA <sup>2</sup> s	95 kA <sup>2</sup> s	100 kA	84 W	1150 g	1
PC73UD13C350D1A	B300565	1250 V	1300 V	350 A	17 kA <sup>2</sup> s	140 kA <sup>2</sup> s	100 kA	86 W	1120 g	1
PC73UD13C400D1A	C300566	1250 V	1300 V	400 A	25 kA <sup>2</sup> s	205 kA <sup>2</sup> s	100 kA	93 W	1120 g	1
PC73UD13C450D1A	D300567	1250 V	1300 V	450 A	35.5 kA <sup>2</sup> s	290 kA <sup>2</sup> s	100 kA	100 W	1120 g	1
PC73UD13C500D1A	E300568	1250 V	1300 V	500 A	44 kA <sup>2</sup> s	360 kA <sup>2</sup> s	100 kA	112 W	1120 g	1
PC73UD13C550D1A	F300569	1250 V	1300 V	550 A	57 kA <sup>2</sup> s	465 kA <sup>2</sup> s	100 kA	120 W	1120 g	1
PC73UD13C630D1A	G300570	1250 V	1300 V	630 A	84 kA <sup>2</sup> s	680 kA <sup>2</sup> s	100 kA	132 W	1120 g	1
PC73UD12C700D1A	H300571	1200 V	1300 V	700 A	110 kA <sup>2</sup> s	900 kA <sup>2</sup> s	100 kA	146 W	1120 g	1
PC73UD11C800D1A	J300572	1100 V	1200 V	800 A	190 kA <sup>2</sup> s	1230 kA <sup>2</sup> s	100 kA	148 W	1120 g	1
PC73UD10C900D1A	K300573	1000 V	1100 V	900 A	250 kA <sup>2</sup> s	1440 kA <sup>2</sup> s	120 kA	170 W	1120 g	1
PC73UD90V10CD1A	L300574	900 V	1000 V	1000 A	370 kA <sup>2</sup> s	1920 kA <sup>2</sup> s	110 kA	174 W	1120 g	1
PC73UD90V11CD1A	M300575	900 V	1000 V	1100 A	445 kA <sup>2</sup> s	2280 kA <sup>2</sup> s	110 kA	208 W	1120 g	1



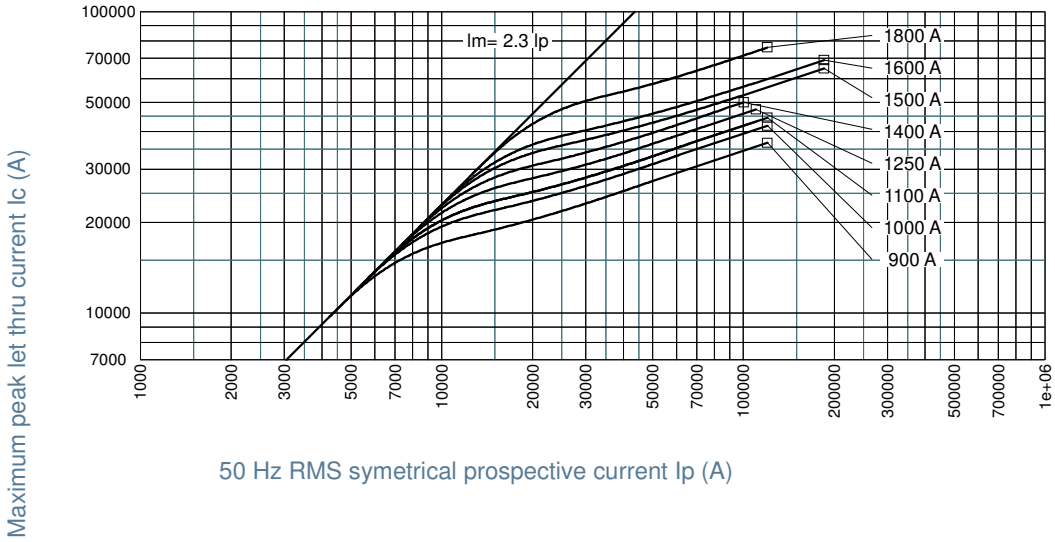
Time current characteristic curves



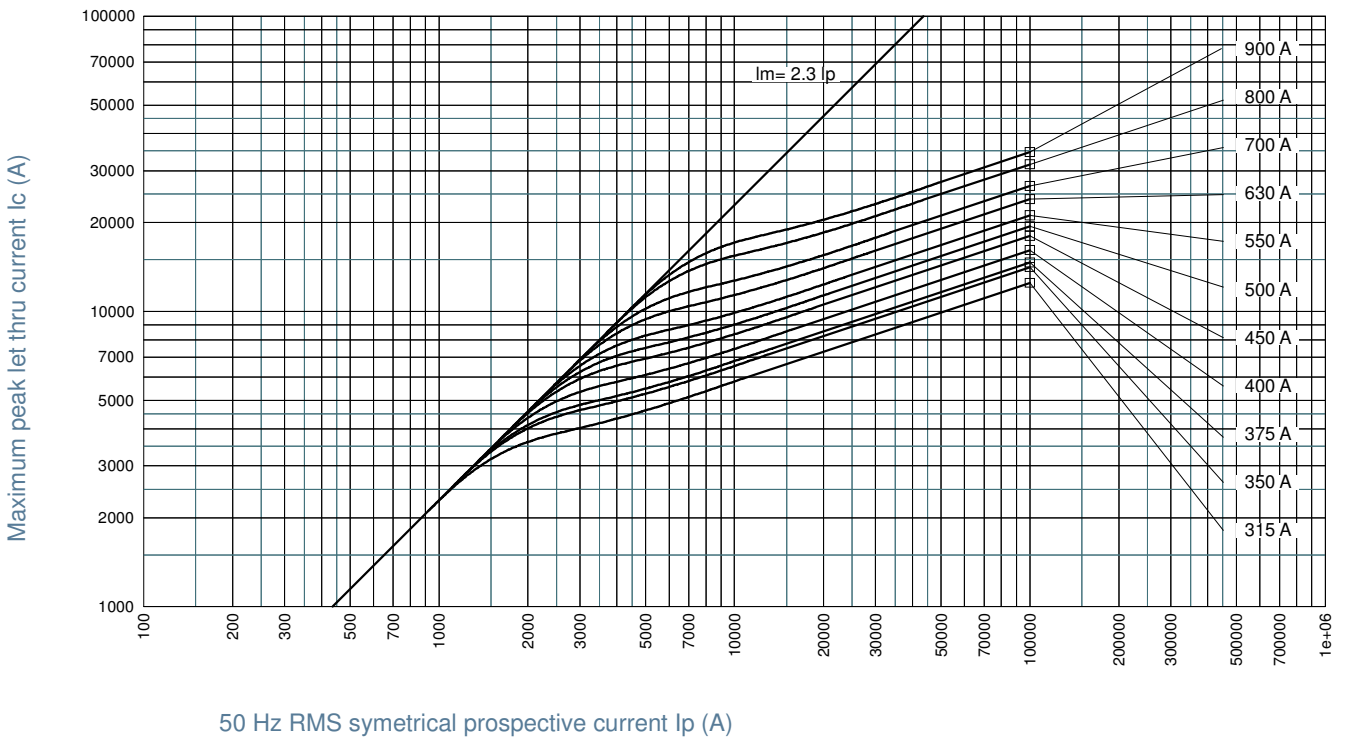


Current limiting diagram

- Size 73 aR 600V 1800A
- Size 73 aR 690V 1500 - 1600A
- Size 73 aR 850V 1400A
- Size 73 aR 900V 1000 - 1250A
- Size 73 aR 950V 1100A
- Size 73 aR 1000V 900 - 1100A



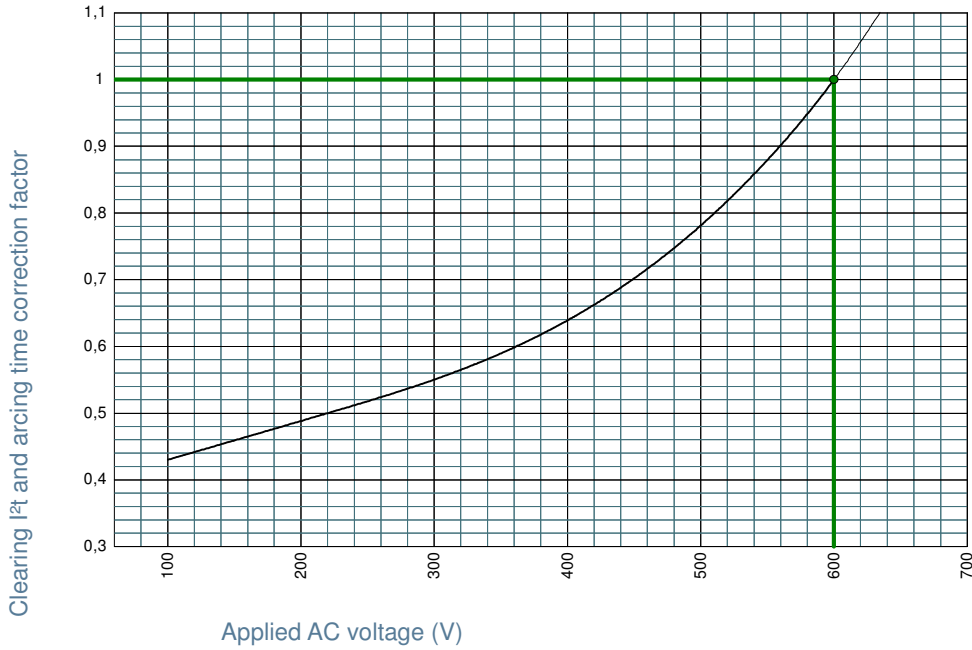
- Size 73 aR 1100V 800A
- Size 73 aR 1200V 700 - 900A
- Size 73 aR 1250V 315 - 800A



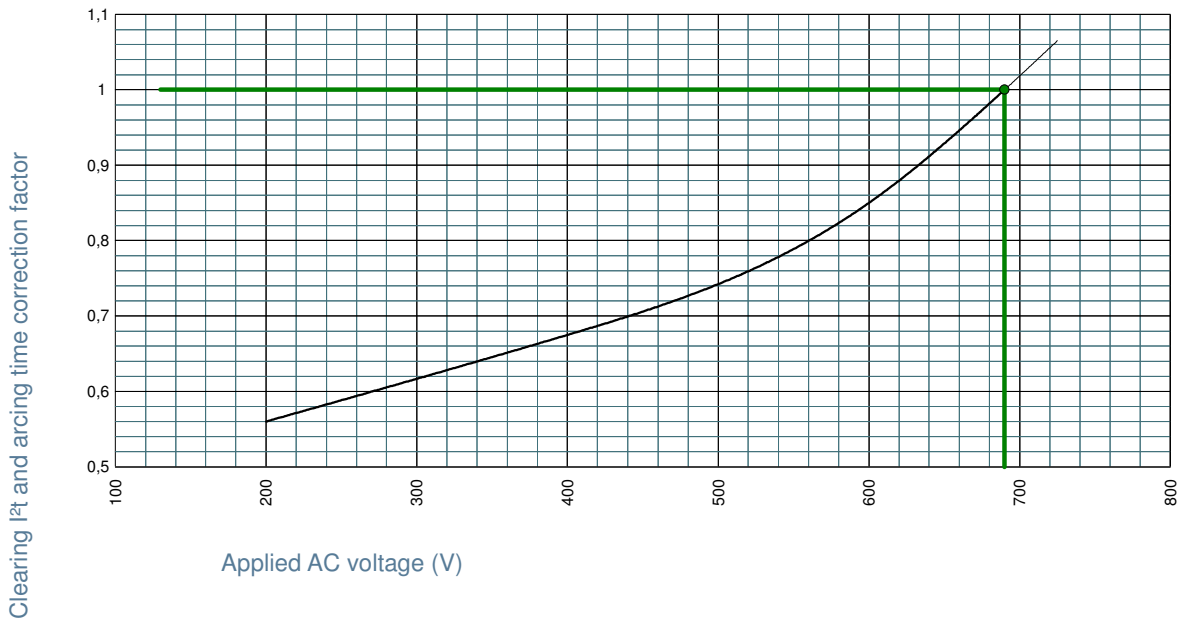


I<sup>2</sup>t Multiplier coefficient

Size 73 aR 600V



Size 73 aR 690V



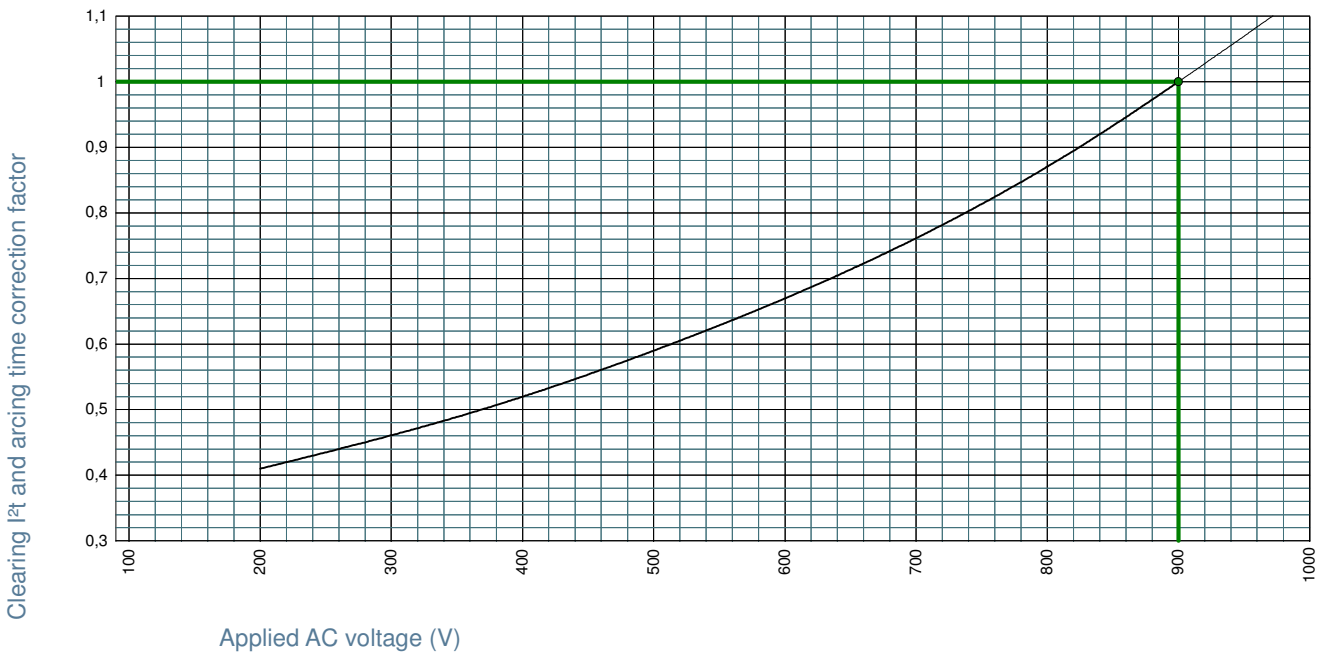


I<sup>2</sup>t Multiplier coefficient

Size 73 aR 850V



Size 73 aR 900V





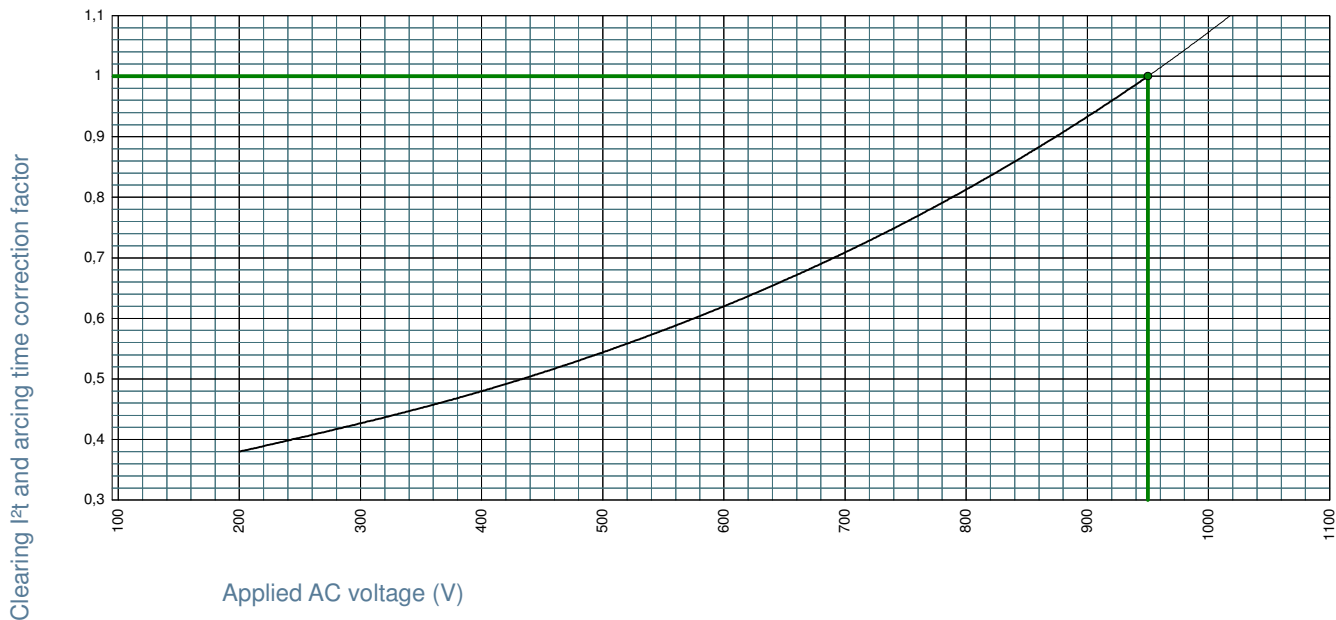
# Protistor® size 73 aR

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

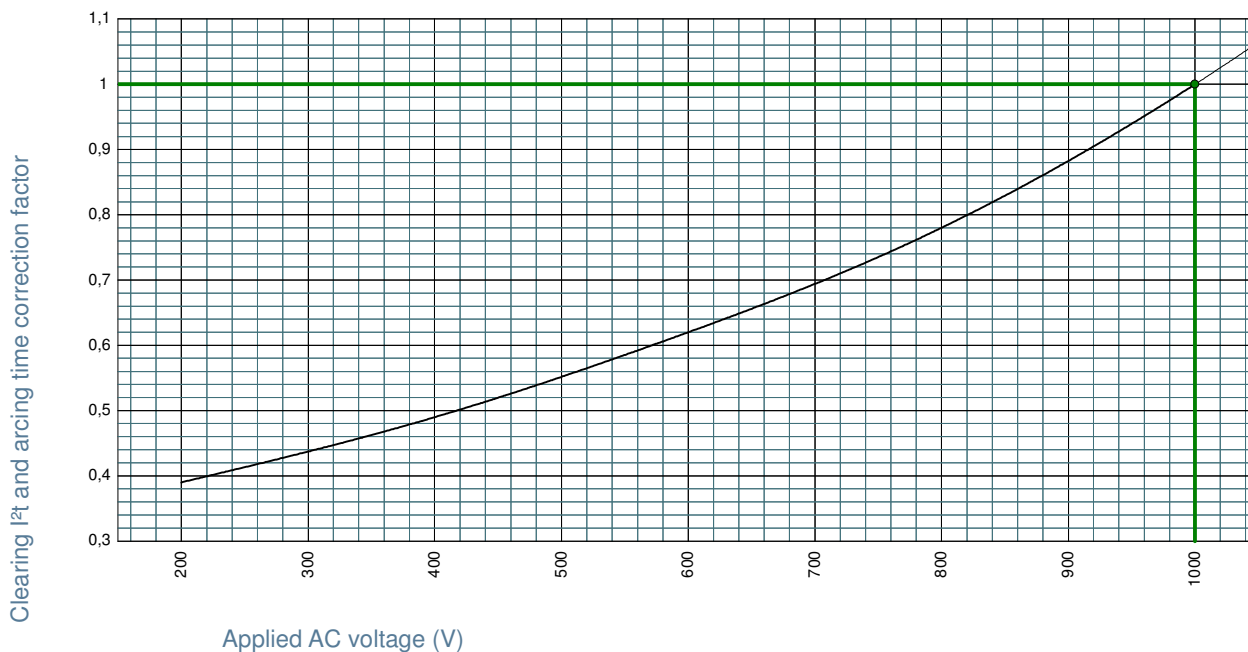


## I<sup>2</sup>t Multiplier coefficient

Size 73 aR 950V



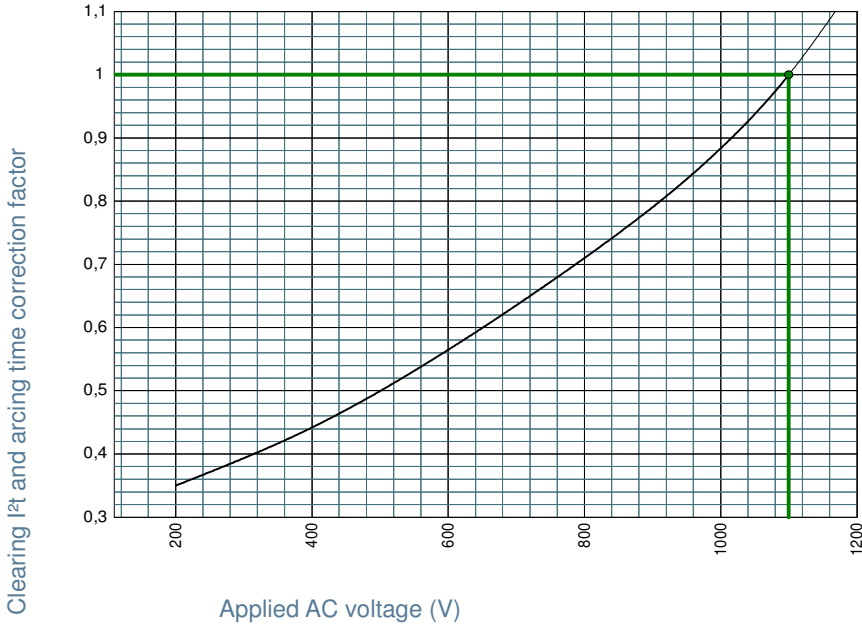
Size 73 aR 1000V



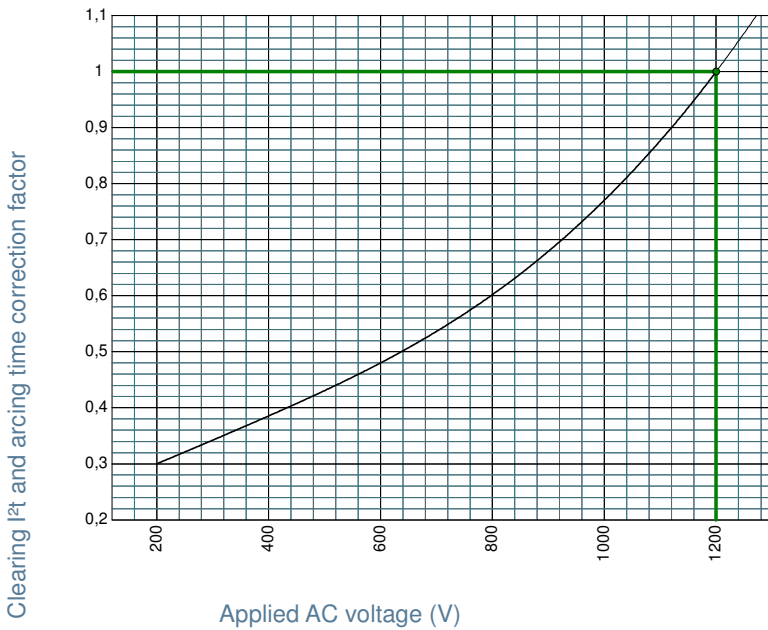


I<sup>2</sup>t Multiplier coefficient

Size 73 aR 1100V



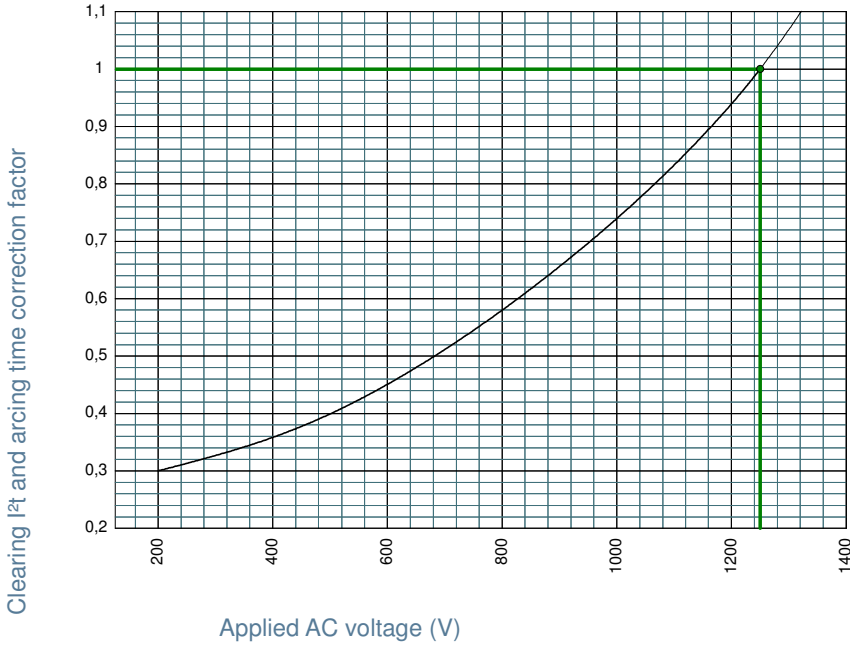
Size 73 aR 1200V





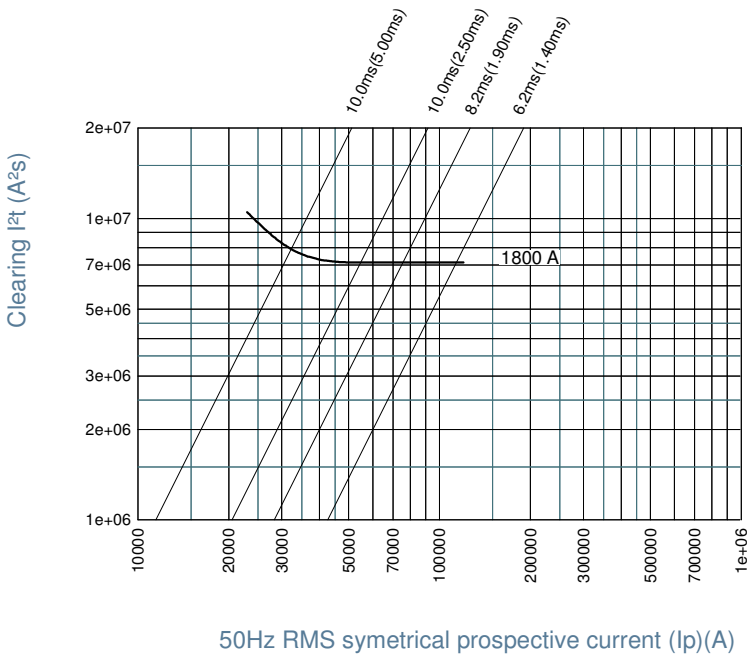
I<sup>2</sup>t Multiplier coefficient

Size 73 aR 1250V



Characteristics total I<sup>2</sup>t curve

Size 73 aR 600V



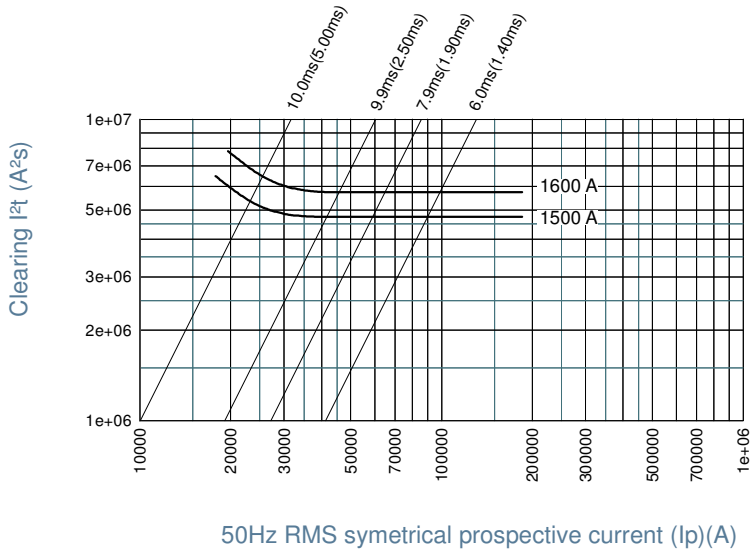
# Protistor® size 73 aR

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

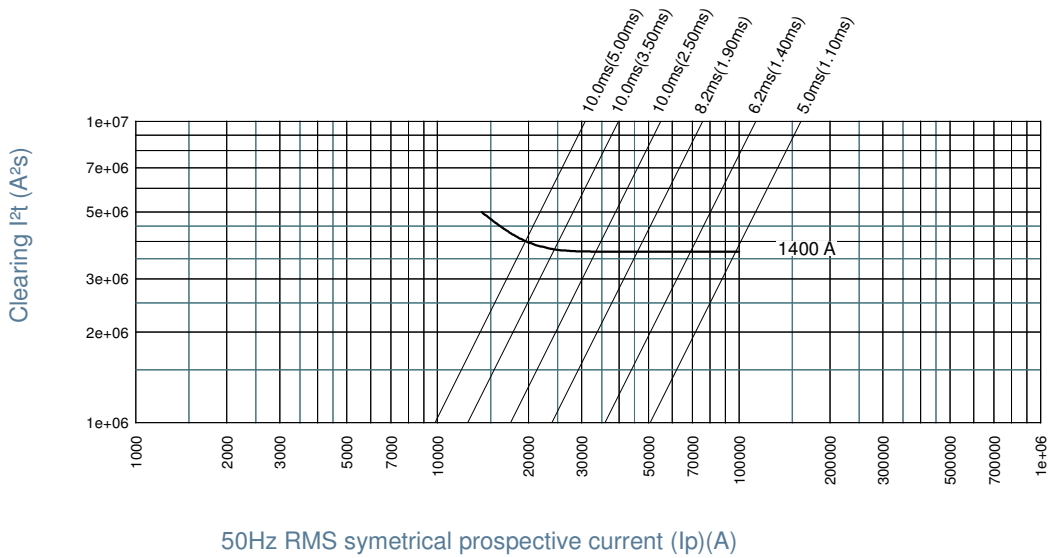


## Characteristics total I<sup>2</sup>t curve

Size 73 aR 690V



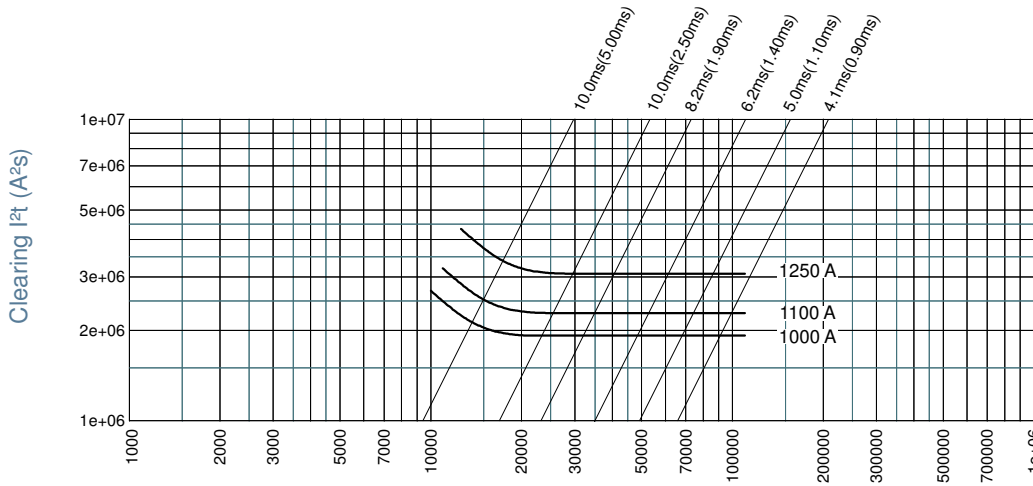
Size 73 aR 850V





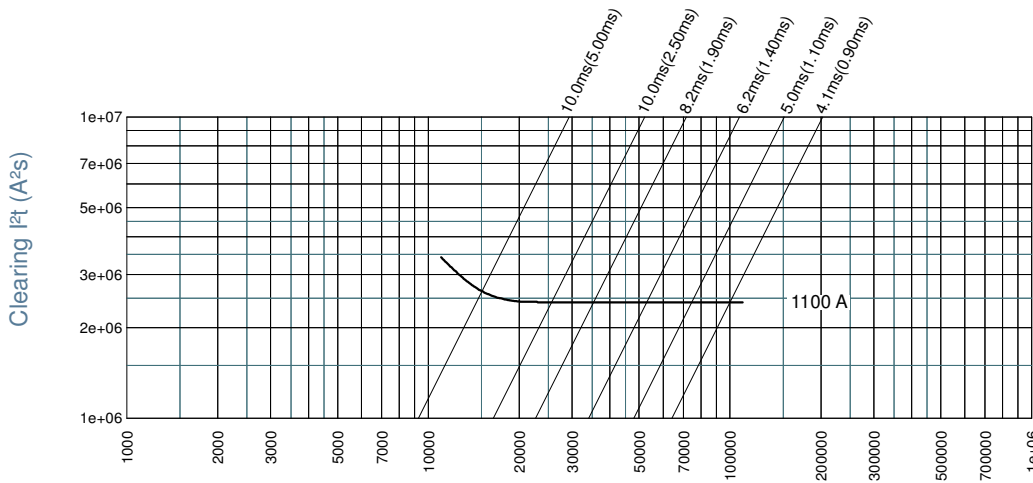
Characteristics total I<sup>2</sup>t curve

Size 73 aR 900V



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

Size 73 aR 950V

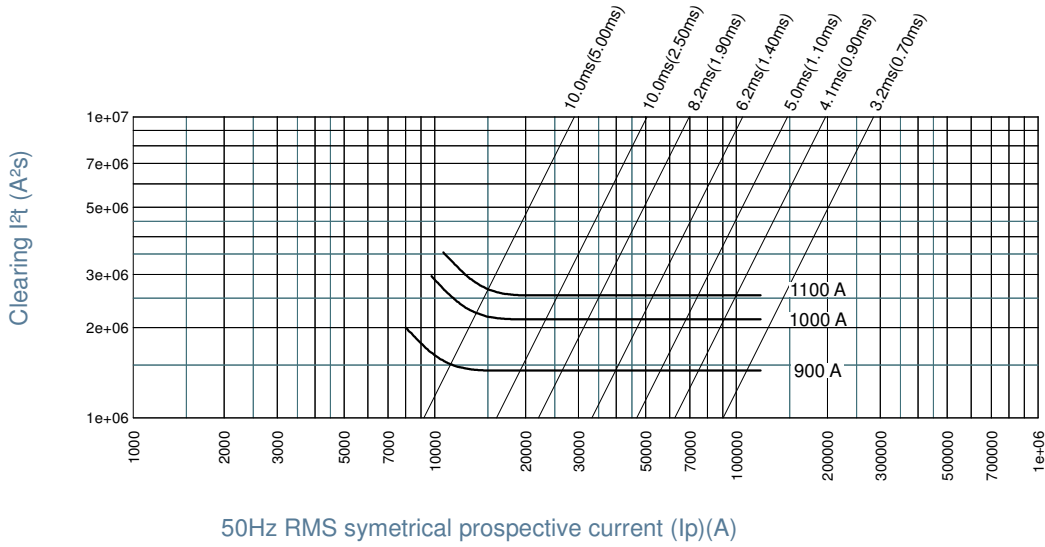


50Hz RMS symmetrical prospective current (Ip)(A)

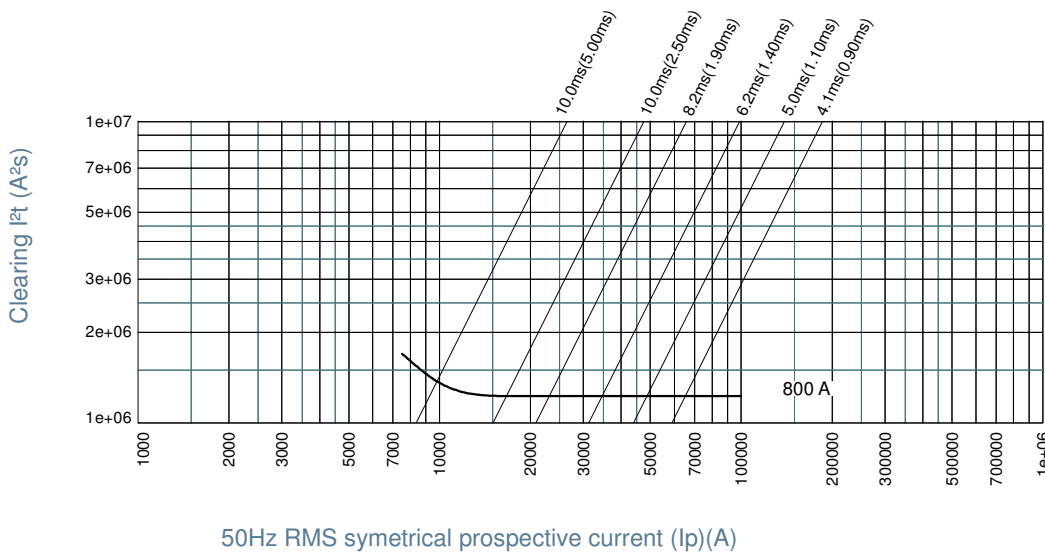


Characteristics total I<sup>2</sup>t curve

Size 73 aR 1000V



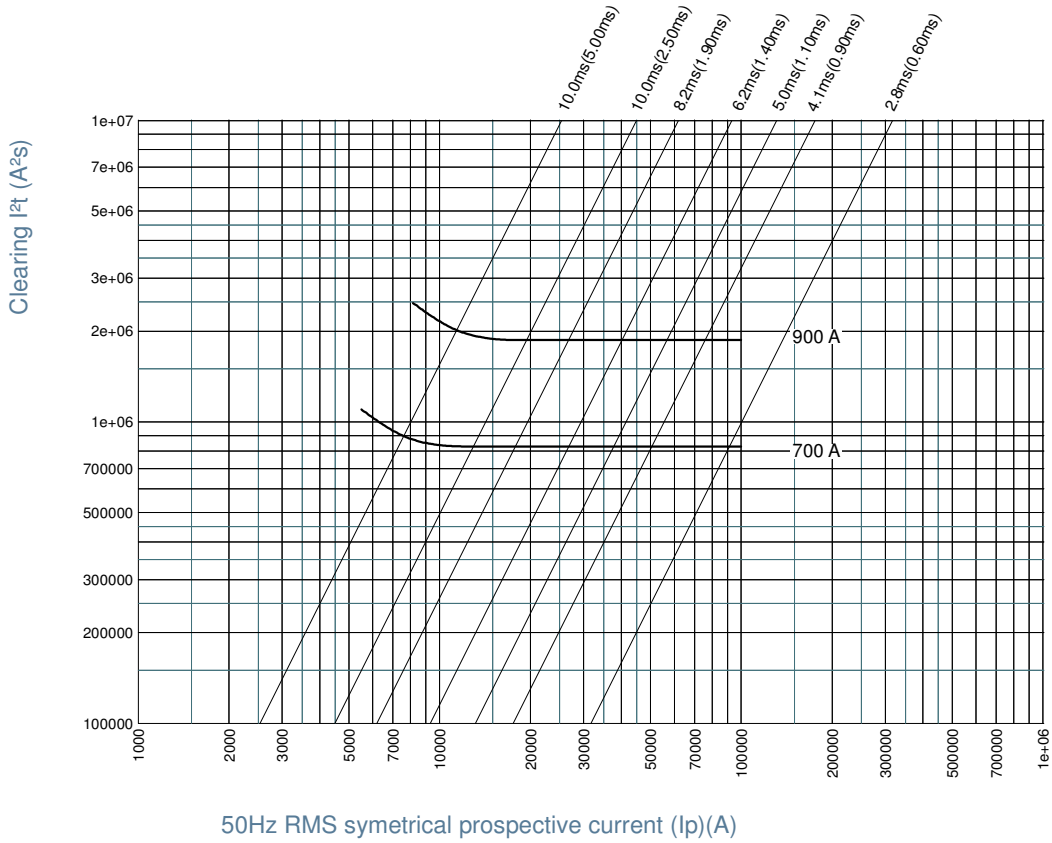
Size 73 aR 1100V





Characteristics total I<sup>2</sup>t curve

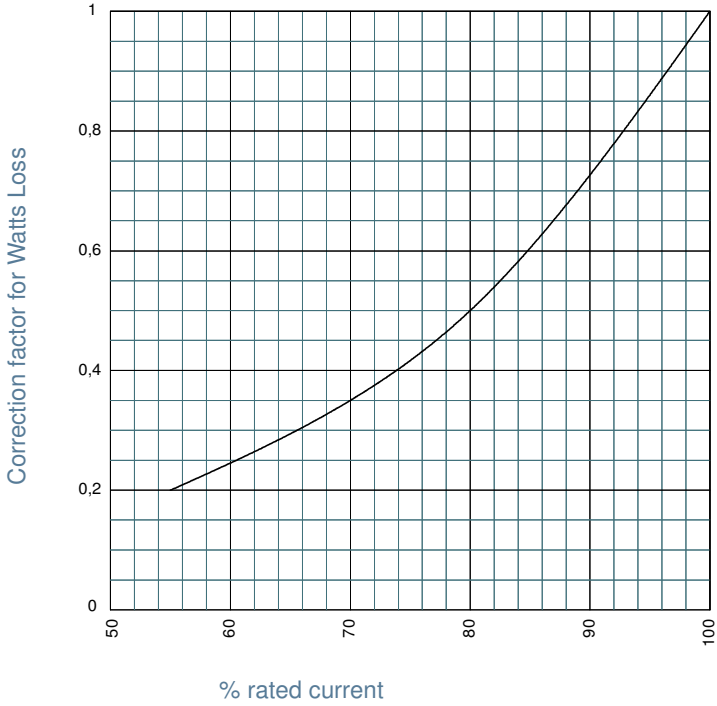
Size 73 aR 1200V





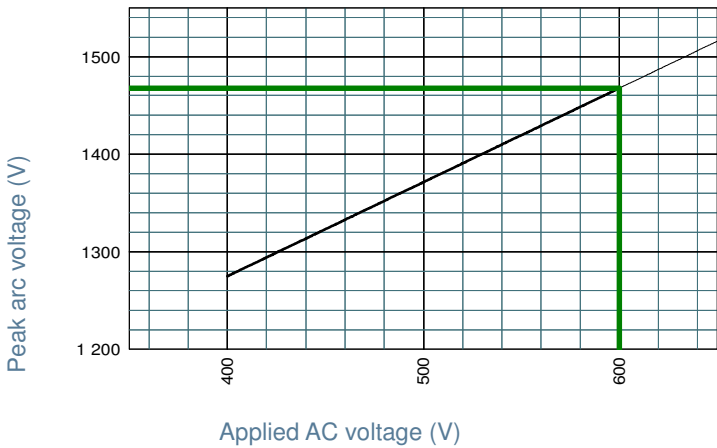
Power dissipation

Size 73 aR



Peak arc voltage

Size 73 aR 600V

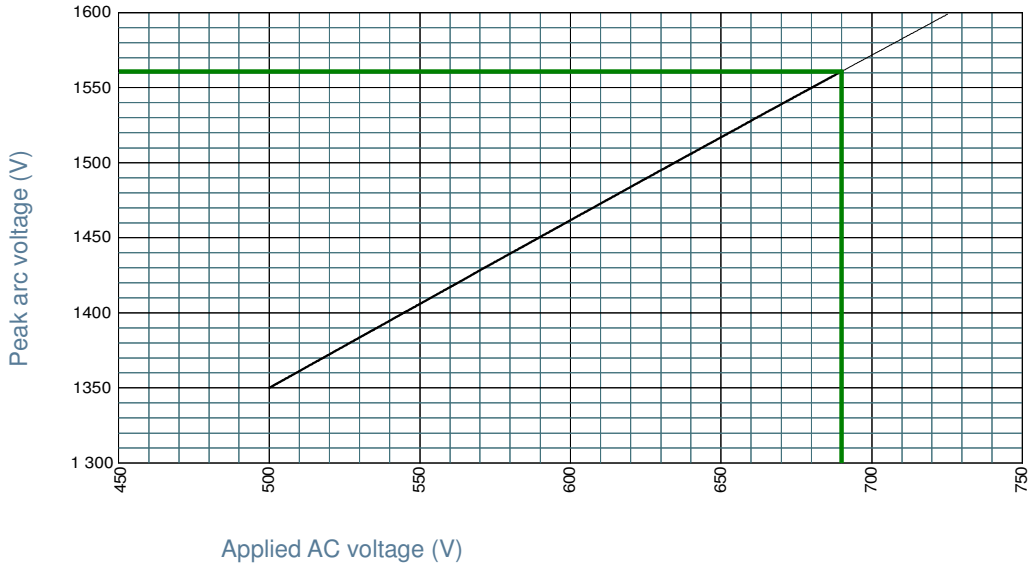




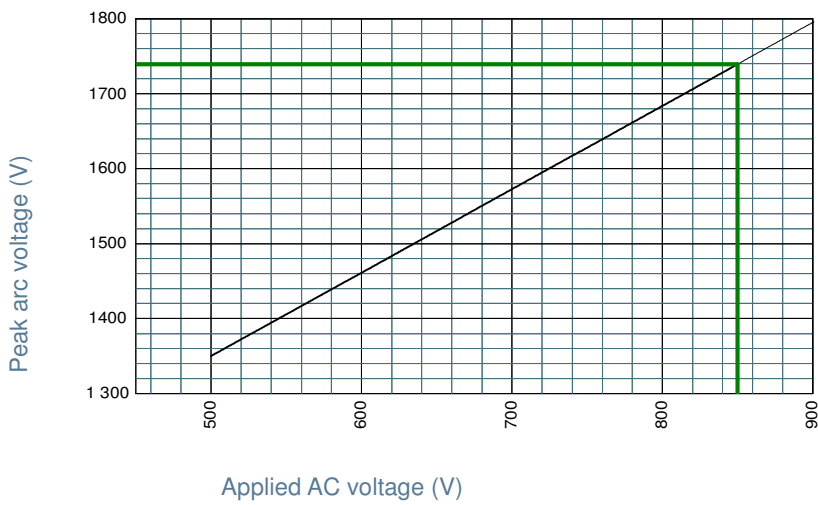


## Peak arc voltage

### Size 73 aR 690V



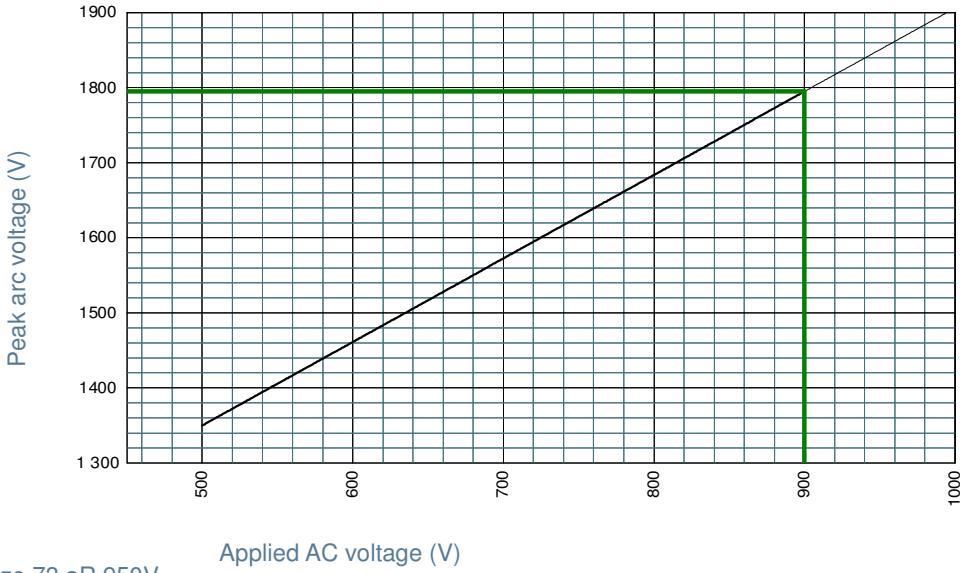
### Size 73 aR 850V



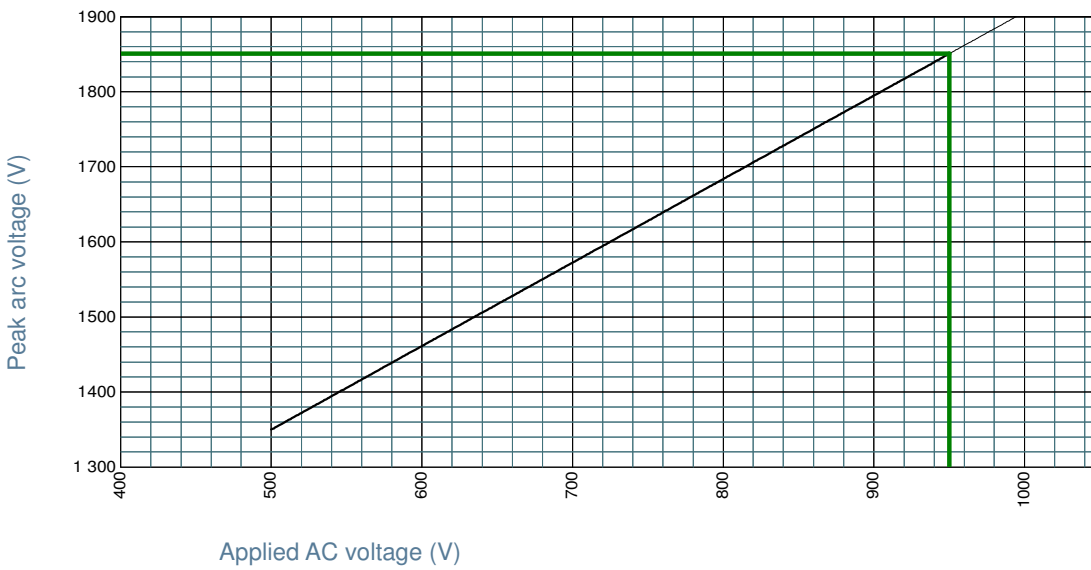


### Peak arc voltage

Size 73 aR 900V



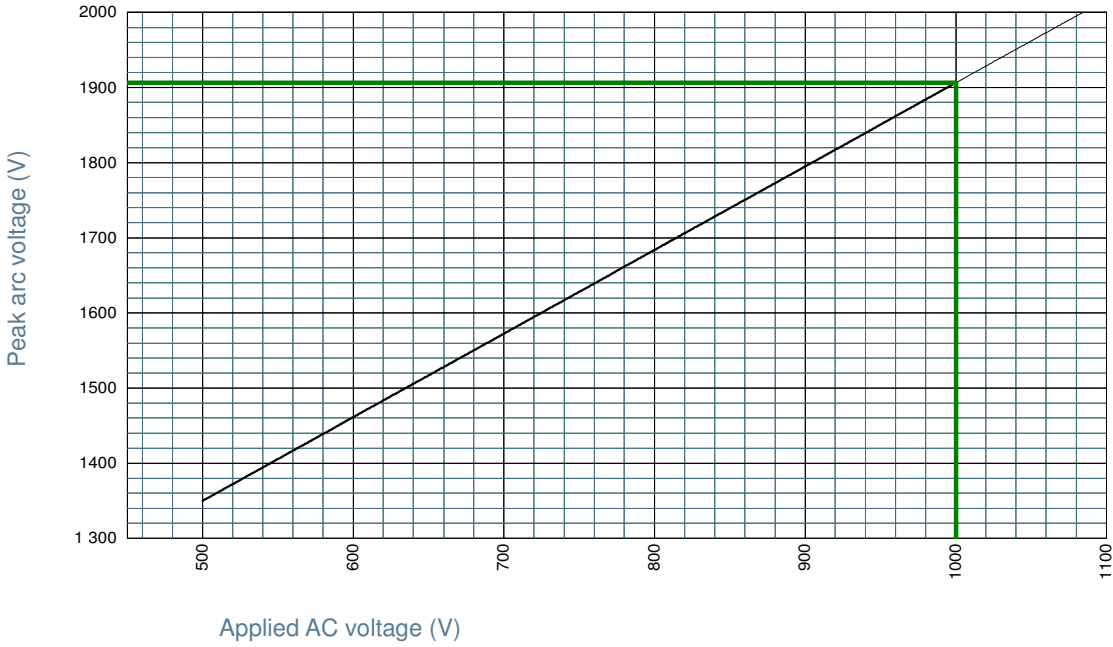
Size 73 aR 950V



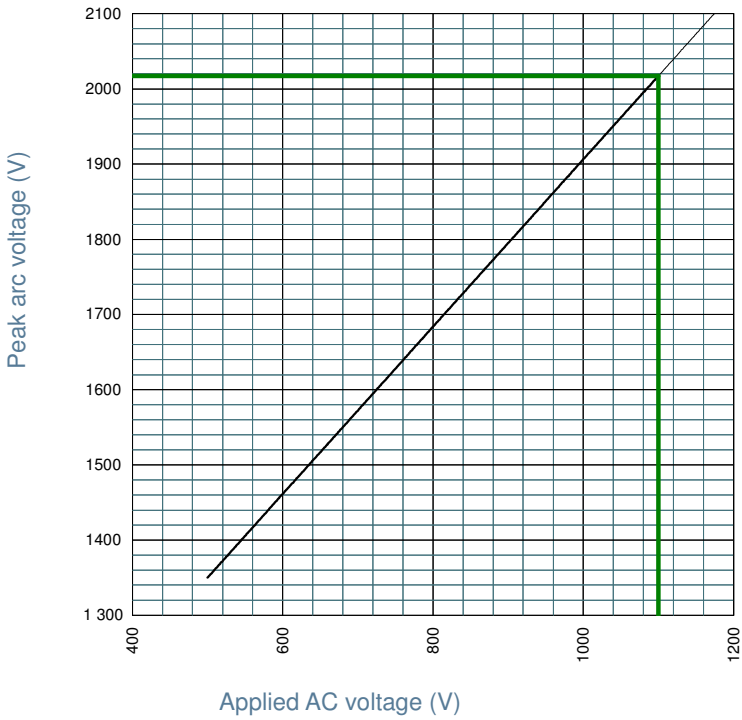


Peak arc voltage

Size 73 aR 1000V



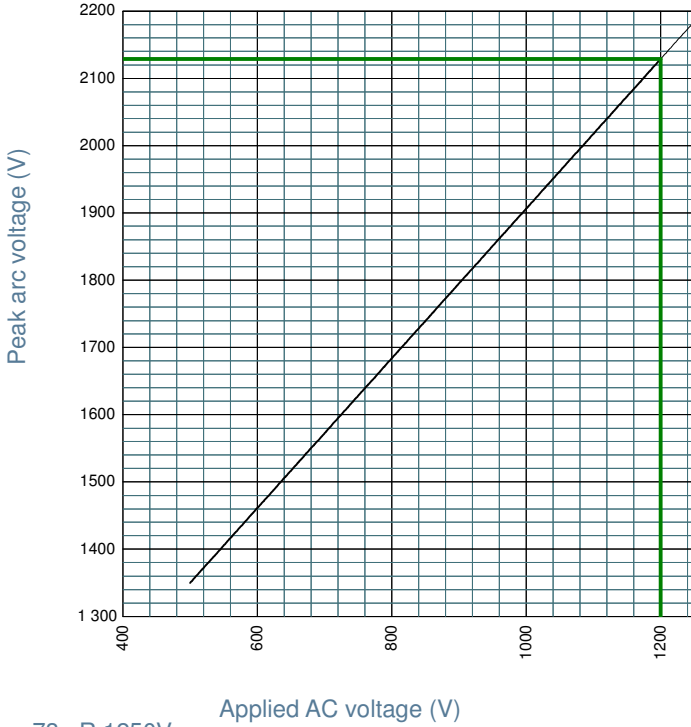
Size 73 aR 1100V



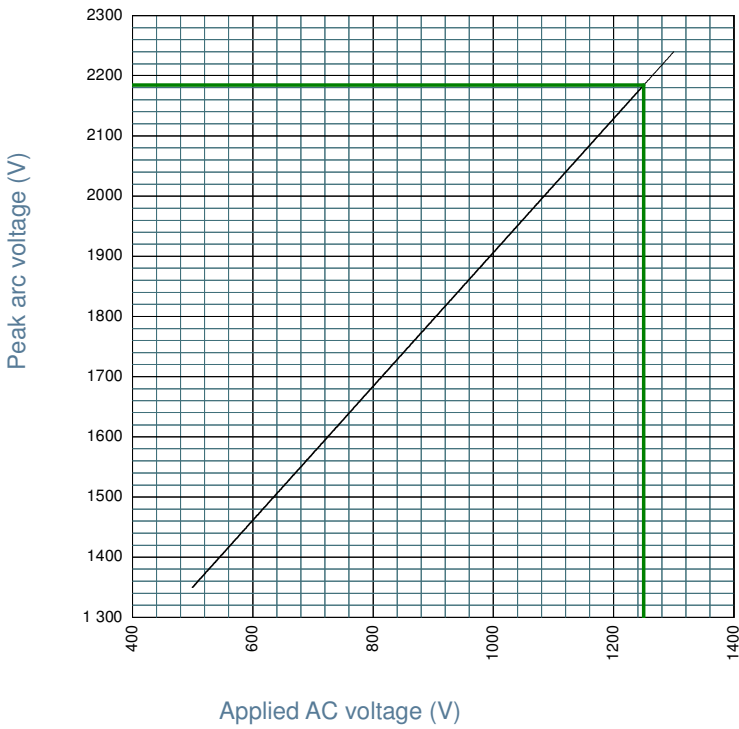


### Peak arc voltage

Size 73 aR 1200V



Size 73 aR 1250V



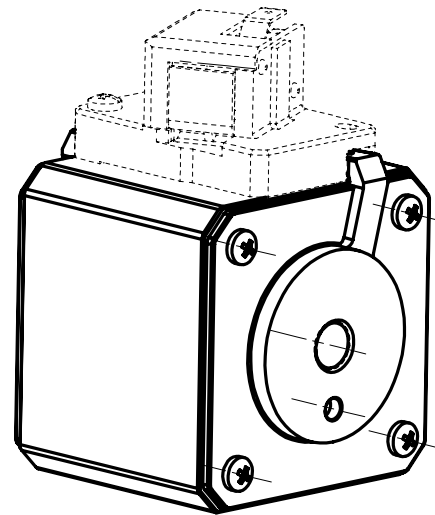
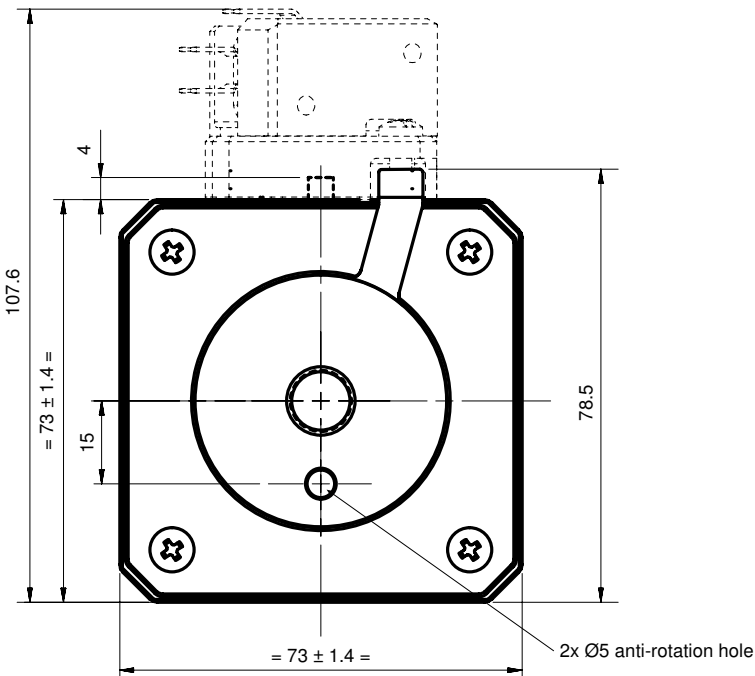
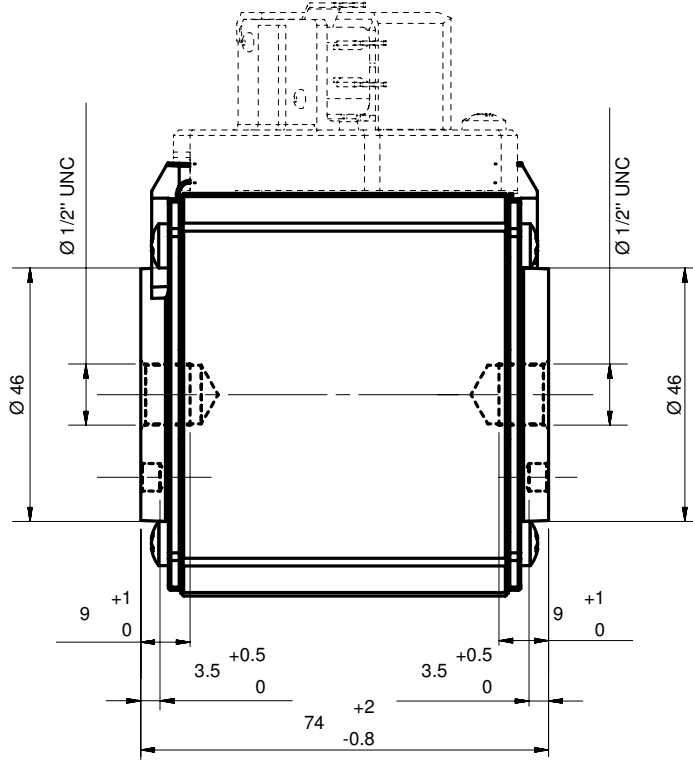
# Protistor® size 73 aR

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



## Dimensions

size 73 aR type TTI (108460\_c)



Dimensions in mm

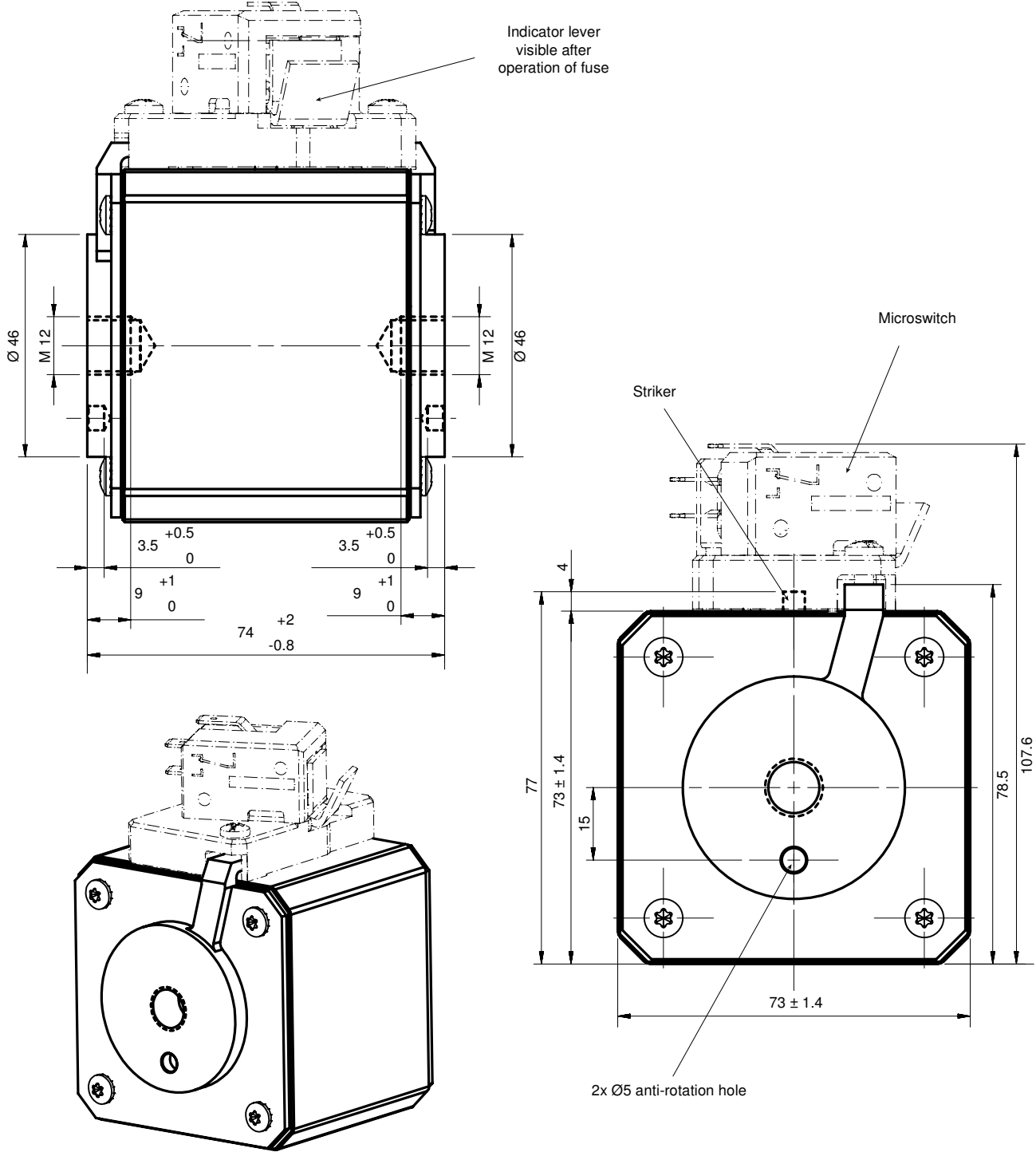
# Protistor® size 73 aR

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



## Dimensions

size 73 aR type TTF (105701\_B)



Dimensions in mm

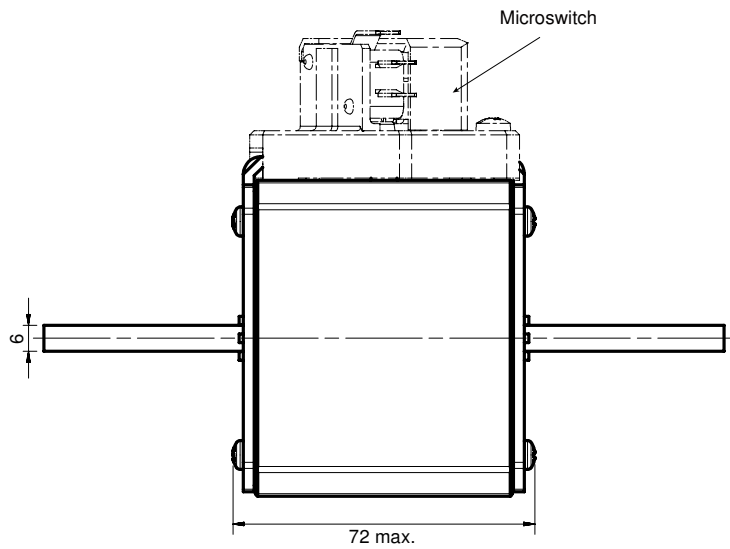
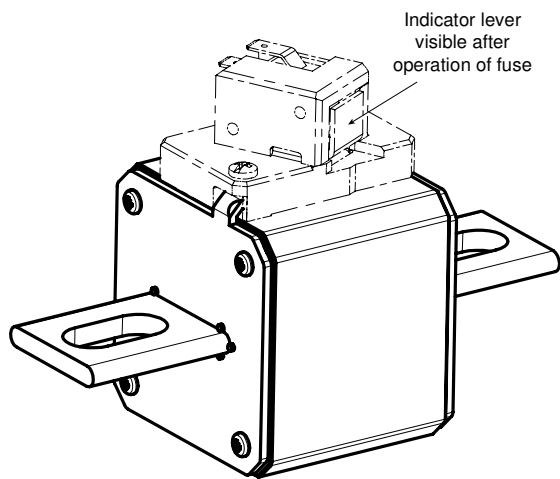
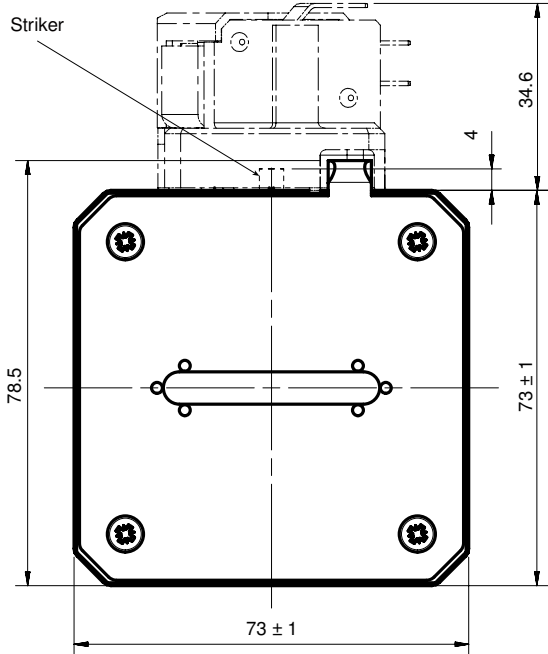
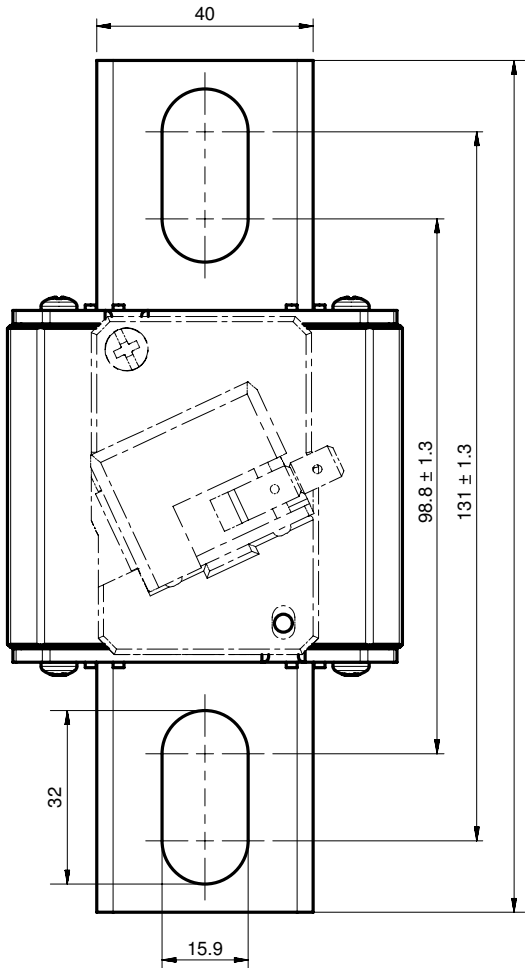
# Protistor® size 73 aR

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



## Dimensions

size 73 aR type LI (105924)



Dimensions in mm

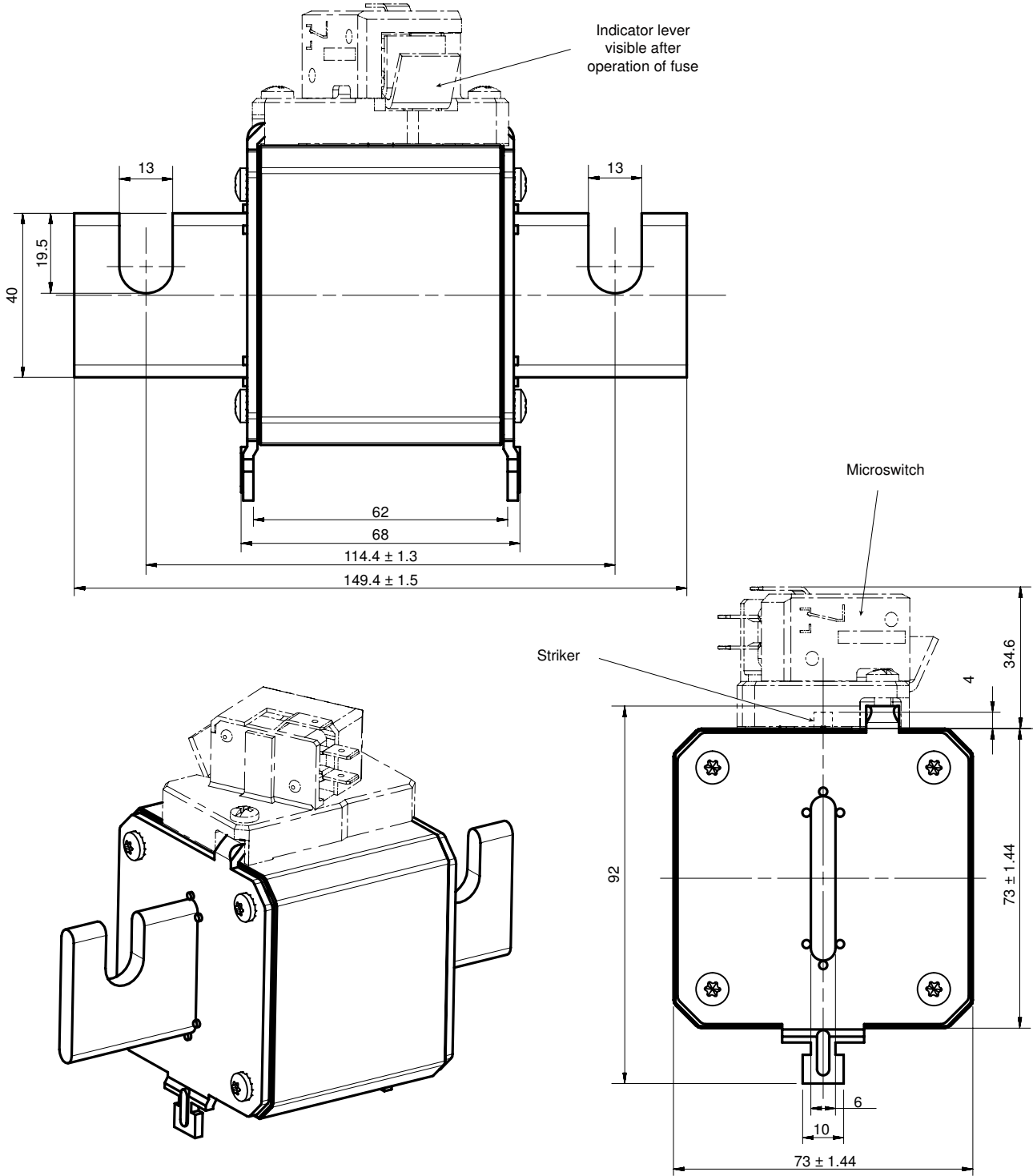
# Protistor® size 73 aR

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



## Dimensions

size 73 aR type EF (105882)



Dimensions in mm



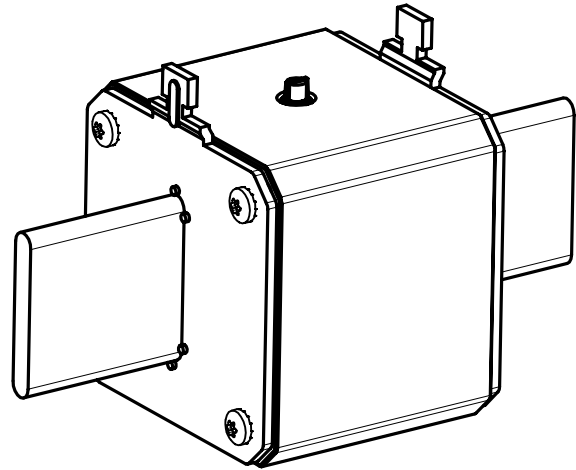
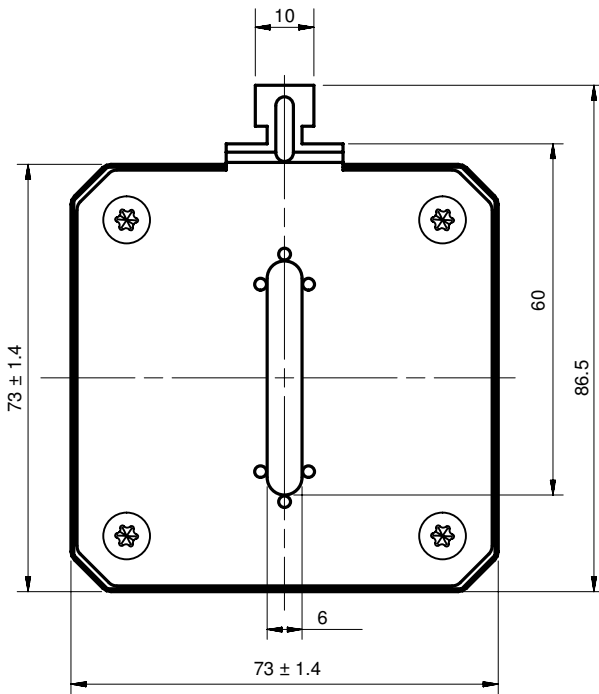
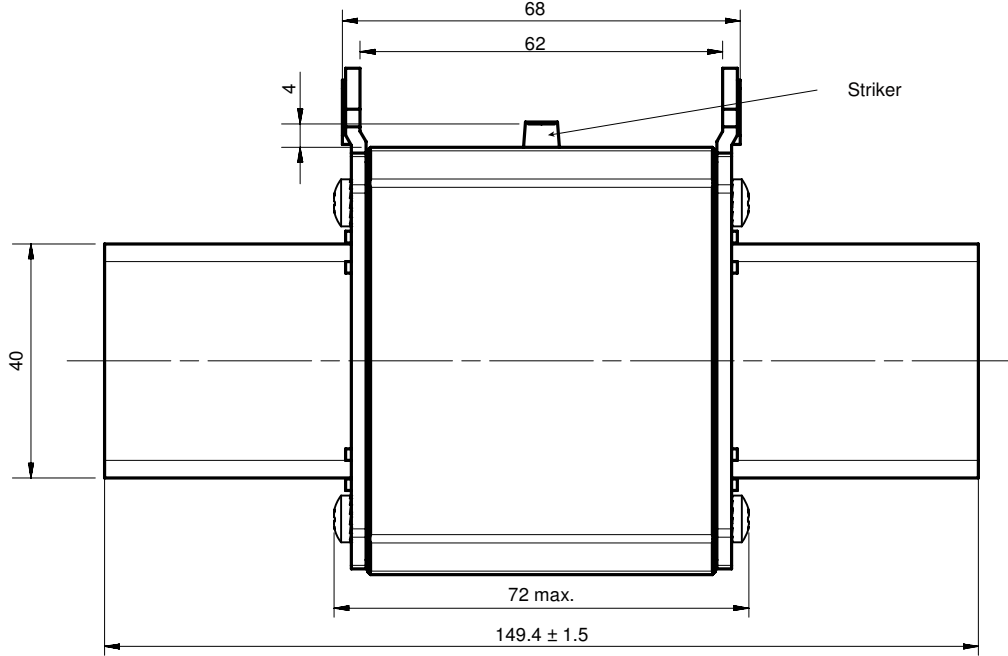
# Protistor® size 73 aR

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



## Dimensions

size 73 aR type PA (107132\_C)



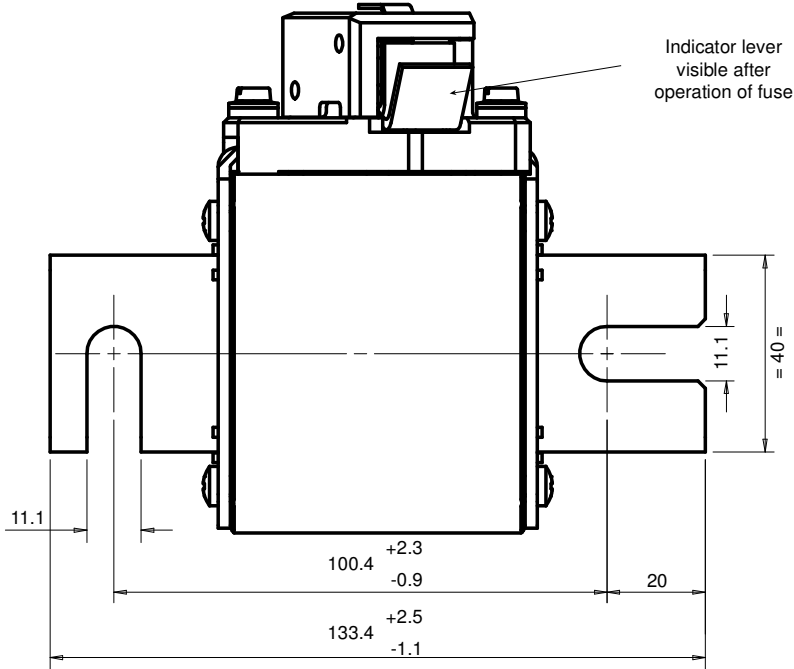
Dimensions in mm

# Protistor® size 73 aR

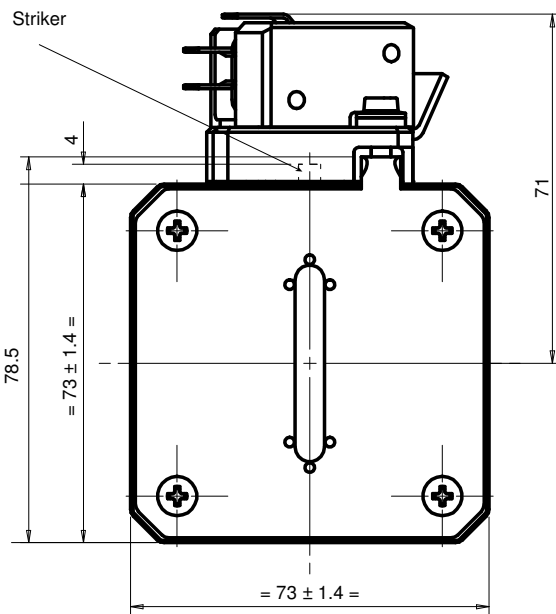
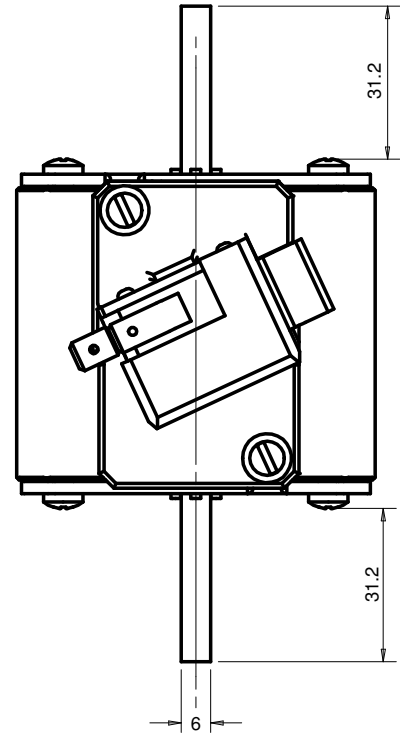
600 to 1250VAC (IEC) / 1300VAC (UL)

## Dimensions

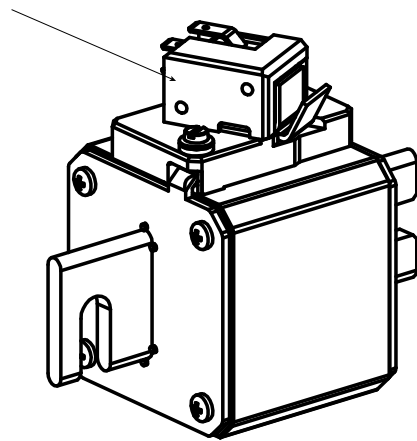
size 73 aR type DIN 110 (105714)



Indicator lever visible after operation of fuse



Microswitch



Dimensions in mm