

# Protistor® size 32 aR

500 to 700VAC

## 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 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.

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

### 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.

### Technical data overview

Voltage Range AC	500 ... 700 VAC
Ampere Range (A)	315 ... 1800 A
Speed/Characteristic	aR
Product Size	32



### Standards

IEC 60269-4 Compliance

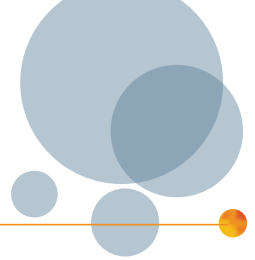
UL/CSA Recognized E76491

CCC GB 1359.4



# Protistor® size 32 aR

500 to 700VAC



## 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	546 g	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	546 g	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	546 g	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	546 g	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	546 g	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	546 g	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	546 g	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	546 g	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	546 g	3

### Reinforced Terminal

PC32UD69V900TF	Q300072	690 V	700 V	900 A	165 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	110 W	600 g	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	600 g	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	600 g	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	600 g	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	600 g	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	600 g	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	600 g	3

### Size 32 type TTI 3/8"-16 unified coarse threaded terminals

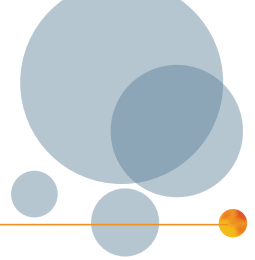
Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
<b>Standard Terminal</b>										
A070UD32TTI400	Q300463	700 V	700 V	400 A	15 A <sup>2</sup> s	90 A <sup>2</sup> s	200 kA	72 W	600 g	3
A070UD32TTI450	N300461	700 V	700 V	450 A	22 kA <sup>2</sup> s	130 kA <sup>2</sup> s	200 kA	77 W	600 g	3
A070UD32TTI500	P300462	700 V	700 V	500 A	28 kA <sup>2</sup> s	160 kA <sup>2</sup> s	200 kA	85 W	600 g	3
A070UD32TTI550	R300464	700 V	700 V	550 A	37 kA <sup>2</sup> s	215 kA <sup>2</sup> s	200 kA	90 W	600 g	3
A070UD32TTI630	S300465	700 V	700 V	630 A	54 kA <sup>2</sup> s	310 kA <sup>2</sup> s	200 kA	95 W	600 g	3
A070UD32TTI700	T300466	700 V	700 V	700 A	76 kA <sup>2</sup> s	440 kA <sup>2</sup> s	200 kA	100 W	600 g	3
A070UD32TTI800	V300467	700 V	700 V	800 A	115 kA <sup>2</sup> s	660 kA <sup>2</sup> s	200 kA	110 W	600 g	3

### Reinforced Terminal

A070UD32TTI900	W300468	690 V	700 V	900 A	165 kA <sup>2</sup> s	990 kA <sup>2</sup> s	200 kA	110 W	600 g	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	600 g	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	600 g	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	600 g	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	600 g	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	600 g	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	600 g	3

# Protistor® size 32 aR

500 to 700VAC



## 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 I <sub>n</sub>	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	530 g	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	530 g	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	530 g	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	530 g	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	530 g	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	530 g	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	530 g	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	530 g	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	530 g	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	530 g	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	530 g	3



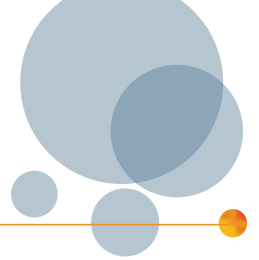
PC32UD69V900D1A

### 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 I <sub>n</sub>	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	565 g	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	565 g	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	565 g	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	565 g	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	565 g	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	565 g	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	565 g	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	565 g	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	565 g	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	565 g	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 I <sub>n</sub>	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	550 g	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	550 g	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	550 g	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	550 g	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	550 g	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	550 g	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	550 g	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	550 g	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	550 g	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	550 g	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	550 g	3



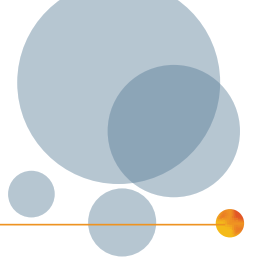
## Product range

### Size 32 type LI long slotted blades

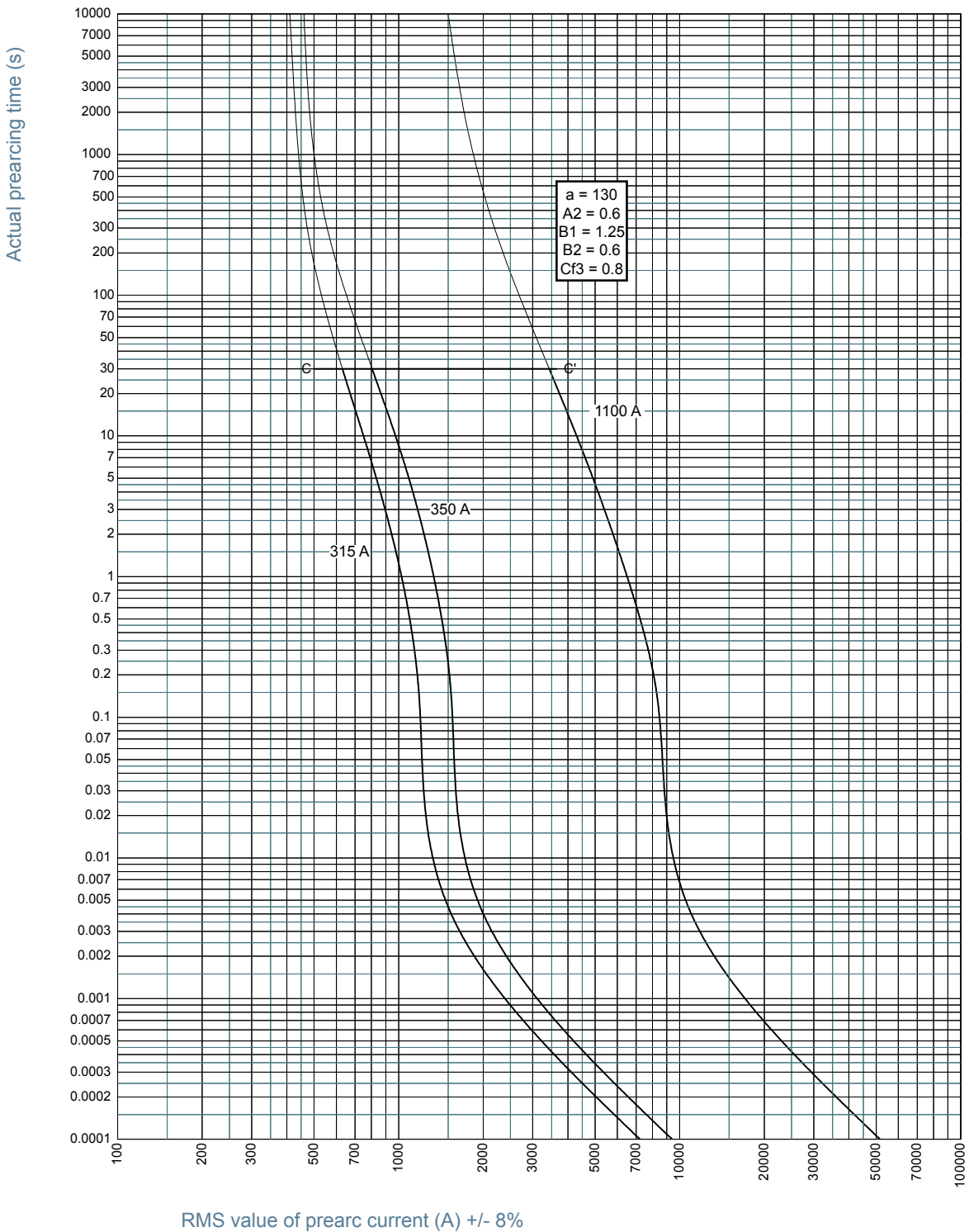
Catalog number	Reference number	Rated voltage AC (IEC)	Rated voltage AC (UL)	Rated current I <sub>n</sub>	Pre-arcing I <sup>2</sup> t	Clearing I <sup>2</sup> t at Rated Voltage	Rated breaking capacity AC	Power dissipation at I <sub>n</sub>	Weight	Package
A070UD32LI315	R302166	690 V	700 V	315 A	5.2 kA <sup>2</sup> s	31.8 kA <sup>2</sup> s	200 kA	71 W	575 g	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	575 g	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	575 g	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	575 g	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	575 g	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	575 g	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	575 g	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	575 g	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	575 g	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	745 g	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	745 g	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	745 g	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	745 g	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	745 g	3

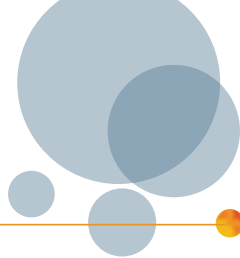
### Size 32 type EF blades for bolted connections

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 I <sub>n</sub>	Weight	Package
PC32UD69V400EF	V300168	690 V	700 V	400 A	15 kA <sup>2</sup> s	90 kA <sup>2</sup> s	200 kA	75 W	570 g	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	570 g	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	570 g	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	570 g	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	570 g	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	570 g	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	570 g	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	570 g	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	570 g	3

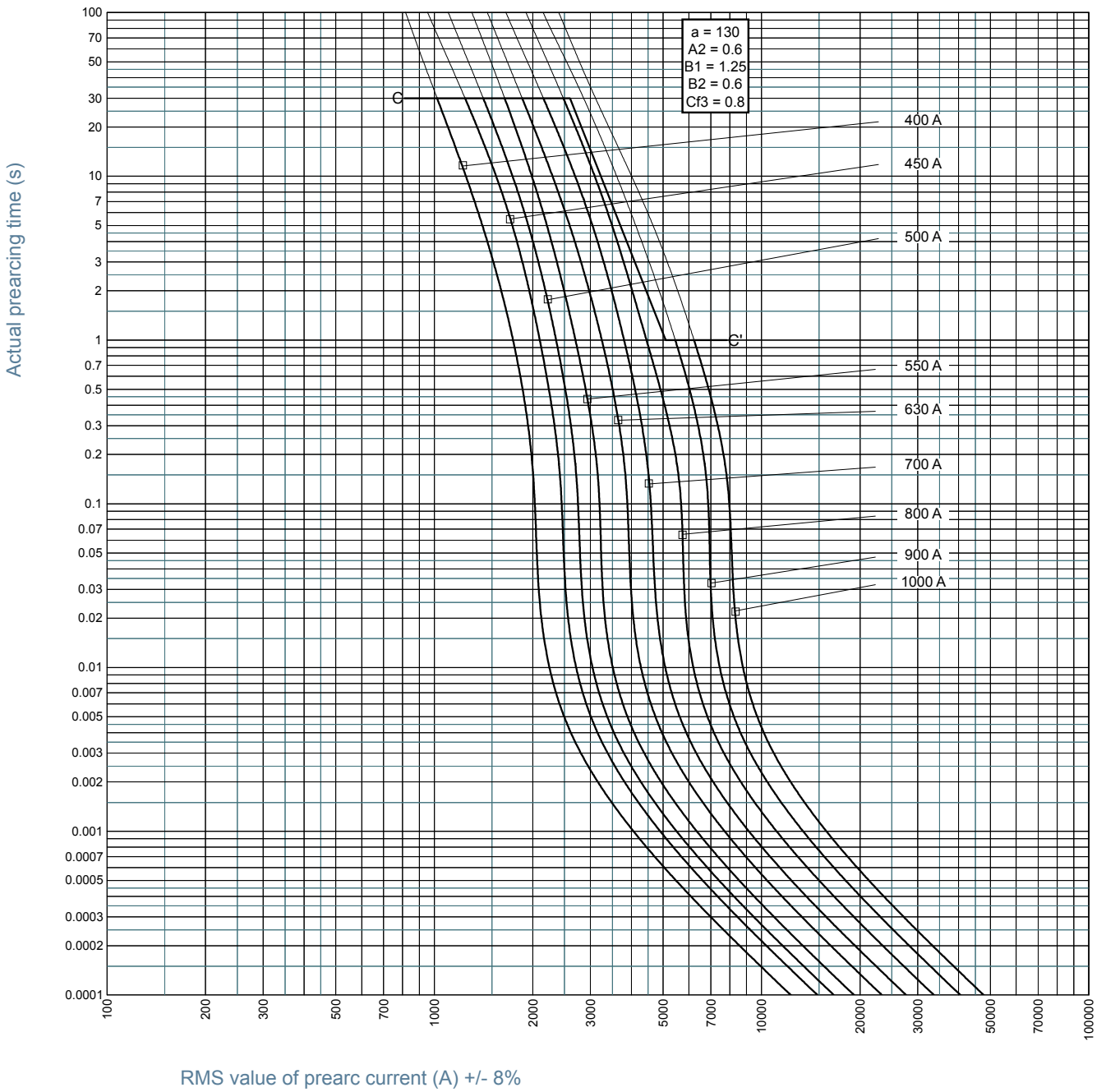


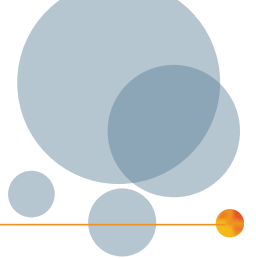
Time current characteristic curves



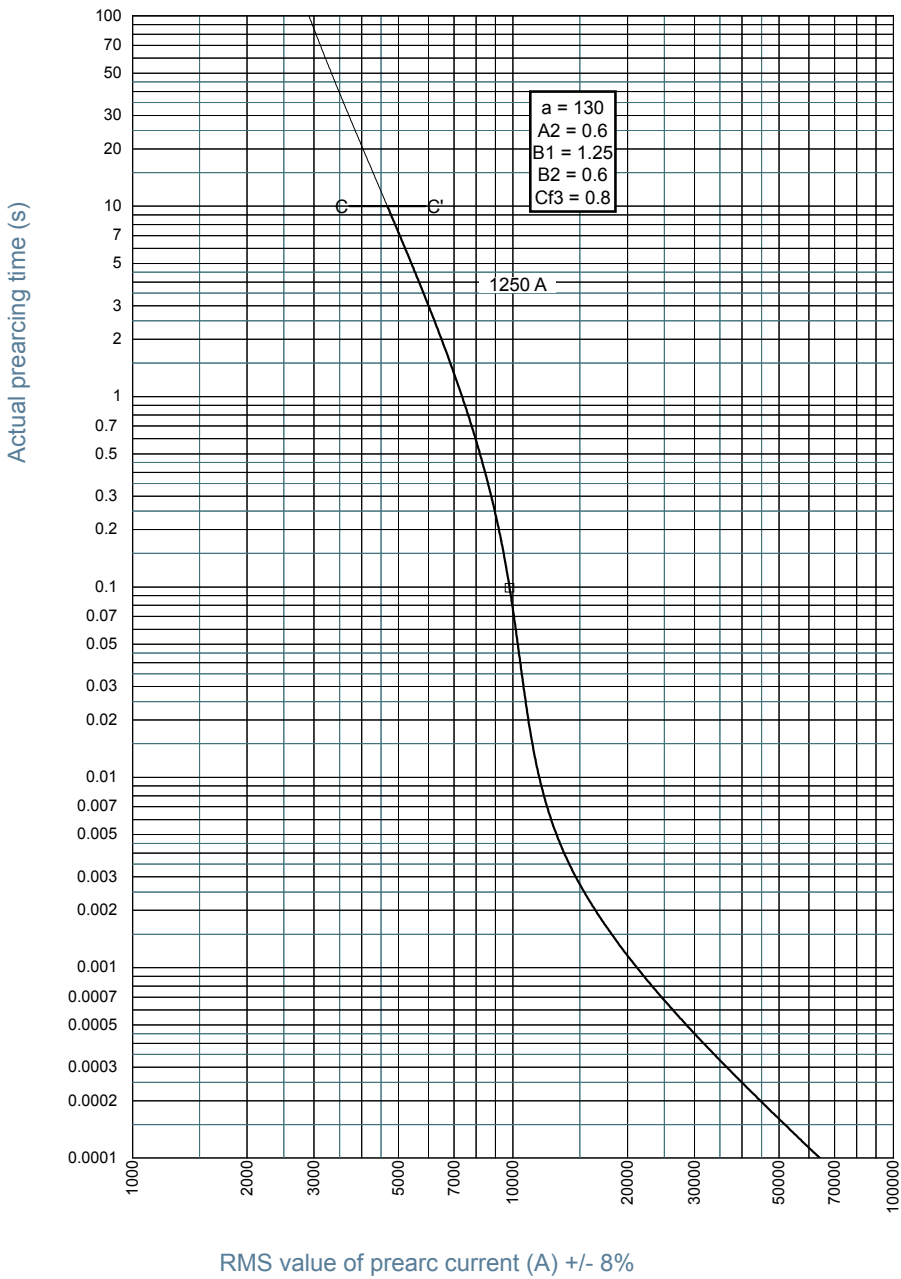


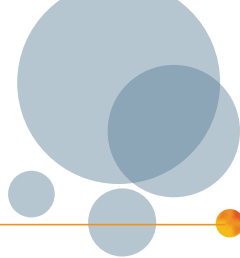
Time current characteristic curves



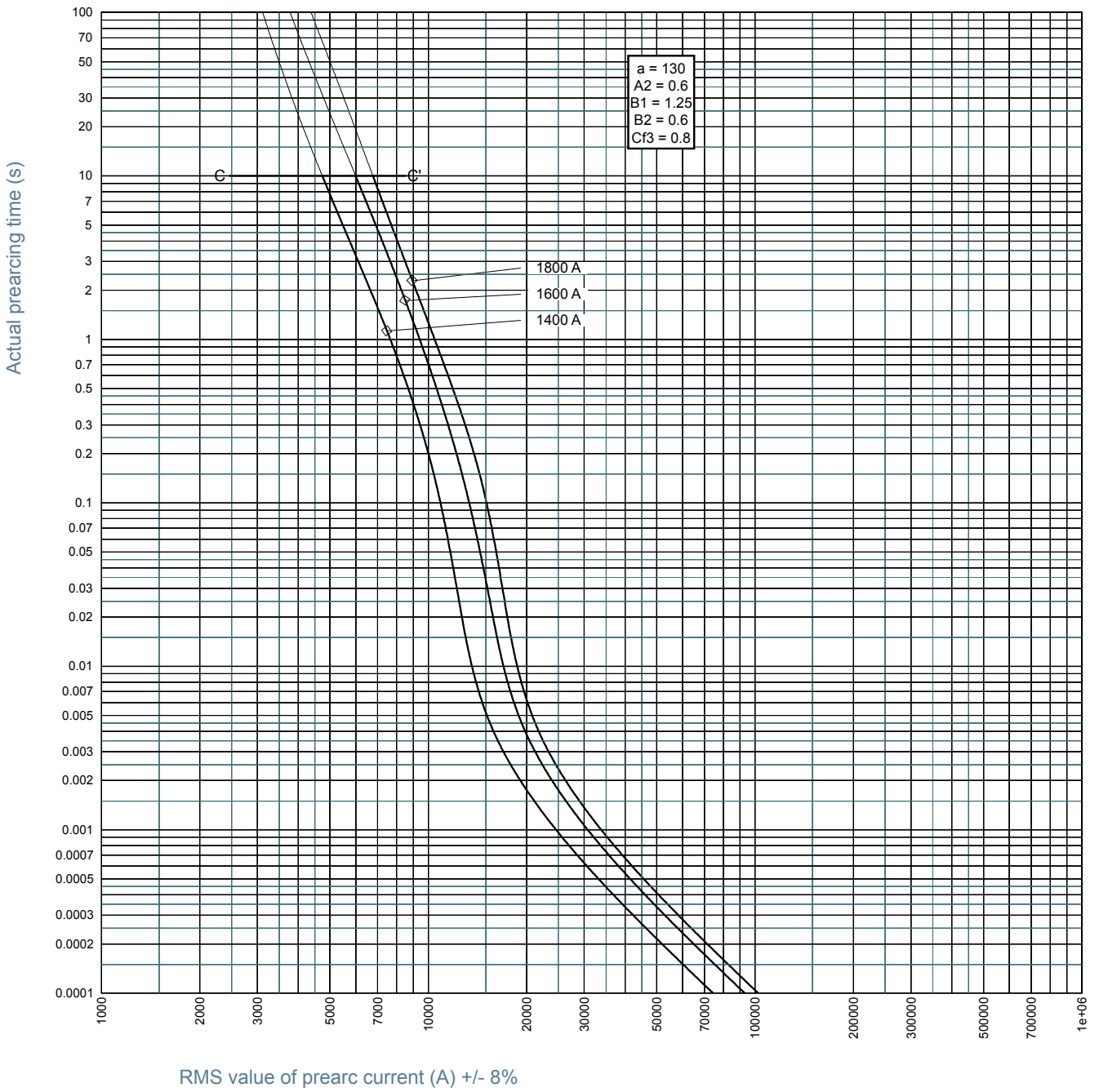


Time current characteristic curves

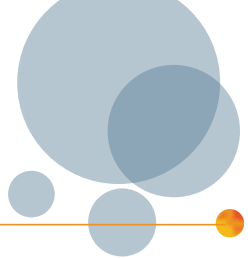




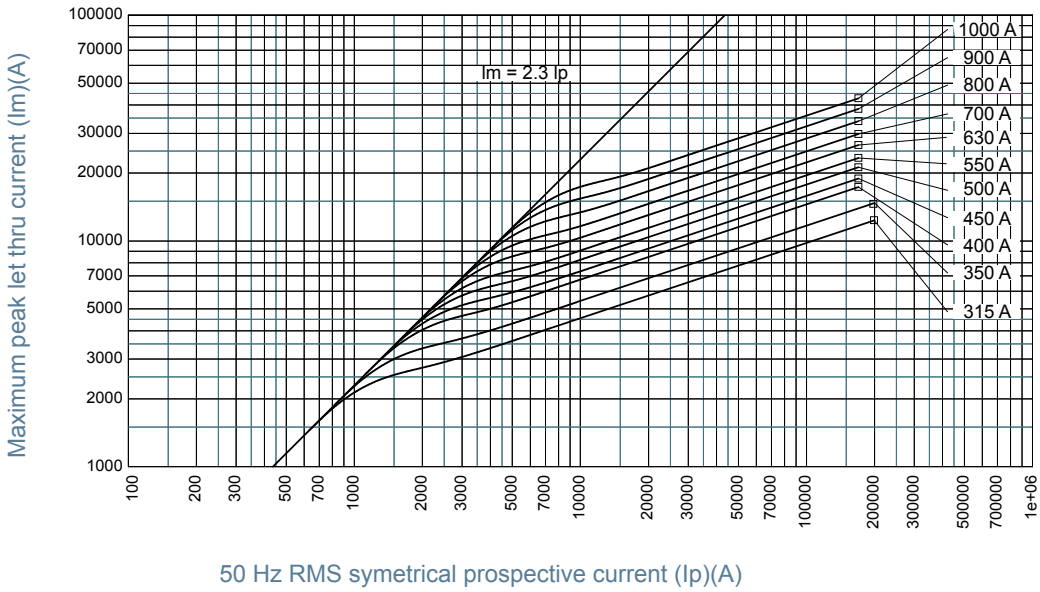
Time current characteristic curves



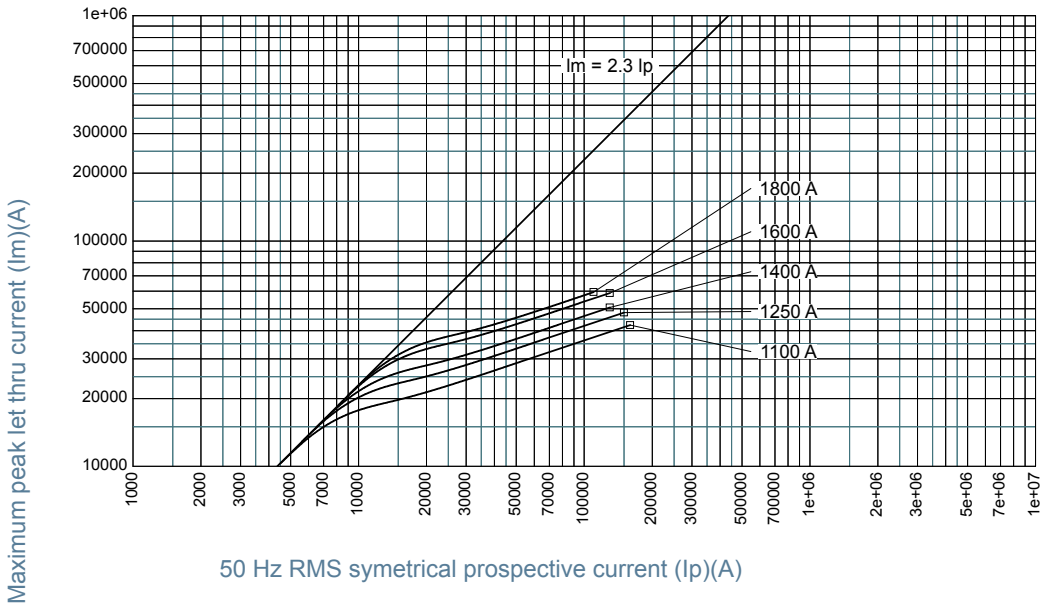




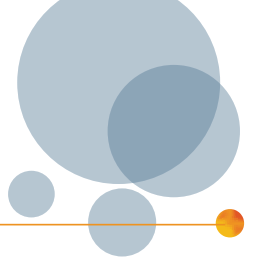
Current limiting diagram



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

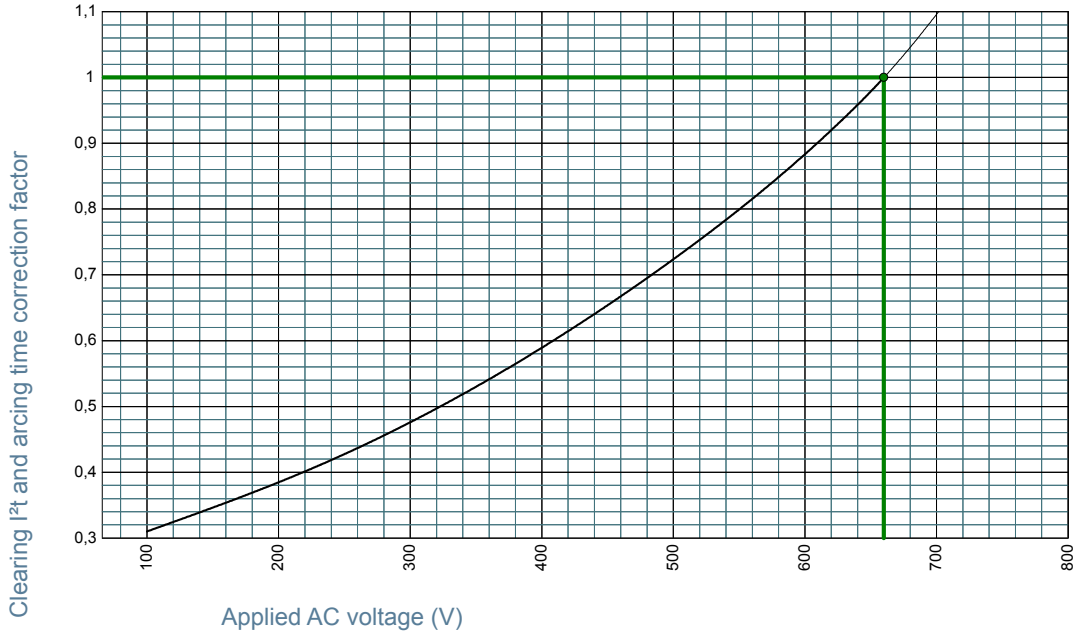


50 Hz RMS symmetrical prospective current ( $I_p$ )(A)

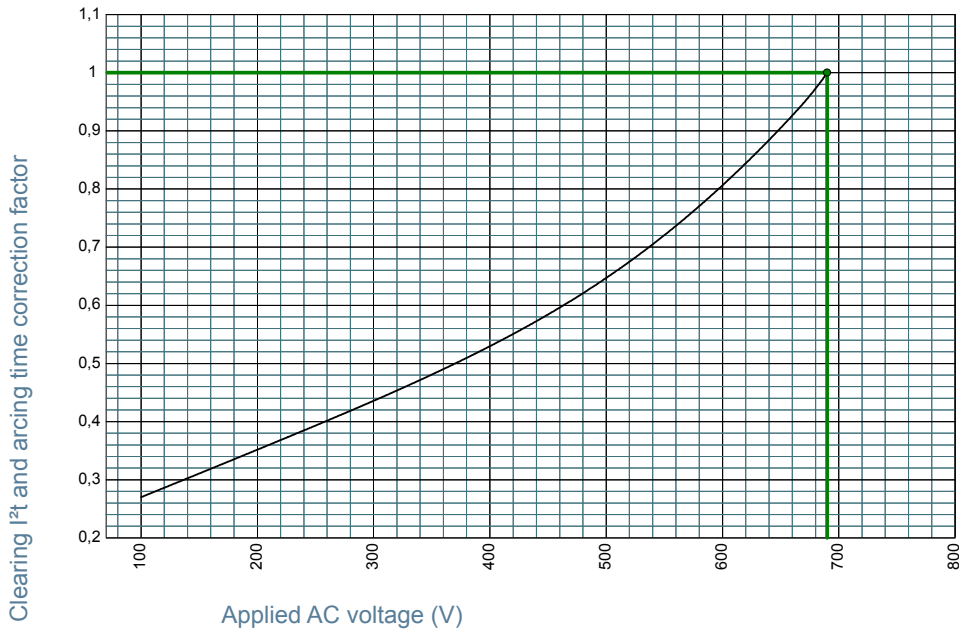


I<sup>2</sup>t Multiplier coefficient

Size 32 660V

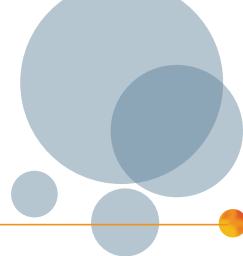


Size 32 690V



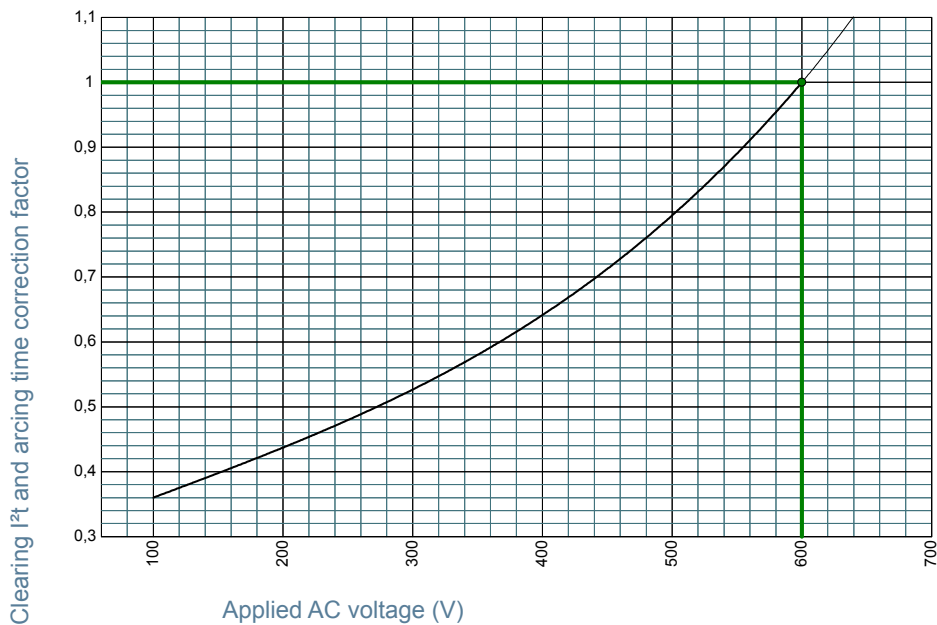
# Protistor® size 32 aR

500 to 700VAC

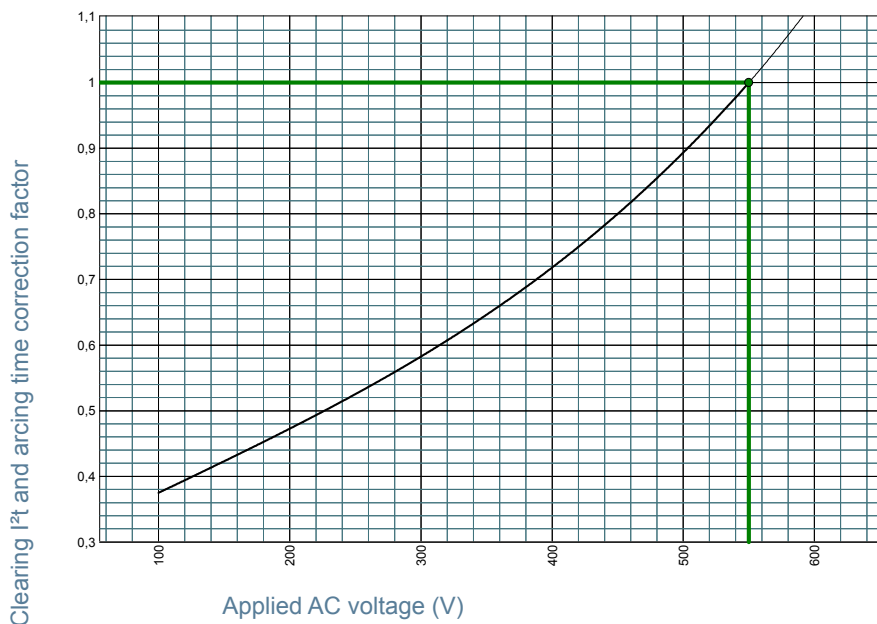


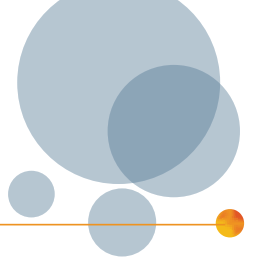
## I<sup>2</sup>t Multiplier coefficient

### Size 32 600V



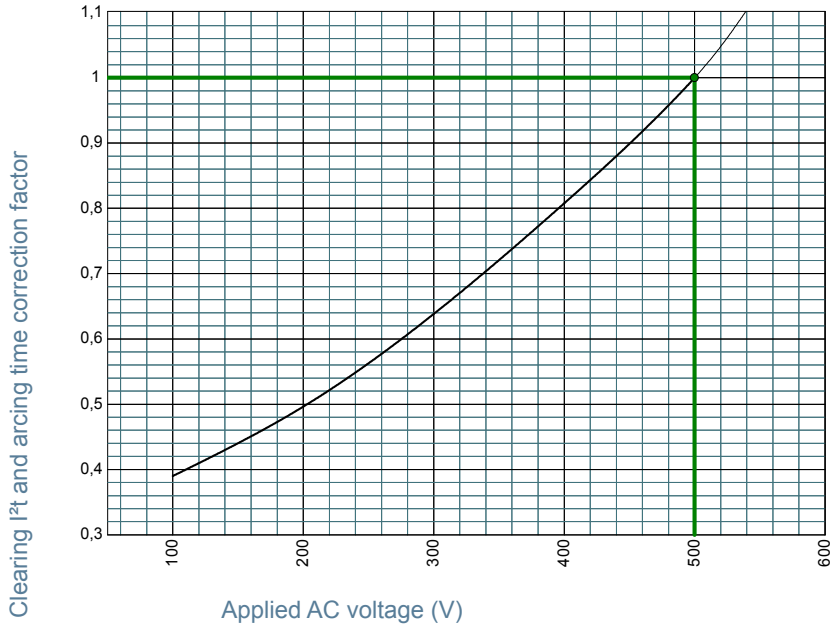
### Size 32 550V



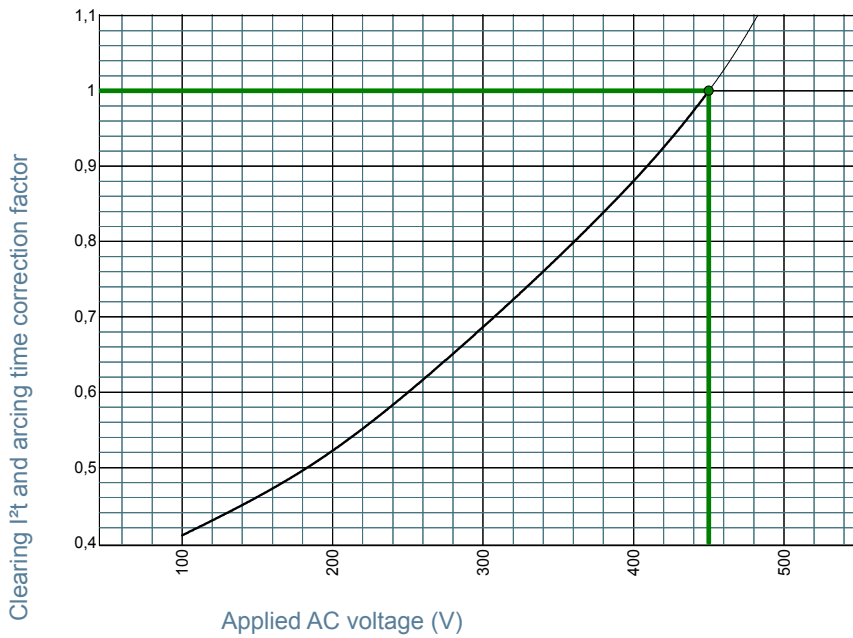


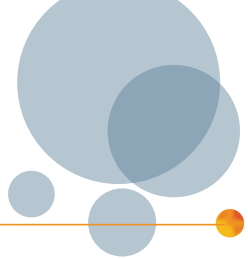
### I<sup>2</sup>t Multiplier coefficient

#### Size 32 500V



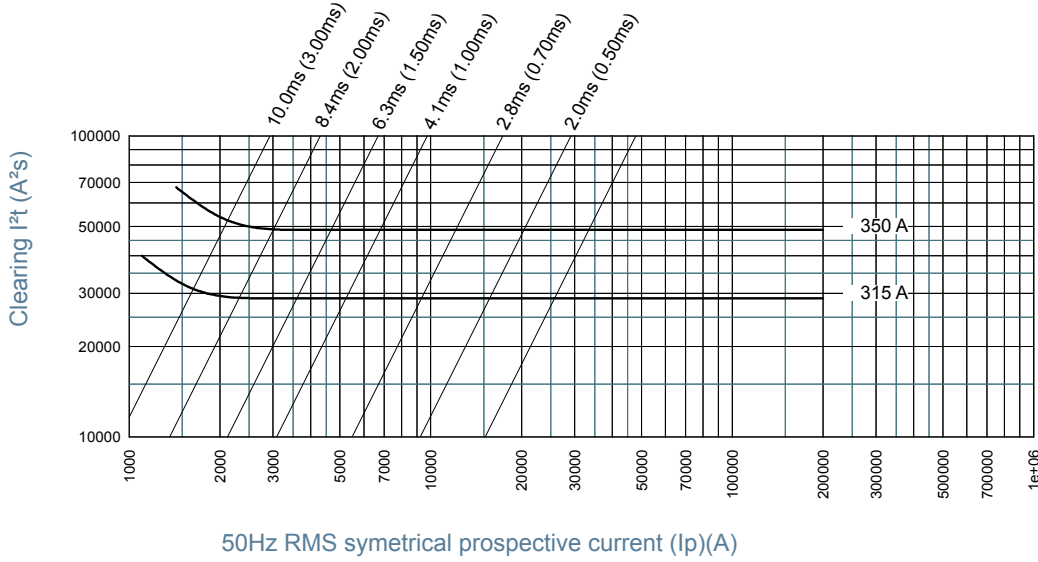
#### Size 32 450V



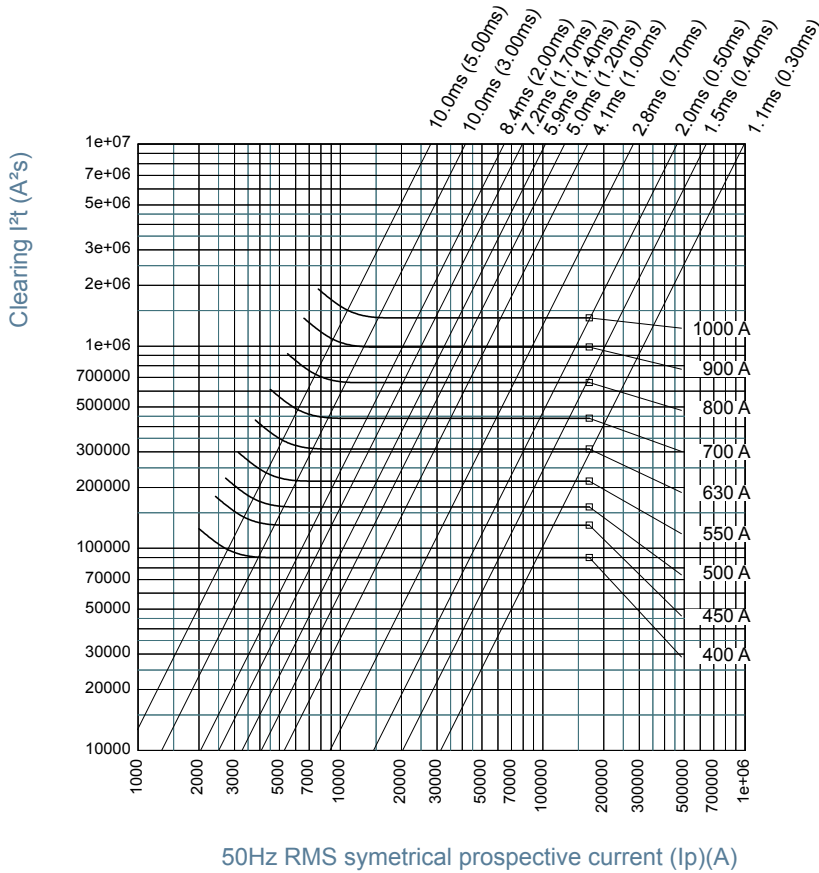


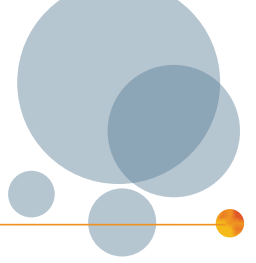
Characteristics total I<sup>2</sup>t curve

Size 32 660V



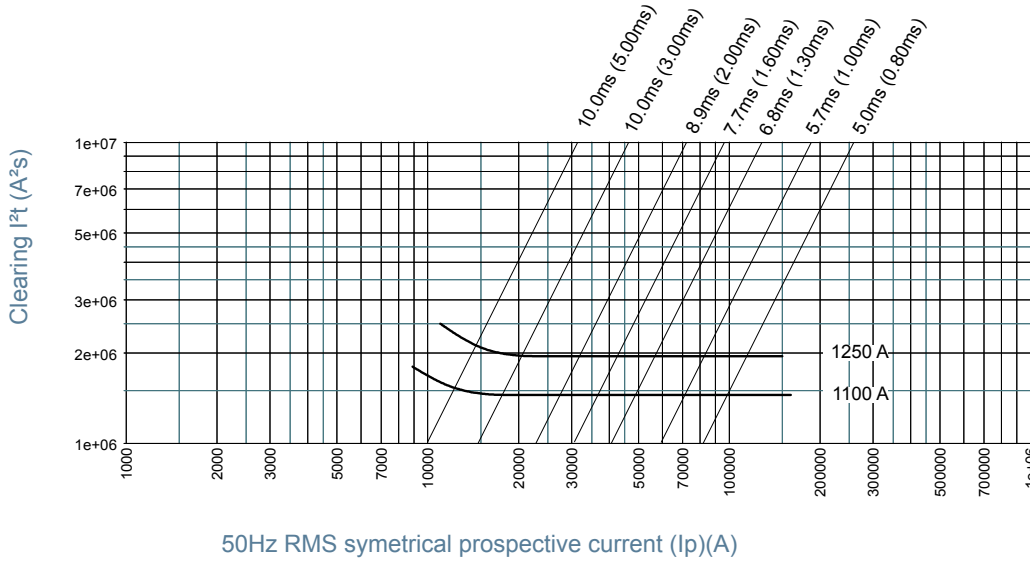
Size 32 690V



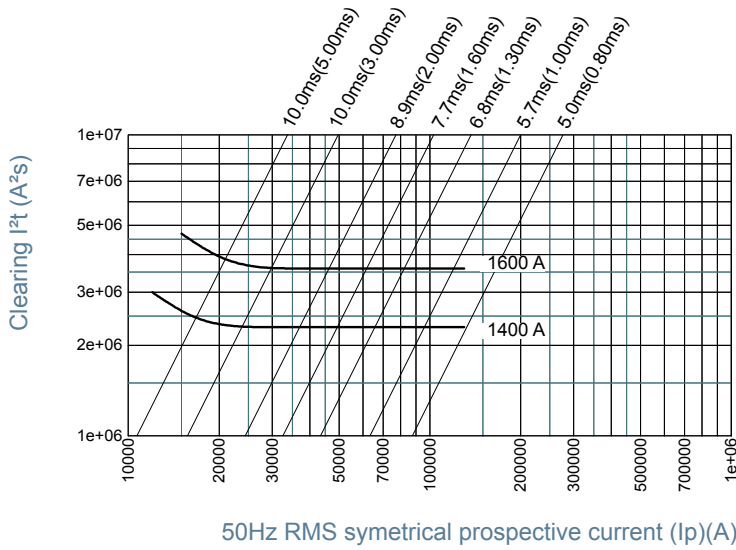


Characteristics total I<sup>2</sup>t curve

Size 32 550V

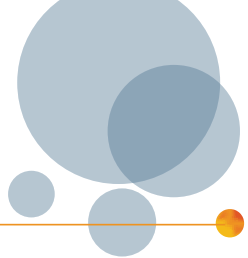


Size 32 500V



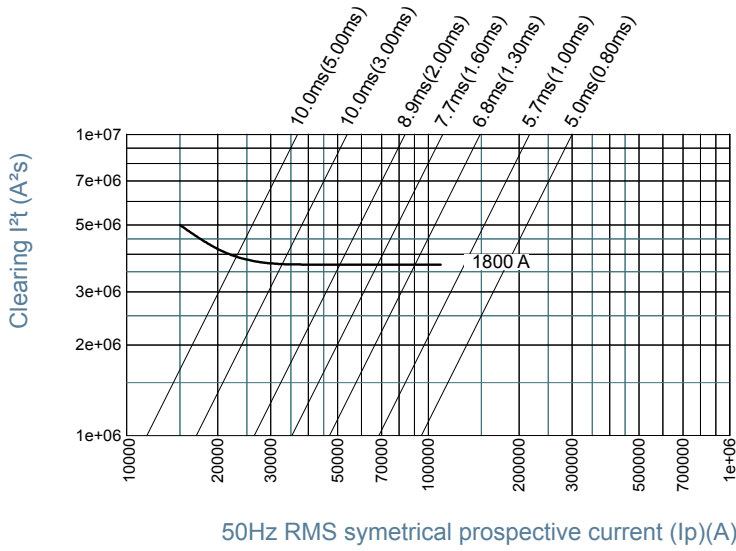
# Protistor® size 32 aR

500 to 700VAC

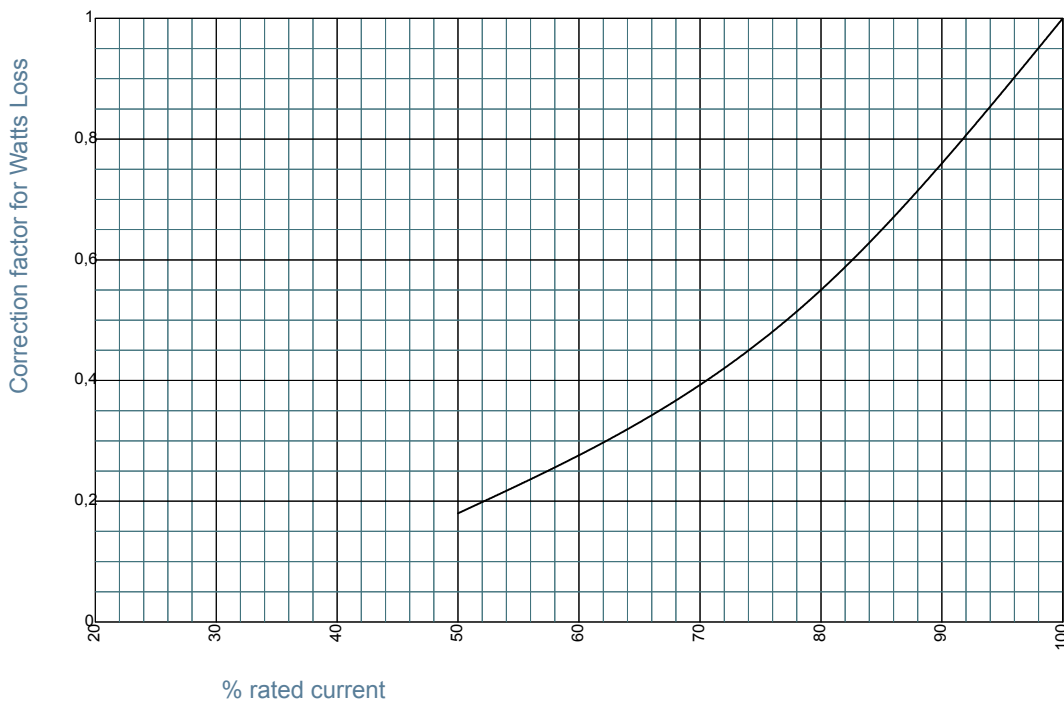


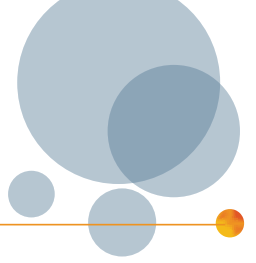
## Characteristics total I<sup>2</sup>t curve

Size 32 450V



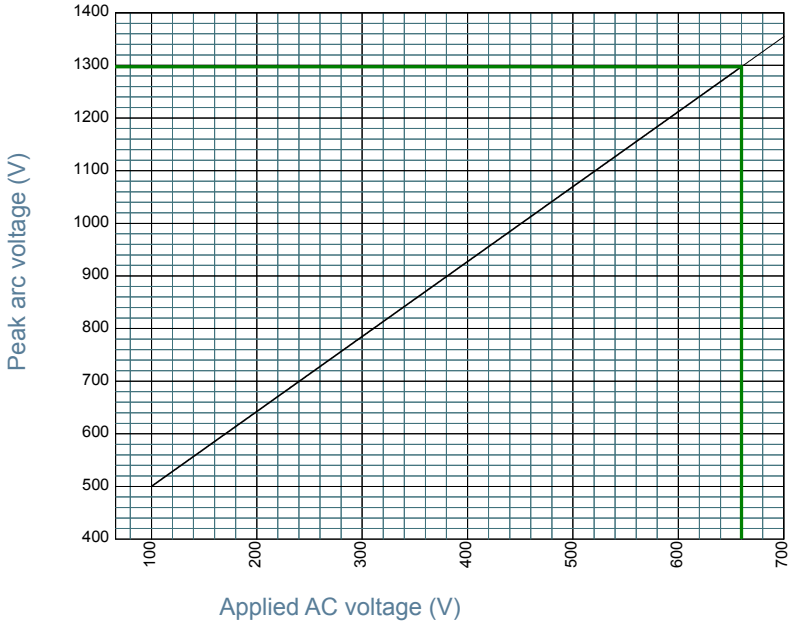
## Power dissipation



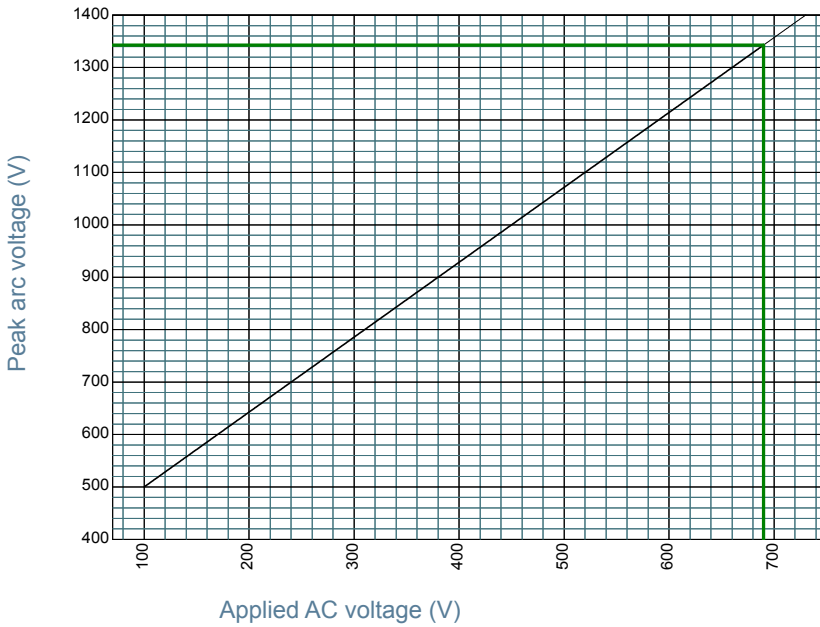


### Peak arc voltage

#### Size 32 660V



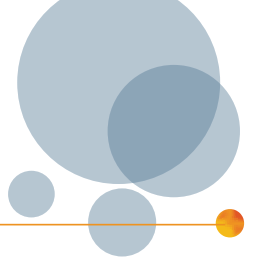
#### Size 32 690V





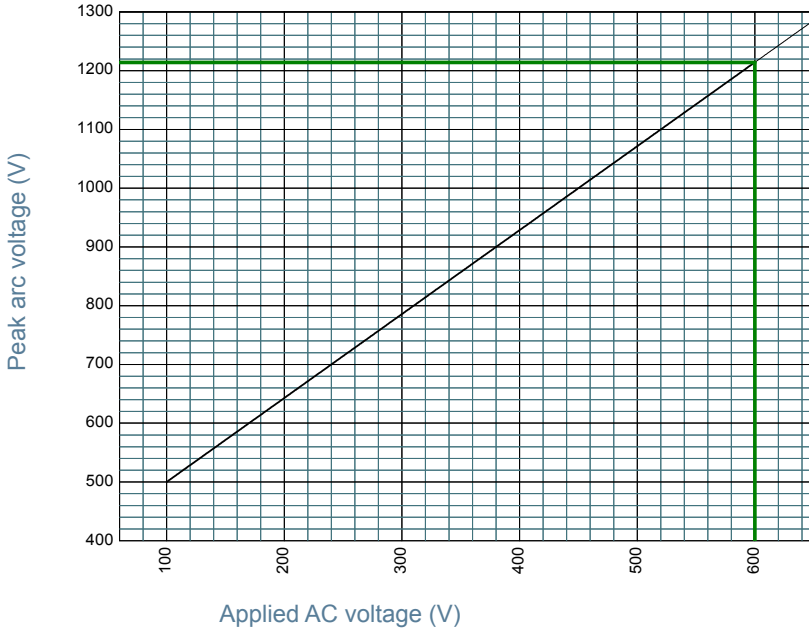
# Protistor® size 32 aR

500 to 700VAC

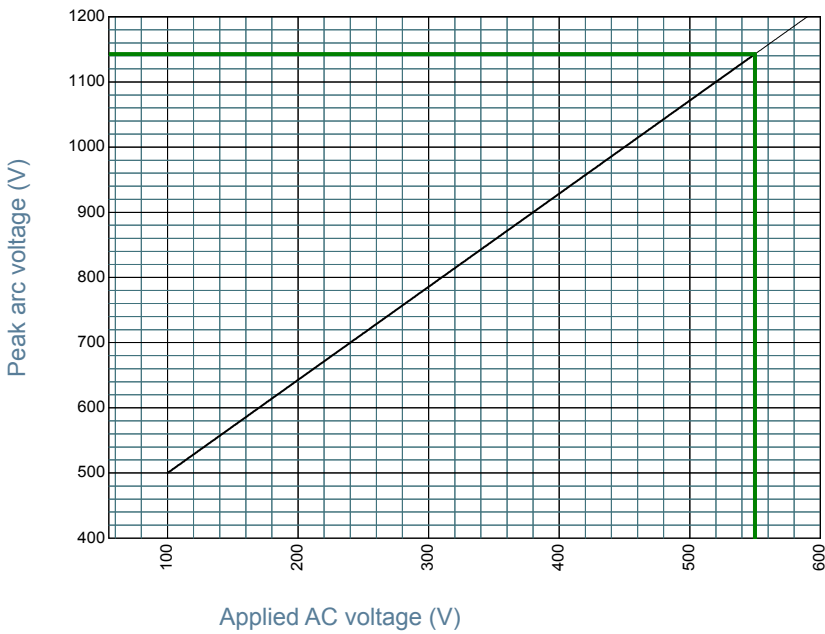


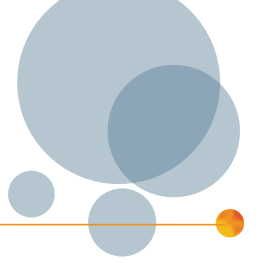
## Peak arc voltage

### Size 32 600V



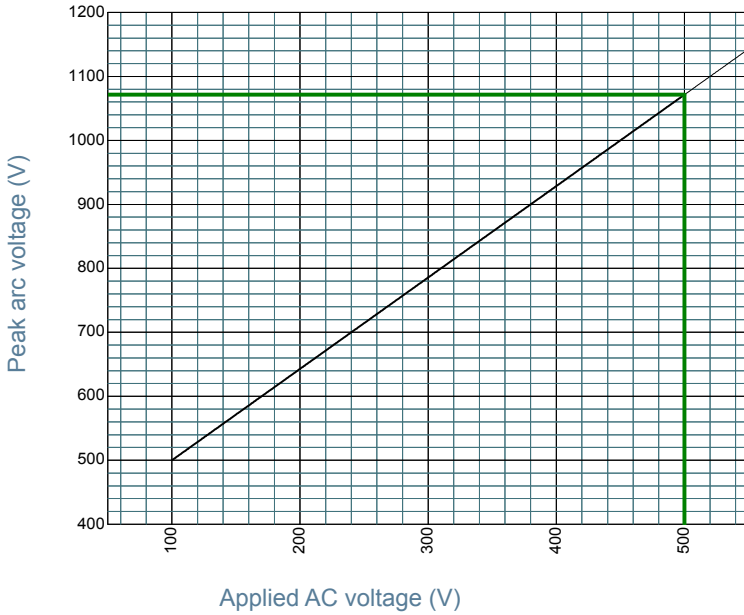
### Size 32 550V





## Peak arc voltage

### Size 32 500V



### Size 32 450V

