Protistor® size NH 000, 00, 0, 1, 2, 3 aR

690VAC (IEC) / 700VAC (UL)

NH 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 NH style fuse-links are defined as per DIN 43620/00 for a worldwide acceptance into NH modular system fuse-holders, fuse switch disconnectors for direct installation.

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 I²t 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
- aR Class according to VDE 636-23 and IEC 60269-4
- Very low I²t for improved semiconductor protection
- Ultra fast acting
- Current limiting
- Superior cycling capability
- Indication system with double indicator

Applications

- Protection of inverters, UPS systems, motor drives and similar 700V or less equipment.

Technical data overview

Voltage AC	690 VAC
Ampere Range (A)	16 ... 1000 A
Size per Standard	NH 000, 00, 0, 1, 2, 3
Speed/Characteristic	aR

Standards

UL/CSA Recognized Component

IEC 60269-4 Compliance

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Product range

NH000UD-69V16PV

Size 000

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 dissi-pation at I_n	Weight	Package
NH000UD69V16PV	P320035	690 V	700 V	16 A	8 A²s	0.05 kA²s	80 kA	2.8 W	135 g	3
NH000UD69V20PV	R320037	690 V	700 V	20 A	15 A²s	0.09 kA²s	80 kA	2.8 W	135 g	3
NH000UD69V25PV	T320039	690 V	700 V	25 A	21 A²s	0.13 kA²s	80 kA	4.2 W	135 g	3
NH000UD69V32PV	Y320043	690 V	700 V	32 A	46 A²s	0.27 kA²s	80 kA	5.5 W	135 g	3
NH000UD69V40PV	C320047	690 V	700 V	40 A	67 A²s	0.4 kA²s	80 kA	5.5 W	135 g	3
NH000UD69V50PV	G320051	690 V	700 V	50 A	110 A²s	0.63 kA²s	80 kA	9.7 W	135 g	3
NH000UD69V63PV	L320055	690 V	700 V	63 A	216 A²s	1.3 kA²s	80 kA	12.5 W	135 g	3
NH000UD69V80PV	Q320059	690 V	700 V	80 A	348 A²s	2 kA²s	80 kA	16.7 W	135 g	3
NH000UD69V100PV	V320063	690 V	700 V	100 A	722 A²s	4.3 kA²s	80 kA	19.4 W	135 g	3
NH000UD69V125PV	X320065	690 V	700 V	125 A	1390 A²s	8.2 kA²s	80 kA	20.8 W	135 g	3
NH000UD69V160PV	B320069	690 V	700 V	160 A	2080 A²s	12.2 kA²s	80 kA	30.5 W	135 g	3
NH000UD69V200PV	D320071	690 V	700 V	200 A	3870 A²s	22.7 kA²s	80 kA	36.1 W	135 g	3
NH000UD69V250PV	H320075	690 V	700 V	250 A	7540 A²s	44.4 kA²s	80 kA	44.1 W	135 g	3
NH000UD50V315PV	M320079	500 V	550 V	315 A	15400 A²s	90.7 kA²s	80 kA	60.2 W	135 g	3

NH00UD-69V20PV

Size 00

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
NH00UD69V20PV	A320137	690 V	700 V	20 A	16 A²s	0.09 kA²s	170 kA	2.8 W	200 g	3
NH00UD69V25PV	C320139	690 V	700 V	25 A	21 A²s	0.13 kA²s	170 kA	4.2 W	200 g	3
NH00UD69V32PV	G320143	690 V	700 V	32 A	46 A²s	0.27 kA²s	170 kA	5.5 W	200 g	3
NH00UD69V40PV	L320147	690 V	700 V	40 A	67 A²s	0.4 kA²s	170 kA	8.3 W	200 g	3
NH00UD69V50PV	Q320151	690 V	700 V	50 A	110 A²s	0.63 kA²s	170 kA	9.7 W	200 g	3
NH00UD69V63PV	V320155	690 V	700 V	63 A	216 A²s	1.3 kA²s	170 kA	12.5 W	200 g	3
NH00UD69V80PV	Z320159	690 V	700 V	80 A	348 A²s	2 kA²s	170 kA	16.7 W	200 g	3
NH00UD69V100PV	D320163	690 V	700 V	100 A	722 A²s	4.3 kA²s	170 kA	19.4 W	200 g	3
NH00UD69V125PV	F320165	690 V	700 V	125 A	1390 A²s	8.2 kA²s	170 kA	20.8 W	200 g	3
NH00UD69V160PV	K320169	690 V	700 V	160 A	2070 A²s	12.2 kA²s	170 kA	30.5 W	200 g	3
NH00UD69V200PV	M320171	690 V	700 V	200 A	3870 A²s	22.7 kA²s	170 kA	36.1 W	200 g	3
NH00UD69V250PV	R320175	690 V	700 V	250 A	7540 A²s	44.4 kA²s	170 kA	44.4 W	200 g	3
NH00UD69V315PV	W320179	690 V	700 V	315 A	15400 A²s	90.7 kA²s	170 kA	60 W	200 g	3

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Product range

NH0UD-69V32PV

Size 0

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
NH0UD69V32PV	Q320243	690 V	700 V	32 A	32 A²s	0.17 kA²s	170 kA	19.4 W	260 g	3
NH0UD69V40PV	V320247	690 V	700 V	40 A	54 A²s	0.28 kA²s	170 kA	20.8 W	260 g	3
NH0UD69V50PV	Z320251	690 V	700 V	50 A	87 A²s	0.47 kA²s	170 kA	20.8 W	260 g	3
NH0UD69V63PV	D320255	690 V	700 V	63 A	128 A²s	0.7 kA²s	170 kA	23.6 W	260 g	3
NH0UD69V80PV	H320259	690 V	700 V	80 A	184 A²s	0.97 kA²s	170 kA	25 W	260 g	3
NH0UD69V100PV	M320263	690 V	700 V	100 A	392 A²s	2.08 kA²s	170 kA	30.5 W	260 g	3
NH0UD69V125PV	P320265	690 V	700 V	125 A	722 A²s	3.89 kA²s	170 kA	36.1 W	260 g	3
NH0UD69V160PV	T320269	690 V	700 V	160 A	1550 A²s	8.32 kA²s	170 kA	44.4 W	260 g	3
NH0UD69V200PV	W320271	690 V	700 V	200 A	2950 A²s	15.9 kA²s	170 kA	54.2 W	260 g	3
NH0UD69V250PV	A320275	690 V	700 V	250 A	5580 A²s	29.9 kA²s	170 kA	66.7 W	260 g	3
NH0UD69V315PV	E320279	690 V	700 V	315 A	11600 A²s	62.3 kA²s	170 kA	80 W	260 g	3

NH1UD-69V80PV

Size 1

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
NH1UD69V63PV	M320355	690 V	700 V	63 A	128 A²s	0.7 kA²s	170 kA	36.1 W	435 g	3
NH1UD69V80PV	K320399	690 V	700 V	80 A	216 A²s	1.17 kA²s	170 kA	43 W	435 g	3
NH1UD69V100PV	W320363	690 V	700 V	100 A	288 A²s	1.57 kA²s	170 kA	45.8 W	435 g	3
NH1UD69V125PV	Y320365	690 V	700 V	125 A	620 A²s	3.32 kA²s	170 kA	53 W	435 g	3
NH1UD69V160PV	C320369	690 V	700 V	160 A	1170 A²s	6.27 kA²s	170 kA	58 W	435 g	3
NH1UD69V200PV	E320371	690 V	700 V	200 A	2480 A²s	13.3 kA²s	170 kA	66.7 W	435 g	3
NH1UD69V250PV	J320375	690 V	700 V	250 A	4690 A²s	25.1 kA²s	170 kA	75 W	435 g	3
NH1UD69V315PV	N320379	690 V	700 V	315 A	9580 A²s	51.4 kA²s	170 kA	83 W	435 g	3
NH1UD69V350PV	P320380	690 V	700 V	350 A	13500 A²s	72.3 kA²s	170 kA	89 W	435 g	3
NH1UD69V400PV	S320383	690 V	700 V	400 A	19500 A²s	105 kA²s	170 kA	97 W	435 g	3

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Product range

NH2UD-69V200PV

Size 2

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
NH2UD69V160PV	L320469	690 V	700 V	160 A	968 A²s	5.18 kA²s	170 kA	75 W	620 g	3
NH2UD69V200PV	N320471	690 V	700 V	200 A	1710 A²s	9.22 kA²s	170 kA	83 W	620 g	3
NH2UD69V250PV	S320475	690 V	700 V	250 A	3500 A²s	18.7 kA²s	170 kA	93 W	620 g	3
NH2UD69V315PV	X320479	690 V	700 V	315 A	6870 A²s	36.9 kA²s	170 kA	108 W	620 g	3
NH2UD69V350PV	Y320480	690 V	700 V	350 A	9580 A²s	51.4 kA²s	170 kA	116 W	620 g	3
NH2UD69V400PV	B320483	690 V	700 V	400 A	13500 A²s	72.3 kA²s	170 kA	125 W	620 g	3
NH2UD69V450PV	D320485	690 V	700 V	450 A	21000 A²s	113 kA²s	170 kA	139 W	620 g	3
NH2UD69V500PV	F320487	690 V	700 V	500 A	27500 A²s	147 kA²s	170 kA	147 W	620 g	3
NH2UD69V550PV	G320488	690 V	700 V	550 A	38400 A²s	206 kA²s	170 kA	155 W	620 g	3
NH2UD69V630PV	H320489	690 V	700 V	630 A	58600 A²s	315 kA²s	170 kA	169 W	620 g	3
NH2UD69V700PV	J320490	690 V	700 V	700 A	78100 A²s	420 kA²s	170 kA	175 W	620 g	3

NH3UD-69V315PV

Size 3

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
NH3UD69V315PV	F320579	690 V	700 V	315 A	5240 A²s	28.2 kA²s	170 kA	113 W	1050 g	1
NH3UD69V350PV	G320580	690 V	700 V	350 A	7540 A²s	40.6 kA²s	170 kA	117 W	1050 g	1
NH3UD69V400PV	K320583	690 V	700 V	400 A	10500 A²s	56.5 kA²s	170 kA	130 W	1050 g	1
NH3UD69V450PV	M320585	690 V	700 V	450 A	15700 A²s	84.3 kA²s	170 kA	139 W	1050 g	1
NH3UD69V500PV	P320587	690 V	700 V	500 A	22200 A²s	119 kA²s	170 kA	150 W	1050 g	1
NH3UD69V550PV	Q320588	690 V	700 V	550 A	30300 A²s	163 kA²s	170 kA	160 W	1050 g	1
NH3UD69V630PV	R320589	690 V	700 V	630 A	42100 A²s	226 kA²s	170 kA	175 W	1050 g	1
NH3UD69V700PV	S320590	690 V	700 V	700 A	61700 A²s	332 kA²s	170 kA	200 W	1050 g	1
NH3UD69V800PV	T320591	690 V	700 V	800 A	88900 A²s	478 kA²s	170 kA	220 W	1050 g	1
NH3UD69V900PV	V320592	690 V	700 V	900 A	124000 A²s	666 kA²s	170 kA	250 W	1050 g	1
NH3UD69V1000PV	W320593	690 V	700 V	1000 A	178000 A²s	959 kA²s	170 kA	280 W	1050 g	1

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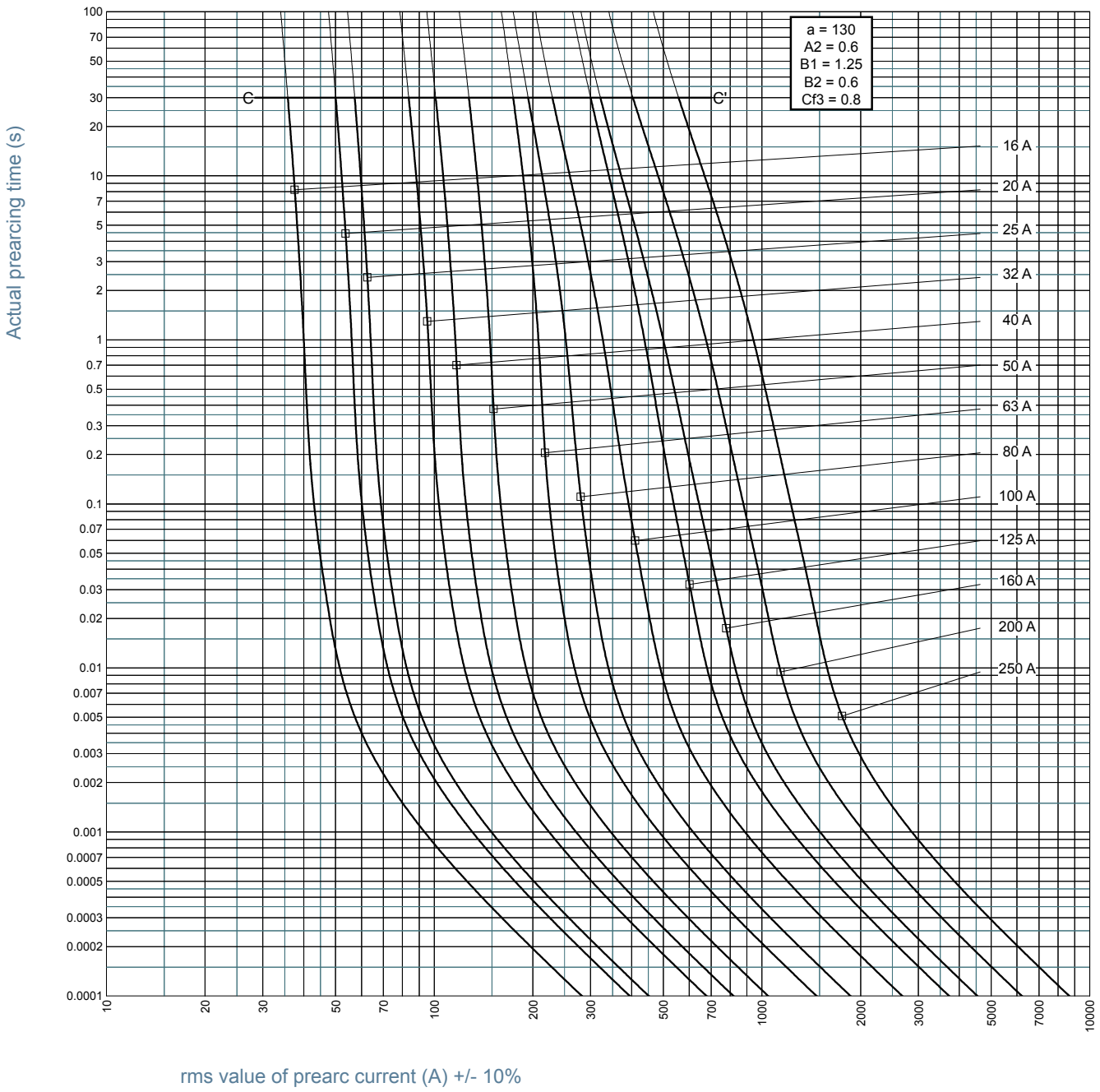
Time current characteristic curves

Size 000



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Time current characteristic curves

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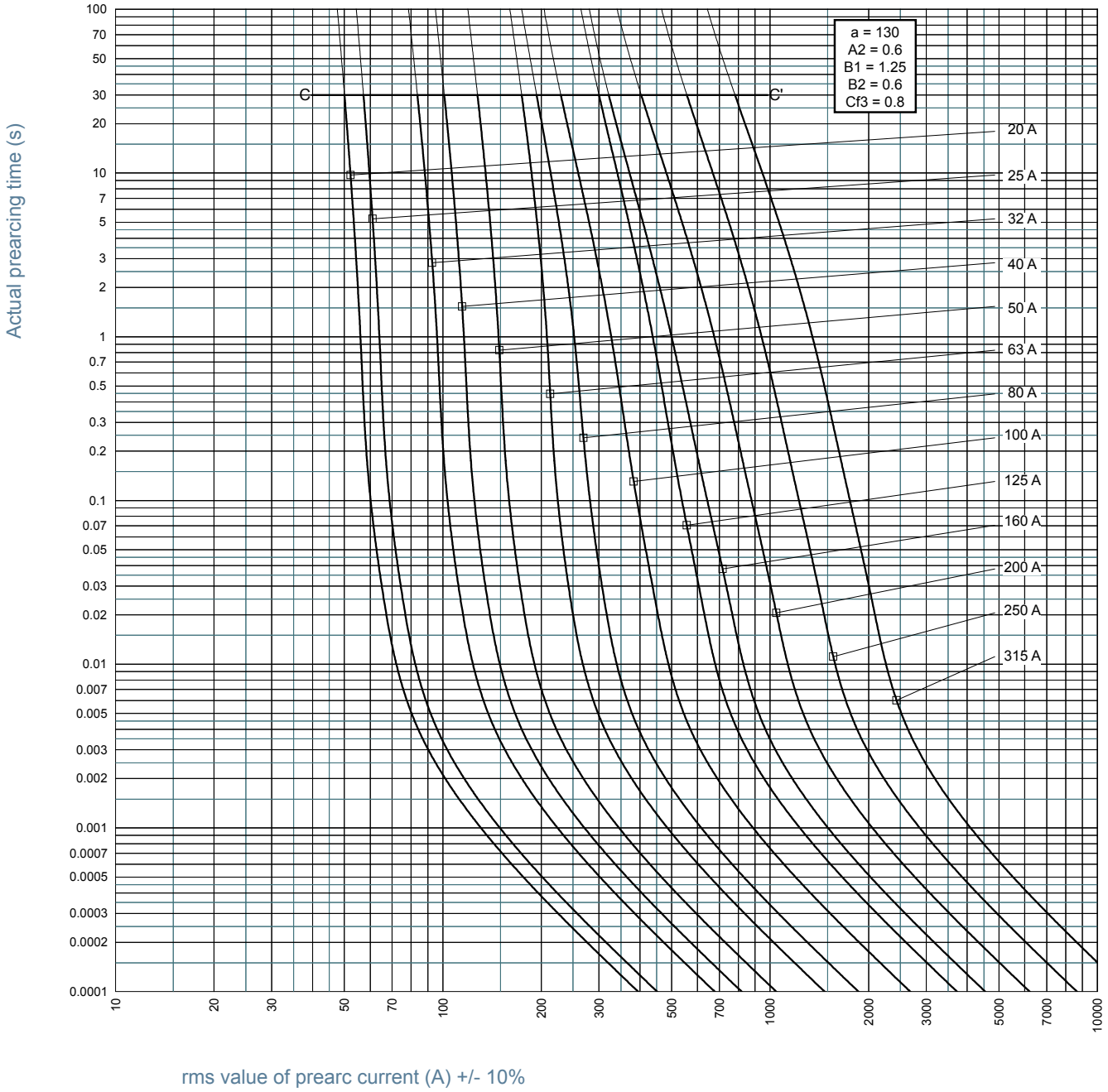

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Time current characteristic curves

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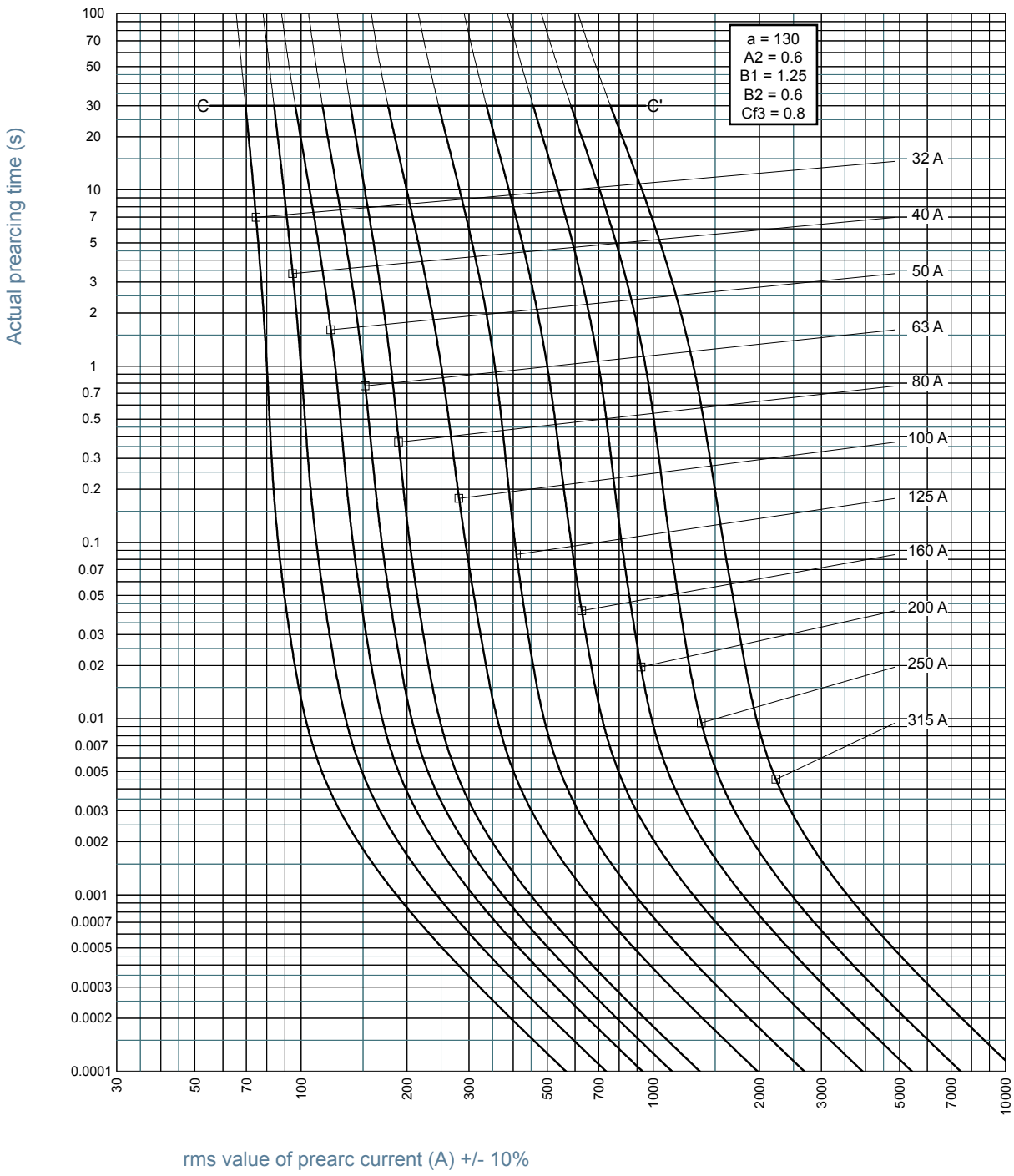

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Time current characteristic curves

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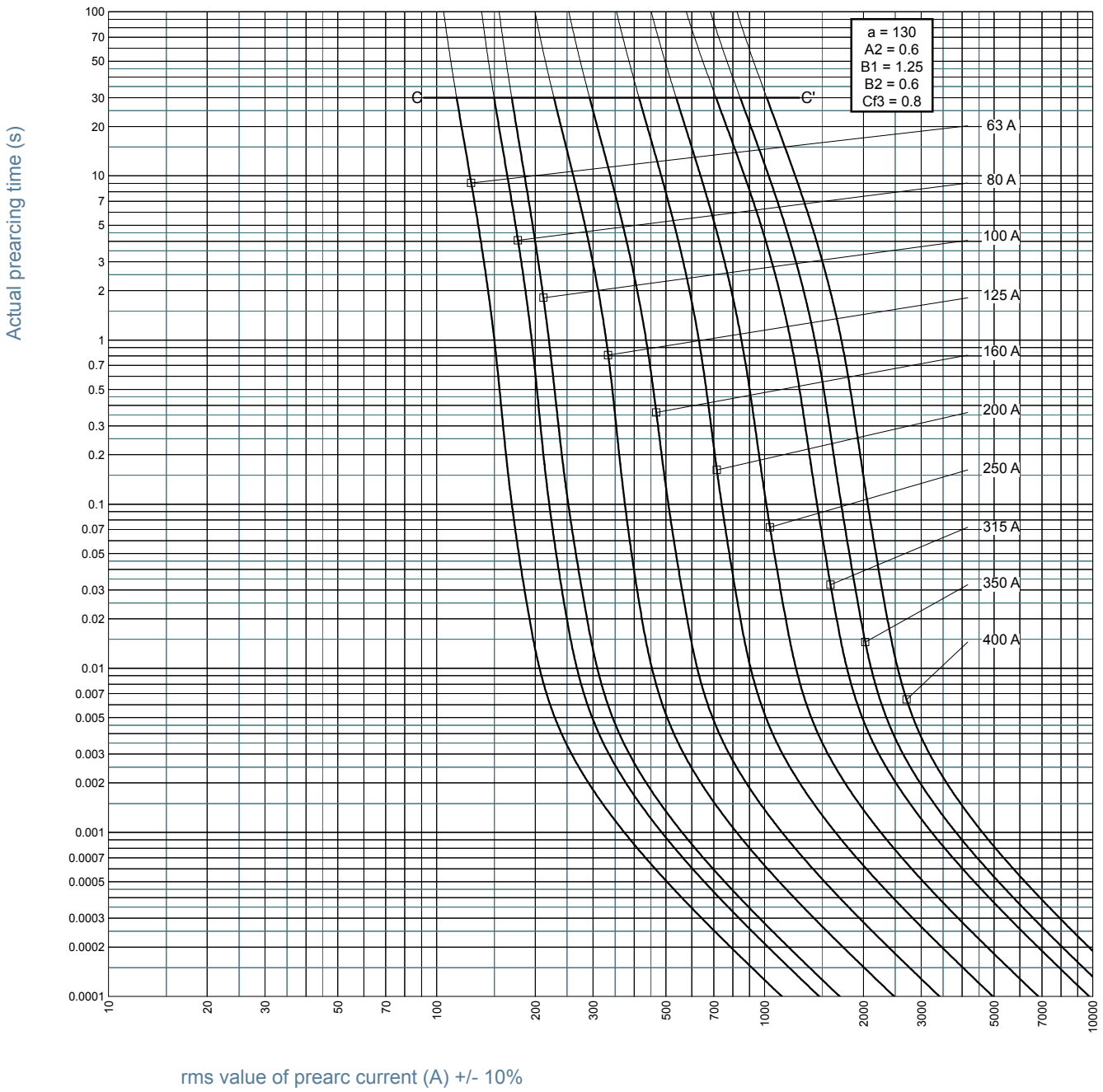

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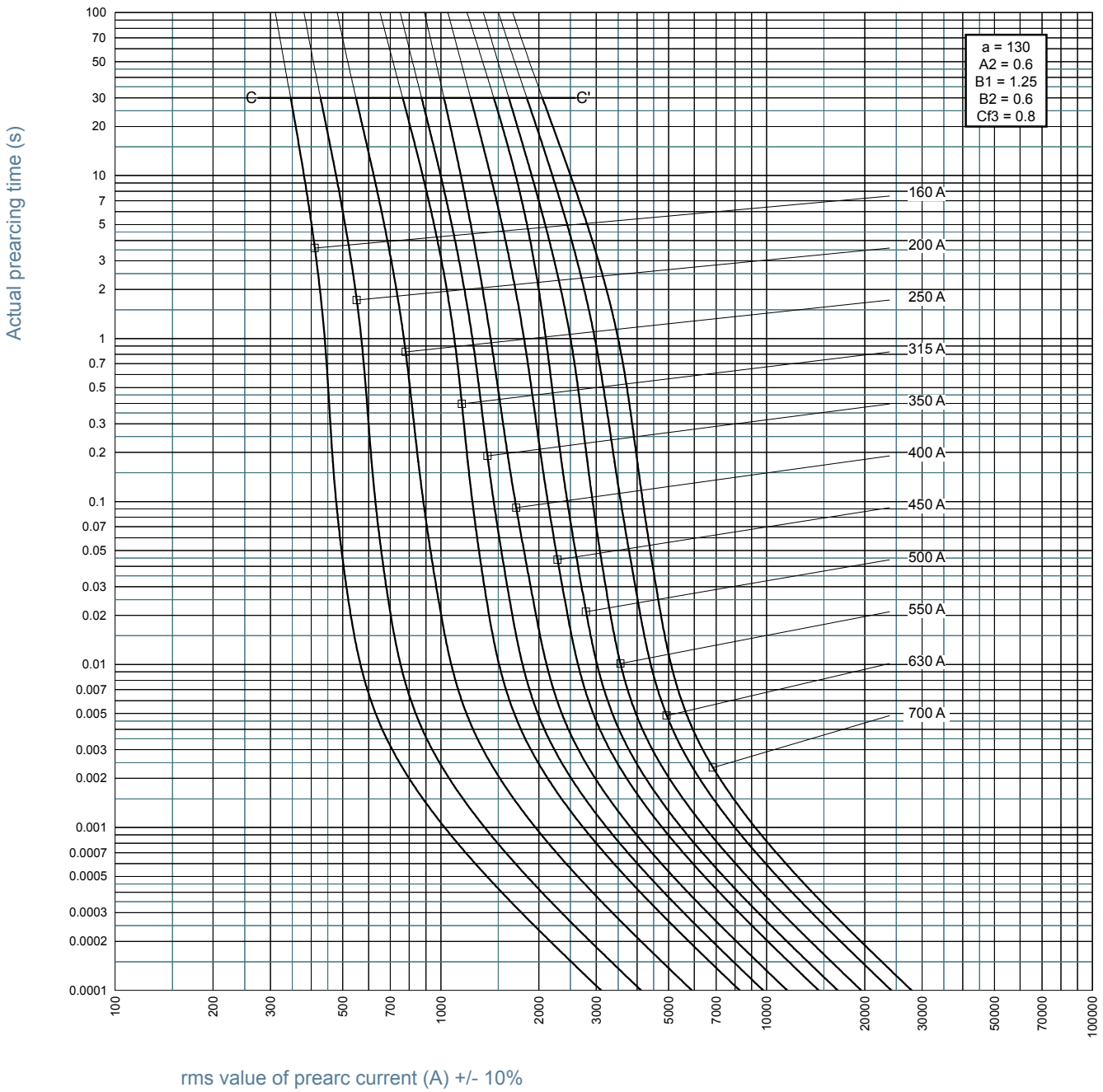
Time current characteristic curves

Size 2



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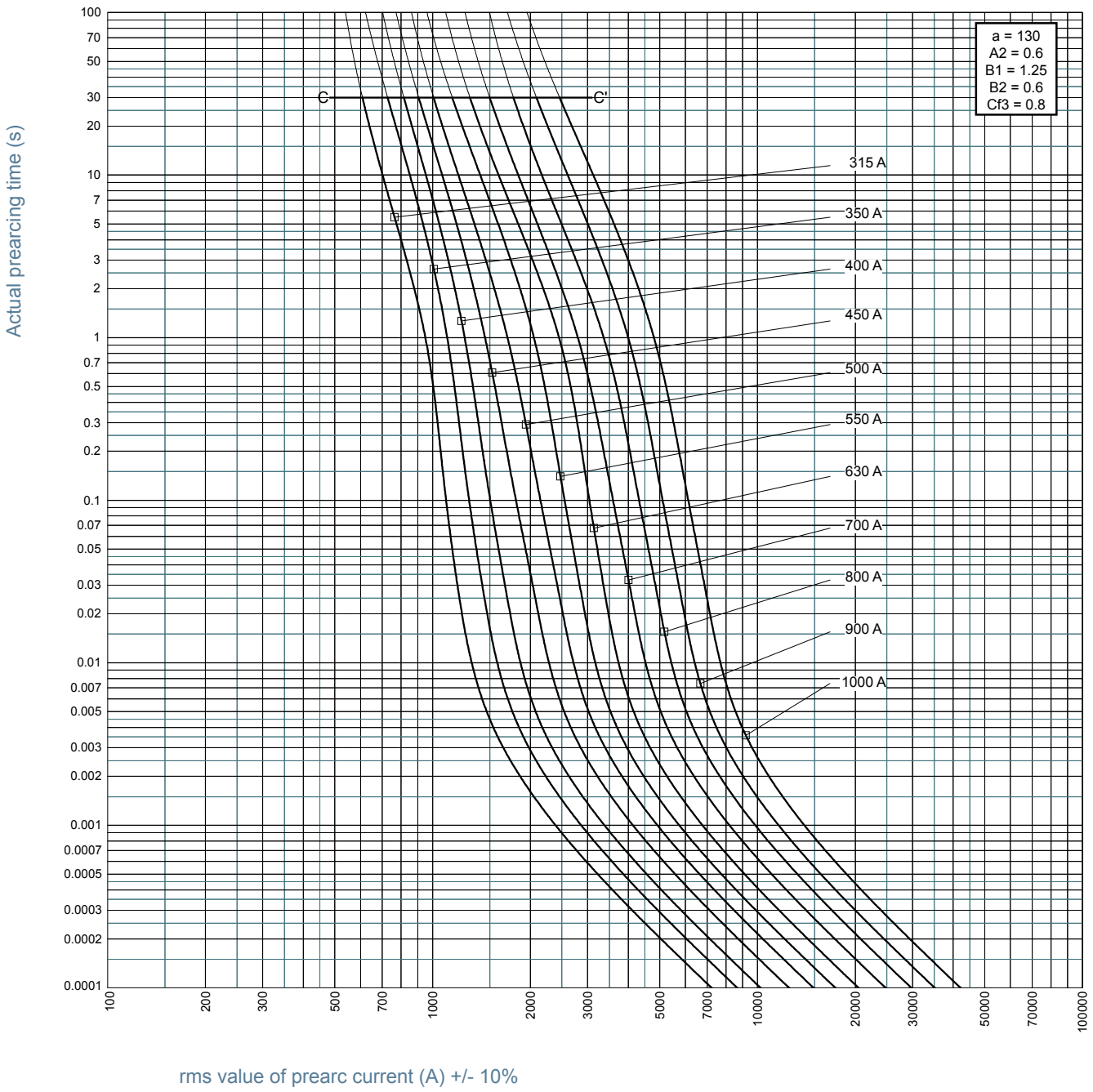
Time current characteristic curves

Size 3



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Current limiting diagram

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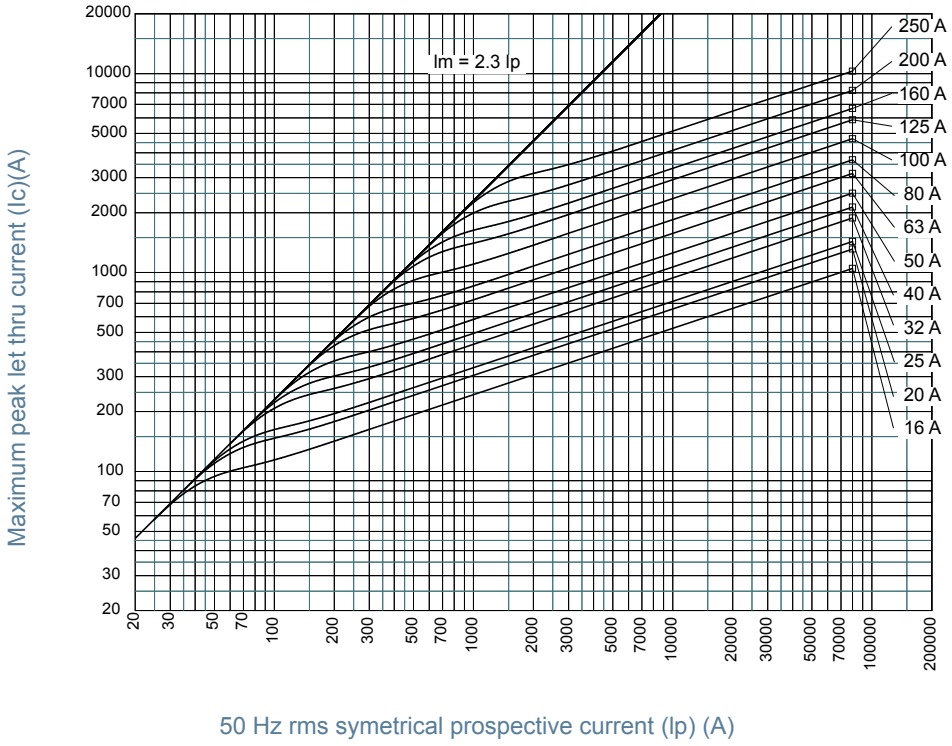

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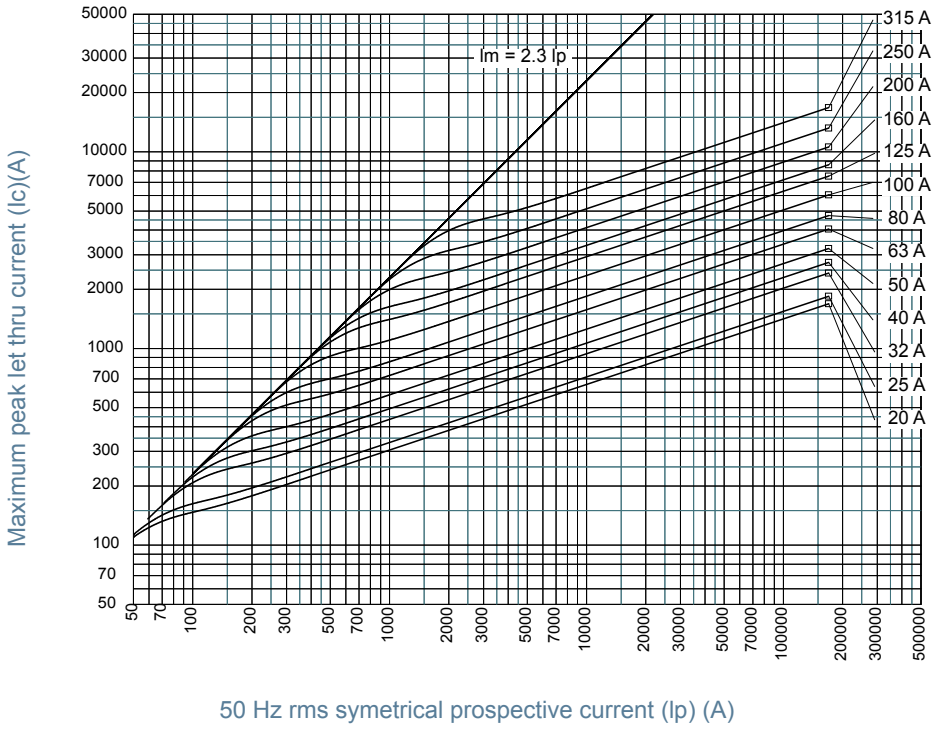

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Current limiting diagram

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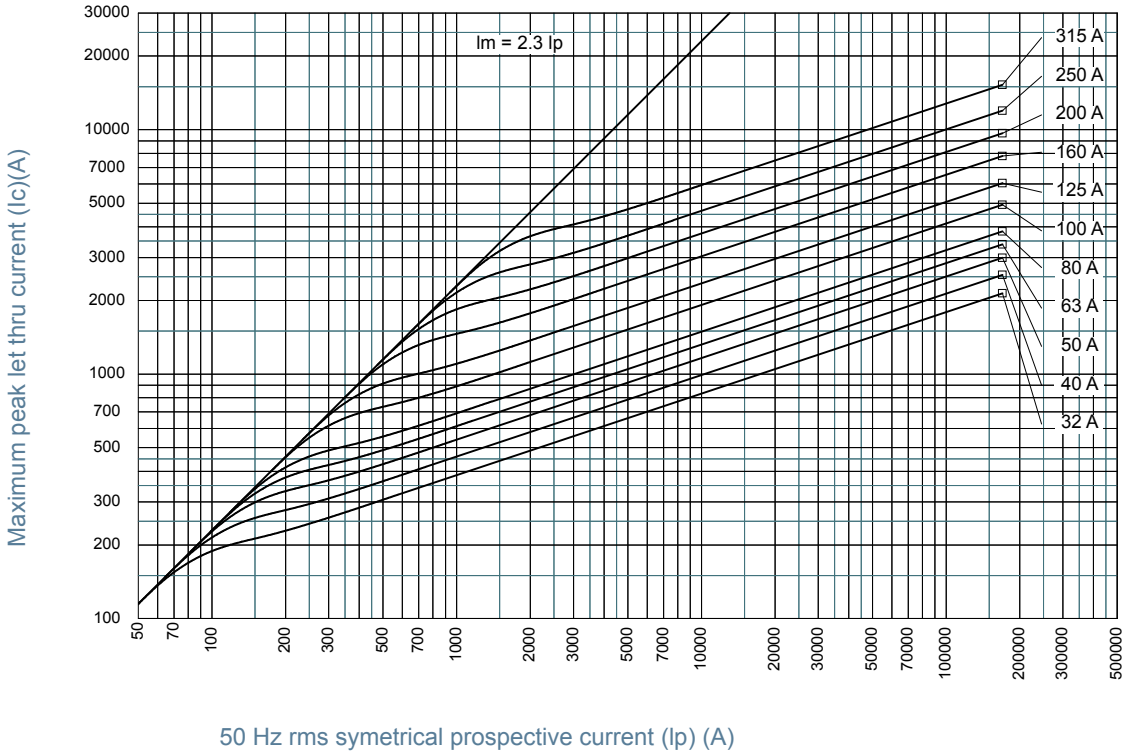

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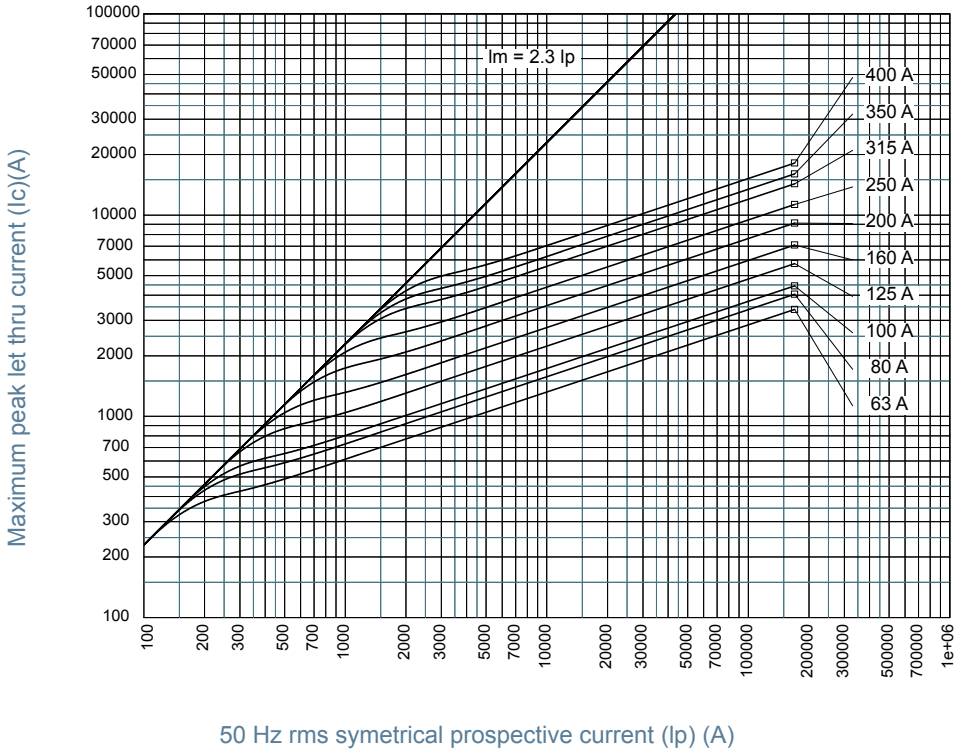

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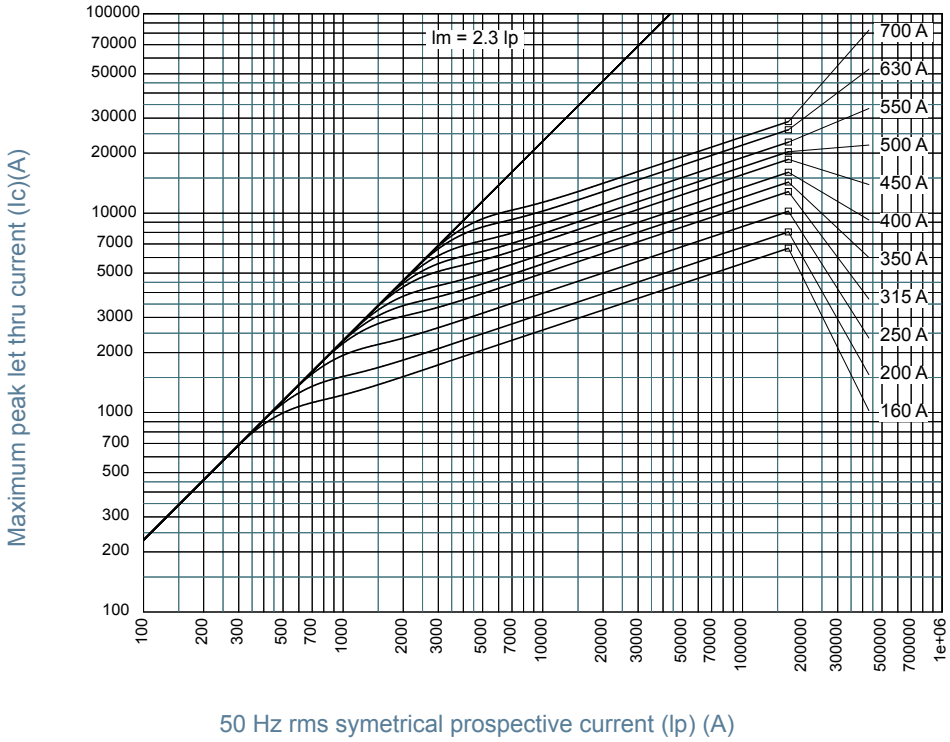

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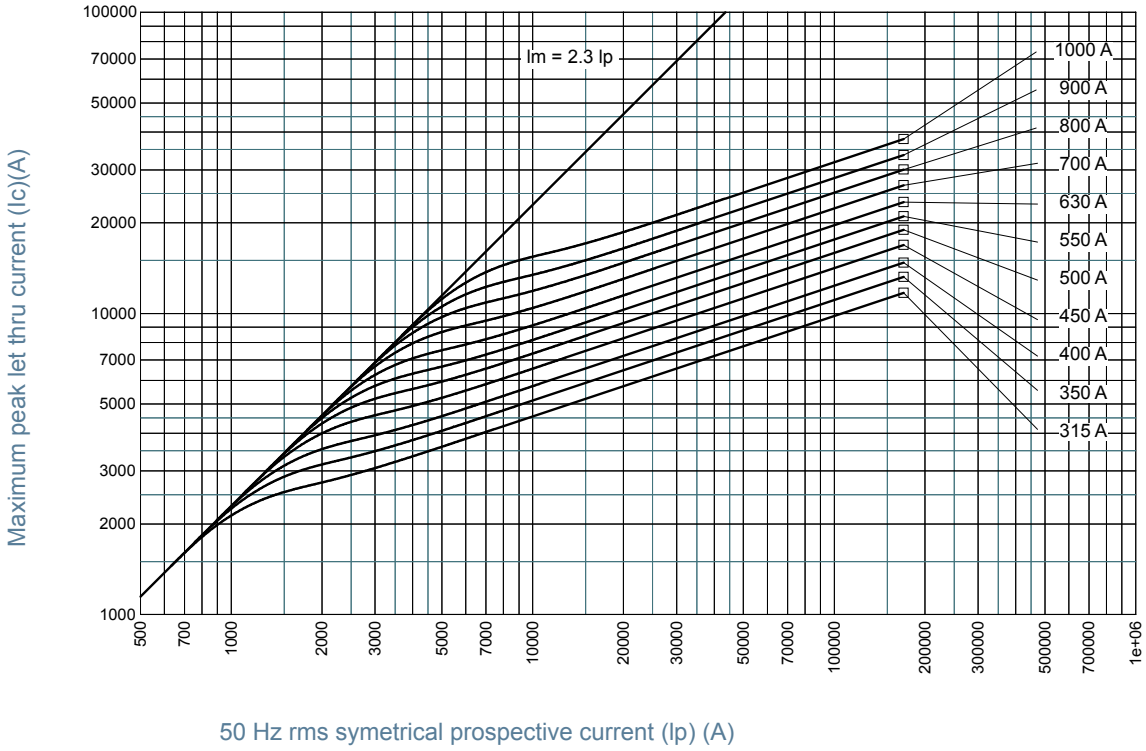

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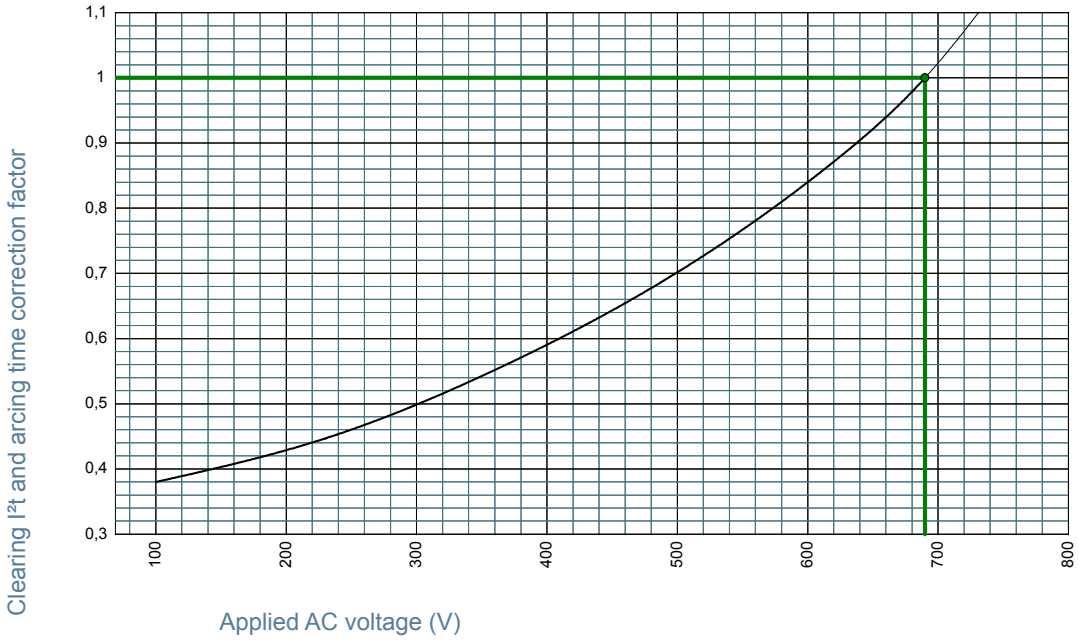
I²t Multiplier coefficient

Size 000



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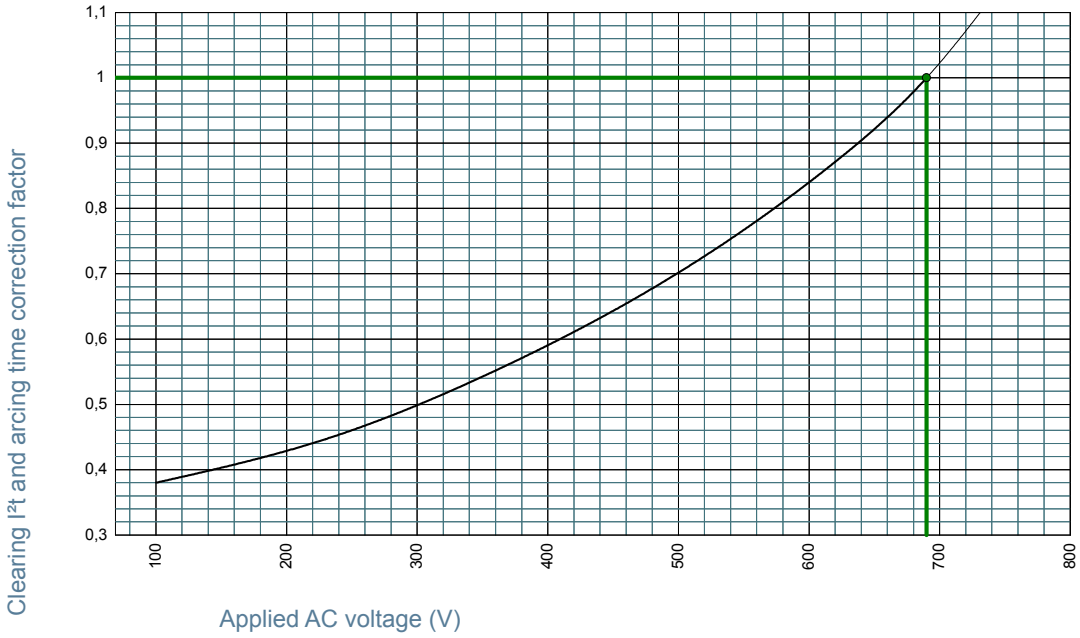

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I²t Multiplier coefficient

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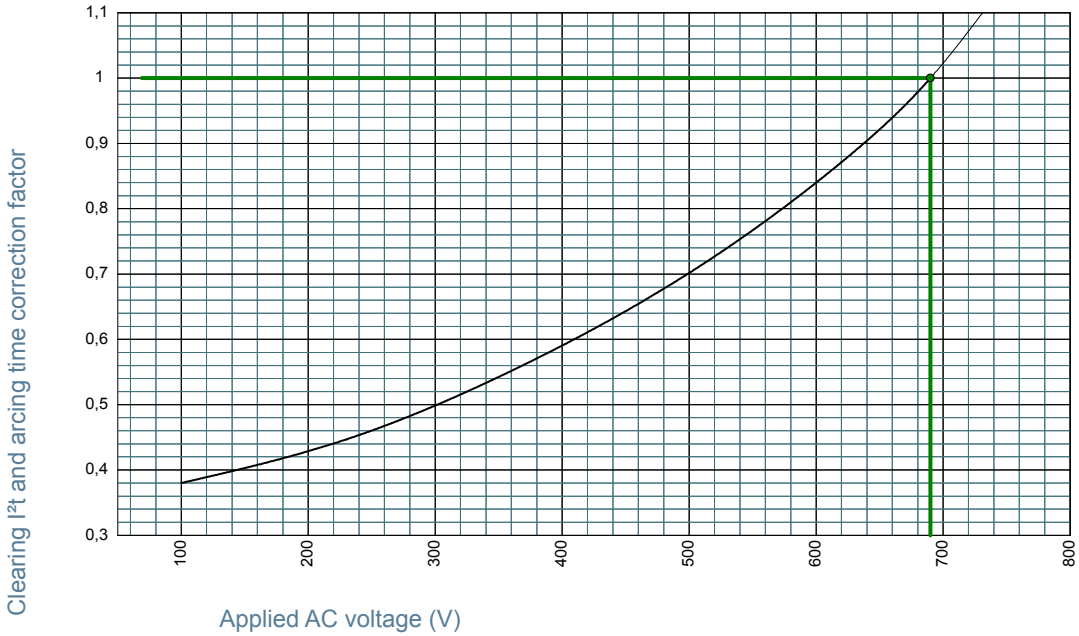

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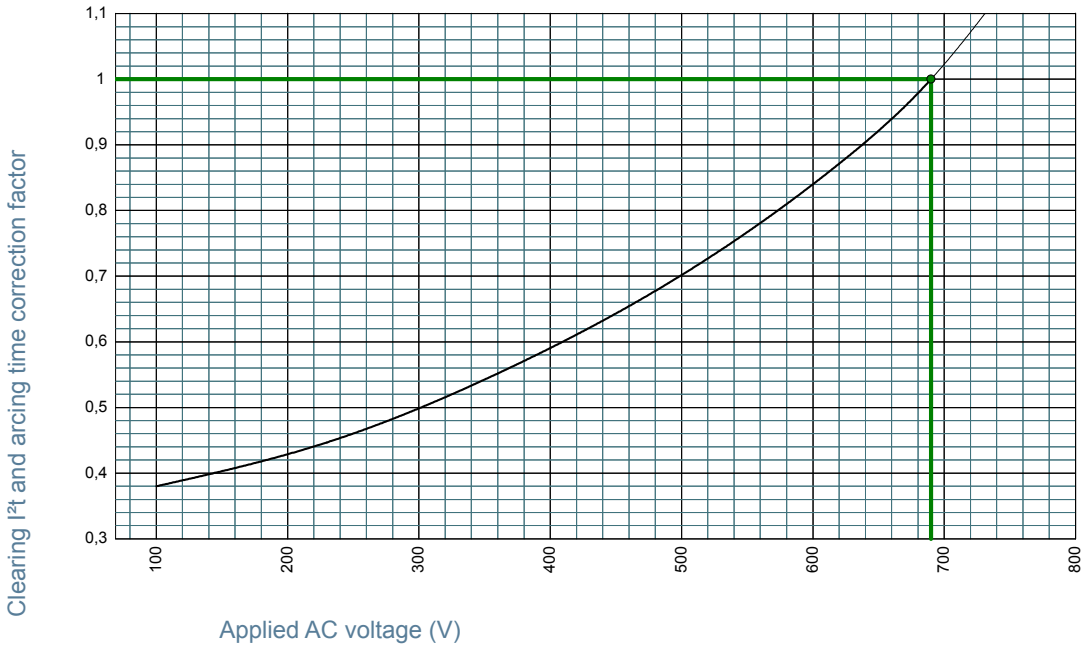

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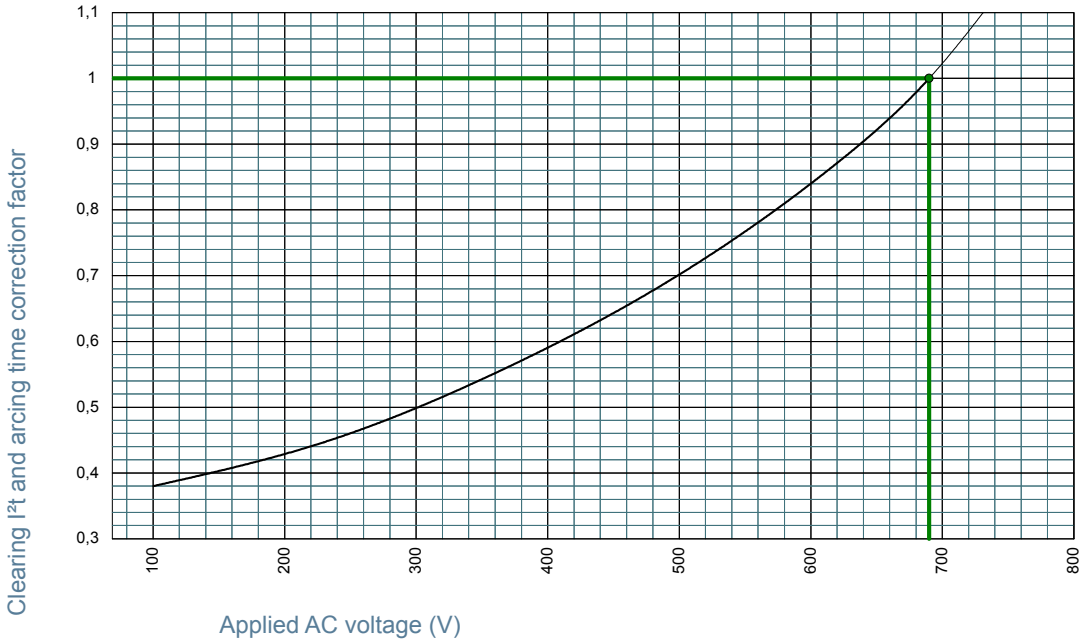
I²t Multiplier coefficient

Size 2



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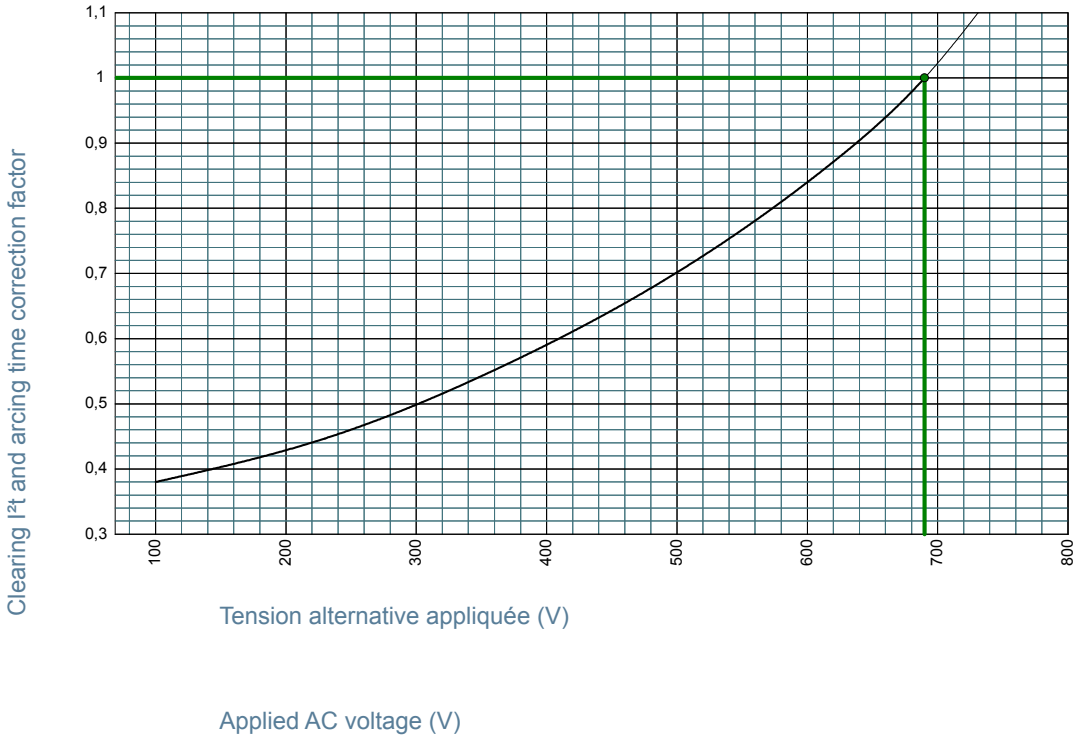

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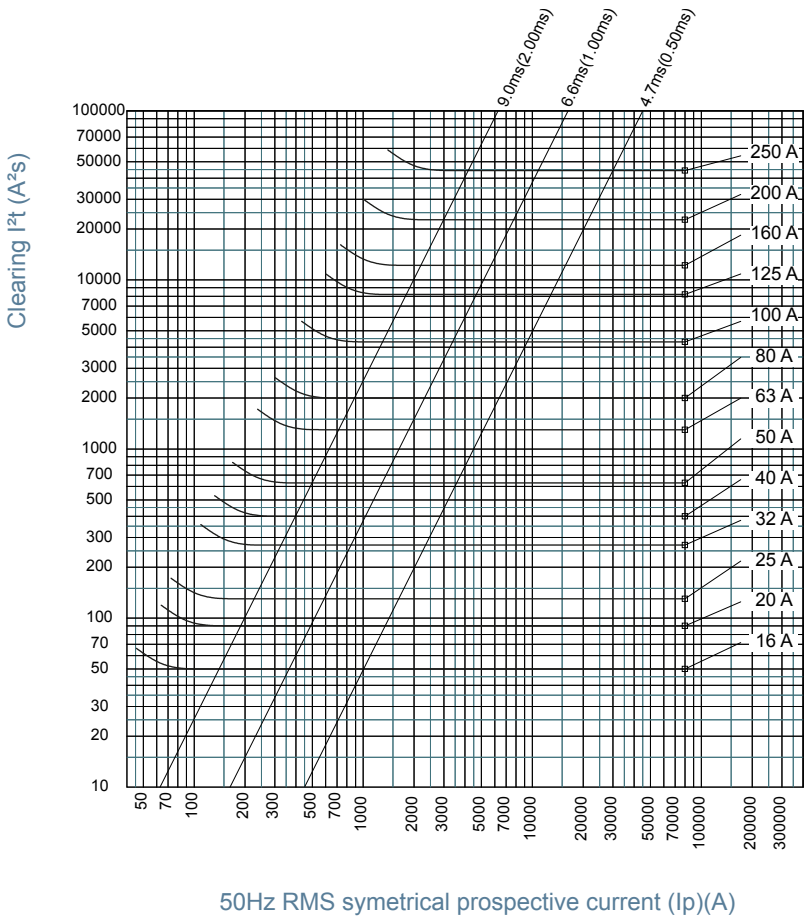
Characteristics total I²t curve

Size 000



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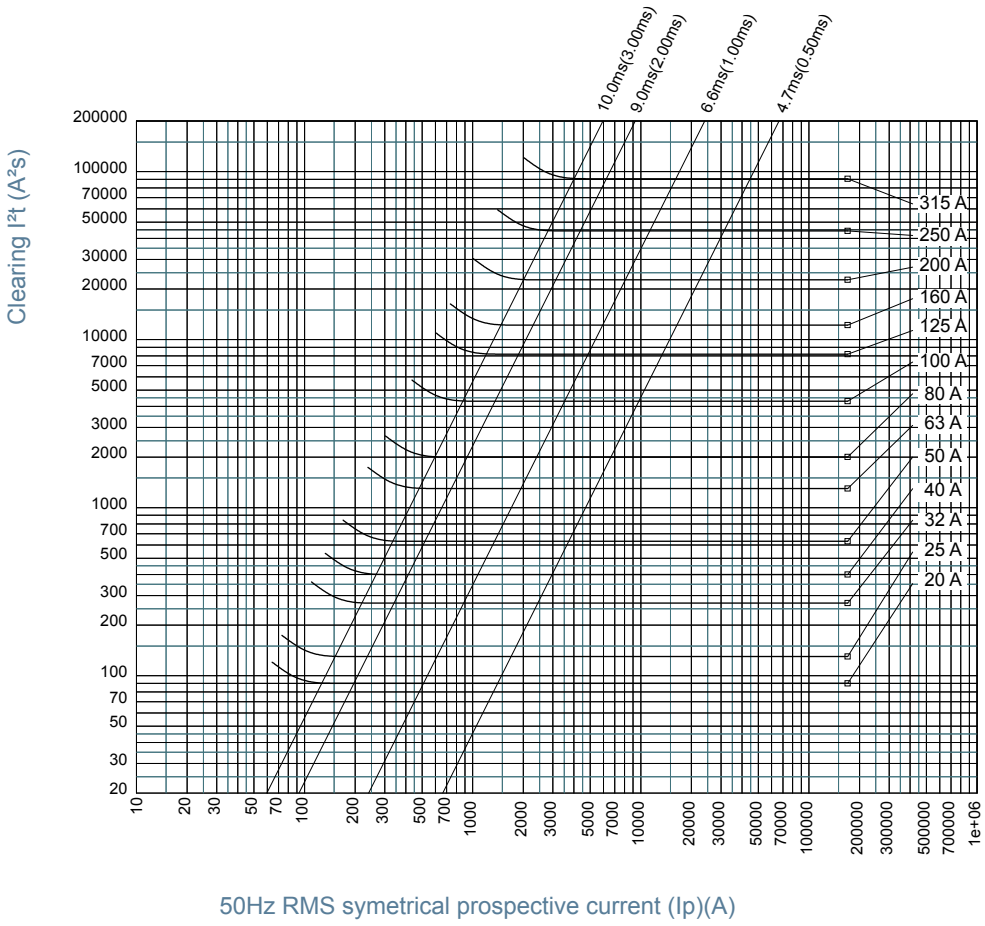
Characteristics total I²t curve

Size 00



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Characteristics total I²t curve

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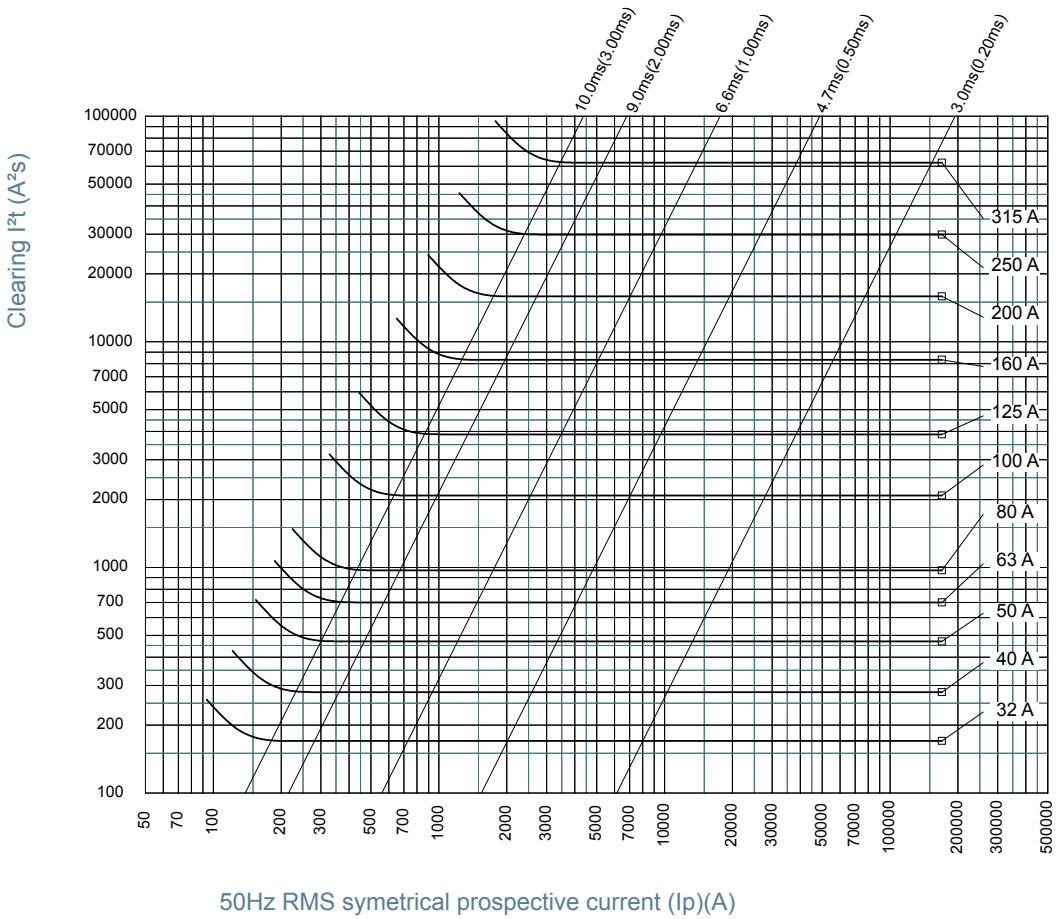

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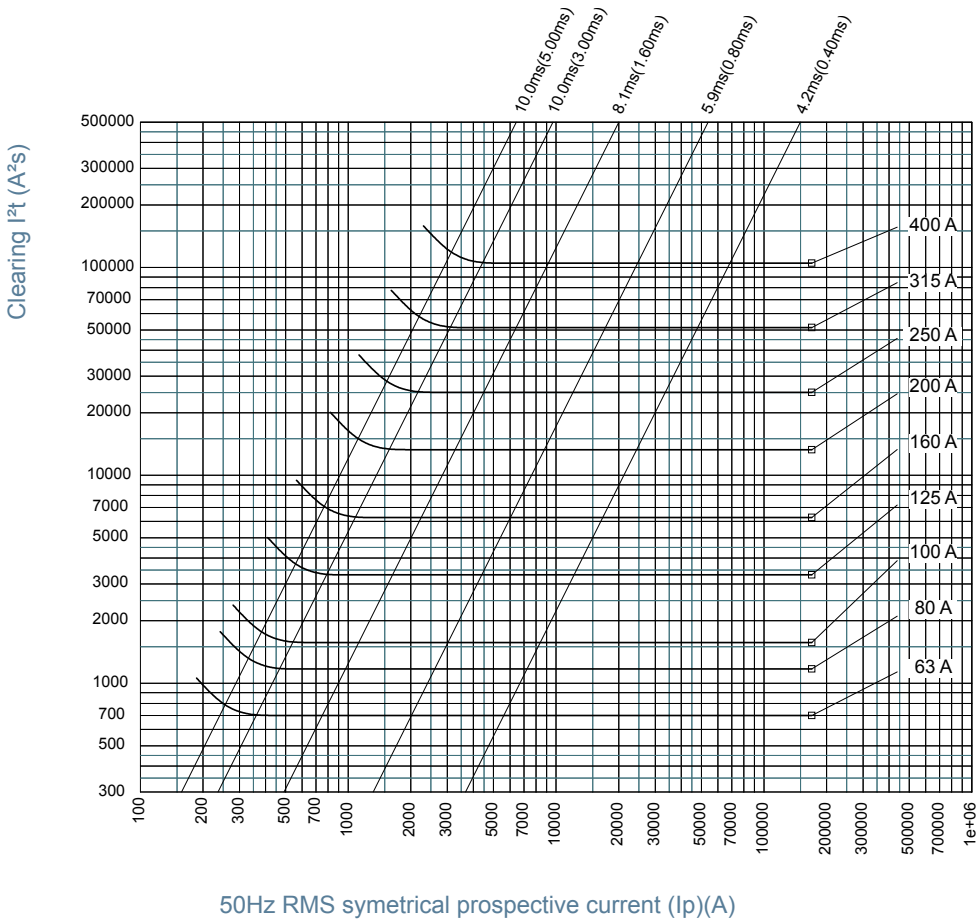
Characteristics total I²t curve

Size 1



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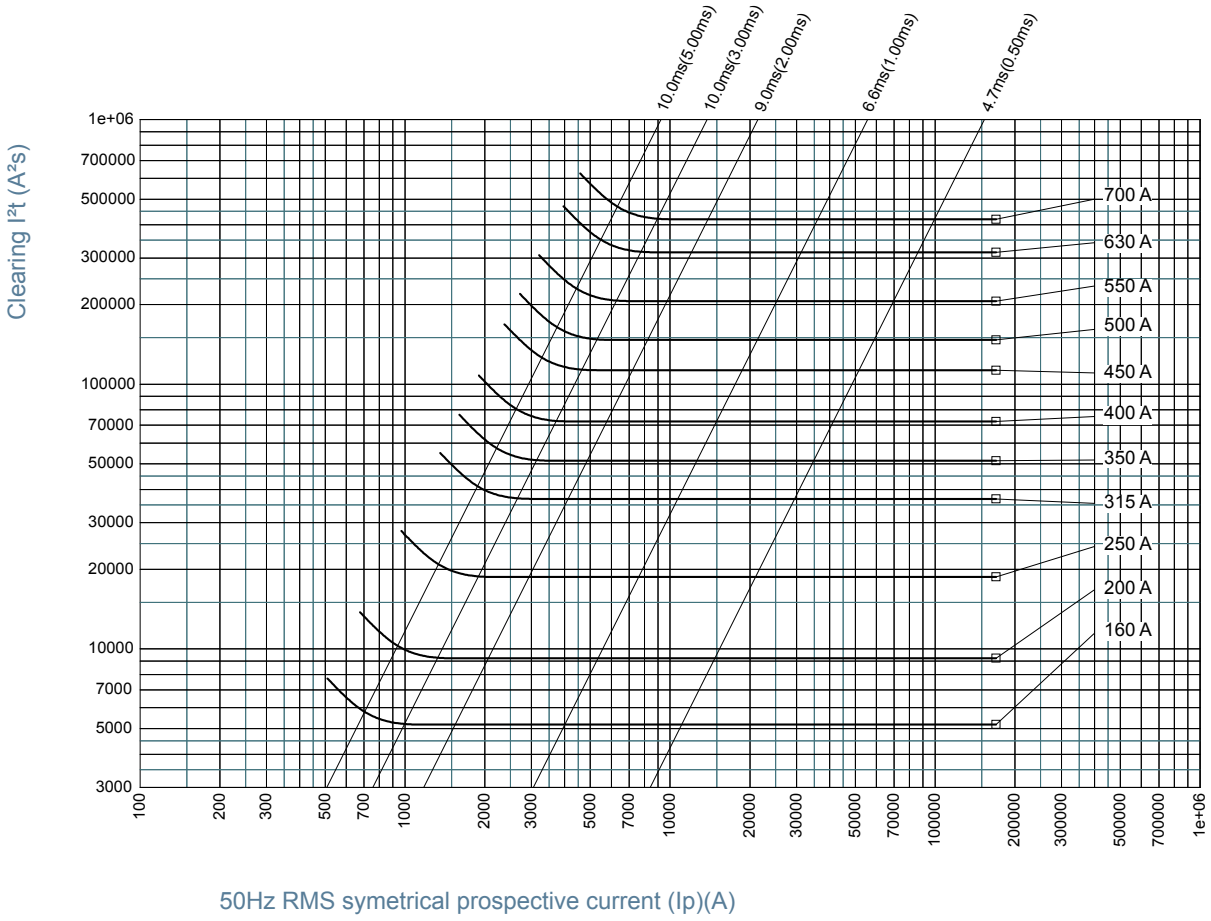
Characteristics total I²t curve

Size 2



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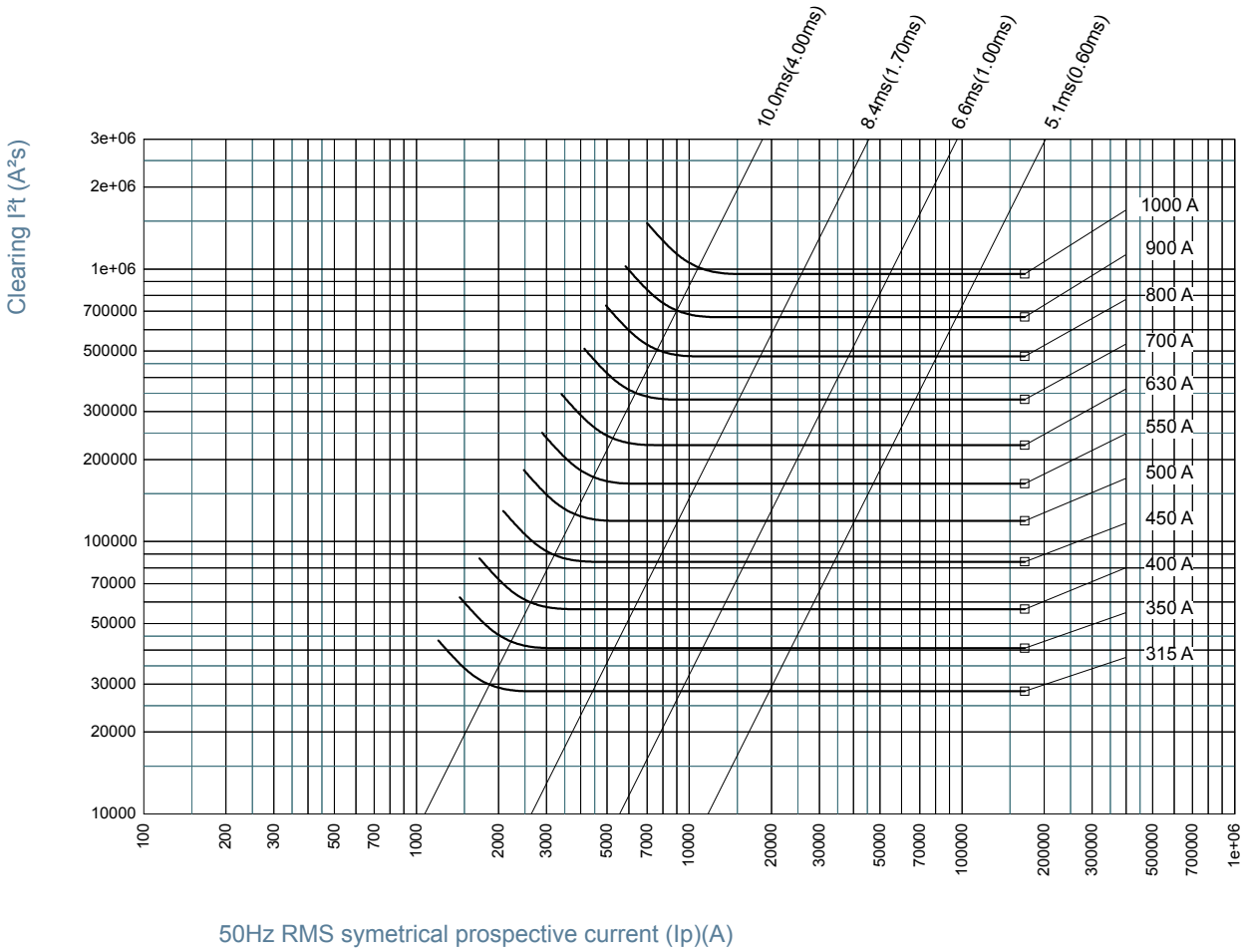
Characteristics total I²t curve

Size 3



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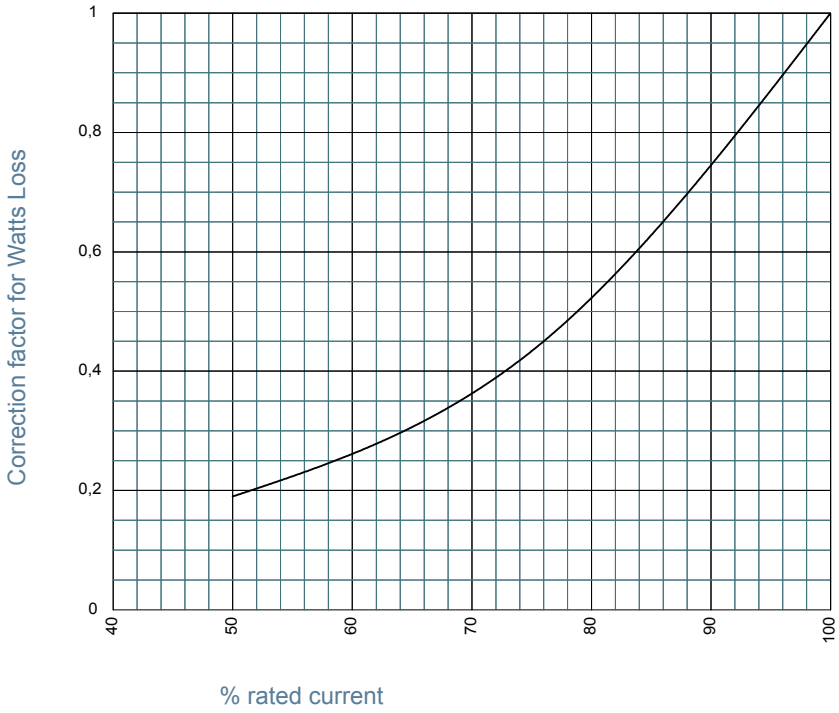
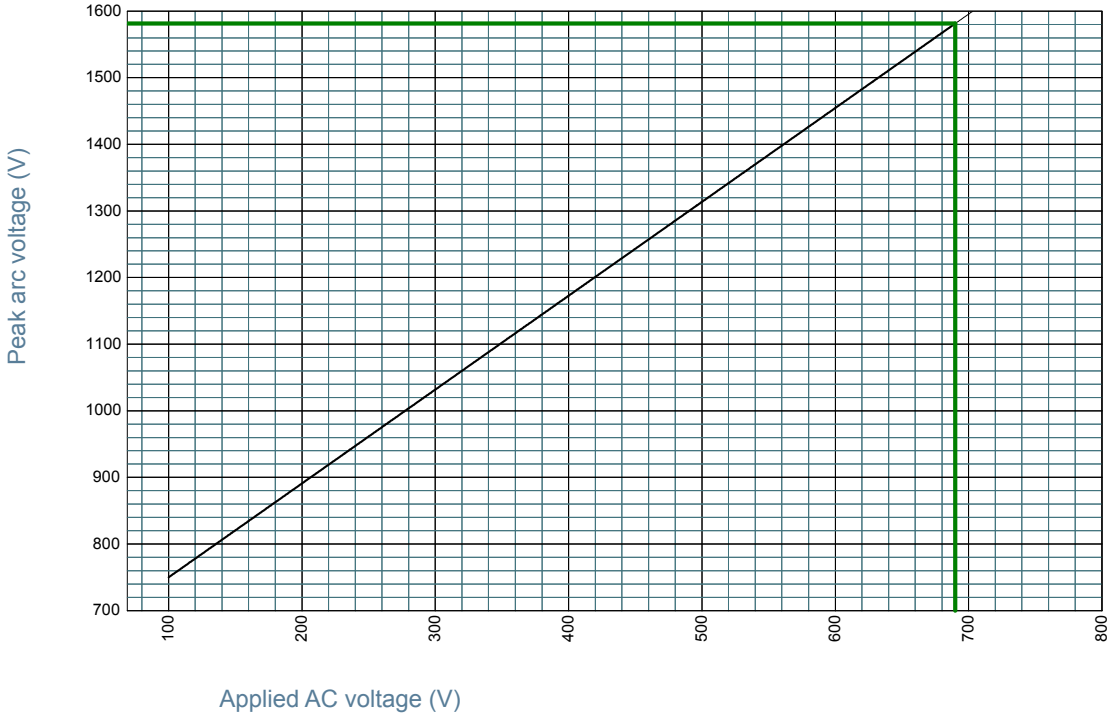
Power dissipation

Sizes 000, 00, 0, 1, 2, 3



Peak arc voltage

Size 000



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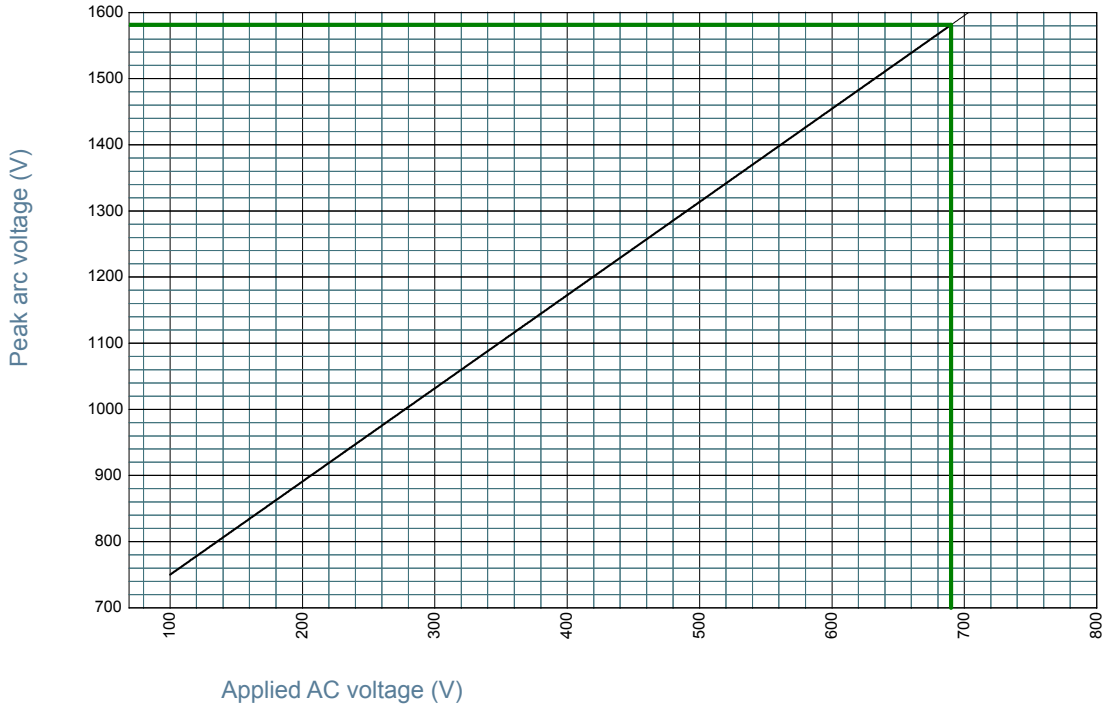
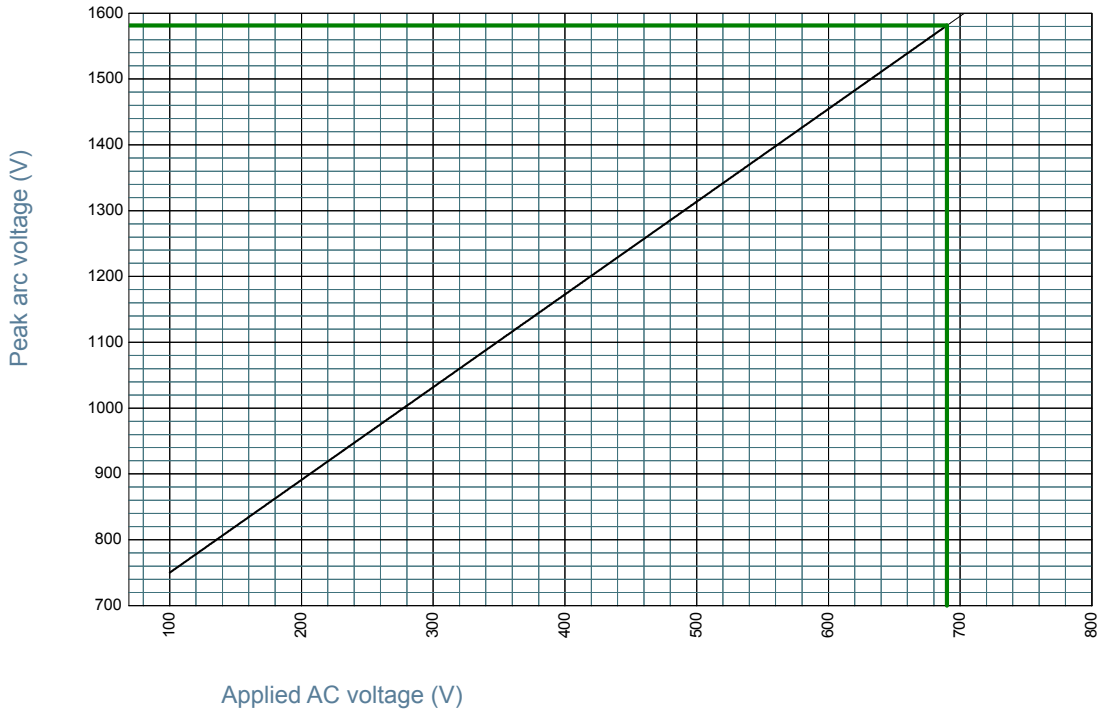
Peak arc voltage

Size 00



Size 0



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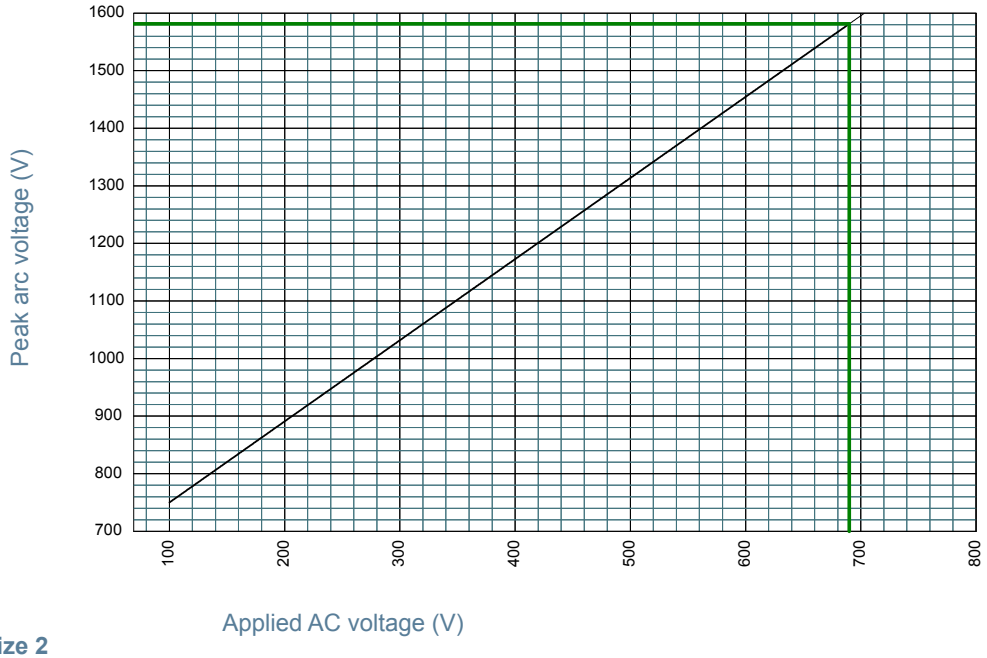
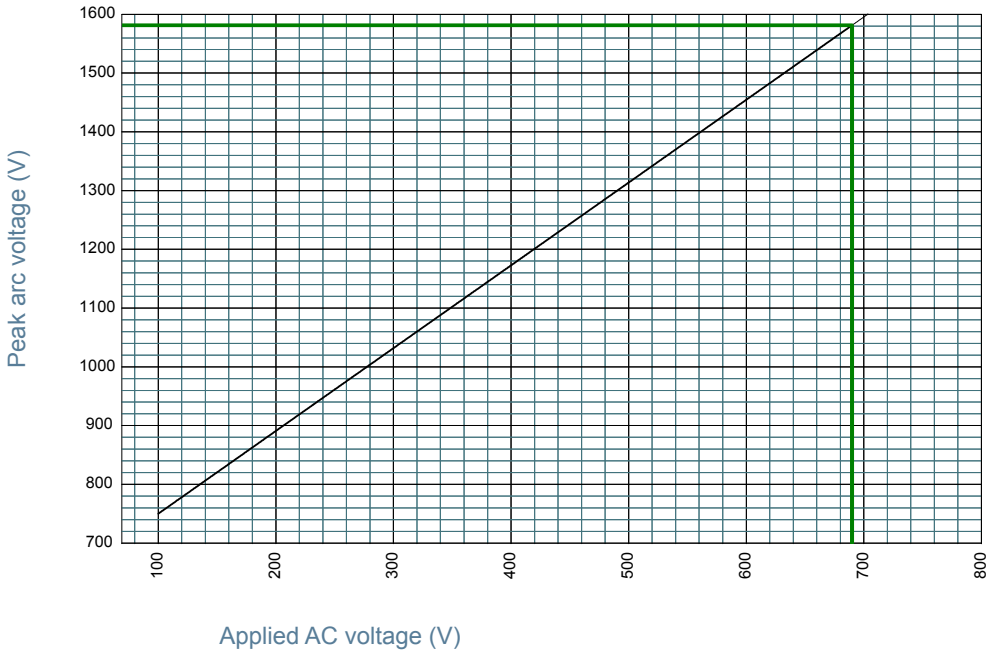
Peak arc voltage

Size 1



Size 2



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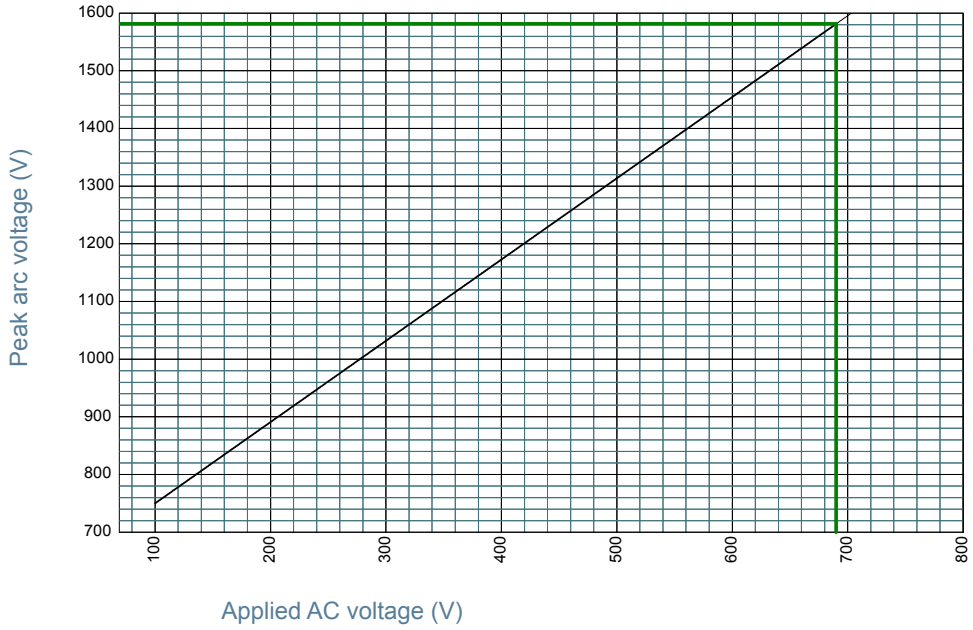
Peak arc voltage

Size 3



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