

Semiconductor & Special Protection

Protistor® Square body fuse-links

Sizes 000 and 00 aR 690VAC from 16 to 400A

The 690/700V Protistor® fuse-links provide maximum flexibility in equipment design and ultimate protection for small power conversion equipment.

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.



Benefits

- Ultra fast acting
- Current limiting
- Very low I^2t for improved semiconductor protection
- Superior cycling capability
- aR Class according to VDE 636-23 and IEC 60269-4

Applications

Protection of inverters, UPS systems, motor drives and similar 690V or less equipment.

Ratings

- 690VAC IEC 60269-4
- 700VAC UL Recognized
- 500VDC UL Recognition for Size 000 up to 315A
- 600VDC UL Recognition for Size 00 up to 160A
- For DC UL Recognition of other rating please consult us

Approvals

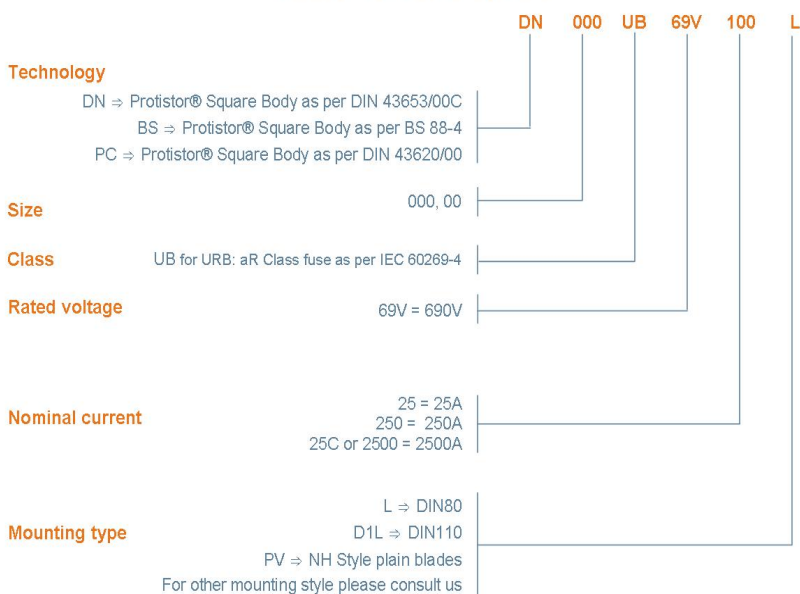
- UL/CSA Recognized Component
- AC: UL Guide No. E76491
- IEC 60269-4 Compliance
- RoHS Compliant



Related products

- Monitoring: MS4L Microswitches
- Fuse-holders: SI bases

Catalog Numbering System



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Size 000

Size	Rated Voltage (V)	Nominal Current (A)	Class	Catalog Number DIN80 w/o indicator	Reference Number DIN80 w/o indicator	Catalog Number DIN80 with indicator	Reference Number DIN80 with indicator	Catalog Number DIN80 for monitoring micro-contact	Reference Number DIN80 for monitoring micro-contact
000	690	75	aR	-	-	-	-	-	-
000	690	80	aR	DN000UB69V80	K330036	DN000UB69V80V	W330023	DN000UB69V80L	T330182
000	690	100	aR	DN000UB69V100	L330037	DN000UB69V100V	X330024	DN000UB69V100L	V330183
000	690	110	aR	-	-	-	-	-	-
000	690	125	aR	DN000UB69V125	M330038	DN000UB69V125V	Y330025	DN000UB69V125L	W330184
000	690	150	aR	-	-	-	-	-	-
000	690	160	aR	DN000UB69V160	N330039	DN000UB69V160V	Z330026	DN000UB69V160L	X330185
000	690	200	aR	DN000UB69V200	P330040	DN000UB69V200V	A330027	DN000UB69V200L	Y330186
000	690	250	aR	DN000UB69V250	Q330041	DN000UB69V250V	B330028	DN000UB69V250L	Z330187
000	690	315	aR	DN000UB69V315	R330042	DN000UB69V315V	C330029	DN000UB69V315L	A330188
000	500	350	aR	DN000UB50V350	V330114	DN000UB50V350V	W330115	DN000UB50V350L	B330189
000	500	400	aR	DN000UB50V400	D330191	DN000UB50V400V	E330192	DN000UB69V400L	F330193

Size	Rated Voltage (V)	Nominal Current (A)	Class	Catalog Number BS w/o indicator	Reference Number BS w/o indicator	Catalog Number BS with indicator	Reference Number BS with indicator
000	690	75	aR	BS000UB69V75	B330051	BS000UB69V75P	H330126
000	690	80	aR	BS000UB69V80	C330052	BS000UB69V80P	J330127
000	690	100	aR	BS000UB69V100	D330053	BS000UB69V100P	K330128
000	690	110	aR	BS000UB69V110	E330100	BS000UB69V110P	L330129
000	690	125	aR	BS000UB69V125	E330054	BS000UB69V125P	M330130
000	690	150	aR	BS000UB69V150	F330101	BS000UB69V150P	N330131
000	690	160	aR	BS000UB69V160	F330055	BS000UB69V160P	P330132
000	690	200	aR	BS000UB69V200	G330056	BS000UB69V200P	Q330133
000	690	250	aR	BS000UB69V250	H330057	BS000UB69V250P	R330134
000	690	315	aR	BS000UB69V315	J330058	BS000UB69V315P	S330135
000	500	350	aR	BS000UB50V350	X330116	BS000UB50V350P	T330136
000	500	400	aR	BS000UB50V400	G330194	BS000UB50V400P	H330195

Size	Rated Voltage (V)	Nominal Current (A)	Breaking Capacity @ Rated Voltage (kA)	Pre-arcing I ^{2t} (A ^{2s})	Clearing I ^{2t} @ Rated Voltage (A ^{2s})	Watts Loss @ 100% I _n (W)	Watts Loss @ 80% I _n (W)
000	690	75	200	350	2250*	20.5	11.2
000	690	80	200	390	2500*	21	11.6
000	690	100	200	690	4200*	23	12.7
000	690	110	200	950	6800*	24.5	13.5
000	690	125	200	1300	8900*	26	14.3
000	690	150	200	-	-	-	-
000	690	160	200	2700	16000*	31	17.0
000	690	200	200	5250	31500*	36	19.8
000	690	250	200	9900	52000*	45	24.8
000	690	315	200	15500	82000*	58	31.9
000	500	350	120	22400	110000**	58	31.9
000	500	400	120	33200	160000**	66	36.3

*Total clearing I^{2t} @ 660V

**Total clearing I^{2t} @ 500V

Product weight: 130g max. for DIN80, 125g max. for BS without indicator and 135g max. for BS with indicator

Packaging: 6 pieces for DIN80 and 3 pieces for BS

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Sizes 000 and 00 aR 690VAC from 16 to 400A



Size 00

Size	Rated Voltage (V)	Nominal Current (A)	Class	Catalog Number DIN80	Reference Number DIN80	Catalog Number DIN110	Reference Number DIN110
00	690	16	aR	DN00UB69V16L	V330275	-	-
00	690	20	aR	DN00UB69V20L	T330274	-	-
00	690	25	aR	DN00UB69V25L	M330268	-	-
00	690	32	aR	DN00UB69V32L	N330269	-	-
00	690	40	aR	DN00UB69V40L	P330270	-	-
00	690	50	aR	DN00UB69V50L	Q330271	-	-
00	690	63	aR	DN00UB69V63L	R330272	-	-
00	690	80	aR	DN00UB69V80L	D330237	DN00UB69V80D1L	A330257
00	690	100	aR	DN00UB69V100L	E330238	DN00UB69V100D1L	B330258
00	690	125	aR	DN00UB69V125L	F330239	DN00UB69V125D1L	C330259
00	690	160	aR	DN00UB69V160L	G330240	DN00UB69V160D1L	D330260
00	690	200	aR	DN00UB69V200L	H330241	DN00UB69V200D1L	E330261
00	690	250	aR	DN00UB69V250L	J330242	DN00UB69V250D1L	F330262
00	690	315	aR	DN00UB69V315L	K330243	DN00UB69V315D1L	G330263
00	690	350**	aR	DN00UB69V350L	L330244	DN00UB69V350D1L	H330264
00	690	400**	aR	DN00UB69V400L	M330245	DN00UB69V400D1L	J330265

Size	Rated Voltage (V)	Nominal Current (A)	Breaking Capacity @ Rated Voltage	Pre-arcing I ² t (A ² s)	Clearing I ² t @ Rated Voltage (A ² s)	Watts Loss @ 100% In (W)	Watts Loss @ 80% In (W)
00	690	16	200	7	52	7	3.8
00	690	20	200	10	75	9	5.0
00	690	25	200	15	120	11	6.0
00	690	32	200	32	210	15	8.2
00	690	40	200	61	400	18	9.9
00	690	50	200	102	700	21	11.5
00	690	63	200	177	1200	23	12.6
00	690	80	200	390	2200	25	13.8
00	690	100	200	692	3900	28	15.4
00	690	125	200	1170	6600	33	18.1
00	690	160	200	2680	14000	36	19.8
00	690	200	200	4690	24000	42	23.1
00	690	250	200	8300	42500	50	27.5
00	690	315	200	17520	81000	58	31.9
00	690	350**	200	25450	118000	60	33.0
00	690	400**	200	33200	150000	70	38.5

Product weight: 140g max. for DIN80 and 190g max. for DIN110

Packaging: 3 pieces

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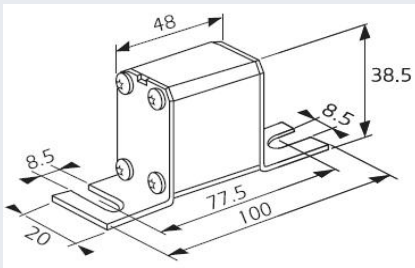
Sizes 000 and 00 aR 690VAC from 16 to 400A



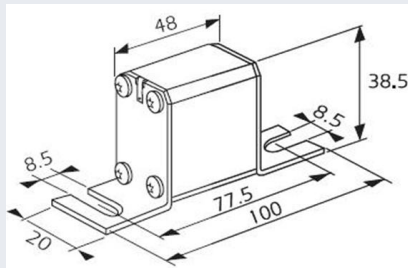
Dimensions (mm)

Size 000

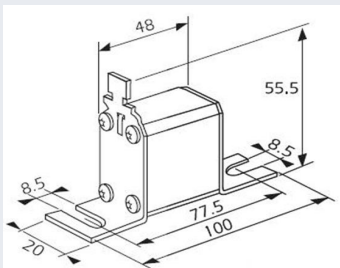
DIN80 w/o indicator



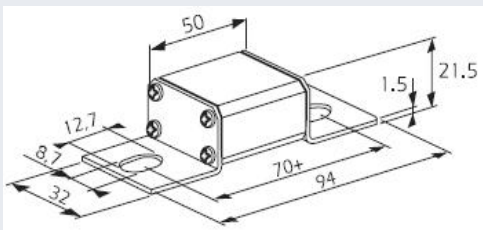
DIN80 with indicator



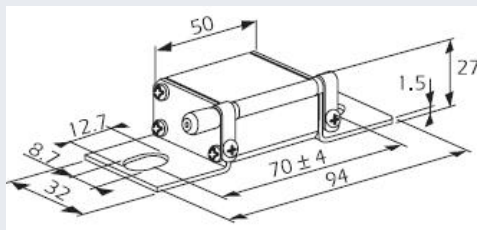
DIN80 for monitoring micro-contact



BS88-4 w/o indicator

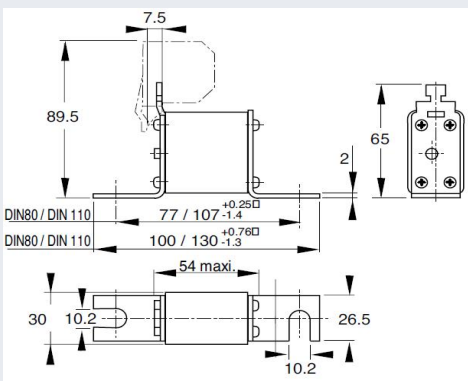


BS88-4 with indicator



Size 00

DIN80 DIN100



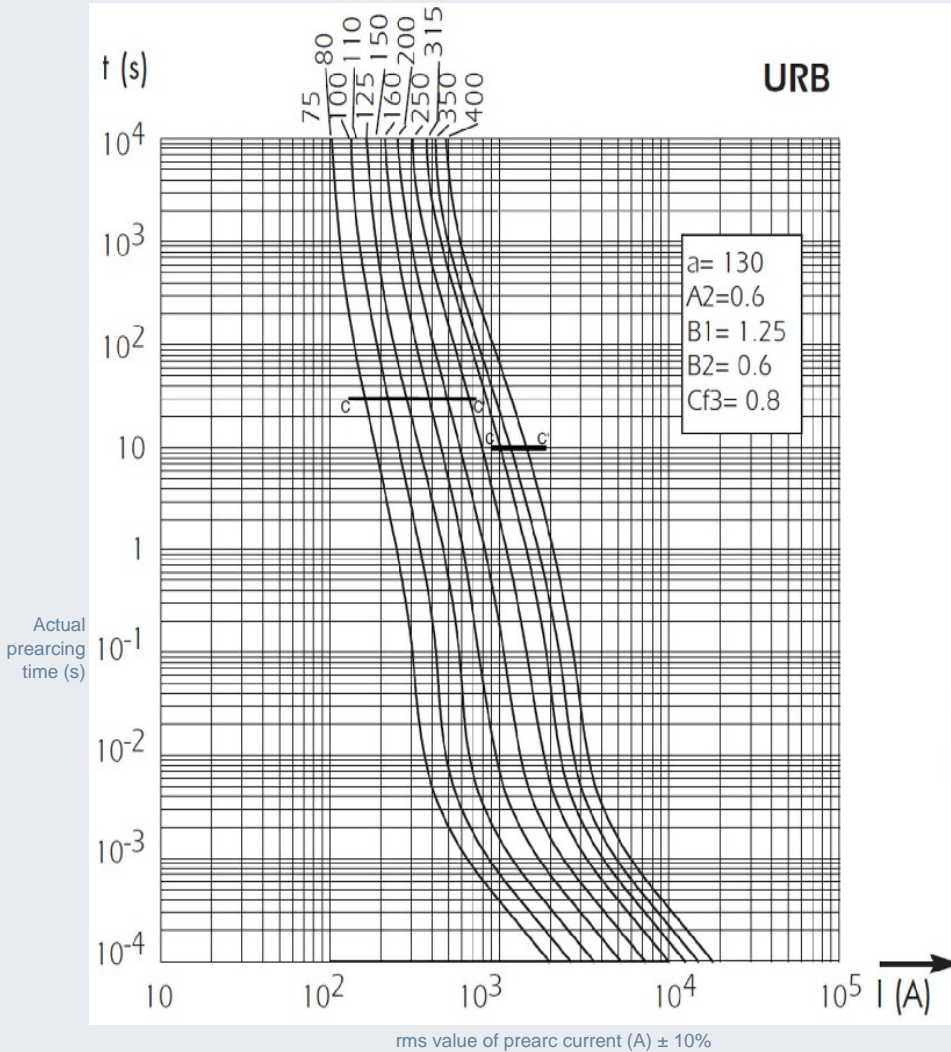
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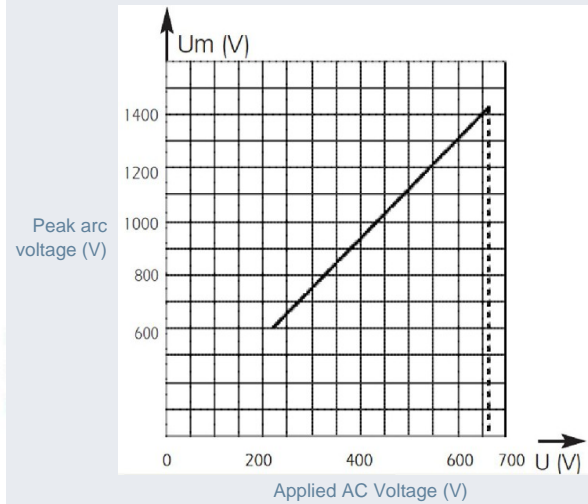
Sizes 000 and 00 aR 690VAC from 16 to 400A



Time current characteristics
Size 000



Peak arc voltage
Size 000



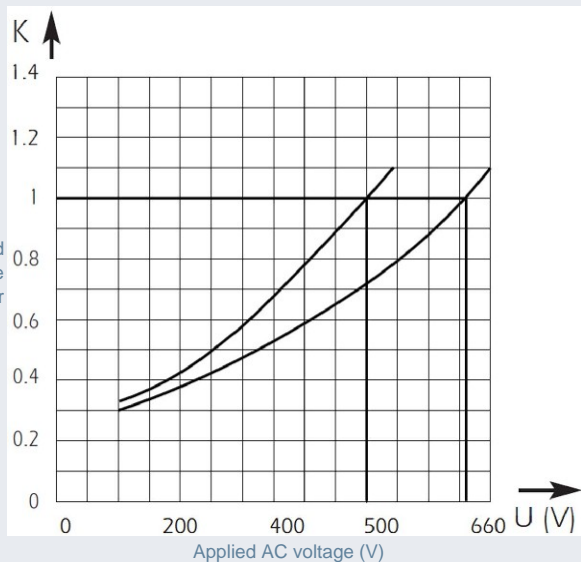
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Sizes 000 and 00 aR 690VAC from 16 to 400A

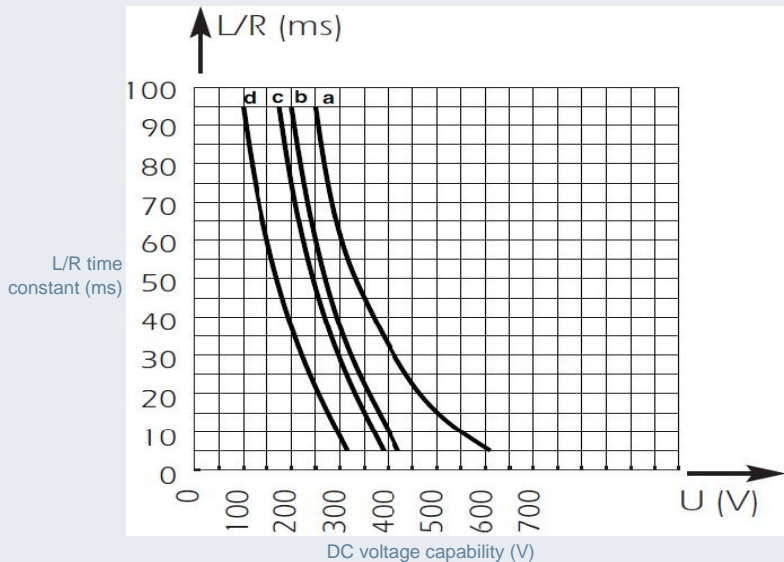


I²t multiplier coefficient
Size 000



Clearing I²t and arcing time correction factor

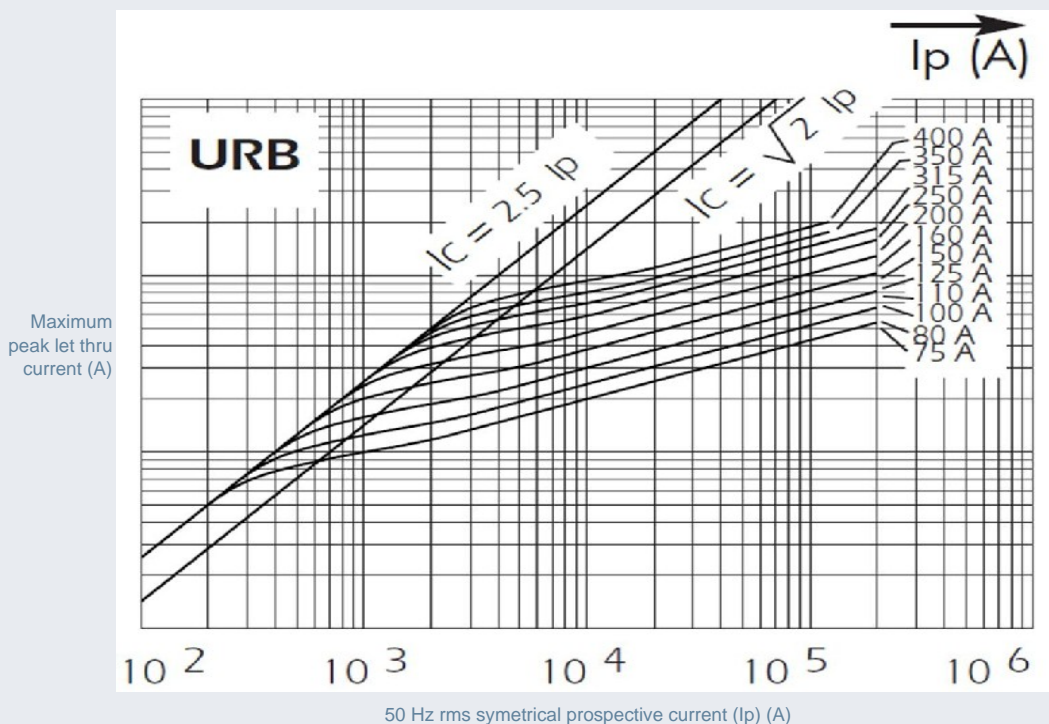
L/R time constant vs DC voltage capability
Size 000



L/R time constant (ms)

- Curve a: Ratings from 20 to 160A
- Curve b: Rating 200A
- Curve c: Ratings from 250 to 315A
- Curve d: Ratings from 350 to 400A

Peak let thru characteristics
Size 000



Maximum peak let thru current (A)

50 Hz rms symmetrical prospective current (I_p) (A)

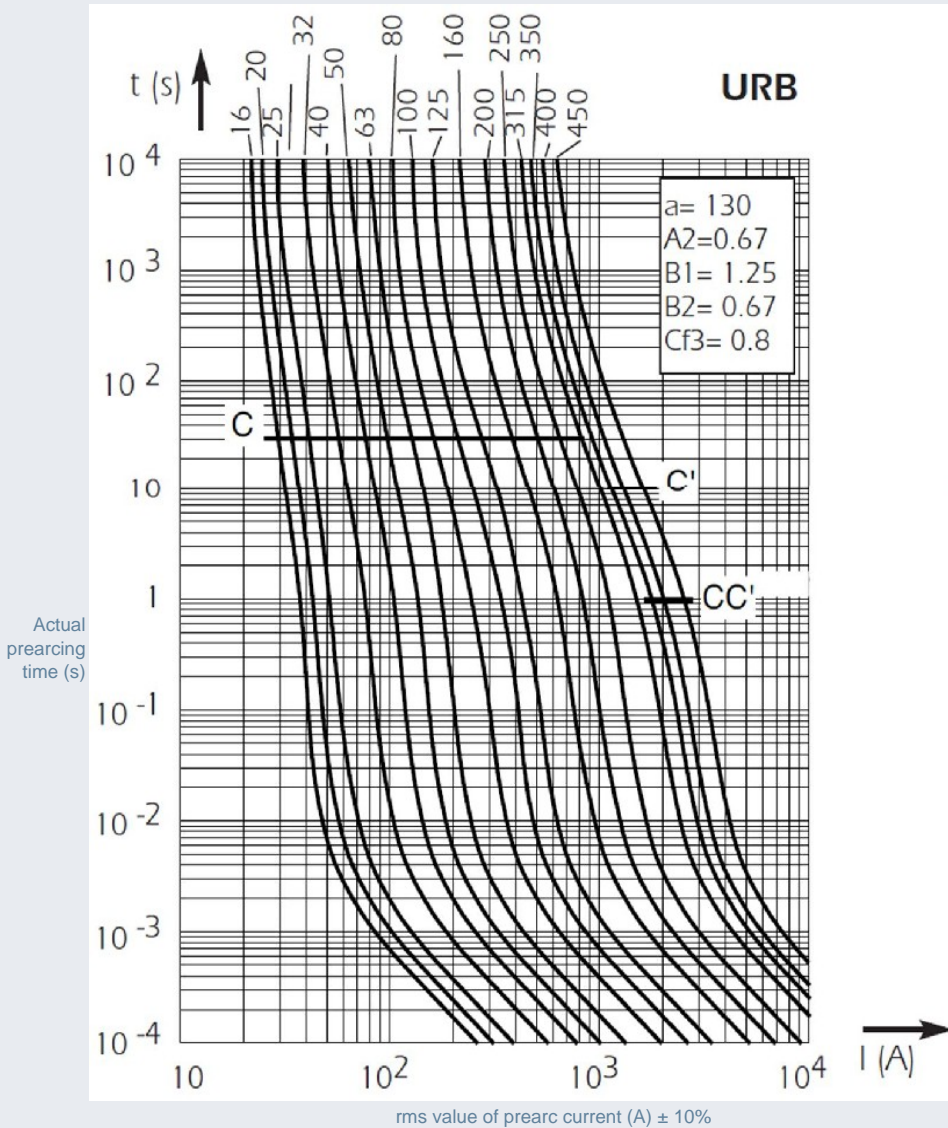
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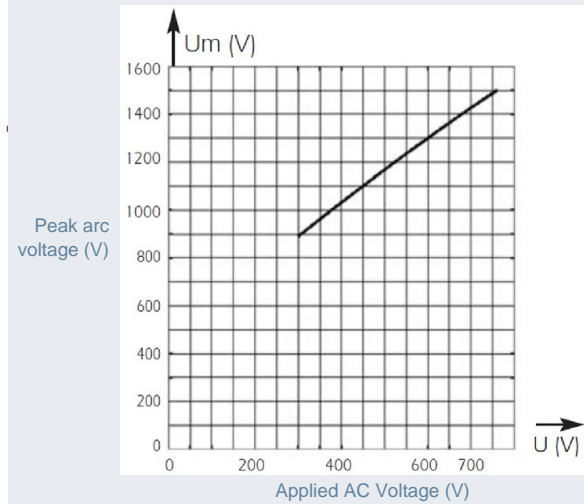
Sizes 000 and 00 aR 690VAC from 16 to 400A



Time current characteristics
Size 00



Peak arc voltage
Size 00



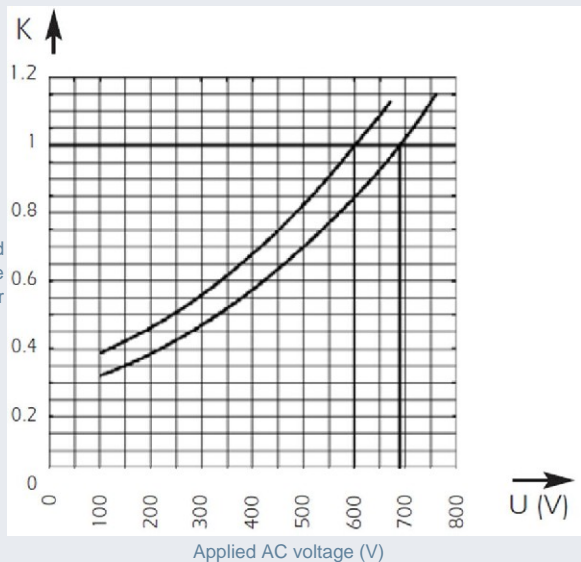
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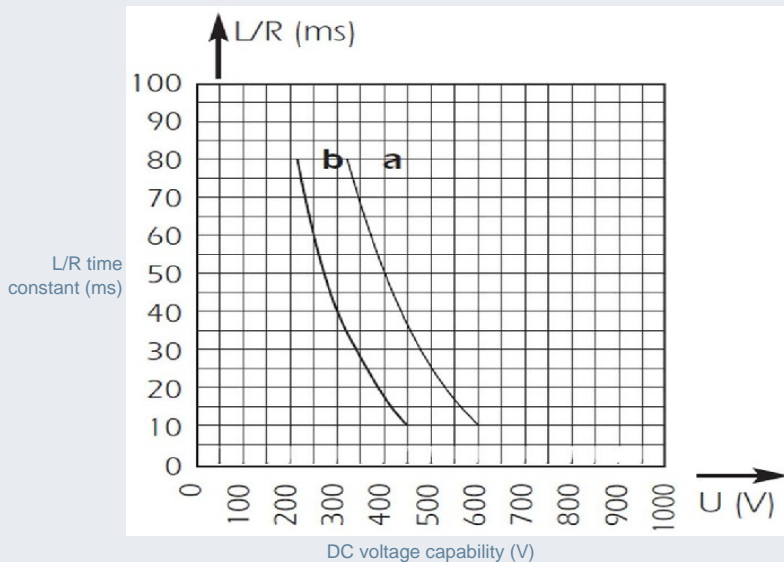
Sizes 000 and 00 aR 690VAC from 16 to 400A



**I²t multiplier coefficient
Size 00**



**L/R time constant vs DC voltage capability
Size 00**



Curve a: Ratings from 16 to 250A
Curve b: Ratings from 315 to 450A

**Peak let thru characteristics
Size 00**

