170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Specifications



Description

Square body flush end contact high speed fuse links, for the protection of DC common bus, DC drives, power converters/rectifiers and reduced rated voltage starters.

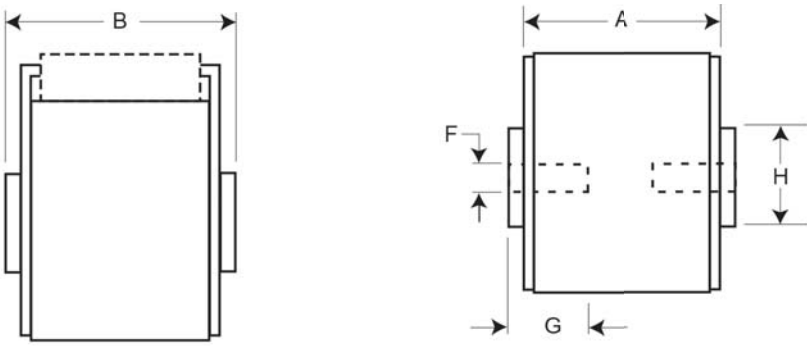
Technical data

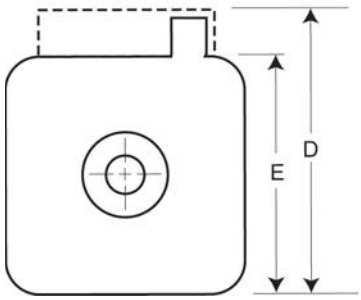
- Rated voltage: see table page 192
- Rated current: 40 A to 2000 A
- Breaking capacity: 200 kA RMS Sym
- Operating class: aR

Standards / Agency information

CE, Designed and tested to IEC 60269 Part 4. Consult Eaton for UL Recognition, CSA Component Acceptance Status and CCC approvals

Dimensions (mm)





Size	A	B	D[3]	E	F	F[1] (in)	G min	H
1*	50	51	59	45	M8	5/16" -18 UNC-2B	5	N17
1	50	51	69	53	M8	5/16" -18 UNC-2B	8	N20
2	50	51 (400 - 1000 A) 65 (1100 and 1250 (A)	77	61	M10	3/8" -16 UNC-2B	10	N24
3	51	53 (500 - 1500 A) 65 (1600 - 2000 A)	92	76	M12	1/2" -13 UNC-2B	10	N30

[1] Valid for fuse links type -G- & -GKN/.
[3] Valid for fuse links type -BKN/ and -GKN/.

Data sheets: 170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

Square body fuse links

170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

			I²t (A² Sec)			Catalogue numbers			
Fuse link body size	Rated voltage	Rated current (Amps)	Pre-arcing	Clearing at 660 V a.c.	Watts loss (W)	-B/- visual indicator	-BKN/- Type K indicator for micro	-G/- visual indicator	-GKN/- Type K indicator for micro
1*	690 V a.c. (IEC) 700 V a.c. (UL)	40	40	270	11	170M3408	170M3458	170M3508	170M3558
		50	77	515	13	170M3409	170M3459	170M3509	170M3559
		63	115	770	17	170M3410	170M3460	170M3510	170M3560
		80	185	1250	21	170M3411	170M3461	170M3511	170M3561
		100	360	2450	24	170M3412	170M3462	170M3512	170M3562
		125	550	3700	30	170M3413	170M3463	170M3513	170M3563
		160	1100	7500	34	170M3414	170M3464	170M3514	170M3564
		200	2200	15,000	41	170M3415	170M3465	170M3515	170M3565
		250	4200	28,500	47	170M3416	170M3466	170M3516	170M3566
		315	7000	46,500	60	170M3417	170M3467	170M3517	170M3567
		350	10,000	68,500	64	170M3418	170M3468	170M3518	170M3568
		400	15,000	105,000	69	170M3419	170M3469	170M3519	170M3569
		450	21,000	140,000	75	170M3420	170M3470	170M3520	170M3570
		500	27,000	180,000	83	170M3421	170M3471	170M3521	170M3571
		550	34,000	230,000	89	170M3422	170M3472	170M3522	170M3572
		630	48,500	325,000	100	170M3423	170M3473	170M3523	170M3573
1	690 V a.c. (IEC) 700 V a.c. (UL)	200	1650	11,500	45	170M4408	170M4458	170M4508	170M4558
		250	3100	21,000	55	170M4409	170M4459	170M4509	170M4559
		315	6200	42,000	58	170M4410	170M4460	170M4510	170M4560
		350	8500	59,000	60	170M4411	170M4461	170M4511	170M4561
		400	13,500	91,500	65	170M4412	170M4462	170M4512	170M4562
		450	17,000	120,000	70	170M4413	170M4463	170M4513	170M4563
		500	25,000	170,000	72	170M4414	170M4464	170M4514	170M4564
		550	34,000	230,000	75	170M4415	170M4465	170M4515	170M4565
		630	52,000	350,000	80	170M4416	170M4466	170M4516	170M4566
		700	69,500	465,000	85	170M4417	170M4467	170M4517	170M4567
		800	105,000	725,000	95	170M4418	170M4468	170M4518	170M4568
	550 V a.c. (IEC)	900	155,000	850,000	100	170M4419	170M4469	170M4519	170M4569
2	690 V a.c. (IEC) 700 V a.c. (UL)	400	11,000	74,000	65	170M5408	170M5458	170M5508	170M5558
		450	15,500	105,000	70	170M5409	170M5459	170M5509	170M5559
		500	21,500	145,000	75	170M5410	170M5460	170M5510	170M5560
		550	28,000	190,000	80	170M5411	170M5461	170M5511	170M5561
		630	41,000	275,000	90	170M5412	170M5462	170M5512	170M5562
		700	60,500	405,000	95	170M5413	170M5463	170M5513	170M5563
		800	86,000	575,000	105	170M5414	170M5464	170M5514	170M5564
		900	125,000	840,000	110	170M5415	170M5465	170M5515	170M5565
		1000	180,000	1,250,000	115	170M5416	170M5466	170M5516	170M5566
	600 V a.c. (IEC) 700 V a.c. (UL)	1100	245,000	1,600,000	120	170M5417	170M5467	170M5517	170M5567
		1250	365,000	2,400,000	130	170M5418	170M5468	170M5518	170M5568
3	690 V a.c. (IEC) 700 V a.c. (UL)	500	14,000	95,000	95	170M6408	170M6458	170M6508	170M6558
		550	19,500	135,000	100	170M6409	170M6459	170M6509	170M6559
		630	31,000	210,000	105	170M6410	170M6460	170M6510	170M6560
		700	44,500	300,000	110	170M6411	170M6461	170M6511	170M6561
		800	69,500	465,000	115	170M6412	170M6462	170M6512	170M6562
		900	100,000	670,000	120	170M6413	170M6463	170M6513	170M6563
		1000	140,000	945,000	125	170M6414	170M6464	170M6514	170M6564
		1100	190,000	1,300,000	130	170M6415	170M6465[1]	170M6515	170M6565
		1250	290,000	1,950,000	140	170M6416	170M6466	170M6516	170M6566
		1400	370,000	2,450,000	155	170M6417	170M6467[1]	170M6517	170M6567
		1500	460,000	3,100,000	160	170M6418	170M6468	170M6518	170M6568
		1600	580,000	3,900,000	160	170M6419	170M6469	170M6519	170M6569
	600 V a.c. (IEC) / 500 V a.c. (UL)	1800	880,000	5,250,000	165	170M6420[2]	170M6470	170M6520[2]	170M6570
	550 V a.c. IEC) / 500 V a.c. (UL)	2000	1,150,000	6,350,000	175	170M6421	170M6471	170M6521	170M6571

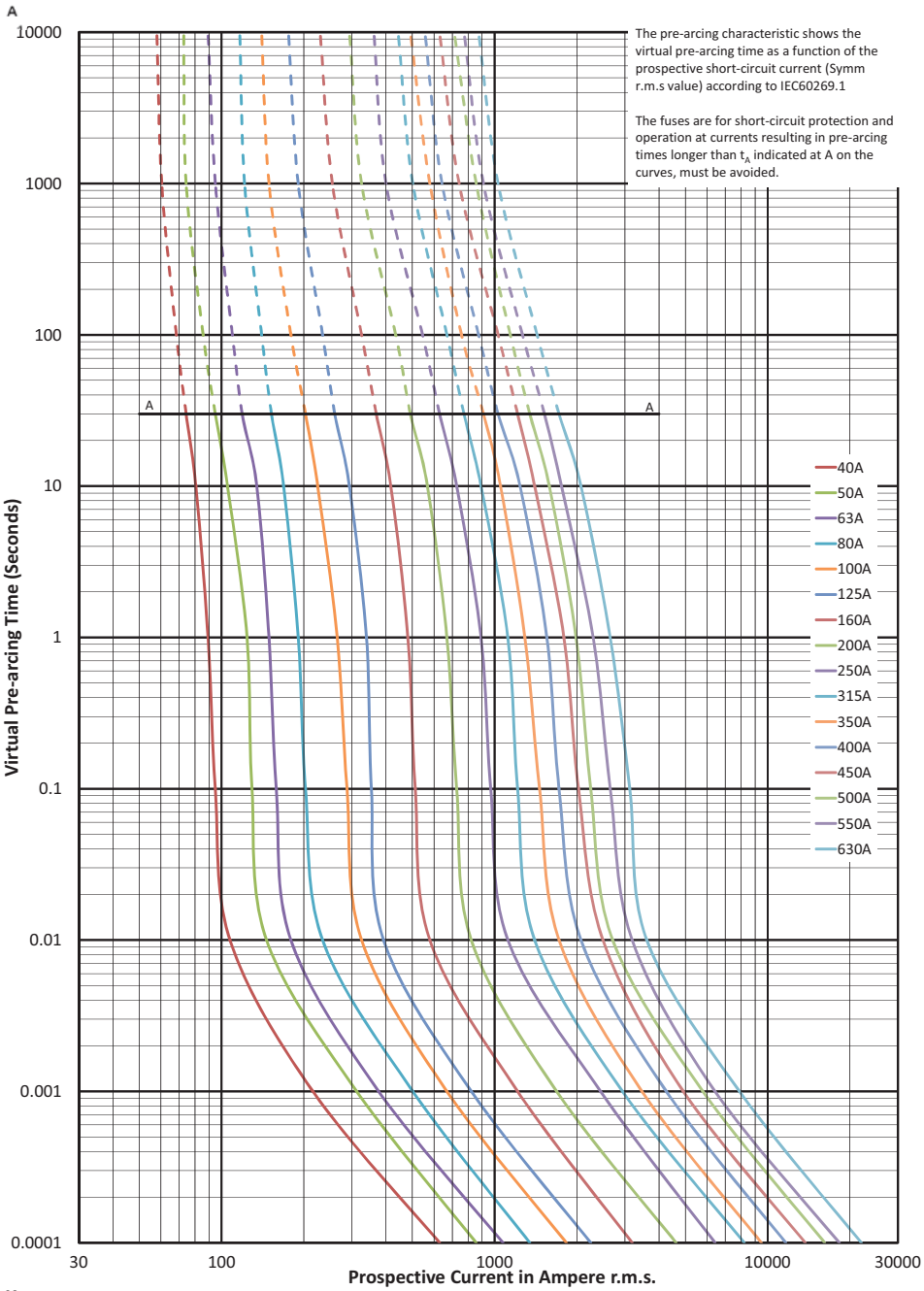
[1] 170M6465 and 170M6467 rated at 800 V d.c. UL 85kA 3ms TC when two fuses are connected in series

[2] 170M6420 and 170M6520 rated at 750 V d.c. 12XIn 130 kA when two fuses are connected in series

Data sheets: 170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve - Size 1*, 40 A to 630 A

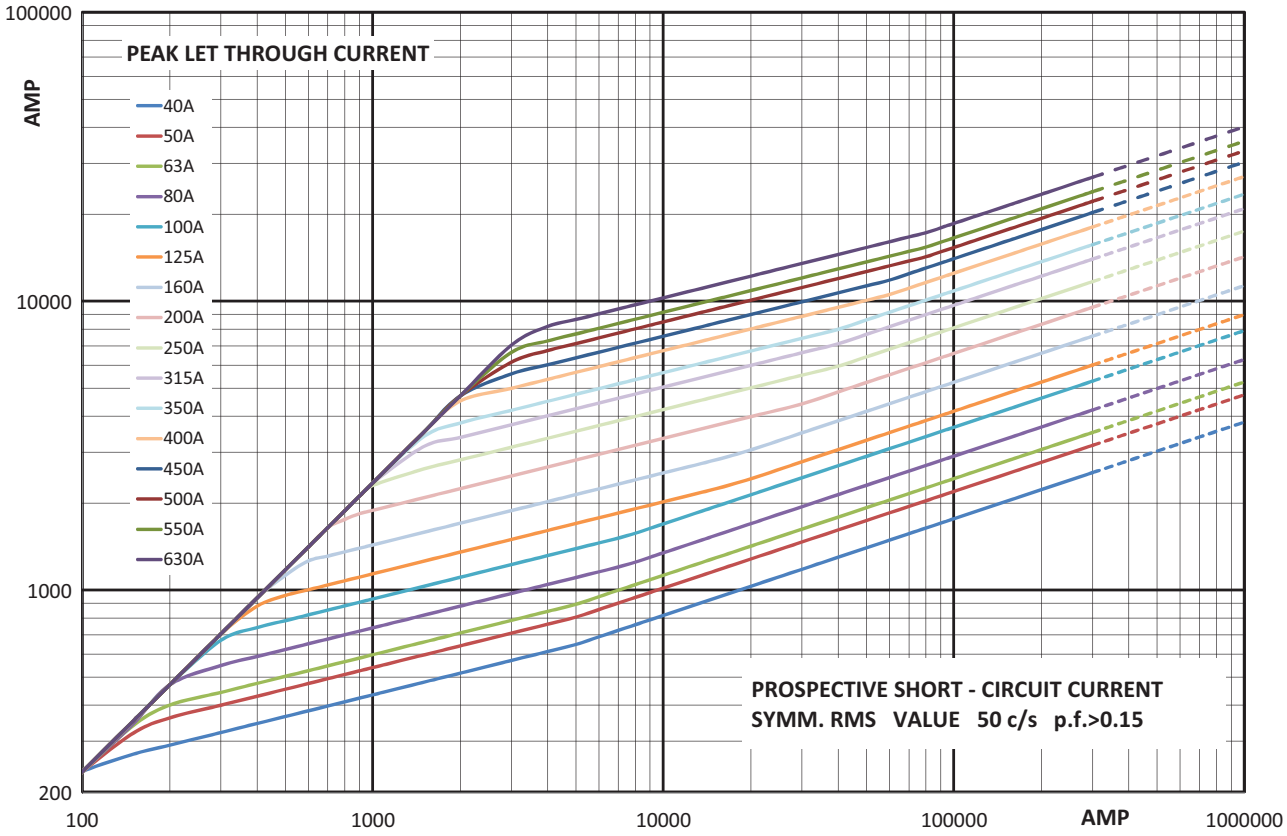


K_b = 1 N = 1,5

Data sheets: 170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

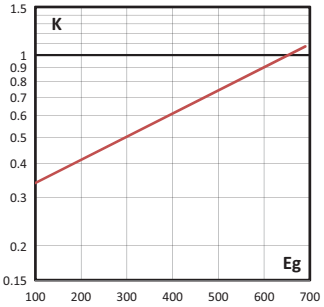
170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 1*, 40 A to 630 A



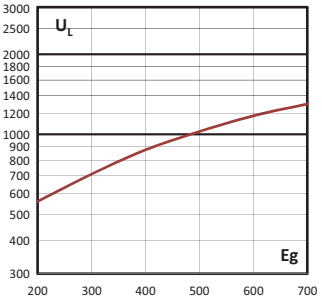
Total clearing I^2t

The total clearing I^2t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I^2t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_g, (RMS).



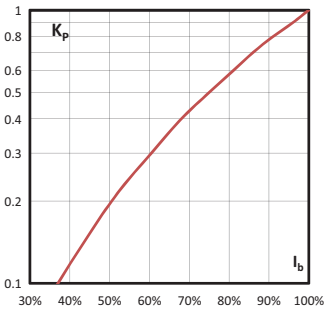
Arc voltage

This curve gives the peak arc voltage, U_L, which may appear across the fuse during its operation as a function of the applied working voltage, E_g, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, K_p , is given as a function of the RMS load current, I_b , in percent of the rated current.



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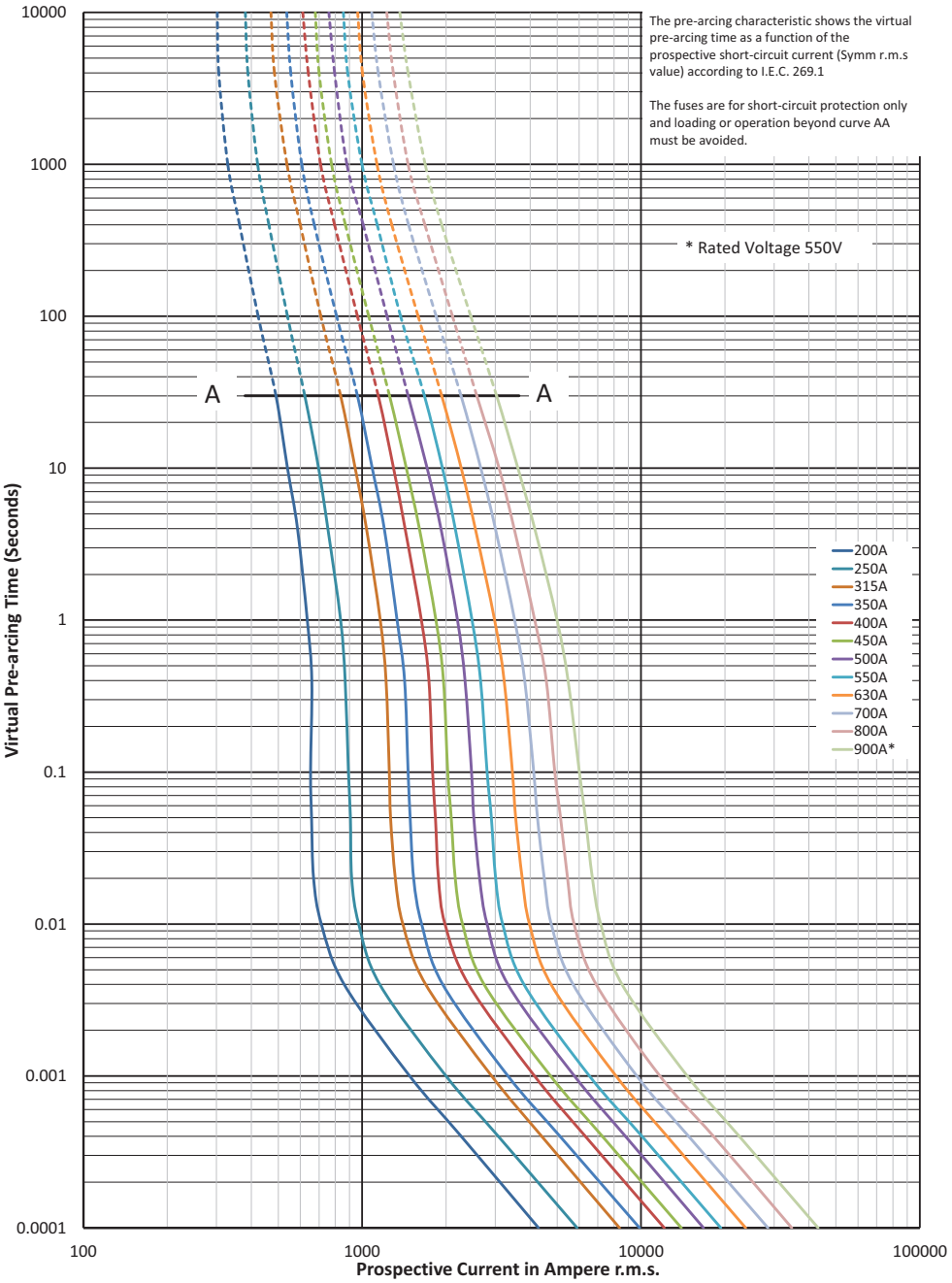
170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve - Size 1, 200 A to 900 A

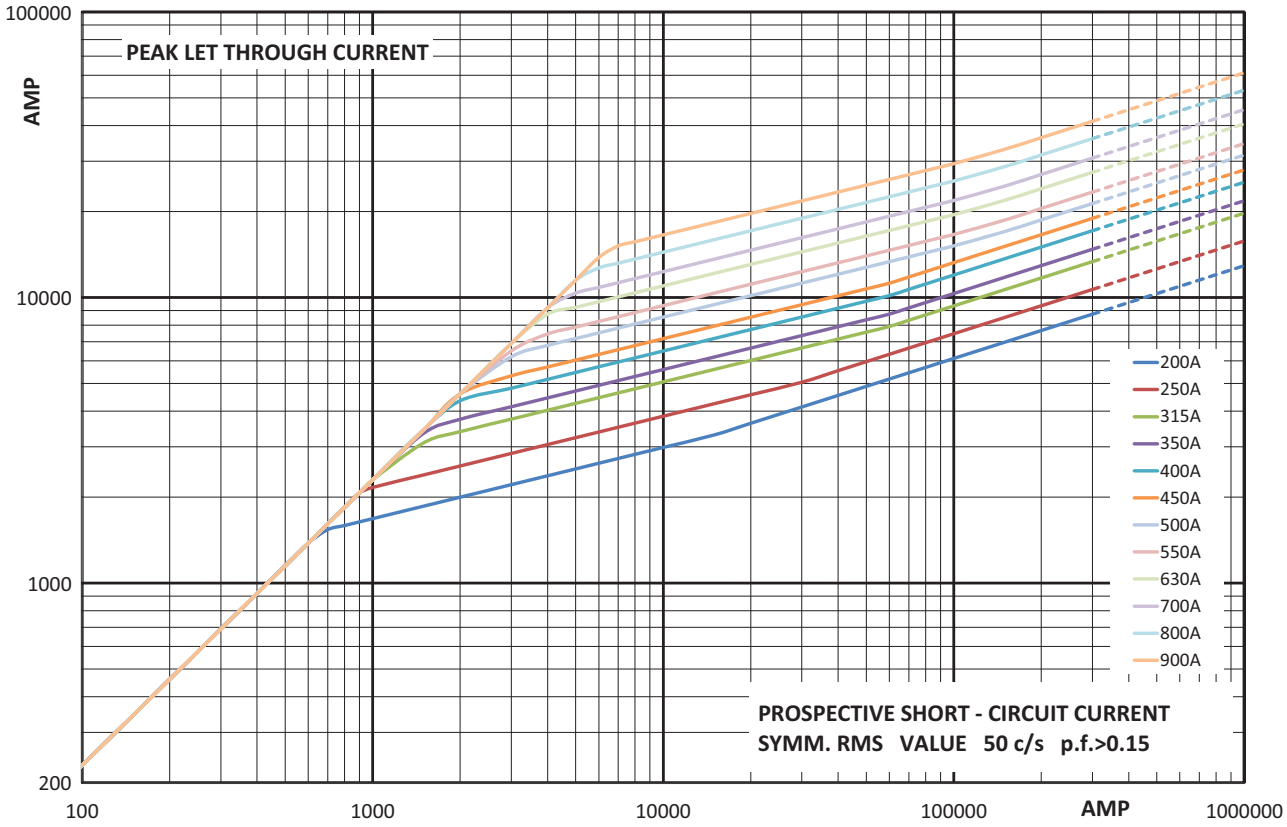


K_b = 1 N = 1.5

Data sheets: 170K6314 (Size 1*), 170K6316 (Size 1), 170K6318 (Size 2), 170K6320 (Size 3)

170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 1, 200 A to 900 A



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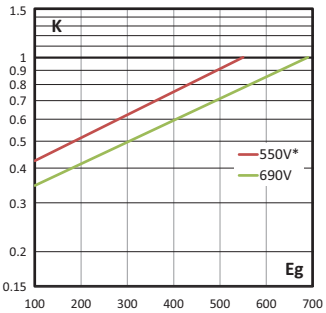

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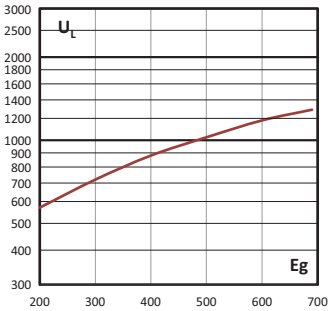
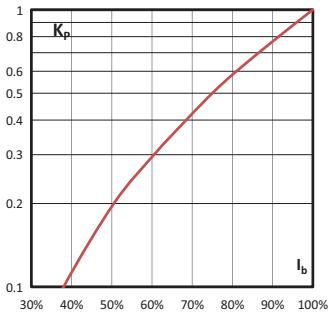


Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, K_p , is given as a function of the RMS load current, I_b , in percent of the rated current.



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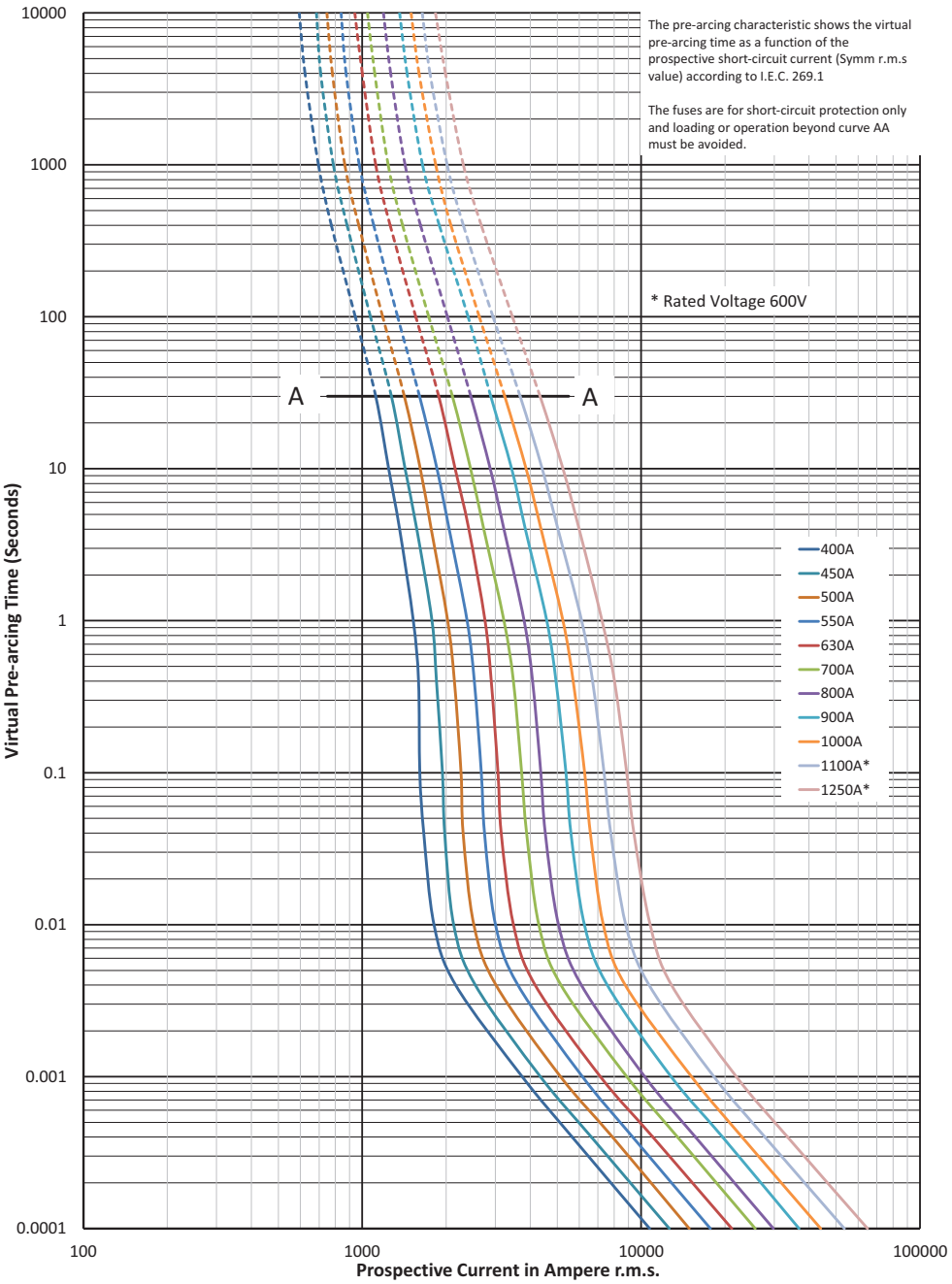
Time-current curve - Size 2, 400 A to 1250 A



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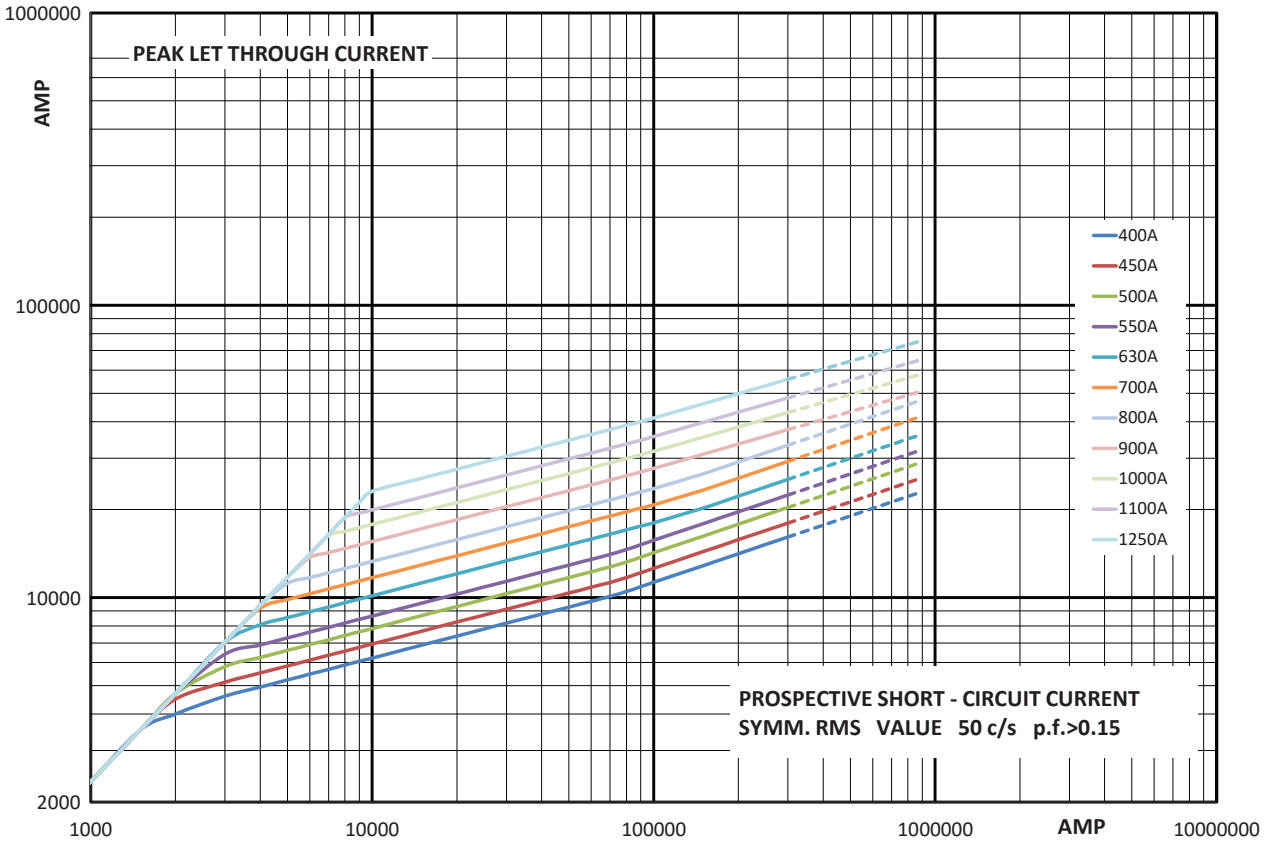
Cut-off curve - Size 2, 400 A to 1250 A



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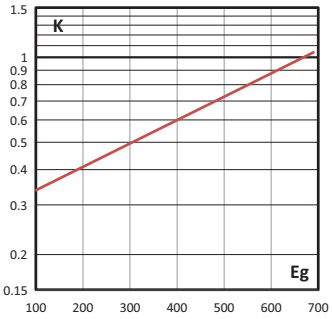

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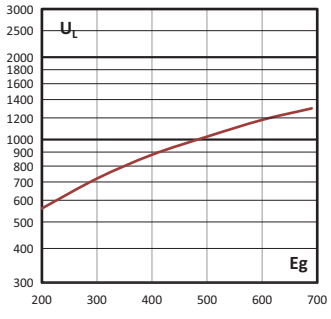
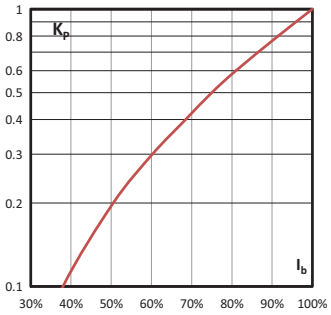
This curve gives the peak arc voltage, U_L, which may appear across the fuse during its operation as a function of the applied working voltage, E_g, (RMS) at a power factor of 15 percent.



Watts losses

Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the watts losses at load currents lower than the rated current. The correction factor, K_p, is given as a function of the RMS load current, I_b, in percent of the rated current.



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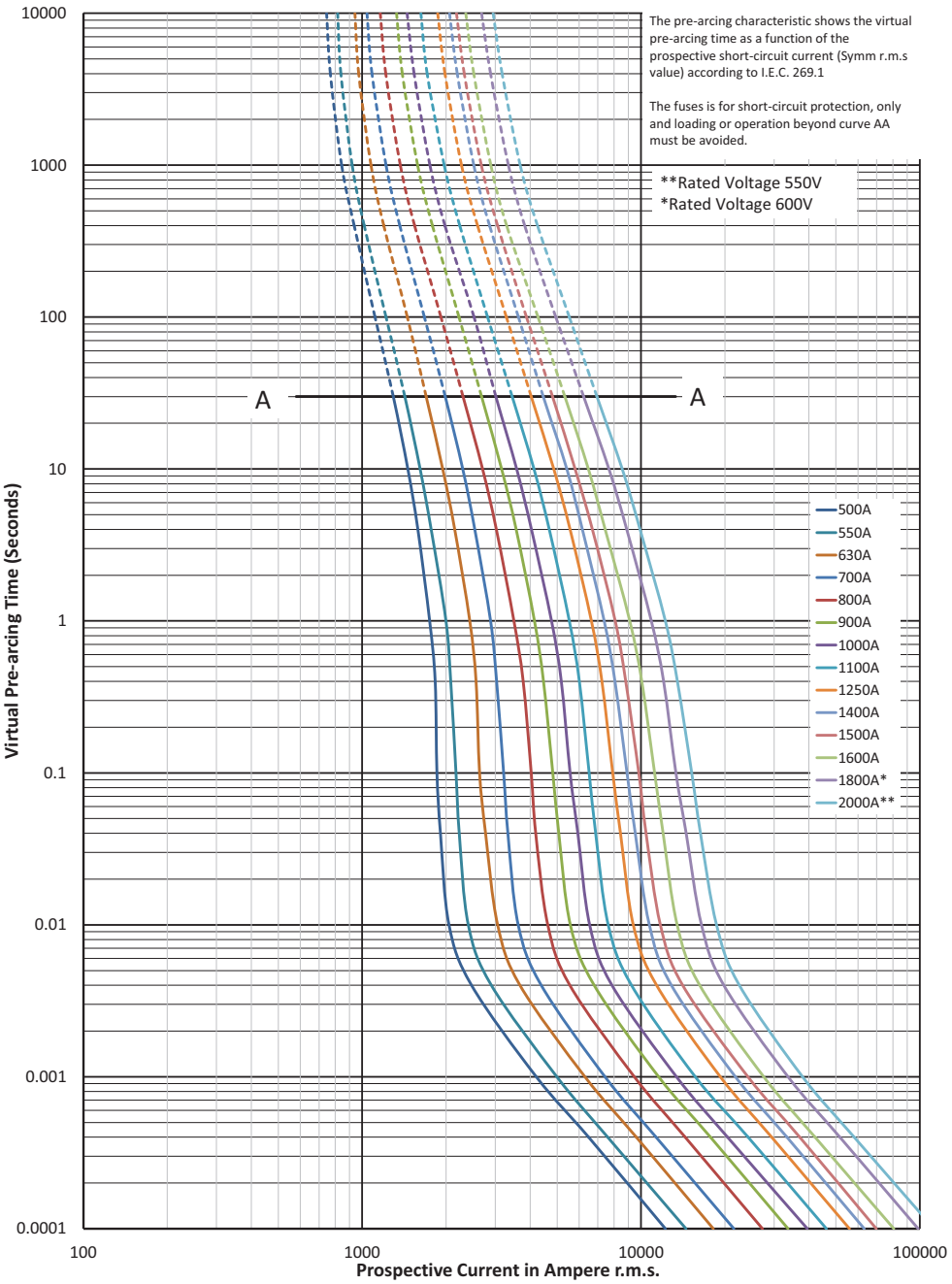
170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Time-current curve - Size 3, 500 A to 2000 A



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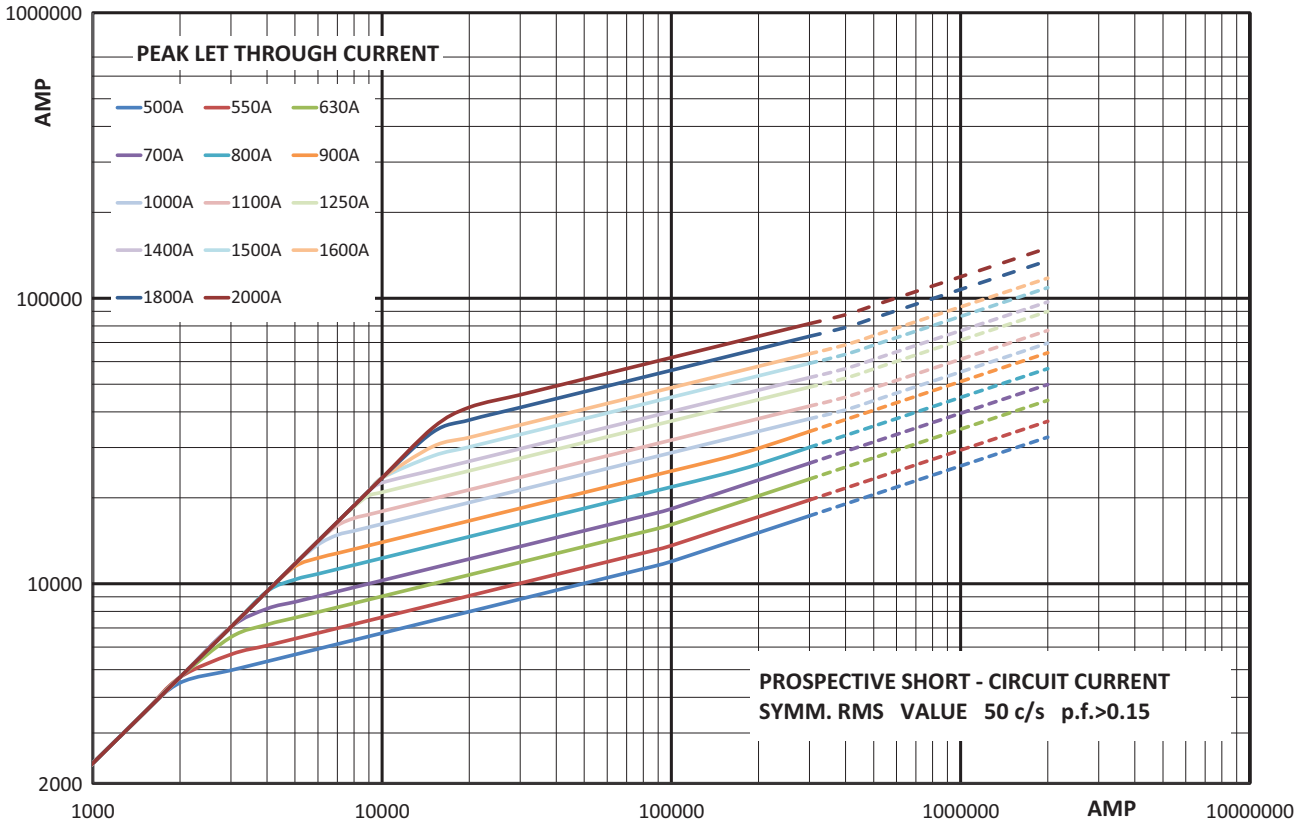
170M - Sizes 1* to 3, Flush end contact, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 2000 A

Cut-off curve - Size 3, 500 A to 2000 A



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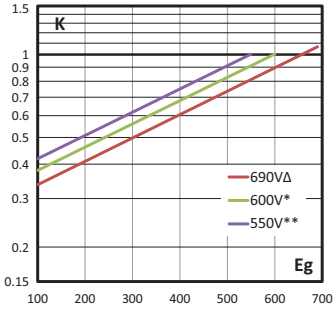

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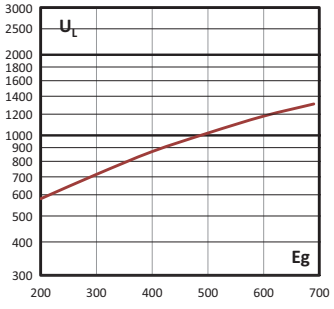

Watts losses

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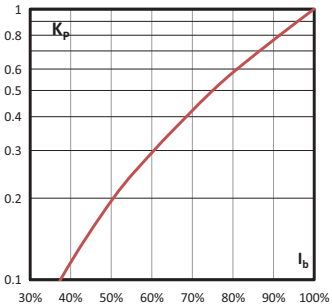

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