HIGH SPEED Dual Indication Fuse-Links HSDI

Square Body DIN 43620 - 690V (IEC/UL), Size 1, 2 & 3, 40 to 1600 Amps



Standards/Approvals:
CE, designed and tested to IEC 60269: part 4. UL recognised (Survival Only), CSA

Description: Square body DIN 43620 blade style, dual indication High Speed fuses

Packaging:
Size 1 are packed in 6's
Size 2 are packed in 3's
Size 3 are packed in 1's

Technical Data:

Rated Voltage:	690 Vac
Amps:	40A to 1600A
Rated Breaking Capacity:	200kA RMS Sym
RoHS Compliant:	Yes

Catalogue Symbol:

Size 1: 170M3808D to 170M3819D
170M4863D to 170M4867D

Size 2: 170M5808D to 170M5817D

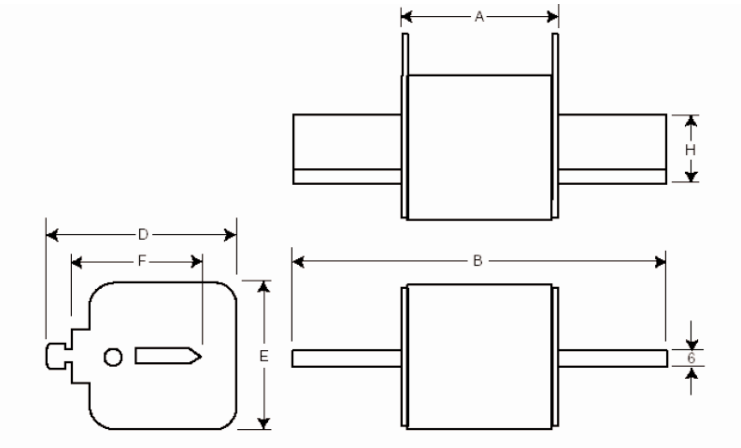
Size 3: 170M6808D to 170M6814D
170M8554D to 170M8557D

Class of Operation: aR

Dimensional Data:

DIN 1 to 3
1mm = 0.0394" / 1" = 25.4mm

Size	A	B	D	E	F	H
1	68±2.5	135±2.5	64	40	40	20
2	68±2.5	150±2.5	72	54	48	25
3	68±2.5	150±3.0	87	71	60	32



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Catalogue Numbers:

Standard Approvals: CE, IEC 60269: part 4, UL recognised (Survival Only), CSA

Technical Data:
Size 1: 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 350, 400, 450, 500, 550, 630 & 700 Amps
Size 2: 400, 450, 500, 550, 630, 700, 800, 900, 1000 & 1100 Amps
Size 3: 500, 550, 630, 700, 800, 900, 1000, 1100, 1250, 1400, 1500 & 1600 Amps

Part Numbers	Size	Rated Current RMS Amps	I^2t (A^2sec)		Watts Loss
			Minimum Pre-Arcing	Clearing at 690V	
170M3808D	1	40	40	285	4
170M3809D		50	78	550	4.5
170M3810D		63	120	850	6.5
170M3811D		80	185	1350	8.5
170M3812D		100	360	2600	10
170M3813D		125	550	3900	11
170M3814D		160	1150	8250	12
170M3815D		200	2300	16500	12.5
170M3816D		250	4350	31000	16
170M3817D		315	7300	52000	20
170M3818D		350	10000	73000	21.5
170M3819D		400	16000	115000	23
170M4863D		450	21500	155000	26.5
170M4864D		500	27000	190000	28.5
170M4865D		550	33500	240000	33
170M4866D		630	48500	345000	37.5
170M4867D		700	69500	495000	39
170M5808D	2	400	11000	79000	29
170M5809D		450	16000	115000	32
170M5810D		500	21500	155000	34
170M5811D		550	29000	215000	36
170M5812D		630	41000	295000	42
170M5813D		700	60500	430000	43
170M5814D		800	86000	610000	48
170M5820D		900	125000	895000	52
170M5816D		1000	180000	1300000	53
170M5817D		1100	245000	1750000	56
170M6808D	3	500	14000	99500	43
170M6809D		550	19500	140000	44
170M6810D		630	31000	220000	45
170M6811D		700	45000	320000	46
170M6812D		800	69500	490000	48
170M6813D		900	100000	720000	50
170M6814D		1000	140000	985000	56
170M6892D		1100	190000	1400000	57
170M8554D		1250	300000	2150000	61
170M8555D		1400	380000	2700000	70
170M8556D		1500	470000	3350000	72
170M8557D		1600	585000	4150000	74

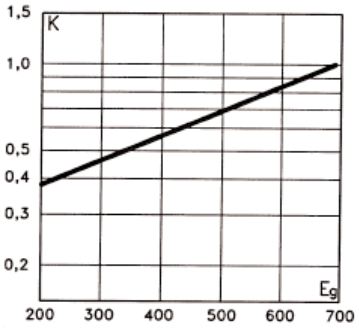
The rated current of this fuse range has been given with copper conductors that have a current density of 1.3A/mm2 IEC 60269-1, the fuses with a rated current higher than 125A must be derated. Please contact Cooper Bussmann for application assistance.

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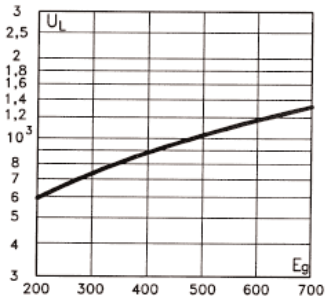
Total Clearing I^2T

The total clearing I^2t at rated voltage and at power factor of 15% 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 Eg (rms)



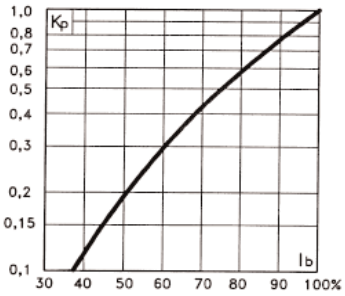
Arc Voltage

This curve gives the peak arc voltage, UL, which may appear accross the fuse during its operation as a function of the applied working voltage, Egrection factor, K, given as a function of applied working voltage Eg (rms) at a power factor of 15%



Power Losses

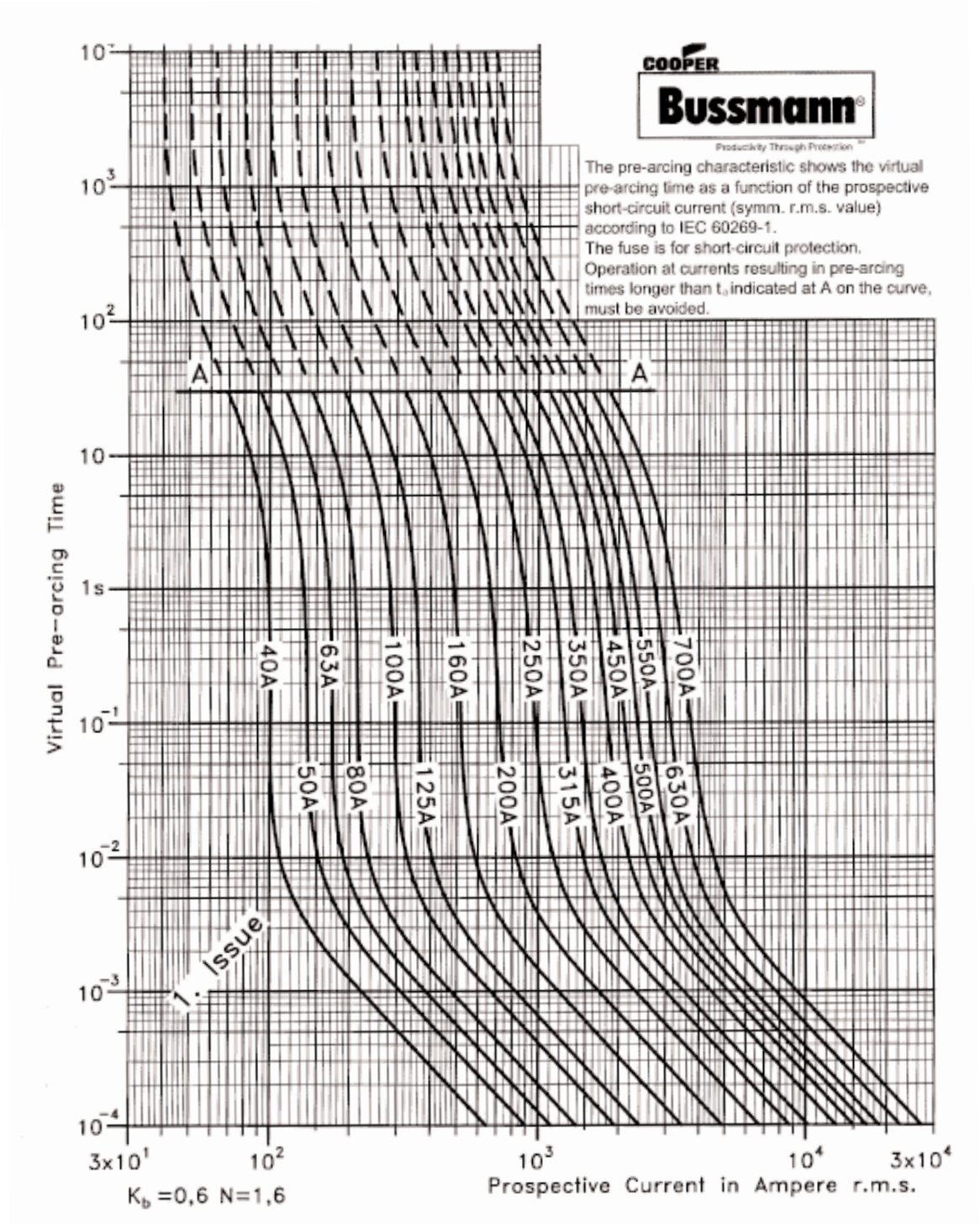
Watts loss at rated current is given in the electrical characteristics. The curve allows the calculation of the power losses at load currents lower than the rated current. The correction factor, Kp, is given as a function of the RMS load current, Ib, in % of the rated current.



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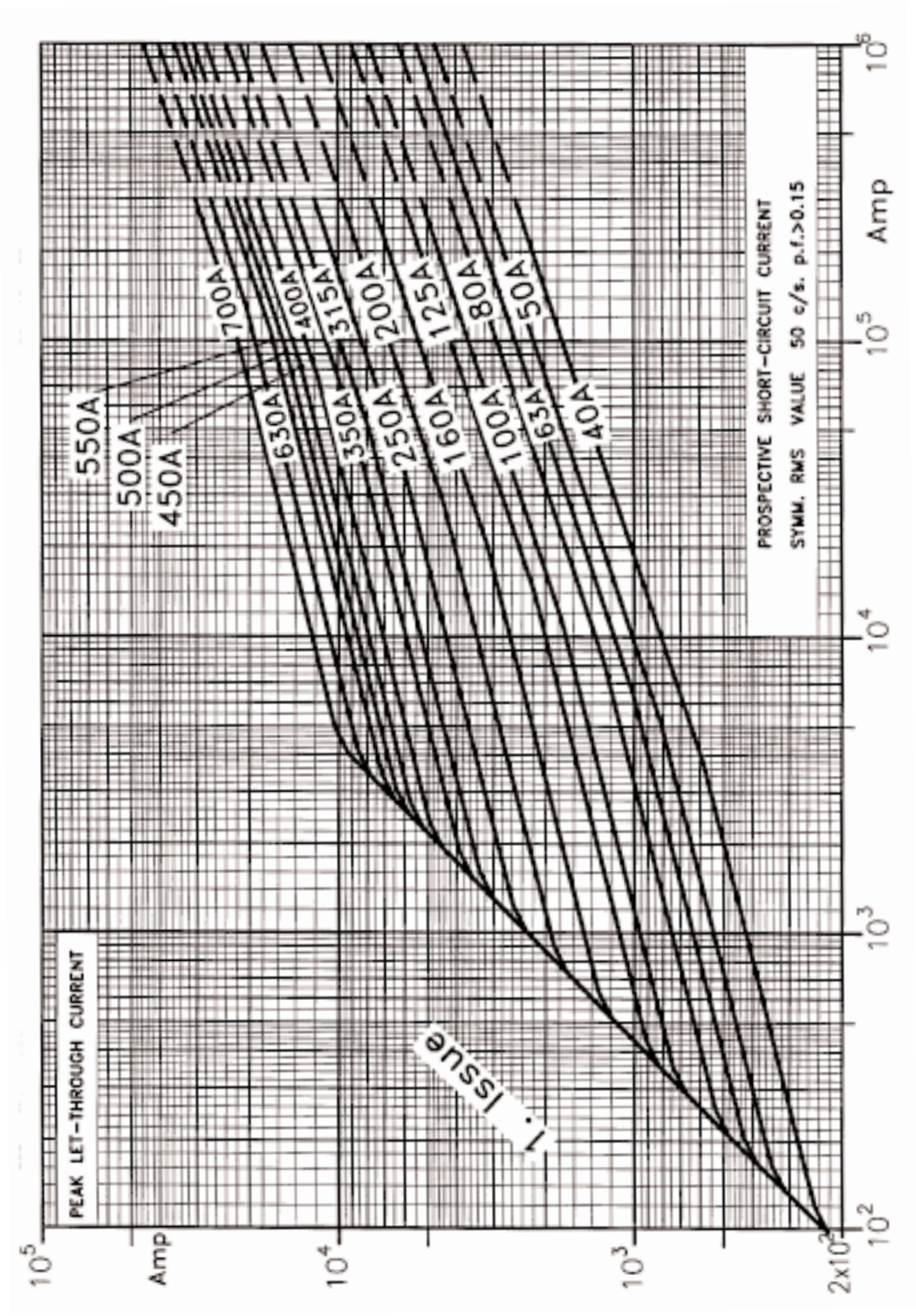
Time Current Curves - Size 1



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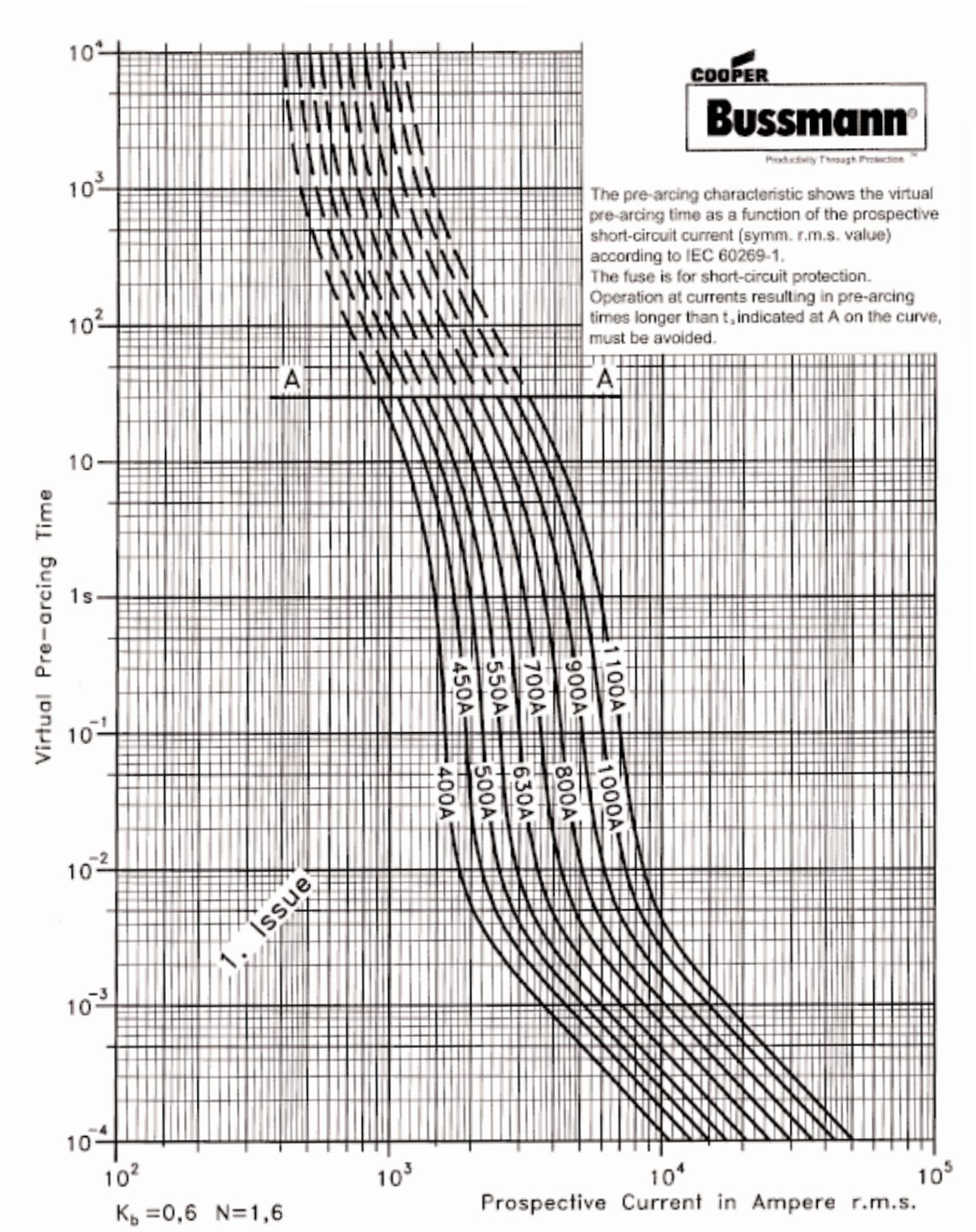
Peak Let-Through - Size 1



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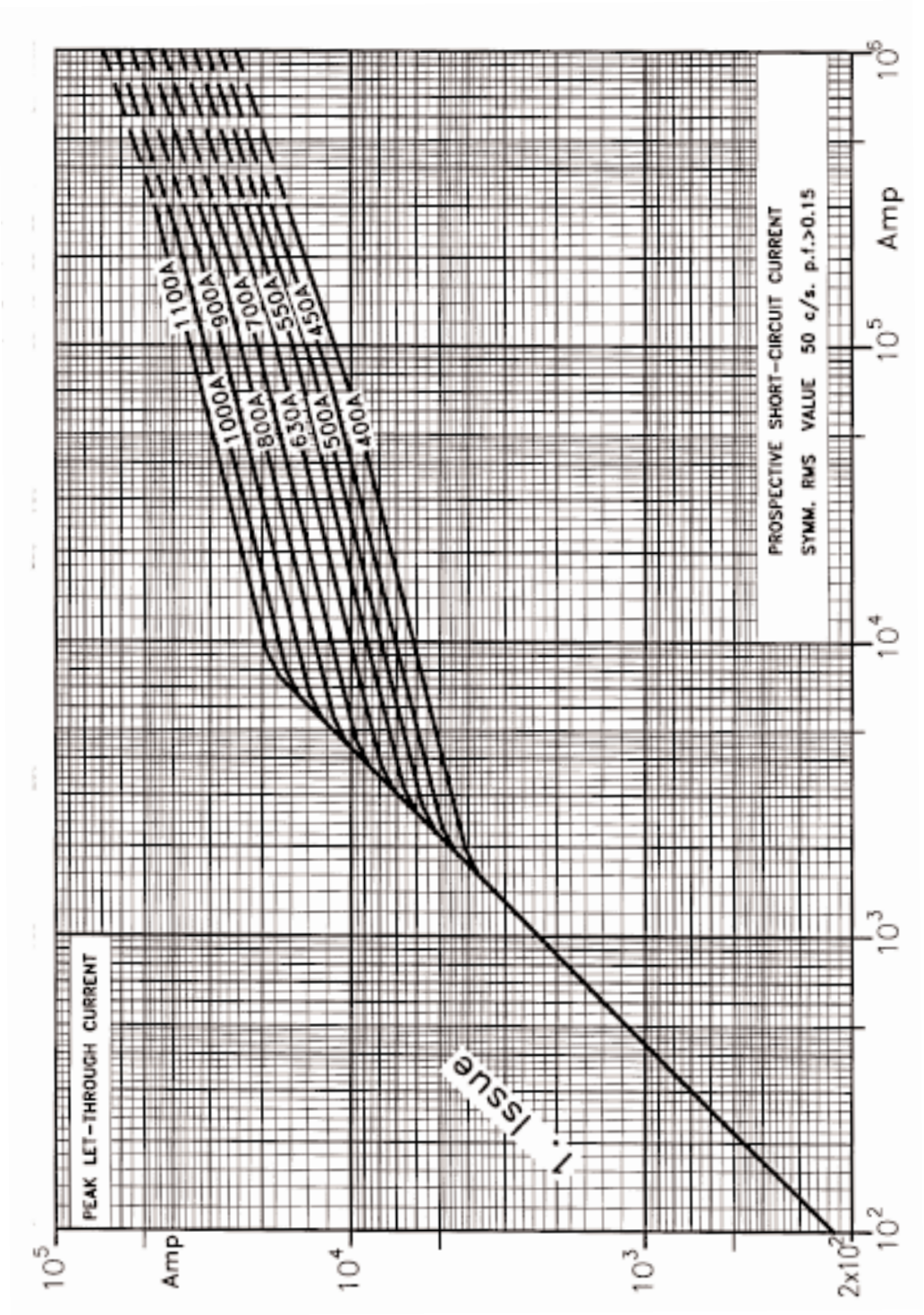
Time Current Curves - Size 2



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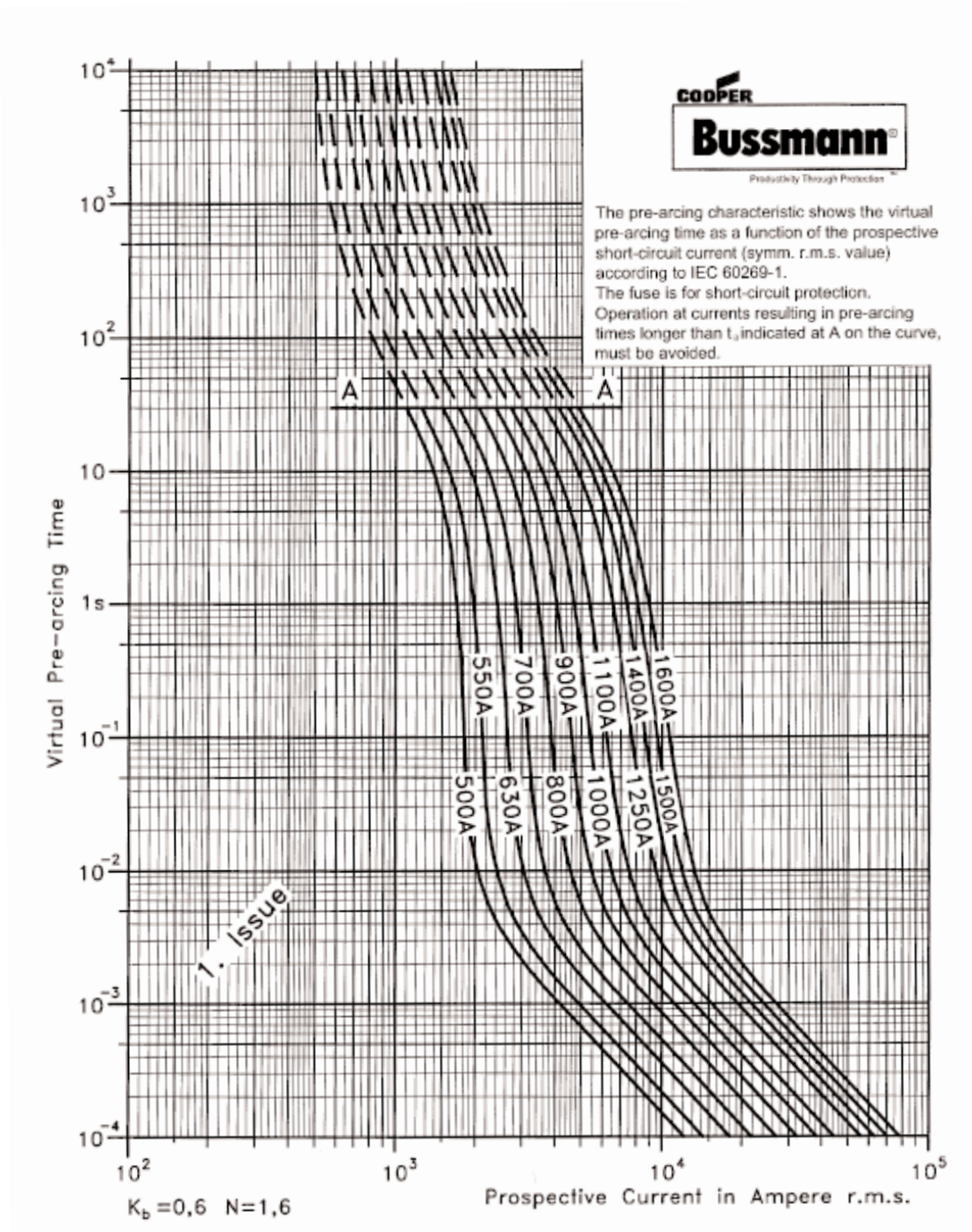
Peak Let-Through - Size 2



HIGH SPEED Dual Indication Fuse-Links HSDI

Square Body DIN 43620 - 690V (IEC/UL), Size 1, 2 & 3, 40 to 1600 Amps

Time Current Curves - Size 3



HIGH SPEED Dual Indication Fuse-Links HSDI

Square Body DIN 43620 - 690V (IEC/UL), Size 1, 2 & 3, 40 to 1600 Amps

Peak Let-Through - Size 3

