

High Speed Fuses

Square Body US Style — 690V/700V (IEC): 40-2000A

690V/700V (IEC) 40-2000A

Specifications

Description: Square body US style high speed fuses.

Dimensions: See dimensions illustration.

Ratings:

Volts: — 690Vac (IEC)
— 700Vac (UL)

Amps: — 40-200A

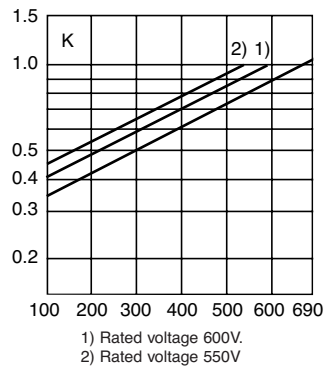
IR: — 200kA RMS Sym.

Agency Information: CE, Designed and tested to IEC 60269: Part 4, UL Recognized. Consult Cooper Bussmann for UL Recognition/ CSA Component Acceptance status.

Electrical Characteristics

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, E_g , (rms).

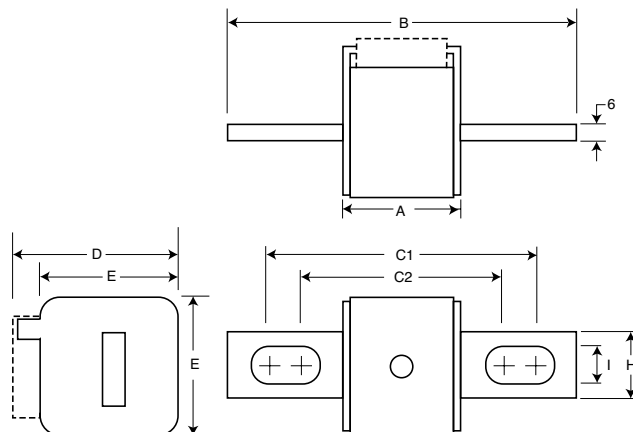


Dimensions (mm)

Type -FU/-, -FKE/-, FU/115-, -FKE/115

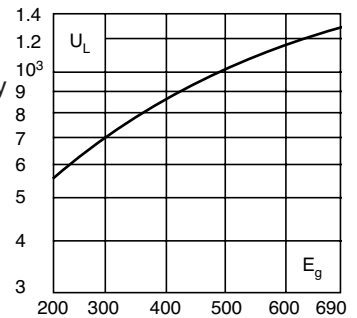
Size	A	B	B**	C1	C1**	C2	C2**	D	E	H	I
1*	50	110	148	85	123	72	110	59	45	20	10
1	50	136	157	104	126	78	100	69	53	25	14
2	50	135	159	105	125	78	99	77	61	25	14
3	51	135	155	106	125	77	97	92	76	36	16

**Valid for fuses type -FU/115 & -FKE/115.
1mm = 0.0394" / 1" = 25.4mm



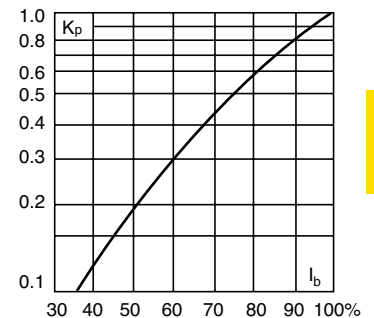
Arc Voltage

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%.



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, K_p , is given as a function of the RMS load current, I_b , in % of the rated current.



Features and Benefits

- Excellent dc performance
- Low arc voltage and low energy let-through (I^2t)
- Low watts loss
- Superior cycling capability

Typical Applications

- DC common bus
- DC drives
- Power converters/rectifiers
- Reduced voltage starters

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Catalog Numbers

Catalog Numbers				Size	Electrical Characteristics			
-FU/ Without Indicator	-FKE/ Type K Indicator for Micro	-FU/115 Without Indicator	-FKE/115 Type K Indicator for Micro		Rated Current RMS-Amps	I ² t (A ² Sec)		Watts Loss
						Pre-arc	Clearing at 660V	
170M3608	170M3658	170M3708	170M3758	1*	40	40	270	9
170M3609	170M3659	170M3709	170M3759		50	77	515	11
170M3610	170M3660	170M3710	170M3760		63	115	770	14
170M3611	170M3661	170M3711	170M3761		80	185	1250	18
170M3612	170M3662	170M3712	170M3762		100	360	2450	21
170M3613	170M3663	170M3713	170M3763		125	550	3700	26
170M3614	170M3664	170M3714	170M3764		160	1100	7500	30
170M3615	170M3665	170M3715	170M3765		200	2200	15000	35
170M3616	170M3666	170M3716	170M3766		250	4200	28500	40
170M3617	170M3667	170M3717	170M3767		315	7000	46500	50
170M3618	170M3668	170M3718	170M3768		350	10000	68500	55
170M3619	170M3669	170M3719	170M3769		400	15000	105000	60
170M3620	170M3670	170M3720	170M3770		450	21000	140000	65
170M3621	170M3671	170M3721	170M3771		500	27000	180000	70
170M3622	170M3672	170M3722	170M3772		550	34000	230000	75
170M3623	170M3673	170M3723	170M3773		630	48500	325000	80
170M4608	170M4658	170M4708	170M4758		1	200	1650	11500
170M4609	170M4659	170M4709	170M4759	250		3100	21000	55
170M4610	170M4660	170M4710	170M4760	315		6200	42000	58
170M4611	170M4661	170M4711	170M4761	350		8500	59000	60
170M4612	170M4662	170M4712	170M4762	400		13500	91500	65
170M4613	170M4663	170M4713	170M4763	450		17000	120000	70
170M4614	170M4664	170M4714	170M4764	500		25000	170000	72
170M4615	170M4665	170M4715	170M4765	550		34000	230000	75
170M4616	170M4666	170M4716	170M4766	630		52000	350000	80
170M4617	170M4667	170M4717	170M4767	700		69500	465000	85
170M4618	170M4668	170M4718	170M4768	800		105000	725000	95
170M4619	170M4669	170M4719	170M4769	±900		155000	±850000	100
170M5608	170M5658	170M5708	170M5758	2	400	11000	74000	65
170M5609	170M5659	170M5709	170M5759		450	15500	105000	70
170M5610	170M5660	170M5710	170M5760		500	21500	145000	75
170M5611	170M5661	170M5711	170M5761		550	28000	190000	80
170M5612	170M5662	170M5712	170M5762		630	41000	275000	90
170M5613	170M5663	170M5713	170M5763		700	60500	405000	95
170M5614	170M5664	170M5714	170M5764		800	86000	575000	105
170M5615	170M5665	170M5715	170M5765		900	125000	840000	110
170M5616	170M5666	170M5716	170M5766		1000	180000	1250000	115
170M5617	170M5667	170M5717	170M5767		1100	245000	1600000	120
170M5618	170M5668	170M5718	170M5768		1250	365000	2400000	130
170M6608	170M6658	170M6708	170M6758		3	500	14000	95000
170M6609	170M6659	170M6709	170M6759	550		19500	135000	100
170M6610	170M6660	170M6710	170M6760	630		31000	210000	105
170M6611	170M6661	170M6711	170M6761	700		44500	300000	110
170M6612	170M6662	170M6712	170M6762	800		69500	465000	115
170M6613	170M6663	170M6713	170M6763	900		100000	670000	120
170M6614	170M6664	170M6714	170M6764	1000		140000	945000	125
170M6615	170M6665	170M6715	170M6765	1100		190000	1300000	130
170M6616	170M6666	170M6716	170M6766	1250		290000	1950000	140
170M6617	170M6667	170M6717	170M6767	1400		370000	2450000	155
170M6618	170M6668	170M6718	170M6768	1500		460000	3100000	160
170M6619	170M6669	170M6719	170M6769	1600		580000	3900000	160
170M6620	170M6670	170M6720	170M6770	±1800		880000	±5250000	165
170M6621	170M6671	170M6721	170M6771	±2000		1150000	±6350000	175

†Rated voltage (IEC) 600V.

‡Rated voltage (IEC) 550V.

•Watts loss provided at rated current.

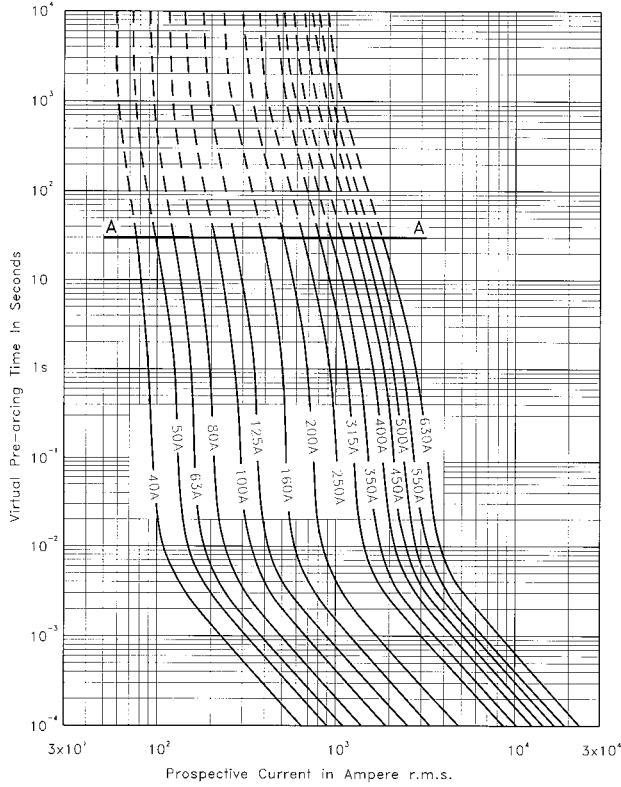
•Microswitch indicator ordered separately. See accessories on pages 179-180.

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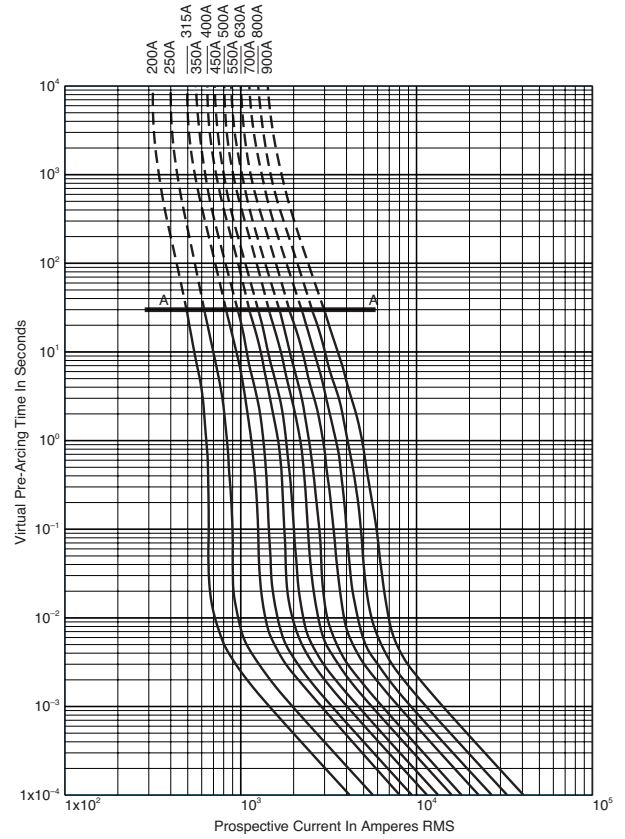
Size 1* — 40-630A: 690V

Time-Current Curve



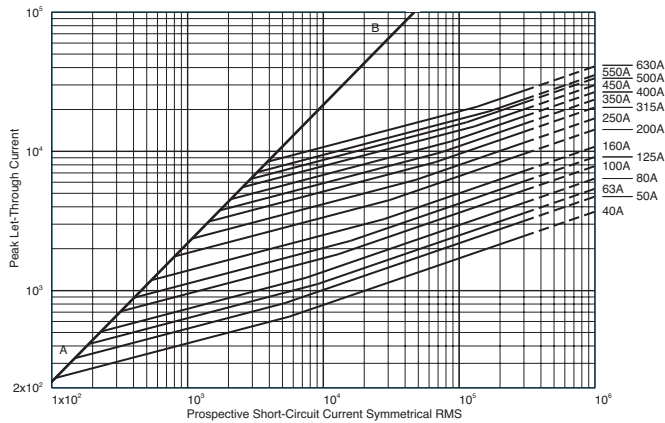
Size 1 — 200-900A: 690V

Time-Current Curve

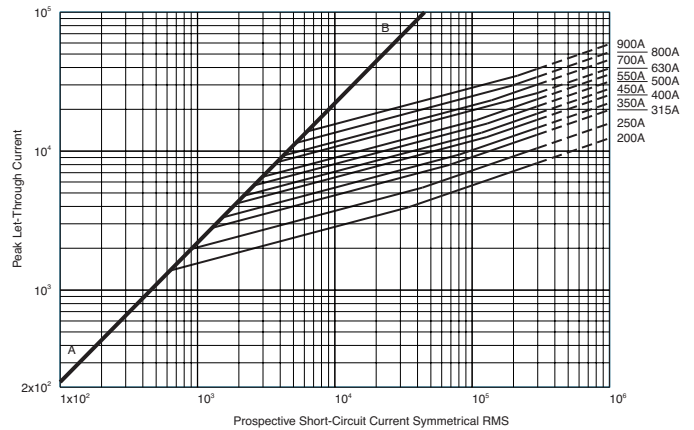


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Peak Let-Through Curve



Peak Let-Through Curve



Data Sheet: 17056314

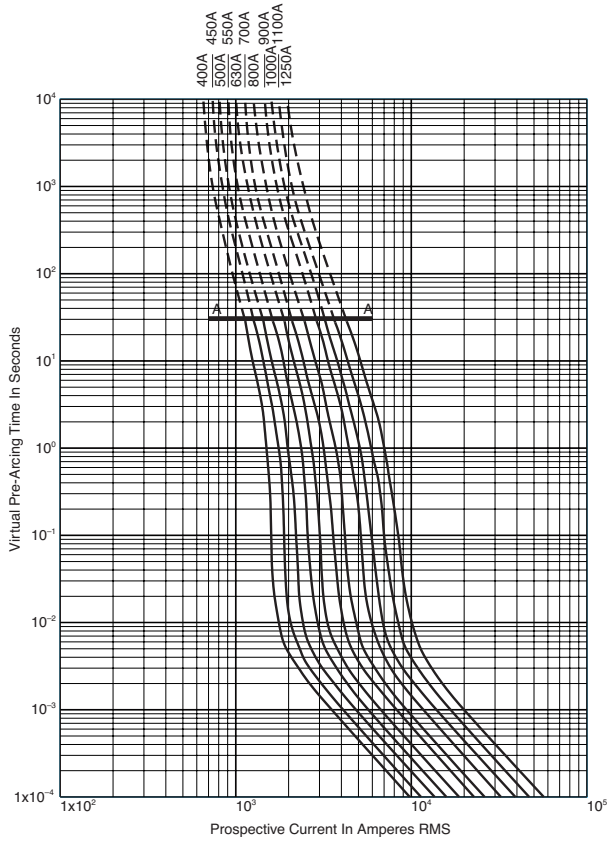
Data Sheet: 17056316

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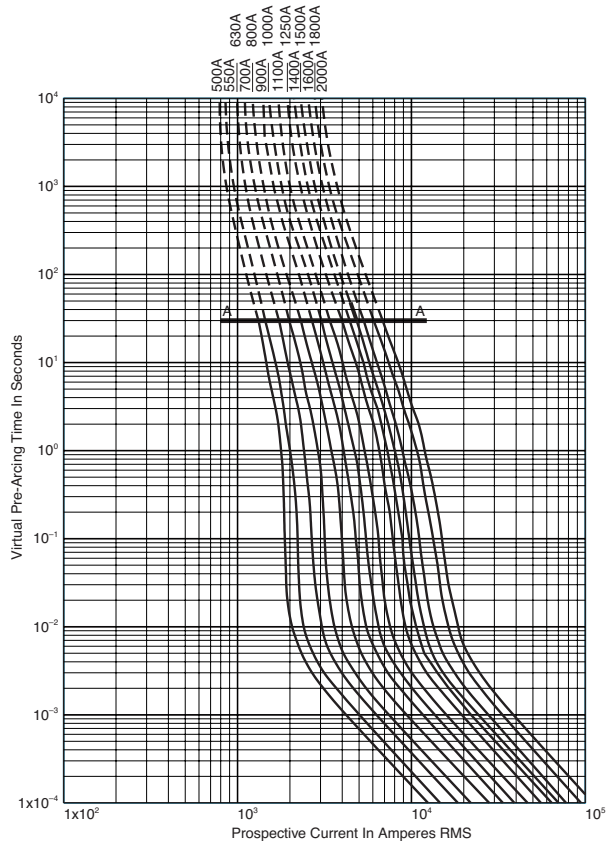
Size 2 — 400-1250A: 690V

Time-Current Curve

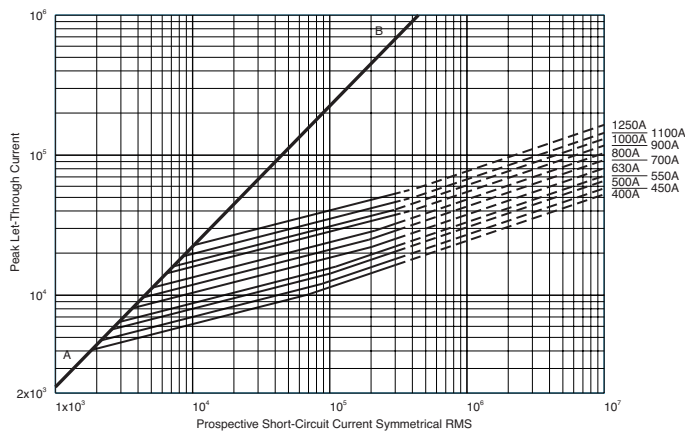


Size 3 — 500-2000A: 690V

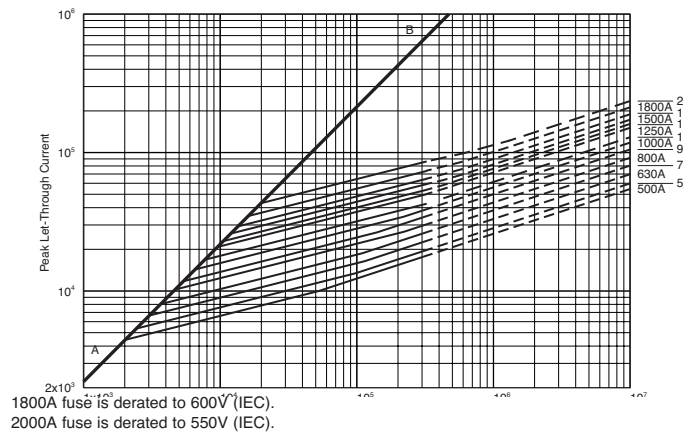
Time-Current Curve



Peak Let-Through Curve



Peak Let-Through Curve



1800A fuse is derated to 600V (IEC).
2000A fuse is derated to 550V (IEC).