

# High Speed Fuses

## Square body DIN 43 620 — 690V/700V (IEC/UL): 40-1000A

### 690V/700V (IEC/UL) 40-1000A

#### Specifications

**Description:** Square body DIN 43 620 blade style high speed fuses.

**Dimensions:** See dimensions illustration.

#### Ratings:

Volts: — 690Vac (IEC)  
— 700Vac (UL)

Amps: — 40-1000A

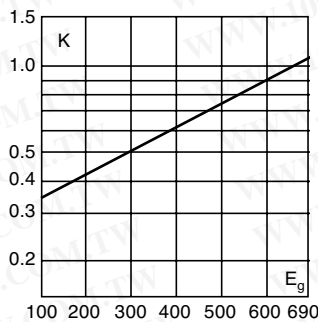
IR: — 200kA RMS Sym.

**Agency Information:** CE, Designed and tested to IEC 60269: Part 4, UL Recognized.

#### Electrical Characteristics

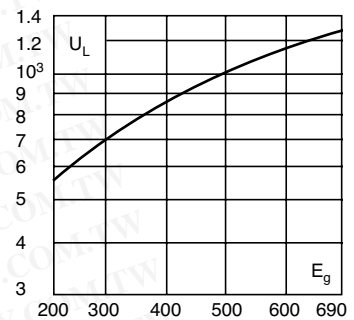
##### Total Clearing I<sup>2</sup>t

The total clearing I<sup>2</sup>t at rated voltage and at power factor of 15% are given in the electrical characteristics. For other voltages, the clearing I<sup>2</sup>t is found by multiplying by correction factor, K, given as a function of applied working voltage, E<sub>g</sub>, (rms).



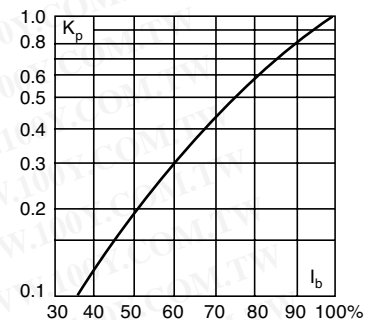
#### Arc Voltage

This curve gives the peak arc voltage, U<sub>L</sub>, which may appear across the fuse during its operation as a function of the applied working voltage, E<sub>g</sub>, (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<sub>p</sub>, is given as a function of the RMS load current, I<sub>b</sub>, in % of the rated current.



#### Features and Benefits

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

#### Typical Applications

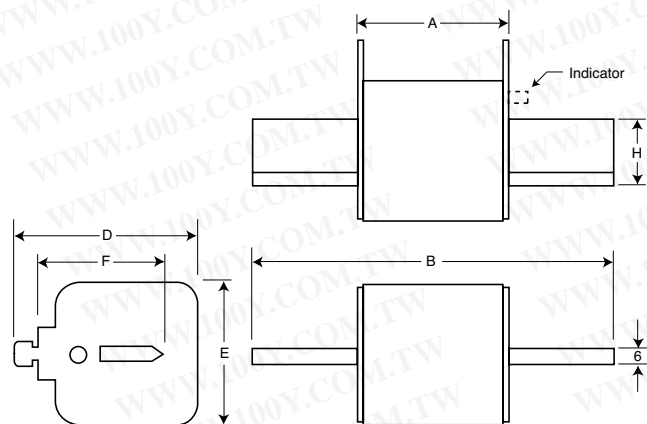
- DC common bus
- DC drives
- Power converters/rectifiers
- Reduced voltage starters

#### Dimensions (mm)

Type DIN 1\*, DIN 2, DIN 3

Size	A	B	D	E	F	H
1*	69	135	58	45	40	20
2	69	150	71	55	48	26
3	68	150	88	76	60	33

1mm = 0.0394" / 1" = 25.4mm



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 勝特力电子(上海) 86-21-54151736  
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[Http://www.100y.com.tw](http://www.100y.com.tw)

## Square body DIN 43 620 — 690V/700V (IEC/UL): 40-1000A

### Catalog Numbers

Catalog Numbers DIN Type T Indicator for Micro	Size	Electrical Characteristics			
		Rated Current RMS-Amps	I <sup>2</sup> t (A <sup>2</sup> Sec)		Watts Loss
			Pre-arc	Clearing at 660V	
170M3808	1*	40	40	270	9
170M3809		50	77	515	11
170M3810		63	115	770	14
170M3811		80	185	1250	18
170M3812		100	360	2450	21
170M3813		125	550	3700	26
170M3814		160	1100	7500	30
170M3815		200	2200	15000	35
170M3816		250	4200	28500	40
170M3817		315	7000	46500	50
170M3818	350	10000	68500	55	
170M3819	400	15000	105000	60	
170M5808	2	400	11000	74000	65
170M5809		450	15500	105000	70
170M5810		500	21500	145000	75
170M5811		550	28000	190000	80
170M5812		630	41000	275000	90
170M5813		700	60500	405000	95
170M6808	3	500	14000	95000	95
170M6809		550	19500	135000	100
170M6810		630	31000	210000	105
170M6811		700	44500	300000	110
170M6812		800	69500	465000	115
170M6813		900	100000	670000	120
170M6814		1000	140000	945000	125

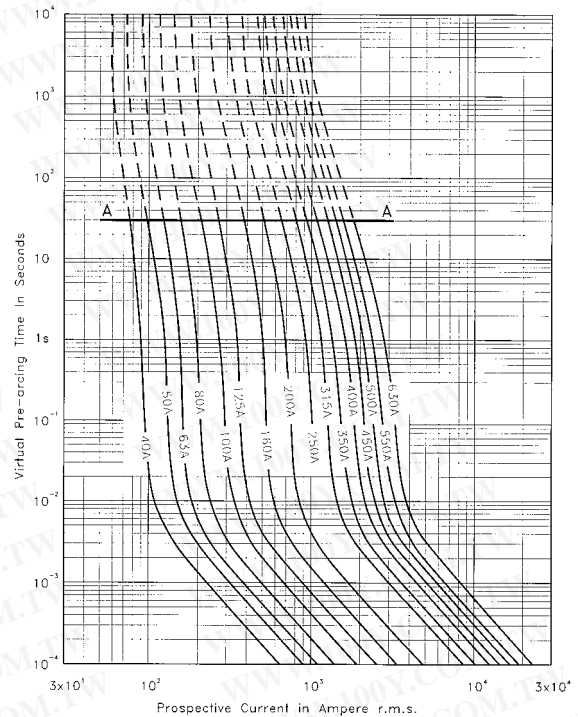
\*Watts loss provided at rated current.  
 \*Microswitch indicator ordered separately. See accessories on pages 179-180.

### Rated Current

The rated current of this fuse range has been given with copper conductors that have a current density of 1.3 A/mm<sup>2</sup> (IEC 60269-4). For conductor cross section according to IEC 60269-1, the fuses must be derated. Please contact Cooper Bussmann for application assistance.

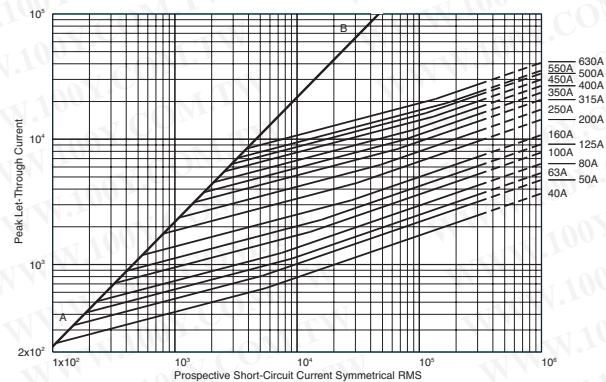
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### Size 1\* — 40-630A: 690V Time-Current Curve



High Speed Fuses

### Peak Let-Through Curve

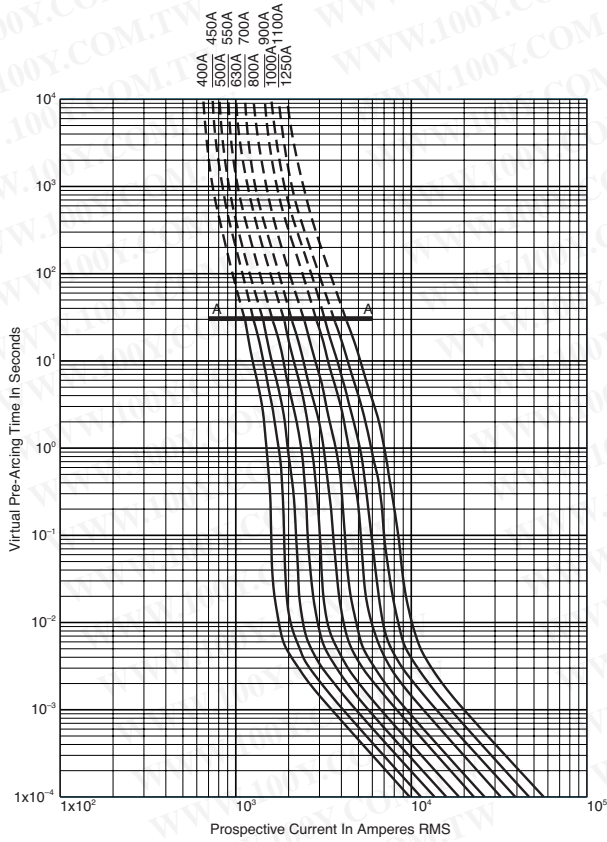


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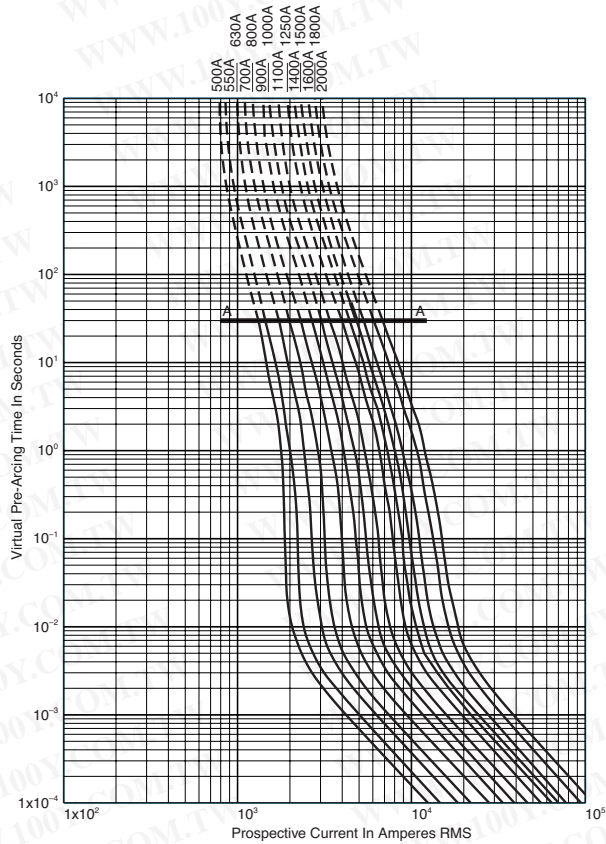
### Size 2 — 400-1250A: 690V

Time-Current Curve

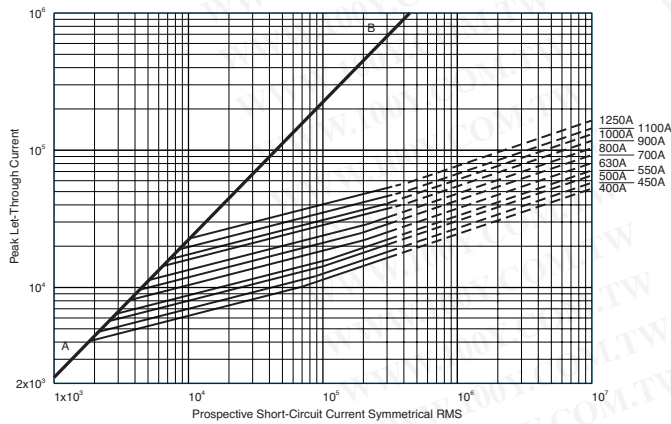


### Size 3 — 500-2000A: 690V

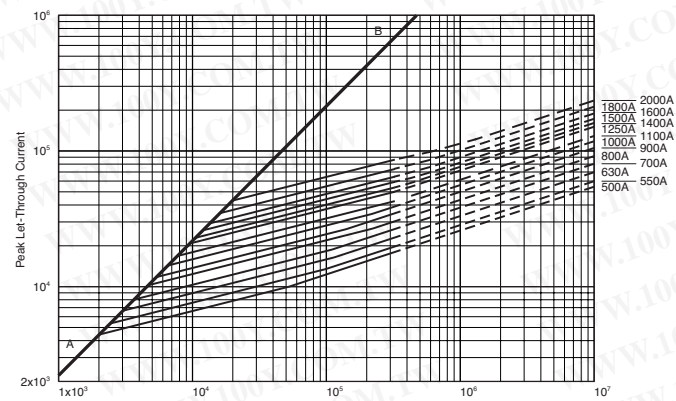
Time-Current Curve



### Peak Let-Through Curve



### Peak Let-Through Curve



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

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