

## 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

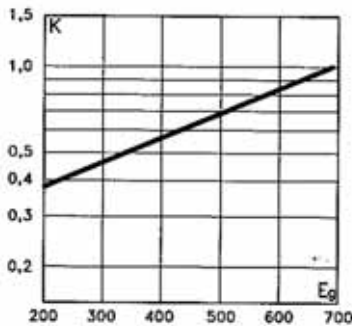
IR: — 200kA RMS Sym.

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

#### Electrical Characteristics

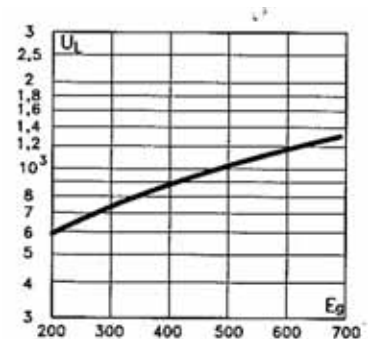
##### Total Clearing $I^2t$

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).



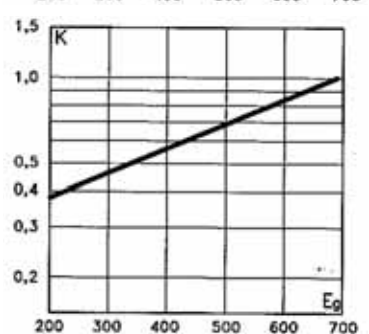
#### Arc Voltage

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

#### For Full Range Fuses in This Body Style

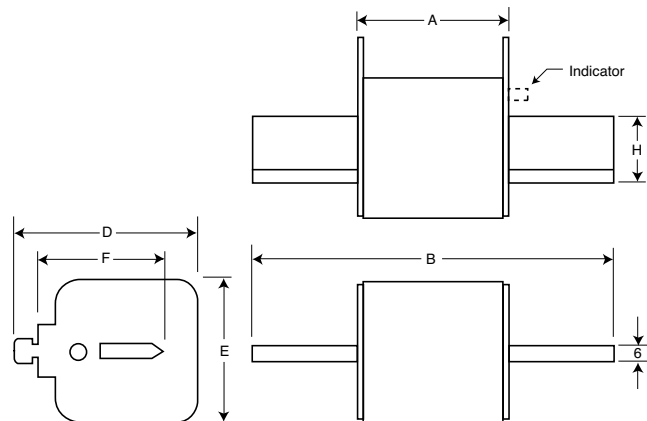
- See page 140

#### 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



## Square Body DIN 43 620 — 690V/700V (IEC/UL): 40-600A

### Catalog Numbers

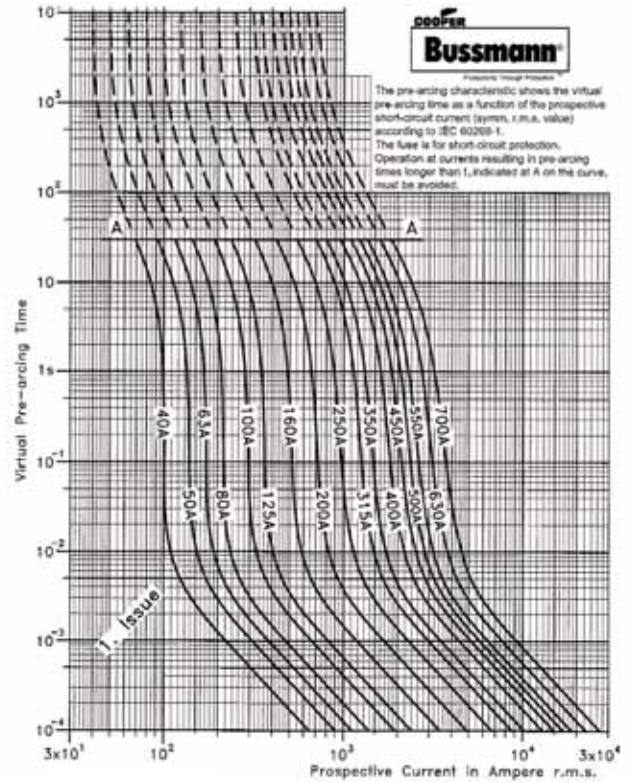
Catalog Numbers DIN Type T Indicator for Micro	Size	Electrical Characteristics			
		Rated Current RMS-Amps	Pt (A <sup>2</sup> Sec)		Watts Loss
			Pre-arc	Clearing at 660V	
170M3808D	1*	40	40	285	4
170M3809D		50	78	550	4.5
170M3810D		63	120	850	6.5
170M3811D		80	185	1350	8.5
170M3812D		100	360	2600	10
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	60
170M4863D		450	21500	155000	26.3
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
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

- Watts loss provided at rated current.
- Microswitch indicator ordered separately. See accessories on pages 185-186.
- For fuse curves see page 134.

### Rated Current

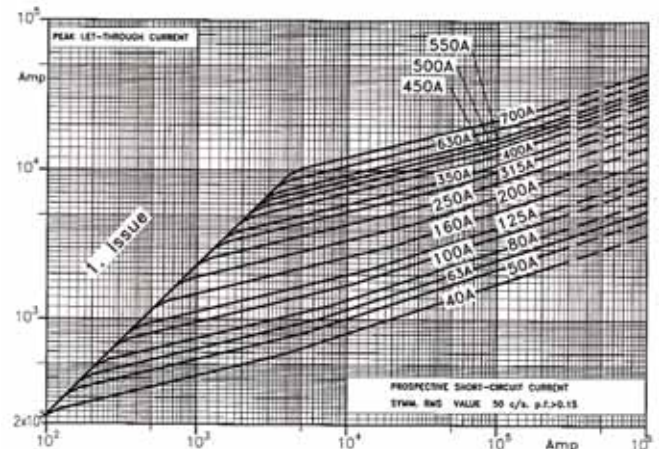
The rated current of this fuse range has been given with copper conductors that have a current density of 1.3 A/mm<sup>2</sup> (IEC 60269-4). For conductor cross section according to IEC 60269-1, the fuses must be derated. Please contact Cooper Bussmann for application assistance.

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



High Speed Fuses

### Peak Let-Through Curve

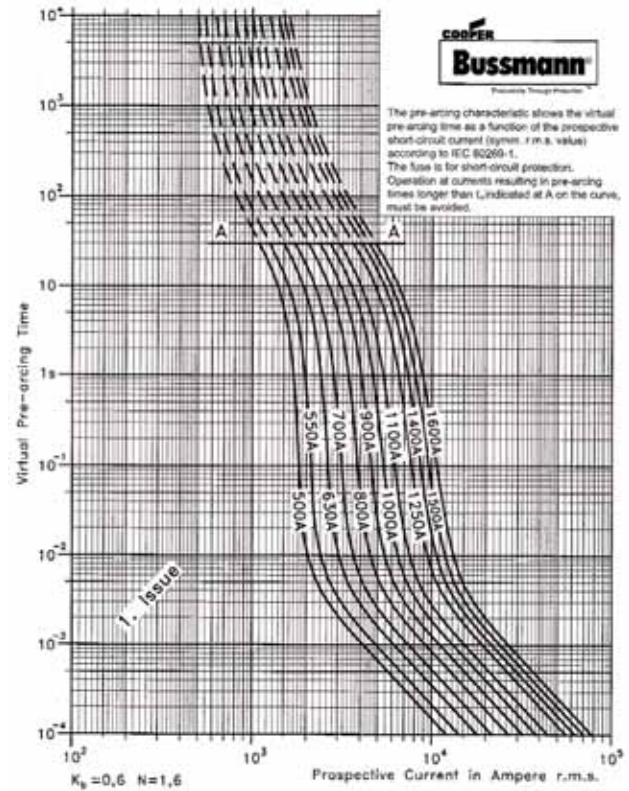
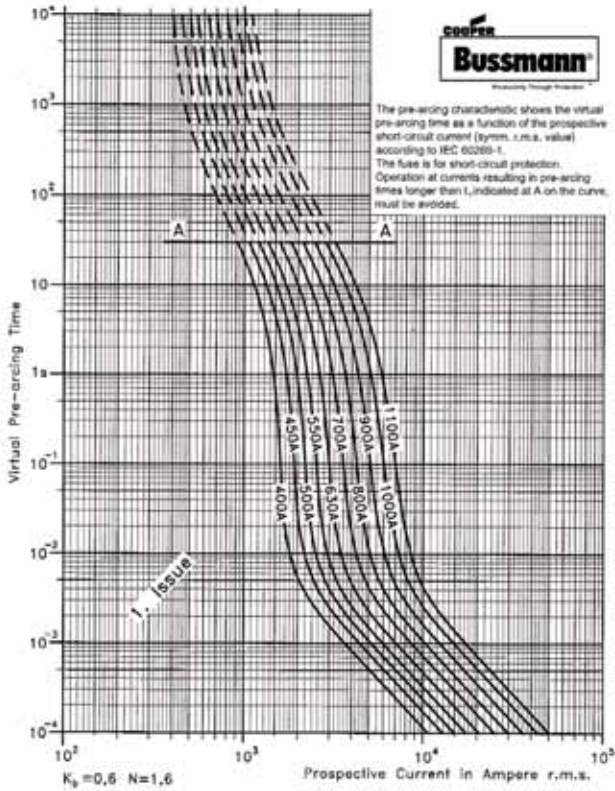




## Square Body DIN 43 620 — 690V/700V (IEC/UL): 40-1000A

**Size 2 — 400-1250A: 690V**  
Time-Current Curve

**Size 3 — 500-2000A: 690V**  
Time-Current Curve



Peak Let-Through Curve

Peak Let-Through Curve

