170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 1600 A

Specifications

Description

Square body French style 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:

- 690 V a.c. (IEC)

- 700 V a.c. (UL)

• Rated current: 40 A to 1600 A

· Breaking capacity: 200 kA RMS Sym

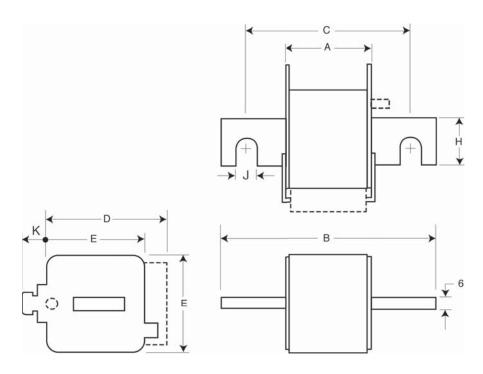
· Operating class: aR

Standards / Agency information

CE, Designed and tested to IEC60269 Part 4, UL Recognised. For CCC approval, please consult Eaton bulehighspeedtechnical@eaton.com



Dimensions (mm)



Size	Α	В	C	D	E	Н	J	K	
1*	50	102	76	59	45	18	9	13	
1	50	111	86	69	53	25	11	11	
2	50	126	91	77	61	30	13	12	
3	51	126	91	92	76	36	13	13	

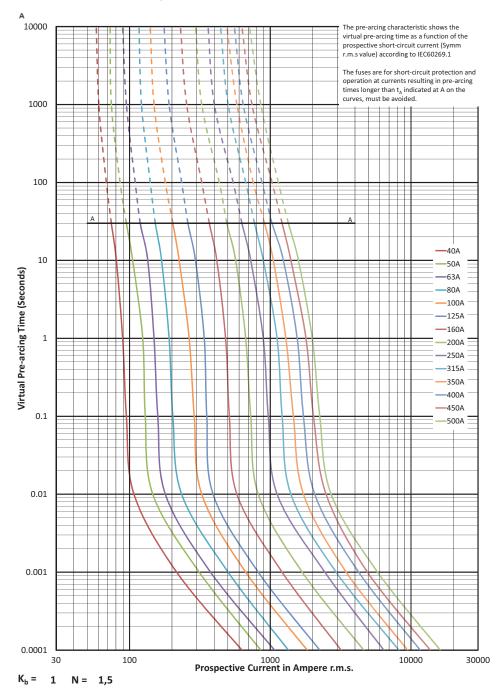
Catalogue numbers

	Rated voltage	Rated current (Amps)	I²t (A² Sec)			Catalogue numbers		
Fuse link body size			Pre-arcing	Clearing at 660 V a.c.	Watts loss (W)	-E/- Type T indicator for micro	-EKN/- Type K indicator for micro	
		40	40	270	9	170M3308	170M3358	
		50	77	515	11	170M3309	170M3359	
		63	115	770	14	170M3310	170M3360	
		80	185	1250	18	170M3311	170M3361	
		100	360	2450	21	170M3312	170M3362	
		125	550	3700	26	170M3313	170M3363	
1*	690 V a.c. (IEC)	160	1100	7500	30	170M3314	170M3364	
	700 V a.c.(UL)	200	2200	15,000	35	170M3315	170M3365	
		250	4200	28,500	40	170M3316	170M3366	
		315	7000	46,500	50	170M3317	170M3367	
		350	10,000	68,500	55	170M3318	170M3368	
		400	15,000	105,000	60	170M3319	170M3369	
		450	21,000	140,000	65	170M3320	170M3370	
		500	27,000	180,000	70	170M3321	170M3371	
		200	1650	11,500	45	170M4308	170M4358	
		250	3100	21,000	55	170M4309	170M4359	
1		315	6200	42,000	58	170M4310	170M4360	
		350	8500	59,000	60	170M4311	170M4361	
	690 V a.c. (IEC)	400	13,500	91,500	65	170M4312	170M4362	
	700 V a.c.(UL)	450	17,000	120,000	70	170M4313	170M4363	
		500	25,000	170,000	72	170M4314	170M4364	
		550	34,000	230,000	75	170M4315	170M4365	
		630	52,000	350,000	80	170M4316	170M4366	
		700	69,500	465,000	85	170M4317	170M4367	
		800	105,000	725,000	95	170M4318	170M4368	
	690 V a.c. (IEC) 700 V a.c.(UL)	400	11,000	74,000	65	170M5308	170M5358	
2		450	15,500	105,000	70	170M5309	170M5359	
		500	21,500	145,000	75	170M5310	170M5360	
		550	28,000	190,000	80	170M5311	170M5361	
		630	41,000	275,000	90	170M5312	170M5362	
		700	60,500	405,000	95	170M5313	170M5363	
		800	86,000	575,000	105	170M5314	170M5364	
		900	125,000	840,000	110	170M5315	170M5365	
		1000	180,000	1,250,000	115	170M5316	170M5366	
		500	14,000	95,000	95	170M6308	170M6358	
3		550	19,500	135,000	100	170M6309	170M6359	
		630	31,000	210,000	105	170M6310	170M6360	
		700	44,500	300,000	110	170M6311	170M6361	
		800	69,500	465,000	115	170M6312	170M6362	
	690 V a.c. (IEC)	900	100,000	670,000	120	170M6313	170M6363	
	700 V a.c.(UL)	1000	140,000	945,000	125	170M6314	170M6364	
		1100	190,000	1,300,000	130	170M6315	170M6365	
		1250	290,000	1,950,000	140	170M6316	170M6366	
		1400	370,000	2,450,000	155	170M6317	170M6367	
		1500	460,000	3,100,000	160	170M6318	170M6368	
		1600	580,000	3,900,000	160	170M6319	170M6369	

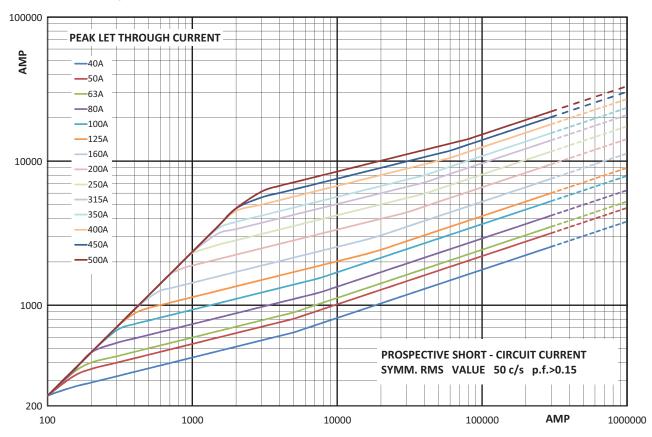


170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 1600 A

Time-current curve - Size 1*, 40 A to 500 A

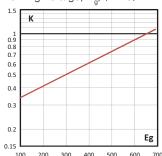


Cut-off curve - Size 1*, 40 A to 500 A



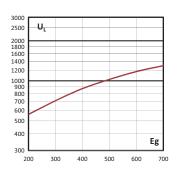
Total clearing I²t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (RMS).



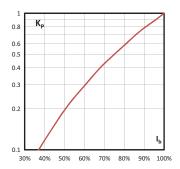
Arc voltage

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.



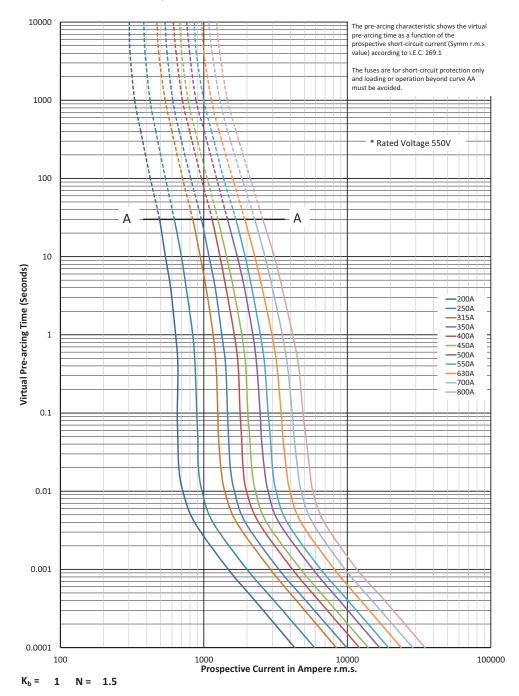
Watts losses

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, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.

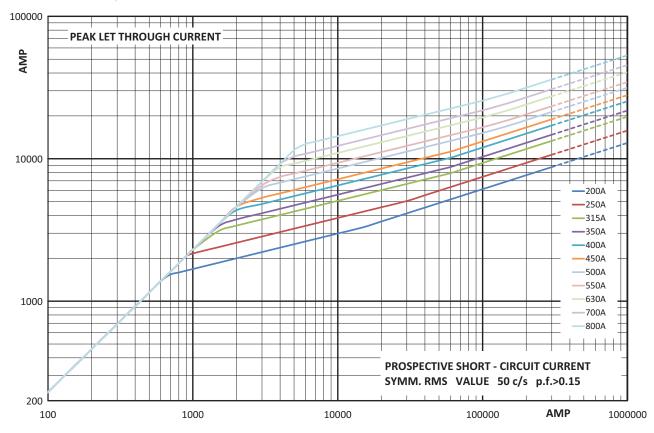


170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 1600 A

Time-current curve - Size 1, 200 A to 800 A

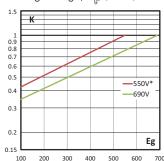


Cut-off curve - Size 1, 200 A to 800 A



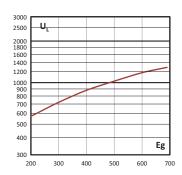
Total clearing I2t

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_{α} , (RMS).



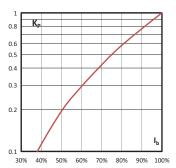
Arc voltage

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.



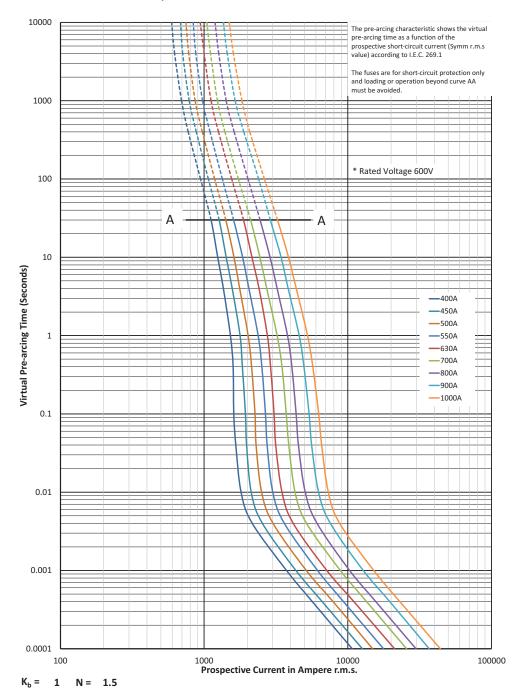
Watts losses

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, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.

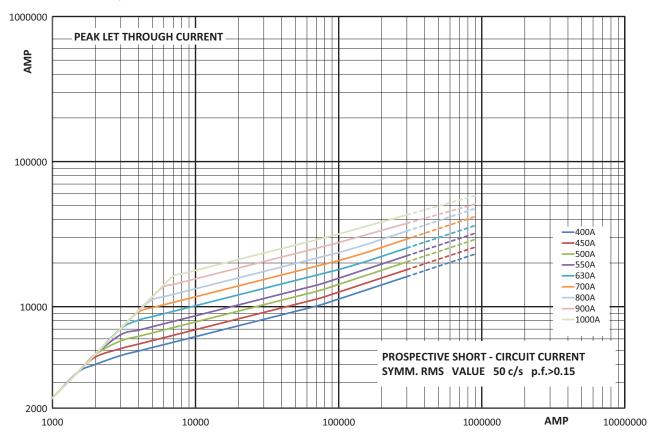


170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 1600 A

Time-current curve - Size 2, 400 A to 1000 A

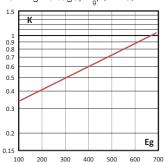


Cut-off curve - Size 2, 400 A to 1000 A



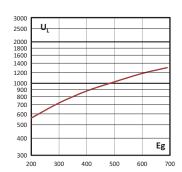
Total clearing I2t

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_{σ} , (RMS).



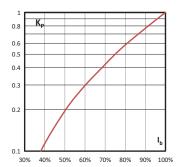
Arc voltage

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.



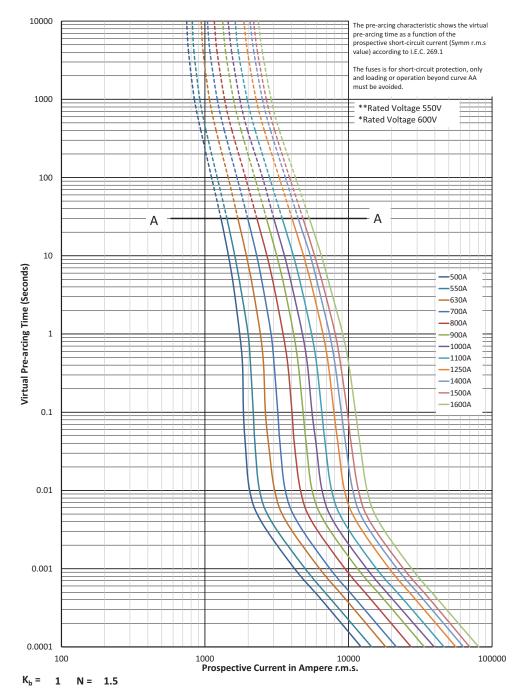
Watts losses

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, $K_{\rm p}$, is given as a function of the RMS load current, $I_{\rm b}$, in percent of the rated current.

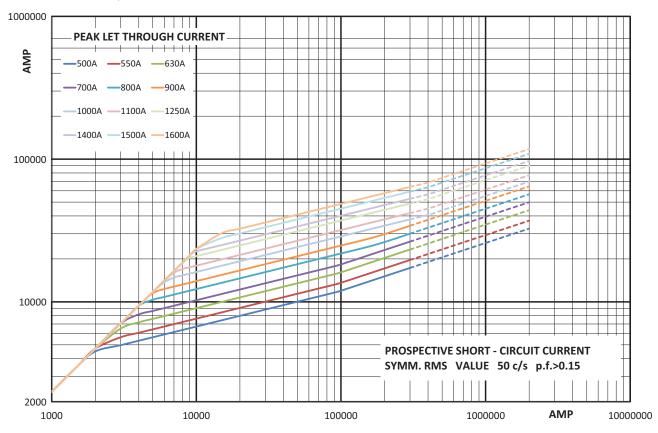


170M - Sizes 1* to 3, French style, 690 V a.c. (IEC), 700 V a.c. (UL), 40 A to 1600 A

Time-current curve - Size 3, 500 A to 1600 A

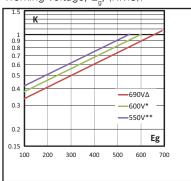


Cut-off curve - Size 3, 500 A to 1600 A



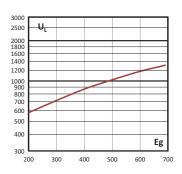
Total clearing I2t

The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_a, (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_q , (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, $\rm K_p$, is given as a function of the RMS load current, $\rm I_b$, in percent of the rated current.

