

CT, ET, FE, EET, FEE, FM, FMM, MT, MMT BS88 High speed fuses



Catalogue symbol

- (amps)CT (6 to 20 A)
- (amps)ET (25 to 80 A)
- (amps)FE (35 to 100 A)
- (amps)EET (90 to 160 A)
- (amps)FEE (100 to 200 A)
- (amps)FM (180 to 350 A)
- (amps)FMM (400 to 700 A)
- (amps)MT (160 to 355 A)
- (amps)MMT (180 to 710 A)

Description

BS88 style high speed fuse links.

Technical data

- Rated voltage

Catalogue numbers	IEC		UL	
	V a.c.	V d.c.	V a.c.	V d.c.
CT,	690	500	700	500
ET	690	500	700	500
FE	690	500	700	500
EET	690	500	700	700
FEE	690	500	700	500
FM	690	450	700	500
FMM	690	450	-	-
MT	690	350	700	-
MMT	690	350	700	-

- Rated current
 - 6 - 710 A
- Operating class: aR

- Breaking capacity

Catalogue numbers	IEC		UL	
	RMS Sym	DC at rated voltage	RMS Sym	DC at rated voltage
CT	90 kA	40 kA at 500 V d.c.	200 kA	50 kA at 500 V d.c.
ET	200 kA	50 kA at 500 V d.c.	200 kA	50 kA at 500 V d.c.
FE				
EET				
FEE				
FM	200 kA	40 kA at 450 V d.c.	200 kA	50 kA at 500 V d.c.
FMM	200 kA	40 kA at 450 V d.c.	200 kA	-
MT	200 kA	40 kA at 350 V d.c.	200 kA	-
MMT	200 kA		200 kA	-

Agency information

- CE
- Designed and tested to BS88 part 4
- IEC 60269 Part 4
- Consult fusetech@eaton.com for specific UL recognition status
- CCC for ET, FE, EET, FEE, FM and FMM

Features and benefits

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

Typical applications

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



Powering Business Worldwide

Carton quantity

- LCT and CT: 20 per carton
- LET, ET and FE: 10 per carton
- EET, FEE: 5 per carton
- LMT, LMMT, FM, FMM, MT and MMT: 1 per carton

Carton weight

- LCT: 0.11 kg
- LET: 0.31 kg
- LMT: 0.18 kg
- LMMT: 0.37 kg
- CT: 0.16 kg
- ET and FE: 0.42 kg
- EET, FEE and FMM: 0.45 kg
- FM: 0.24 kg
- MT: 0.26 kg
- MMT: 0.47 kg

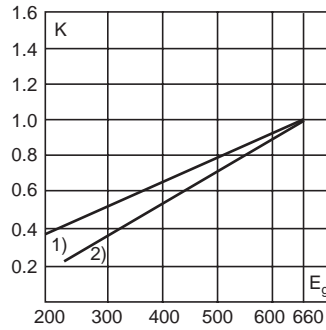
Catalogue numbers

6CT	180FM
10CT	200FM
12CT	225FM
16CT	250FM
20CT	280FM
25ET	315FM
32ET	350FM
35ET	400FMM
40ET	450FMM
45ET	500FMM
56ET	550FMM
63ET	630FMM
80ET	700FMM
35FE	160MT
40FE	180MT
45FE	200MT
50FE	250MT
63FE	280MT
71FE	315MT
80FE	355MT
90FE	180MMT
100FE	200MMT
90EET	225MMT
110EET	280MMT
140EET	315MMT
160EET	355MMT
100FEE	400MMT
120FEE	450MMT
140FEE	500MMT
160FEE	560MMT
180FEE	630MMT
200FEE	710MMT

Electrical characteristics

Total clearing I²t

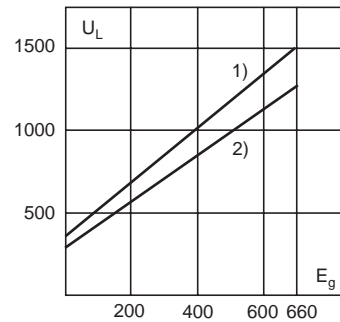
The total clearing I²t at rated voltage and at a power factor of 15 percent are given in the electrical characteristics. For other voltages, the clearing I²t is found by multiplying by correction factor, K, given as a function of applied working voltage, E_g, (RMS).



- 1) CT, ET, EET, FE, FEE, MT, MMT
- 2) FM, FMM

Arc voltage

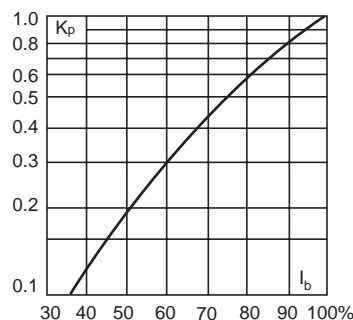
This curve gives the peak arc voltage, U_L, which may appear across the fuse during its operation as a function of the applied working voltage, E_g, (RMS) at a power factor of 15 percent.



- 1) CT
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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_p, is given as a function of the RMS load current, I_b, in percent of the rated current.



Technical data - CT, ET, FE, EET, FEE

Catalogue numbers	Rated voltage V a.c. / V d.c.	Rated current RMS- Amps	I ² t (A ² Sec)		Watts loss**		
			Pre-arc	Clearing at 415 V		Clearing at 660 V	
6CT	690 V a.c. / 500 V d.c. (IEC)	6	1.8	8.5	12	2	
10CT	700 V a.c. / 500 V d.c. (UL)	10	7	30	48	3	
12CT		12	10	40	65	3	
16CT		16	16	66	110	7	
20CT		20	32	150	220	7	
25ET		690 V a.c. / 500 V d.c. (IEC)	25	25	150	250	7
32ET	700 V a.c. / 500 V d.c. (UL)	32	32	190	350	11	
35ET		35	52	310	500	11	
40ET		40	103	600	900	9	
45ET		45	103	680	1100	11	
56ET		56	135	950	1500	14	
63ET		63	171	1200	2000	16	
80ET		80	360	2500	4000	18	
35FE		690 V a.c. / 500 V d.c. (IEC)	35	33	130	200	9
40FE	700 V a.c. / 500 V d.c. (UL)	40	52	180	300	9	
45FE		45	76	270	450	11	
50FE		50	103	380	600	11	
63FE		63	135	480	750	18.5	
71FE		71	210	600	950	17	
80FE		80	250	900	1500	20	
90FE		90	360	1300	2100	20	
100FE		100	470	1800	2800	23	
90EET		690 V a.c. / 500 V d.c. (IEC)	90	490	3000	4500	19
110EET		700 V a.c. / 700 V d.c. (UL)	110	600	4000	6500	27
140EET	140		1050	7000	12,000	35	
160EET	160		1500	10,000	17,000	39	
100FEE	690 V a.c. / 500 V d.c. (IEC)	100	400	1600	2400	24	
120FEE	700 V a.c. / 500 V d.c. (UL)	120	540	1900	3100	32	
140FEE		140	850	2500	3800	36	
160FEE		160	1000	3700	5700	46	
180FEE		180	1400	5300	8400	46	
200FEE		200	1900	7100	11,400	52	

**Watts loss provided at rated current

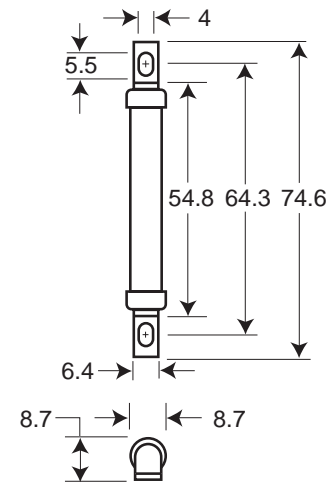
Technical data - FM, FMM, MT and MMT

Catalogue numbers	Rated voltage V a.c. / V d.c.	Rated current RMS-Amps	Pre-arc	I²t (A² Sec)		Watts loss**	
				Clearing at 415 V	Clearing at 660 V		
180FM	690 V a.c. / 450 V d.c. (IEC) 700 V a.c. / 500 V d.c. (UL)	180	1400	7500	13,500	40	
200FM		200	2600	10,500	18,500	40	
225FM		225	3700	14,500	26,500	44	
250FM		250	5200	20,500	37,500	48	
280FM		280	7000	30,500	55,000	48	
315FM		315	10,000	40,000	77,000	55	
350FM		350	15,000	60,000	105,000	55	
400FMM		690 V a.c. / 450 V d.c. (IEC)	400	10,000	40,000	72,500	85
450FMM	450		15,000	60,000	105,000	90	
500FMM	500		20,000	82,000	150,000	100	
550FMM	550		30,000	120,000	215,000	100	
630FMM	630		45,000	180,000	310,000	100	
700FMM	700		60,000	245,000	420,000	120	
160MT	690 V a.c. / 350 V d.c. (IEC) 700 V a.c. (UL)		160	2400	15,000	25,000	26
180MT			180	3800	25,000	38,000	26
200MT		200	6000	40,000	58,000	27	
250MT		250	11,500	80,000	110,000	32	
280MT		280	16,500	100,000	150,000	35	
315MT		315	19,000	125,000	180,000	42	
355MT		355	22,000	160,000	200,000	51	
180MMT		690 V a.c. / 350 V d.c. (IEC) 700 V a.c. (UL)	180	1650	12,000	18,000	42
200MMT	200		2200	16,000	23,000	42	
225MMT	225		3700	26,000	40,000	42	
280MMT	280		6600	47,000	70,000	47	
315MMT	315		8600	62,000	91,000	51	
355MMT	355		13,500	97,000	140,000	54	
400MMT	400		21,000	150,000	220,000	60	
450MMT	450		30,000	220,000	320,000	57	
500MMT	500		42,000	300,000	450,000	64	
560MMT	560		60,000	430,000	640,000	64	
630MMT	630	68,500	500,000	720,000	86		
710MMT	710	78,000	600,000	850,000	105		

**Watts loss provided at rated current

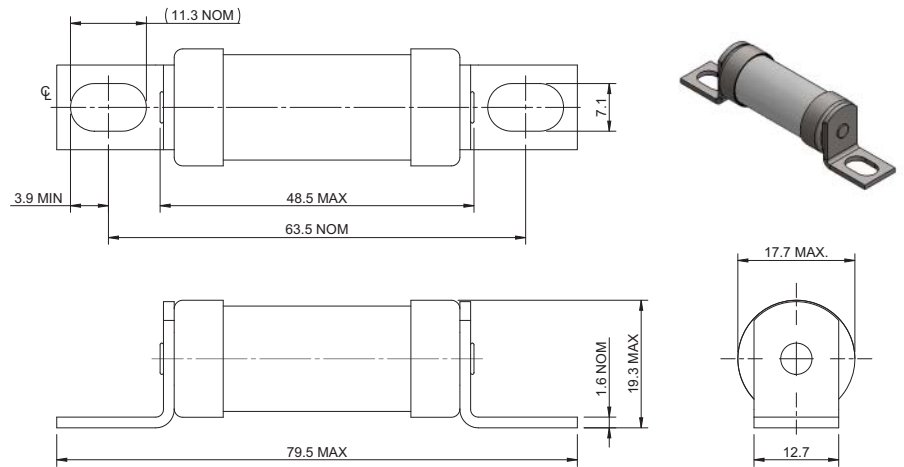
Dimensions - mm

CT



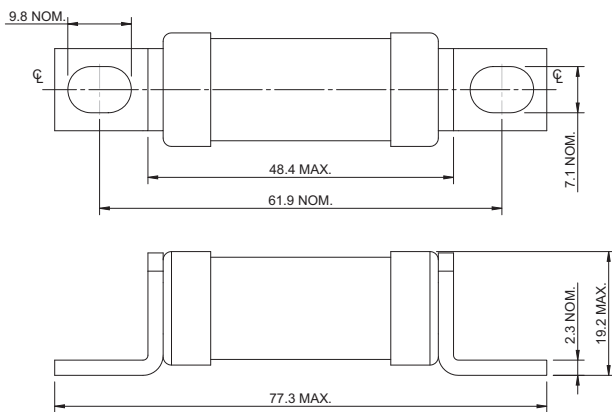
Indicator (optional)

ET, FE up to 63 A



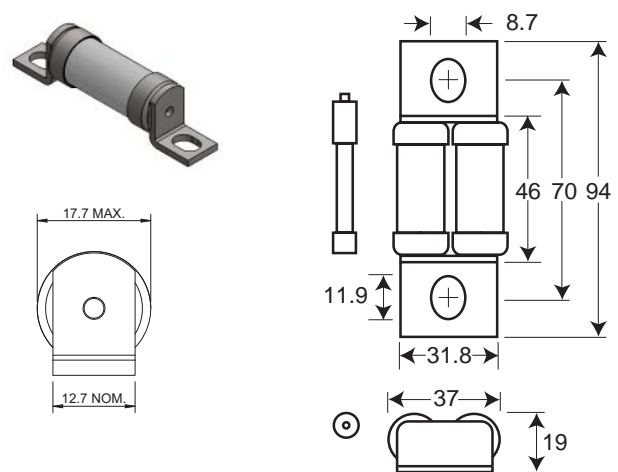
Indicator (optional)

ET, FE greater than 63 A



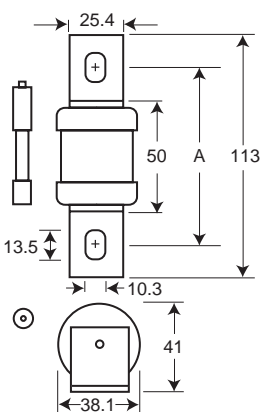
Indicator (optional)

EET, FEE



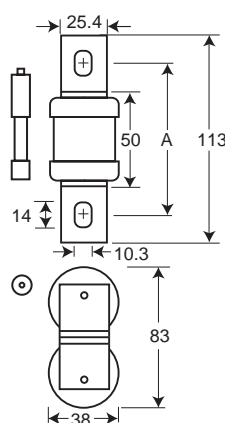
Indicator (optional)

FM, MT



Indicator (optional)

FMM, MMT



Indicator (optional)

Type	'A' Dimensions
FM	80-85
FMM	80-85
MT	85
MMT	85

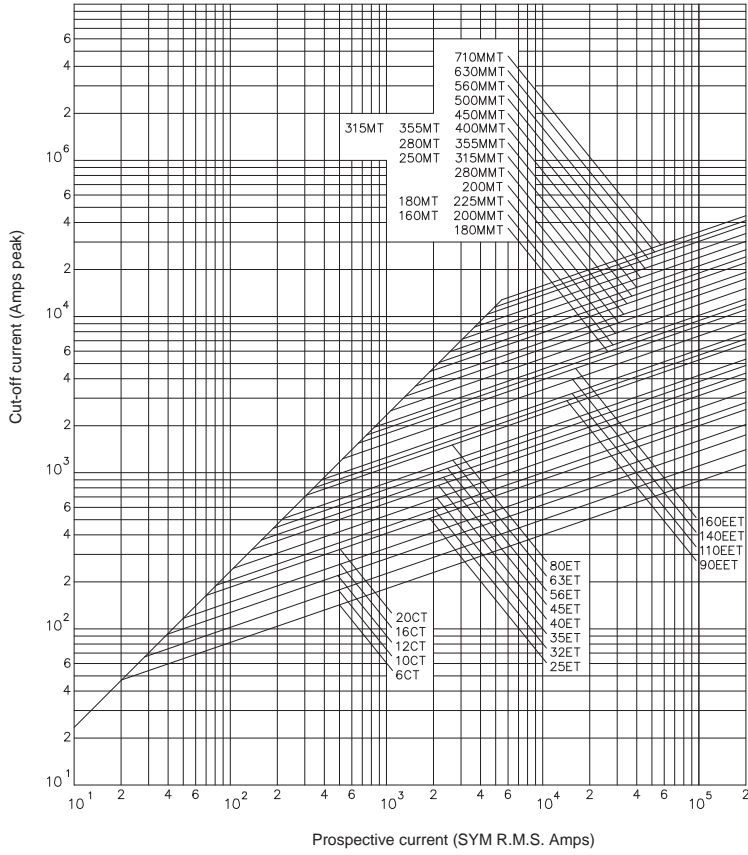
Dimension in mm

1 mm = 0.0394"

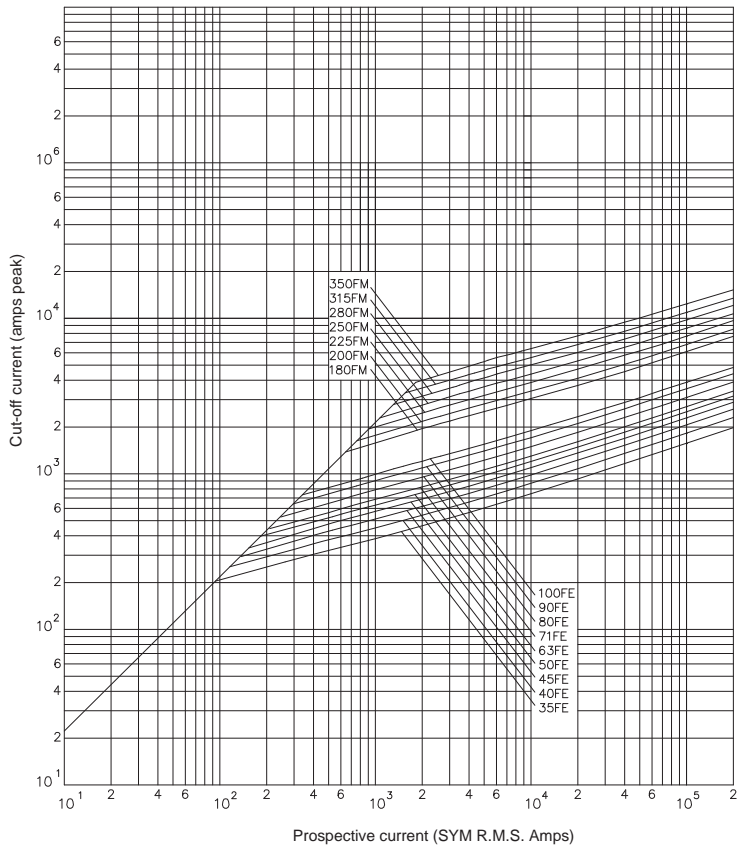
1" = 25.4 mm

Cut-off curves

CT, ET, EET, MT and MMT

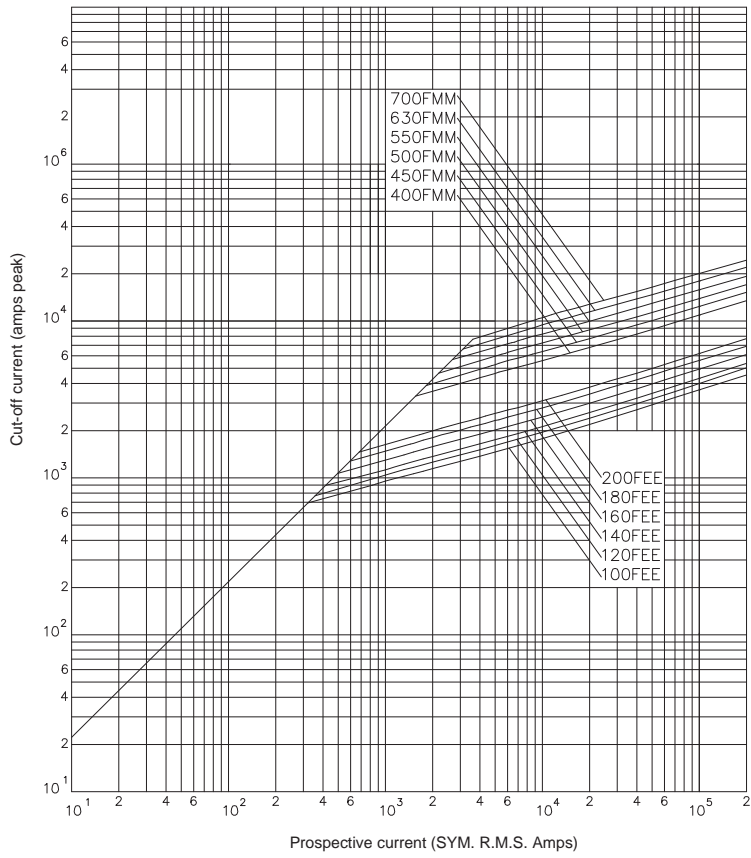


FE, FM



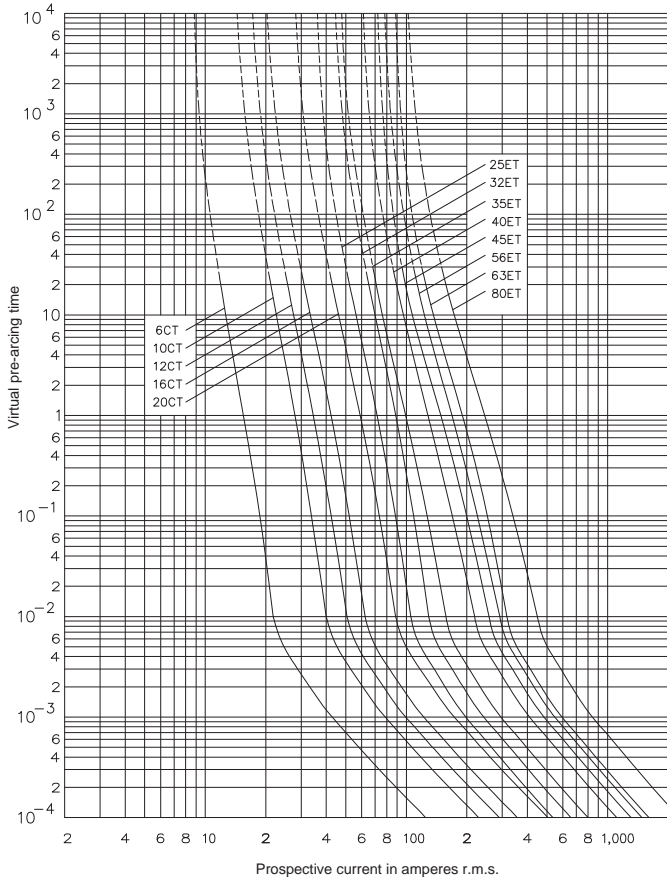
Cut-off curves

FEE and FMM

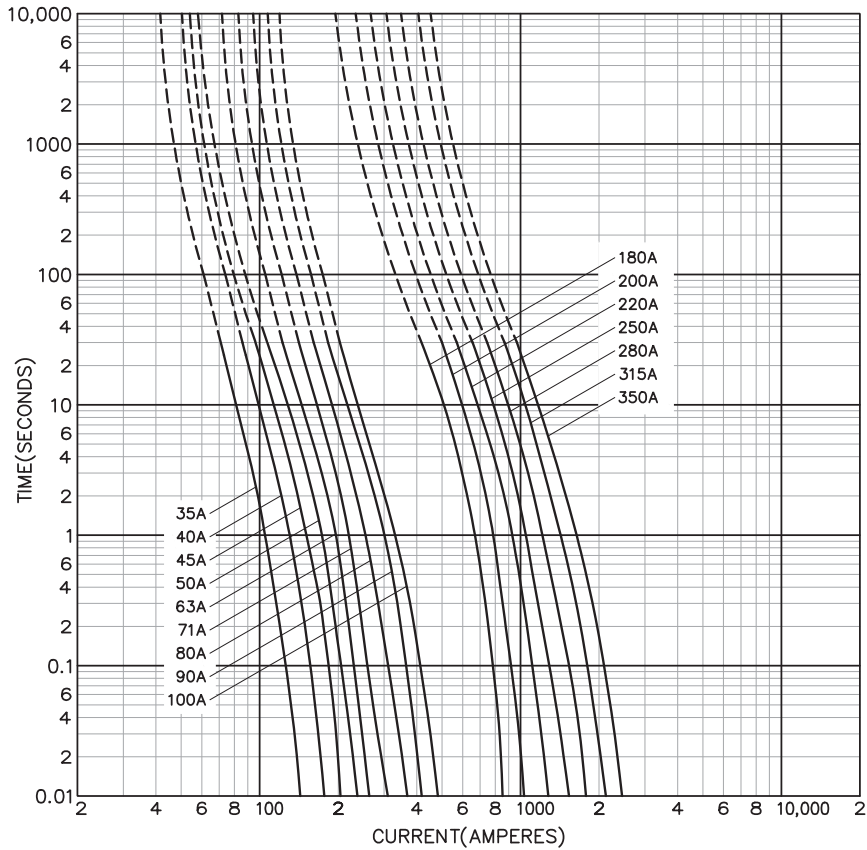


Time-current curves

CT, ET

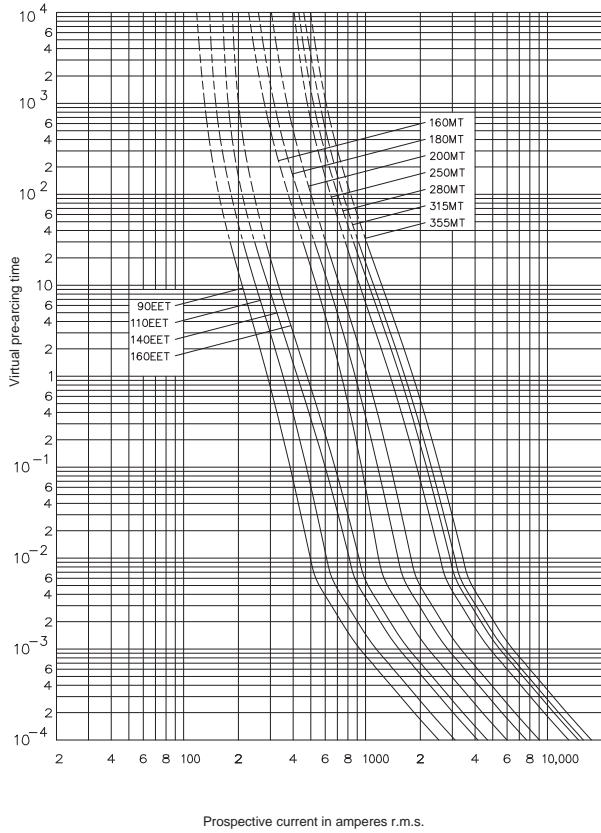


FE, FM

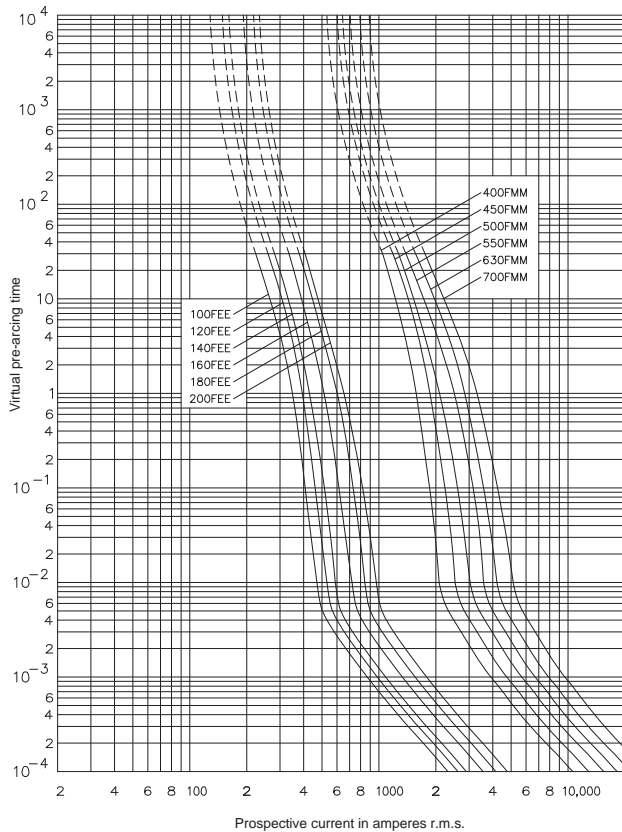


Time-current curve - nominal melt

EET, MT

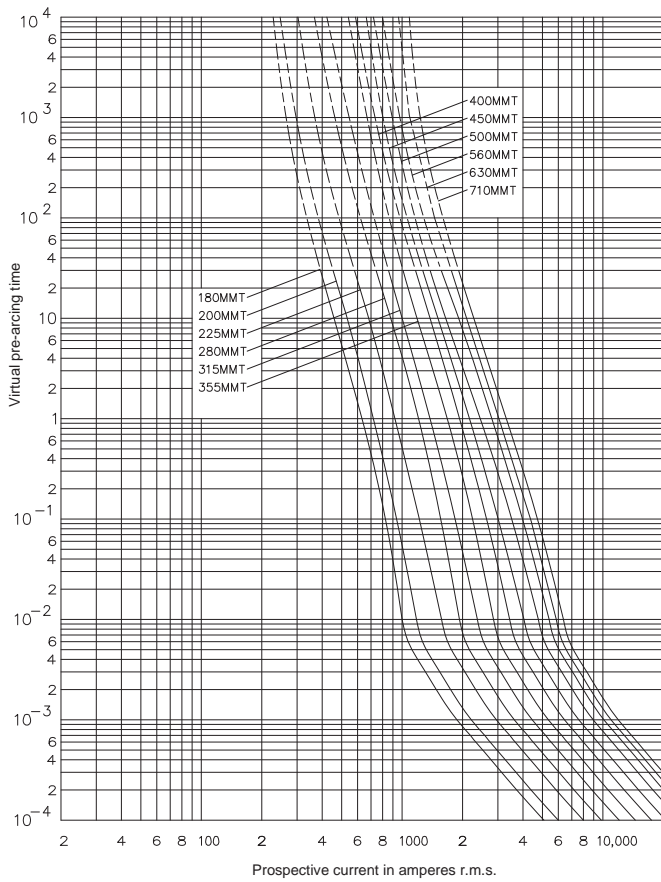


FEE, FMM



Time-current curve - nominal melt

MMT



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