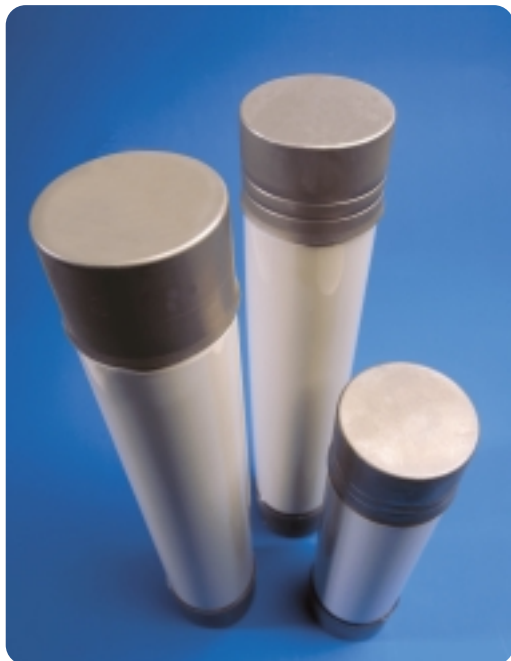




- Fuse Links comply with IEC 282-1, BS2692-1 and ESI Standard 12-8.
- 7.2 and 12kV Fuse Links tested at highest system voltage and approved by the UK Electricity Association approvals panel.
- Voltage ranges 3.6 to 24kV.
- Fitted with powerful pyrotechnic striker pin.

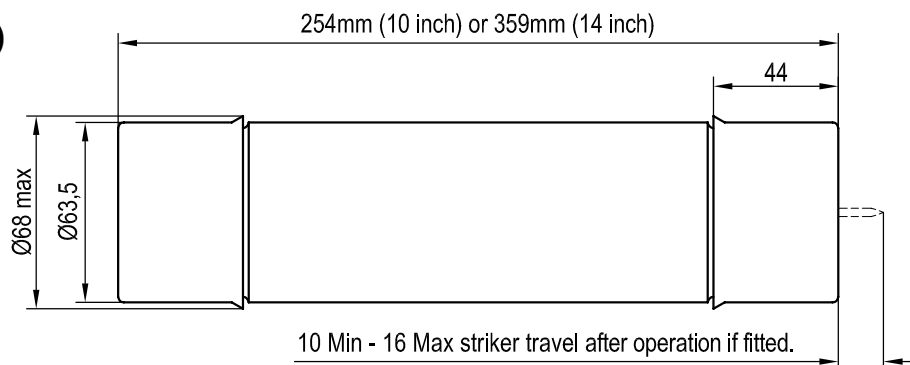
Bussmann under oil Fuse Links

The Bussmann range of oil tight fuse links are designed for use in oil filled switchgear. This type was pioneered in the U.K. and the Bussmann range has been in continuous manufacture for almost 40 years, being by far the most widely used device of its kind in the world. Over 1,000,000 Bussmann branded fuse links have been put into service without a single reported case of oil ingress. A unique triple seal system ensures against long term seal deterioration. Low power dissipation ensures cool running in oil filled switchgear.

The range is not suitable for use inside oil filled transformer tanks where high oil temperatures may be expected.

Current Limiting Fuse Links for use in Oil Switchgear

Dimensions (mm)



Selection Table

Table of ratings for British Standard Oil tight fuses 3.6 - 24kV

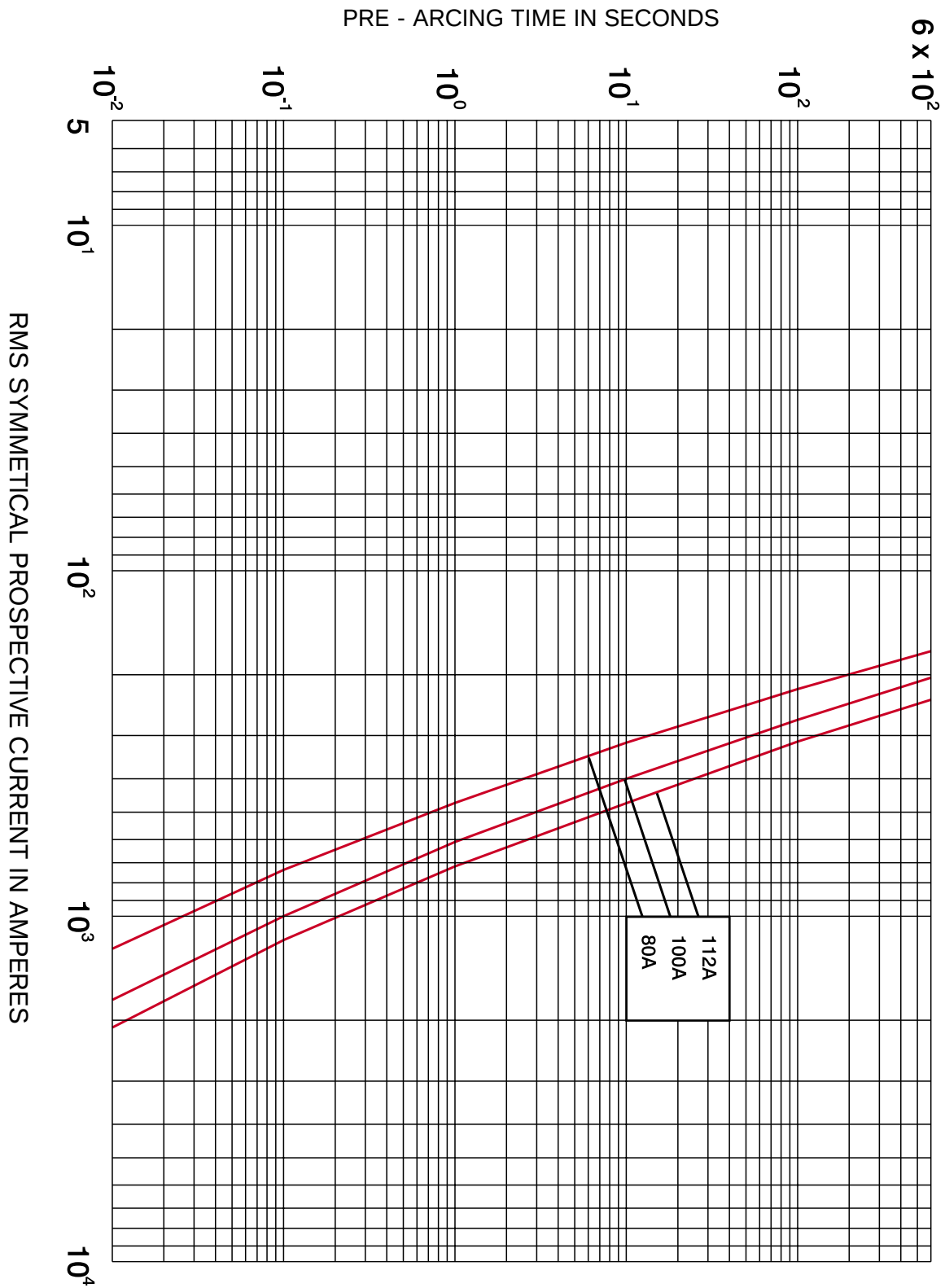
Part Number	Voltage Rating	Current Rating	Breaking Capacity	Dimensional Reference		Cold resistance in free air at rated current		Joule Integral (I ² t)		Length	Diameter Ø	Weight
	U _n	I _n	I ₁	BS 2692		m Ω		A ² s		mm	mm	kg
	kV	A	kA					Minimum Pre-Arcing	Maximum Total Clearing			
3.6OEFMA6.3	3.6	6.3	50	F01		207		2.0X10 ³	4.9X10 ²	254	63.5	1.9
3.6OEFMA10	3.6	10	50			83.6		1.4X10 ³	1.4X10 ³	254	63.5	1.9
3.6OEFMA16	3.6	16	50			42.5		1.7X10 ³	2.4X10 ³	254	63.5	1.9
3.6OEFMA20	3.6	20	50			33.9		2.7X10 ³	3.6X10 ³	254	63.5	1.9
3.6OEFMA25	3.6	25	50			26.5		4.5X10 ³	4.8X10 ³	254	63.5	1.9
3.6OEFMA31.5	3.6	31.5	50			17.6		1.0X10 ³	8.8X10 ³	254	63.5	1.9
3.6OEFMA40	3.6	40	50			15.4		8.9X10 ³	1.0X10 ⁴	254	63.5	1.9
3.6OEFMA50	3.6	50	50			11.5		1.6X10 ³	1.4X10 ⁴	254	63.5	1.9
3.6OEFMA63	3.6	63	50			7.60		3.3X10 ³	2.4X10 ⁴	254	63.5	1.9
3.6OEFMA80	3.6	80	50			6.03		5.2X10 ³	3.4X10 ⁴	254	63.5	1.9
3.6OEFMA100	3.6	100	50			4.02		1.2X10 ⁴	6.2X10 ⁴	254	63.5	1.9
3.6OEFMA125	3.6	125	50			3.02		2.1X10 ⁴	9.6X10 ⁴	254	63.5	1.9
3.6OEFMA160	3.6	160	50	F02		2.21		1.5X10 ⁴	1.6X10 ⁵	254	63.5	1.9
3.6OEFMA200	3.6	200	50			1.74		2.4X10 ⁴	2.3X10 ⁵	254	63.5	1.9
3.6OEGMA63	3.6	63	50			11.0		3.2X10 ³	1.9X10 ⁴	254	63.5	2.6
3.6OEGMA80	3.6	80	50			8.70		5.2X10 ³	2.7X10 ⁴	254	63.5	2.6
3.6OEGMA100	3.6	100	50			5.50		5.0X10 ³	4.9X10 ⁴	254	63.5	2.6
3.6OEGMA125	3.6	125	50			4.59		7.2X10 ³	6.4X10 ⁴	254	63.5	2.6
3.6OEGMA160	3.6	160	50			3.44		1.3X10 ⁴	1.0X10 ⁵	254	63.5	2.6
3.6OEGMA200	3.6	200	50			2.29		2.9X10 ⁴	1.8X10 ⁵	254	63.5	2.6
3.6OLGMA250	3.6	250	50	F02		1.72		5.1X10 ⁴	2.7X10 ⁵	254	63.5	2.6
7.2OEFMA80	7.2	80	45	F01		8.36		3.2X10 ³	5.8X10 ⁴	254	63.5	1.9
7.2OEFMA100	7.2	100	45			5.59		6.3X10 ³	9.0X10 ⁴	254	63.5	1.9
7.2OEFMA112	7.2	112	45			4.57		9.1X10 ³	1.3X10 ⁵	254	63.5	1.9
7.2OHGMA100	7.2	100	45	F02		6.09		5.0X10 ³	7.5X10 ⁴	359	63.5	2.6
7.2OHGMA125	7.2	125	45			5.08		7.2X10 ³	9.6X10 ⁴	359	63.5	2.6
7.2OHGMA140	7.2	140	45			4.35		9.8X10 ³	1.4X10 ⁵	359	63.5	2.6
7.2OHGMA160	7.2	160	45			3.81		1.3X10 ⁴	1.8X10 ⁵	359	63.5	2.6
12OEFMA6.3	12	6.3	40	F01		520		2.0X10 ³	6.1X10 ²	254	63.5	1.9
12OEFMA10	12	10	40			214		1.4X10 ³	1.8X10 ³	254	63.5	1.9
12OEFMA16	12	16	40			108		1.7X10 ³	3.0X10 ³	254	63.5	1.9
12OEFMA20	12	20	40			77.0		3.4X10 ³	5.0X10 ³	254	63.5	1.9
12OEFMA25	12	25	40			57.8		4.0X10 ³	6.5X10 ³	254	63.5	1.9
12OEFMA31.5	12	31.5	40			38.5		8.9X10 ³	1.2X10 ⁴	254	63.5	1.9
12OEFMA40	12	40	40			28.2		1.5X10 ³	1.8X10 ⁴	254	63.5	1.9
12OEFMA50	12	50	40			20.1		2.9X10 ³	2.8X10 ⁴	254	63.5	1.9
12OEFMA63	12	63	40			15.1		5.1X10 ³	4.3X10 ⁴	254	63.5	1.9
12OHFMA71	12	71	45	F01		12.3		3.2X10 ³	5.4X10 ⁴	254	63.5	1.9
12OHFMA80	12	80	45			10.9		4.1X10 ³	7.0X10 ⁴	254	63.5	1.9
12OHGMA6.3	12	6.3	40	F02		520		2.0X10 ³	6.1X10 ²	359	63.5	2.6
12OHGMA10	12	10	40			214		1.4X10 ³	1.8X10 ³	359	63.5	2.6
12OHGMA16	12	16	40			108		1.7X10 ³	3.0X10 ³	359	63.5	2.6
12OHGMA20	12	20	40			77.0		3.4X10 ³	5.0X10 ³	359	63.5	2.6
12OHGMA25	12	25	40			57.8		4.0X10 ³	6.5X10 ³	359	63.5	2.6
12OHGMA31.5	12	31.5	40			38.5		8.9X10 ³	1.2X10 ⁴	359	63.5	2.6
12OHGMA40	12	40	40			28.2		1.5X10 ³	1.8X10 ⁴	359	63.5	2.6
12OHGMA50	12	50	40			22.6		2.3X10 ³	2.4X10 ⁴	359	63.5	2.6
12OHGMA63	12	63	40			17.0		4.1X10 ³	3.7X10 ⁴	359	63.5	2.6
12OHGMA71	12	71	40			16.6		2.0X10 ³	3.9X10 ⁴	359	63.5	2.6
12OHGMA80	12	80	40			13.4		3.2X10 ³	5.5X10 ⁴	359	63.5	2.6
12OHGMA90	12	90	40			12.2		3.8X10 ³	6.2X10 ⁴	359	63.5	2.6
12OHGMA100	12	100	40			8.75		6.3X10 ³	8.9X10 ⁴	359	63.5	2.6
12OLGMA125	12	125	40	F02		7.09		1.0X10 ⁴	1.7X10 ⁵	359	63.5	2.6
15.5OEFMA6.3	15.5	6.3	40	F01		392		4.8X10 ³	1.0X10 ³	254	63.5	1.9
15.5OEFMA10	15.5	10	40			188		4.0X10 ³	3.4X10 ³	254	63.5	1.9
15.5OEFMA16	15.5	16	40			101		2.7X10 ³	3.4X10 ³	254	63.5	1.9
15.5OEFMA20	15.5	20	40			78.7		4.5X10 ³	4.9X10 ³	254	63.5	1.9
15.5OEFMA25	15.5	25	40			55.3		5.2X10 ³	1.1X10 ⁴	254	63.5	1.9
15.5OEFMA31.5	15.5	31.5	40			36.9		1.2X10 ³	1.5X10 ⁴	254	63.5	1.9
15.5OEFMA40	15.5	40	40			29.5		1.8X10 ³	2.0X10 ⁴	254	63.5	1.9
15.5OEFMA50	15.5	50	40			22.1		3.3X10 ³	3.0X10 ⁴	254	63.5	1.9
15.5OEFMA63	15.5	63	40			17.8		2.0X10 ³	3.9X10 ⁴	254	63.5	1.9
15.5OHGMA71	15.5	71	40	F02		17.7		2.5X10 ³	4.4X10 ⁴	359	63.5	2.6
15.5OHGMA80	15.5	80	40			15.5		3.2X10 ³	5.4X10 ⁴	359	63.5	2.6
15.5OHGMA90	15.5	90	40			11.6		5.0X10 ³	7.5X10 ⁴	359	63.5	2.6
15.5OLGMA100	15.5	100	40	F02		10.0		7.2X10 ³	9.6X10 ⁴	359	63.5	2.6
17.5OHGMA6.3	17.5	6.3	35	F02		665		2.0X10 ³	6.1X10 ²	359	63.5	2.6
17.5OHGMA10	17.5	10	35			282		1.4X10 ³	1.8X10 ³	359	63.5	2.6
17.5OHGMA16	17.5	16	35			139		1.7X10 ³	3.0X10 ³	359	63.5	2.6
17.5OHGMA20	17.5	20	35			100		3.4X10 ³	5.0X10 ³	359	63.5	2.6
17.5OHGMA25	17.5	25	35			74.7		4.0X10 ³	6.5X10 ³	359	63.5	2.6
17.5OHGMA31.5	17.5	31.5	35			49.8		9.0X10 ³	1.2X10 ⁴	359	63.5	2.6
17.5OHGMA40	17.5	40	35			36.5		1.5X10 ³	1.9X10 ⁴	359	63.5	2.6
17.5OHGMA50	17.5	50	35			26.0		2.9X10 ³	2.9X10 ⁴	359	63.5	2.6
17.5OHGMA63	17.5	63	35			19.5		5.2X10 ³	4.5X10 ⁴	359	63.5	2.6
17.5OHGMA80	17.5	80	35			15.5		3.8X10 ³	5.7X10 ⁴	359	63.5	2.6
24OEGMA6.3	24	6.3	25	F02		605		4.8X10 ³	1.0X10 ³	359	63.5	2.6
24OEGMA10	24	10	25			290		2.5X10 ³	3.4X10 ³	359	63.5	2.6
24OEGMA16	24	16	25			153		2.7X10 ³	3.4X10 ³	359	63.5	2.6
24OEGMA20	24	20	25			119		4.4X10 ³	4.9X10 ³	359	63.5	2.6
24OEGMA25	24	25	25			84.5		5.2X10 ³	1.1X10 ⁴	359	63.5	2.6
24OEGMA31.5	24	31.5	25			55.9		1.2X10 ³	1.5X10 ⁴	359	63.5	2.6
24OEGMA40	24	40	25			44.7		1.8X10 ³	2.0X10 ⁴	359	63.5	2.6
24OEGMA50	24	50	25			34.0		1.2X10 ³	2.4X10 ⁴	359	63.5	2.6

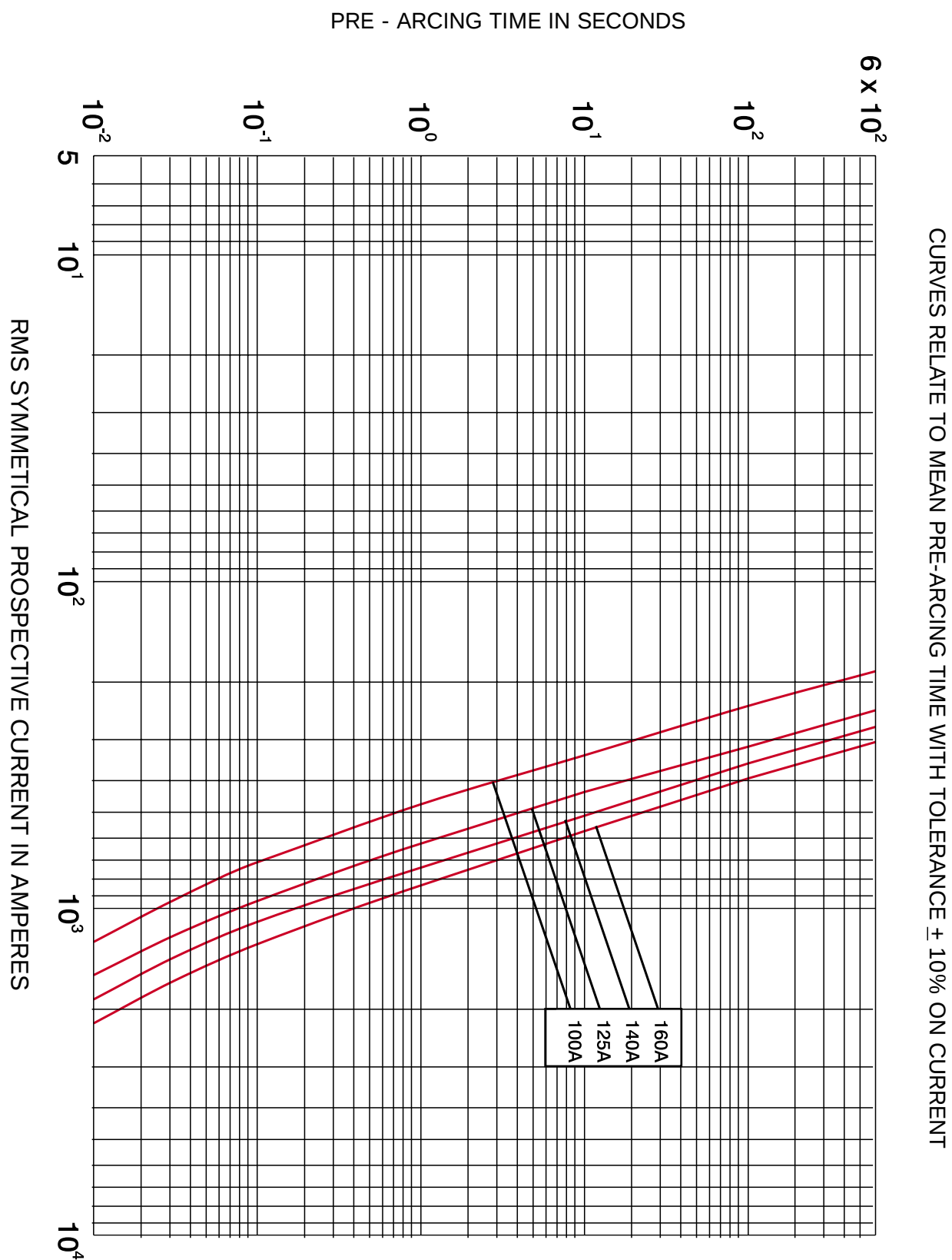
Transformer kVA	Transformer Priority Voltage												
	3.3kV			6.6kV			11kV				13.8kV		
	Product Code	Current Rating (A)	Rating kV	Product Code	Current Rating (A)	Rating kV	ESI 12-8 Ref.	Product Code	Current Rating (A)	Rating kV	Product Code	Current Rating (A)	Rating kV
200	OEFMA	63	3.6	OEFMA	31.5	12	01	OEFMA	25	12	OEFMA	16	15.5
250	OEFMA	80	3.6	OEFMA	40	12	-	OEFMA	25	12	OEFMA	20	15.5
300/315	OEFMA	100	3.6	OEFMA	50	12	02	OEFMA	31.5	12	OEFMA	25	15.5
400	OEFMA	125	3.6	OEFMA	63	12	-	OEFMA	40	12	OEFMA	31.5	15.5
500	OEFMA	160	3.6	OEFMA	71	12	03	OEFMA	50	12	OEFMA	40	15.5
630	OEFMA	200	3.6	OEFMA	100	7.2	-	OEFMA	63	12	OEFMA	50	15.5
750/800	OLGMA	250	3.6	OHGMA	125	7.2	04	OHFMA	80	12	OEFMA	63	15.5
1000	OLGMA	250*	3.6	OHGMA	140	7.2	05	OGFMA	90†	12	OHGMA	71	15.5
1250	-	-	-	OHGMA	160*	7.2	-	OGFMA	100	12	OHGMA	90	15.5
1600	-	-	-	-	-	-	-	OLGMA	125*	12	OLGMA	100*	15.5

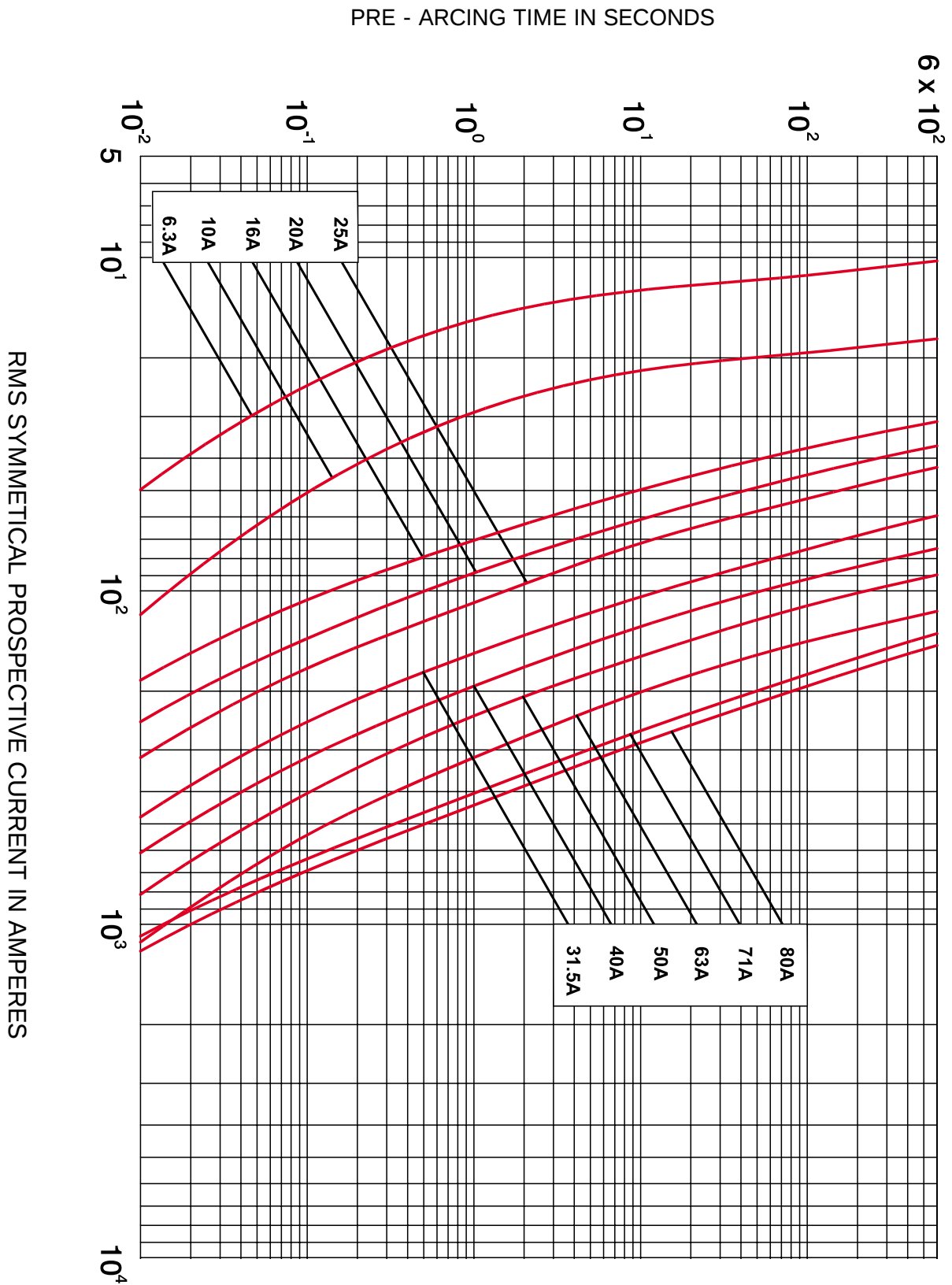
■ Selection of these fuse links has been based on a compromise between the following:

- 1 Withstand against magnetising inrush current is taken as 12 times full-load current for 0.1 second.
- 2 Withstand against 150% permissible overload current. Recommendations marked with an asterisk or dagger have the following significance:
 - * Limited to permissible overload of 130%
 - † Permits use of a 12kV OHFMA 80A fuse with a 1000 kVA transformer where permissible overload does not exceed 130%.
- 3 For 6.6kV systems, 12kV fuse links are recommended where possible in the interests of standardisation.
- 4 Wherever possible, 254mm long fuse links are offered rather than equivalent 359mm types.
- 5 The above recommendations are not generally applicable to transformers feeding motor circuits with starting currents in excess of the transformer full load current. In this event, please consult Bussmann application engineers.

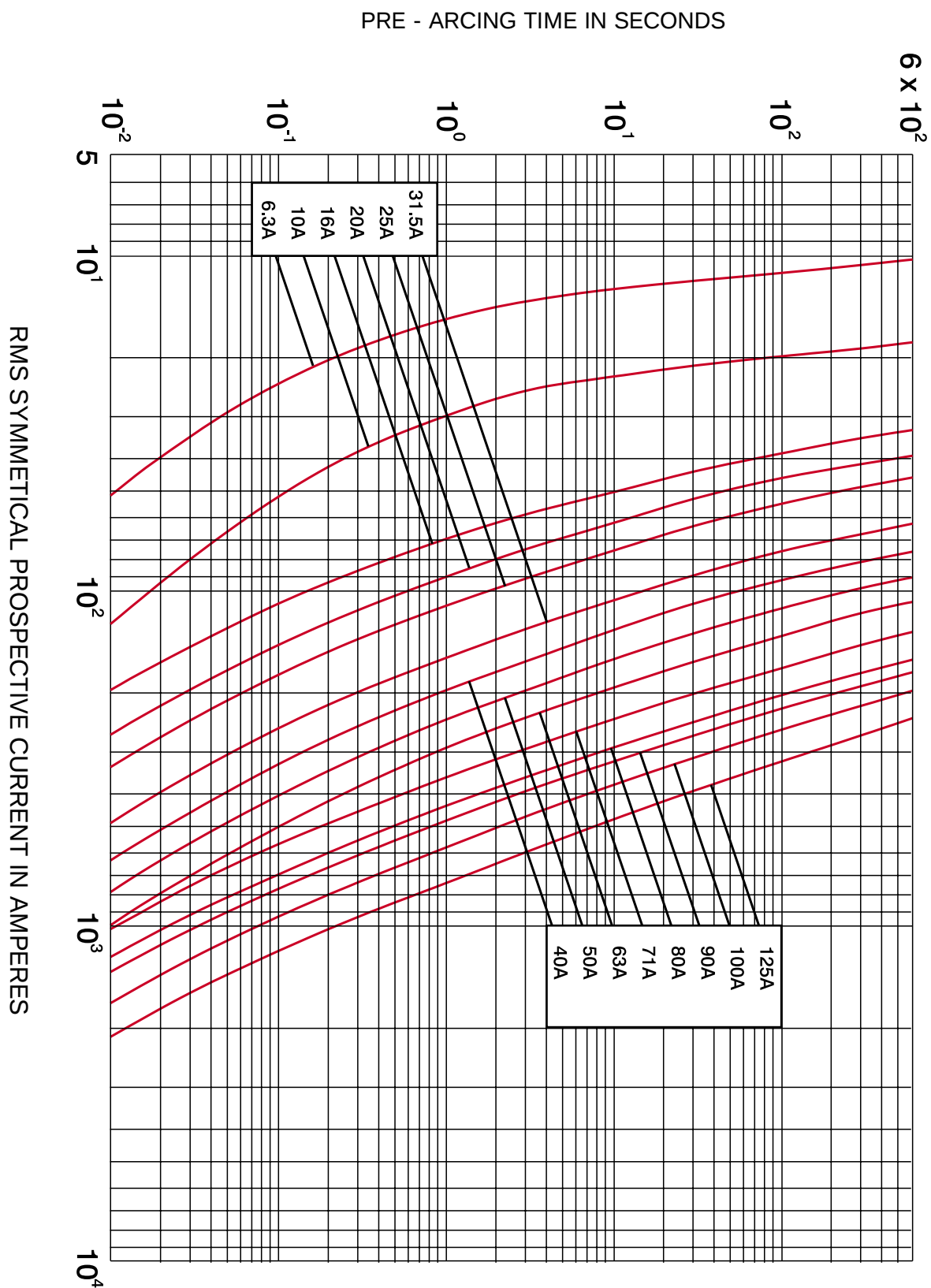
CURVES RELATE TO MEAN PRE-ARCING TIME WITH TOLERANCE $\pm 10\%$ ON CURRENT

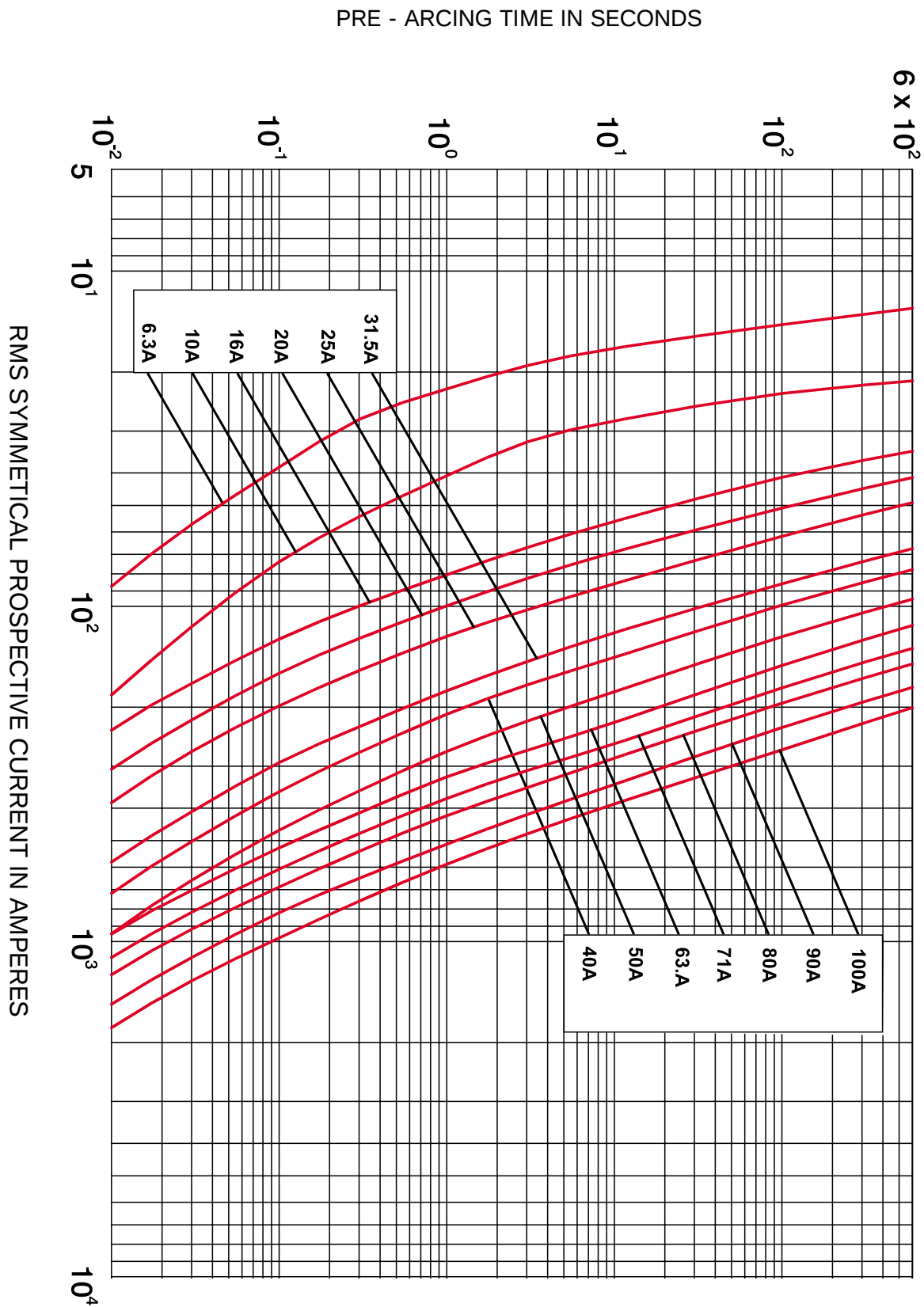


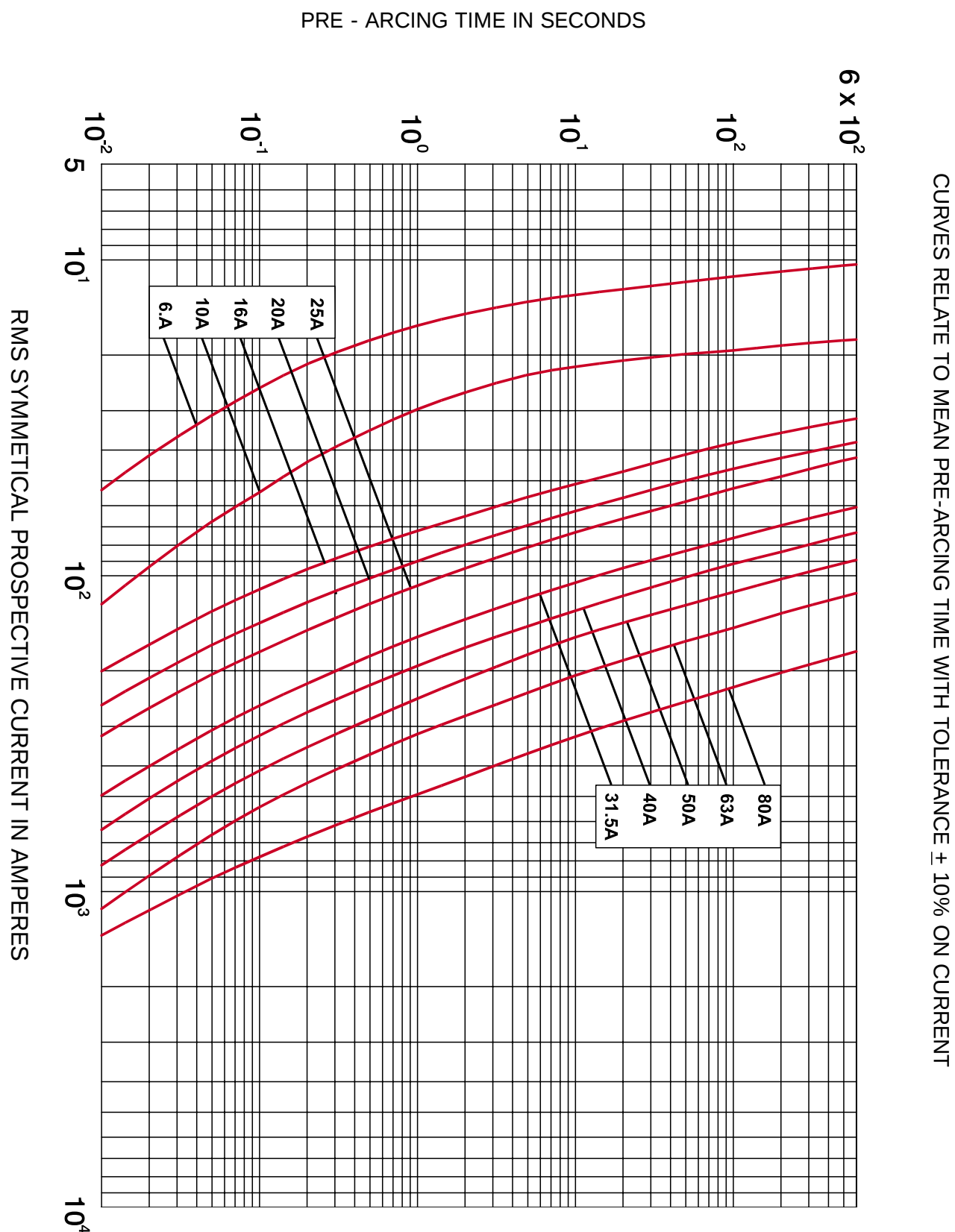


CURVES RELATE TO MEAN PRE-ARCING TIME WITH TOLERANCE $\pm 10\%$ ON CURRENT


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