

- High Voltage fuse links for use in Air, comply with BS 2962-1 dimensions.
- Available in voltage ranges 3.6 to 72.5kV.
- Full range performance option available at 12kV and 24kV.
- Wide variety of fixing arrangements available.
- Powerful pyrotechnic striker fitted.
- E-rated North American dimension products also available.
- Suitable for indoor or outdoor use.

British Standard Range



Bussmann Fuse Links for use in air

The Bussmann range of fuse links for use in air are available in British Standard form, BS 2692, Part 1 1975. A number of options are available, including **full range capability**, and alternative fixing arrangements such as different types of tag, studs and collars etc. Details are available on application. Higher current ratings can be obtained by using fuse links in parallel and special fixing arrangements are available for this purpose.

Bussmann Air Range - USA Dimensions

A comprehensive range of 'E' rated North American Dimension fuse links for industrial applications is also available. These are the latest technology **full range fuse links** in USA Industrial Standard 2 inch and 3 inch diameter ferrule style. Extended ratings in double barrel assemblies; striker, indicator and tag versions are also available.

Selection Tables

Table of ratings for British Standard air fuses 3.6 - 72.5kV

Part Number *	Voltage Rating	Current Rating	Breaking Capacity	Cold resistance in free air at rated current	Joule Intergral (I ² t)		Length	Diameter Ø	Weight
	U _n	I _n	I ₁	m Ω	A ² s				
	kV	A	kA		Minimum Pre-Arcing	Maximum Total Clearing	mm	mm	kg
3.6ADFH*6.3	3.6	6.3	40	208	4.8x10 ³	7.2x10 ³	254	50.8	1.5
3.6ADFH*10	3.6	10	40	91.8	2.3x10 ³	2.3x10 ³	254	50.8	1.5
3.6ADFH*16	3.6	16	40	31.1	7.2x10 ³	1.0x10 ³	254	50.8	1.5
3.6ADFH*20	3.6	20	40	24.9	1.1x10 ³	1.5x10 ³	254	50.8	1.5
3.6ADFH*25	3.6	25	40	18.6	2.0x10 ³	2.1x10 ³	254	50.8	1.5
3.6ADFH*31.5	3.6	31.5	40	14.9	3.1x10 ³	2.8x10 ³	254	50.8	1.5
3.6ADFH*40	3.6	40	40	10.0	7.1x10 ³	7.7x10 ³	254	50.8	1.5
3.6ADGH*6.3	3.6	6.3	25	185	4.8x10 ³	7.2x10 ³	359	50.8	2.1
3.6ADGH*10	3.6	10	25	77.1	3.1x10 ³	4.7x10 ³	359	50.8	2.1
3.6ADGH*16	3.6	16	25	58.6	5.5x10 ³	8.3x10 ³	359	50.8	2.1
3.6ADGH*20	3.6	20	25	44.0	9.8x10 ³	1.5x10 ⁴	359	50.8	2.1
3.6ADGH*25	3.6	25	25	36.9	1.3x10 ³	1.5x10 ³	359	50.8	2.1
3.6ADGH*31.5	3.6	31.5	25	24.6	2.9x10 ³	3.5x10 ³	359	50.8	2.1
3.6ADGH*40	3.6	40	25	13.9	8.0x10 ³	9.6x10 ³	359	50.8	2.1
3.6ADGH*50	3.6	50	25	9.91	1.6x10 ³	1.9x10 ⁴	359	50.8	2.1
3.6ADGH*63	3.6	63	25	7.05	3.1x10 ³	3.7x10 ⁴	359	50.8	2.1
3.6ADGH*80	3.6	80	25	4.94	6.3x10 ³	7.6x10 ⁴	359	50.8	2.1
3.6ADGH*100	3.6	100	25	3.96	9.8x10 ³	1.2x10 ⁵	359	50.8	2.1
7.2ADFH*6.3	7.2	6.3	20	206	4.8x10 ³	5.6x10 ³	254	50.8	1.5
7.2ADFH*10	7.2	10	20	83.0	7.2x10 ³	9.4x10 ³	254	50.8	1.5
7.2ADFH*16	7.2	16	20	52.3	7.2x10 ³	8.6x10 ³	254	50.8	1.5
7.2ADFH*20	7.2	20	20	41.8	1.1x10 ³	1.5x10 ³	254	50.8	1.5
7.2ADFH*25	7.2	25	20	31.5	2.0x10 ³	2.6x10 ³	254	50.8	1.5
7.2ADFH*31.5	7.2	31.5	20	22.8	3.8x10 ³	4.8x10 ³	254	50.8	1.5
7.2ADFH*40	7.2	40	20	15.6	8.0x10 ³	1.1x10 ⁴	254	50.8	1.5
7.2ADFH*50	7.2	50	20	11.8	1.3x10 ³	1.4x10 ⁴	254	50.8	1.5
7.2ADFH*63	7.2	63	20	8.41	2.5x10 ³	2.9x10 ⁴	254	50.8	1.5
7.2AFFH*80	7.2	80	20	5.83	6.3x10 ³	6.9x10 ⁴	254	76.2	2.8
7.2AFFH*100	7.2	100	20	4.38	9.8x10 ³	1.4x10 ⁵	254	76.2	2.8
7.2BDGH*6.3	7.2	6.3	40	206	5.1x10 ³	6.0x10 ³	359	50.8	2.1
7.2BDGH*10	7.2	10	40	83.0	1.0x10 ³	1.3x10 ³	359	50.8	2.1
7.2BDGH*16	7.2	16	40	52.3	8.4x10 ³	1.0x10 ³	359	50.8	2.1
7.2BDGH*20	7.2	20	40	41.8	1.1x10 ³	1.5x10 ³	359	50.8	2.1
7.2BDGH*25	7.2	25	40	31.4	2.0x10 ³	2.6x10 ³	359	50.8	2.1
7.2BDGH*31.5	7.2	31.5	40	22.8	4.6x10 ³	5.8x10 ³	359	50.8	2.1
7.2BDGH*40	7.2	40	40	15.7	8.0x10 ³	1.1x10 ⁴	359	50.8	2.1
7.2BDGH*50	7.2	50	40	11.8	1.6x10 ³	1.8x10 ⁴	359	50.8	2.1
7.2BDGH*63	7.2	63	40	7.48	3.6x10 ³	4.3x10 ⁴	359	50.8	2.1
7.2BDGH*80	7.2	80	40	5.82	6.4x10 ³	7.0x10 ⁴	359	50.8	2.1
7.2BFGH*90	7.2	90	40	4.72	1.0x10 ³	1.4x10 ⁵	359	76.2	4.2
7.2BFGH*100	7.2	100	40	4.05	1.3x10 ³	1.9x10 ⁵	359	76.2	4.2
7.2BFGH*125	7.2	125	40	3.15	1.6x10 ³	1.9x10 ⁵	359	76.2	4.2
7.2BFGH*140	7.2	140	40	2.57	2.4x10 ³	3.3x10 ⁵	359	76.2	4.2
7.2BFGH*160	7.2	160	40	2.35	2.9x10 ³	4.0x10 ⁵	359	76.2	4.2
12ADFH*6.3	12	6.3	12	356	4.8x10 ³	5.0x10 ³	254	50.8	1.5
12ADFH*10	12	10	12	89.8	1.3x10 ³	2.0x10 ³	254	50.8	1.5
12ADFH*16	12	16	12	56.5	1.3x10 ³	2.0x10 ³	254	50.8	1.5
12ADFH*20	12	20	12	36.2	3.1x10 ³	3.5x10 ³	254	50.8	1.5
12ADFH*25	12	25	12	28.3	5.1x10 ³	6.1x10 ³	254	50.8	1.5
12ADFH*31.5	12	31.5	12	22.6	8.0x10 ³	9.0x10 ³	254	50.8	1.5
12AFFH*40	12	40	12	21.8	1.2x10 ³	1.5x10 ⁴	254	76.2	2.8
12AFFH*50	12	50	12	15.7	2.0x10 ³	2.5x10 ⁴	254	76.2	2.8
12AFFH*63	12	63	12	12.5	3.1x10 ³	3.9x10 ⁴	254	76.2	2.8
12BDGH*6.3	12	6.3	40	356	5.2x10 ³	5.0x10 ³	359	50.8	2.1
12BDGH*10	12	10	40	138	6.4x10 ³	1.0x10 ³	359	50.8	2.1
12BDGH*16	12	16	40	87.0	6.4x10 ³	1.0x10 ³	359	50.8	2.1
12BDGH*20	12	20	40	63.3	1.6x10 ³	1.8x10 ³	359	50.8	2.1
12BDGH*22.4	12	22.4	40	49.7	2.4x10 ³	3.0x10 ³	359	50.8	2.1
12BDGH*25	12	25	40	43.5	3.2x10 ³	3.8x10 ³	359	50.8	2.1
12BDGH*31.5	12	31.5	40	32.6	5.8x10 ³	6.5x10 ³	359	50.8	2.1
12BDGH*35.5	12	35.5	40	24.5	9.0x10 ³	1.1x10 ⁴	359	50.8	2.1
12BDGH*40	12	40	40	21.8	1.2x10 ³	1.5x10 ⁴	359	50.8	2.1
12BDGH*45	12	45	40	17.5	1.8x10 ³	2.3x10 ⁴	359	50.8	2.1
12BDGH*50	12	50	40	14.5	2.5x10 ³	3.2x10 ⁴	359	50.8	2.1
12BFGH*56	12	56	40	14.6	2.9x10 ³	3.7x10 ⁴	359	76.2	4.2
12BFGH*63	12	63	40	12.8	3.4x10 ³	4.5x10 ⁴	359	76.2	4.2
12BFGH*71	12	71	40	10.6	4.6x10 ³	6.3x10 ⁴	359	76.2	4.2
12BFGH*80	12	80	40	9.73	6.1x10 ³	7.8x10 ⁴	359	76.2	4.2
12BFGH*90	12	90	40	8.37	8.1x10 ³	1.0x10 ⁵	359	76.2	4.2
12BFGH*100	12	100	40	6.88	1.1x10 ³	1.4x10 ⁵	359	76.2	4.2
12AKGH*112	12	112	20	5.25	1.5x10 ³	1.9x10 ⁵	359	76.2	4.3
12AKGH*125	12	125	20	4.92	2.1x10 ³	2.4x10 ⁵	359	76.2	4.3

*The last letter of the ordering code on these items describes the tag required, please refer to "How to order" (page 61) for an explanation.

Table of ratings for British Standard air fuses 3.6 - 72.5kV

Part Number	Voltage Rating	Current Rating	Breaking Capacity	Cold resistance in free air at rated current	Joule Integral (I ² t)		Length	Diameter Ø	Weight
	U _n	I _n	I ₁	m Ω	A ² s				
	kV	A	kA		Minimum Pre-Arcing	Maximum Total Clearing	mm	mm	kg
Fullrange	12	10	40	90.6	2.7x10 ²	4.7x10 ²	359	76.2	4.1
12FFGN4910	12	16	40	69.1	4.2x10 ²	6.1x10 ²	359	76.2	4.1
12FFGN4916	12	20	40	45.6	9.5x10 ²	1.1x10 ³	359	76.2	4.1
12FFGN4920	12	25	40	36.5	1.6x10 ³	1.5x10 ³	359	76.2	4.1
12FFGN4925	12	31.5	40	25.4	3.1x10 ³	2.5x10 ³	359	76.2	4.1
12FFGN4931.5	12	40	40	19.7	4.7x10 ³	3.8x10 ³	359	76.2	4.1
12FFGN4940	12	50	40	14.7	8.4x10 ³	5.6x10 ³	359	76.2	4.1
12FFGN4950	12	63	40	12.6	6.3x10 ³	5.4x10 ³	359	76.2	4.1
12FFGN4963							359	76.2	4.1
15.5BDGH*6.3	15.5	6.3	20	485	4.8x10 ¹	8.5x10 ²	359	50.8	2.1
15.5BDGH*10	15.5	10	20	158	7.2x10 ¹	1.2x10 ³	359	50.8	2.1
15.5BDGH*16	15.5	16	20	99.1	7.2x10 ¹	1.2x10 ³	359	50.8	2.1
15.5BDGH*20	15.5	20	20	74.6	1.3x10 ²	2.8x10 ³	359	50.8	2.1
15.5BDGH*25	15.5	25	20	54.2	2.4x10 ²	4.3x10 ³	359	50.8	2.1
15.5BDGH*31.5	15.5	31.5	20	38.2	4.9x10 ²	7.0x10 ³	359	50.8	2.1
15.5BDGH*40	15.5	40	20	27.2	9.6x10 ²	1.2x10 ⁴	359	50.8	2.1
15.5BFGH*50	15.5	50	20	22.2	1.6x10 ³	3.2x10 ⁴	359	76.2	4.2
15.5BFGH*63	15.5	63	20	15.5	3.2x10 ³	4.6x10 ⁴	359	76.2	4.2
15.5BFGH*80	15.5	80	20	9.73	7.2x10 ³	1.0x10 ⁵	359	76.2	4.2
15.5BFGH*85	15.5	85	20	9.45	7.2x10 ³	1.0x10 ⁵	359	76.2	4.2
24ADIHA6.3	15.5	6.3	12	520	7.9x10 ¹	8.5x10 ²	565	50.8	3.0
24ADIHA10	15.5	10	12	173	7.2x10 ¹	1.1x10 ³	565	50.8	3.0
24ADIHA16	15.5	16	12	129	1.3x10 ²	1.7x10 ³	565	50.8	3.0
24ADIHA20	15.5	20	12	104	2.0x10 ²	2.8x10 ³	565	50.8	3.0
24ADIHA25	15.5	25	12	82.7	3.1x10 ²	4.1x10 ³	565	50.8	3.0
24ADIHA31.5	15.5	31.5	12	66.2	4.9x10 ²	6.8x10 ³	565	50.8	3.0
24AFIHA40	24	40	16	46.5	1.2x10 ³	1.1x10 ⁴	565	76.2	6.1
24AFIHA50	24	50	16	33.2	2.4x10 ³	2.2x10 ⁴	565	76.2	6.1
24AFIHA63	24	63	16	23.5	3.2x10 ³	5.2x10 ⁴	565	76.2	6.1
24AFIHA80	24	80	16	17.9	5.5x10 ³	8.2x10 ⁴	565	76.2	6.1
24AFIHA90	24	90	16	14.7	7.2x10 ³	1.0x10 ⁵	565	76.2	6.1
Fullrange	24	3.15	35.5	893	3.1x10 ¹	9.8x10 ¹	565	50.8	3.0
24FDIHA3.15	24	5	35.5	412	5.9x10 ¹	4.5x10 ²	565	50.8	3.0
24FDIHA5	24	6.3	35.5	412	5.9x10 ¹	4.5x10 ²	565	50.8	3.0
24FDIHA6.3	24	10	35.5	205	2.7x10 ²	2.1x10 ³	565	50.8	3.0
24FDIHA10	24	16	35.5	103	1.1x10 ³	8.3x10 ³	565	50.8	3.0
24FDIHA16	24	20	35.5	88.2	1.3x10 ³	4.8x10 ³	565	50.8	3.0
24FDIHA20	24	31.5	35.5	56.0	5.3x10 ³	2.0x10 ⁴	565	50.8	3.0
24FDIHA31.5	24						565	50.8	3.0
36ADIHA3.15	36	3.15	16	1460	2.0x10 ¹	2.5x10 ²	565	50.8	3.0
36ADIHA5	36	5	16	973	4.4x10 ¹	5.5x10 ²	565	50.8	3.0
36ADIHA6.3	36	6.3	16	781	7.1x10 ¹	8.9x10 ²	565	50.8	3.0
36ADIHA10	36	10	16	378	7.2x10 ¹	1.1x10 ³	565	50.8	3.0
36ADIHA16	36	16	16	190	1.1x10 ²	1.7x10 ³	565	50.8	3.0
36ADIHA20	36	20	16	142	2.0x10 ²	2.8x10 ³	565	50.8	3.0
36ADIHA25	36	25	16	115	3.1x10 ²	4.5x10 ³	565	50.8	3.0
36ADIHA31.5	36	31.5	16	81.5	6.1x10 ²	8.1x10 ³	565	50.8	3.0
36AFIHA40	36	40	25	61.5	1.2x10 ³	1.9x10 ⁴	565	76.2	6.1
36AFKHA50	36	50	25	54.5	1.9x10 ³	2.8x10 ⁴	914	76.2	9.7
36AFKHA63	36	63	25	40.6	3.5x10 ³	5.0x10 ⁴	914	76.2	9.7
36AFKHA71	36	71	25	32.5	5.5x10 ³	8.2x10 ⁴	914	76.2	9.7
72.5AFKHA3.15	72.5	3.15	12	4230	1.4x10 ¹	1.8x10 ²	914	76.2	9.7
72.5AFKHA5	72.5	5	12	1600	1.1x10 ²	1.4x10 ³	914	76.2	9.7
72.5AFKHA6.3	72.5	6.3	12	1200	1.9x10 ²	2.5x10 ³	914	76.2	9.7
72.5AFKHA10	72.5	10	12	519	7.2x10 ²	9.3x10 ³	914	76.2	9.7
72.5AFKHA16	72.5	16	12	389	1.3x10 ³	1.7x10 ⁴	914	76.2	9.7
72.5AFKHA20	72.5	20	12	249	3.1x10 ³	4.0x10 ⁴	914	76.2	9.7
72.5AFKHA25	72.5	25	12	195	5.1x10 ³	6.6x10 ⁴	914	76.2	9.7
72.5AFKHA31.5	72.5	31.5	12	130	1.0x10 ⁴	1.3x10 ⁵	914	76.2	9.7
72.5AFKHA40	72.5	40	12	92.7	2.0x10 ⁴	2.6x10 ⁵	914	76.2	9.7

Notes

- a) The fifth letter or number of the part reference denotes the end fixing arrangement.
- b) There are a wide variety of end terminations available, the most popular types, some of which have dimensional references to BS2692: Part 1, are:

- A** No Tags - Ferrule - BS Ref. FA3 - ADIHA / BS Ref. FA4 - AFIHA / BS Ref. FA5 - AFKHA
- B** Offset Tag, single bolt fixing
- C & D** Special Offset Tags, two hole fixings for Brush fuse switch equipment, BS Ref. TA3.
- F & O** Offset Tags two bolt fixing.
- 49** Centre Tags, single bolt fixing for use in Fused End Boxes.
- 6** Tags to BS2692-1 ref. TA3

Transformer kVA	Transformer Priority Voltage								
	6.6kV			11kV			13.8kV		
	Fuse Type	Current Rating (A)	Rating kV	Fuse Type	Current Rating (A)	Rating kV	Fuse Type	Current Rating (A)	Rating kV
200	BDG	31.5	12	BDG	20	12	BDG	20	15.5
250	BDG	40	12	BDG	25	12	BDG	25	15.5
300/315	BDG	50	12	BDG	31.5	12	BDG	31.5	15.5
400	BFG	63	12	BDG	40	12	BDG	40	15.5
500	BFG	80	12	BDG	50	12	BFG	50	15.5
630	BFG	90	12	BFG	63	12	BFG	63	15.5
750/800	BFG	125	7.2	BFG	71	12	BFG	63	15.5
1000	BFG	140	7.2	BFG	90	12	BFG	85	15.5
1250	BFG	160	7.2	AKG	112	12	BFG	85 ³	15.5
1500	BFG	160 ³	7.2	AKG	125 ³	12	-	-	-

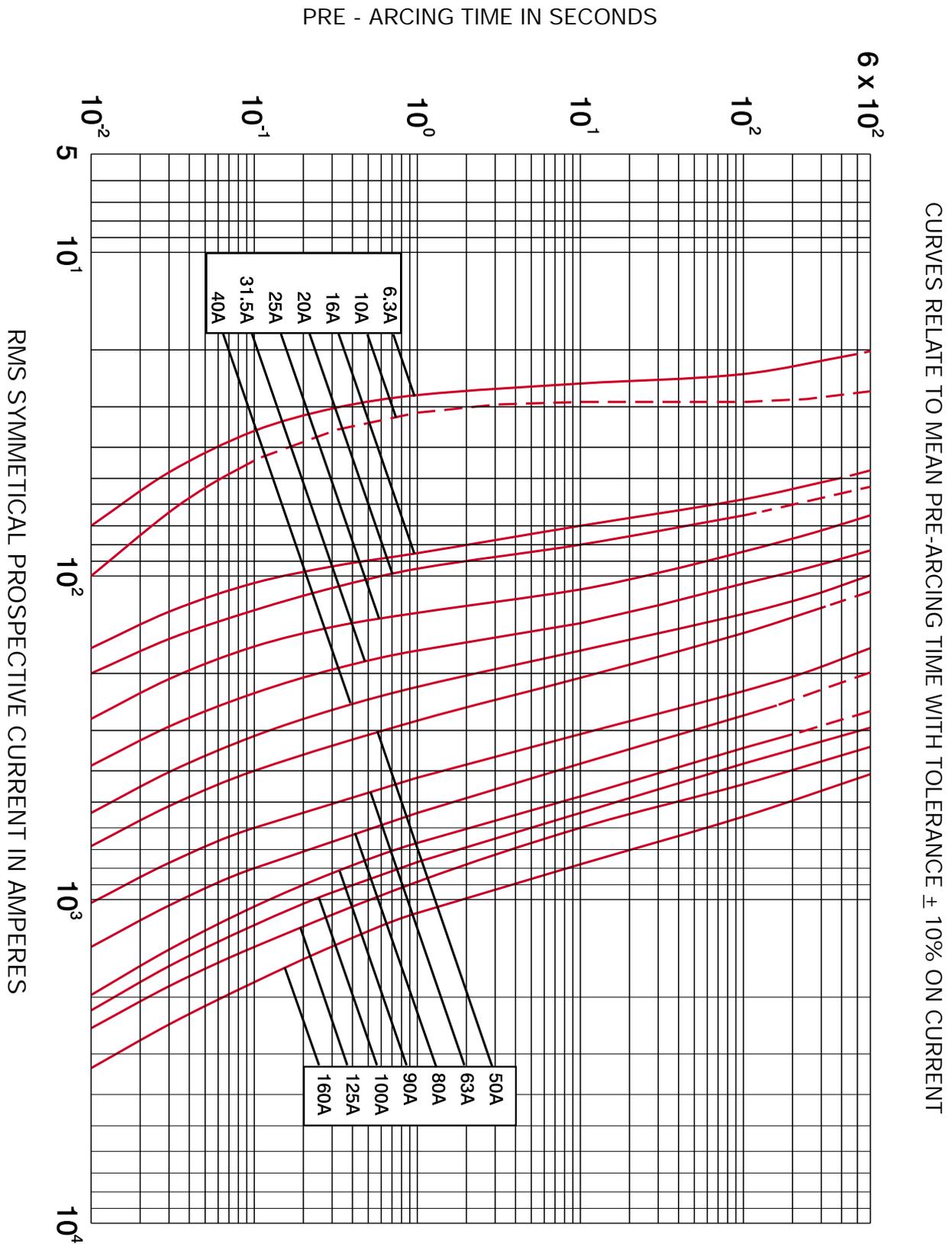
■ **Selection of these fuse links has been based on a compromise between the following:**

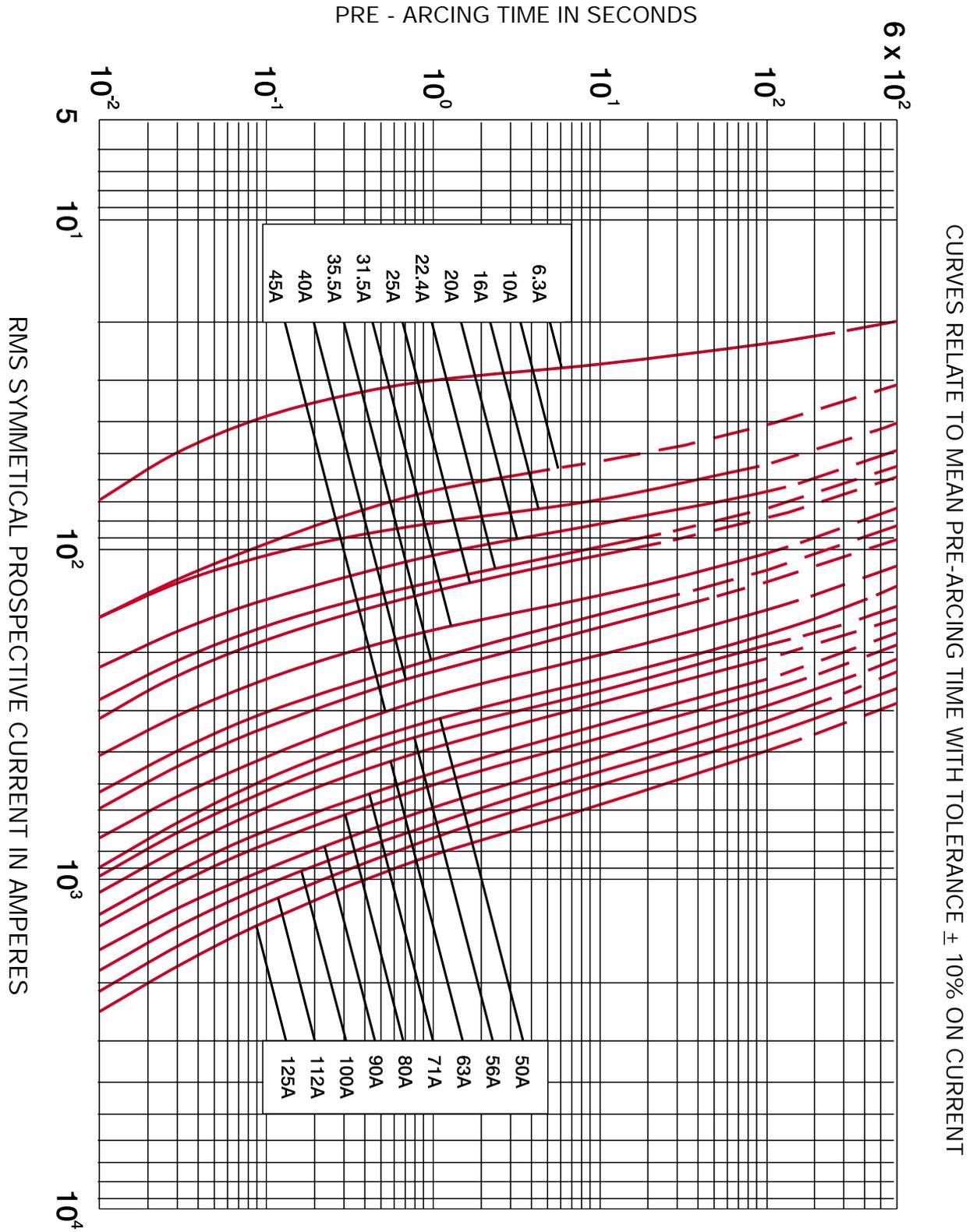
- 1 The fuse links should withstand transformer magnetising inrush currents, taken as 12 times full load current for 0.1 seconds.
- 2 The fuse links should discriminate with the highest rating of secondary fuse link.
- 3 The fuse links should withstand periodic over-currents of up to 150% of transformer full load current.
- 4 The fuse links should operate reasonably quickly in the event of a transformer inter-turn fault or a fault in the secondary terminal zone of the transformer.

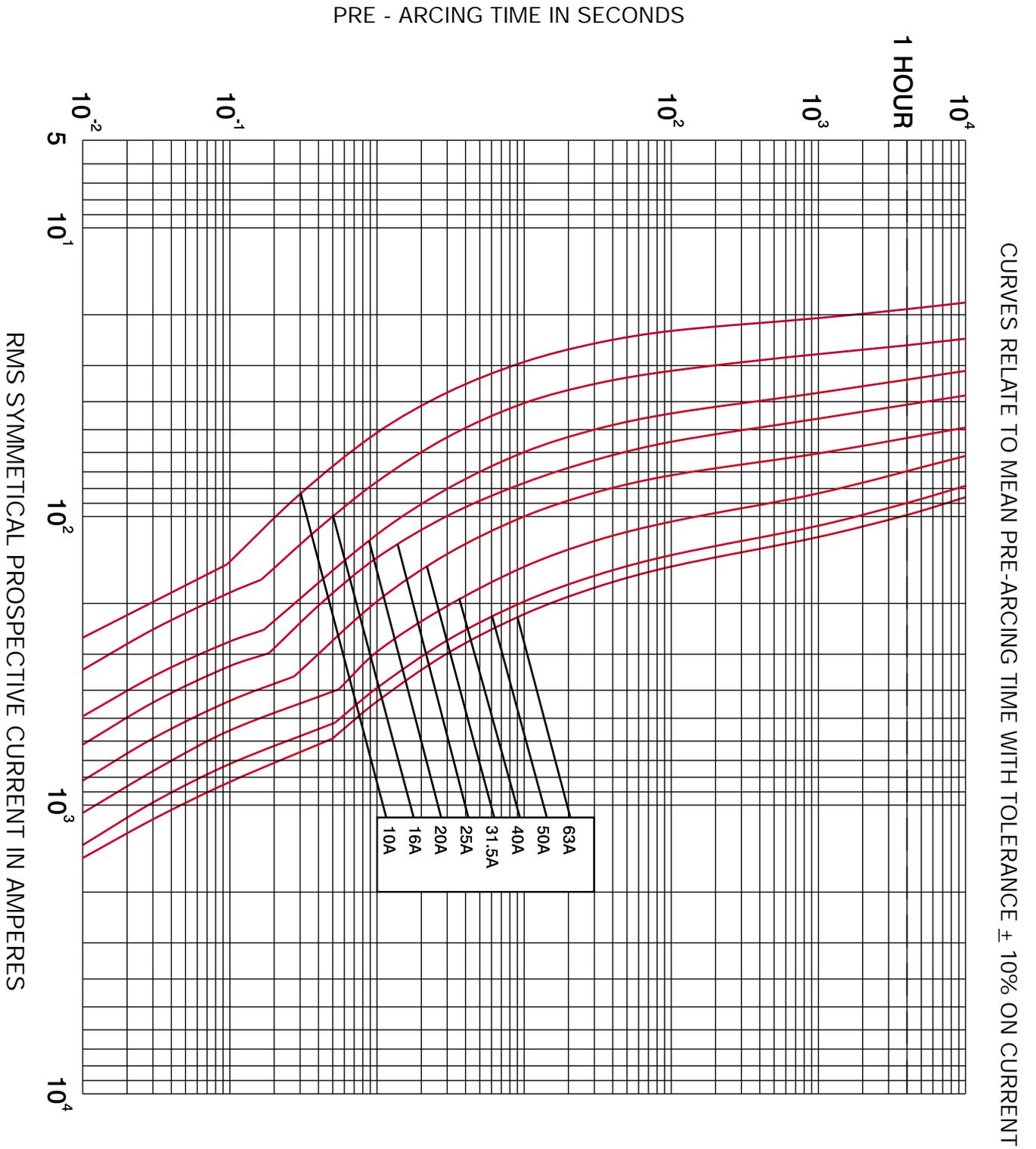
■ **Notes**

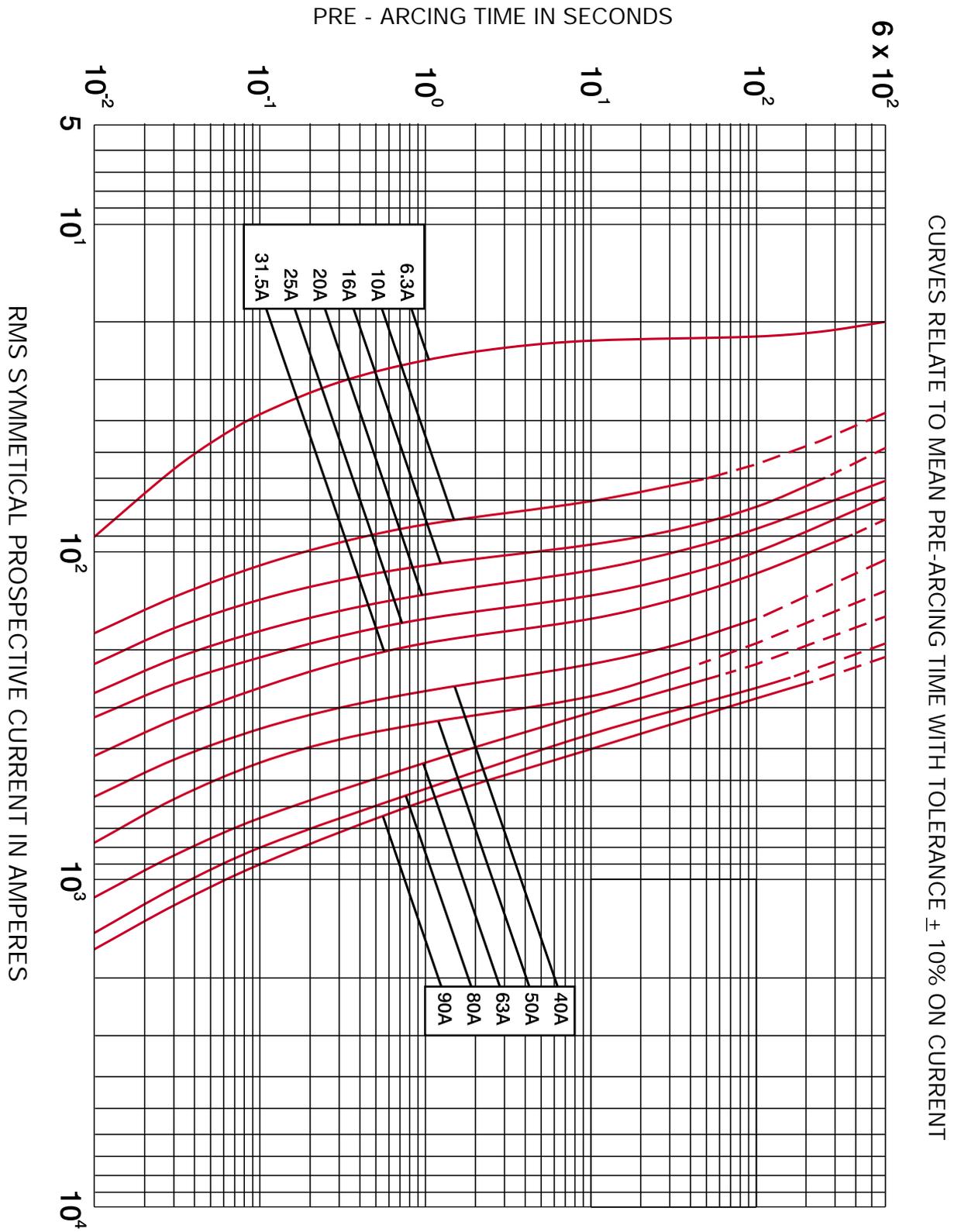
- a) The above recommendations are not generally applicable to transformers feeding motor circuits with starting currents in excess of the rated current of the fuse. In this event, please consult Bussmann.
- b) For 6.6kV transformers, 12kV Fuse Links are recommended, where the required current rating is available.
- c) Where the transformer is not subjected to periodic over-currents, a lower fuse rating may be suitable, fuse ratings marked thus, '3' are only suitable for use with the transformer sizes quoted, where significant over loading does not occur.

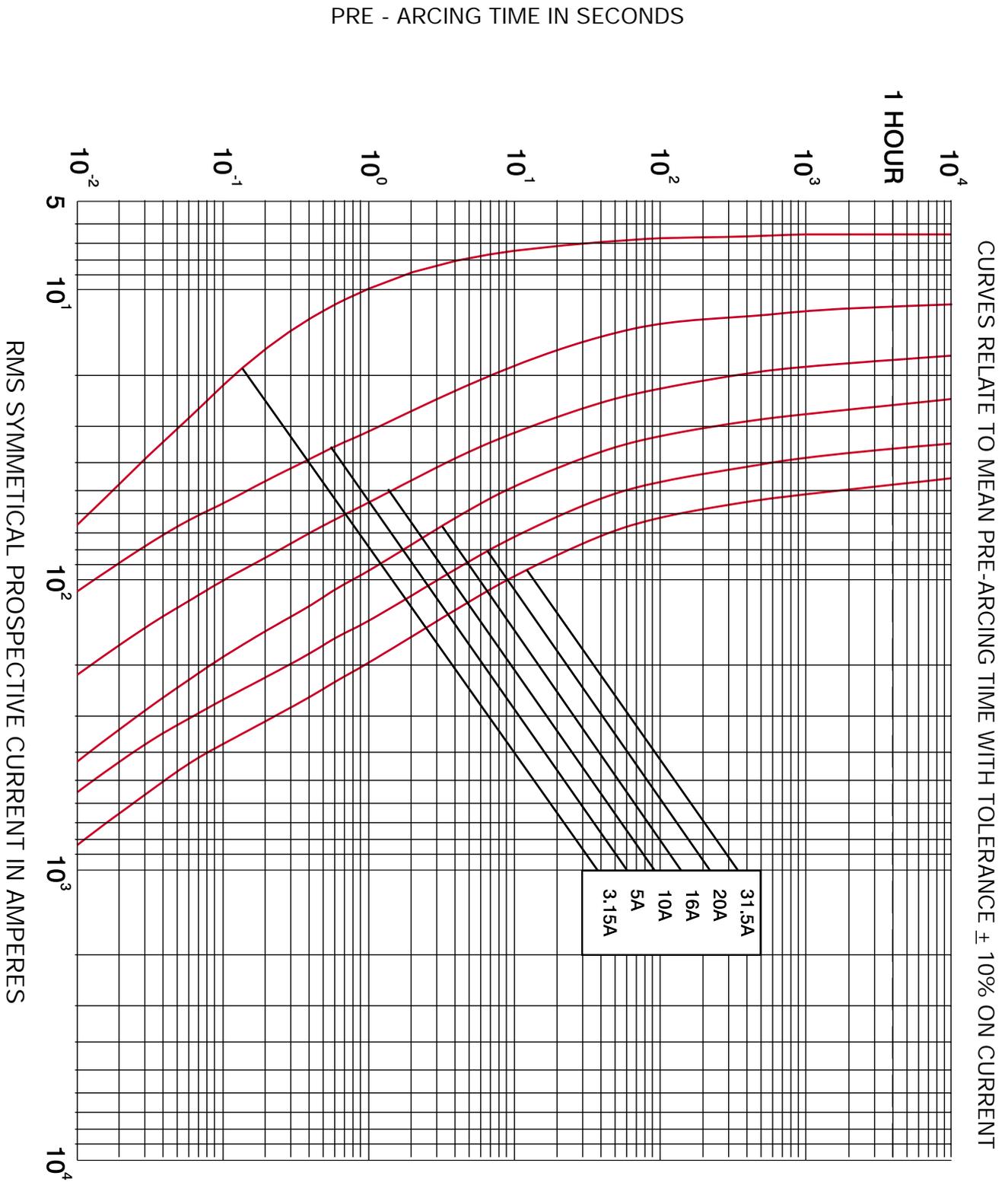
Fuse links for use in transformers with primary voltages of 3.3kV, 22kV and 33kV are available, please consult Bussmann application engineers for further details and a recommendation.

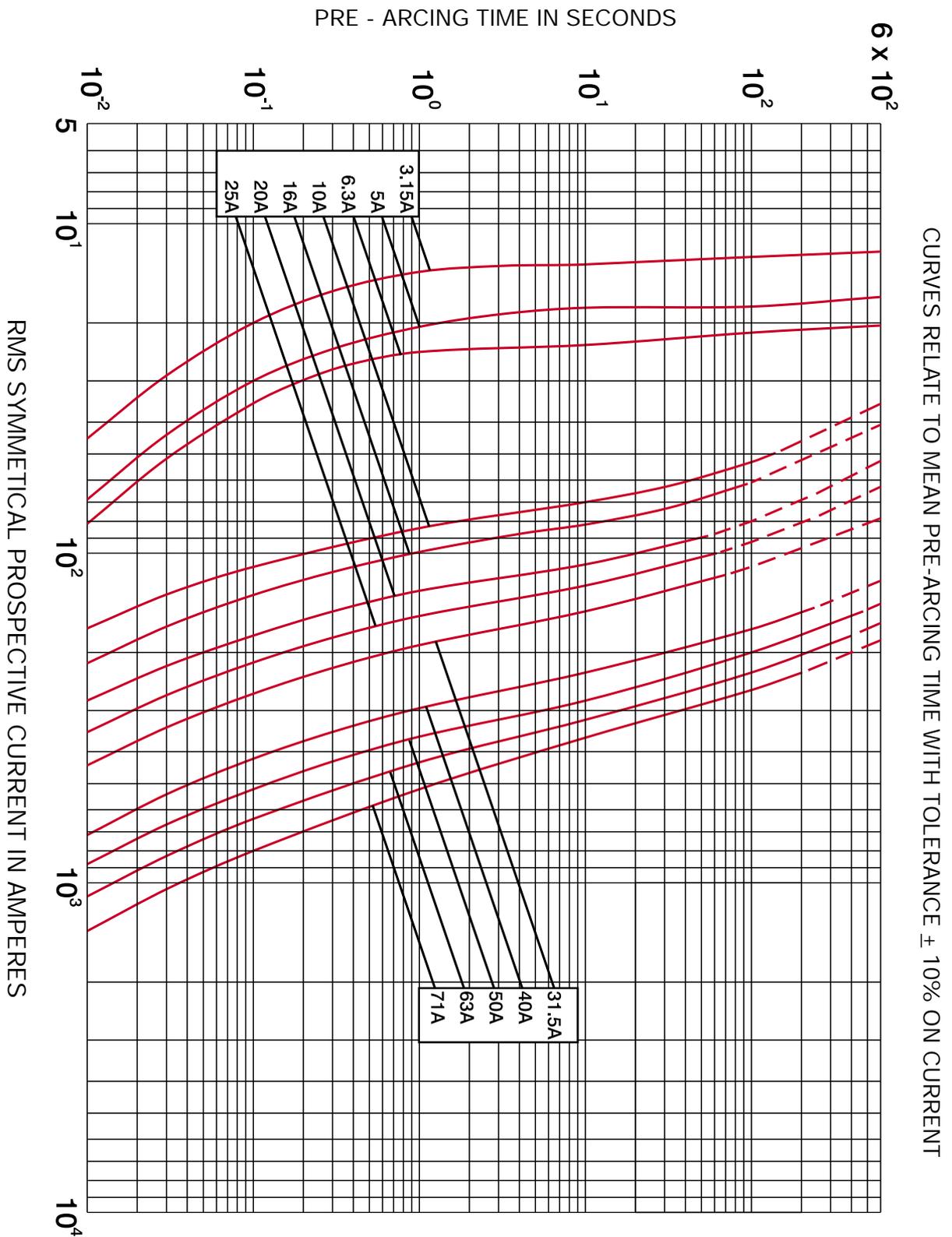






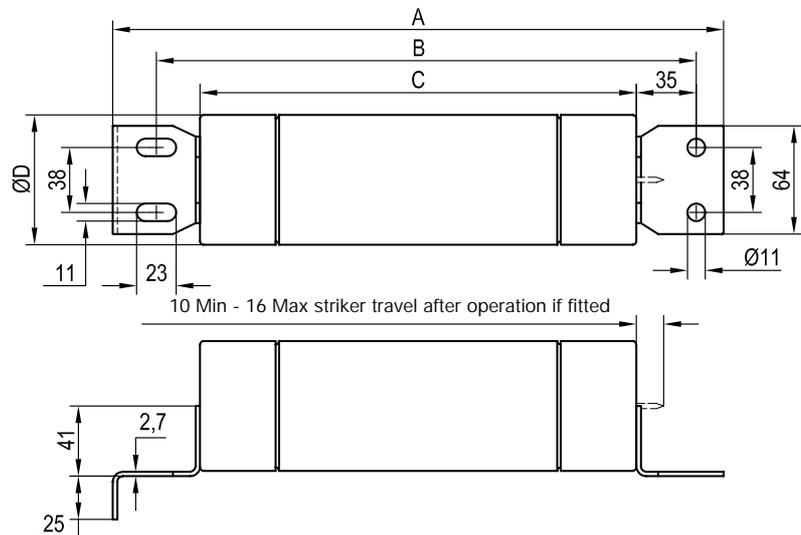






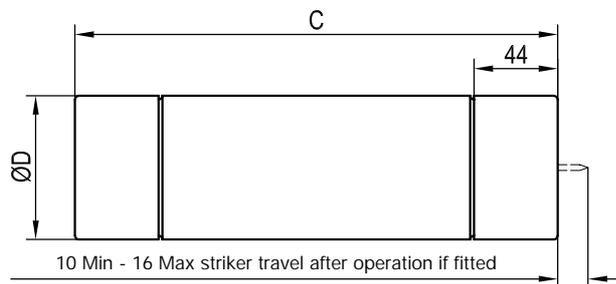
C & D Tags

CODE	A	B	C	DØ
ADFHC	356	314	254	51
ADGHC	461	419	359	51
BDGHC	461	419	359	51
AFFHD	356	314	254	76
AKGHD	461	419	359	76
BFGHD	461	419	359	76



A Tags (ferrule)

CODE	A	DØ
ADGHA	359	51
BDGHA	359	51
ADIHA	565	51
FDIHA	565	51
AKGHA	359	76
BFGHA	359	76
AFIHA	565	76
AKKHA	914	76



F Tags

CODE	A	B	C	DØ
ADFHF	356	314	254	51
ADGHF	461	419	359	51
BDGHF	461	419	359	51
ADIHF	666	624	565	51
FDIHF	666	624	565	51
AFFHF	356	314	254	76
AKGHF	461	419	359	76
BFGHF	461	419	359	76
AFIHF	666	624	565	76
AFKHF	1016	974	914	76

