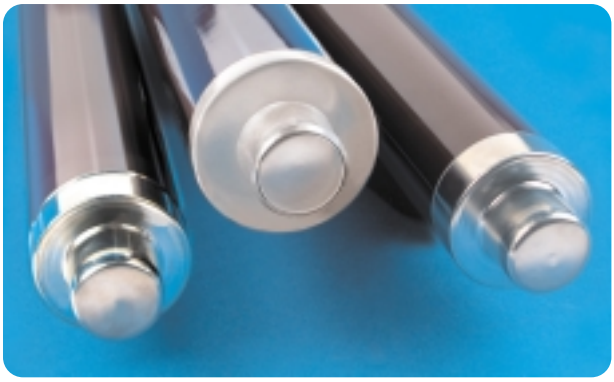
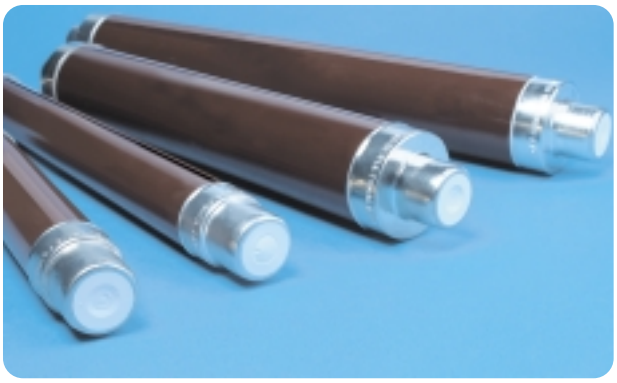
- **Fuse Links comply with DIN dimensional standard DIN43625.**
- **‘F’ range, high performance full range fuse link.**
- **‘S’ range, high performance back-up fuse link, with striker tripping.**
- **‘A’ range, including high current rating back-up fuse link.**
- **Comply with IEC 60282-1 and VDE 0670 part 4.**
- **Wide variety of ratings, 3.6 kV to 36 kV.**
- **Versions suitable for indoor and outdoor use.**
- **Motor circuit fuse link option.**





Bussmann DIN ‘S’ Fuse Links

The time current characteristics of the ‘S’ range is optimised to ensure improved discrimination with upstream devices and to give fast clearance of earth faults in the secondary terminal zones. The breaking performance with low over currents is adequate to cater for all normal distribution applications, where low voltage fuse links on the secondary side take care of low overload faults, leaving the high voltage fuse links to clear major faults ahead of LV protection. The fuse links are suitable for use even where there is no secondary LV protection, provided that they are used in fuse switches fitted with instantaneous striker tripping.

Bussmann DIN ‘F’ Fuse Links

The ‘F’ range fuse links have ‘full range’ clearing capability. Bussmann ‘F’ types are designed to clear all overloads right down to fuse’s rated current in accordance with latest IEC 282-1 requirements. They are thus suitable for use as a sole form of protection. ‘F’ range time current characteristics are especially advantageous for transformer protection applications.

Bussmann DIN ‘A’ Fuse Links

This earlier, well proven design, has values of minimum breaking current between the ‘S’ and ‘F’ range including higher current ratings.

Table of ratings for 'S' range 7.2 - 36kV to DIN dimensions

Part Number	Voltage Rating	Current Rating	Breaking Capacity	Minimum Breaking Current	Cold resistance and watts loss in free air at rated current		Joule Intergral (I^2t)		Length	Diameter Ø	Weight
	U_n	I_n	I_1	I_3			A^2s				
	kV	A	kA	A	m Ω	W	Minimum Pre-Arcing	Maximum Total Clearing	mm	mm	kg
7.2SDLSJ6.3	7.2	6.3	40	20	205	11	$4.8X10^1$	$6.5X10^2$	292	50.8	1.63
7.2SDLSJ10	7.2	10	40	31	99.7	19	$2.5X10^2$	$2.7X10^3$	292	50.8	1.63
7.2SDLSJ16	7.2	16	40	49	65.1	23	$5.5X10^2$	$8.2X10^3$	292	50.8	1.63
7.2SDLSJ20	7.2	20	40	49	48.9	27	$9.7X10^2$	$1.1X10^4$	292	50.8	1.63
7.2SDLSJ25	7.2	25	40	80	32.6	28	$5.7X10^2$	$8.0X10^3$	292	50.8	1.63
7.2SDLSJ31.5	7.2	31.5	40	100	26.0	36	$8.9X10^2$	$1.0X10^4$	292	50.8	1.63
7.2SDLSJ40	7.2	40	40	114	16.0	36	$2.0X10^2$	$2.2X10^4$	292	50.8	1.63
7.2SDLSJ50	7.2	50	40	143	12.9	46	$3.2X10^2$	$3.2X10^4$	292	50.8	1.63
7.2SDLSJ63	7.2	63	40	180	8.14	45	$8.0X10^2$	$7.5X10^4$	292	50.8	1.63
7.2SFLSJ80	7.2	80	40	264	6.01	54	$5.0X10^3$	$6.5X10^4$	292	76.2	3.1
7.2SFLSJ100	7.2	100	40	338	4.65	64	$9.1X10^3$	$1.1X10^5$	292	76.2	3.1
7.2SFLSJ125	7.2	125	40	375	3.60	79	$1.5X10^4$	$1.7X10^5$	292	76.2	3.1
7.2SFLSJ160	7.2	160	40	525	2.73	97	$3.0X10^4$	$3.1X10^5$	292	76.2	3.1
12SDLSJ6.3	12	6.3	50	20	285	14	$7.0X10^1$	$6.5X10^2$	292	50.8	1.63
12SDLSJ10	12	10	50	28	143	18	$3.1X10^2$	$2.7X10^3$	292	50.8	1.63
12SDLSJ16	12	16	50	35	81.4	26	$9.8X10^2$	$8.6X10^3$	292	50.8	1.63
12SDLSJ20	12	20	50	72	54.6	28	$5.7X10^2$	$5.1X10^3$	292	50.8	1.63
12SDLSJ25	12	25	50	90	43.7	35	$8.9X10^2$	$8.1X10^4$	292	50.8	1.63
12SDLSJ31.5	12	31.5	50	90	32.8	43	$1.6X10^3$	$1.5X10^4$	292	50.8	1.63
12SDLSJ40	12	40	50	128	21.6	49	$3.2X10^3$	$2.7X10^4$	292	50.8	1.63
12SDLSJ50	12	50	50	196	15.1	59	$1.3X10^3$	$3.2X10^4$	292	50.8	1.63
12SDLSJ63	12	63	50	275	12.1	75	$2.3X10^3$	$5.7X10^4$	292	50.8	1.63
12SFLSJ50	12	50	50	160	17.1	61	$5.2X10^3$	$4.1X10^4$	292	76.2	3.1
12SFLSJ63	12	63	50	227	12.1	69	$1.0X10^4$	$8.8X10^4$	292	76.2	3.1
12SFLSJ80	12	80	50	256	8.97	88	$1.9X10^4$	$1.5X10^5$	292	76.2	3.1
12SFLSJ100	12	100	50	446	5.61	83	$1.4X10^4$	$2.2X10^5$	292	76.2	3.1
12SKLSJ125	12	125	50	870	4.60	115	$2.8X10^4$	$2.3X10^5$	292	76.2	3.1
12SXLEJ160	12	160	63	500	4.30	200	$1.1X10^5$	$5.0X10^5$	292	88	3.7
12SXLEJ200	12	200	63	610	3.80	330	$1.5X10^5$	$6.5X10^5$	292	88	3.7
15.5SFMSJ100	15.5	100	25	707	8.23	119	$1.2X10^4$	$1.4X10^5$	442	76.2	4.5
15.5SKMSJ125	15.5	125	25	990	5.61	126	$2.4X10^4$	$2.2X10^5$	442	76.2	4.5
17.5SDLSJ6.3	17.5	6.3	35.5	23	313	15	$4.8X10^1$	$6.1X10^2$	292	50.8	1.63
17.5SDLSJ10	17.5	10	35.5	19	185	23	$2.8X10^2$	$4.0X10^3$	292	50.8	1.63
17.5SDLSJ16	17.5	16	35.5	59	104	34	$2.9X10^2$	$2.0X10^3$	292	50.8	1.63
17.5SDLSJ20	17.5	20	35.5	80	69.2	38	$5.7X10^2$	$4.4X10^3$	292	50.8	1.63
17.5SDLSJ25	17.5	25	35.5	100	55.4	48	$8.9X10^2$	$6.6X10^3$	292	50.8	1.63
17.5SDLSJ31.5	17.5	31.5	35.5	118	41.4	58	$5.1X10^2$	$1.1X10^4$	292	50.8	1.63
17.5SDLSJ40	17.5	40	35.5	148	31.1	76	$8.0X10^2$	$1.8X10^4$	292	50.8	1.63
17.5SFLSJ31.5	17.5	31.5	35.5	118	30.3	37	$2.6X10^3$	$1.9X10^4$	292	76.2	3.1
17.5SFLSJ40	17.5	40	35.5	132	21.9	51	$5.1X10^3$	$3.8X10^4$	292	76.2	3.1
17.5SFLSJ50	17.5	50	35.5	225	17.3	62	$8.1X10^3$	$6.0X10^4$	292	76.2	3.1
17.5SDMSJ6.3	17.5	6.3	35.5	16	509	26	$4.8X10^1$	$6.0X10^2$	442	50.8	2.2
17.5SDMSJ10	17.5	10	35.5	27	215	28	$3.1X10^2$	$3.8X10^3$	442	50.8	2.2
17.5SDMSJ16	17.5	16	35.5	57	112	37	$2.9X10^2$	$1.2X10^4$	442	50.8	2.2
17.5SDMSJ20	17.5	20	35.5	80	79.8	38	$5.7X10^2$	$6.7X10^3$	442	50.8	2.2
17.5SDMSJ25	17.5	25	35.5	100	63.8	52	$8.9X10^2$	$1.1X10^4$	442	50.8	2.2
17.5SDMSJ31.5	17.5	31.5	35.5	100	47.9	61	$1.6X10^3$	$2.0X10^4$	442	50.8	2.2
17.5SDMSJ40	17.5	40	35.5	143	31.6	66	$3.2X10^3$	$3.6X10^4$	442	50.8	2.2
17.5SFMSJ50	17.5	50	35	180	25.0	88	$5.2X10^3$	$5.5X10^4$	442	76.2	4.5
17.5SFMSJ63	17.5	63	35	240	17.8	102	$1.0X10^4$	$1.2X10^5$	442	76.2	4.5
17.5SFMSJ80	17.5	80	35	270	13.1	128	$1.9X10^4$	$1.9X10^5$	442	76.2	4.5
24SDMSJ6.3	24	6.3	50	19	489	24	$8.1X10^1$	$1.3X10^3$	442	50.8	2.2
24SDMSJ10	24	10	50	28	287	35	$3.1X10^2$	$5.5X10^3$	442	50.8	2.2
24SDMSJ16	24	16	50	47	165	60	$9.8X10^2$	$1.5X10^4$	442	50.8	2.2
24SDMSJ20	24	20	50	80	79.3	38	$8.1X10^2$	$1.1X10^4$	442	50.8	2.2
24SDMSJ25	24	25	50	84	62.0	49	$1.3X10^3$	$2.0X10^4$	442	50.8	2.2
24SDMSJ31.5	24	31.5	50	105	46.5	56	$2.1X10^3$	$2.9X10^4$	442	50.8	2.2
24SDMSJ40	24	40	50	140	34.0	79	$3.2X10^3$	$4.4X10^4$	442	50.8	2.2
24SFMSJ40	24	40	50	119	38.0	85	$5.1X10^3$	$6.9X10^4$	442	76.2	4.5
24SFMSJ50	24	50	50	225	27.1	96	$8.1X10^3$	$9.0X10^4$	442	76.2	4.5
24SFMSJ63	24	63	50	306	21.6	128	$3.8X10^3$	$5.0X10^4$	442	76.2	4.5
24SFMSJ71	24	71	50	350	17.7	134	$5.0X10^3$	$6.6X10^4$	442	76.2	4.5
24SHMEJ80	24	80	63	300	20.5	250	$1.7X10^4$	$8.4X10^4$	442	64	3.1
24SHMEJ100	24	100	63	350	18.0	350	$2.8X10^4$	$9.3X10^4$	442	64	3.1
24SKMEJ125	24	125	63	420	16.7	*171*	$2.4X10^4$	$8.7X10^4$	442	78	3.7
24SXMEJ160	24	160	63	320	14.0	*279*	$4.4X10^4$	$1.7X10^5$	442	88	4.2
36SDQSJ3.15	36	3.15	20	-	-	-	-	-	537	50.8	2.9
36SDQSJ6.3	36	6.3	35.5	23	684	34	$1.0X10^2$	$1.2X10^3$	537	50.8	2.9
36SDQSJ10	36	10	35.5	35	402	44	$3.1X10^2$	$3.6X10^3$	537	50.8	2.9
36SDQSJ16	36	16	35.5	70	165	52	$4.6X10^2$	$5.1X10^3$	537	50.8	2.9
36SDQSJ20	36	20	35.5	98	117	62	$8.9X10^2$	$8.2X10^4$	537	50.8	2.9
36SDQSJ25	36	25	35.5	112	98.0	85	$1.2X10^3$	$1.5X10^4$	537	50.8	2.9
36SFQSJ31.5	36	31.5	35.5	116	73.4	96	$2.1X10^3$	$2.3X10^4$	537	76.2	6.0
36SFQSJ40	36	40	35.5	178	52.4	116	$4.1X10^3$	$3.9X10^4$	537	76.2	6.0
36SFQSJ50	36	50	35.5	255	36.8	133	$8.3X10^3$	$8.1X10^4$	537	76.2	6.0
36SXQEJ63	36	63	20	280	35.0	271	$1.1X10^4$	$6.2X10^4$	537	88	6.5

Rating at 64%

Table of ratings for 'F' range 12 - 24kV to DIN dimensions

Part Number	Voltage Rating	Current Rating	Breaking Capacity	Minimum Breaking Current	Cold resistance and watts loss in free air at rated current		Joule Intergral (I^2t)		Length	Diameter Ø	Weight
	U_n	I_n	I_1	I_3			A^2s				
	kV	A	kA	A	m Ω	W	Minimum Pre-Arcing	Maximum Total Clearing	mm	mm	kg
12FDLSJ6.3	12	6.3	50	6.3	208	10	$6.9X10^1$	$6.3X10^2$	292	50.8	1.63
12FDLSJ10	12	10	50	10	116	15	$2.2X10^2$	$2.1X10^3$	292	50.8	1.63
12FDLSJ16	12	16	50	16	55.4	17	$8.8X10^2$	$3.9X10^3$	292	50.8	1.63
12FDLSJ20	12	20	50	20	39.6	20	$1.7X10^3$	$7.6X10^3$	292	50.8	1.63
12FDLSJ25	12	25	50	25	31.2	26	$2.8X10^3$	$1.3X10^4$	292	25.8	1.63
12FDLSJ31.5	12	31.5	50	31.5	26.4	36	$2.6X10^3$	$1.3X10^4$	292	50.8	1.63
12FFLSJ40	12	40	50	40	19.7	42	$3.8X10^3$	$3.8X10^4$	292	76.2	3.16
12FFLSJ50	12	50	50	50	14.8	51	$6.8X10^3$	$5.6X10^4$	292	76.2	3.16
12FFLSJ63	12	63	50	63	12.4	72	$5.1X10^3$	$5.4X10^4$	292	76.2	3.16
12FXLSJ80	12	80	50	80	7.94	72	$2.2X10^4$	$1.1X10^5$	292	88	4
12FXLSJ100	12	100	50	100	5.64	82	$4.2X10^4$	$2.0X10^5$	292	88	4
24FDMSJ6.3	24	6.3	35.5	6.3	437	21	$6.8X10^1$	$5.4X10^2$	442	50.8	2.2
24FDMSJ10	24	10	35.5	10	218	29	$2.7X10^2$	$2.1X10^3$	442	50.8	2.2
24FDMSJ16	24	16	35.5	16	118	39	$8.2X10^2$	$2.7X10^3$	442	50.8	2.2
24FDMSJ20	24	20	35.5	20	82.2	43	$1.6X10^3$	$5.1X10^3$	442	50.8	2.2
24FDMSJ25	24	25	35.5	25	54.7	48	$3.4X10^3$	$1.2X10^4$	442	50.8	2.2
24FDMSJ31.5	24	31.5	35.5	31.5	48.6	71	$3.2X10^3$	$1.2X10^4$	442	50.8	2.2
24FFMSJ25	24	25	35.5	25	58.6	47	$3.4X10^3$	$1.1X10^4$	442	76.2	4.5
24FFMSJ31.5	24	31.5	35.5	31.5	48.8	70	$4.7X10^3$	$1.5X10^4$	442	76.2	4.5
24FFMSJ40	24	40	35.5	40	38.4	85	$7.6X10^3$	$2.5X10^4$	442	76.2	4.5
24FFMSJ45	24	45	35.5	45	31.4	92	$7.2X10^3$	$3.0X10^4$	442	76.2	4.5

Table of ratings for 'A' range 3.6 - 24kV to DIN dimensions

Part Number	Voltage Rating	Current Rating	Breaking Capacity	Minimum Breaking Current	Cold resistance and watts loss in free air at rated current		Joule Intergral (I^2t)		Length	Diameter Ø	Weight
	U_n	I_n	I_1	I_3			A^2s				
	kV	A	kA	A	m Ω	W	Minimum Pre-Arcing	Maximum Total Clearing	mm	mm	kg
3.6ADOSJ6.3	3.6	6.3	40	13	158	9	$4.5X10^1$	$1.9X10^2$	192	50.8	1.1
3.6ADOSJ10	3.6	10	40	31	79.2	11	$2.3X10^2$	$9.7X10^2$	192	50.8	1.1
3.6ADOSJ16	3.6	16	40	49	50.8	18	$5.5X10^2$	$2.4X10^3$	192	50.8	1.1
3.6ADOSJ20	3.6	20	40	49	38.1	21	$9.8X10^2$	$4.2X10^3$	192	50.8	1.1
3.6ADOSJ25	3.6	25	40	106	28.9	25	$1.3X10^2$	$1.2X10^3$	192	50.8	1.1
3.6ADOSJ31.5	3.6	31.5	40	106	19.2	26	$2.9X10^2$	$2.7X10^3$	192	50.8	1.1
3.6ADOSJ40	3.6	40	40	106	11.6	26	$8.0X10^2$	$7.5X10^3$	192	50.8	1.1
3.6ADLSJ6.3	3.6	6.3	40	13	158	9	$4.5X10^1$	$1.9X10^2$	292	50.8	1.63
3.6ADLSJ10	3.6	10	40	13	95.6	13	$1.3X10^2$	$5.4X10^2$	292	50.8	1.63
3.6ADLSJ16	3.6	16	40	20	63.3	22	$3.0X10^2$	$1.3X10^3$	292	50.8	1.63
3.6ADLSJ20	3.6	20	40	31	45.9	25	$6.3X10^2$	$2.7X10^3$	292	50.8	1.63
3.6ADLSJ25	3.6	25	40	106	28.7	25	$1.3X10^2$	$1.2X10^3$	292	50.8	1.63
3.6ADLSJ31.5	3.6	31.5	40	106	19.1	26	$2.9X10^2$	$2.7X10^3$	292	50.8	1.63
3.6ADLSJ40	3.6	40	40	106	11.4	25	$8.0X10^2$	$7.5X10^3$	292	50.8	1.63
12AILSJ100	12	100	31.5	176	5.03	70	$1.4X10^4$	$2.0X10^5$	292	76.2	3.3
17.5AILSJ40	17.5	40	25	78	26.3	58	$1.3X10^3$	$1.8X10^4$	292	76.2	3.3
17.5AILSJ50	17.5	50	25	98	21.1	73	$2.0X10^3$	$2.7X10^4$	292	76.2	3.3
17.5AILSJ63	17.5	63	25	156	12.3	68	$5.0X10^3$	$7.0X10^4$	292	76.2	3.3
17.5AIMSJ100	17.5	100	25	176	7.33	102	$1.4X10^4$	$2.0X10^5$	442	76.2	4.5
24AFMSJ50	24	50	20	137	29.5	102	$1.8X10^3$	$2.9X10^4$	442	76.2	4.5
24AFMSJ63	24	63	20	125	23.6	130	$3.2X10^3$	$4.5X10^4$	442	76.2	4.5
24AIMSJ71	24	71	20	176	15.1	106	$6.3X10^3$	$8.5X10^4$	442	76.2	4.5

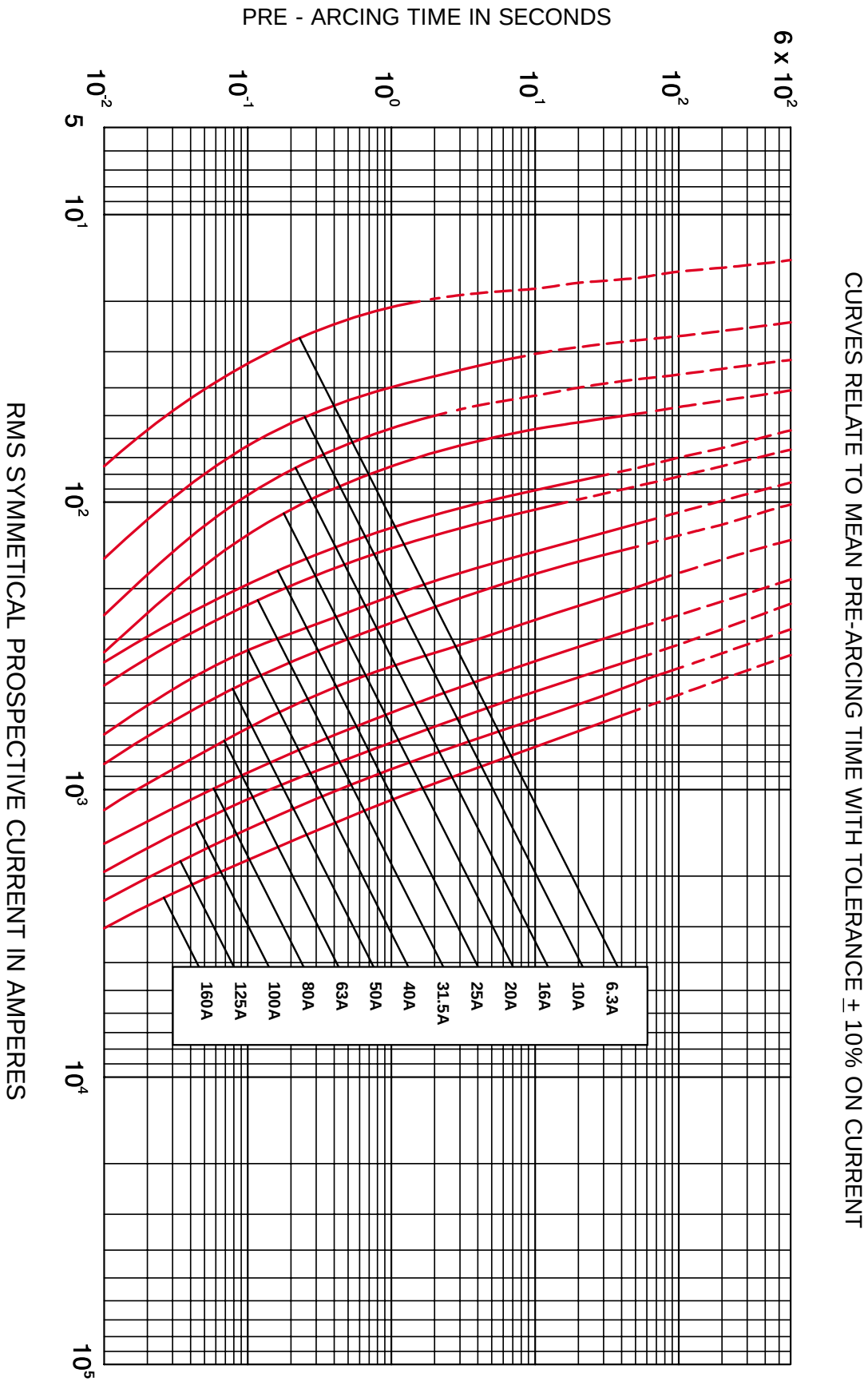
Notes

a) 17.5kV fuse links in 10/12 dimensions are offered, since some switchgear in the 10/12 series is suitable for use at higher voltages.

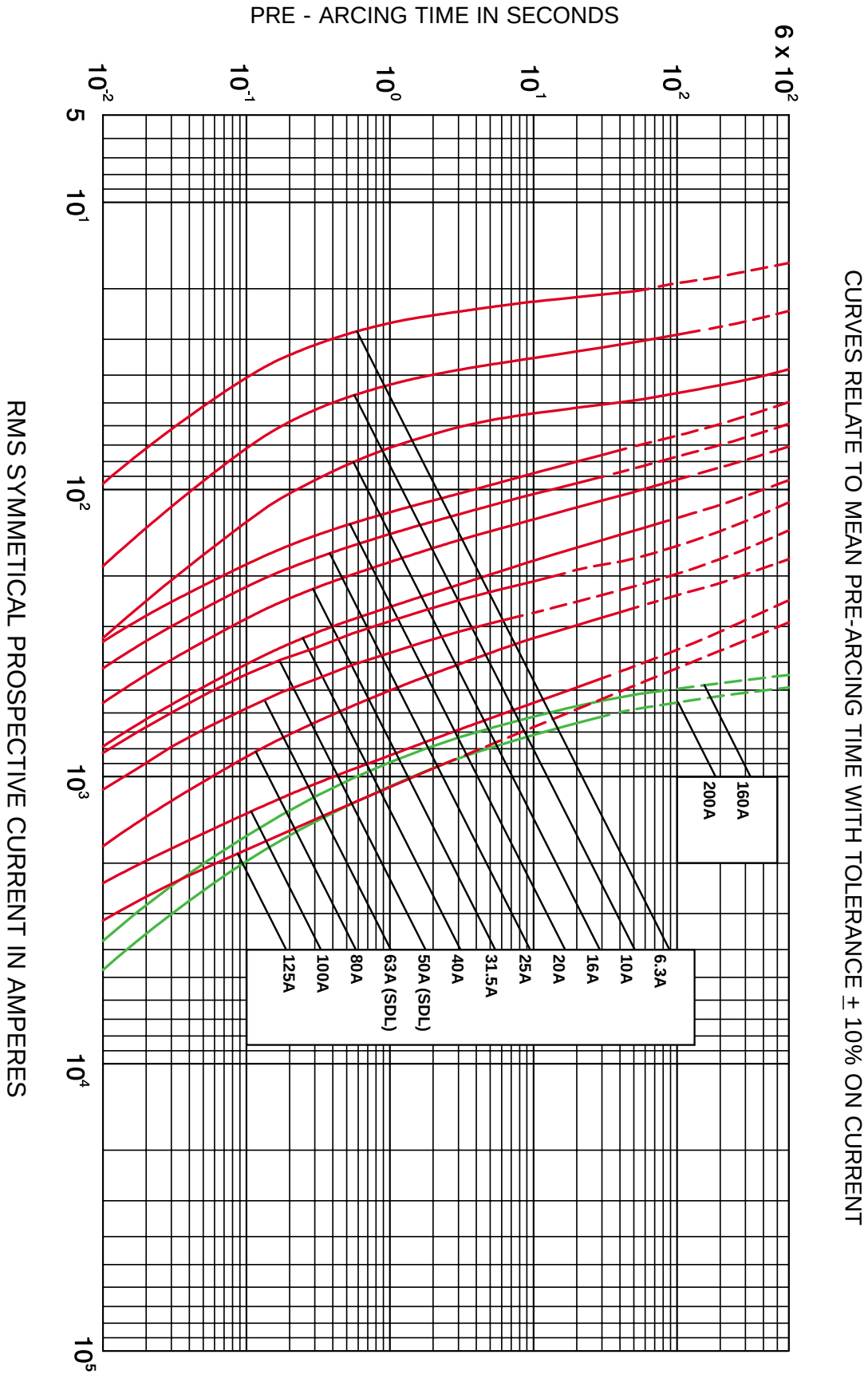
b) Fuse links listed are normally for indoor use but versions suitable for outdoor use are olso available in the same ratings and dimensions. For outdoor versions of the '**S**' range, replace the '**S**' with a '**T**' when ordering - for example '**T**DLSJ'

c) * All the fuse link code references listed in the proceeding tables are for striker fitted versions, for non-striker versions please replace the letter '**S**' with the letter '**N**' in the code - for example 'SDL**N**J'. For further information on our parts referencing system, please refer to section 10 of this catalogue.

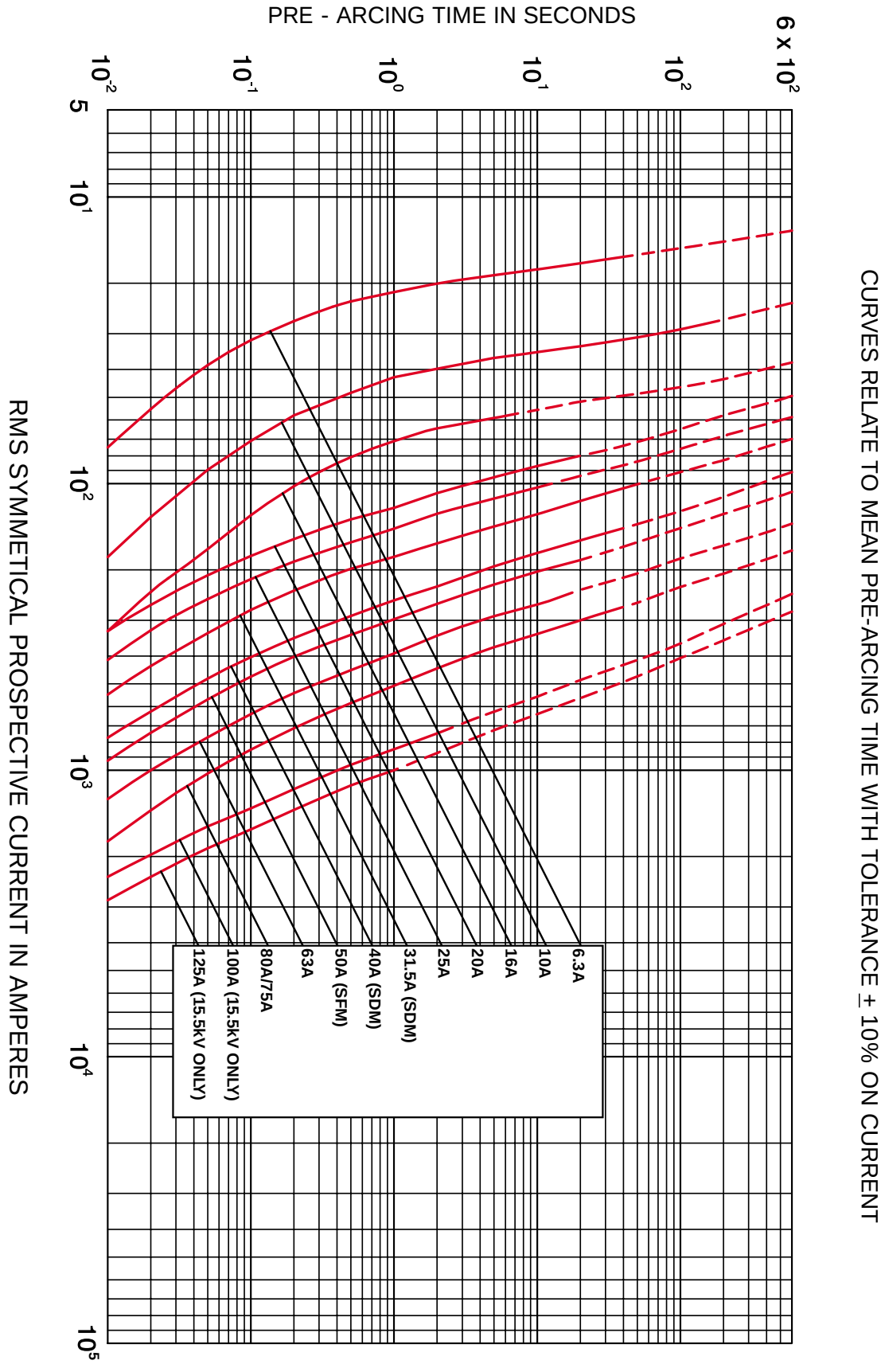
Time current characteristics for 7.2kV DIN Fuse Links, 'S' range, fuse types SDL, SFL



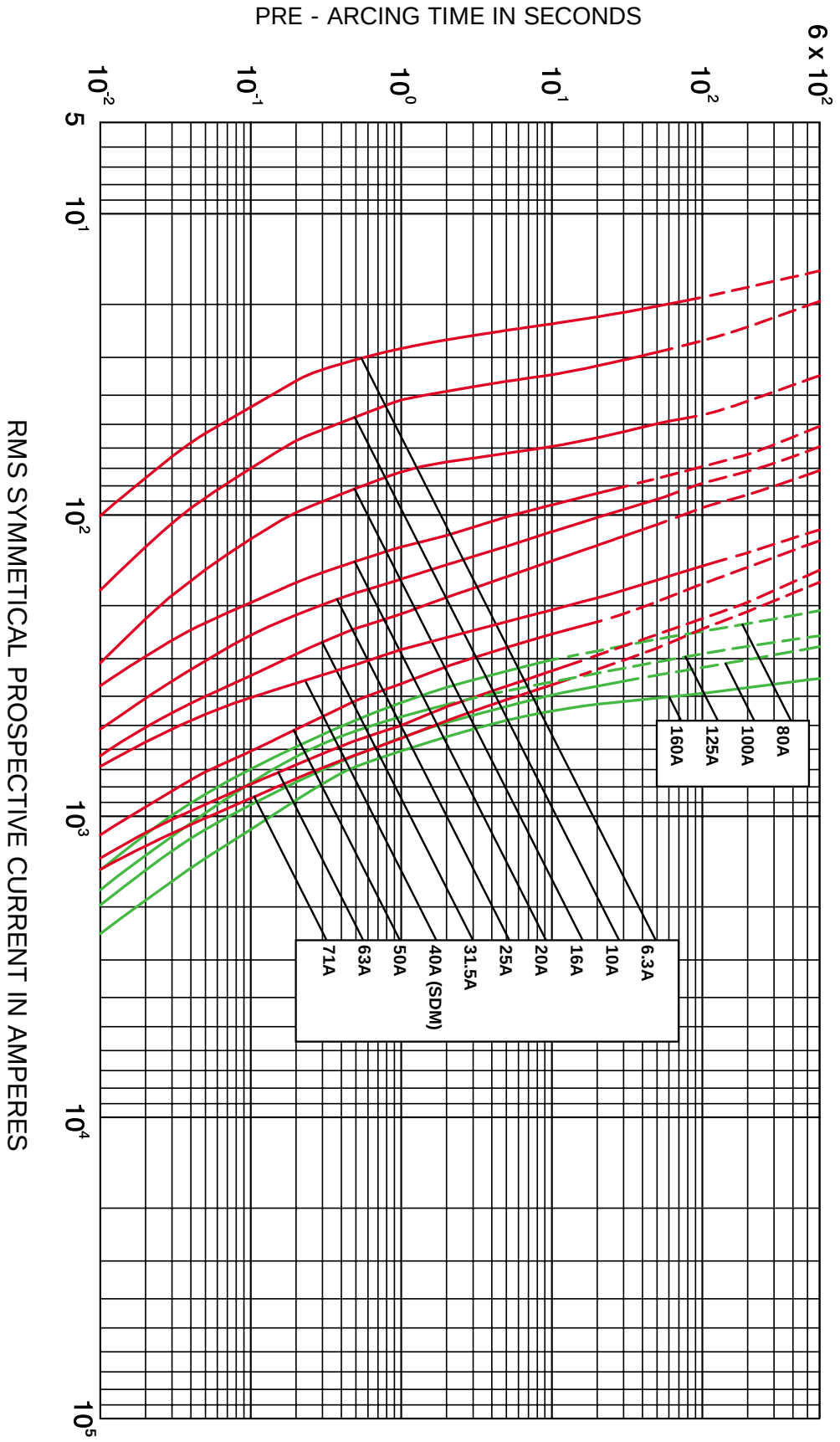
Time current characteristics for 12kV DIN Fuse Links, 'S' range, fuse types SDL, SFL, SKL and SXL



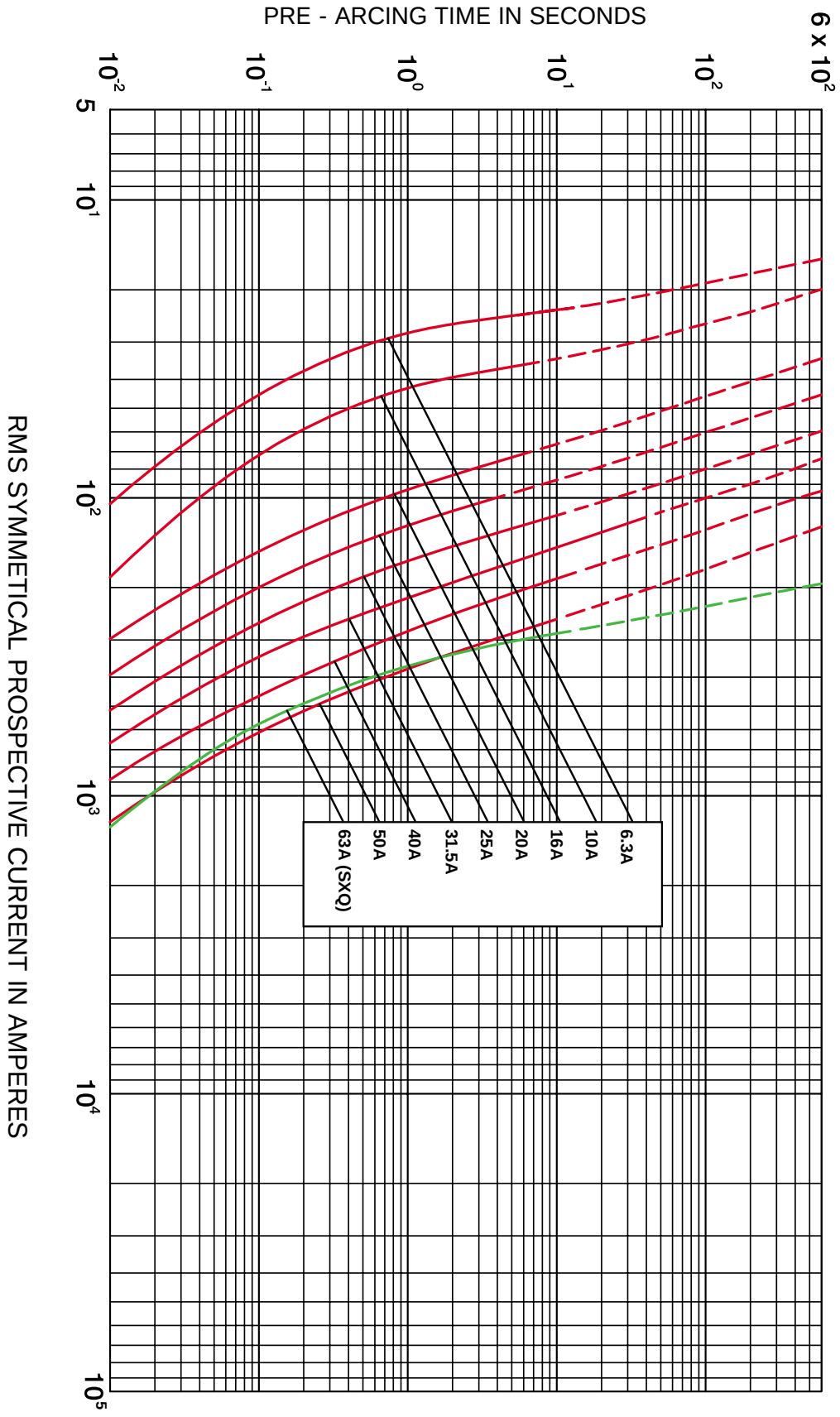
Time current characteristics for 15.5, 17.5kV DIN Fuse Links, 'S' range, fuse types SDL, SFL, SDM, SFM and SKM



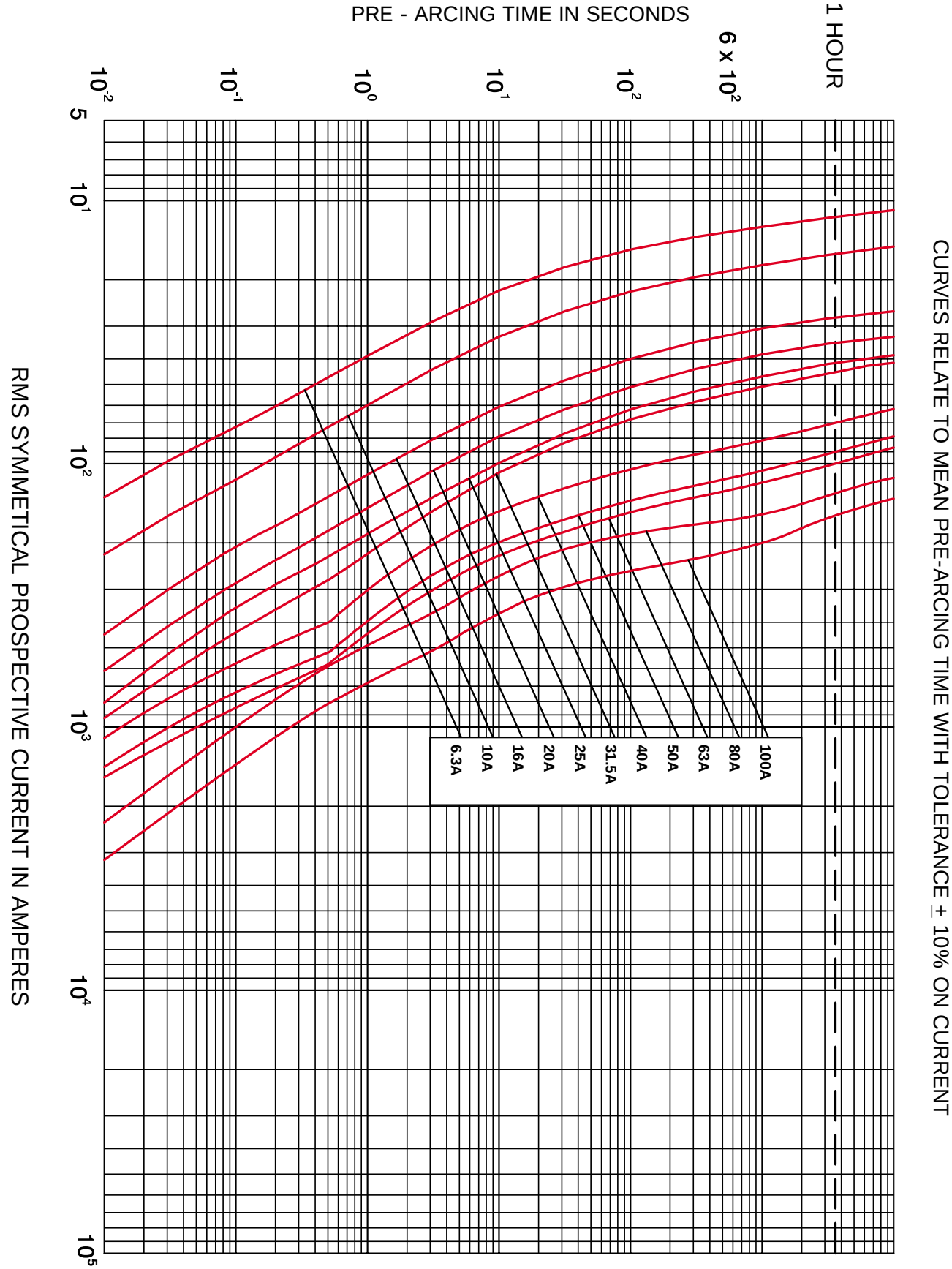
Time current characteristics for 24kV DIN Fuse Links, 'S' range, fuse types SDM, SXM and SFM



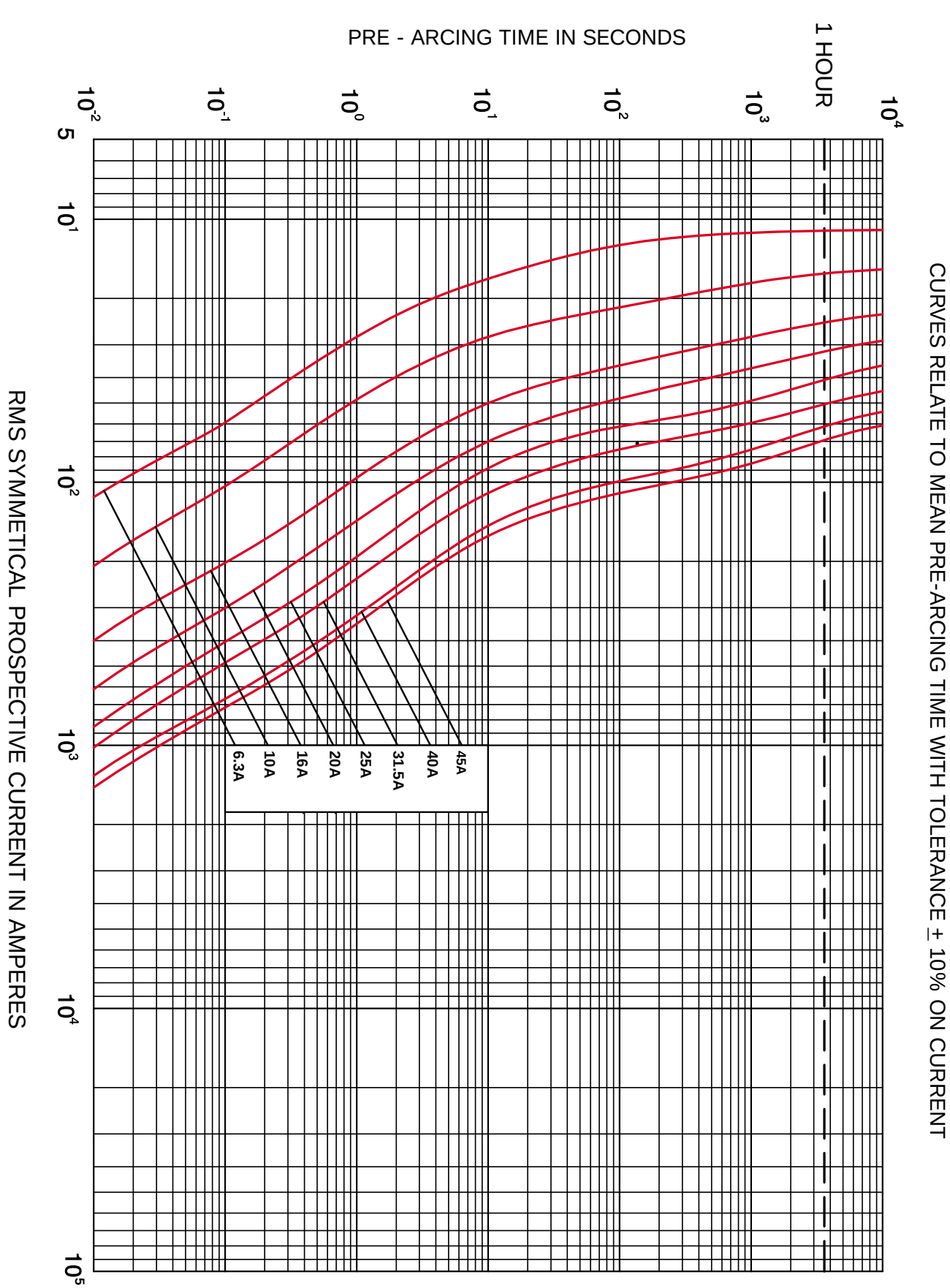
Time current characteristics for 36kV DIN Fuse Links, 'S' range, fuse types SDQ, SFQ and SXQ



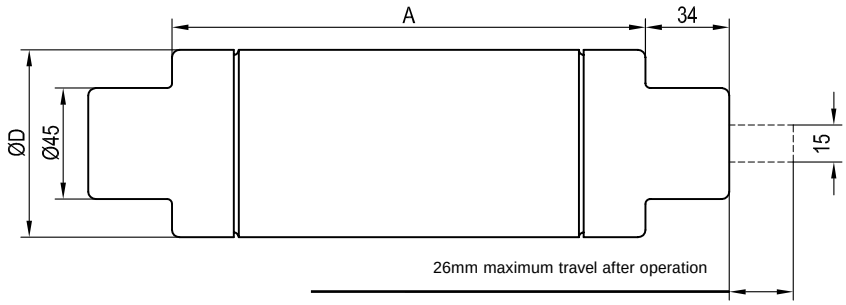
Time current characteristics for 12kV DIN Fuse Links, 'F' range, fuse types FDL, FFL and FXL



Time current characteristics for 24kV DIN Fuse Links, 'F' range, fuse types FDM and FFM



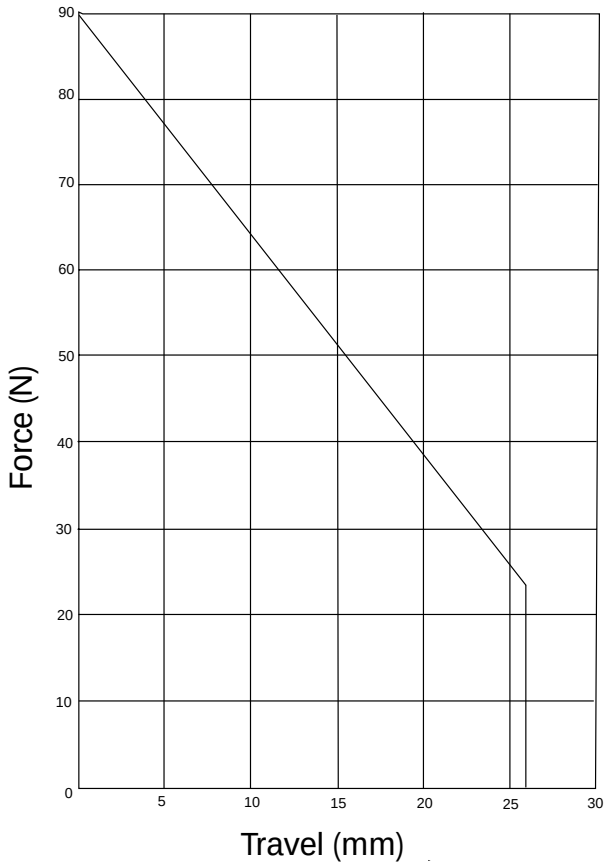
Striker characteristics



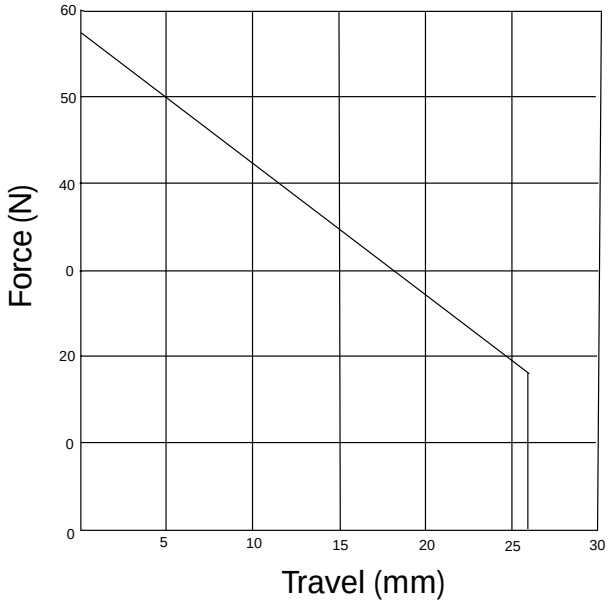
PRODUCT CODE	A	D
ADOSJ	192	51
SDOSJ	192	51
ADLSJ	292	51
FDLSJ	292	51
SDLSJ	292	51
FDMSJ	442	51
SDMSJ	442	51
SDQSJ	537	51
SFOSJ	192	76
AILSJ	292	76
FFLSJ	292	76
SFLSJ	292	76
SKLSJ	292	76
AIMSJ	442	76
FFMSJ	442	76
SFMSJ	442	76
SKMSJ	442	76
SFQSJ	537	76
SXLSJ	292	88
SXMSJ	442	88
SXQSJ	537	88
FXLSJ	292	88

- Please refer to the ‘how to order’ page 61 of this catalogue for further details of how ordering codes are formatted

E = Spring Striker 80N to IEC 60282-1 designation ‘medium’



S = Spring Striker 50N to DIN 43625 and IEC 60282-1 designation ‘medium’



General guide to the selection of DIN Fuse Links for use in the primary circuit of three phase transformers

For HV DIN Fuse Links type SXLSJ, SDLSJ, SFLSJ, SKLSJ, SDMSJ, SFMSJ, SXMSJ SDQSJ, SFQSJ. Selection guide using LV Fuse Links operating class gG/gL on low voltage side for individual cable exit protection.

Selection Table for Back-up Fuse Links

Tranformer Rating	Transformer Primary Voltage					
	10 (kV)		20 (kV)		30 (kV)	
	Rated Current of the High Voltage Fuse Link		Rated Current of the High Voltage Fuse Link		Rated Current of the High Voltage Fuse Link	
(kVA)	Min	Max	Min	Max	Min	Max
50	6.3	10	6.3	6.3	3.15	3.15
100	16	16	6.3	16	6.3	10
125	16	25	10	16	6.3	10
160	16	31.5	10	16	6.3	10
200	20	31.5	16	20	10	16
250	25	50	16	25	10	16
315	31.5	63	20	31.5	16	16
400	40	80	20	40	16	25
500	50	80	25	50	16	31.5
630	63	100	31.5	50	20	40
800	80	125	40	50	25	40
1000	100	125	50	71	31.5	50
1250	125	200	63	100	40	50
1600	160	200	71	100	50	63
2000	200	200	100	160	63	63

For HV DIN Fuse Links type SXLSJ, SDLSJ, SFLSJ, SKLSJ, SDMSJ, SFMSJ, SXMSJ SDQSJ, SFQSJ. Selection guide using LV Fuse Links operating class gG/gL on the low voltage side for overload protection of the transformer.

Selection Table for Back-up Fuse Links

Tranformer Rating	Transformer Primary Voltage						Low Voltage
	10 (kV)		20 (kV)		30 (kV)		NH Fuse Size
	Rated Current of the High Voltage Fuse Link		Rated Current of the High Voltage Fuse Link		Rated Current of the High Voltage Fuse Link		gG/gL
(kVA)	Min	Max	Min	Max	Min	Max	(A)
50	10	10	6.3	6.3	3.15	3.15	80
100	16	16	10	16	6.3	10	125
125	20	25	10	16	6.3	10	160
160	25	31.5	16	16	10	10	200
200	31.5	31.5	16	20	16	16	250
250	40	50	20	25	16	16	315
315	50	63	25	31.5	16	20	400
400	63	80	31.5	40	20	25	500
500	80	80	40	50	25	31.5	630
630	100	100	50	50	31.5	40	800
800	125	125	50	50	40	40	1000
1000	125	125	63	71	50	50	1250

Selection of these HV fuse links has been based on the following:

1. The fuse link should withstand transformer magnetising inrush currents, taken as 12 times full load current for 0.1 seconds.
2. The fuse link should discriminate with the rating of secondary fuse link stated or where only individual cable exit protection exists, the highest rating likely to be used.
3. The fuse link should operate within 2 seconds for transformers complying with IEC60076 - 5 in respect of impedance, voltage and short circuit withstand current.
4. The fuse link should operate reasonably quickly in the event of a transformer internal fault, or an earth fault in the secondary terminal zone of the transformer.
5. In the case where there is no secondary fuse link for overload protection, the minimum recommended HV fuse link rating applies to the use of fuse links in encapsulated enclosures where permissible continuous overload is generally limited to 20% of transformer full load current. However if greater overload currents are permissible a higher rating of fuse link may be required. Where the fuse link is used in open air or conditions of unrestricted ventilation a higher permissible overload may be possible.
6. In most cases more than one rating of HV fuse link is recommended for a particular transformer size. Choice of fuse link will then depend on which fuse offers the best protection e.g. having one fuse for several transformer sizes.

Recommendations for other voltages are available on request.

General guide to the selection of DIN Fuse Links for use in the primary circuit of three phase transformers

For HV DIN fuse links type SXLSJ, SDLSJ, SFLSJ, SKLSJ, SDMSJ, SFMSJ, SXMSJ SDQSJ, SFQSJ. Selection guide according to DIN VDE 0670 part 402 using LV fuse links operating class gTr on low voltage side for overload protection of the transformer.

Selection Table for Back-up Fuse Links

Tranformer Rating	Transformer Primary Voltage						Low Voltage
	10 (kV)		20 (kV)		30 (kV)		NH Fuse Size
	Rated Current of the High Voltage Fuse Link		Rated Current of the High Voltage Fuse Link		Rated Current of the High Voltage Fuse Link		gTr
(kVA)	Min	Max	Min	Max	Min	Max	(A)
100	16	16	10	10	6.3	6.3	100
125	16	16	10	10	10	10	125
160	20	25	16	16	10	10	160
200	25	31.5	16	16	16	16	200
250	31.5	40	16	25	16	20	250
315	40	50	25	25	20	25	315
400	50	63	25	31.5	25	25	400
500	63	80	31.5	40	25	31.5	500
630	80	100	40	50	31.5	40	630
800	100	125	63	63	40	50	800
1000	125	160	63	80	40	50	1000

For HV DIN fuse links type FDLSJ, FFLSJ, FXLSJ, FDMSJ, FFMSJ. Selection guide using LV fuse links operating class gG/gL on low voltage side for individual cable exit protection.

Selection Table for Full Range Fuse Links

Tranformer Rating	Transformer Primary Voltage			
	10 (kV)		20 (kV)	
	Rated Current of the High Voltage Fuse Link		Rated Current of the High Voltage Fuse Link	
(kVA)	Min	Max	Min	Max
50	6.3	10	6.3	6.3
100	10	20	6.3	10
125	16	25	6.3	16
160	16	31.5	10	16
200	20	40	10	20
250	25	50	16	25
315	31.5	63	16	31.5
400	40	80	20	40
500	50	100	25	45
630	63	100	31.5	45
800	80	100	40	45
1000	100	100	45	45

Selection of these HV fuse links has been based on the following:

1. The fuse link should withstand transformer magnetising inrush currents, taken as 12 times full load current for 0.1 seconds.
2. The fuse link should discriminate with the rating of secondary fuse link stated or where only individual cable exit protection exists, the highest rating likely to be used.
3. The fuse link should operate within 2 seconds for transformers complying with IEC60076 - 5 in respect of impedance, voltage and short circuit withstand current.
4. The fuse link should operate reasonably quickly in the event of a transformer internal fault, or an earth fault in the secondary terminal zone of the transformer.
5. In the case where there is no secondary fuse link for overload protection, the minimum recommended HV fuse link rating applies to the use of fuse links in encapsulated enclosures where permissible continuous overload is generally limited to 20% of transformer full load current. However if greater overload currents are permissible a higher rating of fuse link may be required. Where the fuse link is used in open air or conditions of unrestricted ventilation a higher permissible overload may be possible.
6. In most cases more than one rating of HV fuse link is recommended for a particular transformer size. Choice of fuse link will then depend on which fuse offers the best protection e.g. having one fuse for several transformer sizes.

Recommendations for other voltages are available on request.

General guide to the selection of DIN Fuse Links for use in the primary circuit of three phase transformers

For HV DIN fuse links type FDLSJ, FFLSJ, FXLSJ, FDMSJ, FFMSJ. Selection guide using LV fuse links operating class gG/gL on low voltage side for overload protection of the transformer.

Selection Table for Full Range Fuse Links

Tranformer Rating	Transformer Primary Voltage				Low Voltage
	10 (kV)		20 (kV)		NH Fuse Size
	Rated Current of the High Voltage Fuse Link		Rated Current of the High Voltage Fuse Link		gG/gL
(kVA)	Min	Max	Min	Max	(A)
50	6.3	6.3	6.3	6.3	80
100	10	10	10	10	125
125	16	16	10	10	160
160	16	20	16	16	200
200	20	31.5	16	16	250
250	31.5	40	16	20	315
315	40	40	20	20	400
400	40	63	25	31.5	500
500	50	63	31.5	40	630
630	100	100	40	45	800
800	100	100	-	-	1000

For fuse links type FDLSJ, FFLSJ, FXLSJ, FDMSJ, FFMSJ. Selection guide according to DIN VDE O670 part 402 using LV fuse links operating class gTr on low voltage side for overload protection of the transformer.

Selection Table for Full Range Fuse Links

Tranformer Rating	Transformer Primary Voltage				Low Voltage
	10 (kV)		20 (kV)		NH Fuse Size
	Rated Current of the High Voltage Fuse Link		Rated Current of the High Voltage Fuse Link		gTr
(kVA)	Min	Max	Min	Max	(kVA)
100	10	20	6.3	10	100
125	16	25	10	16	125
160	16	31.5	10	16	160
200	20	40	16	20	200
250	25	50	20	25	250
315	40	63	20	31.5	315
400	40	80	25	40	400
500	50	100	31.5	45	500
630	80	100	40	45	630
800	100	100	45	45	800
1000	100	100	-	-	1000

Selection of these HV fuse links has been based on the following:

1. The fuse link should withstand transformer magnetising inrush currents, taken as 12 times full load current for 0.1 seconds.
2. The fuse link should discriminate with the rating of secondary fuse link stated or where only individual cable exit protection exists, the highest rating likely to be used.
3. The fuse link should operate within 2 seconds for transformers complying with IEC60076 - 5 in respect of impedance, voltage and short circuit withstand current.
4. The fuse link should operate reasonably quickly in the event of a transformer internal fault, or an earth fault in the secondary terminal zone of the transformer.
5. In the case where there is no secondary fuse link for overload protection, the minimum recommended HV fuse link rating applies to the use of fuse links in encapsulated enclosures where permissible continuous overload is generally limited to 20% of transformer full load current. However if greater overload currents are permissible a higher rating of fuse link may be required. Where the fuse link is used in open air or conditions of unrestricted ventilation a higher permissible overload may be possible.
6. In most cases more than one rating of HV fuse link is recommended for a particular transformer size. Choice of fuse link will then depend on which fuse offers the best protection e.g. having one fuse for several transformer sizes.

Recommendations for other voltages are available on request.