

Limitor[®] - aSJB/D Back-up Fuses

3,6kV to 12kV - with striker

HIGH VOLTAGE IEC FUSES

DIN HV BACK-UP FUSES FOR MOTORS



Mersen HV fuse-links have been used for reliable protection in high-voltage switchgear and control gear and high-voltage systems for decades.

Mersen HV fuse link for motor protection is specially designed to protect HV motors against the effect of short circuit current and support repeated peak currents due motor starting.

Mersen uses the best materials: Caps are in silver-plated brass and body is in melamine fiber glass.

As defined in the IEC 60644 the coefficient K is 0.51.

TECHNICAL DATA

	3,6kV 192mm	3,6kV 292mm	7,2kV 292mm	7,2kV 442mm	12kV 442mm
Rated current	32 ... 315 A	100 ... 430 A	32 ... 250 A	100 ... 400 A	32 ... 250 A
Rated voltage AC	3.6 kV	3.6 kV	7.2 kV	7.2 kV	12 kV
Breaking capacity I ₁	60 kA	60 kA	50 kA	50 kA	50 kA
Peak arc voltage	6.8 kV	6.8 kV	13 kV	15 kV	20 kV
Package	1	1	1	1	1

FEATURES & BENEFITS

- High speed switching
- Voltage drive
- Low inductance module structure
- Energy efficiency
- Back-up fuse-links
- High breaking capacity
- High current limitation
- Low power losses
- Striker 20N / 20 mm

APPLICATIONS

- HV motor protection
- HV motor pump protection
- For indoor use
- Operating temperature -25°C to +40°C

STANDARDS

- IEC 60282-1
- IEC 60644
- DIN 43625



Limitor® - aSJB/D Back-up Fuses

3,6kV to 12kV - with striker

PRODUCT RANGE

Rated voltage 3,6kV, length 192mm



45ASB36V32P-1

Catalog number	Item number	Rated current I_n	Minimum breaking current $I_3 = I_{min}$	Power dissipation at $0.7 \times I_n$	Operating I^2t at Rated Voltage	Package	Weight
Ø d=50,8mm							
45ASB36V32P-1	S076468	32 A	180 A	6 W	4 kA ² s	3	1.9 kg
45ASB36V50P-1	T076469	50 A	260 A	9 W	9 kA ² s	3	1.9 kg
45ASB36V63P-1	V076470	63 A	310 A	11 W	15 kA ² s	3	1.9 kg
45ASB36V80P-1	W076471	80 A	400 A	13 W	35 kA ² s	3	1.9 kg
45ASB36V100P-1	X076472	100 A	490 A	15 W	60 kA ² s	3	1.9 kg
45ASB36V125P-1	Y076473	125 A	600 A	20 W	95 kA ² s	3	1.9 kg
Ø d=67mm							
45ASB36V160P-1	Z076474	160 A	800 A	27 W	160 kA ² s	3	1.9 kg
45ASB36V200P-1	A076475	200 A	1000 A	32 W	340 kA ² s	3	1.9 kg
Ø d=76mm							
45ASB36V250P-1	B076476	250 A	1200 A	35 W	540 kA ² s	3	2.5 kg
Ø d=88mm							
45ASB36V315P-1	C076477	315 A	1600 A	41 W	1000 kA ² s	3	3.4 kg

Rated voltage 3,6kV, length 292mm



45ASB36V200P-2



45ASB36V430P-2

Catalog number	Item number	Rated current I_n	Minimum breaking current $I_3 = I_{min}$	Power dissipation at $0.7 \times I_n$	Operating I^2t at Rated Voltage	Package	Weight
Ø d=50,8mm							
45ASB36V100P-2	N075521	100 A	700 A	16 W	88 kA ² s	3	1.6 kg
45ASB36V125P-2	P075522	125 A	830 A	20 W	160 kA ² s	3	1.6 kg
45ASB36V160P-2	Q075523	160 A	1000 A	27 W	280 kA ² s	3	1.6 kg
Ø d=67mm							
45ASB36V200P-2	R075524	200 A	1250 A	33 W	370 kA ² s	3	2.7 kg
45ASB36V250P-2	S075525	250 A	1750 A	37 W	720 kA ² s	3	2.7 kg
Ø d=76mm							
45ASB36V315P-2	E075582	315 A	2100 A	45 W	1200 kA ² s	3	3.3 kg
45ASB36V350P-2	F075583	350 A	2400 A	47 W	1700 kA ² s	3	3.3 kg
Ø d=88mm							
45ASB36V430P-2	G075584	430 A	3300 A	51 W	3200 kA ² s	3	4.3 kg

Rated voltage 7,2kV, length 292mm



45ASB72V125P-2

Catalog number	Item number	Rated current I_n	Minimum breaking current $I_3 = I_{min}$	Power dissipation at $0.7 \times I_n$	Operating I^2t at Rated Voltage	Package	Weight
Ø d=50,8mm							
45ASB72V32P-2	J078162	32 A	180 A	10 W	7 kA ² s	3	1.6 kg
45ASB72V50P-2	K078163	50 A	220 A	14 W	16 kA ² s	3	1.6 kg
45ASB72V63P-2	L078164	63 A	300 A	18 W	26 kA ² s	3	1.6 kg
45ASB72V80P-2	M078165	80 A	380 A	20 W	60 kA ² s	3	1.6 kg
45ASB72V100P-2	N078166	100 A	510 A	25 W	105 kA ² s	3	1.6 kg
Ø d=67mm							
45ASB72V125P-2	P078167	125 A	700 A	29 W	195 kA ² s	3	2.7 kg
45ASB72V160P-2	Q078168	160 A	840 A	37 W	340 kA ² s	3	2.7 kg
Ø d=88mm							
45ASB72V200P-2	H093709	200 A	1200 A	41 W	650 kA ² s	3	4.4 kg
45ASB72V250P-2	R078169	250 A	1600 A	49 W	1100 kA ² s	3	4.4 kg

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3,6kV to 12kV - with striker

PRODUCT RANGE

Rated voltage 7,2kV, length 442mm



45ASD72V200P-3

Catalog number	Item number	Rated current I_n	Minimum breaking current $I_3 = I_{min}$	Power dissipation at $0.7 \times I_n$	Operating I^2t at Rated Voltage	Package	Weight
Ø d=50,8mm							
45ASD72V100P-3	Y085581	100 A	500 A	30 W	78 kA ² s	3	2.2 kg
45ASD72V125P-3	Z085582	125 A	630 A	37 W	150 kA ² s	3	2.2 kg
45ASD72V160P-3	A085583	160 A	880 A	41 W	290 kA ² s	3	2.2 kg
Ø d=76mm							
45ASD72V200P-3	Q085620	200 A	1100 A	47 W	560 kA ² s	3	4.2 kg
45ASD72V250P-3	R085621	250 A	1400 A	52 W	1000 kA ² s	3	4.2 kg
Ø d=88mm							
45ASD72V315P-3	S085622	315 A	1900 A	60 W	2000 kA ² s	3	6.1 kg
45ASD72V400P-3	V085624	400 A	2700 A	69 W	4100 kA ² s	3	6.1 kg

Rated voltage 12kV, length 442mm



45ASB120V250P-3

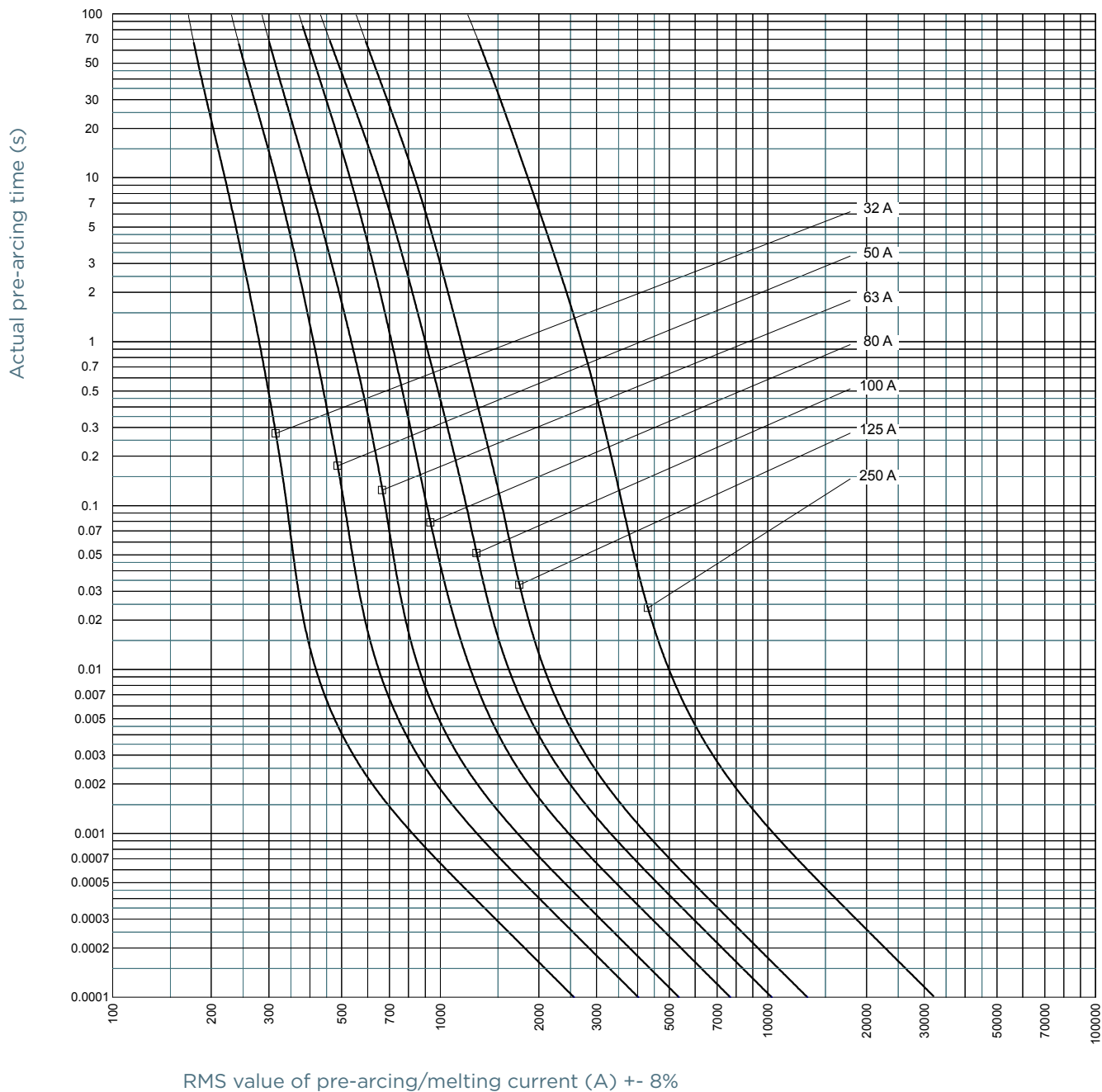
Catalog number	Item number	Rated current I_n	Minimum breaking current $I_3 = I_{min}$	Power dissipation at $0.7 \times I_n$	Operating I^2t at Rated Voltage	Package	Weight
Ø d=50,8mm							
45ASB120V32P-3	D076478	32 A	168 A	21 W	5 kA ² s	3	2.2 kg
45ASB120V50P-3	E076479	50 A	244 A	31 W	12 kA ² s	3	2.2 kg
45ASB120V63P-3	F076480	63 A	325 A	35 W	24 kA ² s	3	2.2 kg
45ASB120V80P-3	G076481	80 A	416 A	41 W	48 kA ² s	3	2.2 kg
45ASB120V100P-3	H076482	100 A	560 A	45 W	85 kA ² s	3	2.2 kg
Ø d=67mm							
45ASB120V125P-3	J076483	125 A	650 A	53 W	150 kA ² s	3	3.4 kg
45ASB120V160P-3	K076484	160 A	930 A	55 W	320 kA ² s	3	3.4 kg
Ø d=76mm							
45ASB120V200P-3	L076485	200 A	1300 A	62 W	720 kA ² s	3	4.2 kg
Ø d=88mm							
45ASB120V250P-3	M076486	250 A	1800 A	74 W	1280 kA ² s	3	6.1 kg

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3,6kV to 12kV - with striker

TIME CURRENT CHARACTERISTIC CURVES

Limitor[®]-aSJB 3,6kV 192mm

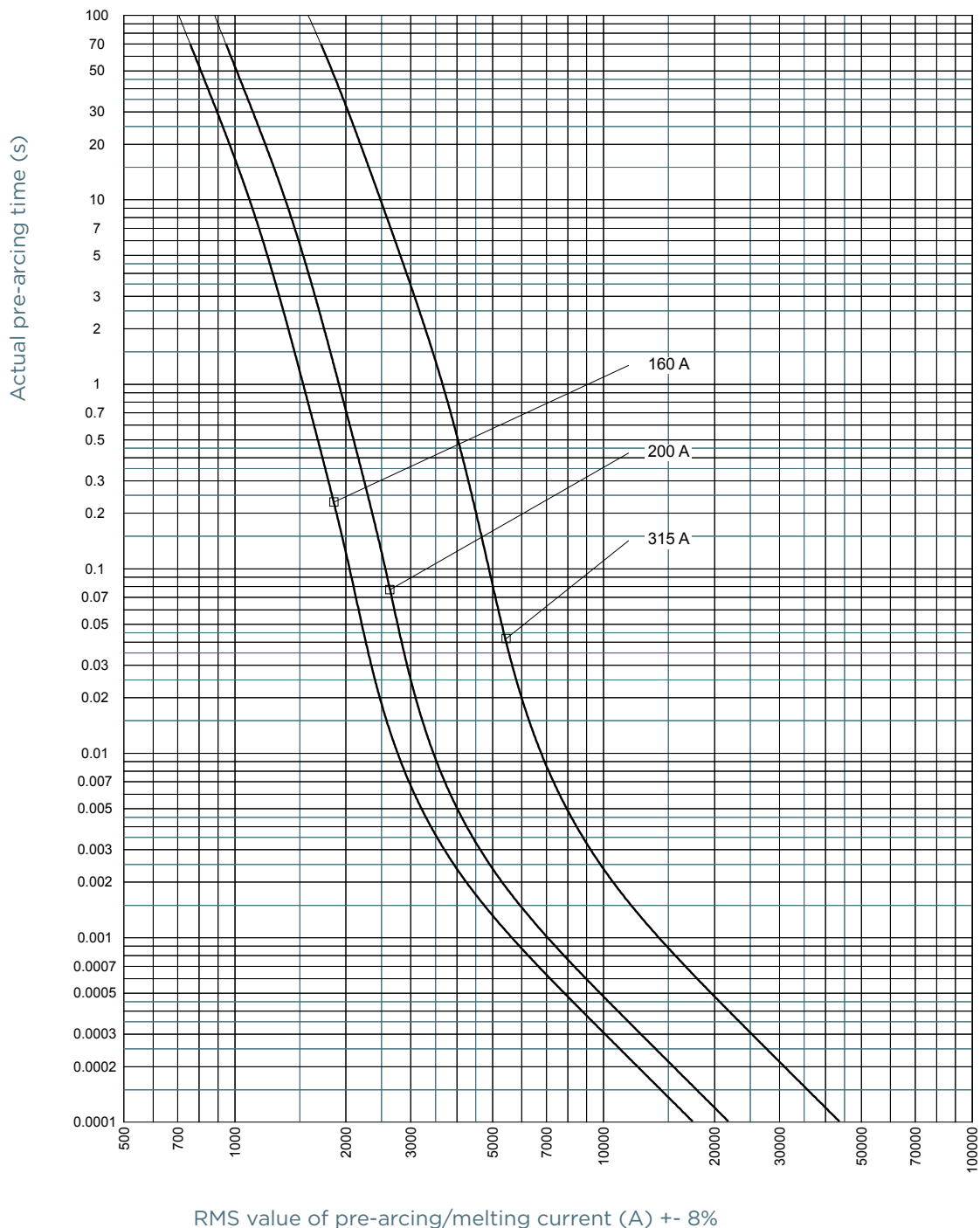


Limitor® - aSJB/D Back-up Fuses

3,6kV to 12kV - with striker

TIME CURRENT CHARACTERISTIC CURVES

Limitor®-aSJB 3,6kV 192mm

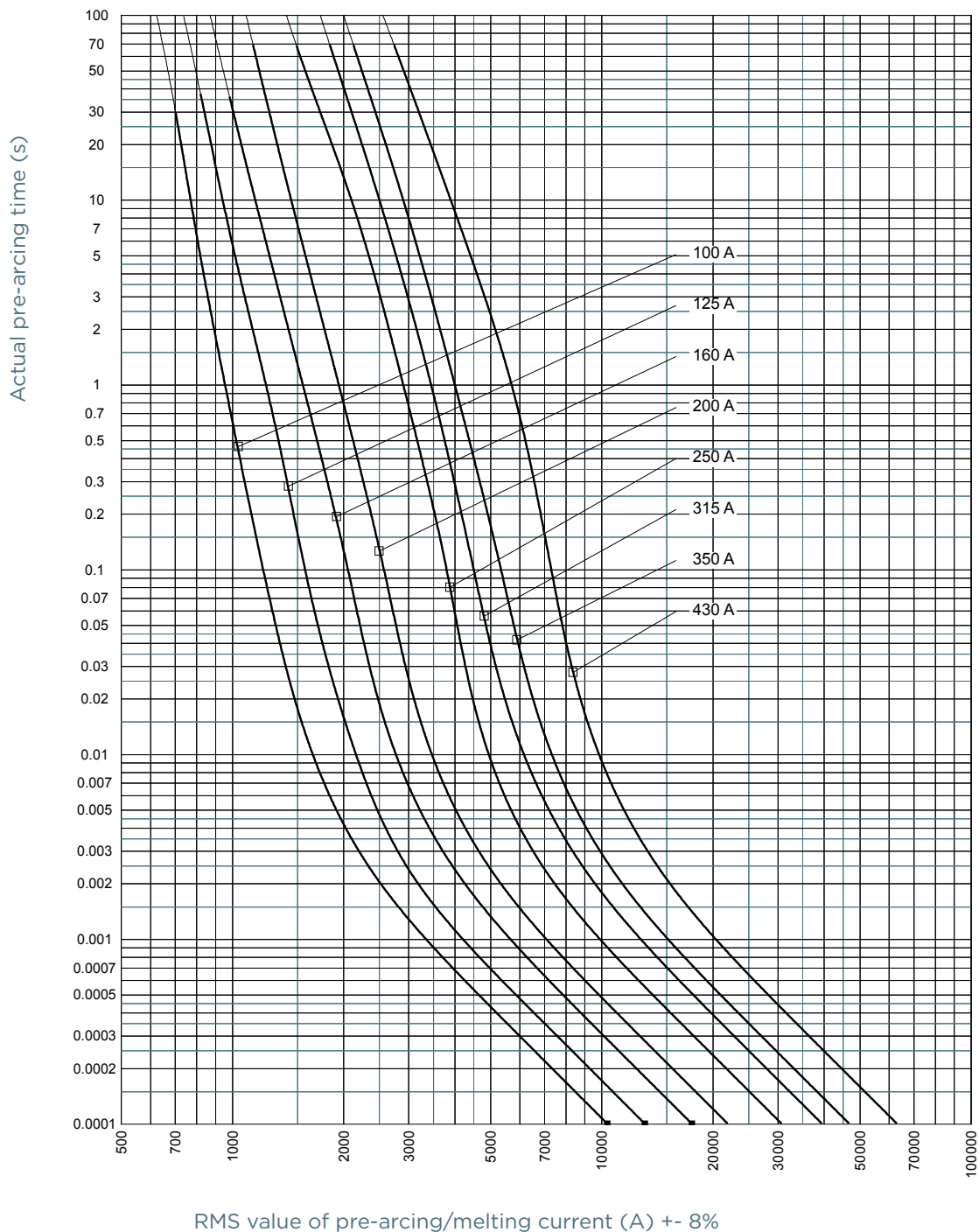


Limitor[®] - aSJB/D Back-up Fuses

3,6kV to 12kV - with striker

TIME CURRENT CHARACTERISTIC CURVES

Limitor[®]-aSJB 3,6kV 292mm

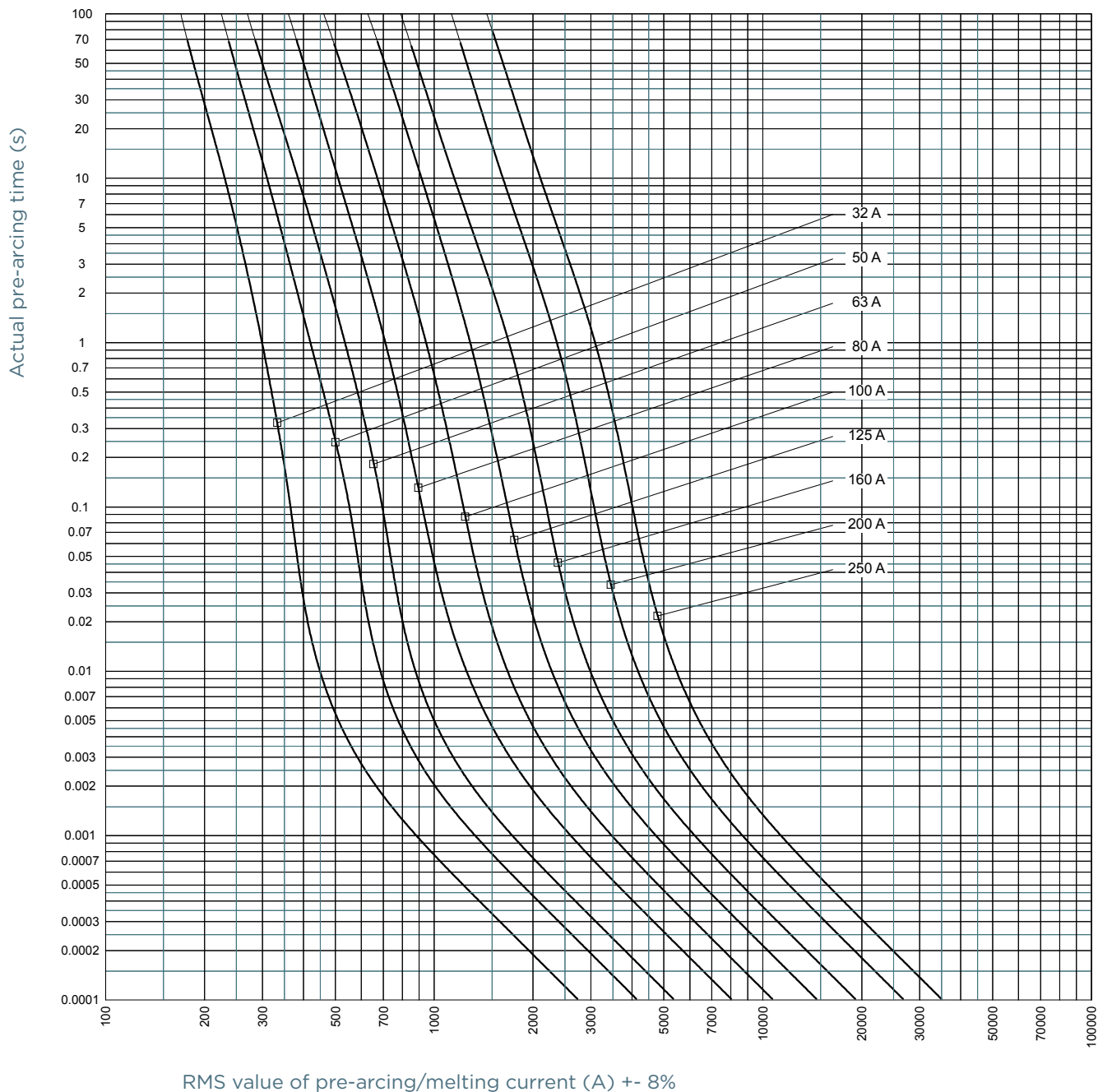


Limitor[®] - aSJB/D Back-up Fuses

3,6kV to 12kV - with striker

TIME CURRENT CHARACTERISTIC CURVES

Limitor[®]-aSJB 7,2kV 292mm

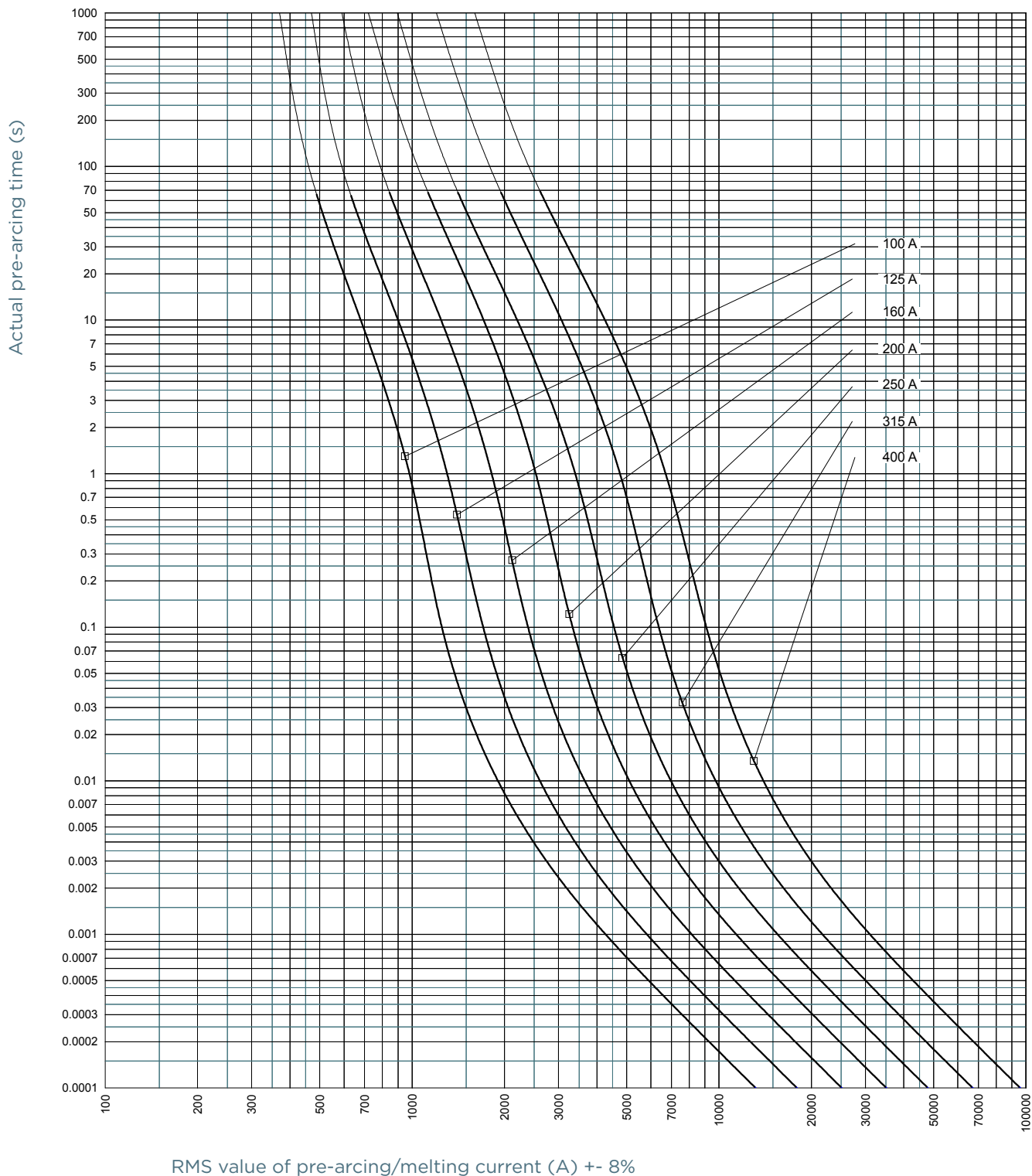


Limitor[®] - aSJB/D Back-up Fuses

3,6kV to 12kV - with striker

TIME CURRENT CHARACTERISTIC CURVES

Limitor[®]-aSJD 7,2kV 442mm

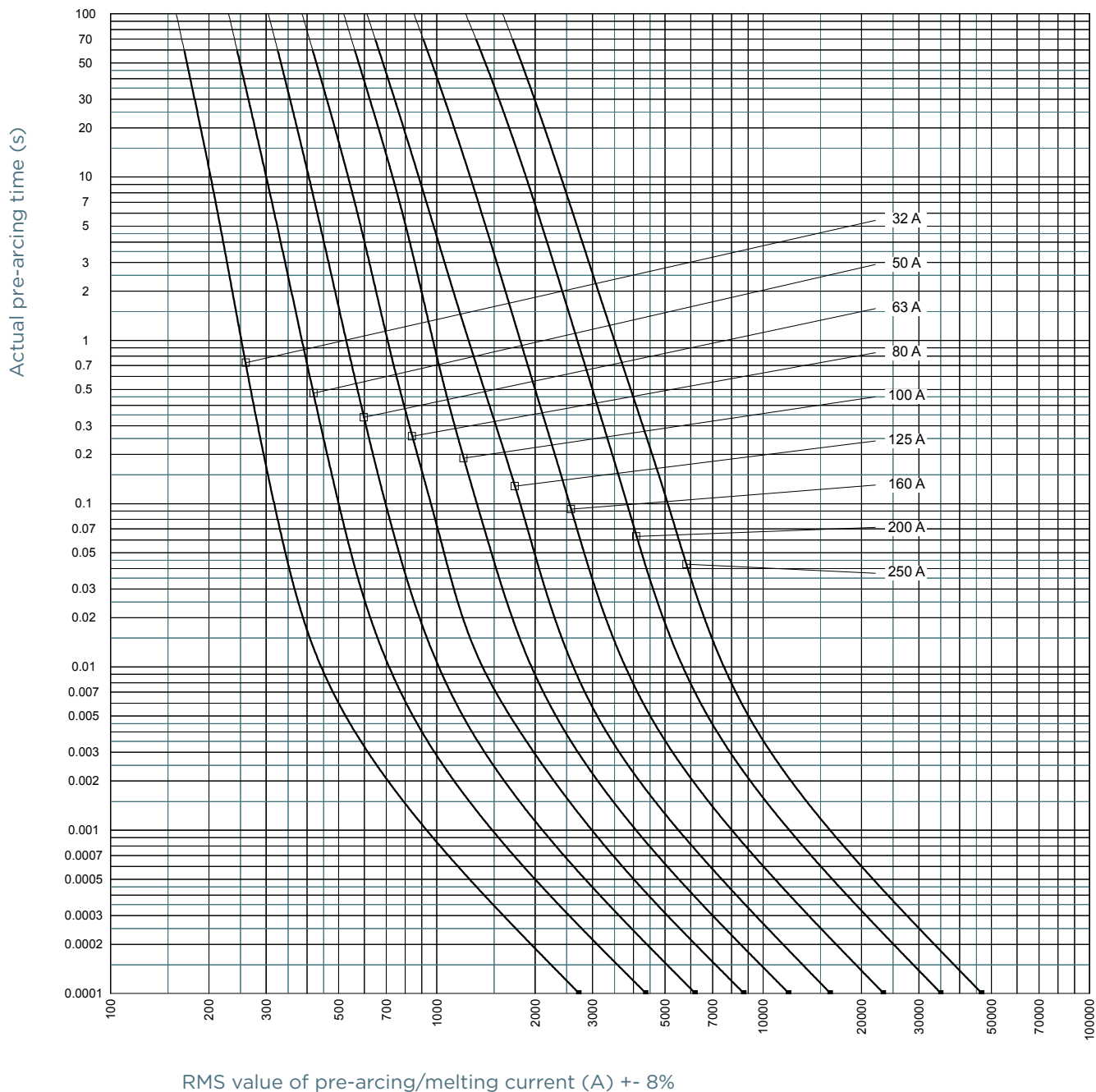


Limitor[®] - aSJB/D Back-up Fuses

3,6kV to 12kV - with striker

TIME CURRENT CHARACTERISTIC CURVES

Limitor[®]-aSJB 12kV 442mm

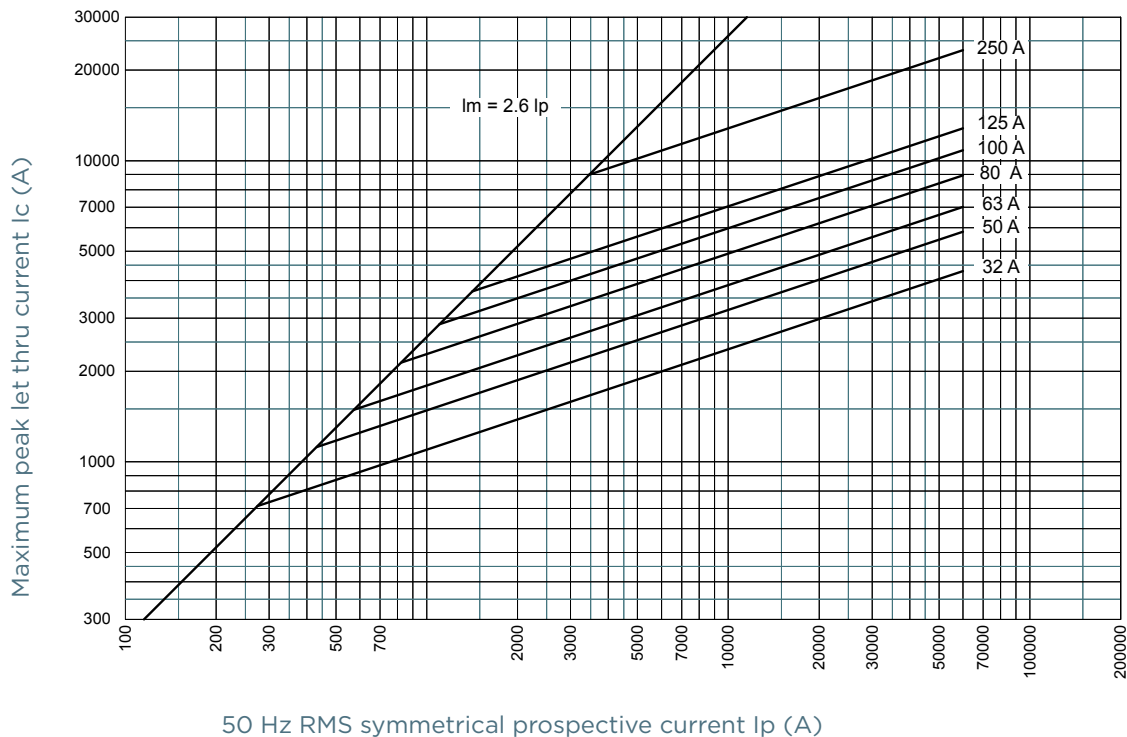


Limitor® - aSJB/D Back-up Fuses

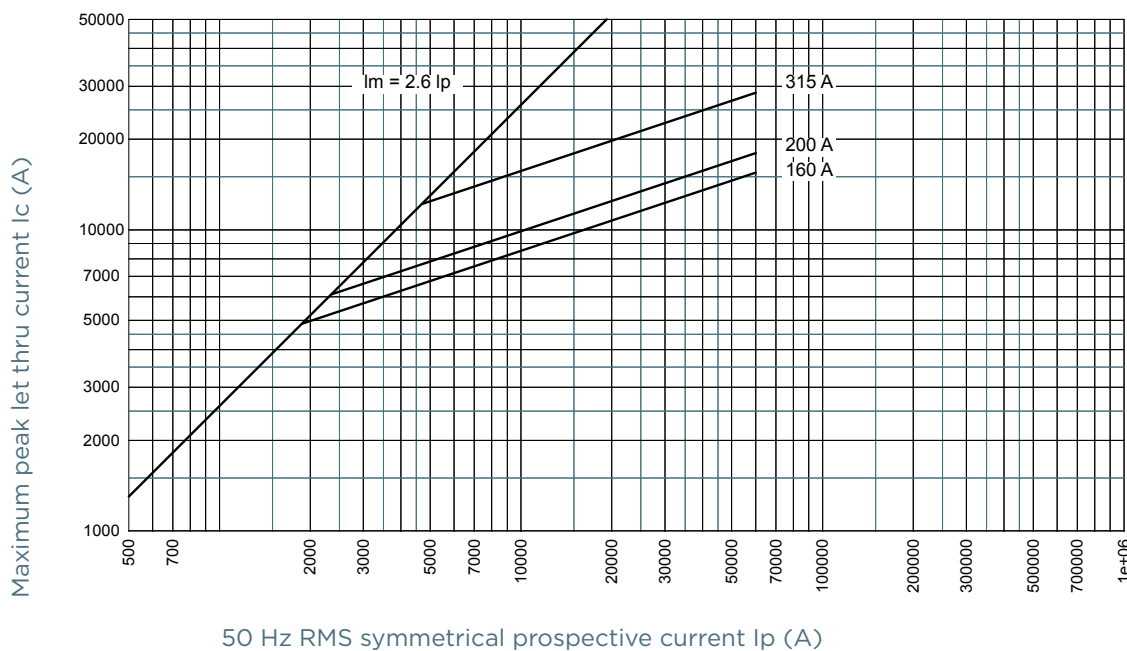
3,6kV to 12kV - with striker

CUT-OFF CURRENT CHARACTERISTIC

Limitor®-aSJB 3,6kV 192mm



Limitor®-aSJB 3,6kV 192mm

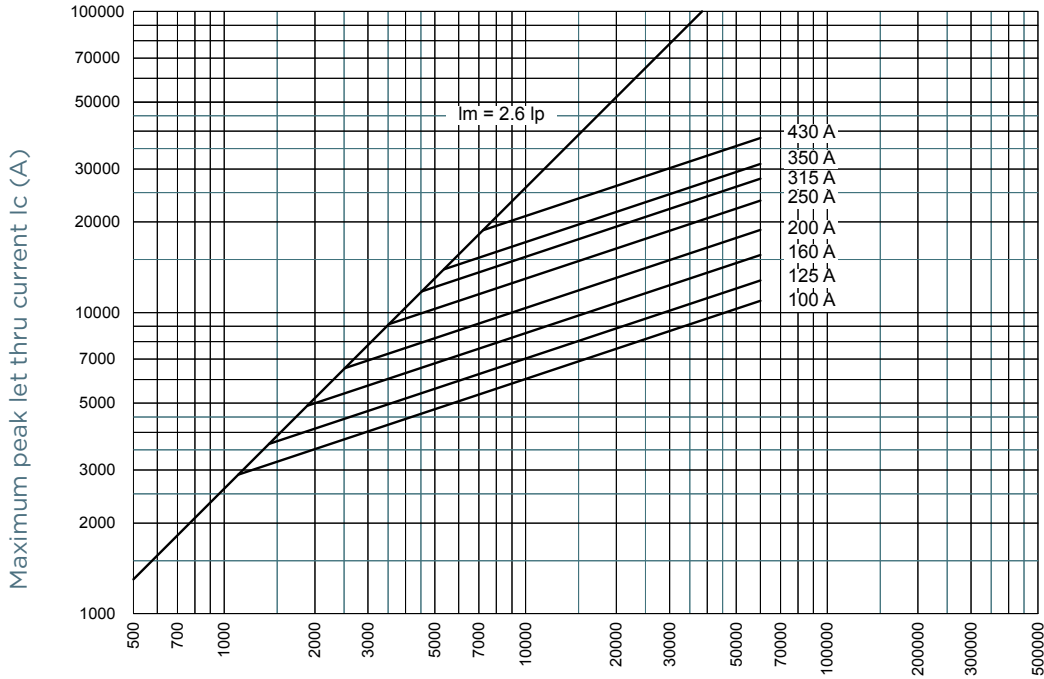


Limitor® - aSJB/D Back-up Fuses

3,6kV to 12kV - with striker

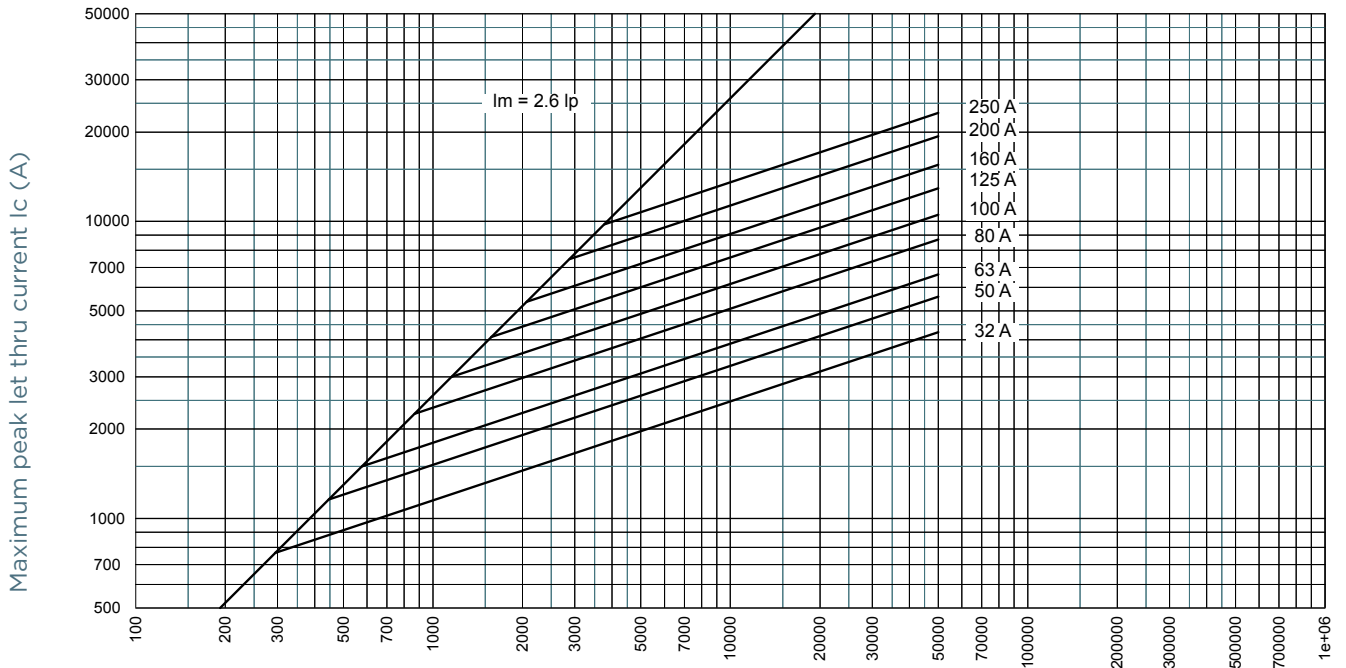
CUT-OFF CURRENT CHARACTERISTIC

Limitor®-aSJB 3,6kV 292mm



50 Hz RMS symmetrical prospective current I_p (A)

Limitor®-aSJB 7,2kV 292mm



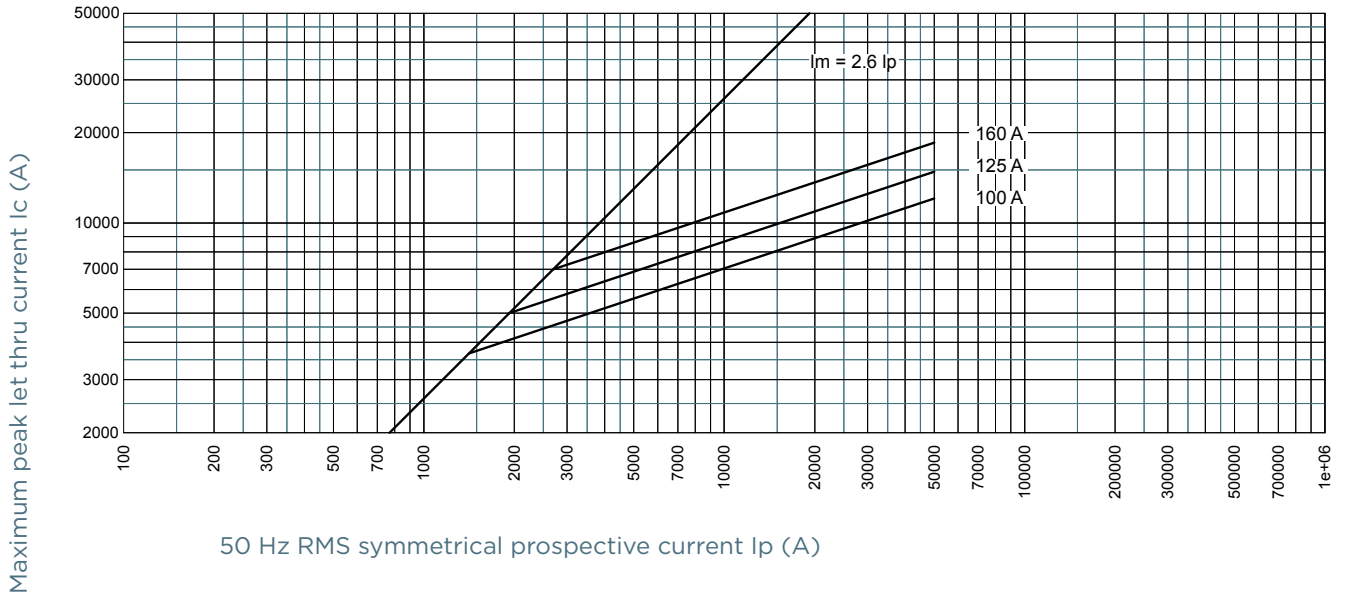
50 Hz RMS symmetrical prospective current I_p (A)

Limitor® - aSJB/D Back-up Fuses

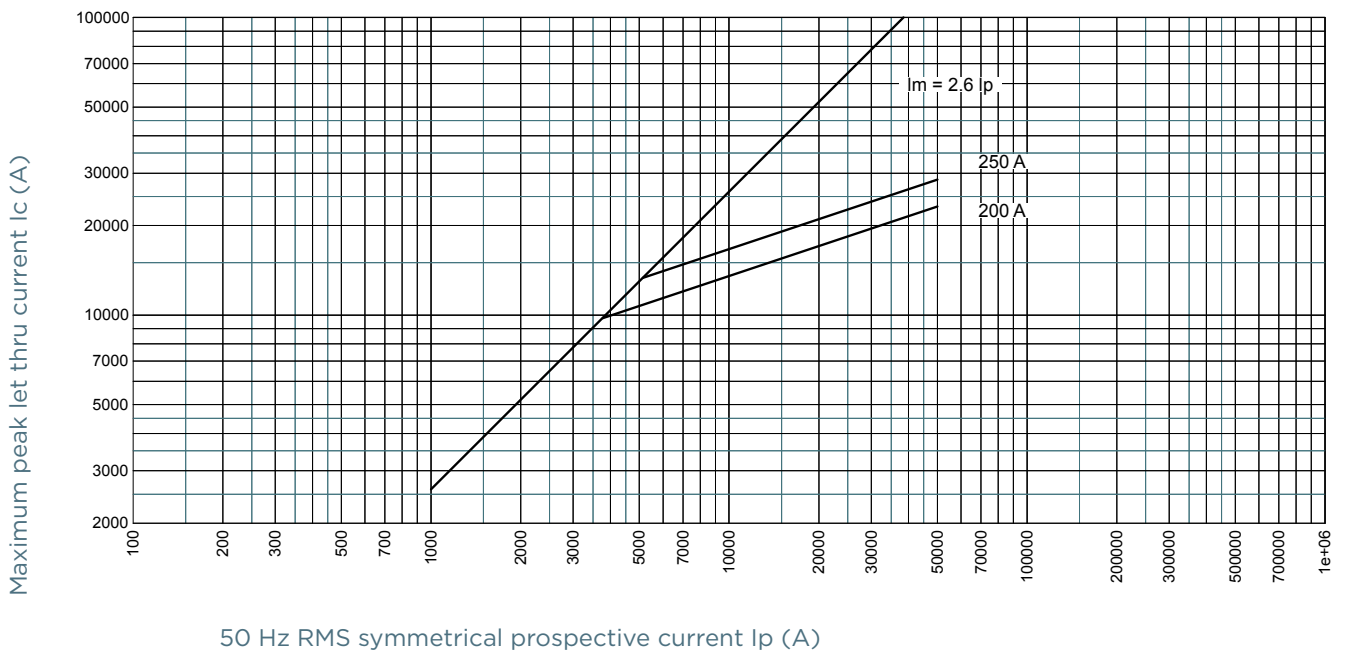
3,6kV to 12kV - with striker

CUT-OFF CURRENT CHARACTERISTIC

Limitor®-aSJD 7,2kV 442mm



Limitor®-aSJD 7,2kV 442mm

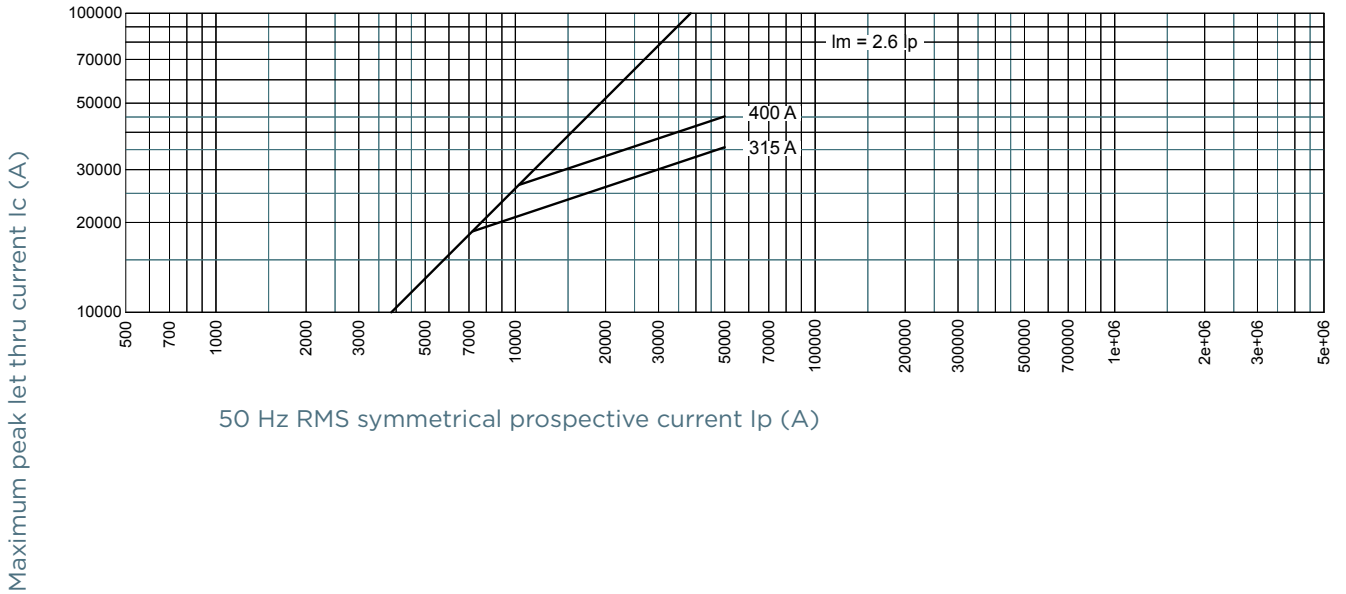


Limitor® - aSJB/D Back-up Fuses

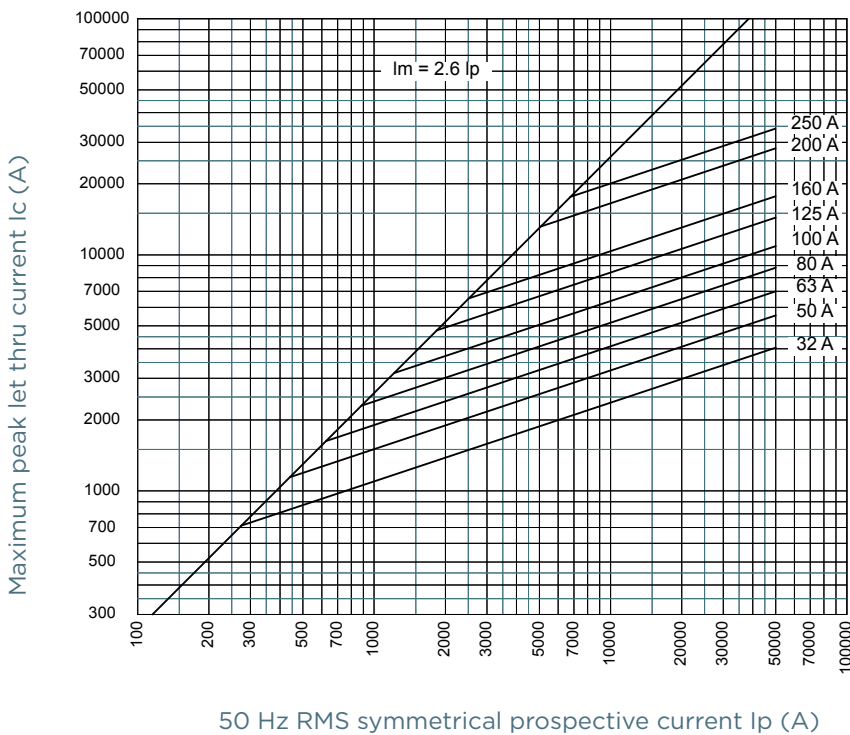
3,6kV to 12kV - with striker

CUT-OFF CURRENT CHARACTERISTIC

Limitor®-aSJD 7,2kV 442mm



Limitor®-aSJB 12kV 442mm

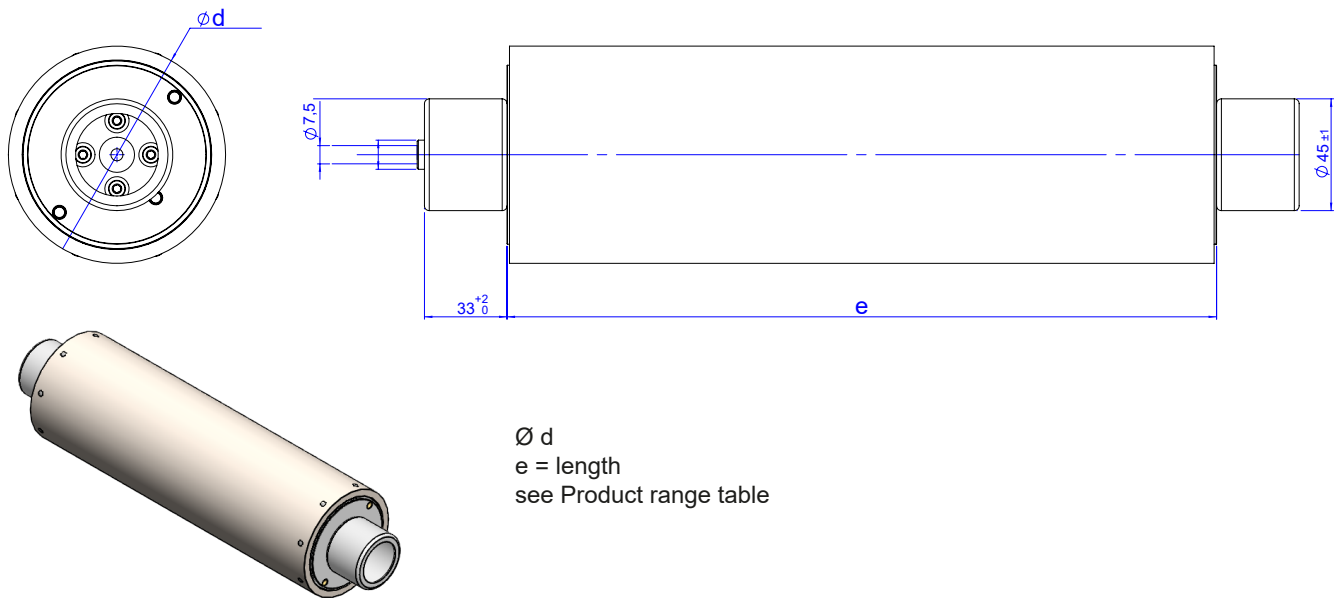


Limitor[®] - aSJB/D Back-up Fuses

3,6kV to 12kV - with striker

DIMENSIONS

IEC HV fuse-link Limitor[®] aSJB/D



Dimensions in mm

Limitor® - aSJB/D Back-up Fuses

3,6kV to 12kV - with striker

SELECTION TABLE

Motor capacity		Operating voltage of motor (kV)	Rated voltage of fuse-link (kV)	Dimension of fuse-link Ø x length	Rated current of fuse-link (A)	Dimension of fuse-link Ø x length	Rated current of fuse-link (A)	Dimension of fuse-link Ø x length	Rated current of fuse-link (A)	Dimension of fuse-link Ø x length	Rated current of fuse-link (A)
kW	HP			Run up time of motor							
				6 sec	10 sec	15 sec	30 sec				
70	95	3	3,6	45x192	32	45x192	32	45x192	32	45x192	50
		3,3	3,6	45x192	32	45x192	32	45x192	32	45x192	32
100	136	3	3,6	45x192	50	45x192	50	45x192	50	45x192	63
		3,3	3,6	45x192	50	45x192	50	45x192	50	45x192	50
		5,5	7,2	45x292	32	45x292	32	45x292	32	45x292	32
130	177	3	3,6	45x192	63	45x192	63	45x192	63	45x192	80
		3,3	3,6	45x192	63	45x192	63	45x192	63	45x192	80
		5,5	7,2	45x292	32	45x292	32	45x292	32	45x292	50
		6	7,2	45x292	32	45x292	32	45x292	32	45x292	32
180	245	3	3,6	45x192	80	45x192	80	45x192	100	45x192	100
		3,3	3,6	45x192	80	45x192	80	45x192	80	45x192	100
		5,5	7,2	45x292	50	45x292	50	45x292	50	45x292	63
		6	7,2	45x292	50	45x292	50	45x292	50	45x292	63
		6,6	7,2	45x292	32	45x292	32	45x292	50	45x292	50
220	300	3	3,6	45x192	100	45x192	100	45x192	125	45x192	125
		3,3	3,6	45x192	100	45x192	100	45x192	100	45x192	125
		5,5	7,2	45x292	63	45x292	63	45x292	63	45x292	80
		6	7,2	45x292	50	45x292	63	45x292	63	45x292	80
		6,6	7,2	45x292	50	45x292	50	45x292	63	45x292	63
250	340	3	3,6	45x192	100	45x192	125	45x192	125	45x192	160
		3,3	3,6	45x192	100	45x192	100	45x192	125	45x192	125
		5,5	7,2	45x292	63	45x292	80	45x292	80	45x292	80
		6	7,2	45x292	63	45x292	63	45x292	80	45x292	80
		6,6	7,2	45x292	63	45x292	63	45x292	63	45x292	80
		10	12	45x442	32	45x442	50	45x442	50	45x442	50
315	430	11	12	45x442	32	45x442	32	45x442	50	45x442	50
		3	3,6	45x192	160	45x192	160	45x192	160	45x192	200
		3,3	3,6	45x192	125	45x192	125	45x192	160	45x192	160
		5,5	7,2	45x292	80	45x292	80	45x292	80	45x292	100
		6	7,2	45x292	80	45x292	80	45x292	80	45x292	80
		6,6	7,2	45x292	80	45x292	80	45x292	80	45x292	80
420	570	10	12	45x442	50	45x442	50	45x442	50	45x442	63
		11	12	45x442	50	45x442	50	45x442	50	45x442	50
		3	3,6	45x192	160	45x192	200	45x192	200	45x192	250
		3,3	3,6	45x192	160	45x192	200	45x192	200	45x192	250
		5,5	7,2	45x292	100	45x292	100	45x292	125	45x292	125
		6	7,2	45x292	80	45x292	100	45x292	100	45x292	125
560	760	6,6	7,2	45x292	80	45x292	80	45x292	100	45x292	125
		10	12	45x442	63	45x442	63	45x442	63	45x442	80
		11	12	45x442	63	45x442	63	45x442	63	45x442	63
		3	3,6	45x192	250	45x192	250	45x192	250	45x192	315
		3,3	3,6	45x192	200	45x192	250	45x192	250	45x192	315
		5,5	7,2	45x292	125	45x292	160	45x292	160	45x292	160
700	950	6	7,2	45x292	125	45x292	125	45x292	125	45x292	160
		6,6	7,2	45x292	100	45x292	125	45x292	125	45x292	160
		10	12	45x442	80	45x442	80	45x442	80	45x442	100
		11	12	45x442	80	45x442	80	45x442	80	45x442	80
		3	3,6	45x192	250	45x192	315	45x192	315	45x192	315
		3,3	3,6	45x192	250	45x192	250	45x192	315	45x192	315
1000	1360	5,5	7,2	45x292	160	45x292	160	45x292	160	45x292	200
		6	7,2	45x292	125	45x292	160	45x292	160	45x292	200
		6,6	7,2	45x292	100	45x292	100	45x292	100	45x292	125
		10	12	45x442	125	45x442	125	45x442	160	45x442	160
		11	12	45x442	125	45x442	125	45x442	125	45x442	160
		3	3,6	45x192	350	45x192	350	45x192	350	45x192	430
1300	1770	3,3	3,6	45x192	315	45x192	350	45x192	350	45x192	430
		5,5	7,2	45x292	200	45x292	200	45x292	250	45x292	250
		6	7,2	45x292	200	45x292	200	45x292	250	45x292	250
		6,6	7,2	45x292	200	45x292	200	45x292	200	45x292	250
		10	12	45x442	125	45x442	125	45x442	160	45x442	160
		11	12	45x442	125	45x442	125	45x442	125	45x442	160
1600	2175	3	3,6	45x192	430	45x192	430	*2x45x292	500	*2x45x292	630
		3,3	3,6	45x192	430	45x192	430	45x292	430	*2x45x292	630
		5,5	7,2	45x292	250	45x292	250	45x442	315	45x442	315
		6	7,2	45x292	250	45x292	250	45x292	250	45x442	315
		6,6	7,2	45x292	200	45x292	250	45x292	250	45x442	315
		10	12	45x442	160	45x442	160	45x442	160	45x442	200
2000	2720	11	12	45x442	160	45x442	160	45x442	160	45x442	200
		5,5	7,2	45x292	315	45x292	315	45x442	400	45x442	400
		6	7,2	45x292	250	45x442	315	45x442	315	45x442	400
		6,6	7,2	45x292	250	45x292	250	45x442	315	45x442	400
		10	12	45x442	200	45x442	200	45x442	200	45x442	250
		11	12	45x442	200	45x442	200	45x442	200	45x442	250
2500	3400	6	7,2	45x442	400	45x442	400	*2x45x442	500	*2x45x442	630
		6,6	7,2	45x442	315	45x442	400	45x442	400	*2x45x442	630
		10	12	45x442	250	45x442	250	45x442	250	45x442	400
		11	12	45x442	200	45x442	200	45x442	250	*2x45x442	320

*Two fuse-links in parallel. Rating fuse-link is 160A, 250A or 315A.
High Voltage IEC Fuses / DS-TypeASJB/D-09-0426_EN