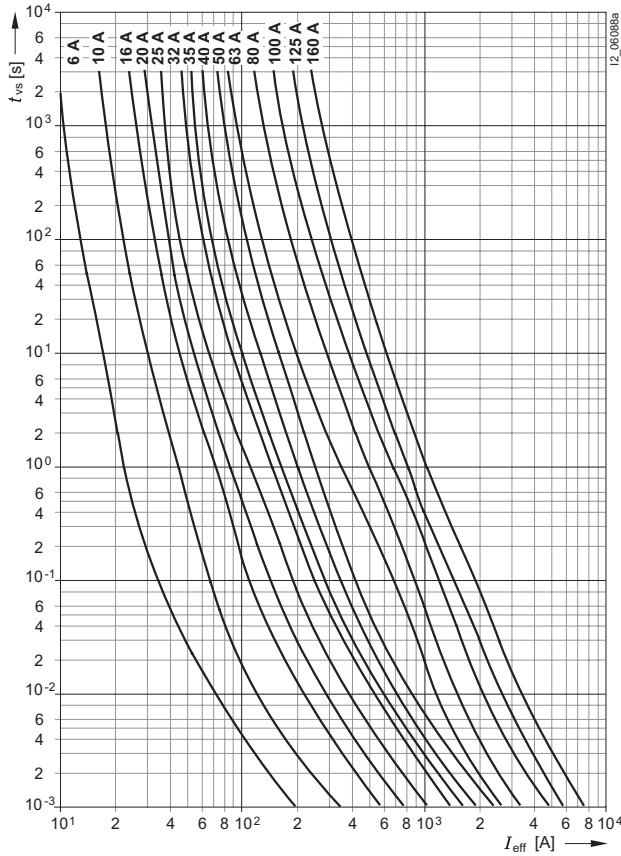


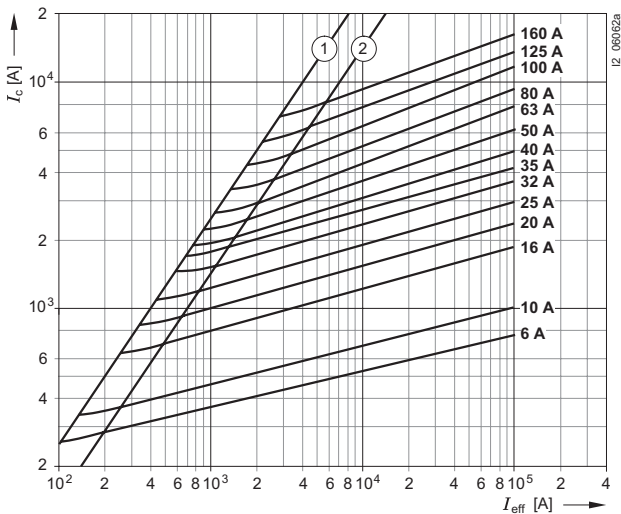
Series 3NA3 0

Size: 0
Operational class: gG
Rated voltage: 500 V AC/440 V DC
Rated current: 6 ... 160 A

Time/current characteristic curves diagram

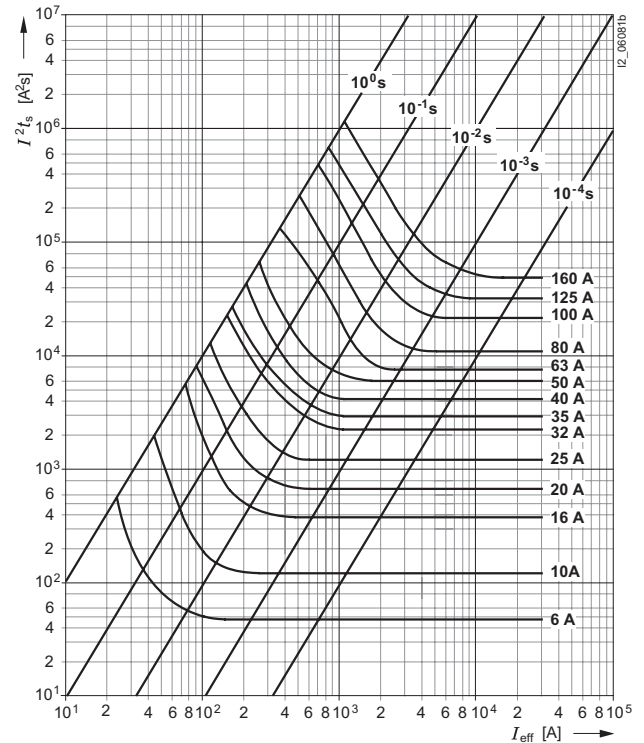


Current limitation diagram



- ① Peak short-circuit current with largest DC component
- ② Peak short-circuit current without DC component

Melting I^2t_s values diagram



Type	I_n	P_v	$\Delta\vartheta$	I^2t_s	
	A	W	K	1 ms A ² s	4 ms A ² s
3NA3 001	6	1.5	6	46	50
3NA3 003	10	1	9	120	130
3NA3 005	16	1.9	11	370	420
3NA3 007	20	2.3	13	670	750
3NA3 010	25	2.7	15	1200	1380
3NA3 012	32	3	13	2200	2400
3NA3 014	35	3	17	3000	3300
3NA3 017	40	3.4	17	4000	4500
3NA3 020	50	4.5	24	6000	6800
3NA3 022	63	5.8	27	7700	9800
3NA3 024	80	7	34	12000	16000
3NA3 030	100	8.2	37	24000	30600
3NA3 032	125	10.2	38	36000	50000
3NA3 036	160	13.5	44	58000	85000

Type	I^2t_a	I^2t_a	I^2t_a
	230 V AC A ² s	400 V AC A ² s	500 V AC A ² s
3NA3 001	80	110	150
3NA3 003	180	265	370
3NA3 005	580	750	1000
3NA3 007	1000	1370	1900
3NA3 010	1800	2340	3300
3NA3 012	3400	4550	6400
3NA3 014	4900	6750	9300
3NA3 017	6100	8700	12100
3NA3 020	9100	11600	16000
3NA3 022	14200	19000	26500
3NA3 024	23100	30700	43000
3NA3 030	40800	56200	80000
3NA3 032	70000	91300	130000
3NA3 036	120000	158000	223000

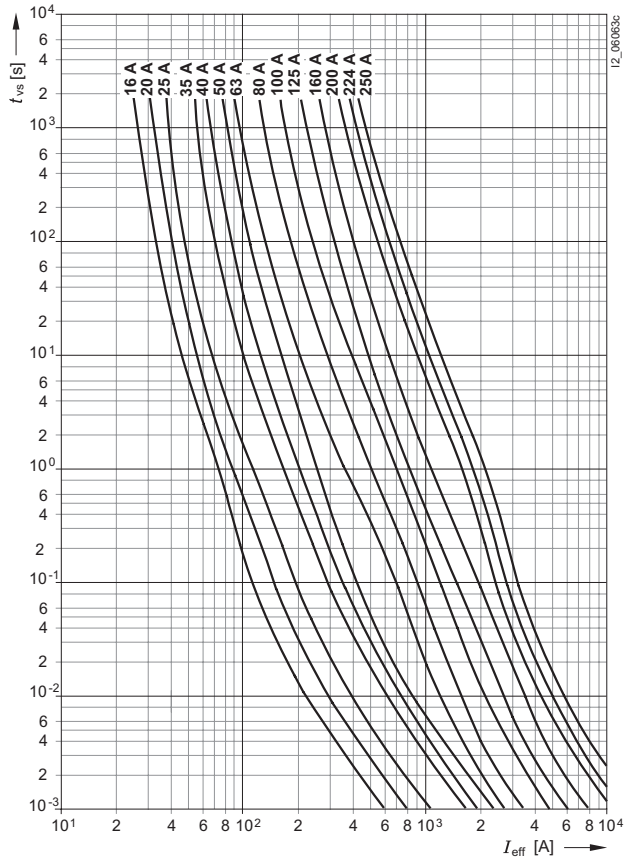
BETA Protecting Low-Voltage Fuse Systems

LV HRC fuse links

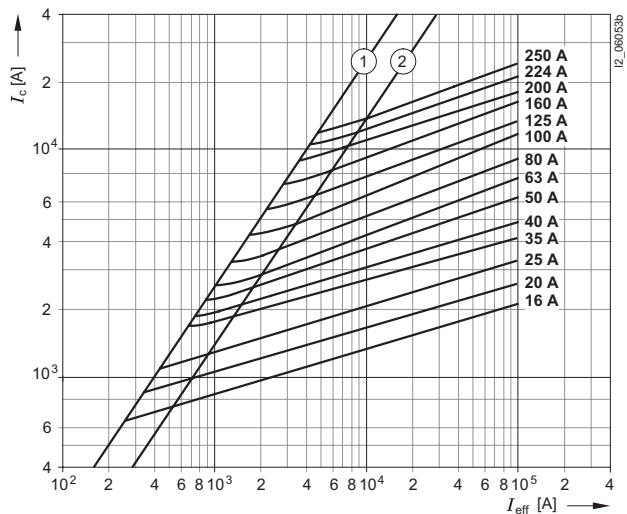
Series 3NA3 1, 3NA6 1, 3NA7 1

Size: 1
Operational class: gG
Rated voltage: 500 V AC/440 V DC
Rated current: 16 ... 250 A

Time/current characteristic curves diagram

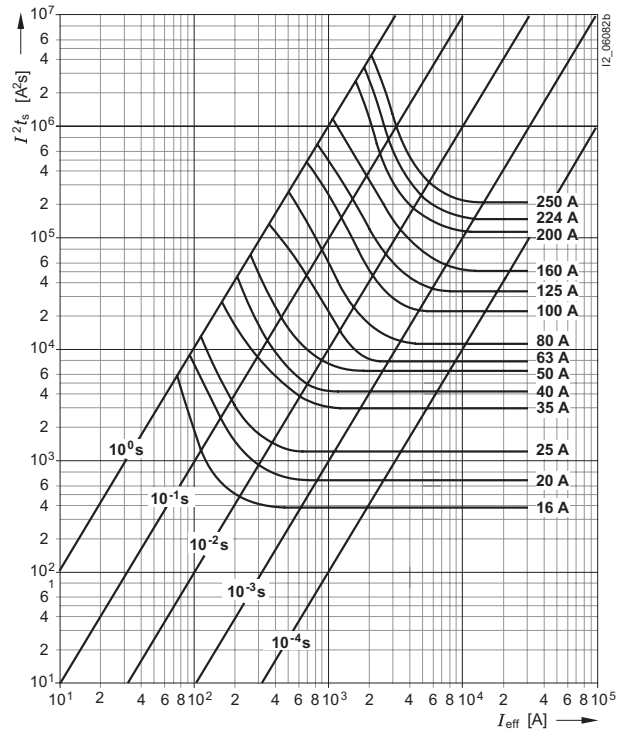


Current limitation diagram



- ① Peak short-circuit current with largest DC component
② Peak short-circuit current without DC component

Melting I^2t_s values diagram



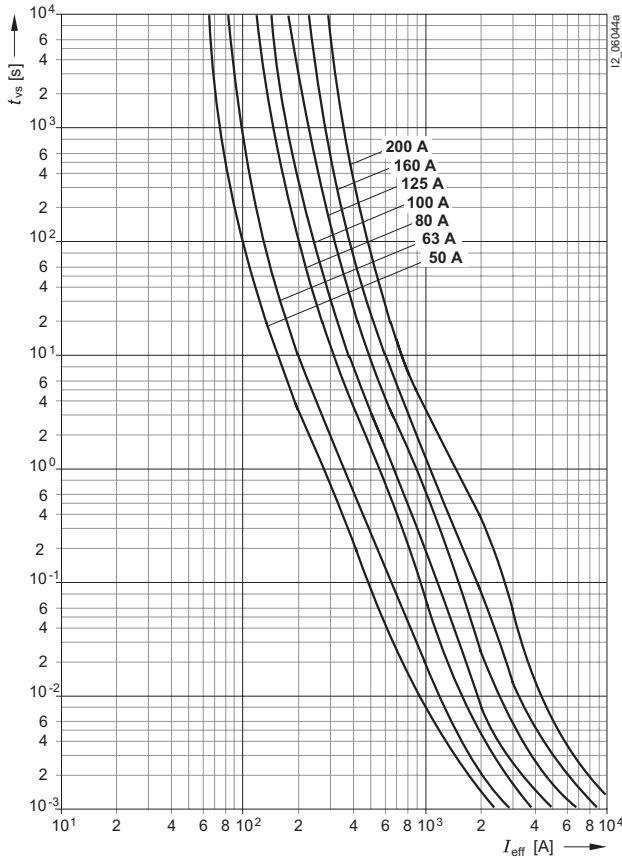
Type	I_n A	P_v W	$\Delta\vartheta$ K	I^2t_s	
				1 ms A ² s	4 ms A ² s
3NA3 105, 3NA6 105, 3NA7 105	16	2.1	8	370	420
3NA3 107, 3NA6 107, 3NA7 107	20	2.4	10	670	750
3NA3 110, 3NA6 110, 3NA7 110	25	2.8	11	1200	1380
3NA3 114, 3NA6 114, 3NA7 114	35	3.2	16	3000	3300
3NA3 117, 3NA6 117, 3NA7 117	40	3.6	16	4000	4500
3NA3 120, 3NA6 120, 3NA7 120	50	4.6	20	6000	6800
3NA3 122, 3NA6 122, 3NA7 122	63	6	21	7700	9800
3NA3 124, 3NA6 124, 3NA7 124	80	7.5	29	12000	16000
3NA3 130, 3NA6 130, 3NA7 130	100	8.9	30	24000	30600
3NA3 132, 3NA6 132, 3NA7 132	125	10.7	31	36000	50000
3NA3 136, 3NA6 136, 3NA7 136	160	13.9	34	58000	85000
3NA3 140, 3NA6 140, 3NA7 140	200	15	36	115000	135000
3NA3 142, 3NA6 142, 3NA7 142	224	16.1	37	145000	170000
3NA3 144, 3NA6 144, 3NA7 144	250	17.3	39	205000	230000

Type	I^2t_a		
	230 V AC A ² s	400 V AC A ² s	500 V AC A ² s
3NA3 105, 3NA6 105, 3NA7 105	580	750	1000
3NA3 107, 3NA6 107, 3NA7 107	1000	1370	1900
3NA3 110, 3NA6 110, 3NA7 110	1800	2340	3300
3NA3 114, 3NA6 114, 3NA7 114	4900	6750	9300
3NA3 117, 3NA6 117, 3NA7 117	6100	8700	12100
3NA3 120, 3NA6 120, 3NA7 120	9100	11600	16000
3NA3 122, 3NA6 122, 3NA7 122	14200	19000	26500
3NA3 124, 3NA6 124, 3NA7 124	23100	30700	43000
3NA3 130, 3NA6 130, 3NA7 130	40800	56200	80000
3NA3 132, 3NA6 132, 3NA7 132	70000	91300	130000
3NA3 136, 3NA6 136, 3NA7 136	120000	158000	223000
3NA3 140, 3NA6 140, 3NA7 140	218000	285000	400000
3NA3 142, 3NA6 142, 3NA7 142	299000	392000	550000
3NA3 144, 3NA6 144, 3NA7 144	420000	551000	780000

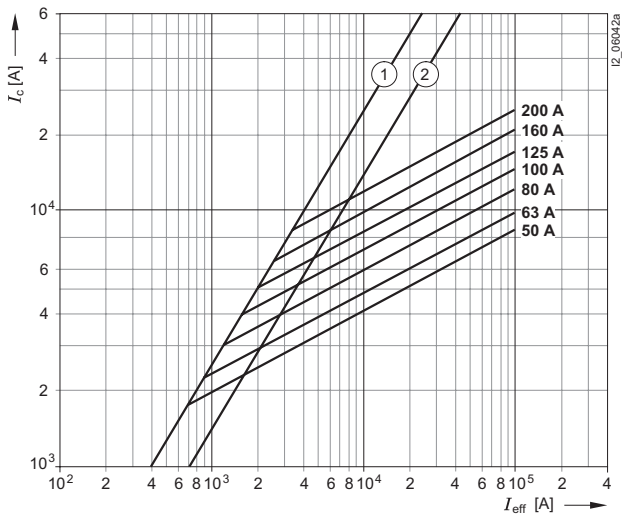
Series 3NA3 1..-6, 3NA6 1..-6, 3NA7 1..-6

Size: 1
Operational class: gG
Rated voltage: 690 V AC/440 V DC
Rated current: 50 ... 200 A

Time/current characteristic curves diagram

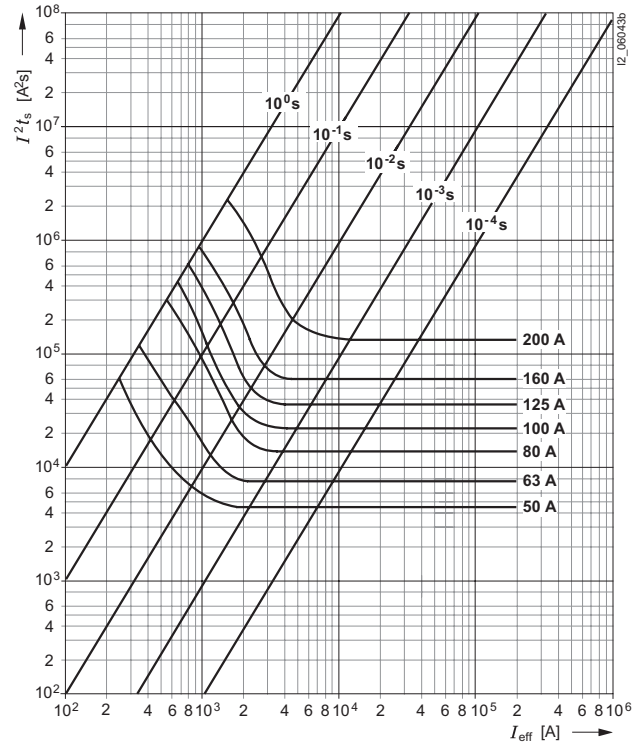


Current limitation diagram



- ① Peak short-circuit current with largest DC component
- ② Peak short-circuit current without DC component

Melting $I^2 t_s$ values diagram



Type	I_n	P_v	$\Delta\vartheta$	$I^2 t_s$	
	A	W	K	1 ms A ² s	4 ms A ² s
3NA3 120-6, 3NA6 120-6, 3NA7 120-6	50	6.7	21	440	7400
3NA3 122-6, 3NA6 122-6, 3NA7 122-6	63	7.6	22	7600	10100
3NA3 124-6, 3NA6 124-6, 3NA7 124-6	80	6.7	22	13500	17000
3NA3 130-6, 3NA6 130-6, 3NA7 130-6	100	8.7	28	21200	30500
3NA3 132-6, 3NA6 132-6, 3NA7 132-6	125	10.5	29	36000	50000
3NA3 136-6, 3NA6 136-6, 3NA7 136-6	160	13.8	33	58000	85000
3NA3 140-6, 3NA6 140-6, 3NA7 140-6	200	16.6	35	132000	144000

Type	$I^2 t_a$	230 V AC A ² s	400 V AC A ² s	690 V AC A ² s
3NA3 120-6, 3NA6 120-6, 3NA7 120-6	9100	11200	1900	
3NA3 122-6, 3NA6 122-6, 3NA7 122-6	13600	17000	24000	
3NA3 124-6, 3NA6 124-6, 3NA7 124-6	24300	32000	55000	
3NA3 130-6, 3NA6 130-6, 3NA7 130-6	42400	52000	75000	
3NA3 132-6, 3NA6 132-6, 3NA7 132-6	69500	82200	130000	
3NA3 136-6, 3NA6 136-6, 3NA7 136-6	120000	155000	223000	
3NA3 140-6, 3NA6 140-6, 3NA7 140-6	211000	240000	360000	

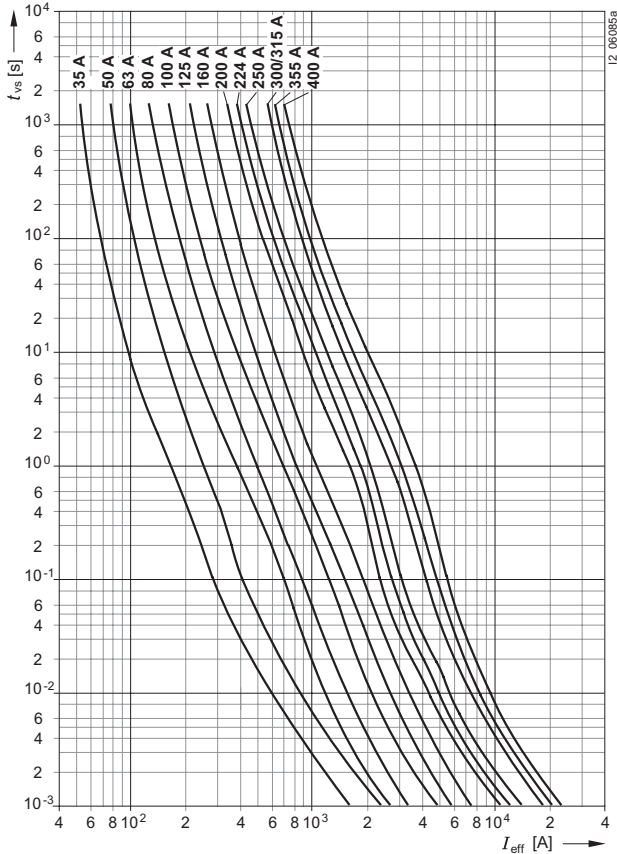
BETA Protecting Low-Voltage Fuse Systems

LV HRC fuse links

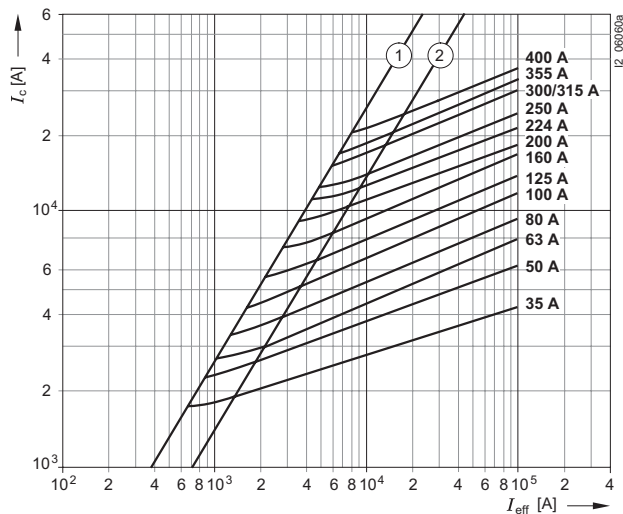
Series 3NA3 2, 3NA6 2, 3NA7 2

Size: 2
Operational class: gG
Rated voltage: 500 V AC/440 V DC
Rated current: 35 ... 400 A

Time/current characteristic curves diagram

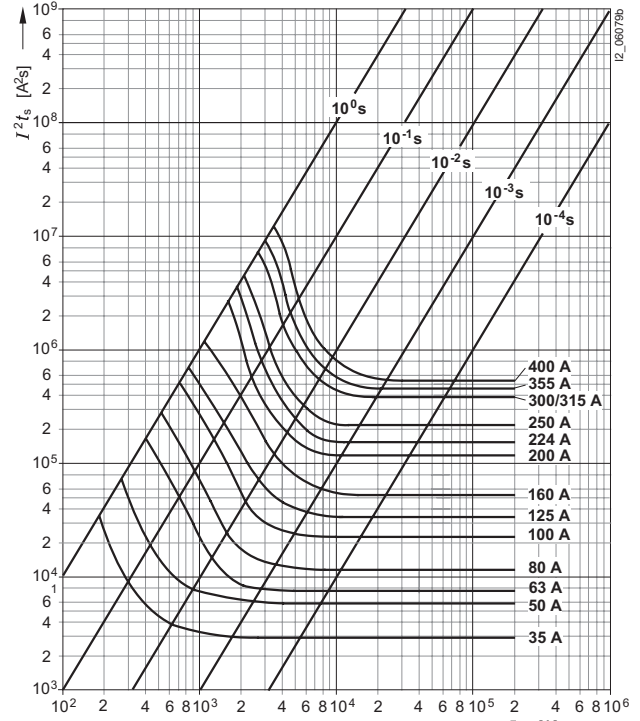


Current limitation diagram



- ① Peak short-circuit current with largest DC component
② Peak short-circuit current without DC component

Melting $I^2 t_s$ values diagram



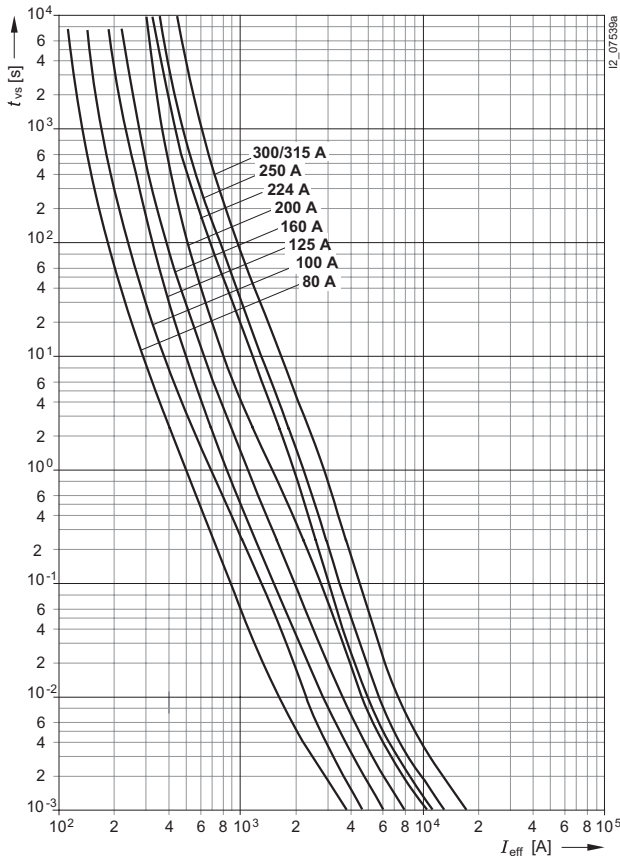
Type	I_n	P_v	$\Delta\vartheta$	$I^2 t_s$	
	A	W	K	1 ms A ² s	4 ms A ² s
3NA3 214, 3NA6 214, 3NA7 214	35	3.2	12	3000	3300
3NA3 220, 3NA6 220, 3NA7 220	50	4.7	16	6000	6800
3NA3 222, 3NA6 222, 3NA7 222	63	5.9	16	7700	9800
3NA3 224, 3NA6 224, 3NA7 224	80	6.8	21	12000	16000
3NA3 230, 3NA6 230, 3NA7 230	100	7.4	22	24000	30600
3NA3 232, 3NA6 232, 3NA7 232	125	9.8	27	36000	50000
3NA3 236, 3NA6 236, 3NA7 236	160	12.6	34	58000	85000
3NA3 240, 3NA6 240, 3NA7 240	200	14.9	33	115000	135000
3NA3 242, 3NA6 242, 3NA7 242	224	15.4	31	145000	170000
3NA3 244, 3NA6 244, 3NA7 244	250	17.9	38	205000	230000
3NA3 250, 3NA6 250	300	19.4	34	361000	433000
3NA3 252, 3NA6 252, 3NA7 252	315	21.4	35	361000	433000
3NA3 254, 3NA6 254	355	26.0	49	441000	538000
3NA3 260, 3NA6 260, 3NA7 260	400	27.5	52	529000	676000

Type	$I^2 t_a$		
	230 V AC A ² s	400 V AC A ² s	500 V AC A ² s
3NA3 214, 3NA6 214, 3NA7 214	4900	6750	9300
3NA3 220, 3NA6 220, 3NA7 220	9100	11600	16000
3NA3 222, 3NA6 222, 3NA7 222	14200	19000	26500
3NA3 224, 3NA6 224, 3NA7 224	23100	30700	43000
3NA3 230, 3NA6 230, 3NA7 230	40800	56200	80000
3NA3 232, 3NA6 232, 3NA7 232	70000	91300	130000
3NA3 236, 3NA6 236, 3NA7 236	120000	158000	223000
3NA3 240, 3NA6 240, 3NA7 240	218000	285000	400000
3NA3 242, 3NA6 242, 3NA7 242	299000	392000	550000
3NA3 244, 3NA6 244, 3NA7 244	420000	551000	780000
3NA3 250, 3NA6 250	670000	901000	1275000
3NA3 252, 3NA6 252, 3NA7 252	670000	901000	1275000
3NA3 254, 3NA6 254	800000	1060000	1500000
3NA3 260, 3NA6 260, 3NA7 260	1155000	1515000	2150000

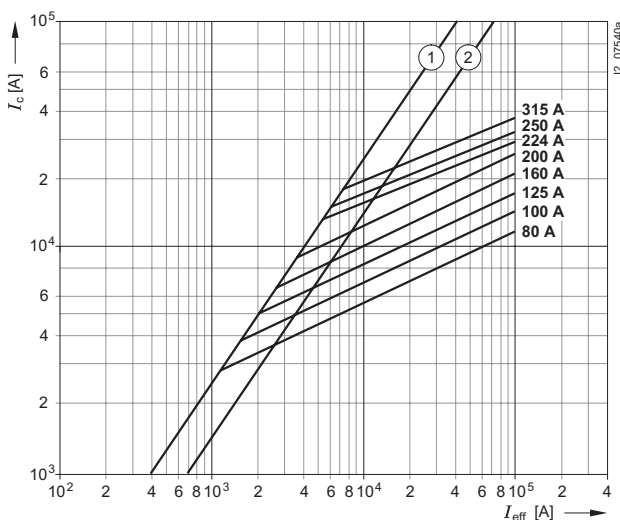
Series 3NA3 2..-6, 3NA6 2..-6, 3NA7 2..-6

Size: 2
Operational class: gG
Rated voltage: 690 V AC/440 V DC
Rated current: 80 ... 315 A

Time/current characteristic curves diagram

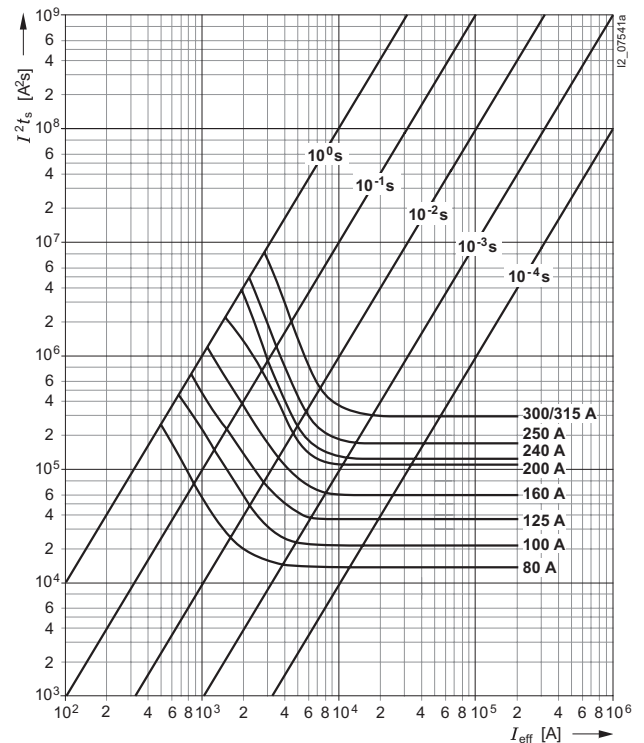


Current limitation diagram



- ① Peak short-circuit current with largest DC component
- ② Peak short-circuit current without DC component

Melting $I^2 t_s$ values diagram



Type	I_n	P_v	$\Delta\vartheta$	$I^2 t_s$	
	A	W	K	1 ms A ² s	4 ms A ² s
3NA3 224-6, 3NA6 224-6, 3NA7 224-6	80	6.6	22	13500	17000
3NA3 230-6, 3NA6 230-6, 3NA7 230-6	100	8.5	26	21200	30500
3NA3 232-6, 3NA6 232-6, 3NA7 232-6	125	9.8	29	36000	50000
3NA3 236-6, 3NA6 236-6, 3NA7 236-6	160	13.3	31	58000	85000
3NA3 240-6, 3NA6 240-6, 3NA7 240-6	200	16.1	33	132000	144000
3NA3 242-6, 3NA6 242-6, 3NA7 242-6	224	19.9	38	125000	162000
3NA3 244-6, 3NA6 244-6, 3NA7 244-6	250	23	44	180000	215000
3NA3 250-6, 3NA6 250-6, 3NA7 250-6	300	25.6	38	300000	380000
3NA3 252-6, 3NA6 252-6, 3NA7 252-6	315	28.2	42	300000	380000

Type	$I^2 t_a$		
	230 V AC A ² s	400 V AC A ² s	690 V AC A ² s
3NA3 224-6, 3NA6 224-6, 3NA7 224-6	24300	32000	55000
3NA3 230-6, 3NA6 230-6, 3NA7 230-6	42400	52000	75000
3NA3 232-6, 3NA6 232-6, 3NA7 232-6	69500	82200	130000
3NA3 236-6, 3NA6 236-6, 3NA7 236-6	120000	155000	223000
3NA3 240-6, 3NA6 240-6, 3NA7 240-6	211000	240000	360000
3NA3 242-6, 3NA6 242-6, 3NA7 242-6	300000	300000	450000
3NA3 244-6, 3NA6 244-6, 3NA7 244-6	453000	350000	525000
3NA3 250-6, 3NA6 250-6, 3NA7 250-6	480000	625000	940000
3NA3 252-6, 3NA6 252-6, 3NA7 252-6	480000	625000	940000

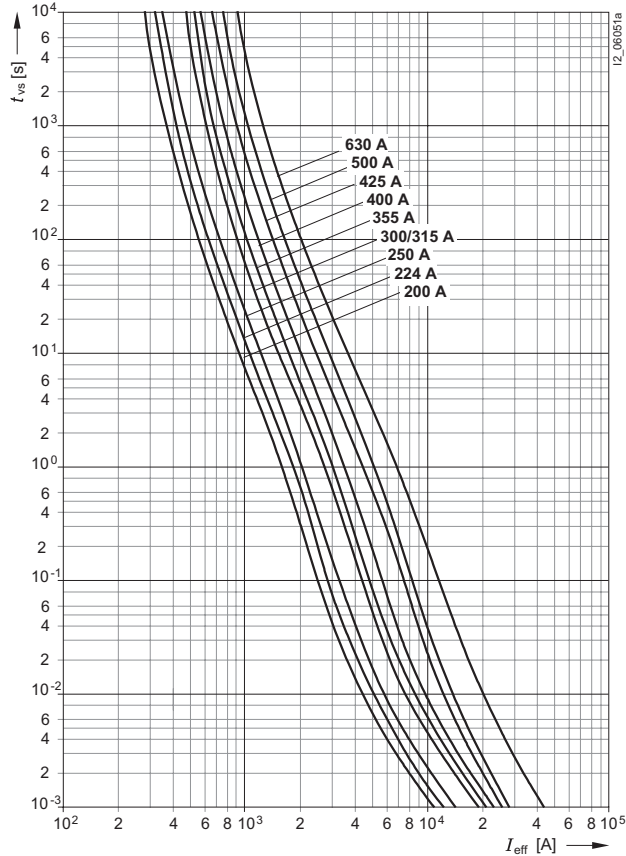
BETA Protecting Low-Voltage Fuse Systems

LV HRC fuse links

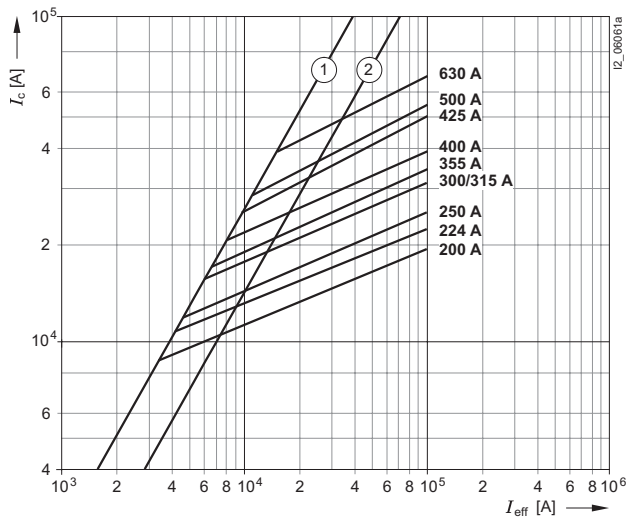
Series 3NA3 3

Size: 3
Operational class: gG
Rated voltage: 500 V AC/440 V DC
Rated current: 200 ... 630 A

Time/current characteristic curves diagram

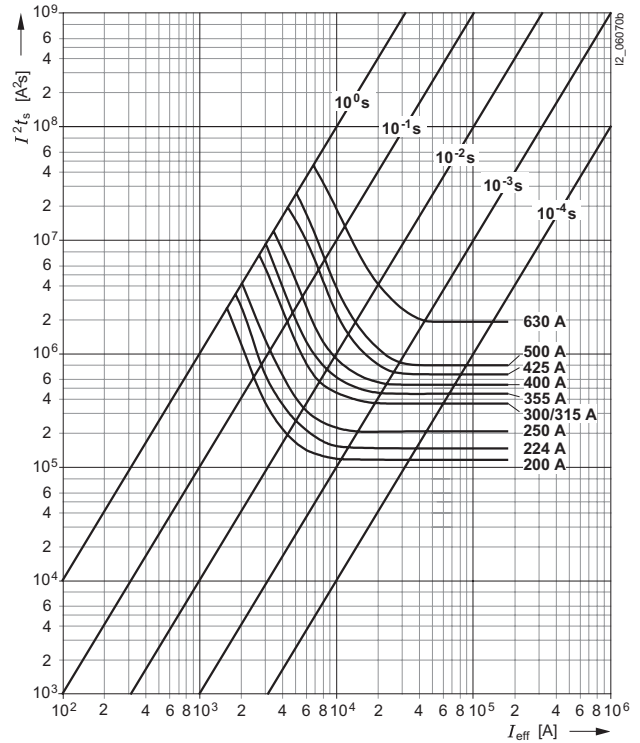


Current limitation diagram



- ① Peak short-circuit current with largest DC component
② Peak short-circuit current without DC component

Melting I^2t_s values diagram



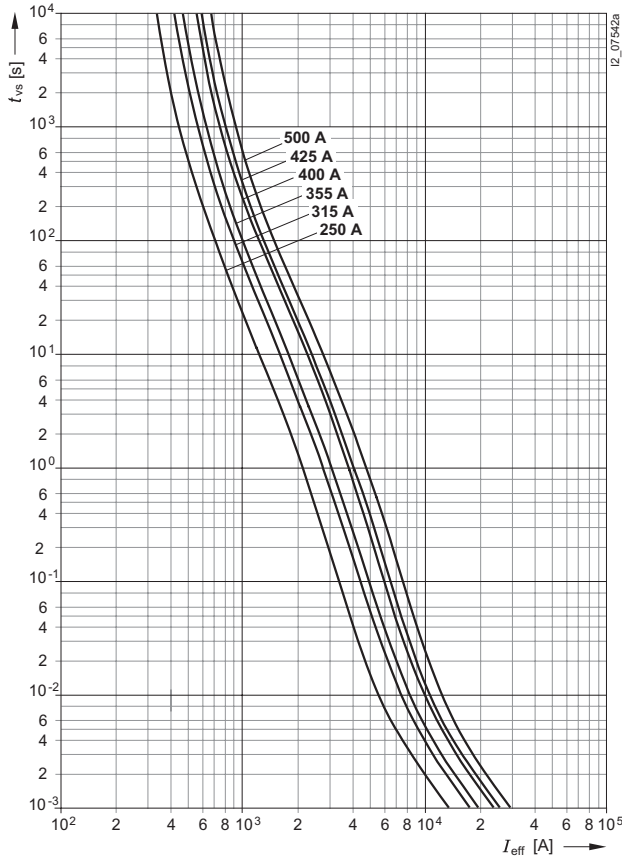
Type	I_n	P_v	$\Delta\vartheta$	I^2t_s	
	A	W	K	1 ms A ² s	4 ms A ² s
3NA3 340	200	14.9	32	115000	135000
3NA3 342	224	15.4	31	145000	170000
3NA3 344	250	17.9	36	205000	230000
3NA3 350	300	19.4	19	361000	433000
3NA3 352	315	21.4	22	361000	433000
3NA3 354	355	26.0	26	441000	538000
3NA3 360	400	27.5	28	529000	676000
3NA3 362	425	26.5	34	650000	970000
3NA3 365	500	36.5	41	785000	1270000
3NA3 372	630	44.0	50	1900000	2700000

Type	I^2t_a		
	230 V AC A ² s	400 V AC A ² s	500 V AC A ² s
3NA3 340	218000	285000	400000
3NA3 342	299000	392000	550000
3NA3 344	420000	551000	780000
3NA3 350	670000	901000	1275000
3NA3 352	670000	901000	1275000
3NA3 354	800000	1060000	1500000
3NA3 360	1155000	1515000	2150000
3NA3 362	1515000	1856000	2270000
3NA3 365	1915000	2260000	2700000
3NA3 372	3630000	4340000	5400000

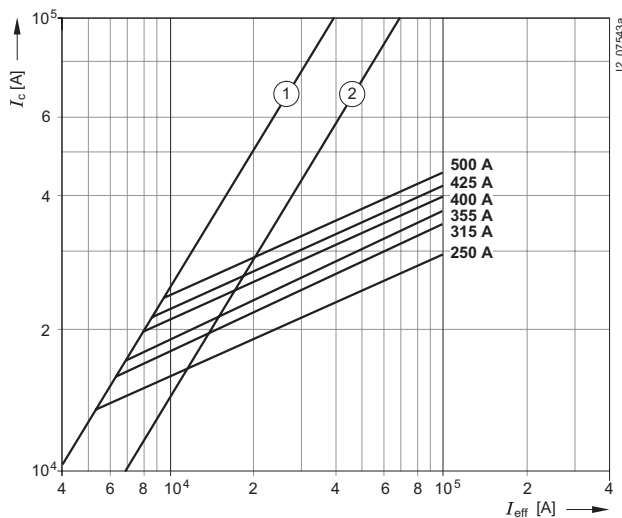
Series 3NA3 3...-6

Size: 3
Operational class: gG
Rated voltage: 690 V AC/440 V DC
Rated current: 250 ... 500 A

Time/current characteristic curves diagram

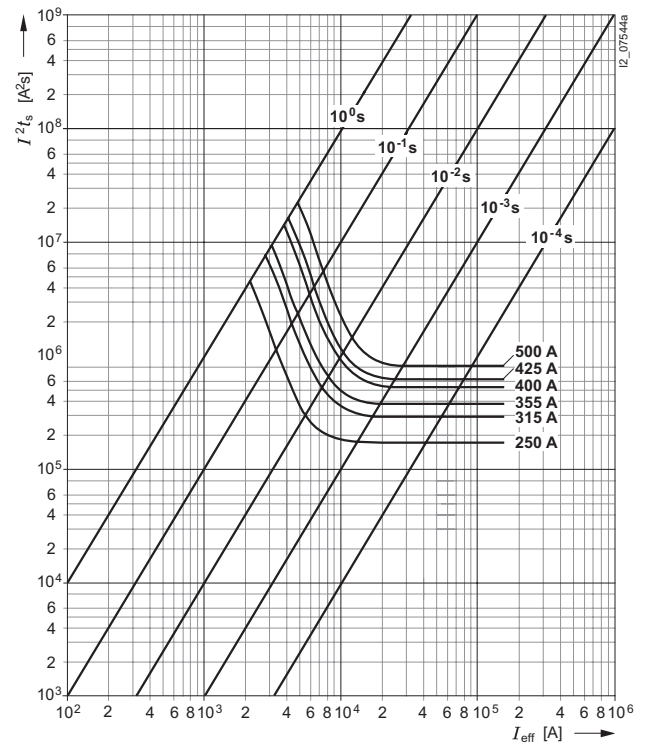


Current limitation diagram



- ① Peak short-circuit current with largest DC component
- ② Peak short-circuit current without DC component

Melting I^2t_s values diagram



Type	I_n	P_v	$\Delta\vartheta$	I^2t_s	
	A	W	K	1 ms A ² s	4 ms A ² s
3NA3 344-6	250	23	44	180000	215000
3NA3 352-6	315	28.2	42	300000	380000
3NA3 354-6	355	32.5	40	380000	470000
3NA3 360-6	400	33.2	42	540000	675000
3NA3 362-6	425	35.3	44	625000	765000
3NA3 365-6	500	43.5	52	810000	1000000

Type	I^2t_a		
	230 V AC A ² s	400 V AC A ² s	690 V AC A ² s
3NA3 344-6	453000	350000	525000
3NA3 352-6	480000	625000	940000
3NA3 354-6	585000	760000	1150000
3NA3 360-6	847000	1100000	1650000
3NA3 362-6	925000	1200000	1800000
3NA3 365-6	1300000	1700000	2500000

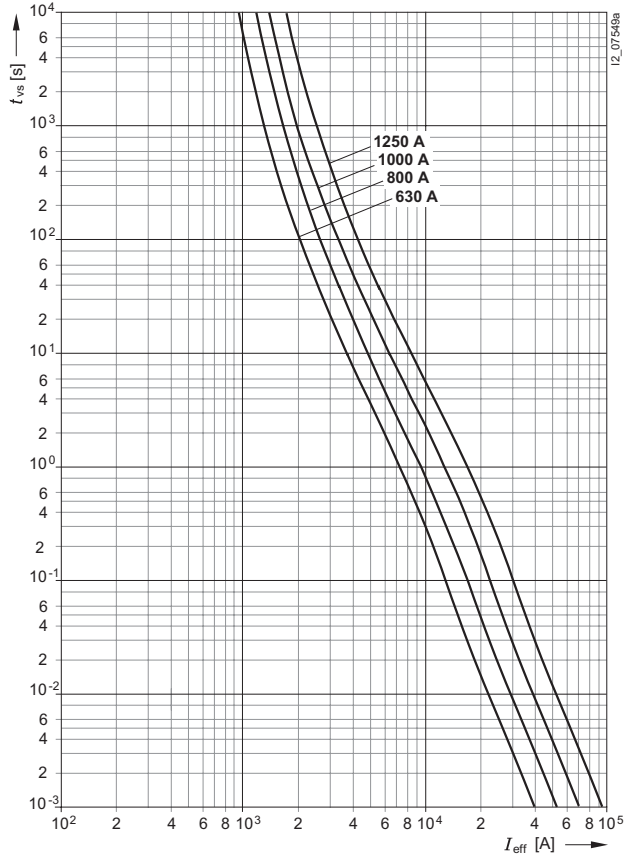
BETA Protecting Low-Voltage Fuse Systems

LV HRC fuse links

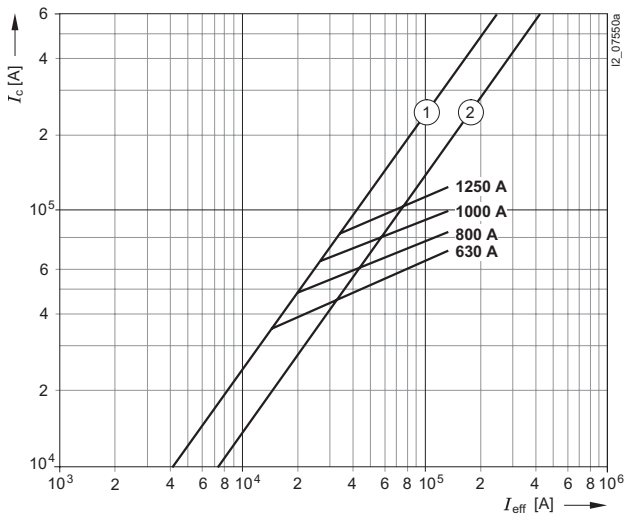
Series 3NA3 4

Size: 4 (IEC design)
Operational class: gG
Rated voltage: 500 V AC/440 V DC
Rated current: 630 ... 1000 A

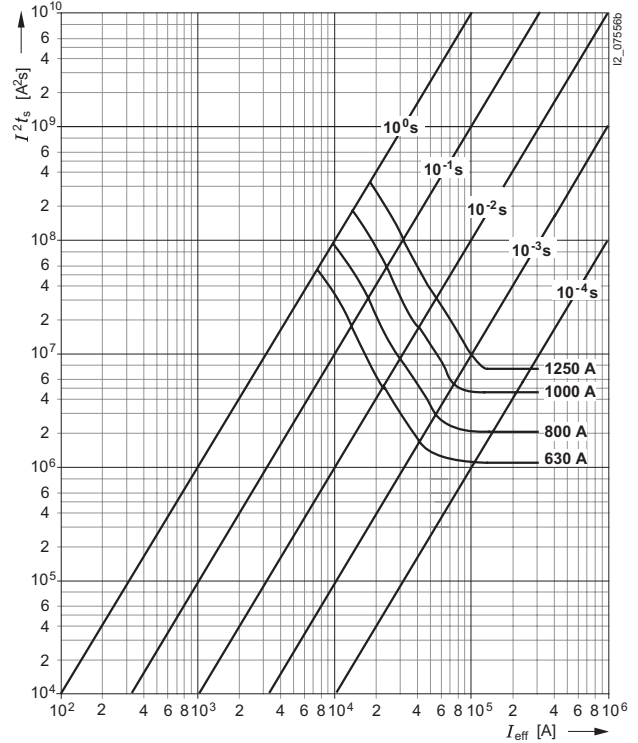
Time/current characteristic curves diagram



Current limitation diagram



Melting I^2t_s values diagram



Type	I_n A	P_v W	$\Delta\vartheta$ K	I^2t_s 1 ms A ² s	I^2t_s 4 ms A ² s
3NA3 472	630	47	37	1900000	2700000
3NA3 475	800	59	43	3480000	5620000
3NA3 480	1000	74	56	7920000	10400000
3NA3 482	1250	99	65	11880000	18200000

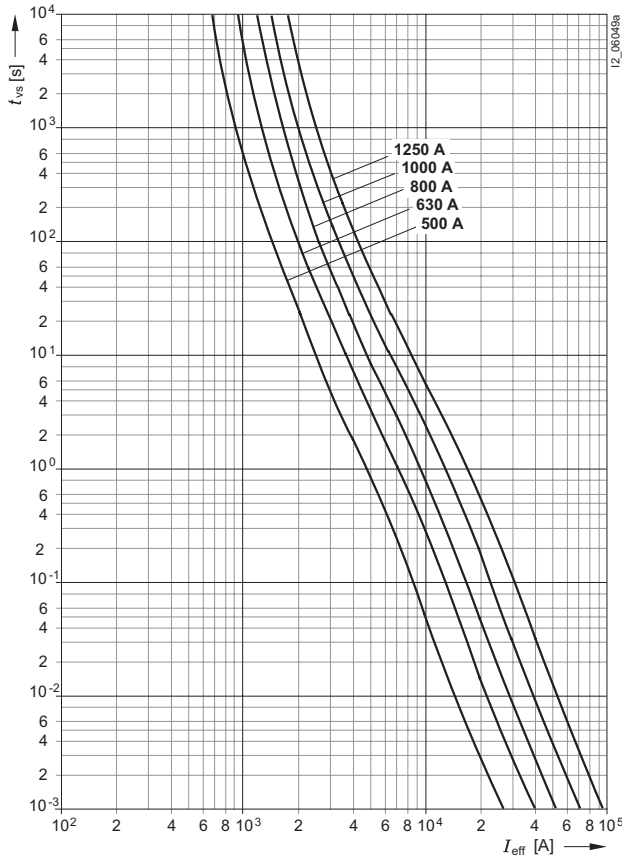
Type	I^2t_a 230 V AC A ² s	I^2t_a 400 V AC A ² s	I^2t_a 500 V AC A ² s
3NA3 472	3630000	4340000	5400000
3NA3 475	7210000	8510000	10400000
3NA3 480	13600000	16200000	19000000
3NA3 482	23900000	29100000	34800000

- ① Peak short-circuit current with largest DC component
- ② Peak short-circuit current without DC component

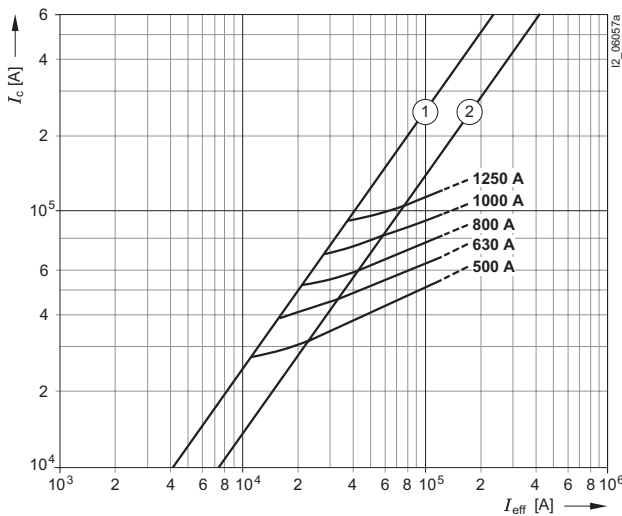
Series 3NA3 6

Size: 4a
Operational class: gG
Rated voltage: 500 V AC/440 V DC
Rated current: 500 ... 1250 A

Time/current characteristic curves diagram

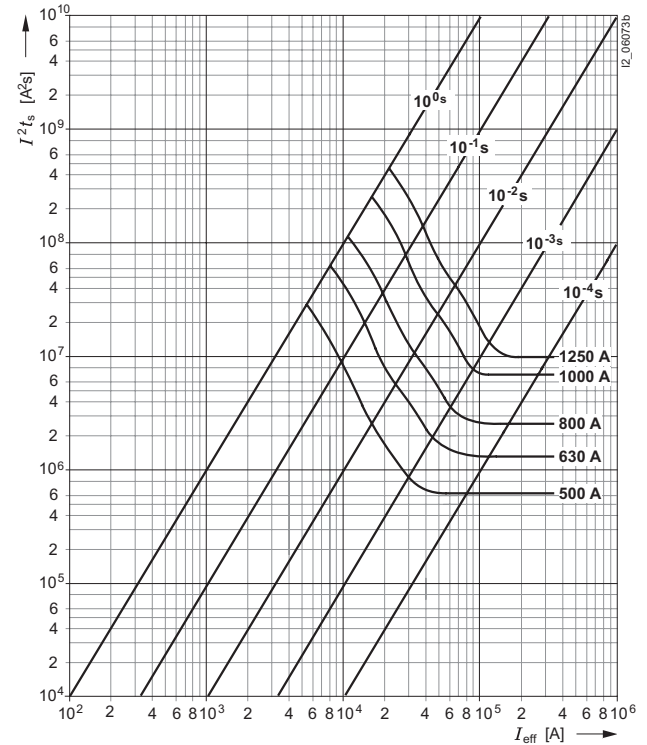


Current limitation diagram



- ① Peak short-circuit current with largest DC component
- ② Peak short-circuit current without DC component

Melting $I^2 t_s$ values diagram



Type	I_n	P_v	$\Delta\vartheta$	$I^2 t_s$	
	A	W	K	1 ms A ² s	4 ms A ² s
3NA3 665	500	43	30	785000	1270000
3NA3 672	630	47	37	1900000	2700000
3NA3 675	800	59	43	3480000	5620000
3NA3 680	1000	74	56	7920000	10400000
3NA3 682	1250	99	65	11880000	18200000

Type	$I^2 t_a$		
	230 V AC A ² s	400 V AC A ² s	500 V AC A ² s
3NA3 665	1915000	2260000	2700000
3NA3 672	3630000	4340000	5400000
3NA3 675	7210000	8510000	10400000
3NA3 680	13600000	16200000	19000000
3NA3 682	23900000	29100000	34800000

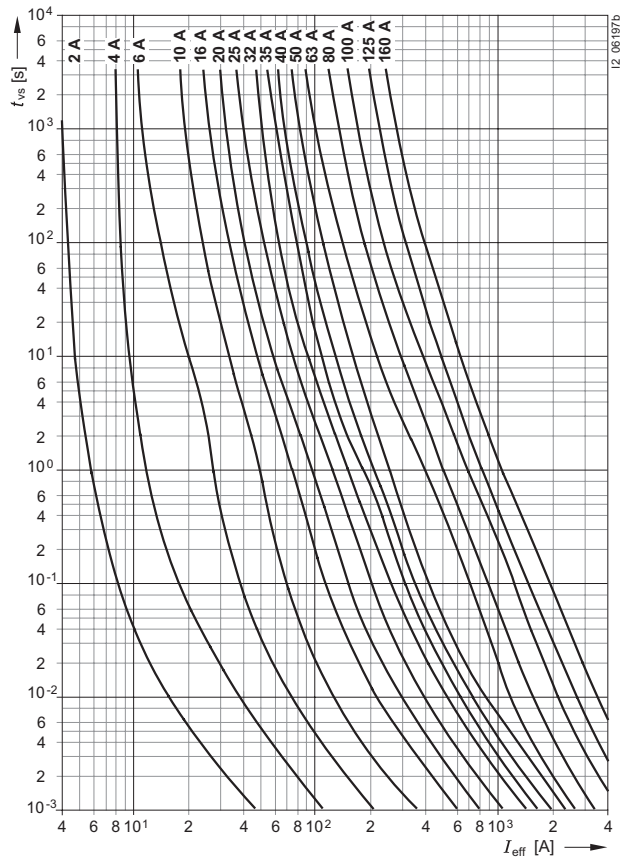
BETA Protecting Low-Voltage Fuse Systems

LV HRC fuse links

Series 3NA3 8, 3NA6 8, 3NA7 8

Size: 000, 00
Operational class: gG
Rated voltage: 500 V AC/250 V DC
Rated current: 2 ... 160 A

Time/current characteristic curves diagram



Melting $I^2 t_s$ values diagram

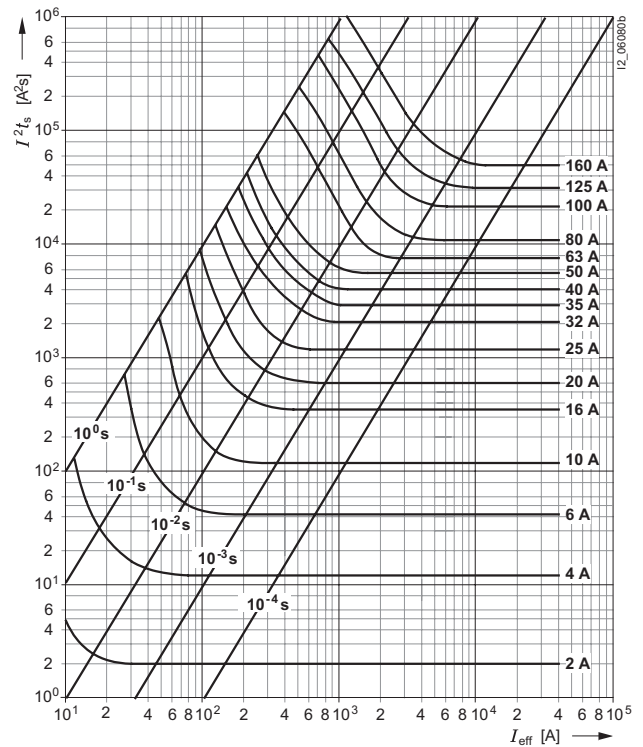
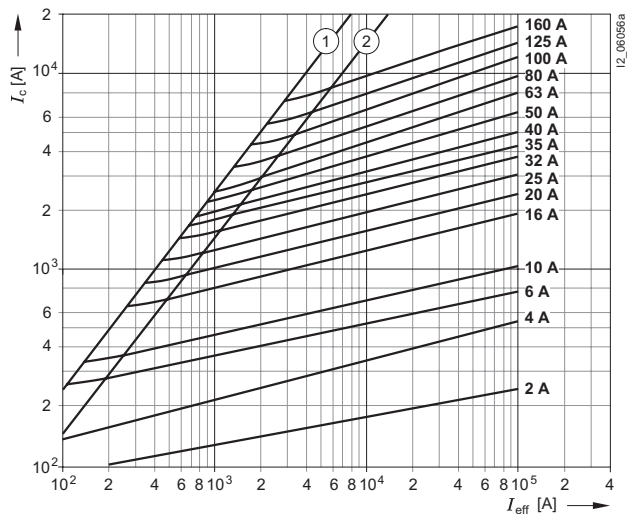


Table see page 3/31.

Current limitation diagram



- ① Peak short-circuit current with largest DC component
- ② Peak short-circuit current without DC component

Series 3NA3 8, 3NA6 8, 3NA7 8

Size: 000, 00
Operational class: gG
Rated voltage: 500 V AC/250 V DC
Rated current: 2 ... 160 A

Type	I_n	P_v	$\Delta\vartheta$	I^2t_s		I^2t_a		
	A	W	K	1 ms A ² s	4 ms A ² s	230 V AC A ² s	400 V AC A ² s	500 V AC A ² s
3NA3 802, 3NA6 802, 3NA7 802	2	1.3	8	2	2	4	6	9
3NA3 804, 3NA6 804, 3NA7 804	4	0.9	6	11	13	18	22	27
3NA3 801, 3NA6 801, 3NA7 801	6	1.3	8	46	50	80	110	150
3NA3 803, 3NA6 803, 3NA7 803	10	1	8	120	130	180	265	370
3NA3 805, 3NA6 805, 3NA7 805	16	1.7	11	370	420	580	750	1000
3NA3 807, 3NA6 807, 3NA7 807	20	2	15	670	750	1000	1370	1900
3NA3 810, 3NA6 810, 3NA7 810	25	2.3	17	1200	1380	1800	2340	3300
3NA3 812, 3NA6 812, 3NA7 812	32	2.6	18	2200	2400	3400	4550	6400
3NA3 814, 3NA3 814-7, 3NA6 814, 3NA7 814	35	2.7	21	3000	3300	4900	6750	9300
3NA3 817, 3NA6 817, 3NA7 817	40	3.1	24	4000	4500	6100	8700	12100
3NA3 820, 3NA3 820-7, 3NA6 820, 3NA7 820	50	3.8	25	6000	6800	9100	11600	16000
3NA3 822, 3NA3 822-7, 3NA6 822, 3NA7 822	63	4.6	28	7700	9800	14200	19000	26500
3NA3 824, 3NA3 824-7, 3NA6 824, 3NA6 824-7, 3NA7 824, 3NA7 824-7	80	5.8	33	12000	16000	23100	30700	43000
3NA3 830, 3NA3 830-7, 3NA6 830, 3NA6 830-7, 3NA7 830, 3NA7 830-7	100	6.6	34	24000	30600	40800	56200	80000
3NA3 832, 3NA6 832, 3NA7 832	125	8.9	44	36000	50000	70000	91300	130000
3NA3 836, 3NA6 836, 3NA7 836	160	11.3	52	58000	85000	120000	158000	223000

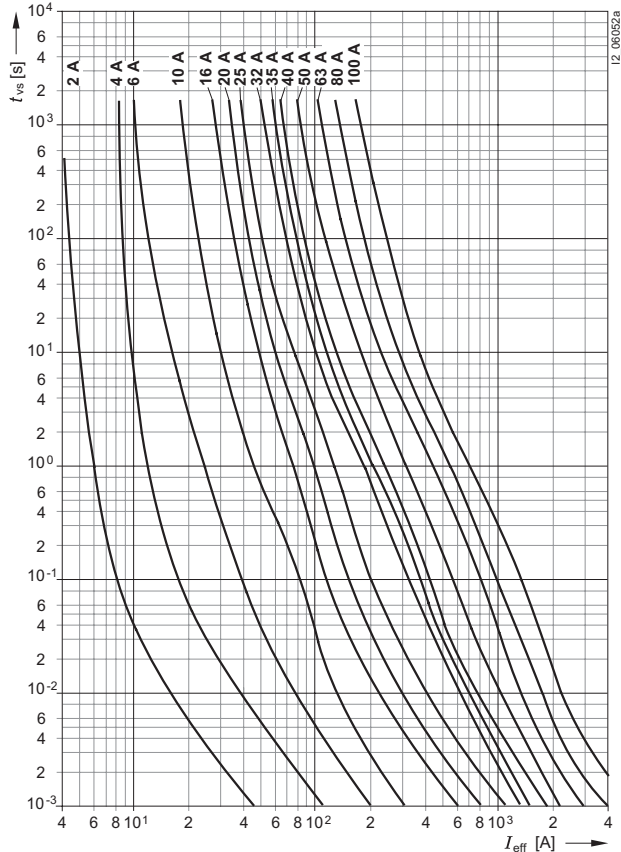
BETA Protecting Low-Voltage Fuse Systems

LV HRC fuse links

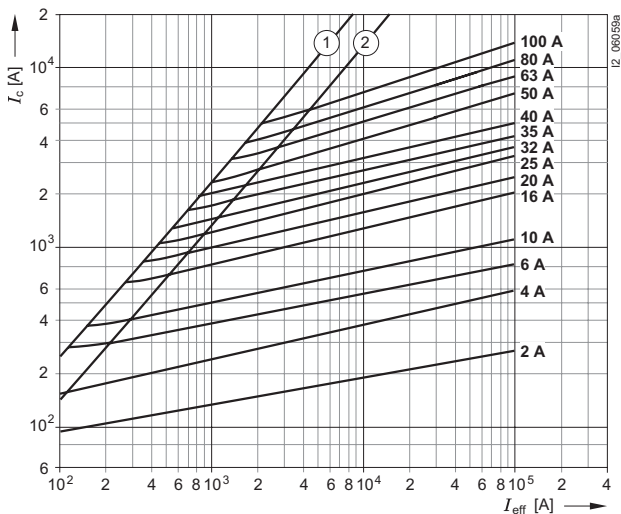
Series **3NA3 8..-6, 3NA6 8..-6, 3NA7 8..-6**

Size: 000, 00
Operational class: gG
Rated voltage: 690 V AC/250 V DC
Rated current: 2 ... 100 A

Time/current characteristic curves diagram

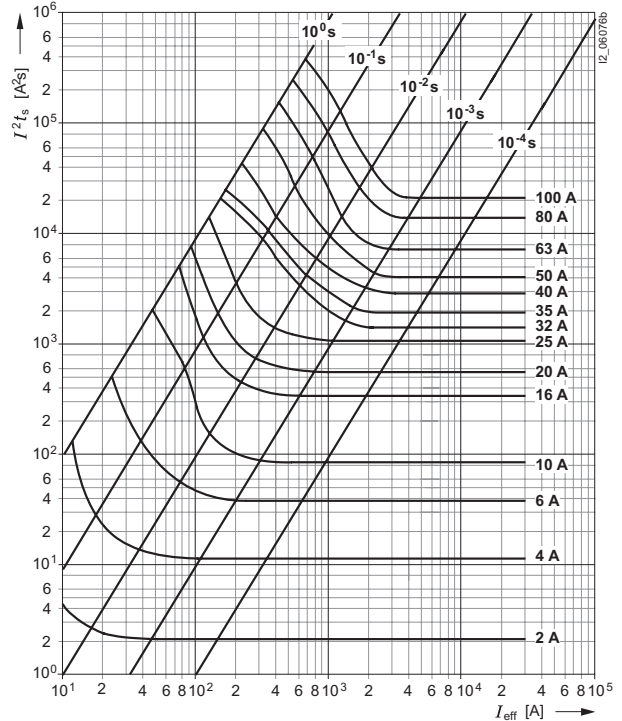


Current limitation diagram



- ① Peak short-circuit current with largest DC component
② Peak short-circuit current without DC component

Melting $I^2 t_s$ values diagram



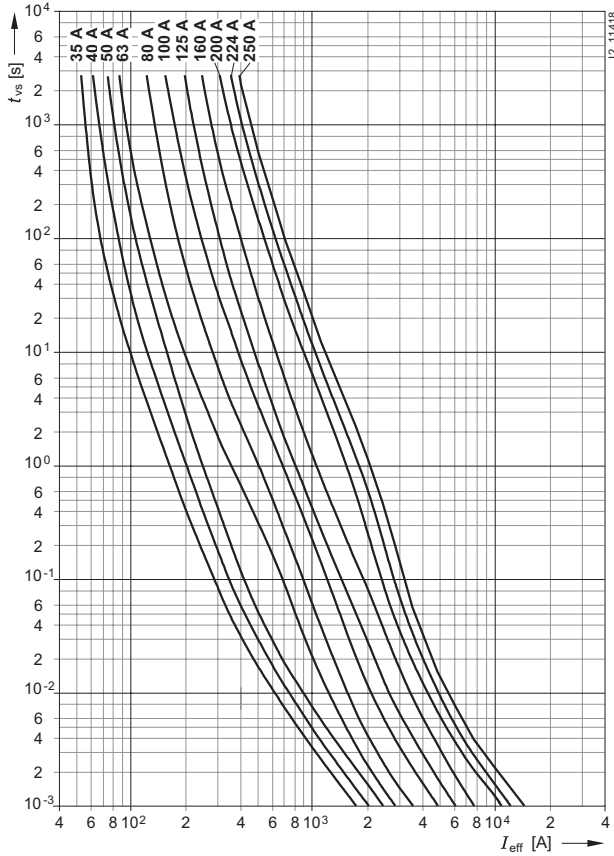
Type	I_n	P_v	$\Delta\vartheta$	$I^2 t_s$	
	A	W	K	1 ms A ² s	4 ms A ² s
3NA3 802-6, 3NA6 802-6, 3NA7 802-6	2	1.3	8	2	2
3NA3 804-6, 3NA6 804-6, 3NA7 804-6	4	0.9	6	11	13
3NA3 801-6, 3NA6 801-6, 3NA7 801-6	6	1.3	8	36	44
3NA3 803-6, 3NA6 803-6, 3NA7 803-6	10	1	8	90	120
3NA3 805-6, 3NA6 805-6, 3NA7 805-6	16	1.7	11	330	360
3NA3 807-6, 3NA6 807-6, 3NA7 807-6	20	2	15	570	690
3NA3 810-6, 3NA6 810-6, 3NA7 810-6	25	2.3	17	1200	1380
3NA3 812-6, 3NA6 812-6, 3NA7 812-6	32	3.1	19	1600	2600
3NA3 814-6, 3NA6 814-6, 3NA7 814-6	35	3.6	23	2100	3100
3NA3 817-6, 3NA6 817-6, 3NA7 817-6	40	3.6	18	3200	4700
3NA3 820-6, 3NA6 820-6, 3NA7 820-6	50	4.9	28	4400	7400
3NA3 822-6, 3NA6 822-6, 3NA7 822-6	63	5.7	33	7600	10100
3NA3 824-6, 3NA6 824-6, 3NA7 824-6	80	6.7	38	13500	17000
3NA3 830-6, 3NA6 830-6, 3NA7 830-6	100	9.1	40	21200	30500

Type	$I^2 t_a$		
	230 V AC A ² s	400 V AC A ² s	690 V AC A ² s
3NA3 802-6, 3NA6 802-6, 3NA7 802-6	4	6	9
3NA3 804-6, 3NA6 804-6, 3NA7 804-6	18	22	27
3NA3 801-6, 3NA6 801-6, 3NA7 801-6	80	110	150
3NA3 803-6, 3NA6 803-6, 3NA7 803-6	180	265	370
3NA3 805-6, 3NA6 805-6, 3NA7 805-6	580	750	1000
3NA3 807-6, 3NA6 807-6, 3NA7 807-6	1000	1370	1900
3NA3 810-6, 3NA6 810-6, 3NA7 810-6	1800	2340	3300
3NA3 812-6, 3NA6 812-6, 3NA7 812-6	3100	4100	5800
3NA3 814-6, 3NA6 814-6, 3NA7 814-6	4000	5000	7800
3NA3 817-6, 3NA6 817-6, 3NA7 817-6	6000	8600	12000
3NA3 820-6, 3NA6 820-6, 3NA7 820-6	9100	11200	19000
3NA3 822-6, 3NA6 822-6, 3NA7 822-6	13600	17000	24000
3NA3 824-6, 3NA6 824-6, 3NA7 824-6	24300	32000	55000
3NA3 830-6, 3NA6 830-6, 3NA7 830-6	42400	52000	75000

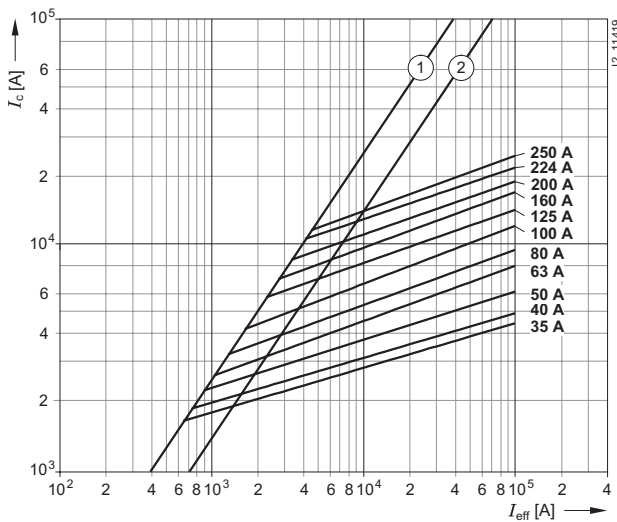
Series 3NA6 1...-4

Size: 1
Operational class: gG
Rated voltage: 400 V AC
Rated current: 35 ... 250 A

Time/current characteristic curves diagram

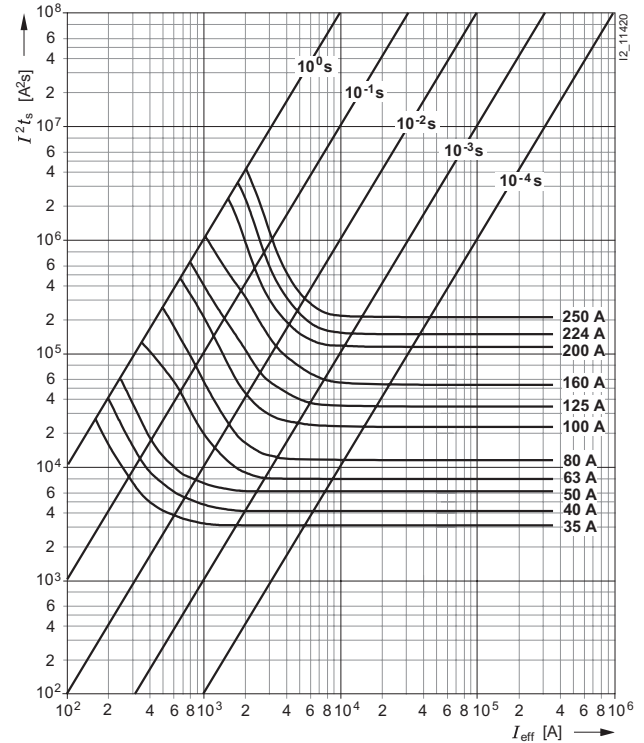


Current limitation diagram



- ① Peak short-circuit current with largest DC component
- ② Peak short-circuit current without DC component

Melting I^2t_s values diagram



Type	I_n A	P_v W	$\Delta\vartheta$ K
3NA6 114-4	35	3.2	16
3NA6 117-4	40	3.6	16
3NA6 120-4	50	4.6	20
3NA6 122-4	63	6.0	21
3NA6 124-4	80	7.5	29
3NA6 130-4	100	8.9	30
3NA6 132-4	125	10.7	31
3NA6 136-4	160	13.9	34
3NA6 140-4	200	15.0	36
3NA6 142-4	224	16.1	37
3NA6 144-4	250	17.3	39

Type	I^2t_s 1 ms A^2s	I^2t_s 4 ms A^2s	I^2t_a 230 V AC A^2s	I^2t_a 400 V AC A^2s
3NA6 114-4	3000	3300	4900	6750
3NA6 117-4	4000	4500	6100	8700
3NA6 120-4	6000	6800	9100	11600
3NA6 122-4	7700	9800	14200	19000
3NA6 124-4	12000	16000	23100	30700
3NA6 130-4	24000	30600	40800	56200
3NA6 132-4	36000	50000	70000	91300
3NA6 136-4	58000	85000	120000	158000
3NA6 140-4	115000	135000	218000	285000
3NA6 142-4	145000	170000	299000	392000
3NA6 144-4	205000	230000	420000	551000

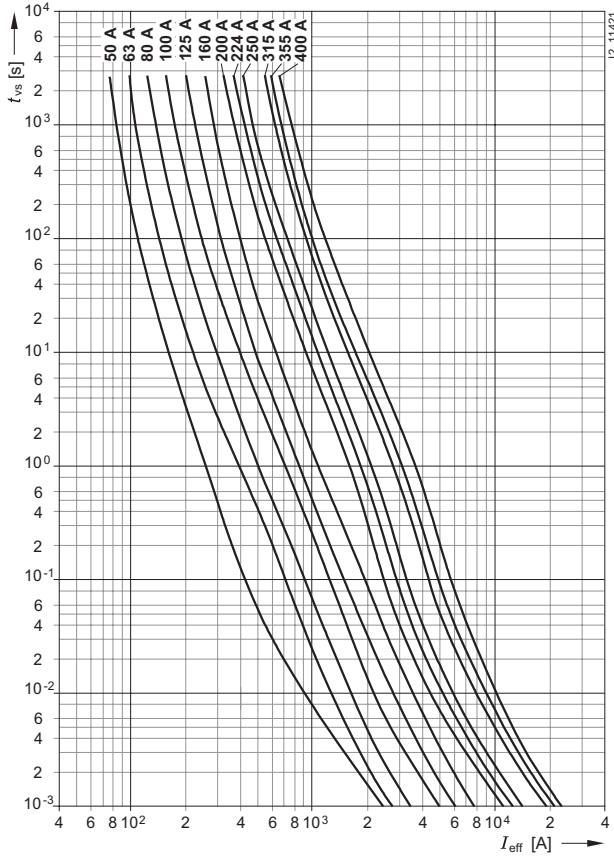
BETA Protecting Low-Voltage Fuse Systems

LV HRC fuse links

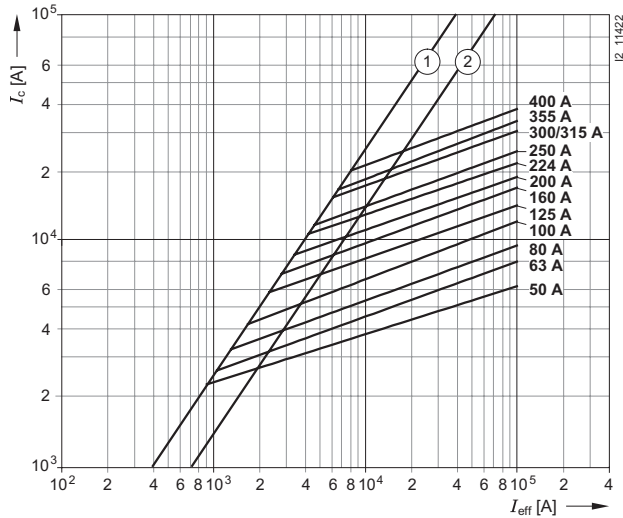
Series 3NA6 2..-4

Size: 2
Operational class: gG
Rated voltage: 400 V AC
Rated current: 50 ... 400 A

Time/current characteristic curves diagram

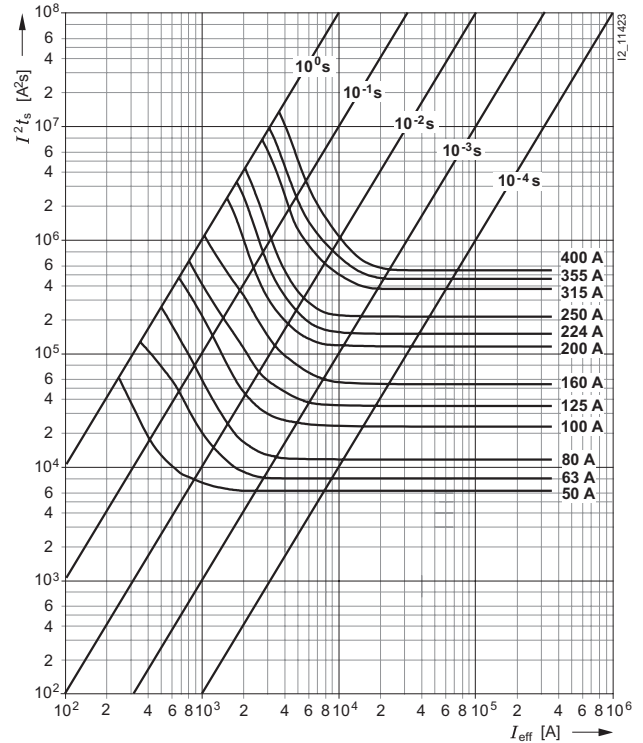


Current limitation diagram



- ① Peak short-circuit current with largest DC component
② Peak short-circuit current without DC component

Melting I^2t_s values diagram



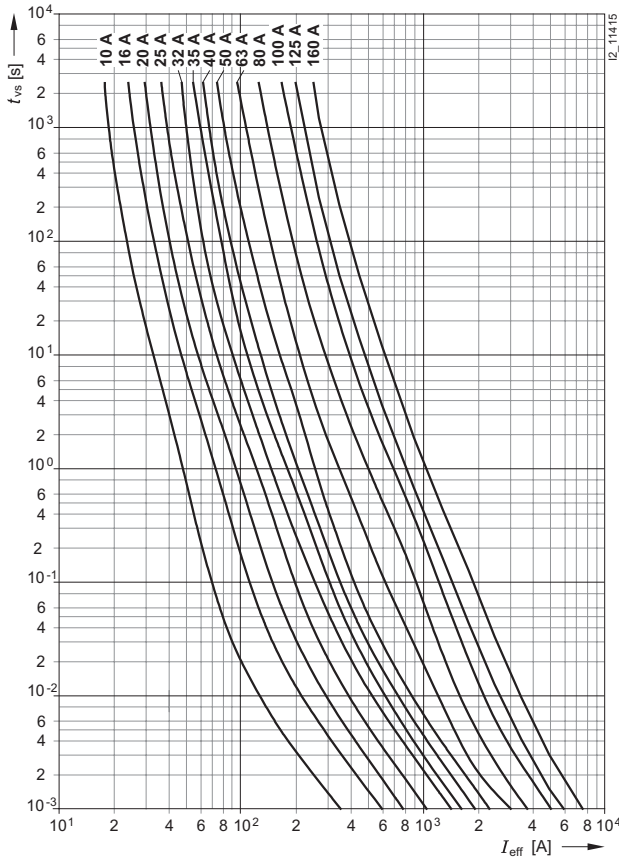
Type	I_n	P_v	$\Delta\vartheta$
	A	W	K
3NA6 220-4	50	4.7	16
3NA6 222-4	63	5.9	16
3NA6 224-4	80	6.8	21
3NA6 230-4	100	7.4	22
3NA6 232-4	125	9.8	27
3NA6 236-4	160	12.6	34
3NA6 240-4	200	14.9	33
3NA6 242-4	224	15.4	31
3NA6 244-4	250	17.9	38
3NA6 250-4	300	19.4	34
3NA6 252-4	315	21.4	35
3NA6 254-4	355	26.0	49
3NA6 260-4	400	27.5	52

Type	I^2t_s 1 ms A ² s	4 ms A ² s	I^2t_a 230 V AC A ² s	400 V AC A ² s
3NA6 220-4	6000	6800	9100	11600
3NA6 222-4	7700	9800	14200	19000
3NA6 224-4	12000	16000	23100	30700
3NA6 230-4	24000	30600	40800	56200
3NA6 232-4	36000	50000	70000	91300
3NA6 236-4	58000	85000	120000	158000
3NA6 240-4	115000	135000	218000	285000
3NA6 242-4	145000	170000	299000	392000
3NA6 244-4	205000	230000	420000	551000
3NA6 250-4	361000	433000	670000	901000
3NA6 252-4	361000	433000	670000	901000
3NA6 254-4	441000	538000	800000	1060000
3NA6 260-4	529000	676000	1155000	1515000

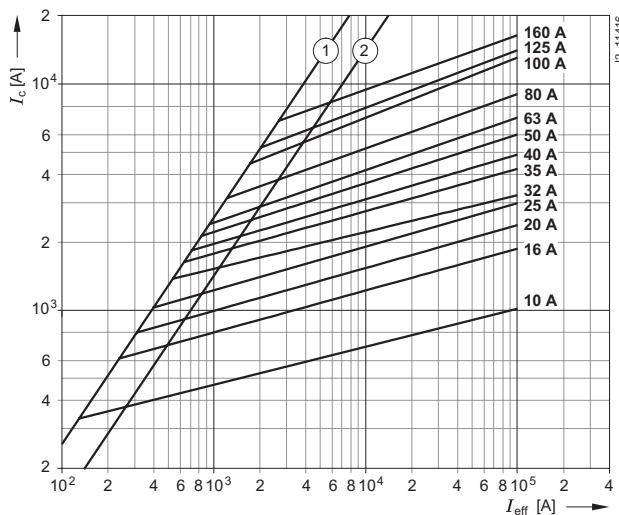
Series 3NA6 8...-4/-4KK

Size: 000, 00
Operational class: gG
Rated voltage: 400 V AC
Rated current: 10 ... 160 A

Time/current characteristic curves diagram

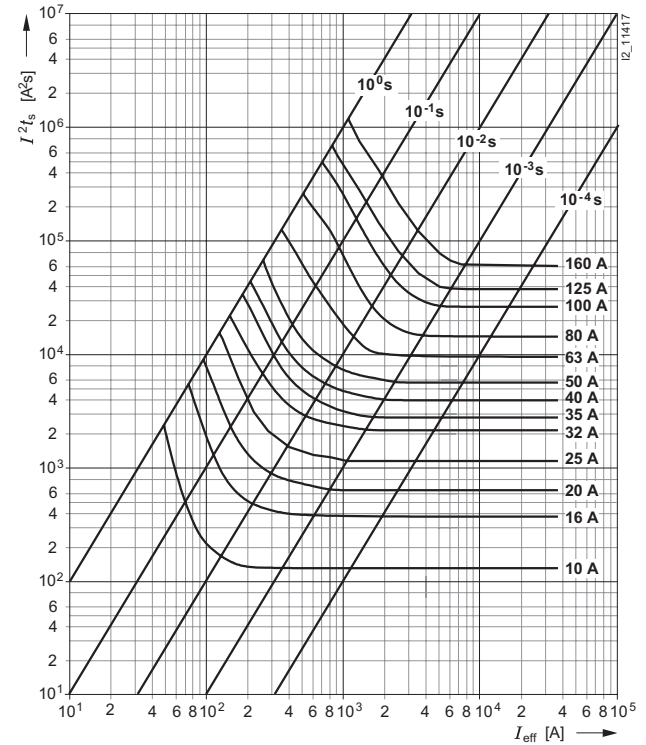


Current limitation diagram



- ① Peak short-circuit current with largest DC component
- ② Peak short-circuit current without DC component

Melting I^2t_s values diagram



Type	I_n A	P_v W	$\Delta\vartheta$ K	I^2t_s 1 ms A ² s	I^2t_s 4 ms A ² s
3NA6 803-4	10	1.0	8	120	130
3NA6 805-4	16	1.7	11	370	420
3NA6 807-4	20	2.0	15	670	750
3NA6 810-4	25	2.3	17	1200	1380
3NA6 812-4	32	2.6	18	2200	2500
3NA6 814-4	35	2.7	21	3000	3300
3NA6 817-4	40	3.1	24	4000	4500
3NA6 820-4	50	3.8	25	6000	6800
3NA6 822-4	63	3.9	23	9300	10250
3NA6 824-4, 3NA6 824-4KK	80	4.9	26	14200	18300
3NA6 830-4, 3NA6 830-4KK	100	5.4	29	25600	33600
3NA6 832-4	125	8.9	44	36000	50000
3NA6 836-4	160	11.3	52	58000	85000

Type	I^2t_a 230 V AC A ² s	I^2t_a 400 V AC A ² s
3NA6 803-4	180	265
3NA6 805-4	580	750
3NA6 807-4	1000	1370
3NA6 810-4	1800	2340
3NA6 812-4	3400	4550
3NA6 814-4	4900	6750
3NA6 817-4	6100	8700
3NA6 820-4	9100	11600
3NA6 822-4	12400	17900
3NA6 824-4, 3NA6 824-4KK	27000	38000
3NA6 830-4, 3NA6 830-4KK	48300	69200
3NA6 832-4	70000	91300
3NA6 836-4	120000	158000

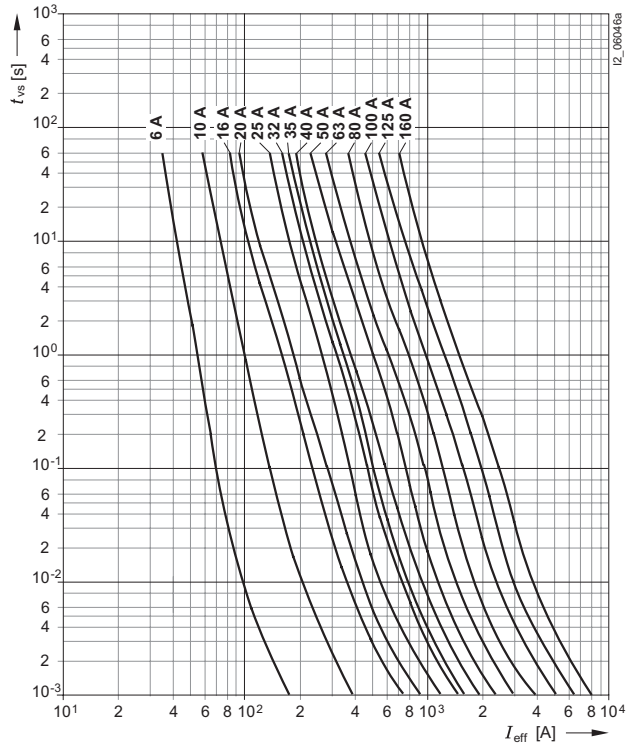
BETA Protecting Low-Voltage Fuse Systems

LV HRC fuse links

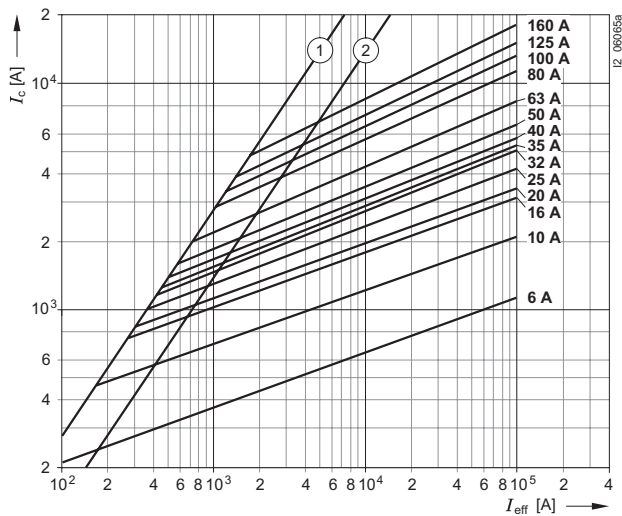
Series 3ND1 8

Size: 000, 00
Operational class: aM
Rated voltage: 500 V AC
Rated current: 6 ... 160 A

Time/current characteristic curves diagram

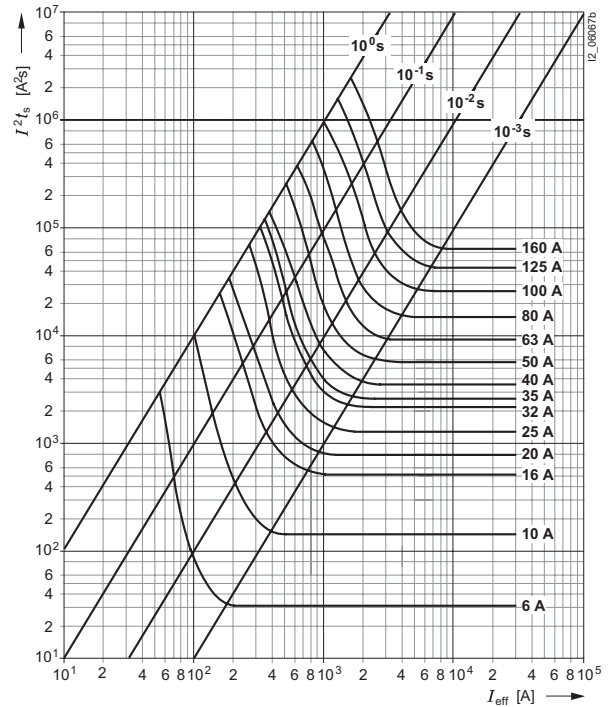


Current limitation diagram



- ① Peak short-circuit current with largest DC component
② Peak short-circuit current without DC component

Melting I^2t_s values diagram



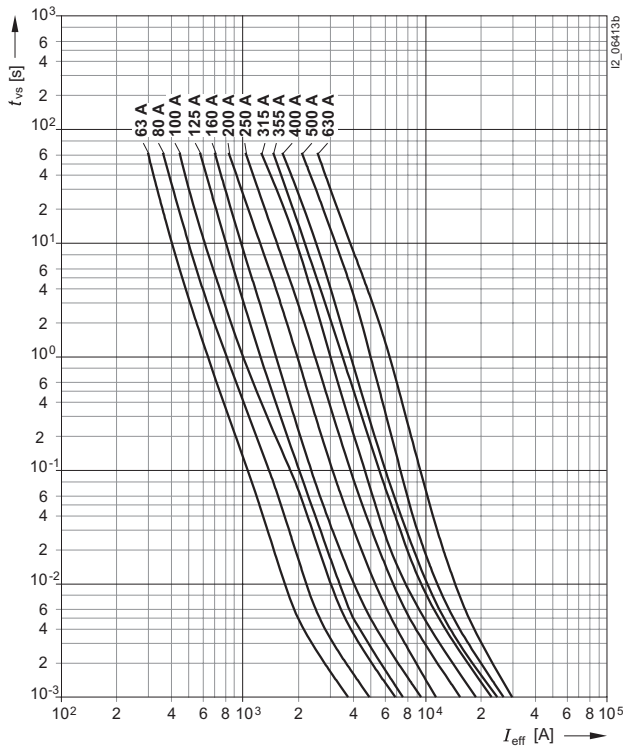
Type	I_n	P_v	$\Delta\vartheta$	I^2t_s	
	A	W	K	1 ms A ² s	4 ms A ² s
3ND1 801	6	0.8	7	32	55
3ND1 803	10	0.5	5	150	260
3ND1 805	16	0.8	7	570	800
3ND1 807	20	1	8	830	1200
3ND1 810	25	1.2	9	1400	2000
3ND1 812	32	1.5	10	2300	3300
3ND1 814	35	1.8	11	2600	3800
3ND1 817	40	2	12	3700	5500
3ND1 820	50	2.4	14	5800	8400
3ND1 822	63	3.3	17	9300	13000
3ND1 824	80	4.5	20	15000	21000
3ND1 830	100	4.9	18	26000	37000
3ND1 832	125	6.3	22	41000	60000
3ND1 836	160	9.3	31	64000	92000

Type	I^2t_a		
	230 V AC A ² s	400 V AC A ² s	500 V AC A ² s
3ND1 801	60	75	110
3ND1 803	280	320	430
3ND1 805	1000	1300	1600
3ND1 807	1300	1600	2200
3ND1 810	2200	2800	3300
3ND1 812	3800	4500	5400
3ND1 814	4200	5100	6300
3ND1 817	5700	7200	9300
3ND1 820	5200	10500	12500
3ND1 822	15000	16500	21000
3ND1 824	21500	27000	34000
3ND1 830	44000	56000	76000
3ND1 832	76000	98000	135000
3ND1 836	105000	130000	170000

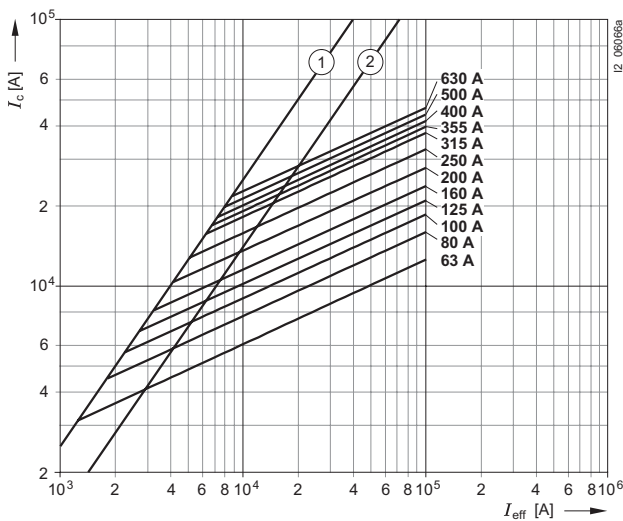
Series 3ND1 3..., 3ND2

Size: 1, 2, 3
Operational class: aM
Rated voltage: 690 V AC
Rated current: 63 ... 630 A

Time/current characteristic curves diagram



Current limitation diagram



- ① Peak short-circuit current with largest DC component
- ② Peak short-circuit current without DC component

Melting $I^2 t_s$ values diagram

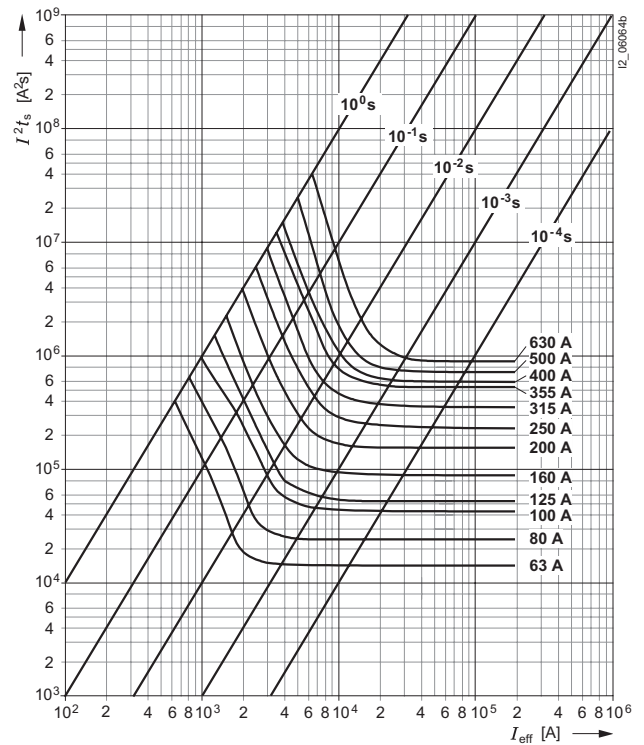


Table see page 3/38.

BETA Protecting Low-Voltage Fuse Systems

LV HRC fuse links

Series 3ND1 3..., 3ND2

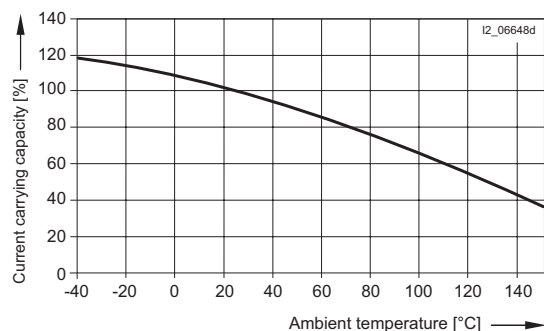
Size: 1, 2, 3
Operational class: aM
Rated voltage: 690 V AC
Rated current: 63 ... 630 A

Type	I_n	P_v	$\Delta\vartheta$	$I^2 t_s$		$I^2 t_a$		
	A	W	K	1 ms A ² s	4 ms A ² s	230 V AC A ² s	400 V AC A ² s	690 V AC A ² s
3ND2 122	63	4	12.2	14000	17700	19300	25600	42000
3ND2 124	80	4.9	13	24200	30800	36500	48000	80000
3ND2 130	100	5.8	15	45600	59000	65000	85000	140000
3ND2 132	125	8.1	16.5	57000	74300	73000	97000	160000
3ND2 136	160	11.4	18	90000	114000	107000	142000	235000
3ND2 140	200	14.1	19.5	150000	198000	172000	228000	375000
3ND2 144	250	18	22	250000	313000	260000	340000	565000
3ND2 232	125	8.1	16.5	57000	74300	73000	97000	160000
3ND2 236	160	11.4	18	90000	114000	107000	142000	235000
3ND2 240	200	14.1	19.5	150000	198000	172000	228000	375000
3ND2 244	250	18	22	250000	313000	260000	340000	565000
3ND2 252	315	22.6	30	370000	450000	460000	610000	1000000
3ND2 254	355	24.7	29	540000	643000	645000	855000	1400000
3ND2 260	400	30.8	35	615000	750000	688000	910000	1500000
3ND2 352	315	22.6	30	370000	450000	460000	610000	1000000
3ND2 354	355	24.7	29	540000	643000	645000	855000	1400000
3ND2 360	400	30.8	26	615000	750000	688000	910000	1500000
3ND1 365	500	47	40	730000	933000	876000	1095000	1825000
3ND1 372	630	50	43	920000	1375000	1300000	1800000	2600000

More information

Load capability with increased ambient temperature

The time/current characteristics of the NEOZED/DIAZED/LV HRC fuse links are based on an ambient temperature of 20 °C ±5 °C in accordance with DIN VDE 0636. If higher ambient temperatures are used (see diagram) a lower load capability must be used. For example, at an ambient temperature of 50 °C, an LV HRC fuse link is required that can handle 90 % of the rated current. While the short-circuit behavior is not influenced by an increased ambient temperature, it is influenced by overload and operation at rated value.



Influence of the ambient temperature on the load capability of NEOZED, DIAZED and LV HRC fuses of gG operational class with natural convection in the distribution board.

Assignment of cable and line protection

When assigning fuses gG to cable and line protection in the event of an overload in compliance with DIN VDE 0100 Part 430, the following conditions must be met:

(1) $I_B = I_n = I_z$ (rated current rule)

(2) $I_2 = 1.45 \times I_z$ (tripping rule)

I_B : Operational current of electrical circuit

I_n : Rated current of selected protective device

I_z : Permissible current carrying capacity of the cable or line under specified operating conditions

I_2 : Tripping current of the protective device under specified operating conditions ("conventional test current").

These days, the factor 1.45 has become an internationally accepted compromise of the protection and utilization ratio of a line, taking into account the breaking behavior of the protective device (e.g. fuse).

In compliance with the supplementary requirements for DIN VDE 0636, Siemens fuse links of gG operational class comply with the following conditions:

"Load breaking switching with $I_2=1.45 \times I_n$ during conventional test duration under special test conditions in accordance with the aforementioned supplementary requirements of DIN VDE 0636"

This therefore permits direct assignment.