

Technical specifications

Sizes	mm x mm	10 x 38 Cylindrical fuse links 3NC1 0, 3NC1 1, 3NC2 2	14 x 51	22 x 58
Standards Approved acc. to		IEC 60269-4; UL 248-13; CSA C22.2 No. 248.13 UL 248-13; UL File No. E167357; CSA C22.2 No. 248.13		
		Fuse holders, fuse bases 3NC1, 3NC2		
Standards Approved to		IEC 60269-2; IEC 60947-3; UL 512; CSA C22.2 No. 39-M UL 512; UL File No. E220063; CSA C22.2 No. 39-M		
Rated voltage	V AC	690		
Rated current I_n	A	32	50	100
Max. power dissipation of fuse links (conductor cross-section used)	W	3 (6 mm ²) 4.3 (10 mm ²)	5 (10 mm ²) 6.5 (25 mm ²)	9.5 (35 mm ²) 11 (50 mm ²)
Feeder terminals	mm ²	1.5 ... 25	1.5 ... 35	4 ... 50
Utilization category	acc. to IEC 60947-3	22B/32 A/400 V AC 22B/10 A/690 V AC	22B/50 A/400 V AC 22B/20 A/690 V AC	20B/690 V AC
Rated conditional short-circuit current • At 400 V	kA	50 (32 A gG)	100 (50 A gG)	100 (100 A gG) 80 (80 A gG)

Technical specifications

Cylinders	Operational class (IEC 60269)	Rated voltage U_n	Rated voltage U_n	Rated current I_n	Melting I^2t value I^2t_s ($t_{VS} = 1\text{ ms}$)	Breaking I^2t value I^2t_A at U_n	Temperature rise at I_n body center	Power dissipation at I_n	Weight approx.
		V AC	V DC	A	A ² s	A ² s	K	W	kg
3NC1 003	aR	600	400	3	3	8	30	1.2	0.01
3NC1 006	aR	600	400	6	4	20	30	1.5	0.01
3NC1 008	aR	600	400	8	6	30	25	2	0.01
3NC1 010	aR	600	400	10	9	60	40	2.5	0.01
3NC1 012	aR	600	400	12	15	110	50	3	0.01
3NC1 016	aR	600	400	16	25	150	60	3.5	0.01
3NC1 020	aR	600	400	20	34	200	80	4.8	0.01
3NC1 025	aR	600	400	25	60	250	90	6	0.01
3NC1 032	aR	600	400	32	95	500	110	7.5	0.01
3NC1 401	aR	660	700	1		1.2	90	5	0.02
3NC1 402	aR	660	700	2		10	30	3	0.02
3NC1 403	aR	660	700	3		15	40	2.5	0.02
3NC1 404	aR	660	700	4		25	50	3	0.02
3NC1 405	aR	690	700	5	1.6	9	20	1.5	0.02
3NC1 406	aR	690	700	6		12	30	1.5	0.02
3NC1 410	aR	690	700	10	3.6	20	50	4	0.02
3NC1 410-5	aR	690	700 ¹⁾	10	3.6	90	50	4	0.02
3NC1 415	aR	690	700	15	10	75	60	5.5	0.02
3NC1 415-5	aR	690	700 ¹⁾	15	9	100	60	5.5	0.02
3NC1 420	aR	690	700	20	26	120	70	6	0.02
3NC1 420-5	aR	690	700 ¹⁾	20	26	500	70	6	0.02
3NC1 425	aR	690	700	25	44	250	80	7	0.02
3NC1 425-5	aR	690	700 ¹⁾	25	47	400	80	7	0.02
3NC1 430	aR	690	700	30	58	300	80	9	0.02
3NC1 430-5	aR	690	700 ¹⁾	30	58	500	80	9	0.02
3NC1 432	aR	690	700	32	95	700	80	7.6	0.02
3NC1 432-5	aR	690	700 ¹⁾	32	68	600	80	7.6	0.02
3NC1 440	aR	690	700	40	110	900	100	8	0.02
3NC1 440-5	aR	690	700 ¹⁾	40	84	900	100	8	0.02
3NC1 450	aR	690	700	50	220	1800	110	9	0.02
3NC1 450-5	aR	690	700 ¹⁾	50	200	2000	110	9	0.02
3NC2 200	aR	600	700	100	1250	8000	110	16	0.06
3NC2 200-5	aR	600	700 ¹⁾	100	1100	8500	110	16	0.06
3NC2 220	aR	690	700	20	34	220	40	4.6	0.06
3NC2 220-5	aR	690	700 ¹⁾	20	19	240	40	5	0.06
3NC2 225	aR	690	700	25	50	300	50	5.6	0.06
3NC2 225-5	aR	690	700 ¹⁾	25	34	350	50	6	0.06
3NC2 232	aR	690	700	32	80	450	65	7	0.06
3NC2 232-5	aR	690	700 ¹⁾	32	54	500	65	8	0.06
3NC2 240	aR	690	700	40	100	700	80	8.5	0.06
3NC2 240-5	aR	690	700 ¹⁾	40	68	800	80	9	0.06
3NC2 250	aR	690	700	50	185	1350	90	9.5	0.06
3NC2 250-5	aR	690	700 ¹⁾	50	135	1500	90	9.5	0.06
3NC2 263	aR	690	700	63	310	2600	100	11	0.06
3NC2 263-5	aR	690	700 ¹⁾	63	280	3000	100	11	0.06
3NC2 280	aR	690	700	80	620	5500	110	13.5	0.06
3NC2 280-5	aR	690	700 ¹⁾	80	600	6000	110	13.5	0.06

1) Cooling air speed 1 m/s. In the case of natural air cooling, reduction of 5 %.

BETA Protecting

SITOR Semiconductor Fuses

SITOR, cylindrical fuse design

Load rating of SITOR cylindrical fuses without strikers
in fuse holders - can be used as fuse switch disconnectors¹⁾²⁾

For SITOR fuse links	Rated voltage	Rated current	Required conductor cross- section	Cylindrical fuse bases						Fuse holders - can be used as fuse switch disconnectors ¹⁾						
				1-pole Type	$I_{\max}$ A	2-pole Type	$I_{\max}$ A	3-pole Type	$I_{\max}$ A	1-pole Type	$I_{\max}$ A	2-pole Type	$I_{\max}$ A	3-pole Type	$I_{\max}$ A	
V AC																
Size 10 x 38																
3NC1 003	600	3	1	3NC1 038-1	3	3NC1 038-2 /	3	3NC1 038-3 /	3	3NC1 091	3	3NC1 092 /	3	3NC1 093 /	3	
3NC1 006		6	1		6		6		6		6		6			
3NC1 008		8	1		8		8		8		8		8		8	
3NC1 010		10	1.5	3NC1 038-1	10	3NC1 038-1	10	3NC1 038-1	10	3NC1 091	10	3NC1 091	10	3NC1 091	10	
3NC1 012		12	1.5		12		12		12		12		12			
3NC1 016		16	2.5		16		16		16		16		16			
3NC1 020		20	2.5		20		20		20		20		20		20	
3NC1 025		25	4		25		24		24		25		24		22	
3NC1 032		32	6		32		28		28		32		30		28	
Size 14 x 51																
3NC1 401	660	1	1	3NC1 451-1	1	-	-	-	-	3NC1 491	1	3NC1 492 /	1	3NC1 493 /	1	
3NC1 402		2	1		2						2		2		2	2
3NC1 403		3	1		3						3		3		3	3
3NC1 404	690	4	1		4						4	3NC1 491	4	3NC1 491	4	
3NC1 405		5	1		5						5		5		5	5
3NC1 406		6	1		6						6		6		6	6
3NC1 410		10	1.5		10						10		10		10	
3NC1 415		15	1.5		15						15		15		15	15
3NC1 420		20	2.5		20						20		20		20	20
3NC1 425		25	4		25						25		24		23	
3NC1 430		30	6		30						28		27		25	
3NC1 432		32	6		32						31		30		30	
3NC1 440		40	10		40						38		37		36	
3NC1 450		50	10		50						48		46		44	
Size 22 x 58																
3NC2 220	690	20	2.5	3NC2 258-1	20	-	-	-	-	3NC2 291	20	3NC2 292 /	20	3NC2 293 /	20	
3NC2 225		25	4		25						25		25		25	25
3NC2 232		32	6		32						32		32		32	32
3NC2 240		40	10		40						40	3NC2 291	39	3NC2 291	38	
3NC2 250		50	10		50						50		48		46	
3NC2 263		63	16		63						60		58		56	
3NC2 280	600	80	25		80						74		71		69	
3NC2 200		100	35		100						95		90		85	

Fuse tongs: 3NC1 000

Load rating of SITOR cylindrical fuses with strikers
in fuse holders - can be used as fuse switch disconnectors¹⁾²⁾

For SITOR fuse links	Rated voltage	Rated current	Required conductor cross-section	Fuse holders - can be used as fuse switch disconnectors ¹⁾					
	V AC	I_n	Cu	1-pole Type	I_{max}	2-pole Type	I_{max}	3-pole Type	I_{max}
		A	mm ²		A		A		A
Size 14 x 51									
3NC1 410-5	690	10	1.5	3NC1 491	10	3NC1 492/ 2 x 3NC1 491-5	10	3NC1 493/ 3 x 3NC1 491-5	10
3NC1 415-5		15	1.5		15		15		15
3NC1 420-5		20	2.5		20		20		20
3NC1 425-5		25	4		25		25		25
3NC1 430-5		30	6		30		30		30
3NC1 432-5		32	6		32		32		31
3NC1 440-5		40	10		38		35		34
3NC1 450-5		50	10		48		46		44
Size 22 x 58									
3NC2 220-5	690	20	2.5	3NC2 291	20	3NC2 292/ 2 x 3NC2 291-5	20	3NC2 293/ 3 x 3NC2 291-5	20
3NC2 225-5		25	4		25		25		25
3NC2 232-5		32	6		32		31		30
3NC2 240-5		40	10		40		39		37
3NC2 250-5		50	10		45		43		42
3NC2 263-5		63	16		59		55		52
3NC2 280-5	600	80	25		71		69		68
3NC2 200-5		100	35		94		90		85

¹⁾ Fuse holders according to IEC 60269-3, UL 512,
fuse switch disconnectors (10 x 38, 14 x 51) according to IEC 60947-3,
fuse disconnectors (22 x 58) according to IEC 60947-3

²⁾ The values $I_{\max}$ apply for "stand-alone operation". If several devices are
butt-mounted and/or subject to unfavorable cooling conditions,
these values may be reduced still further.