Fuse Systems

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Introduction

Overview

Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
	**NEOZED fuse systems**	5/4	MINIZED switch disconnectors, bases, fuse links from 2 A to 63 A of operational class gG and accessories. Everything you need for a complete system.	Fuse system: IEC 60269-3 Safety switching devices: IEC/EN 60947-3 DIN VDE 0638	✓	✓	✓
	**DIAZED fuse systems**	5/12	Fuse links from 2 A to 100 A in various operational classes, base versions with classic screw base connections. A widely used fuse system.	IEC 60269-3; DIN VDE 0635; CEE 16	✓	✓	✓
Cylindrical fuse systems							
	**Cylindrical fuse links and cylindrical fuse holders**	5/18	Line protection or protection of switching devices. The fuse holders with touch protection ensure the safe "no-voltage" replacement of fuse links. Auxiliary switches can be retrofitted	IEC 60269-1, -2, -3; NF C 60-200; NF C 63-210, -211; NBN C 63269-2, CEI 32-4, -12	✓	✓	✓
	**Compact fuse holders in size 10 x 38 mm and Class CC**	5/22	For installing fused loaded motor starter combinations.	IEC 60269-1,-2; IEC 60947-4; UL 512; CSA	✓	--	✓
	**Class CC fuse systems**	5/26	These comply with American standard and have UL and CSA approval, for customers exporting OEM products and mechanical engineers. Modern design with touch protection according to BGV A3 for use in "branch circuit protection".	Fuse holders: UL 512; CSA 22.2 Fuse links: UL 248-4; CSA 22.2	✓	✓	✓
	**Busbar systems**	5/28	Busbars for NEOZED fuse bases, NEOZED fuse disconnectors, MINIZED switch disconnectors, DIAZED fuse systems and cylindrical fuse systems.	EN 60439-1	✓	✓	✓

Devices		Page	Application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
LV HRC fuse systems							
	**LV HRC fuse links**	5/34	Fuse links from 2 A to 1250 A for selective line protection and system protection in non-residential buildings, industry and power utilities.	IEC 60269-1, -2; EN 60269-1	✓	✓	✓
	**LV HRC signal detectors**	5/43	Signal detectors for when a fuse is tripped on all LV HRC fuse links with combination or front indicators with non-insulated grip lugs. Plus the comprehensive accessory range required for LV HRC fuse systems.	--	✓	✓	✓
	**LV HRC sockets and accessories**	5/45	Fuse bases for screw or snap-on mounting onto standard mounting rails, available as 1-pole or 3-pole version	IEC 60269-1, -2; EN 60269-1	✓	✓	✓
SITOR semiconductor fuses							
	**SITOR LV HRC design**	5/53	Fuse links in LV HRC design and a huge variety of models support a wide range of applications from 500 V to 1500 V and 150 A to 1600 A. Fuses with slotted blade contacts, bolt-on links or female thread and special designs.	--	--	--	✓
	**SITOR, cylindrical fuse design**	5/61	Fuse links, fuse holders – usable as fuse switch disconnectors and fuse bases up to 600/690 V AC and 400/700 V DC from 1 A to 100 A in the sizes 10 × 38 mm, 14 × 51 mm and 22 × 58 mm.	--	--	--	✓
	**NEOZED and DIAZED, SILIZED design**	5/64	NEOZED fuse links for 400 V AC and 250 V DC and DIAZED for 500 V AC and 500 V DC.	--	--	--	✓
Photovoltaic fuses							
	**PV cylindrical fuses**	5/67	Fuses with a rated voltage of 1000 V DC and gPV operational class for the protection of photovoltaic modules, their connecting cables and other components.	IEC 60269-6	✓	✓	✓
	**PV cumulative fuses**	5/68	Fuses with a rated voltage of 1000 V and 1500 V DC, a rated current of 63 A to 400 A and gPV operational class for the protection of connecting cables and other components.	IEC60269-6	✓	✓	✓

Introduction

Overview

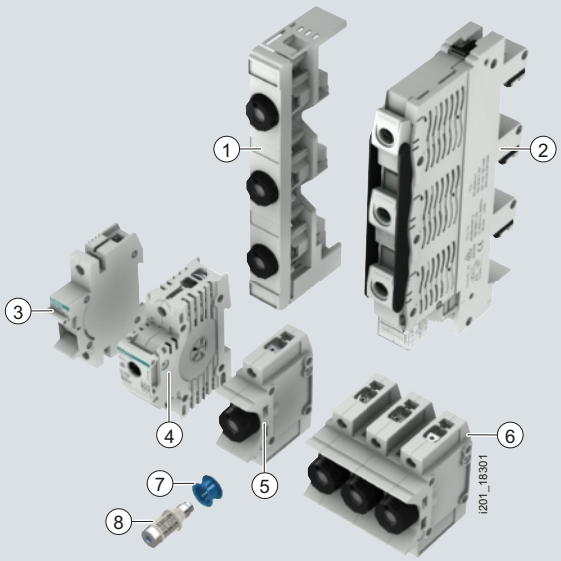
The NEOZED fuse system is primarily used in distribution technology and industrial switchgear assemblies. The system is easy to use and is also approved for domestic installation.

The MINIZED switch disconnectors are primarily used in switchgear assemblies and control engineering. They are approved for switching loads as well as for safe switching in the event of short circuits. The MINIZED D02 is also suitable for use in the pre-counter area in household applications in compliance with the recommendations of the VDEW according to TAB 2007.

Due to its small footprint, the MINIZED D01 fuse switch disconnector is primarily used in control engineering.

The NEOZED fuse bases are the most cost-effective solution for the application of NEOZED fuses. All NEOZED bases must be fed from the bottom to ensure that the threaded ring is insulated during removal of the fuse link. The terminals of the NEOZED bases are available in different versions and designs to support the various installation methods.

Benefits



1. NEOZED bus-mounting base D02 for 60 mm busbar system, with NEOZED screw cap
2. NEOZED bus-mounting switch disconnector D02 for 60mm busbar system
3. MINIZED fuse switch disconnector D01
4. MINIZED switch disconnector D02
5. NEOZED comfort base, 1-pole (fuse base with touch protection BGV A3), with NEOZED screw cap
6. NEOZED comfort base, 3-pole (fuse base with touch protection BGV A3), with NEOZED screw cap
7. NEOZED adapter sleeve
8. NEOZED fuse link

Compared to the older DIAZED fuse system, the NEOZED fuse system is significantly more modern:

- Much more compact which saves space in the distribution board
- Modern devices like the MINIZED switching devices, which combine the functions of a switch disconnector and a fuse base
- Wide range of accessories, such as busbars for one, two, or three-phase wiring
- Modern terminals for MINIZED D02 and NEOZED comfort bases: Visible, clear and controllable connection simplifies cable entry

Double terminal chambers permit connection of two wires of different cross-sections

- Lower power loss of the fuse links

Even when compared to the internationally prevalent cylindrical fuse system, the NEOZED fuse system has considerable advantages:

- Non-interchangeability - thanks to use of adapter sleeves (i.e. it is not possible to insert a fuse for larger currents). This is a requirement of numerous wiring regulations in Germany and other European countries
- Switching devices with load switching characteristics allow the safe switching of load currents up to 63 A

Technical specifications

		NEOZED fuse links 5SE2
Standards		IEC 60269-3
Operational class		gG
Rated voltage U_n	V AC	400
	V DC	250
Rated current I_n	A	2 ... 100
Rated breaking capacity	kA AC	50
	kA DC	8
Non-interchangeability		Using adapter sleeves
Resistance to climate	°C	Up to 45 at 95 % rel. humidity
Ambient temperature	°C	-5 ... +40, humidity 90 % at 20

		MINIZED switch dis-connectors	MINIZED fuse switch discon-nectors	Fuse bases, made of ceramic			Comfort bases	Fuse bases
		D02	D01	D01	D02	D03	D01/02	
		5SG7 1	5SG7 6	5SG1 5 5SG5 5	5SG1 6 5SG5 6	5SG1 8	5SG1 .01 5SG5 .01	5SG1 .30 5SG1 .31 5SG5 .30
Standards		DIN VDE 0638 IEC/EN 60947-3		IEC 60269-3				
Main switch characteristic EN 60204-1		Yes	--	--				
Insulation characteristic EN 60664-1		Yes	--	--				
Rated voltage U_n	V AC	230/400, 240/415		400				
• 1P	V DC	65	48	250				
• 2P in series	V DC	130	110	250				
Rated current I_n	A	63	16	16	63	100	16/63	16/63
Rated insulation voltage	V AC	500	400	--				
Rated impulse withstand voltage	kV AC	6	2.5	--				
Overvoltage category		4	--	--				
Utilization category acc. to VDE 0638								
• AC-22	A	63	16	--				
Utilization category acc. to EN 60947-3								
• AC-22 B	A	63	16	--				
• AC-23 B	A	35	--	--				
• -22 DC B	A	63	--	--				
Sealable when switched on		Yes		Yes, with sealable screw caps				
Mounting position		Any, but preferably vertical						
Reduction factor of I_n with 18 pole								
• Side-by-side mounting		0.9	--					
• On top of one another, with vertical standard mounting rail		0.87	--					
Degree of protection acc. to IEC 60529		IP20, with connected conductors						
Terminals with touch protection acc. to BGV A3		Yes		No			Yes	
Ambient temperature	°C	-5 ... +40, humidity 90 % at 20						
Terminal versions		--	--	B	K, S	K/S	--	--
Conductor cross-sections								
• Solid and stranded	mm^2	1.5 ... 35	1.5 ... 16	1.5 ... 4	1.5 ... 25	10 ... 50	0.75 ... 35	1.5 ... 35
• Flexible, with end sleeve	mm^2	1.5 ... 35	1.5	1.5	1.5	10	--	--
• Finely stranded, with end sleeve	mm^2	--	--	0.75 ... 25	--	--	--	--
Tightening torques	Nm	2.5 ... 3	1.2	1.2	2	3.5/2.5	3.5	3

Introduction

More information

Fuse bases D01 with terminal version BB

- Incoming feeders, clamp-type terminal B
- Outgoing feeders, clamp-type terminal B

Fuse bases D02, with terminal version KS

- Incoming feeders, screw head contact K
- Outgoing feeders, saddle terminal S

Fuse bases D02, with terminal version SS

- Incoming feeders, saddle terminal S
- Outgoing feeders, saddle terminal S

Selection and ordering data

	Sizes	I_n	Identification color	Mounting width	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A		MW							kg
	NEOZED fuse links, rated voltage 400 V AC/250 V DC, gG operational class										
	D01	2	Pink		►	**5SE2 302**		1	10 units	017	0.005
		4	Brown		►	**5SE2 304**		1	10 units	017	0.013
		6	Green		►	**5SE2 306**		1	10/500 units	017	0.009
		10	Red		►	**5SE2 310**		1	10/500 units	017	0.007
		13	Black			**5SE2 013-2A**		1	10 units	017	0.006
		16	Gray		►	**5SE2 316**		1	10/500 units	017	0.005
	D02	20	Blue		►	**5SE2 320**		1	10 units	017	0.011
		25	Yellow		►	**5SE2 325**		1	10 units	017	0.010
		32	Black			**5SE2 332**		1	10 units	017	0.013
		35	Black		►	**5SE2 335**		1	10 units	017	0.011
		40	Black			**5SE2 340**		1	10 units	017	0.015
		50	White		►	**5SE2 350**		1	10 units	017	0.013
		63	Copper		►	**5SE2 363**		1	10 units	017	0.015
	D03	80	Blue		►	**5SE2 280**		1	10 units	017	0.035
		100	Red		►	**5SE2 300**		1	10 units	017	0.042

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* You can order this quantity or a multiple thereof.

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Selection and ordering data

	Sizes	Number of poles	I_n A	Mounting width MW	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	**MINIZED switch disconnectors with fuses** using draw-out technology with touch protection according to BGV A3 (adapter sleeves not included in the scope of delivery)										
	D02	1P	63	1.5	▶	**5SG7 113**		1	1 unit	017	0.141
		1P+N	63	3		**5SG7 153**		1	1 unit	017	0.259
		2P	63	3		**5SG7 123**		1	1 unit	017	0.276
		3P	63	4.5	▶	**5SG7 133**		1	1 unit	017	0.411
		3P+N	63	6		**5SG7 163**		1	1 unit	017	0.524
	Versions for Austria only, with permanently fitted adapter sleeves, incl. fuse link										
	D02	3P	25	4.5		**5SG7 133-8BA25**		1	1 unit	017	0.450
			35			**5SG7 133-8BA35**		1	1 unit	017	0.448
			50			**5SG7 133-8BA50**		1	1 unit	017	0.455
	**Reducers**										
	For fuse links D01 in MINIZED switch disconnectors D02					**5SH5 527**		1	10/100 units	031	0.001
	**Auxiliary switches (AS)**										
	For MINIZED switch disconnectors D02										
	1 NO + 1 NC			0.5	▶	**5ST3 010**		1	1 unit	020	0.066
	2 NO					**5ST3 011**		1	1 unit	020	0.055
	2 NC					**5ST3 012**		1	1 unit	020	0.055
	For technical specifications, see chapter "Miniature circuit breakers –> Additional components"										
	**Auxiliary switches (AS) with TEST button**										
	For MINIZED switch disconnectors D02										
	1 NO + 1 NC			0.5		**5ST3 010-2**		1	1 unit	020	0.045
	2 NO					**5ST3 011-2**		1	1 unit	020	0.045
	2 NC					**5ST3 012-2**		1	1 unit	020	0.045
	For technical specifications, see chapter "Miniature circuit breakers –> Additional components"										
	**MINIZED fuse switch disconnectors** For industrial applications With draw-out technology and touch protection acc. to BGV A3 (not compatible with NEOZED adapter sleeves)										
	D01	1P	16	1		**5SG7 610**		1	1 unit	017	0.082
		1P+N	16	2		**5SG7 650**		1	1 unit	017	0.169
		2P	16	2		**5SG7 620**		1	1 unit	017	0.165
		3P	16	3		**5SG7 630**		1	1 unit	017	0.241
		3P+N	16	4		**5SG7 660**		1	1 unit	017	0.323

For busbars, see page 5/30 ff.

* You can order this quantity or a multiple thereof.

Selection and ordering data

	Sizes	Number of poles	I_n	Matching cover [1]	Terminals [2]	Mounting width	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
			A			MW							kg
	**NEOZED comfort bases made of molded plastic**												
	With touch protection according to BGV A3												
	D01	1P	16	--		1.5	▶	**5SG1 301**		1	3 units	017	0.114
	D02		63	--			▶	**5SG1 701**		1	3 units	017	0.116
	D01	3P	16	--		4.5	▶	**5SG5 301**		1	1 unit	017	0.382
	D02		63	--			▶	**5SG5 701**		1	1 unit	017	0.380
	**NEOZED fuse bases made of molded plastic**												
	For snap-on mounting on standard mounting rails, with cover												
	D01	1P	16	(A1)		1.5		**5SG1 330**		1	6 units	017	0.077
	D02		63	(A1)		1.5		**5SG1 730**		1	6 units	017	0.085
	For snap-on mounting on standard mounting rails, w/o cover												
	D01	1P	16	A1		1.5		**5SG1 331**		1	6 units	017	0.069
	D02		63	A1		1.5		**5SG1 731**		1	6 units	017	0.081
	For snap-on mounting on standard mounting rails, with cover												
	D01	3P	16			4.5		**5SG5 330**		1	2 units	017	0.227
	D02		63			4.5		**5SG5 730**		1	2 units	017	0.270
	**NEOZED fuse bases made of ceramic**												
	For snap-on mounting on standard mounting rails, with cover												
	D01	1P	16	(A4)	BB	1.5	▶	**5SG1 553**		1	6 units	017	0.065
	D02		63	(A10)	SS	1.5		**5SG1 653**		1	6 units	017	0.091
	D02		63	(A10)	KS	1.5	▶	**5SG1 693**		1	6 units	017	0.080
	For snap-on mounting on standard mounting rails, w/o cover												
	D01	1P	16	A4, A8	BB	1.5		**5SG1 595**		1	6 units	017	0.059
	D02		63	A10, A8	SS	1.5		**5SG1 655**		1	6 units	017	0.082
	D02		63	A10, A8	KS	1.5		**5SG1 695**		1	6 units	017	0.078
	D03		100	A6, A9	KS	2.5		**5SG1 812**		1	10 units	017	0.190
	For snap-on mounting on standard mounting rails, with cover												
	D01	3P	16		BB	4.5	▶	**5SG5 553**		1	2 units	017	0.203
	D02		63		SS	4.5	▶	**5SG5 653**		1	2 units	017	0.272
	D02		63		KS	4.5		**5SG5 693**		1	2 units	017	0.256

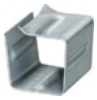
[1] Covers with brackets are part of the scope of delivery.
Covers without brackets are not part of the scope of delivery.

[2] For terminal versions, see page 5/6.

NEOZED fuse bases and accessories

	Sizes	I_n	Matching cover	Mounting width	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A		MW							kg
	NEOZED covers										
	Made of molded plastic, plug-in, for fuse bases made of molded plastic										
	D01, D02		A1	1.5		**5SH5 244**		1	15 units	017	0.002
	For fuse bases made of ceramic										
	D01		A4	1.5		**5SH5 251**		1	15 units	017	0.008
	D02		A10	1.5		**5SH5 253**		1	15 units	017	0.006
	Screw-on										
	D03		A6	2.5		**5SH5 233**		1	20 units	017	0.019
	NEOZED caps										
	Made of molded plastic, plug-in										
	D01, D02		A8			**5SH5 235**		1	5 units	017	0.021
	Screw-on										
	D03		A9			**5SH5 234**		1	10 units	017	0.065

* You can order this quantity or a multiple thereof.

	Sizes	For fuse links A	Identification color	Mounting width MW	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	NEOZED screw caps										
	Molded plastic, with inspection hole										
	D01				▶	**5SH4 116**		1	10/1000 units	017	0.007
	D02				▶	**5SH4 163**		1	10/200 units	017	0.009
	Ceramic										
	D01, sealable					**5SH4 316**		1	10 units	017	0.017
	D02, sealable					**5SH4 363**		1	10 units	017	0.022
	D03					**5SH4 100**		1	3 units	017	0.074
	Ceramic, with inspection hole										
	D01				▶	**5SH4 317**		1	20 units	017	0.017
	D02				▶	**5SH4 362**		1	20 units	017	0.019
	NEOZED adapter sleeves										
	D01	2	Pink		▶	**5SH5 002**		1	10 units	017	0.002
		4	Brown			**5SH5 004**		1	10 units	017	0.002
		6	Green		▶	**5SH5 006**		1	10 units	017	0.002
		10/13	Red		▶	**5SH5 010**		1	10 units	017	0.002
	D02	20	Blue		▶	**5SH5 020**		1	10 units	017	0.002
		25	Yellow		▶	**5SH5 025**		1	10 units	017	0.002
		32/35/40	Black		▶	**5SH5 035**		1	10 units	017	0.003
		50	White			**5SH5 050**		1	10 units	017	0.002
	D03	80	Silver			**5SH5 080**		1	25 units	017	0.002
	For fuse links D01 in base D02 and MINIZED switch disconnectors D02										
	D02	2	Pink			**5SH5 402**		1	10 units	017	0.003
		4	Brown			**5SH5 404**		1	10 units	017	0.005
		6	Green			**5SH5 406**		1	10 units	017	0.002
		10/13	Red			**5SH5 410**		1	10 units	017	0.014
		16	Gray			**5SH5 416**		1	10 units	017	0.002
	NEOZED adapter sleeve fitters										
						**5SH5 100**		1	1/10 units	017	0.023
	NEOZED retaining springs										
	For fuse links D01 in screw caps										
	D02	2 ... 16				**5SH5 400**		1	25 units	017	0.002

* You can order this quantity or a multiple thereof.

DIAZED fuse systems

Overview

The DIAZED fuse system is one of the oldest fuse systems in the world. It was developed by Siemens as far back as 1906. It is still the standard fuse system in many countries to this day. It is particularly widely used in the harsh environments of industrial applications.

The series is available with rated voltages from 500 V to 750 V.

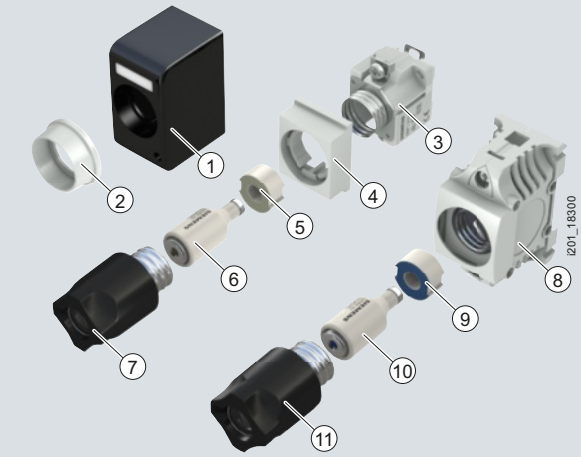
All DIAZED bases must be fed from the bottom to ensure an insulated threaded ring when the fuse link is being removed. Reliable contact of the fuse links is only ensured when used together with DIAZED screw adapters.

The terminals of the DIAZED bases are available in different versions and designs to support the various installation methods.

The high-performing EZR bus-mounting system for screw fixing is an outstanding feature. The busbars, which are particularly suited for bus-mounting bases, have a load capacity of up to 150 A with lateral infeed.

DIAZED stands for **Dia**metral gestuftes **z**weiteiliges Sicherungssystem mit **Ed**isongewinde (diametral two-step fuse system with Edison screw).

Benefits



1 DIAZED cap for fuse bases
2 DIAZED collar for fuse bases
3 DIAZED fuse bases
4 DIAZED cover for fuse bases
5 9 DIAZED screw adapter
6 10 DIAZED fuse link
7 11 DIAZED screw cap
8 DIAZED fuse base (with touch protection BGV A3)

Technical specifications

			5SA, 5SB, 5SC, 5SD
Standards			IEC 60269-3; DIN VDE 0635; CEE 16
Operational class	Acc. to IEC 60269		gG
Characteristic	Acc. to DIN VDE 0635		Slow and quick
Rated voltage U_n		V AC V DC	500, 690, 750 500, 600, 750
Rated current I_n		A	2 ... 100
Rated breaking capacity		kA AC kA DC	50, 40 at E16 8, 1.6 at E16
Mounting position			Any, but preferably vertical
Non-interchangeability			Using screw adapter or adapter sleeves
Degree of protection	Acc. to IEC 60529		IP20, with connected conductors
Resistance to climate		°C	Up to 45, at 95 % rel. humidity
Ambient temperature		°C	-5 ... +40, humidity 90 % at 20

		Terminal version								
		B		K			S		R	
Size		DII	DIII	NDz	DII	DIII	DIII	DIV	DII	DIII
Conductor cross-sections										
• Rigid, min.	mm^2	1.5	2.5	1.0	1.5	2.5	2.5	10	1.5	1.5
• Rigid, max.	mm^2	10	25	6	10	25	25	50	35	35
• Flexible, with end sleeve	mm^2	10	25	6	10	25	25	50	35	35
Tightening torques										
• Screw M4	Nm	1.2							--	
• Screw M5	Nm	2.0							--	
• Screw M6	Nm	2.5							3.0	
• Screw M8	Nm	3.5							--	

Selection and ordering data

	Sizes	U_n	I_n	Identification color	Thread	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC/V DC	A									kg
	DIAZED fuse links											
	Operational class gG											
	DII	500/500	2	Pink	E27	▶	**5SB2 11**		1	25 units	017	0.019
			4	Brown		▶	**5SB2 21**		1	25 units	017	0.024
			6	Green		▶	**5SB2 31**		1	25 units	017	0.023
			10	Red		▶	**5SB2 51**		1	25 units	017	0.022
			16	Gray		▶	**5SB2 61**		1	25 units	017	0.028
			20	Blue		▶	**5SB2 71**		1	25 units	017	0.035
			25	Yellow		▶	**5SB2 81**		1	25 units	017	0.030
	DIII	500/500	32	Black	E33		**5SB4 010**		1	25 units	017	0.046
			35	Black			**5SB4 11**		1	25 units	017	0.051
			50	White			**5SB4 21**		1	25 units	017	0.048
			63	Copper			**5SB4 31**		1	25 units	017	0.054
	DIV	500/400	80	Silver	R1¼"		**5SC2 11**		1	3 units	017	0.129
			100	Red			**5SC2 21**		1	3 units	017	0.119
	Characteristic: slow											
	TNDz	500/500	2	Pink	E16		**5SA2 11**		1	10 units	017	0.011
			4	Brown			**5SA2 21**		1	10 units	017	0.020
			6	Green			**5SA2 31**		1	10 units	017	0.015
			10	Red			**5SA2 51**		1	10 units	017	0.012
			16	Gray			**5SA2 61**		1	10 units	017	0.013
			20	Blue			**5SA2 71**		1	10 units	017	0.014
			25	Yellow			**5SA2 81**		1	10 units	017	0.030
	Operational class gG, use 5SF1 and 5SF5 fuse base made of ceramic for 2 A ... 25 A screw adapter DII											
	DIII	690/600	2	Pink	E33		**5SD8 002**		1	5 units	017	0.068
			4	Brown			**5SD8 004**		1	5 units	017	0.071
			6	Green			**5SD8 006**		1	5 units	017	0.067
			10	Red			**5SD8 010**		1	5 units	017	0.067
			16	Gray			**5SD8 016**		1	5 units	017	0.072
			20	Blue			**5SD8 020**		1	5 units	017	0.069
			25	Yellow			**5SD8 025**		1	5 units	017	0.072
			35	Black			**5SD8 035**		1	5 units	017	0.072
			50	White			**5SD8 050**		1	5 units	017	0.075
			63	Copper			**5SD8 063**		1	5 units	017	0.078

* You can order this quantity or a multiple thereof.

DIAZED fuse systems

	Sizes	U_n	I_n	Identification color	Thread	Terminals	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC/V DC	A										kg
	DIAZED fuse links												
	Characteristic: quick, also for direct current railway facilities for 2 A ... 25 A screw adapter DII												
	DIII	750/750	2	Pink	E33			**5SD6 01**		1	5 units	017	0.066
			4	Brown				**5SD6 02**		1	5 units	017	0.072
			6	Green				**5SD6 03**		1	5 units	017	0.068
			10	Red				**5SD6 04**		1	5 units	017	0.072
			16	Gray				**5SD6 05**		1	5 units	017	0.042
			20	Blue				**5SD6 06**		1	5 units	017	0.074
			25	Yellow				**5SD6 07**		1	5 units	017	0.072
			35	Black				**5SD6 08**		1	5 units	017	0.072
			50	White				**5SD6 10**		1	5 units	017	0.077
			63	Copper				**5SD6 11**		1	5 units	017	0.078
	DIAZED fuse bases made of ceramic												
	1P, for standard mounting rail												
	NDz	500/500	25		E16	KK[2]		**5SF1 012**		1	5 units	017	0.062
	DII		25		E27	BB[2]	▶	**5SF1 005**		1	5 units	017	0.093
	DIII[1]		63		E33	BS[2]		**5SF1 205**		1	1 unit		0.142
	DIII[1]		63		E33	SS[2]		**5SF1 215**		1	5 units		0.141
	1P, for screw fixing												
	NDz	500/500	25		E16	KK[2]		**5SF1 01**		1	5 units	017	0.057
	DII		25		E27	BB[2]		**5SF1 024**		1	5 units	017	0.100
	DIII[1]		63		E33	BS[2]		**5SF1 224**		1	5 units		0.143
	1P, with flat terminal												
	DIV		100		R1¼"			**5SF1 401**		1	1 unit		0.604
	DIAZED fuse bases made of molded plastic With touch protection according to BGV A3												
	1P, for standard mounting rail or screw fixing												
	DII	500/500	25		E27	RR		**5SF1 060**		1	3/108 units		0.146
	DIII		63		E33	RR		**5SF1 260**		1	3/132 units		0.200
	3P, for standard mounting rail or screw fixing												
	DII	500/500	25		E27	RR		**5SF5 068**		1	1/36 units		0.475
	DIII		63		E33	RR	▶	**5SF5 268**		1	1/44 units	017	0.595
	DIAZED EZR bus-mounting bases												
	1P, to snap onto EZR busbars for screw fixing												
	DII	500/500	25	E27		B[2]		**5SF6 005**		1	5 units	017	0.080
	DIII	500/500	63	E33		B[2]		**5SF6 205**		1	5 units	017	0.114

[1] Also for 690 V AC/600 V DC.

[2] For terminal versions, see page 5/17.

* You can order this quantity or a multiple thereof.

	Sizes	U_n	I_n	Thread	Terminals	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V AC/V DC	A									kg
	DIAZED components 750 V											
	DIAZED fuse bases 1P, for screw fixing, with fine thread and cap											
	DIII	750/750	63	E33S	KK[1)]		**5SF4 230**		1	1 unit	017	0.504
	DIAZED screw caps made of ceramic, with fine thread											
	DIII	750/750	63	E33S			**5SH1 161**		1	5 units	017	0.134
	DIAZED screw caps											
	Molded plastic, with inspection hole, black, not for SILIZED fuse links											
	NDz	500/500	25	E16			**5SH1 112**		1	20 units	017	0.013
	DII		25	E27		►	**5SH1 221**		1	5/200 units	017	0.024
	DIII		63	E33		►	**5SH1 231**		1	5/5000 units	017	0.038
	Ceramic											
	DII	500/500	25	E27		►	**5SH1 12**		1	50/30000 units	017	0.037
	DIII		63	E33		►	**5SH1 13**		1	30 units	017	0.063
	Ceramic, with inspection hole, sealable											
	DII	500/500	25	E27			**5SH1 22**		1	50/5000 units	017	0.046
	DIII		63	E33			**5SH1 23**		1	30/5000 units	017	0.068
	Ceramic											
	DIV	500/500	100	R1¼"			**5SH1 141**		1	1 unit	017	0.223
	Ceramic, extended version											
	DIII	690/600	63	E33			**5SH1 170**		1	5 units	017	0.095

1) For terminal versions, see page 5/17.

DIAZED fuse systems

	Sizes	Thread	For fuse links A	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	DIAZED screw adapters									
	NDz	E16	2		**5SH3 28**		1	20 units	017	0.003
			4		**5SH3 31**		1	20 units	017	0.002
			6		**5SH3 05**		1	20 units	017	0.004
			10		**5SH3 06**		1	20 units	017	0.003
			16		**5SH3 07**		1	20 units	017	0.002
	Also for 5SF2 30 to 750 V									
	DII	E27	2	▶	**5SH3 10**		1	25/1500 units	017	0.014
			4	▶	**5SH3 11**		1	25/1500 units	017	0.009
			6	▶	**5SH3 12**		1	25/1500 units	017	0.015
			10	▶	**5SH3 13**		1	25/1500 units	017	0.021
			16	▶	**5SH3 14**		1	25/1500 units	017	0.008
			20	▶	**5SH3 15**		1	25/1500 units	017	0.013
			25	▶	**5SH3 16**		1	25/1500 units	017	0.012
	Also for 5SF2 30 to 750 V									
	DIII	E33	35	▶	**5SH3 17**		1	25/850 units	017	0.025
			50	▶	**5SH3 18**		1	25/850 units	017	0.018
			63	▶	**5SH3 20**		1	25/850 units	017	0.019
	DIAZED adapter sleeves									
	DIV	R1¼"	80		**5SH3 21**		1	10/1000 units	017	0.006
			100		**5SH3 22**		1	10/1000 units	017	0.004
	DIAZED adapter sleeves for screw caps									
	For NDz/TNDz fuse links in base DII				**5SH3 01**		1	10 units	017	0.011
	For DII fuse links in DIII base				**5SH3 02**		1	10 units	017	0.012
	DIAZED adapter sleeve fitters									
	DII/DIII				**5SH3 703**		1	1 unit	017	0.046
	DIAZED caps made of molded plastic									
	NDz	E16			**5SH2 01**		1	5 units	017	0.044
	DII	E27			**5SH2 02**		1	5 units	017	0.249
	DIII	E33			**5SH2 22**		1	5 units	017	0.049

* You can order this quantity or a multiple thereof.

	Sizes	Thread	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	DIAZED cover rings								
	Ceramic DII and DIII, also for EZR bus-mounting base								
	DII	E27		**5SH3 32**		1	10 units	017	0.024
	DIII	E33		**5SH3 34**		1	10 units	017	0.031
	Made of molded plastic, also for EZR bus-mounting base								
	DII	E27		**5SH3 401**		1	5/60 units	017	0.014
	DIII	E33		**5SH3 411**		1	5/60 units	017	0.020

More information

DIII fuse bases with terminal version BS
- Outgoing feeders (top), saddle terminal S
- Incoming feeders (bottom), clamp-type terminal B

NDZ fuse bases with terminal version KK
- Outgoing feeders (top), screw head contact K
- Incoming feeders (bottom), screw head contact K

DIII fuse bases with terminal version BB
- Outgoing feeders (top), clamp-type terminal B
- Incoming feeders (bottom), clamp-type terminal B

DIII fuse bases with terminal version SS
- Outgoing feeders (top), saddle terminal S
- Incoming feeders (bottom), saddle terminal S

* You can order this quantity or a multiple thereof.

Cylindrical fuse links and cylindrical fuse holders

Overview

Cylindrical fuses are standard in Europe. There are a range of different cylindrical fuse links and holders that comply with the standards IEC 60269-1, -2 and -3, and which are suitable for use in industrial applications.
In South West Europe they are also approved for use in residential buildings.

The cylindrical fuse holders are also approved according to UL 512. The cylindrical fuse holders are tested and approved as fuse disconnectors according to the switching device standard IEC 60947-3. They are not suitable for switching loads.

Cylindrical fuse holders can be supplied with or without signal detectors. In the case of devices with signal detector, a small electronic device with LED is located behind an inspection window in the plug-in module. If the inserted fuse link is tripped, this is indicated by the LED flashing.

The switching state of the fuse holder can be signaled over a laterally retrofitted auxiliary switch, which enables the integration of the fuses in the automation process.

Benefits

- Devices with pole number 1P+N are available in a single modular width. This reduces the footprint by 50 %.
- The sliding catch for type ranges 8 x 32 mm and 10 x 38 mm enables the removal of individual devices from the assembly.
- Space for a spare fuse in the plug-in module enables the fast replacement of fuses. This saves time and money and increases system availability.
- A flashing LED signals that a fuse link has been tripped. This enables fast detection during runtime

Technical specifications

			Cylindrical fuse links						
			3NW6 3..	3NW6 0..	3NW6 1..	3NW6 2..	3NW8 0..	3NW8 1..	3NW8 2..
Sizes		mm × mm	8 × 32	10 × 38	14 × 51	22 × 58	10 × 38	14 × 51	22 × 58
Standards			IEC 60269-1, -2, -3; NF C 60-200; NF C 63-210, -211; NBN C 63269-2, CEI 32-4, -12						
Operational class			gG				aM		
Rated voltages U_n		V AC	400	400 or 500					
Rated current I_n		A	2 ... 20	0.5 ... 32	4 ... 50	8 ... 100	0.5 ... 32	2 ... 50	10 ... 100
Rated breaking capacity									
• 500 V version		kA AC	--	120	100		120	100	
• 400 V version		kA AC	20	120	20		120	20	
Mounting position			Any, but preferably vertical						

			Cylindrical fuse holders			
			3NW7 3..	3NW7 0..	3NW7 1..	3NW7 2..
Sizes		mm × mm	8 × 32	10 × 38	14 × 51	22 × 58
Standards			IEC 60269-1, -2, -3; NF C 60-200; NF C 63-210, -211; NBN C 63269-2-1, CEI 32-4, -12			
Approvals	Acc. to UL		--	cULus	cULus	--
	Acc. to CSA		--	CSA	CSA	--
Rated voltage U_n		V AC	400	690		
	Acc. to UL/CSA	V AC	400	600		
Rated current I_n		A AC	20	32	50	100
Rated breaking capacity		kA	20	100		
Switching capacity						
• Utilization category			AC-20B (switching without load), DC-20B			
No-voltage changing of fuse links			Yes			
Sealable when installed			Yes			
Mounting position			Any, but preferably vertical			
Degree of protection	Acc. to IEC 60529		IP20, with connected conductors			
Terminals with touch protection according to BGV A3 at incoming and outgoing feeder			Yes			
Ambient temperature		°C	-5 ... +40, humidity 90 % at +20			
Conductor cross-sections						
• Rigid		mm^2	0.5 ... 10		2.5 ... 10	4 ... 10
• Stranded		mm^2	0.5 ... 10		2.5 ... 25	4 ... 50
• Finely stranded, with end sleeve		mm^2	0.5 ... 10[1]		2.5 ... 16	4 ... 35
• AWG (American Wire Gauge)			--	10 ... 20	6 ... 10	--
Tightening torques		Nm	1.2		2.0	2.5

[1] Max. cross-section 10 mm^2 with K28 crimper from Klauke.

Selection and ordering data

	Sizes	I_n	U_n	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm × mm	A	V AC							kg
	Cylindrical fuse links, operational class gG									
	8 × 32	2	400		**3NW6 302-1**		1	10 units	017	0.004
		4			**3NW6 304-1**		1	10 units	017	0.004
		6			**3NW6 301-1**		1	10 units	017	0.011
		10			**3NW6 303-1**		1	10 units	017	0.004
		16			**3NW6 305-1**		1	10 units	017	0.004
		20			**3NW6 307-1**		1	10 units	017	0.004
	10 × 38	0.5	500		**3NW6 000-1**		1	10 units	017	0.008
		1			**3NW6 011-1**		1	10 units	017	0.008
		2		►	**3NW6 002-1**		1	10 units	017	0.009
		4		►	**3NW6 004-1**		1	10 units	017	0.008
		6		►	**3NW6 001-1**		1	10 units	017	0.008
		8			**3NW6 008-1**		1	10 units	017	0.008
		10		►	**3NW6 003-1**		1	10 units	017	0.008
		12			**3NW6 006-1**		1	10/100 units	017	0.008
		16		►	**3NW6 005-1**		1	10 units	017	0.008
		20			**3NW6 007-1**		1	10 units	017	0.009
		25			**3NW6 010-1**		1	10 units	017	0.008
		32	400		**3NW6 012-1**		1	10 units	017	0.008
	14 × 51	4	500		**3NW6 104-1**		1	10 units	017	0.019
		6			**3NW6 101-1**		1	10 units	017	0.012
		8			**3NW6 108-1**		1	10/100 units	017	0.019
		10			**3NW6 103-1**		1	10 units	017	0.022
		12			**3NW6 106-1**		1	10/100 units	017	0.017
		16			**3NW6 105-1**		1	10 units	017	0.023
		20			**3NW6 107-1**		1	10 units	017	0.021
		25			**3NW6 110-1**		1	10 units	017	0.221
		32			**3NW6 112-1**		1	10 units	017	0.023
		40			**3NW6 117-1**		1	10 units	017	0.018
		50	400		**3NW6 120-1**		1	10 units	017	0.021
	22 × 58	8	500		**3NW6 208-1**		1	10/100 units	017	0.051
		10			**3NW6 203-1**		1	10/100 units	017	0.052
		12			**3NW6 206-1**		1	10/100 units	017	0.056
		16			**3NW6 205-1**		1	10 units	017	0.052
		20			**3NW6 207-1**		1	10 units	017	0.055
		25			**3NW6 210-1**		1	10 units	017	0.054
		32			**3NW6 212-1**		1	10 units	017	0.052
		40			**3NW6 217-1**		1	10 units	017	0.048
		50			**3NW6 220-1**		1	10 units	017	0.054
		63			**3NW6 222-1**		1	10 units	017	0.068
		80			**3NW6 224-1**		1	10 units	017	0.051
		100	400		**3NW6 230-1**		1	10 units	017	0.053
	Cylindrical fuse links, operational class aM									
	10 × 38	0.5	500		**3NW8 000-1**		1	10 units	017	0.007
		1			**3NW8 011-1**		1	10 units	017	0.008
		2			**3NW8 002-1**		1	10 units	017	0.007
		4			**3NW8 004-1**		1	10 units	017	0.007
		6			**3NW8 001-1**		1	10 units	017	0.006
		8			**3NW8 008-1**		1	10 units	017	0.011
		10			**3NW8 003-1**		1	10 units	017	0.005
		12			**3NW8 006-1**		1	10/100 units	017	0.007
		16			**3NW8 005-1**		1	10 units	017	0.008
		20			**3NW8 007-1**		1	10 units	017	0.006
		25	400		**3NW8 010-1**		1	10 units	017	0.008
		32			**3NW8 012-1**		1	10 units	017	0.008
	14 × 51	2	500		**3NW8 102-1**		1	10/50 units	017	0.018
		4			**3NW8 104-1**		1	10 units	017	0.018
		6			**3NW8 101-1**		1	10/50 units	017	0.018
		8			**3NW8 108-1**		1	10/50 units	017	0.018
		10			**3NW8 103-1**		1	10 units	017	0.016
		12			**3NW8 106-1**		1	10/50 units	017	0.018
		16			**3NW8 105-1**		1	10 units	017	0.017
		20			**3NW8 107-1**		1	10 units	017	0.016
		25			**3NW8 110-1**		1	10 units	017	0.186
		32			**3NW8 112-1**		1	10 units	017	0.019
		40			**3NW8 117-1**		1	10 units	017	0.018
		50	400		**3NW8 120-1**		1	10 units	017	0.019

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* You can order this quantity or a multiple thereof.

Cylindrical fuse links and cylindrical fuse holders

Sizes	I_n	U_n	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
mm × mm	A	V AC							kg
22 × 58	10	500		**3NW8 203-1**		1	10/50 units	017	0.048
	12			**3NW8 206-1**		1	10/50 units	017	0.048
	16			**3NW8 205-1**		1	10/50 units	017	0.048
	20			**3NW8 207-1**		1	10 units	017	0.046
	25			**3NW8 210-1**		1	10 units	017	0.040
	32			**3NW8 212-1**		1	10 units	017	0.052
	40			**3NW8 217-1**		1	10 units	017	0.047
	50			**3NW8 220-1**		1	10 units	017	0.049
	63			**3NW8 222-1**		1	10 units	017	0.046
	80			**3NW8 224-1**		1	10 units	017	0.054
	100	400		**3NW8 230-1**		1	10 units	017	0.050

Number of poles	I_n	For fuse links of size	Mounting width	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	mm × mm	MW							kg
Cylindrical fuse holders with signal detector										
1P										
	20	8 × 32	1		**3NW7 314**		1	1 unit	017	0.067
	32	10 × 38	1		**3NW7 014**		1	1 unit	017	0.066
	50	14 × 51	1.5		**3NW7 112**		1	1 unit	017	0.100
	100	22 × 58	2		**3NW7 212**		1	1 unit	017	0.150
1P+N										
	20	8 × 32	1		**3NW7 354**		1	1 unit	017	0.082
	32	10 × 38	1		**3NW7 054**		1	1 unit	017	0.080
	50	14 × 51	3		**3NW7 152**		1	1 unit	017	0.224
	100	22 × 58	4		**3NW7 252**		1	1 unit	017	0.359
2P										
	20	8 × 32	2		**3NW7 324**		1	1 unit	017	0.135
	32	10 × 38	2		**3NW7 024**		1	1 unit	017	0.134
	50	14 × 51	3		**3NW7 122**		1	1 unit	017	0.217
	100	22 × 58	4		**3NW7 222**		1	1 unit	017	0.328
3P										
	20	8 × 32	3		**3NW7 334**		1	1 unit	017	0.198
	32	10 × 38	3		**3NW7 034**		1	1 unit	017	0.199
	50	14 × 51	4.5		**3NW7 132**		1	1 unit	017	0.327
	100	22 × 58	6		**3NW7 232**		1	1 unit	017	0.495
3P+N										
	20	8 × 32	3		**3NW7 364**		1	1 unit	017	0.216
	32	10 × 38	3		**3NW7 064**		1	1 unit	017	0.215
	50	14 × 51	6		**3NW7 162**		1	1 unit	017	0.444
	100	22 × 58	8		**3NW7 262**		1	1 unit	017	0.681
Cylindrical fuse holders without signal detector										
1P										
	20	8 × 32	1		**3NW7 313**		1	1 unit	017	0.066
	32	10 × 38	1	▶	**3NW7 013**		1	1/12 units	017	0.076
	50	14 × 51	1.5	▶	**3NW7 111**		1	1 unit	017	0.108
	100	22 × 58	2	▶	**3NW7 211**		1	1 unit	017	0.165
1P+N										
	20	8 × 32	1		**3NW7 353**		1	1 unit	017	0.080
	32	10 × 38	1	▶	**3NW7 053**		1	1 unit	017	0.078
	50	14 × 51	3		**3NW7 151**		1	1 unit	017	0.237
	100	22 × 58	4		**3NW7 251**		1	1 unit	017	0.362
2P										
	20	8 × 32	2		**3NW7 323**		1	1 unit	017	0.133
	32	10 × 38	2	▶	**3NW7 023**		1	1/6 units	017	0.132
	50	14 × 51	3	▶	**3NW7 121**		1	1 unit	017	0.217
	100	22 × 58	4	▶	**3NW7 221**		1	1 unit	017	0.326

* You can order this quantity or a multiple thereof.

	Number of poles	I_n	For fuse links of size	Mounting width	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	mm × mm	MW							kg
	Cylindrical fuse holders without signal detector										
	3P										
		20	8 × 32	3		**3NW7 333**		1	1 unit	017	0.194
		32	10 × 38	3	▶	**3NW7 033**		1	1/4 units	017	0.194
		50	14 × 51	4.5	▶	**3NW7 131**		1	1 unit	017	0.324
		100	22 × 58	6	▶	**3NW7 231**		1	1 unit	017	0.488
	3P+N										
		20	8 × 32	3		**3NW7 363**		1	1 unit	017	0.208
		32	10 × 38	3	▶	**3NW7 063**		1	1 unit	017	0.205
		50	14 × 51	6		**3NW7 161**		1	1 unit	017	0.452
		100	22 × 58	8		**3NW7 261**		1	1 unit	017	0.685
	Auxiliary switches										
	For indicating disconnection of the fuse link, solely for application of striker fuse links. For retrofitting using the factory-fitted brackets. Contact: 250 V AC, 5 A, Minimum contact load: 12 V, 25 mA										
	For fuse bases		14 × 51	0.5		**3NW7 901**		1	1 unit	017	0.048
	For fuse bases		22 × 58			**3NW7 902**		1	1 unit	017	0.048
	For indicating the switching state of the fuse holder. For retrofitting using the factory-fitted brackets. Contact: 230 V AC, 6 A/110 V DC, 1 A Minimum contact load: 12 V, 25 mA Terminals 1.5 mm² - 0.5 Nm										
	For fuse holders		10 × 38	0.5		**3NW7 903**		1	1 unit	017	0.034

More information

Mounting

Fuse holders, sizes 8 × 32 mm und 10 × 38 mm, have a sliding catch that enables the removal of individual devices from the assembly.

The infeed can be from the top or the bottom. Because the cylindrical fuse holders are fitted with the same anti-slip terminals at the top and the bottom, the devices can also be bus-mounted at the top or the bottom.

Auxiliary switches

Auxiliary switches are available for the cylindrical fuse holders. These are simply clipped onto the base using the factory-fitted brackets.

Sizes 8 × 32 mm und 10 × 38 mm:
The auxiliary switches support the remote display of the switching state ON or OFF of the fuse holder.

Sizes 14 × 51 mm und 22 × 58 mm:
The auxiliary switches support the remote display of fuse failure. However, fuse links with strikers are required for this function. When the fuse is tripped, a small striking pin - the striker - shoots out of the front of the fuse. Over an armature link in the auxiliary switch, the kinetic energy of this striker is used to switch a mini switch, which then initializes this signal over a floating contact.

* You can order this quantity or a multiple thereof.

Compact cylindrical fuse holders in size 10 x 38 mm and Class CC

Overview

A key feature of our three-pole fuse holders is their ultra compact design. With a width of only 45 mm, they are ideal for use with fused motor starter combinations. Because the contactor and the fuse holder have the same 45 mm width, they are easy to mount on top of one another. The strong current-limiting fuses ensure a type 2 protection level (coordination according to IEC 60947-4, no damage protection) for the contactor.

The UL version has an SCCR value of 200 kA. The accessories are generally UL-certified.

Customers can mount an auxiliary switch which signals the switching state or prevents the fuse holder from switching off under load by interrupting the contactor control, thus increasing safety for the operator and process. Busbars and a matching three-phase feeder terminal complete the product range.

Benefits

- Compact design, especially for motor starter combinations
- For IEC fuses of size 10 x 38 mm up to 32 A and Class CC UL fuses up to 30 A
- Meets the requirements of UL 508 with regard to clearances
- UL-approved microswitches, busbars and adapters for 60mm busbar systems
- Optical signal detector for fast fault locating

Compact cylindrical fuse holder Class CC with signal detector and mounted auxiliary switch

Installation configuration of a cylindrical fuse holder and a SIRIUS contactor on busbar device adapter for the 60 mm busbar system

Technical specifications

		Cylindrical fuse holders 3NW7 0..-1	Fuse holders 3NW7 5..-1HG
Sizes	mm × mm	10 × 38	Class CC
Standards		IEC 60269; UL 512; CSA	UL 512; CSA
Approvals • Acc. to UL • Acc. to CSA		 , UL File Number E171267 	 , UL File Number E171267
Rated voltage U_n	V AC	690	600
Rated current I_n	A AC	32	30
Rated short-circuit strength	kA	120 (at 500 V) 80 (at 690 V)	200
Switching capacity • Utilization category		 AC-20B (switching without load)	 --
Rated impulse withstand voltage	kV	6	
Overvoltage category		III	
Pollution degree		2	
Max. power dissipation of the fuse link	W	3	
No-voltage changing of fuse links	°C	-5 ... +40, humidity 90 % at +20	
Sealable when installed		Yes	
Lockable with padlock		Yes	
Mounting position		Any, but preferably vertical	
Current direction		Any	
Degree of protection Acc. to IEC 60529		IP20, with connected conductors	
Terminals with touch protection according to BGV A3 at incoming and outgoing feeder		Yes	
Ambient temperature	°C	-5 ... +40, humidity 90 % at +20	
Conductor cross-sections • Finely stranded, with end sleeve • AWG cables (American Wire Gauge)	 mm^2 AWG	 1 ... 4 18 ... 10	
Tightening torques • Terminal screws	Nm lb.in	1.5 13 PZ2	

		Auxiliary switches 3NW7 903-1							
Standards		IEC 60947							
Approvals		, , UL 508, UL File Number E334003							
Utilization category		AC-12	DC-13			AC-15			Acc. to UL
Rated voltage U_n	V AC V DC	250 --	-- 24	-- 120	-- 240	24 --	120 --	240 --	240 --
Rated current I_n	A		2	0.5	0.25	4	3	1.5	5

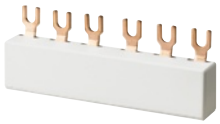
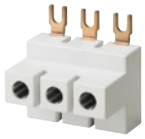
		Busbars 5ST2 60.	
For cylindrical fuse holders		3NW7 0..-1	3NW7 5..-1HG
Pin spacing	mm	15	
Standards		EN 60974-1, VDE 0660 part 100, IEC 60947-1:2004, UL 508, CSA 22.2	
Approvals		, UL 4248-1, UL File Number E337131	
Busbar material		E-Cu 58 F25	
Partition material		PA66-V0	
Lamp wire resistance /1.5 mm^2	°C	960	
Insulation coordination		Overvoltage category III, degree of pollution 2	
Rated voltage U_n • Acc. to UL • Acc. to IEC	 V AC V AC	 -- 690	 600 --
Maximum busbar current I_n • Acc. to UL • Acc. to IEC	 A A	 -- 80	 65 --

Compact cylindrical fuse holders in size 10 x 38 mm and Class CC

		Terminals 5ST2 600	
For cylindrical fuse holders		3NW7 0..-1	3NW7 5..-1HG
Pin spacing	mm	15	
Standards		IEC 60999:2000, UL 508	
Approvals		UL, UL 4248-1, UL File Number E337131	
Enclosure/cover material		PA66-V0	
Lamp wire resistance /1 mm²	°C	960	
Temperature resistance PA66-V0, HDT B ISO 179, UL 94-V0/1.5	°C	200	
Insulation coordination		Overvoltage category III, degree of pollution 2	
Max. operational voltage U_{max}			
• Acc. to UL	V AC	--	600
• Acc. to IEC	V AC	690	--
Maximum electrical load I_{max}			
• Acc. to UL	A	--	65
• Acc. to IEC	A	80	--
Rated current I_n	A	63	
Conductor cross-sections			
• Solid/stranded	mm²	2.5 ... 35	
• Finely stranded, with end sleeve	mm²	2.5 ... 25	
Tightening torque of clamping screw	Nm	2.5 ... 3.5	

Selection and ordering data

	Number of poles	I_n	For fuse links of size	Mounting width	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	mm x mm	MW							kg
3NW7 cylindrical fuse holders											
	**Cylindrical fuse holders**										
	3P	32	10 x 38	2.5							
	Without signal detector					**3NW7 033-1**		1	1 unit	017	0.190
	With signal detector					**3NW7 034-1**		1	1 unit	017	0.195
	Fuse holders class CC										
	3P	30	Class CC	2.5							
	Without signal detector					**3NW7 533-1HG**		1	1 unit	018	0.192
	With signal detector					**3NW7 534-1HG**		1	1 unit	018	0.195
Accessories											
	Auxiliary switches										
	AC-12, 5 A, max. 250 V, 1 NO, 1 NC			2.5		**3NW7 903-1**		1	1 unit	017	0.018

	Version	I_n	Pin spacing	Length	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	mm	mm							kg
Busbar system 5ST2 60.											
	**Busbars**										
	2 x 3P	63	15	45		**5ST2 601**		1	10 units	020	0.450
	3 x 3P			90		**5ST2 602**		1	10 units	020	0.705
	4 x 3P			135		**5ST2 603**		1	10 units	020	0.950
	5 x 3P			180		**5ST2 604**		1	10 units	020	1.230
Accessories											
	**Terminals**										
	for conductor cross-section 2.5 mm^2 ... 35 mm^2					**5ST2 600**		1	10 units	020	0.500

		Length of adapter	Width of adapter	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	mm							kg
Device adapters										
	**Busbar device adapters**[1] **with connecting cables (above)**									
	Size S00, rated voltage 690 V AC, rated current 25 A, 1 support rail (35 mm), connection cable AWG 12									
		200	45	▶	**8US12 51-5DS10**		1	1 unit	143	0.310
		260		▶	**8US12 51-5DT10**		1	1 unit	143	0.324
Accessories										
	**Mounting rails for busbar device adapter**									
	For assembly of additional devices		45		**8US19 98-7CB45**		1	10 units	143	0.014

[1] For further device adapters and accessories, see chapter "Busbar systems".

* You can order this quantity or a multiple thereof.

Class CC fuse systems

Overview

Class CC fuses are used for "branch circuit protection".

The enclosed fuse holders are designed and tested to comply with the US National Electrical Code NEC 210.20(A). This means that when subject to continuous operation, only 80 % of the rated current is permissible as operational current.

An operational current of 100 % of the rated current (30 A) is only permissible short-time.

The devices are prepared for the inscription labels of the ALPHA FIX terminal blocks 8WH8 120-7AA15 and 8WH8 120-7XA05.

There are three different series:

- Characteristic: slow 3NW1 ...-0HG
  For the protection of control transformers, reactors, inductances. Significantly slower than the minimum requirements specified by UL for class CC fuses of 12 s at 2 × I_n.
- Characteristic: quick 3NW2 ...-0HG
  For a wide range of applications, for the protection of lighting installations, heating, control systems.
- Characteristic: slow, current-limiting, 3NW3 ...-0HG
  Slow for overloads and quick for short circuits. High current limitation for the protection of motor circuits

Note:

For class CC compact fuse holders for motor starter combinations, see page 5/25.

Benefits

- For switchgear assemblies and machine manufacturers who export their systems to the USA or Canada.
- Easier export due to UL and CSA approvals for typical applications
- Modern design with touch protection according to BGV A3 ensures safe installation.

Technical specifications

		Class CC fuse holders 3NW7 5.3-0HG
Standards **Approvals**		UL 512; CSA C22.2 UL512; UL File No. E171267; CSA C22.2
Rated voltage U_n	V AC	600
Rated current I_n	A	30
Rated conditional short-circuit current	kA	200
Switching capacity • Utilization category		 AC-20B (switching without load)
Max. power dissipation of fuse links • With cable, 6 mm² • With cable, 10 mm²	 W W	 3 4.3
Rated impulse withstand voltage	kV	6
Overvoltage category		II
Pollution degree		2
No-voltage changing of fuse links		Yes
Sealable when installed		Yes
Mounting position		Any
Current direction		Any
Degree of protection acc. to IEC 60529		IP20
Terminals are touch-protected according to BGVA3 at the incoming and outgoing feeder		Yes
Ambient temperature	°C	45
Conductor cross-sections • Solid and stranded • AWG conductor cross-section, solid and stranded	 mm² AWG	 1.5 ... 25 16 ... 4
Tightening torques	Nm	2.5 (22 lb.in)

		Class CC fuse links		
		3NW1 ...-0HG	3NW2 ...-0HG	3NW3 ...-0HG
Standards **Approvals**		UL 248-4; CSA C22.2 UL 248-4; UL File Number E258218; CSA C22.2		
Characteristic		Slow	Quick	Slow, current limiting
Rated voltage	V AC	600	600	600
	V DC	--	--	150 (3 .... 15 A) 300 (< 3 A, > 15 A)
Rated breaking capacity	kA AC	200		

Selection and ordering data

	Number of poles	U_n	I_n	Mounting width	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		V	A	MW							kg
	Class CC fuse holders										
	1P	600	30	1		**3NW7 513-0HG**		1	12 units	018	0.069
	2P	600	30	2		**3NW7 523-0HG**		1	6 units	018	0.139
	3P	600	30	3		**3NW7 533-0HG**		1	4 units	018	0.208

	I_n [1]	DT	Characteristic: slow Order No.	Price per PU	PG	DT	Characteristic: quick Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A											kg
	Class CC fuse links											
	0.6 (6/10)		**3NW1 006-0HG**		018		**--**					
	0.8 (8/10)		**3NW1 008-0HG**		018		**--**					
	1		**3NW1 010-0HG**		018		**3NW2 010-0HG**		1	10 units	018	0.008
	1.5 (1 ½)		**3NW1 015-0HG**		018		**--**					
	2		**3NW1 020-0HG**		018		**3NW2 020-0HG**		1	10 units	018	0.008
	2.5		**3NW1 025-0HG**		018		**--**					
	3		**3NW1 030-0HG**		018		**3NW2 030-0HG**		1	10 units	018	0.008
	4		**3NW1 040-0HG**		018		**3NW2 040-0HG**		1	10 units	018	0.008
	5		**3NW1 050-0HG**		018		**3NW2 050-0HG**		1	10 units	018	0.008
	6		**3NW1 060-0HG**		018		**3NW2 060-0HG**		1	10 units	018	0.008
	7.5		**3NW1 075-0HG**		018		**--**					
	8		**3NW1 080-0HG**		018		**3NW2 080-0HG**		1	10 units	018	0.008
	10		**3NW1 100-0HG**		018		**3NW2 100-0HG**		1	10 units	018	0.008
	12		**--**				**3NW2 120-0HG**		1	10 units	018	0.008
	15		**3NW1 150-0HG**		018		**3NW2 150-0HG**		1	10 units	018	0.008
	20		**3NW1 200-0HG**		018		**3NW2 200-0HG**		1	10 units	018	0.008
	25		**3NW1 250-0HG**		018		**3NW2 250-0HG**		1	10 units	018	0.008
	30		**3NW1 300-0HG**		018		**3NW2 300-0HG**		1	10 units	018	0.008

[1] Values in brackets, American English Wording

	I_n	DT	Characteristic: slow, current limiting Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A							kg
	Class CC fuse links							
	1		**3NW3 010-0HG**		1	10 units	018	0.008
	2		**3NW3 020-0HG**		1	10 units	018	0.008
	3		**3NW3 030-0HG**		1	10 units	018	0.008
	4		**3NW3 040-0HG**		1	10 units	018	0.008
	5		**3NW3 050-0HG**		1	10 units	018	0.008
	6		**3NW3 060-0HG**		1	10 units	018	0.008
	8		**3NW3 080-0HG**		1	10 units	018	0.008
	10		**3NW3 100-0HG**		1	10 units	018	0.008
	12		**3NW3 120-0HG**		1	10 units	018	0.008
	15		**3NW3 150-0HG**		1	10 units	018	0.008
	20		**3NW3 200-0HG**		1	10 units	018	0.008
	25		**3NW3 250-0HG**		1	10 units	018	0.008
	30		**3NW3 300-0HG**		1	10 units	018	0.008

* You can order this quantity or a multiple thereof.

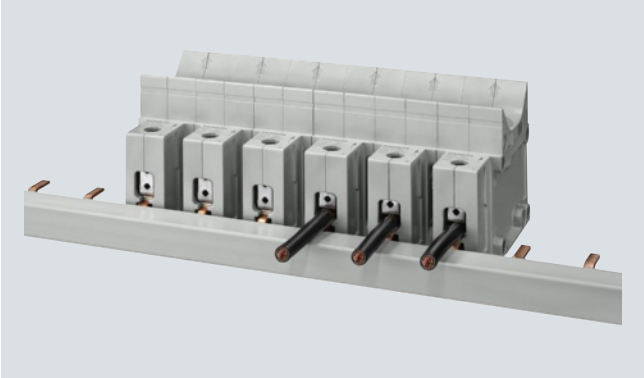
Busbar systems

Overview

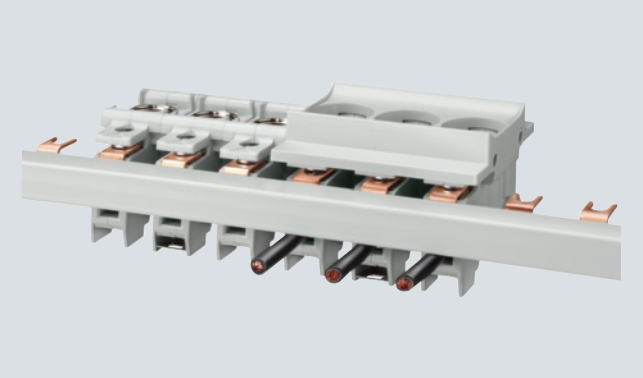
Busbars with pin-type connections can be used for NEOZED safety switching devices and fuse bases. Busbars in 10 mm^2 and 16 mm^2 versions are available.

Busbars with fork plugs are used for the most frequently used NEOZED fuse bases made of ceramic.

Benefits

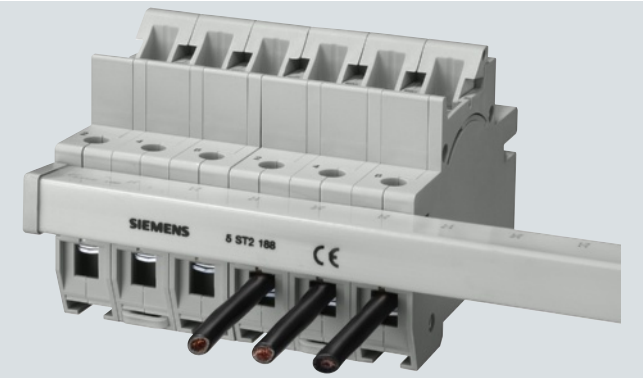


- Clear and visible conductor connection that can be easily checked when using NEOZED comfort base D02 and which facilitates cable entry

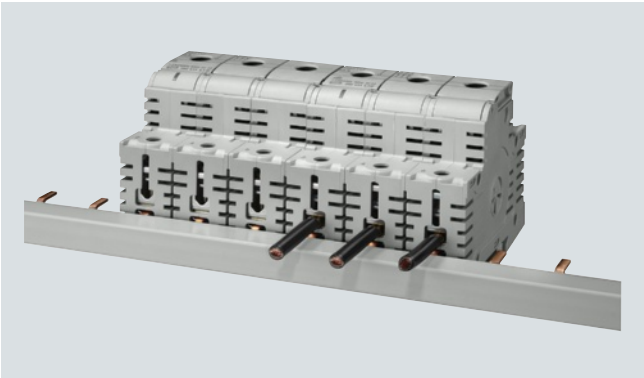


- Bus-mounting of NEOZED fuse bases made of molded plastic on three-phase busbar with fork plug, which can be cut to length

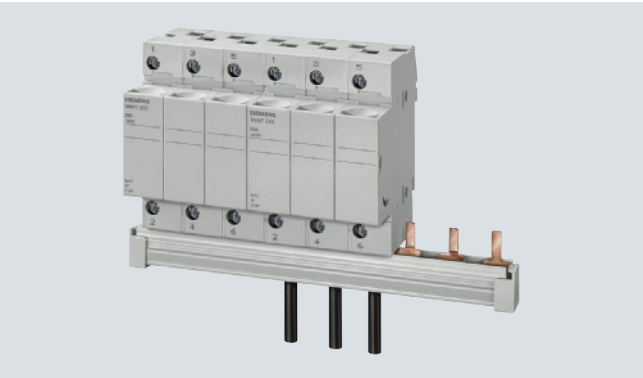
- Bus-mounting of NEOZED fuse bases made of ceramic on three-phase busbar with fork plug, which can be cut to length



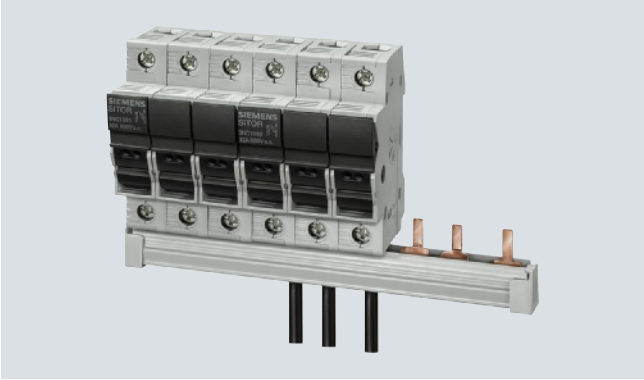
- Bus mounting of MINIZED fuse switch disconnectors D01 with three-phase pin busbar, which can be cut to length with fork plug



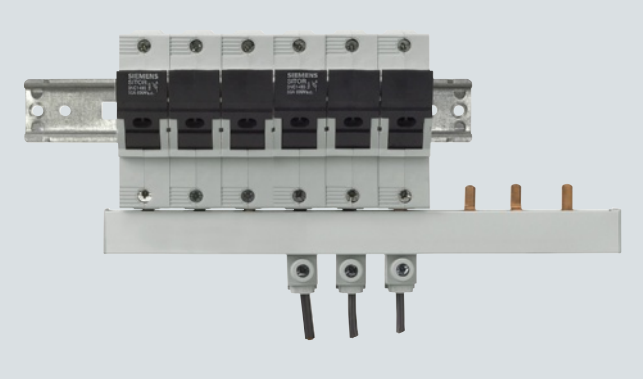
- Clear and visible conductor connection that can be easily checked when using MINIZED switch disconnectors D02. This facilitates cable entry and saves time



- Bus-mounting of cylindrical fuse holders 8 × 32 mm and 10 × 38 mm with three-phase pin busbar which can be cut to length



- Bus-mounting of SITOR cylindrical fuse holders 10 mm x 38 mm with the same terminal connection as Class CC fuse holders with three-phase pin busbar which can be cut to length



- Bus mounting with infeed through a connection terminal directly on the fuse holder up to a conductor cross-section of 25 mm^2

Technical specifications

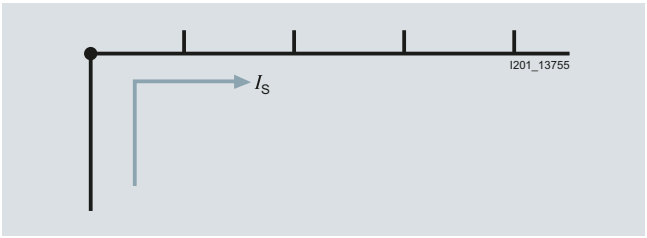
			5ST, 5SH
Standards			EN 60439-1: 2005-01
Busbar material			SF-Cu F 24
Partition material			Plastic, Cycoloy 3600, Heat-resistant over 90 °C, flame-retardant, self-extinguishing, dioxin and halogen-free
Rated operational voltage U_c		V AC	400
Rated current I_n			
• Cross-section 10 mm^2		A	63
• Cross-section 16 mm^2		A	80
Rated impulse withstand voltage U_{imp}		kV	4
Test pulse voltage (1.2/50)		kV	6.2
Rated conditional short-circuit current I_{cc}		kA	25
Resistance to climate			
• Constant atmosphere	Acc. to DIN 50015		23/83; 40/92; 55/20
• Humid heat	Acc. to IEC 60068-2-30		28 cycles
Insulation coordination			
• Overvoltage category			III
• Pollution degree			2
Maximum busbar current I_S/phase			
• Infeed at the start of the busbar			
- Cross-section 10 mm^2		A	63
- Cross-section 16 mm^2		A	80
• Infeed at the center of the busbar			
- Cross-section 10 mm^2		A	100
- Cross-section 16 mm^2		A	130

Busbar systems

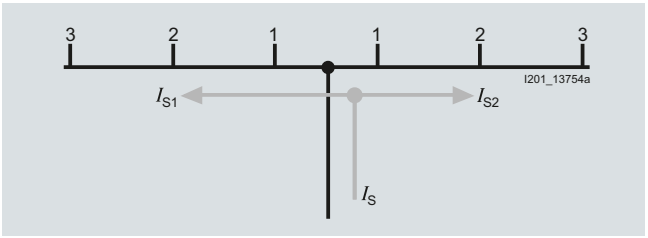
5ST3 7 . . - . HG busbars acc. to UL 508

		5ST3 7..-0HG	5ST3 7..-2HG	5ST3 770-0HG	5ST3 770-1HG
Standards		UL 508, CSA C22.2 No. 14-M 95			
Approvals		UL 508 File No. E328403 CSA			
Operational voltage					
• Acc. to IEC	V AC	690			
• Acc. to UL 489	V AC	600			
Rated conditional short-circuit current	kA	10 (RMS symmetrical 600 V for three cycles)			
• Dielectric strength	kV/mm	25			
• Surge strength	kV	> 9.5			
Rated current	A	--	--	115	
Maximum busbar current I_S/phase					
• Infeed at the start of the busbar	A	80	100	--	--
• Infeed at the center of the busbar	A	160	200	--	--
Insulation coordination					
• Overvoltage category		III			
• Pollution degree		2			
Busbar cross-section	mm^2 Cu	18	25	--	--
Infeed		Any			
Conductor cross-sections	AWG	--	--	10 ... 1/0	14 ... 1
	mm^2	--	--	6 ... 35	1.5 ... 50
Terminals					
• Terminal tightening torque	Nm	--	--	5	3.5
	lb.in	--	--	50	35

Infeed at the start of the busbar

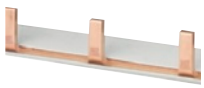


Infeed along the busbar or midpoint infeed

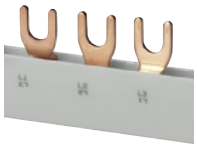
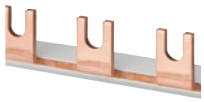
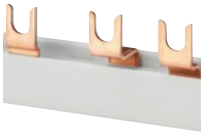
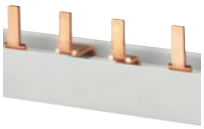
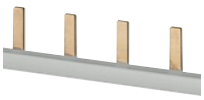


The sum of the output current per branch must not be greater than the busbar current $I_{S1.2}$ / phase.

Selection and ordering data

	Phases	Conductor cross-section	Load capacity up to	Pin spacing	Length	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm^2	A	MW	mm							kg
	Busbars											
	For MINIZED switch disconnectors D02 **For NEOZED comfort bases D01/D02** made of molded plastic 5SG1 301, 5SG1 701, 5SG5 301, 5SG5 701											
	For NEOZED fuse bases D01/D02 made of ceramic terminal version S (saddle terminal) **For cylindrical fuse holder 14 × 51 mm** **For cylindrical fuse holder SITOR 14 × 51 mm**											
	Can be cut to length, without end caps											
	Single-phase	16	130	1.5	1016	►	**5ST3 703**		1	1 unit	020	0.185
	Three-phase	16	120	1.5	1016		**5ST3 714**		1	1 unit	020	0.540

* You can order this quantity or a multiple thereof.

	Phases	Conductor cross-section	Load capacity up to	Pin spacing	Length	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm^2	A	MW	mm							kg
	For MINIZED fuse switch disconnectors D01											
	Can be cut to length, without end caps											
	Single-phase	16	120	1	1000		**5ST2 190**		1	1 unit	020	0.222
	Two-phase						**5ST2 191**		1	1 unit	020	0.448
	Three-phase						**5ST2 192**		1	1 unit	020	0.582
	Can be cut to length, with 2 end caps											
	Single-phase	16	120	1	220		**5ST2 186**		1	1 unit	020	0.048
	Two-phase						**5ST2 187**		1	1 unit	020	0.092
	Three-phase						**5ST2 188**		1	1 unit	020	0.110
	For NEOZED fuse bases D01/D02											
	• Made of molded plastic 5SG1 .30, 5SG1 .31, 5SG5 .30 • Made of ceramic, terminal version B and K (clamp-type terminal, screw head contact)											
	Non-insulated											
	Single-phase	20	116	1.5	1000		**5SH5 321**		1	1 unit	017	0.169
		36	168	1.5			**5SH5 322**		1	1 unit	017	0.260
	Can be cut to length, without end caps											
	Single-phase	24	160	1.5	1000		**5SH5 517**		1	1 unit	017	0.342
	Three-phase	16	120	1.5	1000	▶	**5SH5 320**		1	1 unit	017	0.562
	For cylindrical fuse holder 8 × 32 mm and 10 × 38 mm **For cylindrical fuse holder SITOR 10 × 38 mm** **For class CC fuse holder** [1]											
	Can be cut to length, without end caps											
	Single-phase	16	120	1	1016	▶	**5ST3 701**		1	1 unit	020	0.196
	Two-phase		120	1		▶	**5ST3 705**		1	1 unit	020	0.452
	Three-phase	16	120	1	1016	▶	**5ST3 710**		1	1 unit	020	0.610
	Cannot be cut to length, fully insulated											
	Single-phase	16		1	214	▶	**5ST3 700**		1	1 unit	020	0.039
	Two-phase			1		▶	**5ST3 704**		1	1 unit	020	0.092
	Three-phase			1		▶	**5ST3 708**		1	1 unit	020	0.116
	End caps for busbars											
	For single-phase busbars 5ST2 190						**5ST2 196**		1	10 units	020	0.001
	For 2-phase busbar 5ST2 191 and For three-phase busbar 5ST2 192						**5ST2 197**		1	10 units	020	0.001
	For single-phase busbars 5ST3 7, 5SH5 5					▶	**5ST3 748**		1	10 units	020	0.001
	For two-phase and three-phase 5ST3 7 and for 5SH5 320 busbars					▶	**5ST3 750**		1	10 units	020	0.001

[1] For UL-approved busbars, see page 5/33.

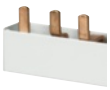
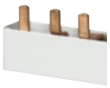
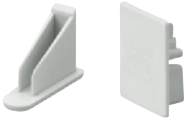
* You can order this quantity or a multiple thereof.

Busbar systems

	Phases	Conductor cross-section	Load capacity up to	Length	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm^2	A	mm							kg
	**Touch protection for free connection of pin busbars**										
	Yellow, (RAL1004) 5 x 1 pin				►	**5ST3 655**		1	10 units	020	0.003
	Terminals										
	For NEOZED fuse bases D01/D02 made of ceramic For DIAZED fuse bases DII/DIII made of ceramic										
	Terminal version S For con-ductors	2 ... 25				**5SH5 327**		1	10/300 units	017	0.011
	Terminal versions B and K For con-ductors	6 ... 25				**5SH5 328**		1	10/300 units	017	0.016
	For the infeed of fork-type or pin busbars For con-ductors	6 ... 35				**5ST2 157**		1	5 units	020	0.028
	Busbars **For 1-pole DIAZED fuse bases made of ceramic with terminal versions BB and BS**										
	Size DII, for 19 bases Single-phase	24	80	1000		**5SH3 500**		1	1/25 units	017	0.120
	Size DIII, for 25 bases Single-phase	39	120	1000		**5SH3 501**		1	1/25 units	017	0.200
	Busbars **For DIAZED bus-mounting bases/EZR with thread for screw adapters**										
	For size DII, 42 5SF6 005 bases Single-phase	48	150	2000		**5SH3 54**		1	5 units	017	0.700
	For size DIII, 34 5SF6 205 bases Single-phase	48	150	2000		**5SH3 55**		1	5 units	017	0.750
	Bus-mounting terminals For DIAZED EZR bus-mounting bases										
	Non-insulated										
	For con-ductors	1.5 ... 16				**8JH4 122**		1	10 units	046	0.009
	For con-ductors	10 ... 35				**8JH4 124**		1	10 units	046	0.023

* You can order this quantity or a multiple thereof.

5ST3 7 . . - . HG busbars acc. to UL 508

		Pin spacing	Length	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		MW	mm							kg
	5ST3 7..-.HG busbars according to UL 508, 18 mm², can be cut, without end caps									
	Single-phase									
	• For fuse holders 10 x 38 mm class CC (3NC1 091, 3NW7 513-0HG) or MCB 1P (5SY)	1	1000		**5ST3 701-0HG**		1	1 unit	005	0.330
	• For fuse holders 14 x 51 mm (3NC1 491, 3NW7 111) or MCB 1P (5SY, 5SP) with AS or FC	1.5	1000		**5ST3 703-0HG**		1	1 unit	005	0.330
	Two-phase									
	• For fuse holders 10 x 38mm/class CC (3NC1 092, 3NW7 523-0HG) or MCB 2P (5SY)	1	1000		**5ST3 705-0HG**		1	1 unit	005	0.700
	Three-phase									
	• For fuse holders 10 x 38 mm/class CC (3NC1 093, 3NW7 533-0HG) or MCB 3P (5SY)	1	1000		**5ST3 710-0HG**		1	1 unit	005	0.850
	• For fuse holders 14 x 51 mm (3NC1 493, 3NW7 131) or MCB 1P (5SY, 5SP) with AS or FC	1.5	1000		**5ST3 714-0HG**		1	1 unit	005	0.850
	5ST3 7..-.HG busbars according to UL 508, 25 mm², can be cut, without end caps									
	Single-phase									
	• For fuse holders 14 x 51 mm (3NC1 491, 3NW7 111) or MCB 1P (5SP)	1.5	1000		**5ST3 701-2HG**		1	1 unit	005	0.340
	Two-phase									
	• For fuse holders 14 x 51 mm (3NC1 492, 3NW7 121) or MCB 2P (5SP)	1.5	1000		**5ST3 705-2HG**		1	1 unit	005	0.800
	Three-phase									
	• For fuse holders 14 x 51 mm (3NC1 493, 3NW7 131) or MCB 3P (5SP)	1.5	1000		**5ST3 710-2HG**		1	1 unit	005	1.090
	End caps for 5ST3 7..-.HG									
	• For single-phase busbars				**5ST3 748-0HG**		1	10 units	005	0.001
	• For two- and three-phase busbars				**5ST3 750-0HG**		1	10 units	005	0.002
	Terminals according to UL 508									
	Infeed to device									
	• 35 mm²				**5ST3 770-0HG**		1	10 units	005	0.035
	Infeed to busbar									
	• 50 mm²				**5ST3 770-1HG**		1	10 units	005	0.035
	Touch protection cover for busbars according to UL 508									
	• 5 x 1 pin				**5ST3 655-0HG**		1	10 units	005	0.005

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* You can order this quantity or a multiple thereof.

LV HRC fuse links

Overview

LV HRC fuse systems (NH type) are used for installation systems in non-residential, commercial and industrial buildings as well as in switchgear assemblies of power utilities. They therefore protect essential building parts and systems.

LV HRC fuse systems (NH type) are fuse systems designed for operation by experts. There are no constructional requirements for non-interchangeability of rated current and touch protection.

The components and auxiliary equipment are designed in such a way as to ensure the safe replacement of LV HRC fuse systems or isolation of systems.

LV HRC fuse links are available in the sizes 000, 00, 0, 1, 2, 3, 4 and 4a.

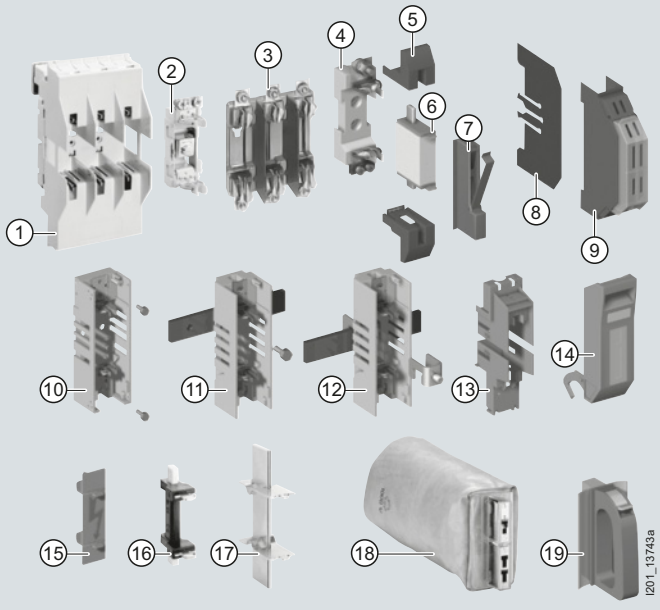
LV HRC fuse links are available in the following operational classes:

- gG for cable and line protection
- aM for short-circuit protection of switching devices in motor circuits
- gR or aR for protection of power semiconductors
- gS: The new gS operational class combines cable and line protection with semiconductor protection

LV HRC fuse links of size 000 can also be used in LV HRC fuse bases, LV HRC fuse switch disconnectors, LV HRC fuse strips as well as LV HRC in-line fuse switch disconnectors of size 00.

The fuse links 300 A, 355 A and 425 A comply with the standard but do not have the VDE mark.

LV HRC components:

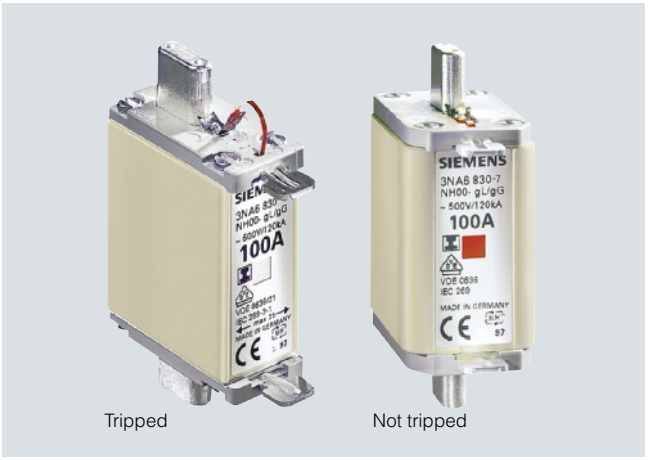


1. LV HRC fuse bases from the SR60 busbar system
2. LV HRC fuse bases for busbar mounting
3. LV HRC fuse base, 3-pole
4. LV HRC fuse base, 1-pole
5. LV HRC contact covers
6. LV HRC fuse link
7. LV HRC signal detectors
8. LV HRC partitions
9. LV HRC protective covers

LV HRC fuse bases with swivel mechanisms,

10. - For screw mounting on mounting plate
11. - For screw fixing on busbar systems
12. - For claw fixing on busbars
13. LV HRC protective cover for LV HRC fuse bases with swivel mechanism
14. LV HRC swivel mechanisms
15. LV HRC fuse base covers
16. LV HRC isolating links with insulated grip lugs
17. LV HRC isolating links with live grip lugs
18. LV HRC fuse pullers with sleeve
19. LV HRC fuse pullers

Benefits



- LV HRC fuse links with combination alarm signal the tripping of a fuse by a clear color change from red to white. This enables fast identification and replacement of the tripped fuse links. This increases system availability
- The insulated grip lugs made of metal are integrated in the top and bottom covers of the fuse link in molded plastic and provide greater safety during replacement. The mark shown below indicates that the grip lugs are insulated
- In the standard series with front indicator, the front-mounted red indicator signals the tripping of a fuse
- LV HRC fuse links are always equipped with silver-plated contact pins. This means that they are non-corroding and have less contact resistance. This ensures the long-term operational safety of the plant

Technical specifications

		LV HRC fuse links					
		Operational class gG					Operational class aM
		3NA6 ...-4 3NA6 ...-4KK 3NA3 83.-8	3NA6 ... 3NA6 ...-7 3NA7 ... 3NA7 ...-7	3NA3 ... 3NA3 ...-7	3NA6 ...-6 3NA7 ...-6	3NA3 ...-6	3ND1 3ND2
Standards **Approvals**		IEC 60269-1, -2; EN 60269-1 CSA 22.2 No.106, File Number 016325_0_00 (CSA approval of fuses 500 V for 600 V)					
Rated voltage U_n							
• Sizes 000 and 00	V AC V DC	400 --	500 250	500 250	690 250	690 250	500 --
• Sizesn 1 and 2	V AC V DC	400 --	500 440	500 440	690 440	690 440	690 --
• Size 3	V AC V DC	-- --	-- --	500 440	-- --	690 440	690 --
• Sizes 4 and 4a (IEC design)	V AC V DC	-- --	-- --	500 440	-- --	-- --	-- --
Rated current I_n	A	10 ... 400	2 ... 400	2 ... 1250	2 ... 315	2 ... 500	6 ... 630
Rated breaking capacity	kA AC	120					
	kA DC	--	25				--
Contact pins		Non-corroding, silver-plated					
Resistance to climate	°C	-20 ... +50 at 95 % relative humidity					

LV HRC fuse links

Selection and ordering data

	Sizes	Mounting width	I_n	U_n	DT	Insulated grip lugs Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	A	V AC/V DC							kg
	LV HRC fuse links with combination alarm, operational class gG										
	000	21	10	400/--		**3NA6 803-4**		1	3 units	017	0.127
			16			**3NA6 805-4**		1	3 units	017	0.128
			20			**3NA6 807-4**		1	3 units	017	0.128
			25			**3NA6 810-4**		1	3 units	017	0.128
			32			**3NA6 812-4**		1	3 units	017	0.128
			35			**3NA6 814-4**		1	3 units	017	0.123
			40			**3NA6 817-4**		1	3 units	017	0.113
			50			**3NA6 820-4**		1	3 units	017	0.125
			63			**3NA6 822-4**		1	3 units	017	0.126
			80			**3NA6 824-4**		1	3 units	017	0.124
			100			**3NA6 830-4**		1	3 units	017	0.120
	00	30	80	400/--		**3NA6 824-4KK**		1	3 units	017	0.201
			100			**3NA6 830-4KK**		1	3 units	017	0.204
			125			**3NA6 832-4**		1	3 units	017	0.193
			160			**3NA6 836-4**		1	3 units	017	0.206
	1	30	35	400/--		**3NA6 114-4**		1	3 units	017	0.293
			40			**3NA6 117-4**		1	3 units	017	0.290
			50			**3NA6 120-4**		1	3 units	017	0.287
			63			**3NA6 122-4**		1	3 units	017	0.294
			80			**3NA6 124-4**		1	3 units	017	0.288
			100			**3NA6 130-4**		1	3 units	017	0.278
			125			**3NA6 132-4**		1	3 units	017	0.276
			160			**3NA6 136-4**		1	3 units	017	0.295
		47.2	200			**3NA6 140-4**		1	3 units	017	0.421
			224			**3NA6 142-4**		1	3 units	017	0.442
			250			**3NA6 144-4**		1	3 units	017	0.420
	2	47.2	50	400/--		**3NA6 220-4**		1	3 units	017	0.460
			63			**3NA6 222-4**		1	3 units	017	0.461
			80			**3NA6 224-4**		1	3 units	017	0.460
			100			**3NA6 230-4**		1	3 units	017	0.461
			125			**3NA6 232-4**		1	3 units	017	0.457
			160			**3NA6 236-4**		1	3 units	017	0.463
			200			**3NA6 240-4**		1	3 units	017	0.462
			224			**3NA6 242-4**		1	3 units	017	0.441
			250			**3NA6 244-4**		1	3 units	017	0.464
		57.8	300			**3NA6 250-4**		1	3 units	017	0.666
			315			**3NA6 252-4**		1	3 units	017	0.619
			355			**3NA6 254-4**		1	3 units	017	0.660
			400			**3NA6 260-4**		1	3 units	017	0.662

* You can order this quantity or a multiple thereof.

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	Sizes	Mounting width	I_n	U_n	DT	Non-insulated grip lugs Order No.	Price per PU	PG	DT	Insulated grip lugs Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	A	V AC/ V DC											kg
	LV HRC fuse links with combination alarm, operational class gG														
	000	21	2	500/		**3NA7 802**		017		**3NA6 802**		1	3 units	017	0.130
			4	250		**3NA7 804**		017		**3NA6 804**		1	3 units	017	0.126
			6			**3NA7 801**		017		**3NA6 801**		1	3 units	017	0.116
			10			**3NA7 803**		017		**3NA6 803**		1	3 units	017	0.128
			16		▶	**3NA7 805**		017	▶	**3NA6 805**		1	3 units	017	0.129
			20		▶	**3NA7 807**		017	▶	**3NA6 807**		1	3 units	017	0.128
			25		▶	**3NA7 810**		017	▶	**3NA6 810**		1	3 units	017	0.121
			32			**3NA7 812**		017		**3NA6 812**		1	3 units	017	0.129
			35		▶	**3NA7 814**		017	▶	**3NA6 814**		1	3 units	017	0.129
			40			**3NA7 817**		017		**3NA6 817**		1	3 units	017	0.123
			50		▶	**3NA7 820**		017	▶	**3NA6 820**		1	3 units	017	0.124
			63		▶	**3NA7 822**		017	▶	**3NA6 822**		1	3 units	017	0.125
			80		▶	**3NA7 824**		017	▶	**3NA6 824**		1	3 units	017	0.128
			100		▶	**3NA7 830**		017	▶	**3NA6 830**		1	3 units	017	0.124
	00	30	80	500/		**3NA7 824-7**		017		**3NA6 824-7**		1	3 units	017	0.182
			100	250		**3NA7 830-7**		017		**3NA6 830-7**		1	3 units	017	0.202
			125		▶	**3NA7 832**		017	▶	**3NA6 832**		1	3 units	017	0.206
			160		▶	**3NA7 836**		017		**3NA6 836**		1	3 units	017	0.194
	1	30	16	500/		**3NA7 105**		017		**3NA6 105**		1	3 units	017	0.305
			20	440		**3NA7 107**		017		**3NA6 107**		1	3 units	017	0.286
			25			**3NA7 110**		017		**3NA6 110**		1	3 units	017	0.290
			35			**3NA7 114**		017		**3NA6 114**		1	3 units	017	0.284
			40			**3NA7 117**		017		**3NA6 117**		1	3 units	017	0.295
			50			**3NA7 120**		017		**3NA6 120**		1	3 units	017	0.288
			63			**3NA7 122**		017		**3NA6 122**		1	3 units	017	0.281
			80			**3NA7 124**		017	▶	**3NA6 124**		1	3 units	017	0.289
			100			**3NA7 130**		017	▶	**3NA6 130**		1	3 units	017	0.290
			125		▶	**3NA7 132**		017	▶	**3NA6 132**		1	3 units	017	0.292
			160		▶	**3NA7 136**		017	▶	**3NA6 136**		1	3 units	017	0.283
		47.2	200		▶	**3NA7 140**		017	▶	**3NA6 140**		1	3 units	017	0.442
			224			**3NA7 142**		017		**3NA6 142**		1	3 units	017	0.439
			250		▶	**3NA7 144**		017	▶	**3NA6 144**		1	3 units	017	0.419
	2	47.2	35	500/		**3NA7 214**		017		**3NA6 214**		1	3 units	017	0.435
			50	440		**3NA7 220**		017		**3NA6 220**		1	3 units	017	0.435
			63			**3NA7 222**		017		**3NA6 222**		1	3 units	017	0.460
			80			**3NA7 224**		017		**3NA6 224**		1	3 units	017	0.459
			100			**3NA7 230**		017		**3NA6 230**		1	3 units	017	0.434
			125			**3NA7 232**		017		**3NA6 232**		1	3 units	017	0.463
			160		▶	**3NA7 236**		017	▶	**3NA6 236**		1	3 units	017	0.462
			200		▶	**3NA7 240**		017	▶	**3NA6 240**		1	3 units	017	0.437
			224			**3NA7 242**		017		**3NA6 242**		1	3 units	017	0.462
			250		▶	**3NA7 244**		017	▶	**3NA6 244**		1	3 units	017	0.463
		57.8	300			**--**				**3NA6 250**		1	3 units	017	0.656
			315		▶	**3NA7 252**		017	▶	**3NA6 252**		1	3 units	017	0.627
			355			**--**				**3NA6 254**		1	3 units	017	0.657
			400		▶	**3NA7 260**		017	▶	**3NA6 260**		1	3 units	017	0.659

* You can order this quantity or a multiple thereof.

LV HRC fuse links

	Sizes	Mounting width	I_n	U_n	DT	Non-insulated grip lugs Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	A	V AC/V DC							kg
	LV HRC fuse links with front indicator, operational class gG										
	000	21	2	500/250	▶	**3NA3 802**		1	3 units	017	0.122
			4		▶	**3NA3 804**		1	3 units	017	0.125
			6		▶	**3NA3 801**		1	3 units	017	0.121
			10		▶	**3NA3 803**		1	3 units	017	0.130
			16		▶	**3NA3 805**		1	3 units	017	0.123
			20		▶	**3NA3 807**		1	3 units	017	0.120
			25		▶	**3NA3 810**		1	3 units	017	0.123
			32		▶	**3NA3 812**		1	3 units	017	0.124
			35		▶	**3NA3 814**		1	3/90 units	017	0.129
			40		▶	**3NA3 817**		1	3 units	017	0.127
			50		▶	**3NA3 820**		1	3/90 units	017	0.122
			63		▶	**3NA3 822**		1	3/90 units	017	0.124
			80		▶	**3NA3 824**		1	3/90 units	017	0.128
			100		▶	**3NA3 830**		1	3/90 units	017	0.124
			125	400/250	▶	**3NA3 832-8**		1	3/60 units	017	0.120
			160		▶	**3NA3 836-8**		1	3/60 units	017	0.160
	00	30	35	500/250		**3NA3 814-7**		1	3 units	017	0.190
			50			**3NA3 820-7**		1	3 units	017	0.189
			63			**3NA3 822-7**		1	3 units	017	0.190
			80			**3NA3 824-7**		1	3 units	017	0.198
			100			**3NA3 830-7**		1	3 units	017	0.191
			125		▶	**3NA3 832**		1	3 units	017	0.192
			160		▶	**3NA3 836**		1	3 units	017	0.189
	0	30	6	500/440		**3NA3 001**		1	3 units	017	0.266
			10			**3NA3 003**		1	3 units	017	0.244
			16			**3NA3 005**		1	3 units	017	0.255
			20			**3NA3 007**		1	3 units	017	0.253
			25			**3NA3 010**		1	3 units	017	0.258
			32			**3NA3 012**		1	3 units	017	0.270
			35			**3NA3 014**		1	3 units	017	0.271
			40			**3NA3 017**		1	3 units	017	0.253
			50			**3NA3 020**		1	3 units	017	0.266
			63			**3NA3 022**		1	3 units	017	0.271
			80			**3NA3 024**		1	3 units	017	0.256
			100			**3NA3 030**		1	3 units	017	0.260
			125			**3NA3 032**		1	3 units	017	0.259
			160			**3NA3 036**		1	3 units	017	0.272
	1	30	16	500/440		**3NA3 105**		1	3 units	017	0.283
			20			**3NA3 107**		1	3 units	017	0.285
			25			**3NA3 110**		1	3 units	017	0.275
			35			**3NA3 114**		1	3 units	017	0.283
			40			**3NA3 117**		1	3 units	017	0.275
			50			**3NA3 120**		1	3 units	017	0.280
			63		▶	**3NA3 122**		1	3 units	017	0.284
			80		▶	**3NA3 124**		1	3 units	017	0.269
			100		▶	**3NA3 130**		1	3 units	017	0.270
			125		▶	**3NA3 132**		1	3 units	017	0.271
			160		▶	**3NA3 136**		1	3 units	017	0.290
		47.2	200		▶	**3NA3 140**		1	3 units	017	0.412
			224			**3NA3 142**		1	3 units	017	0.411
			250		▶	**3NA3 144**		1	3 units	017	0.447

* You can order this quantity or a multiple thereof.

	Sizes	Mounting width	I_n	U_n	DT	Non-insulated grip lugs Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	A	V AC/V DC							kg
	LV HRC fuse links with front indicator, operational class gG										
	2	47.2	35	500/440		**3NA3 214**		1	3 units	017	0.454
			50			**3NA3 220**		1	3 units	017	0.420
			63			**3NA3 222**		1	3 units	017	0.433
			80			**3NA3 224**		1	3 units	017	0.431
			100			**3NA3 230**		1	3 units	017	0.430
			125			**3NA3 232**		1	3 units	017	0.429
			160		▶	**3NA3 236**		1	3 units	017	0.432
			200		▶	**3NA3 240**		1	3 units	017	0.427
			224		▶	**3NA3 242**		1	3 units	017	0.432
			250		▶	**3NA3 244**		1	3 units	017	0.440
		57.8	300			**3NA3 250**		1	3 units	017	0.626
			315		▶	**3NA3 252**		1	3 units	017	0.625
			355		▶	**3NA3 254**		1	3 units	017	0.617
			400		▶	**3NA3 260**		1	3 units	017	0.624
	3	57.8	200	500/440		**3NA3 340**		1	3 units	017	0.629
			224			**3NA3 342**		1	3 units	017	0.625
			250			**3NA3 344**		1	3 units	017	0.632
			300			**3NA3 350**		1	3 units	017	0.626
			315		▶	**3NA3 352**		1	3 units	017	0.632
			355			**3NA3 354**		1	3 units	017	0.666
			400		▶	**3NA3 360**		1	3 units	017	0.677
		71.2	425			**3NA3 362**		1	3 units	017	0.892
			500		▶	**3NA3 365**		1	3 units	017	0.880
			630		▶	**3NA3 372**		1	3 units	017	0.885
	Can only be used for 3NH3 530 LV HRC fuse base										
	4 (IEC design)	101.8	630	500/440		**3NA3 472**		1	1 unit	017	2.577
			800			**3NA3 475**		1	1 unit	017	2.580
			1000			**3NA3 480**		1	1 unit	017	2.584
			1250			**3NA3 482**		1	1 unit	017	2.608
	Only for base LV HRC 3NH7 520 or usable for fuse switch disconnector with in-line design 3NJ56 43-0BB00										
	4a	101.8	500	500/440		**3NA3 665**		1	1 unit	017	2.692
			630			**3NA3 672**		1	1 unit	017	2.694
			800			**3NA3 675**		1	1 unit	017	2.707
			1000			**3NA3 680**		1	1 unit	017	2.708
			1250			**3NA3 682**		1	1 unit	017	2.748

* You can order this quantity or a multiple thereof.

LV HRC fuse links

	Sizes	Mounting width	I_n	U_n	DT	Non-insulated grip lugs Order No.	Price per PU	PG	DT	Insulated grip lugs Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	A	V AC/ V DC											kg
	LV HRC fuse links with combination alarm, operational class gG														
	000	21	2	690/ 250		**3NA7 802-6**		017		**3NA6 802-6**		1	3 units	017	0.122
			4			**3NA7 804-6**		017		**3NA6 804-6**		1	3 units	017	0.130
			6			**3NA7 801-6**		017		**3NA6 801-6**		1	3 units	017	0.122
			10			**3NA7 803-6**		017		**3NA6 803-6**		1	3 units	017	0.124
			16			**3NA7 805-6**		017		**3NA6 805-6**		1	3 units	017	0.123
			20			**3NA7 807-6**		017		**3NA6 807-6**		1	3 units	017	0.128
			25			**3NA7 810-6**		017		**3NA6 810-6**		1	3 units	017	0.120
			32			**3NA7 812-6**		017		**3NA6 812-6**		1	3 units	017	0.128
			35			**3NA7 814-6**		017		**3NA6 814-6**		1	3 units	017	0.129
	00	30	40	690/ 250		**3NA7 817-6**		017		**3NA6 817-6**		1	3 units	017	0.203
			50			**3NA7 820-6**		017		**3NA6 820-6**		1	3 units	017	0.196
			63			**3NA7 822-6**		017		**3NA6 822-6**		1	3 units	017	0.202
			80			**3NA7 824-6**		017		**3NA6 824-6**		1	3 units	017	0.187
			100			**3NA7 830-6**		017		**3NA6 830-6**		1	3 units	017	0.202
	1	30	50	690/ 440		**3NA7 120-6**		017		**3NA6 120-6**		1	3 units	017	0.271
			63			**3NA7 122-6**		017		**3NA6 122-6**		1	3 units	017	0.280
			80			**3NA7 124-6**		017		**3NA6 124-6**		1	3 units	017	0.284
			100			**3NA7 130-6**		017		**3NA6 130-6**		1	3 units	017	0.291
			125			**3NA7 132-6**		017		**3NA6 132-6**		1	3 units	017	0.282
			160			**3NA7 136-6**		017		**3NA6 136-6**		1	3 units	017	0.293
		47.2	200			**3NA7 140-6**		017		**3NA6 140-6**		1	3 units	017	0.439
	2	47.2	80	690/ 440		**3NA7 224-6**		017		**3NA6 224-6**		1	3 units	017	0.460
			100			**3NA7 230-6**		017		**3NA6 230-6**		1	3 units	017	0.462
			125			**3NA7 232-6**		017		**3NA6 232-6**		1	3 units	017	0.436
			160			**3NA7 236-6**		017		**3NA6 236-6**		1	3 units	017	0.439
			200			**3NA7 240-6**		017		**3NA6 240-6**		1	3 units	017	0.455
		57.8	224			**3NA7 242-6**		017		**3NA6 242-6**		1	3 units	017	0.656
			250			**3NA7 244-6**		017		**3NA6 244-6**		1	3 units	017	0.658
			300			**3NA7 250-6**		017		**3NA6 250-6**		1	3 units	017	0.661
			315			**3NA7 252-6**		017		**3NA6 252-6**		1	3 units	017	0.627

* You can order this quantity or a multiple thereof.

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	Sizes	Mounting width	I_n	U_n	DT	Non-insulated grip lugs Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	A	V AC/V DC							kg
	LV HRC fuse links with front indicator, operational class gG										
	000	21	2	690/250	▶	**3NA3 802-6**		1 3 units		017	0.127
			4		▶	**3NA3 804-6**		1 3 units		017	0.128
			6		▶	**3NA3 801-6**		1 3 units		017	0.123
			10		▶	**3NA3 803-6**		1 3 units		017	0.123
			16		▶	**3NA3 805-6**		1 3 units		017	0.126
			20		▶	**3NA3 807-6**		1 3 units		017	0.133
			25		▶	**3NA3 810-6**		1 3 units		017	0.126
			32			**3NA3 812-6**		1 3 units		017	0.121
			35		▶	**3NA3 814-6**		1 3 units		017	0.128
	00	30	40	690/250		**3NA3 817-6**		1 3 units		017	0.190
			50		▶	**3NA3 820-6**		1 3 units		017	0.191
			63		▶	**3NA3 822-6**		1 3 units		017	0.191
			80		▶	**3NA3 824-6**		1 3 units		017	0.195
			100		▶	**3NA3 830-6**		1 3 units		017	0.200
	1	30	50	690/440		**3NA3 120-6**		1 3 units		017	0.285
			63			**3NA3 122-6**		1 3 units		017	0.276
			80			**3NA3 124-6**		1 3 units		017	0.277
			100		▶	**3NA3 130-6**		1 3 units		017	0.274
			125		▶	**3NA3 132-6**		1 3 units		017	0.288
			160		▶	**3NA3 136-6**		1 3 units		017	0.286
		47.2	200		▶	**3NA3 140-6**		1 3 units		017	0.439
	2	47.2	80	690/440		**3NA3 224-6**		1 3 units		017	0.455
			100			**3NA3 230-6**		1 3 units		017	0.448
			125			**3NA3 232-6**		1 3 units		017	0.452
			160		▶	**3NA3 236-6**		1 3 units		017	0.424
			200		▶	**3NA3 240-6**		1 3 units		017	0.451
		57.8	224			**3NA3 242-6**		1 3 units		017	0.657
			250		▶	**3NA3 244-6**		1 3 units		017	0.652
			300			**3NA3 250-6**		1 3 units		017	0.631
			315		▶	**3NA3 252-6**		1 3 units		017	0.666
	3	57.8	250	690/440		**3NA3 344-6**		1 3 units		017	0.659
			315			**3NA3 352-6**		1 3 units		017	0.634
		71.2	355			**3NA3 354-6**		1 3 units		017	0.982
			400		▶	**3NA3 360-6**		1 3 units		017	1.026
			425			**3NA3 362-6**		1 3 units		017	1.025
			500		▶	**3NA3 365-6**		1 3 units		017	0.982

* You can order this quantity or a multiple thereof.

LV HRC fuse links

	Sizes	Mounting width	I_n	U_n	DT	Non-insulated grip lugs Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		mm	A	V AC/V DC							kg
	LV HRC fuse links with front indicator, operational class aM										
	000	21	6	500/--		**3ND1 801**		1	3 units	017	0.114
			10			**3ND1 803**		1	3 units	017	0.127
			16			**3ND1 805**		1	3 units	017	0.129
			20			**3ND1 807**		1	3 units	017	0.128
			25			**3ND1 810**		1	3 units	017	0.122
			32			**3ND1 812**		1	3 units	017	0.130
			35			**3ND1 814**		1	3 units	017	0.123
			40			**3ND1 817**		1	3 units	017	0.123
			50			**3ND1 820**		1	3 units	017	0.134
			63			**3ND1 822**		1	3 units	017	0.122
			80			**3ND1 824**		1	3 units	017	0.129
	00	30	100	500/--		**3ND1 830**		1	3 units	017	0.177
			125			**3ND1 832**		1	3 units	017	0.189
			160			**3ND1 836**		1	3 units	017	0.199
	1	30	63	690/--		**3ND2 122**		1	3 units	017	0.284
			80			**3ND2 124**		1	3 units	017	0.281
			100			**3ND2 130**		1	3 units	017	0.276
		47.2	125			**3ND2 132**		1	3 units	017	0.405
			160			**3ND2 136**		1	3 units	017	0.440
			200			**3ND2 140**		1	3 units	017	0.441
			250			**3ND2 144**		1	3 units	017	0.420
	2	47.2	125	690/--		**3ND2 232**		1	3 units	017	0.428
			160			**3ND2 236**		1	3 units	017	0.435
			200			**3ND2 240**		1	3 units	017	0.453
			250			**3ND2 244**		1	3 units	017	0.450
		57.8	315			**3ND2 252**		1	3 units	017	0.634
			355			**3ND2 254**		1	3 units	017	0.654
			400			**3ND2 260**		1	3 units	017	0.629
	3	57.8	315	690/--		**3ND2 352**		1	3 units	017	0.638
			355			**3ND2 354**		1	3 units	017	0.664
			400			**3ND2 360**		1	3 units	017	0.633
		71.2	500			**3ND1 365**		1	3 units	017	0.980
			630			**3ND1 372**		1	3 units	017	0.980

* You can order this quantity or a multiple thereof.

Overview

LV HRC signal detectors are used for remotely indicating that the LV HRC fuse links have been tripped. Three different solutions are available:

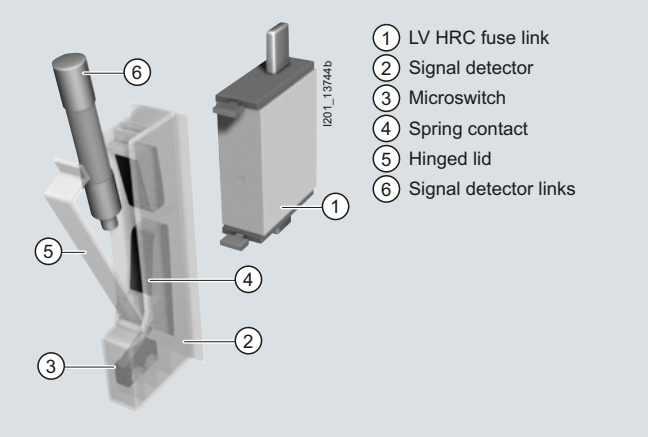
- 3NX1 021 signal detectors with signal detector link
  The LV HRC signal detectors with signal detector link support monitoring of LV HRC fuse links with non-insulated grip lugs of sizes 000 to 4 at 10 A or more. The signal detector link is connected in parallel to the LV HRC fuse link. In the event of a fault, the LV HRC fuse links are released simultaneously with the fuse detector link A tripping pin switches a floating microswitch
- 3NX1 024 signal detector top
  The signal detector top can be used with LV HRC fuse links, sizes 000, 00, 1 and 2, which are equipped with non-insulated grip lugs and have a front indicator or combination alarm. It is simply plugged into the grip lugs
- 5TT3 170 fuse monitor
  If a fuse is tripped, the front indicator springs open and switches a floating microswitch. This solution should not be used for safety-relevant systems. For this purpose, we recommend our electronic fuse monitors

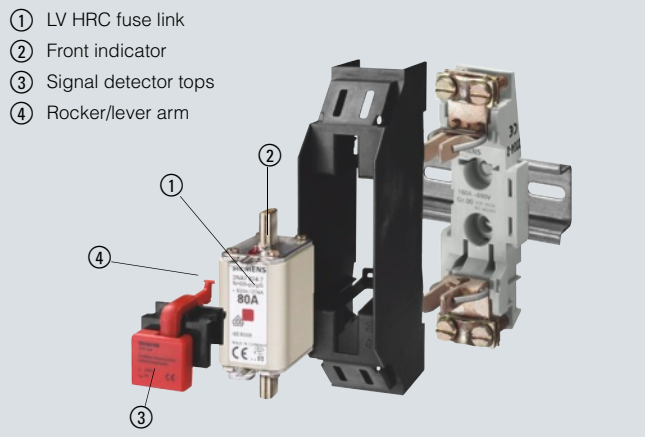
Benefits

Uniform solution for all sizes

LV HRC signal detectors reliably indicate when a fuse has tripped. Tripped fuses are quickly located. This saves time and increases system availability.

The LV HRC signal detector top is a cost-effective solution for the monitoring of Siemens LV HRC fuse links of sizes 000, 00, 1 and 2.





LV HRC signal detectors

Selection and ordering data

		Sizes	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	**LV HRC signal detectors** Only for SIEMENS 3NA3, 3NA7 and 3ND LV HRC fuse links with non-insulated grip lugs • Rated voltage up to 690 V AC/600 V DC • Contact: microswitches 250 V AC, 6 A • Connection: flat termination 2.3 mm	000 ... 4		**3NX1 021**		1	1 unit	017	0.039
	**Signal detector links** • Rated voltage up to 690 V AC/600 V DC								
	Response value > 9 V; 2.5 A; for standard applications	000 ... 4		**3NX1 022**		1	3 units	017	0.014
	Response value > 2 V; 7 A; only for meshed networks			**3NX1 023**		1	3 units	017	0.023
	**Signal detector tops** Only for SIEMENS 3NA3, 3NA7 and 3ND LV HRC fuse links with non-insulated grip lugs • Rated voltage up to 690 V AC/600 V DC • Contact: microswitch 230 V AC, 5 A, 1 CO • Connection: flat termination 2.3 mm	000, 00, 1, 2 ►		**3NX1 024**		1	1 unit	017	0.021

	U_e V AC	I_n A	U_c V	Mounting width MW	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	**Fuse monitors** For all low-voltage fuse systems. Can be used in asymmetric systems afflicted with harmonics and regenerative feedback motors. Signal also for disconnected loads.										
	230	4	3 AC 380 ... 415	2		**5TT3 170**		1	1 unit		0.153

For more information on fuse monitors, see chapter "Monitoring devices —> Monitoring of electrical values".

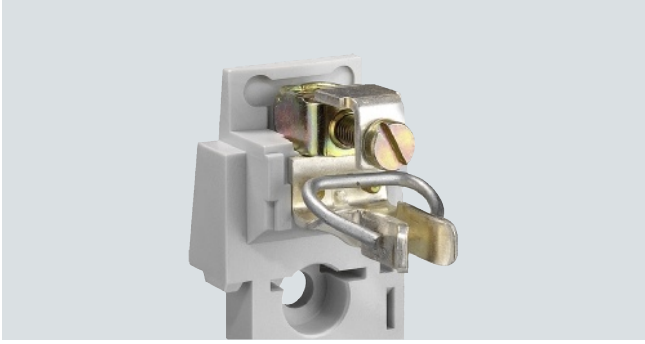
* You can order this quantity or a multiple thereof.

Overview

Terminals for all applications

Flat terminals with screws are suitable for connecting busbars or cable lugs. They have a torsion-proof screw connection with shim, spring washer and nut. When tightening the nut, always ensure compliance with the specified torque due to the considerable leverage effect.

The double busbar terminal differs from the flat terminal in that it supports connection of two busbars, one on the top and one at the bottom of the flat terminal.



The modern box terminal ensures efficient and reliable connection to the conductors. They support connection of conductors with or without end sleeves.

With the flat terminal with nut, terminal lug of the nut is torsion-proof. When tightening the nut, the torque must be observed because of the considerable leverage effect.

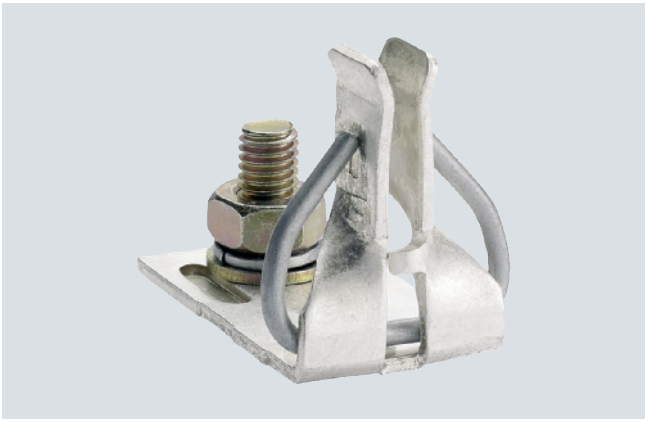
Up to three conductors can be clamped to the terminal strip.

The plug-in terminal is equipped for connecting two conductors.

One conductor can be clamped to the saddle-type terminal.

LV HRC sockets and accessories

Benefits



- The silver-plated Lyra contact provides a large contact area for the pin of the LV HRC fuse link. This improves heat transmission and lowers the temperature. It also minimizes the aging of the fuse link in the maximum load range, in particular when using SITOR fuses
- The large contact area also facilitates replacement of LV HRC fuse links
- The spring washer tensioning the contact is mechanically galvanized. This will prevent hydrogen embrittlement. The contact is resistant to aging and there will be no dreaded annealing of contacts, which considerably improves operating safety

Technical specifications

		LV HRC fuse bases, LV HRC bus-mounting bases					
Size		**000/00**	**0**	**1**	**2**	**3**	**4**
Standards		IEC 60269-1, -2; EN 60269-1					
Rated current I_n	A	160	160	250	400	630	1250
Rated voltage U_n	V AC	690[1)]	690[1)]				690
	V DC	250	440				440
Rated short-circuit strength	kA AC	120					
	kA DC	25					
Max. power dissipation of fuse links	W	12	25	32	45	60	90
Flat terminal							
Screw		M8		M10		M12	
Nut		M8	--				
Max. tightening torque	Nm	14		38			65
Plug-in terminal							
Conductor cross-section	mm^2	2.5 ... 50		--			
Saddle-type terminal							
Conductor cross-section	mm^2	6 ... 70	--				
Box terminals							
Conductor cross-section	mm^2	2.5 ... 50					
Terminal strips							
Conductor cross-section, 3-wire	mm^2	1.5 ... 16	--				
Max. torque for attachment of LV HRC fuse base	Nm	2		2.5			--

[1)] Extended rated voltage up to 1000 V (except LV HRC bus-mounting bases).

		LV HRC fuse bases with swivel mechanism			
Size		**000/00**	**1**	**3**	**4a**
Rated voltage U_n	V AC	690			
	V DC	440			
Max. power dissipation of fuse links	W	12	32	48	110
Flat terminal					
Screw		M8	M10	M12	M16
Nut		M8	--		
Max. tightening torque	Nm	14	38		65

Selection and ordering data

Sizes	I_n A	Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
LV HRC fuse bases									
Made of molded plastic, for standard rail mounting or screw fixing									
000/00		1P							
	160	With flat terminals, screw	▶	**3NH3 051**		1	1/10 units	017	0.149
		With saddle-type terminals	▶	**3NH3 052**		1	1/10 units	017	0.010
	125	With box terminals, up to 50 mm^2	▶	**3NH3 053**		1	1/10 units	017	0.118
Made of ceramic for screw fixing									
000/00	160	1P							
		With flat terminals, screw	▶	**3NH3 030**		1	3 units	017	0.217
		With plug-in terminals		**3NH3 031**		1	3 units	017	0.260
		With saddle-type terminals	▶	**3NH3 032**		1	3 units	017	0.204
		With flat terminals and terminal strip		**3NH3 035**		1	3 units	017	0.229
		With flat terminals, nut		**3NH3 038**		1	3 units	017	0.177
		With flat and saddle-type terminals		**3NH3 050**		1	3 units	017	0.217
		3P (incl. two partitions)							
		With flat terminals	▶	**3NH4 030**		1	1 unit	017	0.715
		With plug-in terminals		**3NH4 031**		1	1 unit	017	0.883
		With saddle-type terminals		**3NH4 032**		1	1 unit	017	0.717
		With flat terminals and terminal strip		**3NH4 035**		1	1 unit	017	0.743
Made of ceramic for screw fixing									
0	160	1P							
		With flat terminals		**3NH3 120**		1	3 units	017	0.411
		With plug-in terminals		**3NH3 122**		1	3 units	017	0.473
Made of ceramic for screw fixing									
1	250	1P							
		With flat terminals	▶	**3NH3 230**		1	3 units	017	0.738
		With double busbar terminals		**3NH3 220**		1	3 units	017	0.737
Ceramic supports on base plate for screw fixing									
1	250	3P (incl. two partitions)							
		With flat terminals		**3NH4 230**		1	1 unit	017	2.086
Made of ceramic for screw fixing									
2	400	1P							
		With flat terminals	▶	**3NH3 330**		1	1 unit	017	0.817
		With double busbar terminals		**3NH3 320**		1	1 unit	017	0.819
Made of ceramic for screw fixing									
3	630	1P							
		With flat terminals	▶	**3NH3 430**		1	1 unit	017	1.077
		With double busbar terminals		**3NH3 420**		1	1 unit	017	1.080







* You can order this quantity or a multiple thereof.

LV HRC sockets and accessories

	Sizes	I_n A	Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	LV HRC fuse bases									
	Ceramic supports on base plate for screw fixing (IEC design)									
	4	1250	1P With flat terminals		**3NH3 530**		1	1 unit	017	3.116
	LV HRC bus-mounting bases made of molded plastic For busbars 12 × 5 mm to 12 × 10 mm, busbar spacing 40 mm									
	**000/00**	160	1P With top saddle-type terminal With bottom saddle-type terminal		**3NH3 036** **3NH3 037**		1 1	1 unit 1 unit	017 017	0.235 0.243
	**000/00**	80	3P, in tandem design 3 outgoing feeders, top and bottom with saddle-type terminal							
			With 4 partitions With 2 non-interrupted partitions		**3NH4 037** **3NH4 045**		1 1	1 unit 1 unit	017 017	1.023 0.997
	LV HRC fuse bases with swivel mechanism With flat terminals and additional saddle-type terminals (included)									
	**000/00**	160	1P							
			With screw fixing for mounting plate With claw fixing for non-perforated busbar With screw fixing for perforated busbar		**3NH7 030** **3NH7 031** **3NH7 032**		1 1 1	1 unit 1 unit 1 unit	017 017 017	0.416 0.421 0.393
	**1**	250	1P							
			With screw fixing for mounting plate With claw fixing for non-perforated busbar With screw fixing for perforated busbar		**3NH7 230** **3NH7 231** **3NH7 232**		1 1 1	1 unit 1 unit 1 unit	017 017 017	1.086 1.501 1.212
	Can also be used for fuse links of size 2									
	**3**	630	1P							
			With screw fixing for mounting plate With claw fixing for non-perforated busbar With screw fixing for perforated busbar, can be used as disconnector		**3NH7 330** **3NH7 331** **3NH7 332**		1 1 1	1 unit 1 unit 1 unit	017 017 017	2.157 2.523 2.450

* You can order this quantity or a multiple thereof.

	Sizes	I_n	Version		Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A								kg
	LV HRC fuse bases with swivel mechanism									
	**4a**	1250	1P With screw fixing for mounting plate		**3NH7 520**		1	1 unit	017	5.428
	LV HRC protective covers for LV HRC fuse bases									
	As touch protection for contact pieces									
	000/00			▶	**3NX3 105**		1	2/20 units	017	0.009
	0				**3NX3 114**		1	2/40 units	017	0.010
	1			▶	**3NX3 106**		1	2/20 units	017	0.010
	2			▶	**3NX3 107**		1	2/12 units	017	0.024
	3			▶	**3NX3 108**		1	2/10 units	017	0.030
	LV HRC partitions for LV HRC fuse bases									
	As intermediate phase and end barrier									
			Type							
	000/00		3NH3 0/3NH4 0	▶	**3NX2 023**		1	2 units	017	0.027
	0		3NH3 1		**3NX2 030**		1	2 units	017	0.033
	1		3NH3 2	▶	**3NX2 024**		1	2 units	017	0.048
	2		3NH3 3	▶	**3NX2 025**		1	2 units	017	0.063
	3		3NH3 4	▶	**3NX2 026**		1	2 units	017	0.076
	LV HRC protective covers IP2X for LV HRC fuse bases									
	**LV HRC protective covers**									
	000/00		1P and 3P		**3NX3 115**		1	10 units	017	0.039
	LV HRC protective hoods									
	**000/00**		When using fuse links with non-insulated grip lugs		**3NX3 116**		1	10 units	017	0.014
	LV HRC protective covers for LV HRC bus-mounting bases									
	**000/00**		As touch protection for contact pieces							
			Outgoing terminal	▶	**3NX3 105**		1	2/20 units	017	0.009
			Incoming terminal		**3NX3 113**		1	2/50 units	017	0.006
	LV HRC partitions for 3NH3 0 LV HRC bus-mounting bases									
	**000/00**		As phase barrier		**3NX2 027**		1	2 units	017	0.018
	**000/00**		As end barrier		**3NX2 028**		1	2/50 units	017	0.040

* You can order this quantity or a multiple thereof.

LV HRC sockets and accessories

	Sizes	Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	**Non-interrupted partitions**								
	000/00	For 3NH4 0 LV HRC bus-mounting bases		**3NX2 031**		1	2/30 units	017	0.067
	**Fuse base covers**								
	For LV HRC fuse bases, red, with inscription "Isolating point"								
	000/00			**3NX1 003**		1	3 units	017	0.013
	1, 2, 3			**3NX1 004**		1	3 units	017	0.087
	**Fuse pullers**								
	000 ... 4	For LV HRC fuse links							
		Without sleeve	▶	**3NX1 013**		1	1 unit	017	0.301
		With sleeve	▶	**3NX1 014**		1	1 unit	017	0.558
	**Isolating blades For LV HRC fuse bases and fuse switch disconnectors**								
	With insulated grip lugs								
	000/00	Silver-plated	▶	**3NG1 002**		1	3/30 units	017	0.066
	0			**3NG1 102**		1	1/10 units	017	0.116
	1		▶	**3NG1 202**		1	1/10 units	017	0.159
	2		▶	**3NG1 302**		1	1/5 units	017	0.228
	3		▶	**3NG1 402**		1	1/5 units	017	0.281
	With non-insulated grip lugs								
	4	Tinned		**3NG1 503**		1	3 units	017	0.679
	4a	Nickel-plated		**3NG1 505**		1	1/5 units	017	0.701

* You can order this quantity or a multiple thereof.

SITOR fuses for 3NH bases: Assignment table

3NH bases are generally suitable for all LV HRC type fuses. LV HRC type fuses for SITOR semiconductor protection can also be used, although it must be noted that, compared to cable and line protection fuses, these get much hotter during operation. The following table contains the permissible load currents of the SITOR fuses for installation in 3NH.

For installation in a base, it may therefore be necessary to operate the fuse under I_n (derating)

The values were determined using the conductor cross-sections specified in the table. If using smaller cross-sections, a considerably higher derating is required due to the lower heat dissipation.

SITOR fuse data						**Permissible load currents of fuse when installed in: 3 NH**		
Type	Rated current I_n	Rated voltage	Operational class	Size	Required conductor cross-section Cu	Type	Size	Permissible load current[1)]
--	A	V AC	--	--	mm² Cu	--	--	A
3NC2 423. .	150	500	gR	3	70	3NH3 430/20	3	150
3NC2 425. .	200	500	gR	3	95	3NH3 430/20	3	190
3NC2 427. .	250	500	gR	3	120	3NH3 430/20	3	240
3NC2 428. .	300	500	gR	3	185	3NH3 430/20	3	285
3NC2 431. .	350	500	gR	3	240	3NH3 430/20	3	330
3NC2 432. .	400	500	aR	3	240	3NH3 430/20	3	400
3NC3 336-1	630	1000	aR	3	2 x (40 x 5)	3NH3 430/20	3	560
3NC3 337-1	710	1000	aR	3	2 x (50 x 5)	3NH3 430/20	3	600
3NC3 338-1	800	1000	aR	3	2 x (40 x 8)	3NH3 430/20	3	660
3NC3 340-1	900	1000	aR	3	2 x (40 x 8)	3NH3 430/20	3	750
3NC3 341-1	1000	1000	aR	3	2 x (50 x 8)	3NH3 430/20	3	850
3NC3 342-1	1100	800	aR	3	2 x (50 x 8)	3NH3 430/20	3	900
3NC3 343-1	1250	800	aR	3	2 x (50 x 8)	3NH3 430/20	3	950
3NC3 430-1	315	1250	aR	3	2 x 95	3NH3 430/20	3	310
3NC3 432-1	400	1250	aR	3	2 x 120	3NH3 430/20	3	390
3NC3 434-1	500	1250	aR	3	2 x 150	3NH3 430/20	3	460
3NC3 436-1	630	1250	aR	3	2 x (40 x 5)	3NH3 430/20	3	560
3NC3 438-1	800	1100	aR	3	2 x (40 x 8)	3NH3 430/20	3	690
3NC8 423..	150	660	gR	3	70	3NH3 430/20	3	135
3NC8 425..	200	660	gR	3	95	3NH3 430/20	3	180
3NC8 427..	250	660	gR	3	120	3NH3 430/20	3	250
3NC8 431..	350	660	gR	3	240	3NH3 430/20	3	315
3NC8 434..	500	660	gR	3	2 x 150	3NH3 430/20	3	450
3NC8 444..	1000	600	aR	3	2 x (60 x 6)	3NH3 430/20	3	800
3NE1 020-2	80	690	gR	00	25	3NH3 030/4 030	00	80
3NE1 021-0	100	690	gS	00	35	3NH3 030/4 030	00	100
3NE1 021-2	100	690	gR	00	35	3NH3 030/4 030	00	100
3NE1 022-0	125	690	gS	00	50	3NH3 030/4 030	00	125
3NE1 022-0	125	690	gR	00	50	3NH3 030/4 030	00	125
3NE1 224-0	160	690	gS	1	70	3NH3 230/4 230	1	160
3NE1 224-2/-3	160	690	gR	1	70	3NH3 230/4 230	1	160
3NE1 225-0	200	690	gS	1	95	3NH3 230/4 230	1	200
3NE1 225-2/-3	200	690	gR	1	95	3NH3 230/4 230	1	200
3NE1 227-0	250	690	gS	1	120	3NH3 230/4 230	1	250
3NE1 227-2/-3	250	690	gR	1	120	3NH3 230/4 230	1	250
3NE1 230-0	315	690	gS	1	2 x 70	3NH3 330/20	2	315
3NE1 230-2/-3	315	690	gR	1	2 x 70	3NH3 330/20	2	315
3NE1 331-0	350	690	gS	2	2 x 95	3NH3 330/20	2	350
3NE1 331-2/-3	350	690	gR	2	2 x 95	3NH3 330/20	2	350
3NE1 332-0	400	690	gS	2	2 x 95	3NH3 330/20	2	400
3NE1 332-2/-3	400	690	gR	2	2 x 95	3NH3 330/20	2	400
3NE1 333-0	450	690	gS	2	2 x 120	3NH3 430/20	3	450
3NE1 333-2/-3	450	690	gR	2	2 x 120	3NH3 430/20	3	450
3NE1 334-0	500	690	gS	2	2 x 120	3NH3 430/20	3	500
3NE1 334-2/-3	500	690	gR	2	2 x 120	3NH3 430/20	3	500
3NE1 435-0	560	690	gS	3	2 x 150	3NH3 430/20	3	560
3NE1 435-2/-3	560	690	gR	3	2 x 150	3NH3 430/20	3	560
3NE1 436-0	630	690	gS	3	2 x 185	3NH3 430/20	3	630
3NE1 436-2/-3	630	690	gR	3	2 x 185	3NH3 430/20	3	630
3NE1 437-0	710	690	gS	3	2 x (40 x 5)	3NH3 430/20	3	710
3NE1 437-1	710	600	gR	3	2 x (40 x 5)	3NH3 430/20	3	690
3NE1 437-2/-3	710	690	gR	3	2 x (40 x 5)	3NH3 430/20	3	710
3NE1 438-0	800	690	gS	3	2 x (50 x 5)	3NH3 430/20	3	800
3NE1 438-1	800	600	gR	3	2 x (50 x 5)	3NH3 430/20	3	750
3NE1 438-2/-3	800	690	gR	3	2 x (50 x 5)	3NH3 430/20	3	800
3NE1 447-2/-3	670	690	gR	3	2 x (40 x 5)	3NH3 430/20	3	670
3NE1 448-2/-3	850	690	gR	3	2 x (40 x 8)	3NH3 430/20	3	850
3NE1 802-0	40	690	gS	000	10	3NH3 030/4 030	00	40

[1)] In the case of cyclic loads, the currents may have to be further reduced (precise values on request).

LV HRC sockets and accessories

SITOR fuse data						Permissible load currents of fuse when installed in: 3 NH		
Type	Rated current I_n	Rated voltage	Operational class	Size	Required conductor cross-section Cu	Type	Size	Permissible load current[1]
--	A	V AC	--	--	mm² Cu	--	--	A
3NE1 803-0	35	690	gS	000	6	3NH3 030/4 030	00	35
3NE1 813-0	16	690	gS	000	1.5	3NH3 030/4 030	00	16
3NE1 814-0	20	690	gS	000	2.5	3NH3 030/4 030	00	20
3NE1 815-0	25	690	gS	000	4	3NH3 030/4 030	00	25
3NE1 817-0	50	690	gS	000	10	3NH3 030/4 030	00	50
3NE1 818-0	63	690	gS	000	16	3NH3 030/4 030	00	63
3NE1 820-0	80	690	gS	000	25	3NH3 030/4 030	00	80
3NE3 221	100	1000	aR	1	35	3NH3 230/4 230	1	100
3NE3 222	125	1000	aR	1	50	3NH3 230/4 230	1	125
3NE3 224	160	1000	aR	1	70	3NH3 230/4 230	1	160
3NE3 225	200	1000	aR	1	95	3NH3 230/4 230	1	200
3NE3 227	250	1000	aR	1	120	3NH3 230/4 230	1	250
3NE3 230-0B	315	1000	aR	1	185	3NH3 330/20	2	305
3NE3 231	350	1000	aR	1	240	3NH3 330/20	2	335
3NE3 232-0B	400	1000	aR	1	230	3NH3 330/20	2	380
3NE3 233	450	1000	aR	1	2 x 150	3NH3 330/20	2	425
3NE3 332-0B	400	1000	aR	2	240	3NH3 430/20	3	400
3NE3 333	450	1000	aR	2	2 x 150	3NH3 430/20	3	450
3NE3 334-0B	500	1000	aR	2	2 x 150	3NH3 430/20	3	500
3NE3 335	560	1000	aR	2	2 x 185	3NH3 430/20	3	560
3NE3 336	630	1000	aR	2	2 x 185	3NH3 430/20	3	630
3NE3 337-8	710	900	aR	2	2 x (40 x 5)	3NH3 430/20	3	680
3NE3 338-8	800	800	aR	2	2 x 240	3NH3 430/20	3	700
3NE3 340-8	900	690	aR	2	2 x (40 x 8)	3NH3 430/20	3	750
3NE4 101	32	1000	gR	0	6	3NH3 120/4 230	0/1	32
3NE4 102	40	1000	gR	0	10	3NH3 120/4 230	0/1	40
3NE4 117	50	1000	gR	0	10	3NH3 120/4 230	0/1	50
3NE4 118	63	1000	aR	0	16	3NH3 120/4 230	0/1	63
3NE4 120	80	1000	aR	0	25	3NH3 120/4 230	0/1	80
3NE4 121	100	1000	aR	0	35	3NH3 120/4 230	0/1	100
3NE4 122	125	1000	aR	0	50	3NH3 120/4 230	0/1	125
3NE4 124	160	1000	aR	0	70	3NH3 120/4 230	0/1	160
3NE4 327-0B	250	800	aR	2	150	3NH3 330/20	2	240
3NE4 330-0B	315	800	aR	2	240	3NH3 330/20	2	300
3NE4 333-0B	450	800	aR	2	2 x (30 x 5)	3NH3 430/20	3	425
3NE4 334-0B	500	800	aR	2	2 x (30 x 5)	3NH3 430/20	3	475
3NE4 337	710	800	aR	2	2 x (50 x 5)	3NH3 430/20	3	630
3NE8 015-1	25	690	gR	00	4	3NH3 030/4 030	00	25
3NE8 003-1	35	690	gR	00	6	3NH3 030/4 030	00	35
3NE8 017-1	50	690	gR	00	10	3NH3 030/4 030	00	50
3NE8 018-1	63	690	gR	00	16	3NH3 030/4 030	00	63
3NE8 020-1	80	690	aR	00	25	3NH3 030/4 030	00	80
3NE8 021-1	100	690	aR	00	35	3NH3 030/4 030	00	100
3NE8 022-1	125	690	aR	00	50	3NH3 030/4 030	00	125
3NE8 024-1	160	690	aR	00	70	3NH3 030/4 030	00	160

[1] In the case of cyclic loads, the currents may have to be further reduced (precise values on request).

Overview

SITOR fuses protect power semiconductors from the effects of short-circuits because the quick-acting tripping characteristic is much quicker than with conventional LV HRC fuse systems. They protect high-quality devices and system components, such as converters with fuses in the input and the DC link, UPS systems and soft starters for motors.

Panel mounting requirements have given rise to various connection versions and designs.

The fuses with blade contacts comply with IEC 60269-2 and are suitable for installation in LV HRC fuse bases, in LV HRC fuse switch disconnectors and switch disconnectors with fuses. They also include fuses with slotted blade contacts for screw fixing with 110 mm mounting dimension, whose sizes are according to IEC 60269-4.

Fuses with slotted blade contacts for screw fixing with 80 mm or 110 mm mounting dimension are often screwed directly onto busbars for optimum heat dissipation. Even better heat transmission is provided by the compact fuses with M10 or M12 female thread, which are also mounted directly onto busbars.

Bolt-on links with 80 mm mounting dimension are another panel-mounting version for direct busbar mounting.

The fuses for SITOR thyristor sets, railway rectifiers or electrolysis systems were developed specially for these applications.

LV HRC bases suitable for use with SITOR fuses and safety switching devices can be found on page 5/45ff.

Fuse characteristics, configuration notes and the assignments of SITOR fuses to the fuse bases and 3NP and 3KL fuse switching devices can be found in the Configuration Manual, "Fuse Systems" at: www.siemens.com/lowvoltage/manuals

The new size 3 type ranges have a round ceramic body instead of a square one. These series are characterized by small I^2t values with low power dissipation and high capability under alternating load. The dimensions and functional values correspond to the current standards IEC 60269-4/ EN 60269-4.

Note:

The ordering data of the fuses are listed in ascending order of the rated voltage in the selection tables.

Benefits

- SITOR fuses have a high varying load factor, which ensures a high level of operating safety and system availability - even when subject to constant load change.
- The use of SITOR fuses in LV HRC bases or Siemens switch disconnectors has been tested with regard to heat dissipation and maximum current loading. This makes planning and dimensioning easier and prevents consequential damage.
- Our high standard of quality ensures good compliance with the characteristic curve and accuracy. This ensures long-term protection of devices

Operational classes

Fuses are categorized according to function and operational classes. SITOR semiconductor fuses, in LV HRC (NH) design, are available in the following operational classes:

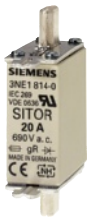
- aR: for the short-circuit protection of power semiconductors (partial range protection)
- gR: for the protection of power semiconductors (full range protection)
- gS: The gS operational class combines cable and line protection with semiconductor protection (full range protection).

SITOR LV HRC design

Selection and ordering data

Sizes	I_e	U_e	Operational class	Breaking I^2t value	Power loss	Varying load factor	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	V AC		A^2s	W	WL							kg
SITOR LV HRC design													
With slotted blade contacts with 2 oblong slots for M10 screw fixing, mounting dimension: 110 mm, or for installation in LV HRC fuse bases or switch disconnectors													
3	150	500	gR	33 000	35	0.85		**3NC2 423-0C**		1	3 units	016	1.210
	200			64 000	40	0.85		**3NC2 425-0C**		1	3 units	016	1.210
	250			99 000	50	0.85		**3NC2 427-0C**		1	3 units	016	1.210
	300			132 000	65	0.85		**3NC2 428-0C**		1	3 units	016	1.210
	350			249 000	60	0.85		**3NC2 431-0C**		1	3 units	016	1.210
	400		aR	390 000	50	0.85		**3NC2 432-0C**		1	3 units	016	1.210
With slotted blade contacts for M10 screw fixing, mounting dimension: 110 mm, or for installation in LV HRC fuse bases or switch disconnectors													
3	150	500	gR	33 000	35	0.85		**3NC2 423-3C**		1	3 units	016	1.210
	200			64 000	40	0.85		**3NC2 425-3C**		1	3 units	016	1.210
	250			99 000	50	0.85		**3NC2 427-3C**		1	3 units	016	1.210
	300			132 000	65	0.85		**3NC2 428-3C**		1	3 units	016	1.210
	350			249 000	60	0.85		**3NC2 431-3C**		1	3 units	016	1.210
	400		aR	390 000	50	0.85		**3NC2 432-3C**		1	3 units	016	1.210
1	160	690	gR	18 600	30	1.0		**3NE1 224-3**		1	3 units	016	0.640
	200			51 800	28	1.0		**3NE1 225-3**		1	3 units	016	0.640
	250			80 900	35	1.0		**3NE1 227-3**		1	3 units	016	0.640
	315			168 000	42	1.0		**3NE1 230-3**		1	3 units	016	0.640
2	350	690	gR	177 000	44	1.0		**3NE1 331-3**		1	3 units	016	0.680
	400			224 000	54	1.0		**3NE1 332-3**		1	3 units	016	0.680
	450			276 500	62	1.0		**3NE1 333-3**		1	3 units	016	0.680
	500			398 000	65	1.0		**3NE1 334-3**		1	3 units	016	0.680
3	150	690	gR	17 600	40	0.85		**3NC8 423-3C**		1	3 units	016	1.220
	200			38 400	55	0.85		**3NC8 425-3C**		1	3 units	016	1.220
	250			70 400	72	0.85		**3NC8 427-3C**		1	3 units	016	1.220
	350			176 000	95	0.85		**3NC8 431-3C**		1	3 units	016	1.220
	500			448 000	130	0.85		**3NC8 434-3C**		1	3 units	016	1.220
	1 000	600	aR	2 480 000	140	0.95		**3NC8 444-3C**		1	3 units	016	1.220
With slotted blade contacts for M12 screw fixing, mounting dimension: 110 mm, or for installation in LV HRC fuse bases or switch disconnectors													
3	560	690	gR	890 000	60	1.0		**3NE1 435-3**		1	3 units	016	0.690
	630			1 390 000	62	1.0		**3NE1 436-3**		1	3 units	016	0.690
	670			1 640 000	65	1.0		**3NE1 447-3**		1	3 units	016	0.690
	710			1 818 000	72	1.0		**3NE1 437-3**		1	3 units	016	0.690
	800			2 475 000	82	1.0		**3NE1 438-3**		1	3 units	016	0.690
	850			3 640 000	76	1.0		**3NE1 448-3**		1	3 units	016	0.690

* You can order this quantity or a multiple thereof.

	Sizes	I_e	U_e	Operational class	Breaking I^2t value	Power loss	Varying load factor	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC		A^2s	W	WL							kg
	SITOR LV HRC design													
	With slotted blade contacts for M12 screw fixing, mounting dimension: 80 mm													
	3	630	690	aR	244 000	120	0.85		**3NC3 236-1**		1	3 units	016	1.198
		710			346 000	130	0.85		**3NC3 237-1**		1	3 units	016	1.200
		800			498 000	135	0.9		**3NC3 238-1**		1	3 units	016	1.200
		900			677 000	145	0.9		**3NC3 240-1**		1	3 units	016	1.200
		1 000			975 000	155	0.95		**3NC3 241-1**		1	3 units	016	1.200
		1 100			1 382 000	165	0.95		**3NC3 242-1**		1	3 units	016	1.200
		1 250			1 990 000	175	0.95		**3NC3 243-1**		1	3 units	016	1.200
		1 400	500		2 100 000	200	0.95		**3NC3 244-1**		1	3 units	016	1.200
		1 600			2 860 000	240	0.9		**3NC3 245-1**		1	3 units	016	1.200
	With slotted blade contacts with 2 oblong slots for M10 screw fixing, mounting dimension: 110 mm, or for installation in LV HRC fuse bases or switch disconnectors													
	3	150	690	gR	17 600	40	0.85		**3NC8 423-0C**		1	3 units	016	1.220
		200			38 400	55	0.85		**3NC8 425-0C**		1	3 units	016	1.220
		250			70 400	72	0.85		**3NC8 427-0C**		1	3 units	016	1.220
		350			176 000	95	0.85		**3NC8 431-0C**		1	3 units	016	1.220
		500			448 000	130	0.85		**3NC8 434-0C**		1	3 units	016	1.220
	With blade contacts for mounting in LV HRC fuse bases or switch disconnectors													
	3	710	600	gR	2 460 000	65	1.0		**3NE1 437-1**		1	3 units	016	1.210
		800			3 350 000	72	1.0		**3NE1 438-1**		1	3 units	016	1.210
	000	16	690	gS	200	3.0	1.0	▶	**3NE1 813-0**		1	3 units	016	0.133
		20			430	3.5	1.0	▶	**3NE1 814-0**		1	3 units	016	0.124
		25			780	4.0	1.0	▶	**3NE1 815-0**		1	3 units	016	0.127
		35			1 700	5.0	1.0	▶	**3NE1 803-0**		1	3 units	016	0.128
		40			3 000	5.0	1.0	▶	**3NE1 802-0**		1	3 units	016	0.126
		50			4 400	6.0	1.0	▶	**3NE1 817-0**		1	3 units	016	0.129
		63			9 000	7.0	1.0	▶	**3NE1 818-0**		1	3 units	016	0.126
		80			18 000	8.0	1.0	▶	**3NE1 820-0**		1	3 units	016	0.124
	00	100	690	gS	33 000	10	1.0	▶	**3NE1 021-0**		1	3 units	016	0.204
		125			63 000	11	1.0	▶	**3NE1 022-0**		1	3 units	016	0.195
	1	160	690	gS	60 000	24	1.0	▶	**3NE1 224-0**		1	3 units	016	0.620
		200			100 000	27	1.0	▶	**3NE1 225-0**		1	3 units	016	0.630
		250			200 000	30	1.0	▶	**3NE1 227-0**		1	3 units	016	0.620
		315			310 000	38	1.0		**3NE1 230-0**		1	3 units	016	0.630
	2	350	690	gS	430 000	42	1.0	▶	**3NE1 331-0**		1	3 units	016	0.830
		400			590 000	45	1.0	▶	**3NE1 332-0**		1	3 units	016	0.830
		450			750 000	53	1.0		**3NE1 333-0**		1	3 units	016	0.850
		500			950 000	56	1.0		**3NE1 334-0**		1	3 units	016	0.840
	3	560	690	gS	1 700 000	50	1.0		**3NE1 435-0**		1	3 units	016	1.205
		630			2 350 000	55	1.0		**3NE1 436-0**		1	3 units	016	1.210
		710			3 400 000	60	1.0		**3NE1 437-0**		1	3 units	016	1.220
		800			5 000 000	59	1.0		**3NE1 438-0**		1	3 units	016	1.220

* You can order this quantity or a multiple thereof.

SITOR LV HRC design

Sizes	I_e	U_e	Operational class	Breaking I^2t value	Power loss	Varying load factor	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	V AC		A^2s	W	WL							kg
SITOR LV HRC design													
With blade contacts for installatin in LV HRC fuse bases or switch disconnectors													
00	25	690	gR	180	7	0.95	▶	**3NE8 015-1**		1	3 units	016	0.193
	35			400	9	0.95	▶	**3NE8 003-1**		1	3 units	016	0.195
	50			700	14	0.90	▶	**3NE8 017-1**		1	3 units	016	0.614
	63			1 400	16	0.95	▶	**3NE8 018-1**		1	3 units	016	0.196
	80			5 800	10.5	1.0		**3NE1 020-2**		1	3 units	016	0.200
	100			11 000	11.5	1.0		**3NE1 021-2**		1	3 units	016	0.197
	125			23 000	13.5	1.0		**3NE1 022-2**		1	3 units	016	0.195
	80		aR	2 400	19	0.95	▶	**3NE8 020-1**		1	3 units	016	0.206
	100			4 200	22	0.95	▶	**3NE8 021-1**		1	3 units	016	0.207
	125			6 500	28	0.95	▶	**3NE8 022-1**		1	3 units	016	0.195
	160			13 000	38	0.95	▶	**3NE8 024-1**		1	3 units	016	0.195
1	160	690	gR	18 600	30	1.0		**3NE1 224-2**		1	3 units	016	0.660
	200			51 800	28	1.0		**3NE1 225-2**		1	3 units	016	0.620
	250			80 900	35	1.0		**3NE1 227-2**		1	3 units	016	0.670
	315			168 000	42	1.0		**3NE1 230-2**		1	3 units	016	0.640
2	350	690	gR	177 000	44	1.0		**3NE1 331-2**		1	3 units	016	0.840
	400			224 000	54	1.0		**3NE1 332-2**		1	3 units	016	0.680
	450			276 500	62	1.0		**3NE1 333-2**		1	3 units	016	0.850
	500			398 000	65	1.0		**3NE1 334-2**		1	3 units	016	0.840
3	560	690	gR	890 000	60	1.0		**3NE1 435-2**		1	3 units	016	1.190
	630			1 390 000	62	1.0		**3NE1 436-2**		1	3 units	016	1.210
	670			1 640 000	65	1.0		**3NE1 447-2**		1	3 units	016	1.210
	710			1 818 000	72	1.0		**3NE1 437-2**		1	3 units	016	1.200
	800			2 475 000	82	1.0		**3NE1 438-2**		1	3 units	016	1.210
	850			3 640 000	76	1.0		**3NE1 448-2**		1	3 units	016	1.210
0	32	1 000	gR	280	12	0.9	▶	**3NE4 101**		1	3 units	016	0.824
	40			500	13	0.9	▶	**3NE4 102**		1	3 units	016	0.258
	50			800	16	0.9	▶	**3NE4 117**		1	3 units	016	0.274
	63		aR	1 500	20	0.9	▶	**3NE4 118**		1	3 units	016	0.257
	80			3 000	22	0.9	▶	**3NE4 120**		1	3 units	016	0.261
	100			6 000	24	0.9	▶	**3NE4 121**		1	3 units	016	0.260
	125			14 000	30	0.9	▶	**3NE4 122**		1	3 units	016	0.265
	160			29 000	35	0.9	▶	**3NE4 124**		1	3 units	016	0.274

Size	I_e	U_e	Operational classes	Breaking I^2t value	Power loss	Varying load factor	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	V AC/ V DC		A^2s	W	WL							kg
SITOR LV HRC design													
With M8 bolt-on links, mounting dimension: 80 mm, for screwing onto busbars													
000	20	690/ 700[1]	gR	83	7	0.9		**3NE8 714-1**		1	10 units	016	0.128
	25			140	9	0.9		**3NE8 715-1**		1	10 units	016	0.130
	32			285	10	0.9		**3NE8 701-1**		1	10 units	016	0.110
	40			490	12	0.9		**3NE8 702-1**		1	10 units	016	0.122
	50			815	15	0.9		**3NE8 717-1**		1	10 units	016	0.131
	63		aR	1 550	16	0.95		**3NE8 718-1**		1	10 units	016	0.130
	80			2 700	18	0.9	▶	**3NE8 720-1**		1	10 units	016	0.132
	100			4 950	19	0.95	▶	**3NE8 721-1**		1	10 units	016	0.123
	125			9 100	23	0.95	▶	**3NE8 722-1**		1	10 units	016	0.130
	160			17 000	31	0.9	▶	**3NE8 724-1**		1	10 units	016	0.122
	200			30 000	36	0.9	▶	**3NE8 725-1**		1	10 units	016	0.117
	250			55 000	42	0.9	▶	**3NE8 727-1**		1	10 units	016	0.132
	315			85 500	54	0.85	▶	**3NE8 731-1**		1	10 units	016	0.127

[1] DC voltage acc. to UL.

* You can order this quantity or a multiple thereof.

	Sizes	I_e	U_e	Operational class	Breaking I^2t value	Power loss	Varying load factor	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC		A^2s	W	WL							kg
	SITOR LV HRC design													
	With slotted blade contacts for M10 screw fixing, mounting dimension: 110 mm, or for installation in LV HRC fuse bases or switch disconnectors													
	2	250	800	aR	29 700	105	0.85	▶	**3NE4 327-0B**		1	3 units	016	0.840
		315			60 700	120	0.85	▶	**3NE4 330-0B**		1	3 units	016	0.830
		450			191 000	140	0.85	▶	**3NE4 333-0B**		1	3 units	016	0.820
		500			276 000	155	0.85	▶	**3NE4 334-0B**		1	3 units	016	0.840
		710			923 000	155	0.95	▶	**3NE4 337**		1	3 units	016	0.850
	1	100	1 000	aR	4 800	28	0.95		**3NE3 221**		1	3 units	016	0.620
		125			7 200	36	0.95		**3NE3 222**		1	3 units	016	0.610
		160			13 000	42	1.0	▶	**3NE3 224**		1	3 units	016	0.630
		200			30 000	42	1.0	▶	**3NE3 225**		1	3 units	016	0.620
		250			48 000	50	1.0	▶	**3NE3 227**		1	3 units	016	0.620
		315			80 000	65	0.95	▶	**3NE3 230-0B**		1	3 units	016	0.630
		350			100 000	75	0.95		**3NE3 231**		1	3 units	016	0.620
		400			135 000	85	0.9		**3NE3 232-0B**		1	3 units	016	0.620
		450			175 000	95	0.9	▶	**3NE3 233**		1	3 units	016	0.630
	2	400	1 000	aR	135 000	85	1.0		**3NE3 332-0B**		1	3 units	016	0.840
		450			175 000	90	1.0		**3NE3 333**		1	3 units	016	0.830
		500			260 000	90	1.0	▶	**3NE3 334-0B**		1	3 units	016	0.840
		560			360 000	95	1.0	▶	**3NE3 335**		1	3 units	016	0.840
		630			600 000	100	1.0	▶	**3NE3 336**		1	3 units	016	0.840
		710	900	aR	800 000	105	1.0	▶	**3NE3 337-8**		1	3 units	016	0.850
		800	800		850 000	130	0.95	▶	**3NE3 338-8**		1	3 units	016	0.840
		900	690		920 000	165	0.95	▶	**3NE3 340-8**		1	3 units	016	0.850
	With slotted blade contacts for M10 screw fixing, mounting dimension: 130 mm													
	3	100	1 000	aR	13 500	25	1.0		**3NE3 421-0C**		1	3 units	016	1.120
		224			54 000	85	1.0		**3NE3 626-0C**		1	3 units	016	1.120
		315			218 000	80	1.0		**3NE3 430-0C**		1	3 units	016	1.120
		400			364 000	110	1.0		**3NE3 432-0C**		1	3 units	016	1.120
		450			488 000	110	1.0		**3NE3 635-0C**		1	3 units	016	1.120
		500			870 000	95	1.0		**3NE3 434-0C**		1	3 units	016	1.120
		630			1 280 000	132	1.0		**3NE3 636-0C**		1	3 units	016	1.120
		710			1 950 000	145	1.0		**3NE3 637-0C**		1	3 units	016	1.120
	With slotted blade contacts for M12 screw fixing, mounting dimension: 140 mm													
	3	710	1 000	aR	1 950 000	145	1.0		**3NE3 637-1C**		1	3 units	016	1.120
	With slotted blade contacts for M12 screw fixing, mounting dimension: 110 mm, or for installation in LV HRC fuse bases or switch disconnectors													
	3	630	1 000	aR	418 000	145	0.85		**3NC3 336-1**		1	3 units	016	1.220
		710			569 000	150	0.85		**3NC3 337-1**		1	3 units	016	1.220
		800			819 000	155	0.85		**3NC3 338-1**		1	3 units	016	1.220
		900			1 160 000	165	0.9		**3NC3 340-1**		1	3 units	016	1.200
		1 000			1 670 000	170	0.9		**3NC3 341-1**		1	3 units	016	1.220
		1 100	800		1 910 000	185	0.9		**3NC3 342-1**		1	3 units	016	1.220
		1 250			2 600 000	210	0.9		**3NC3 343-1**		1	3 units	016	1.220
	3	315	1 250	aR	72 500	80	0.95		**3NC3 430-1**		1	3 units	016	1.220
		400			163 000	95	0.95		**3NC3 432-1**		1	3 units	016	1.010
		500			290 000	115	0.90		**3NC3 434-1**		1	3 units	016	1.220
		630			650 000	120	0.95		**3NC3 436-1**		1	3 units	016	1.220
		800	1 100		985 000	145	0.90		**3NC3 438-1**		1	3 units	016	1.220

* You can order this quantity or a multiple thereof.

SITOR LV HRC design

Sizes	I_e	U_e	Operational class	Breaking I^2t value	Power loss	Varying load factor	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	V AC		A^2s	W	WL							kg
SITOR LV HRC design													
With slotted blade contacts for M10 screw fixing, mounting dimension: 210 mm													
3	160	1500	aR	54000	56	1.0		**3NE5 424-0C**		1	2 units	016	1.260
	224			138000	80	1.0		**3NE5 426-0C**		1	2 units	016	1.220
	315			311000	115	1.0		**3NE5 430-0C**		1	2 units	016	1.260
	350			428000	135	1.0		**3NE5 431-0C**		1	2 units	016	1.260
	450			870000	145	0.95		**3NE5 433-0C**		1	2 units	016	1.260
With slotted blade contacts for M12 screw fixing, mounting dimension: 210 mm													
	450	1500	aR	870000	145	0.95		**3NE5 433-1C**		1	2 units	016	1.260
With slotted blade contacts for M10 screw fixing, mounting dimension: 170 mm													
3	250	1500	aR	84000	130	1.0		**3NE5 627-0C**		1	3 units	016	1.240
	450			590000	160	1.0		**3NE5 633-0C**		1	3 units	016	1.240
	600			1950000	145	1.0		**3NE5 643-0C**		1	3 units	016	1.240
With slotted blade contacts for M10 screw fixing, mounting dimension: 210 mm													
3	200	2000	aR	138000	75	1.0		**3NE7 425-0C**		1	2 units	016	1.260
	250			218000	110	1.0		**3NE7 427-0C**		1	2 units	016	1.220
	350			555000	120	1.0		**3NE7 431-0C**		1	2 units	016	1.220
	400			870000	150	1.0		**3NE7 432-0C**		1	2 units	016	1.260
	450			960000	160	1.0		**3NE7 633-0C**		1	2 units	016	1.260
	630			1950000	220	1.0		**3NE7 636-0C**		1	2 units	016	1.220
With slotted blade contacts for M12 screw fixing, mounting dimension: 210 mm													
3	450	2000	aR	960000	160	1.0		**3NE7 633-1C**		1	2 units	016	1.260
	525			1120000	210	1.0		**3NE7 648-1C**		1	2 units	016	1.220
	630			1950000	220	1.0		**3NE7 636-1C**		1	1 unit	016	1.260
	710			3110000	275	1.0		**3NE7 637-1C**		1	2 units	016	1.220
With slotted blade contacts for M12 screw fixing, mounting dimension: 260 mm													
3	125	2500	aR	34500	78	1.0		**3NE9 622-1C**		1	1 unit	016	2.500
	400			620000	205	1.0		**3NE9 632-1C**		1	1 unit	016	2.350
	500			1270000	235	1.0		**3NE9 634-1C**		1	1 unit	016	2.350
	630			2800000	275	1.0		**3NE9 636-1C**		1	1 unit	016	2.350

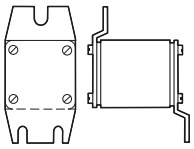



* You can order this quantity or a multiple thereof.

	Sizes	I_e	U_e	Operational class	Breaking I^2t value	Power loss	Varying load factor	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC		A^2s	W	WL							kg
	SITOR LV HRC design													
	With M12 female thread at both ends for direct busbar mounting, flange dimensions 52 mm													
	3	630	690	aR	244 000	125	0.9		**3NC3 236-6**		1	3 units	016	1.160
		710			346 000	130	0.9		**3NC3 237-6**		1	3 units	016	1.160
		800			498 000	135	0.95		**3NC3 238-6**		1	3 units	016	1.160
		900			677 000	140	0.95		**3NC3 240-6**		1	3 units	016	1.160
		1 000			975 000	145	1.0		**3NC3 241-6**		1	3 units	016	1.160
		1 100			1 382 000	150	1.0		**3NC3 242-6**		1	3 units	016	1.160
		1 250			1 990 000	155	1.0		**3NC3 243-6**		1	3 units	016	1.160
		1 400	500		2 100 000	175	1.0		**3NC3 244-6**		1	3 units	016	1.160
		1 600			2 860 000	195	0.95		**3NC3 245-6**		1	3 units	016	1.160
	With M10 female thread at both ends for direct busbar mounting, flange dimensions 109 mm													
	3	450	1 000	aR	488 000	110	1.0		**3NE3 635-6**		1	3 units	016	1.184
	With M12 female thread at both ends for direct busbar mounting, flange dimensions 73 mm													
	3	630	1 000	aR	418 000	130	0.90		**3NC3 336-6**		1	3 units	016	1.160
		710			569 000	140	0.90		**3NC3 337-6**		1	3 units	016	1.160
		800			819 000	150	0.90		**3NC3 338-6**		1	3 units	016	1.160
		900			1 160 000	160	0.95		**3NC3 340-6**		1	3 units	016	1.160
		1 000			1 670 000	165	0.95		**3NC3 341-6**		1	3 units	016	1.160
		1 100	800		1 910 000	175	0.95		**3NC3 342-6**		1	3 units	016	1.160
		1 250			2 600 000	185	0.95		**3NC3 343-6**		1	3 units	016	1.160
	3	315	1 250	aR	72 500	80	0.95		**3NC3 430-6**		1	3 units	016	1.160
		400			163 000	95	0.95		**3NC3 432-6**		1	3 units	016	1.160
		500			290 000	115	0.90		**3NC3 434-6**		1	3 units	016	1.160
		630			650 000	120	0.95		**3NC3 436-6**		1	3 units	016	1.160
		800	1 100		985 000	145	0.95		**3NC3 438-6**		1	3 units	016	1.160

* You can order this quantity or a multiple thereof.

SITOR LV HRC design

	Sizes	I_e	U_e	Operational classes	Breaking I^2t value	Power loss	Varying load factor	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC		A^2s	W	WL							kg
	Fuses for special applications													
	For screwing onto water-cooled busbars, for rectifiers in electrolysis systems													
	--[1]	350	800	aR	260 000	80	0.9		**3NC5 531**		1	3 units	016	0.671
		600	1 000		888 000	150	0.9		**3NC5 840**		1	3 units	016	1.485
		630	800		888 000	145	0.9		**3NC5 841**		1	3 units	016	1.177
		800	1 000		1 728 000	170	0.9		**3NC5 838**		1	3 units	016	3.569
		710	900		620 000	150	0.9		**3NE6 437-7**		1	3 units	016	1.062
		1 250	600		2 480 000	210	0.9		**3NE9 450-7**		1	3 units	016	1.072
	With M10 female thread at both ends for direct busbar mounting, flange dimensions 89 (99)[2] mm, for air-cooled rectifiers in electrolysis systems													
	--[1]	710	900	aR	620 000	150	0.9		**3NE6 437**		1	3 units	016	1.030
		850	600	gR	2 480 000	85	1.0		**3NE9 440-6**		1	3 units	016	0.960
		900	900	aR	1 920 000	170	0.9		**3NE6 444**		1	3 units	016	1.105
		1 250	600	aR	2 480 000	210	0.9		**3NE9 450**		1	3 units	016	1.011
	Fuses with installation holder for SITOR 6QG10 thyristor sets													
	--[1]	200	1 000	aR	44 000	50	0.85		**3NE3 525-5**		1	2 units	016	0.744
		450			395 000	90	0.85		**3NE3 535-5**		1	2 units	016	0.735
	Fuses with installation holder for SITOR 6QG11 thyristor sets													
	--[1]	50	1 000	gR	1 100	20	0.85		**3NE4 117-5**		1	2 units	016	0.300
		100		aR	7 400	35	0.85		**3NE4 121-5**		1	2 units	016	0.299
		170		aR	60 500	43	0.85		**3NE4 146-5**		1	2 units	016	0.287
	Fuses for special applications													
	With female thread at both ends for SITOR 6QG12 thyristor sets, flange dimensions 77 mm													
	--[1]	250	800	aR	29 700	105	0.85	▶	**3NE4 327-6B**		1	3 units	016	0.780
		315			60 700	120	0.85	▶	**3NE4 330-6B**		1	3 units	016	0.770
		450			191 000	140	0.85	▶	**3NE4 333-6B**		1	3 units	016	0.780
		500			276 000	155	0.85	▶	**3NE4 334-6B**		1	3 units	016	0.770
		710			923 000	155	0.95	▶	**3NE4 337-6**		1	3 units	016	0.770
	Special design for mounting directly in the railway supply rectifier													
	--[1]	250	680	aR	635 000	25	0.9		**3NC7 327-2**		1	3 units	016	0.670
		350			1 430 000	32	0.9		**3NC7 331-2**		1	3 units	016	0.740

[1] Special design

[2] Flange dimensions 99 mm only for 3NE6 444.

* You can order this quantity or a multiple thereof.

Overview

SITOR cylindrical fuses protect power semiconductors from the effects of short-circuits because the quick-acting tripping characteristic is much quicker than that of conventional fuses. They protect high-quality devices and system components such as semiconductor contactors, electronic relays (solid state), converters with fuses in the input and in the DC link, UPS systems and soft starters for motors up to 100 A.

The cylindrical design is approved for industrial applications. The cylindrical fuse links comply with IEC 60269.

Cylindrical fuse holders also comply with IEC 60269 and UL 512. The cylindrical fuse holders for 10 x 38 mm and 14 x 51 mm have been tested and approved as fuse switch disconnectors and the cylindrical fuse holders for 22 x 58 mm as fuse disconnectors according to the switching device standard IEC 60947-3. The utilization category and the tested current and voltage values are specified in the Table "Technical Specifications".

The cylindrical fuse holders have been specially developed for the application of SITOR fuse links with regard to heat tolerance and heat dissipation and are therefore not recommended for standard applications.

Cylindrical fuse bases do not offer the same comprehensive touch protection as the fuse holders, but have better heat dissipation. The single-pole cylindrical fuse bases for 14 × 51 mm and 22 × 58 mm allow modular expansion to multi-pole bases.

Benefits

- Cylindrical fuses have an extremely compact design and a correspondingly small footprint
- The cylindrical fuses have IEC and UL approval and are suitable for universal use worldwide.
- The use of SITOR cylindrical fuses in the cylindrical fuse holders and bases has been tested with regard to heat dissipation and maximum current loading. This makes planning and dimensioning easier and prevents consequential damage.
- The use of fuse holders as switch disconnectors expands the area of application of these devices and increases operating safety

Technical specifications

		Cylindrical fuse holders		
		3NC1 0	**3NC1 4**	**3NC2 2**
Sizes	mm × mm	10 × 38	14 × 51	22 × 58
Standards		UL 512; CSA C22.2; IEC 60269-2, IEC 60947-3		
Approvals		UL 512; UL File No. E171267; CSA C22.2 No. 39-M		
Rated voltage U_n	V AC	690; 600 acc. to UL/CSA		
Rated current I_n	A AC	32 30 acc. to UL/CSA	50 50 acc. to UL 40 acc. to CSA	100 80 acc. to UL/CSA
Rated conditional short-circuit current	kA	50	50 (100 at 400 V)	50 (100 at 500 V)
Switching capacity • Utilization category		AC-22B (400 V)	AC-22B (400 V)	AC-20B (690 V)
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)
Rated impulse withstand voltage	kV	6		
Overvoltage category		II		
Pollution degree		2		
No-voltage changing of fuse links		Yes		
Sealable when installed		Yes		
Mounting position		Any		
Current direction		Any		
Degree of protection acc. to IEC 60529		IP20		
Terminals are touch-protected according to BGVA3 at the incoming and outgoing feeder		Yes		
Ambient temperature	°C	45		
Conductor cross-sections • Finely stranded, with end sleeve • AWG (American Wire Gauge)	mm^2	 1.5 ... 16 15 ... 5	 1.5 ... 35 14 ... 2	 4 ... 50 10 ... 1/0
Tightening torques	Nm lb.in	2.5 22	2.5 ... 3 22 ... 26	3.5 ... 4 31 ... 35

SITOR, cylindrical fuse design

Selection and ordering data

Sizes	I_e	U_e	Breaking I^2t value	Power loss	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
mm × mm	A	V AC/ V DC	A^2s	W							kg
Cylindrical fuse links, operational class aR[1]											
10 × 38	3	600/700	8	1.2		**3NC1 003**		1	10 units	016	0.008
	6		20	1.5	▶	**3NC1 006**		1	10 units	016	0.008
	8		30	2		**3NC1 008**		1	10 units	016	0.006
	10		60	2.5	▶	**3NC1 010**		1	10 units	016	0.007
	12		110	3		**3NC1 012**		1	10 units	016	0.006
	16		150	3.5	▶	**3NC1 016**		1	10 units	016	0.009
	20		200	4.8	▶	**3NC1 020**		1	10 units	016	0.016
	25		250	6	▶	**3NC1 025**		1	10 units	016	0.008
	32	600/--	500	7.5	▶	**3NC1 032**		1	10 units	016	0.010
14 × 51	1	660/700	1.2	5		**3NC1 401**		1	10 units	016	0.018
	2		10	3	▶	**3NC1 402**		1	10 units	016	0.020
	3		15	2.5		**3NC1 403**		1	10 units	016	0.018
	4		25	3	▶	**3NC1 404**		1	10 units	016	0.018
	5	690/700	9	1.5		**3NC1 405**		1	10 units	016	0.021
	6		12	1.5	▶	**3NC1 406**		1	10 units	016	0.022
	10		20	4	▶	**3NC1 410**		1	10 units	016	0.019
	15		75	5.5	▶	**3NC1 415**		1	10 units	016	0.020
	20		120	6	▶	**3NC1 420**		1	10 units	016	0.020
	25		250	7	▶	**3NC1 425**		1	10 units	016	0.020
	30		300	9		**3NC1 430**		1	10 units	016	0.020
	32		700	7.6	▶	**3NC1 432**		1	10 units	016	0.028
	40		900	8	▶	**3NC1 440**		1	10 units	016	0.020
	50		1 800	9	▶	**3NC1 450**		1	10 units	016	0.021
22 × 58	20	690/700	220	4.6		**3NC2 220**		1	5 units	016	0.056
	25		300	5.6		**3NC2 225**		1	5 units	016	0.053
	32		450	7		**3NC2 232**		1	5 units	016	0.055
	40		700	8.5		**3NC2 240**		1	5 units	016	0.055
	50		1 350	9.5	▶	**3NC2 250**		1	5 units	016	0.056
	63		2 600	11	▶	**3NC2 263**		1	5 units	016	0.051
	80		5 500	13.5	▶	**3NC2 280**		1	5 units	016	0.055
	100	600/700	8 000	16	▶	**3NC2 200**		1	5 units	016	0.052
Cylindrical fuse links with striking pin, operational class aR[1]											
14 × 51	10	690/700	90	4		**3NC1 410-5**		1	10 units	016	0.024
	15		100	5.5		**3NC1 415-5**		1	10 units	016	0.024
	20		500	6		**3NC1 420-5**		1	10 units	016	0.020
	25		400	7		**3NC1 425-5**		1	10 units	016	0.024
	30		500	9		**3NC1 430-5**		1	10 units	016	0.020
	32		600	7.6		**3NC1 432-5**		1	10 units	016	0.022
	40		900	8		**3NC1 440-5**		1	10 units	016	0.020
	50		2 000	9		**3NC1 450-5**		1	10 units	016	0.020
22 × 58	20	690/700	240	5		**3NC2 220-5**		1	10 units	016	0.039
	25		350	6		**3NC2 225-5**		1	5 units	016	0.041
	32		500	8		**3NC2 232-5**		1	5 units	016	0.057
	40		800	9		**3NC2 240-5**		1	5 units	016	0.039
	50		1 500	9.5		**3NC2 250-5**		1	5 units	016	0.058
	63		3 000	11		**3NC2 263-5**		1	5 units	016	0.040
	80		6 000	13.5		**3NC2 280-5**		1	5 units	016	0.057
22 × 58	100	600/700	8 500	16		**3NC2 200-5**		1	5 units	016	0.042

[1] DC voltage acc. to UL.

* You can order this quantity or a multiple thereof.

SITOR, cylindrical fuse design

	Sizes	Version	Rated voltage	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm × mm		V AC							kg
	Cylindrical fuse holders Can be used as fuse switch disconnectors[1)]									
	10 × 38	1P	690	►	**3NC1 091**		1	12 units	016	0.067
		2P		►	**3NC1 092**		1	6 units	016	0.126
		3P		►	**3NC1 093**		1	4 units	016	0.200
	14 × 51	1P		►	**3NC1 491**		1	6 units	016	0.102
		2P		►	**3NC1 492**		1	3 units	016	0.203
		3P			**3NC1 493**		1	2 units	016	0.279
	22 × 58	1P		►	**3NC2 291**		1	1 unit	016	0.204
		2P		►	**3NC2 292**		1	3 units	016	0.358
		3P			**3NC2 293**		1	2 units	016	0.512
	Cylindrical fuse holders Can be used as fuse switch disconnectors, with signaling switches for fuse links with striking pin[1)]									
	14 × 51	1P	690		**3NC1 491-5**		1	6 units	016	0.130
	22 × 58	1P			**3NC2 291-5**		1	6 units	016	0.181
	Cylindrical fuse bases									
	10 × 38	1P	600		**3NC1 038-1**		1	10 units	016	0.045
		2P			**3NC1 038-2**		1	8 units	016	0.074
		3P			**3NC1 038-3**		1	6 units	016	0.113
	Fuse tongs									
	10 × 38, 14 × 51, 22 × 58				**3NC1 000**		1	1 unit	016	0.069

[1)] Please note the utilization category and current/voltage values, see "Technical specifications"

* You can order this quantity or a multiple thereof.

NEOZED and DIAZED design, SILIZED

Overview

SILIZED is the brand name of the NEOZED fuses (D0 fuses) and the DIAZED fuses (D fuses) with quick-acting characteristic for semiconductor protection.
The fuses are used in combination with fuse bases, fuse screw caps and accessory parts of the standard fuse system.

SILIZED fuses protect power semiconductors from the effects of short-circuits because the quick-acting tripping characteristic is much quicker than that of conventional fuses. They protect high-quality devices and system components, such as semiconductor contactors, static relays, converters with fuses in the input and in the DC link,
UPS systems and soft starters for motors up to 100 A.

When using fuse bases and fuse screw caps made of molded plastic, always heed the maximum permissible power loss values due to the higher power loss (power dissipation) of the SILIZED fuses.
When using these components, the following maximum permissible power loss applies:
- NEOZED D02: 5.5 W
- DIAZED DII: 4.5 W
- DIAZED DIII: 7.0 W

This enables a partial thermal permanent load of only 50 %.

The DIAZED screw adapter DII for 25 A is used for the 30 A fuse link.

Benefits

- SILIZED fuses have an extremely compact design. This means they have a very small footprint – particularly the NEOZED version.
- The rugged and well-known DIAZED design complies with IEC 60269-3. It is globally renowned and can be used in many countries.
- A huge range of fuse bases and accessories are available for the NEOZED and DIAZED versions of the SILIZED fuses. This increases the application options in many areas

Technical specifications

		SILIZED fuse links, NEOZED design 5SE1 3	SILIZED fuse links, DIAZED design 5SD4
Standards		IEC 60269-3; IEC 60269-4, EN 60269-4	
Operational class		gR	
Characteristic		Quick-acting	
Rated voltage U_n	V AC V DC	400 250	500 500
Rated current I_n	A	10 ... 63	16 ... 100
Rated breaking capacity	kA AC kA DC	50 8	
Mounting position		Any, but preferably vertical	
Non-interchangeability		Using adapter sleeves	Using screw adapter or adapter sleeves
Resistance to climate	°C	Up to 45 at 95 % rel. humidity	
Ambient temperature	°C	-5 ... +40, humidity 90 % at 20	

Selection and ordering data

	Sizes	I_e	U_e	Breaking I^2t value	Power loss	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A	V AC/ V DC	A^2s	W							kg
	Fuse links, NEOZED design, SILIZED operational class gR											
	D01	10	400/250	73	6.9		**5SE1 310**		1	10 units	016	0.007
		16		120	6.2		**5SE1 316**		1	10 units	016	0.007
	D02	20		190	8.1		**5SE1 320**		1	10 units	016	0.012
		25		215	8.2		**5SE1 325**		1	10 units	016	0.013
		35		470	16.7		**5SE1 335**		1	10 units	016	0.013
		50		1 960	12.0		**5SE1 350**		1	10 units	016	0.017
		63		4 230	15.5		**5SE1 363**		1	10 units	016	0.016
	Fuse links, DIAZED design, SILIZED operational class gR											
	DII	16	500/500	60	12.1		**5SD4 20**		1	5 units	016	0.028
		20		139	12.3		**5SD4 30**		1	5 units	016	0.029
		25		205	12.5		**5SD4 40**		1	5 units	016	0.029
		30		310	13.5		**5SD4 80**		1	5 units	016	0.031
	DIII	35		539	14.8		**5SD4 50**		1	5 units	016	0.047
		50		1 250	18.5		**5SD4 60**		1	5 units	016	0.048
		63		1 890	28		**5SD4 70**		1	5 units	016	0.049
	DIV	80		4 200	34.3		**5SD5 10**		1	3 units	016	0.131
		100		8 450	41.5		**5SD5 20**		1	3 units	016	0.115

* You can order this quantity or a multiple thereof.

Introduction

Overview

Special demands are made on fuses for application in photovoltaic systems. These fuses have a high DC rated voltage and a tripping characteristic specially designed to protect PV modules and their connecting cables (the newly defined operational class gPV). It is also crucial that the PV fuses do not age in spite of strongly alternating load currents, in order to ensure high plant availability throughout the service life of the PV system. The fuses must also be able to withstand high temperature fluctuations without damage. These requirements were only incorporated into an international standard in recent years and have now been published as IEC 60269-6.
All Siemens photovoltaic fuse systems comply with this new standard. Furthermore, they also already comply with the recently agreed corrections to the characteristic curves, which will be incorporated in the next standard update.

The IEC cylindrical fuses used as string fuses also correspond to the characteristic curves specified in UL standard UL 2579. The non-fusing current I_{nf} and fusing current I_f test currents are crucial to the shape of the characteristic curves.

Standard	I_{nf}	I_f
Current IEC standard	1.13 x I_n	1.45 x I_n
UL standard	1.0 x I_n	1.35 x I_n
Future IEC standard	1.05 x I_n	1.35 x I_n
Siemens fuses	1.13 x I_n	1.35 x I_n

These test currents of gPV string fuses to 32 A apply for a conventional test duration of one hour; at I_{nf}, the fuse must not trip within an hour, at I_f, it must trip within an hour.

The PV cylindrical fuses of size 10 mm x 38 mm offer an especially space-saving solution for the protection of the strings.

The PV fuses in LV HRC design are usually used as cumulative fuses upstream of the inverter. In addition, they can also be used for protecting groups (PV subarrays). For the PV cumulative fuses of size 1, standard LV HRC fuse bases are available. For PV cumulative fuses of size 1L, 1XL, 2L, 2XL and 3L, we have developed a special 3NH7...-4 fuse base with a swiveling mechanism which combines maximum touch protection with maximum user-friendliness. This makes it possible to change fuses safely and without the need for any tools, such as a fuse handle. This provides safe and fast access even in an emergency.

The cylindrical fuse holders can be supplied in single-pole and two-pole versions with and without signal detectors. In the case of devices with signal detector, a small electronic device with LED is located behind an inspection window in the plug-in module. If the inserted fuse link is tripped, this is indicated by the LED flashing.

The fuse holders size 10 x 38 mm have a sliding catch that enables the removal of individual devices from the assembly. The infeed can be from the top or the bottom. As the cylindrical fuse holders are fitted with the same anti-slip terminals at the top and the bottom, the devices can also be bus-mounted at the top or the bottom.

Our cylindrical fuse holders and 3NH7 ...-4 fuse bases with swiveling mechanism comply with the IEC 60269-6 standard and are considered fuse disconnectors as defined in the switching device standard IEC 60947. Under no circumstances are they suitable for switching loads.

To ensure that PV fuses are correctly selected and dimensioned, the specific operating conditions and the
PV module data must be taken into account when calculating voltage and current ratings.

Benefits

- Protection of the modules and their connecting cables in the event of reverse currents
- Safe tripping in case of fault currents reduces the risk of fire due to DC electric arcs
- Safe separation when the fuse holder/fuse base is open

PV cylindrical fuse system, 3NW7 0..-4, 3NW6 0..-4

PV fuse system NH, 3NH7 3..-4, 3NE1 3..-4D

Technical specifications

		Cylindrical fuse links 3NW6 0..-4	Cylindrical fuse holders 3NW7 0..-4
Sizes	mm x mm	10 x 38	
Standards		IEC 60269-6	IEC 60269, IEC 60269-6, IEC 60947, UL 4248-1, -18
Approvals		UL 248-13 (available soon)	UL 4248-1, -18, File No. E 355487
Operational class		gPV	
Rated voltage U_n	V DC	1000	
Rated current I_n	A DC	4 to 16	25
Rated short-circuit withstand current	kA	--	30
Rated breaking capacity	kA DC	30	--
Switching capacity • Utilization category		--	AC-20B, DC-20B (switching without load)
Max. power dissipation of the fuse link	W	--	3.4 (3.8 at 6 mm^2)
Rated impulse withstand voltage	kV	--	6
Overvoltage category		--	II
Pollution degree		--	2
No-voltage changing of fuse links		--	Yes
Sealable when installed		--	Yes
Mounting position		Any, but preferably vertical	
Current direction		--	Any (signal detector with antiparallel LED)
Degree of protection acc. to IEC 60529		--	IP20, with connected conductors
Terminals are touch-protected according to BGVA3 at the incoming and outgoing feeder		--	Yes
Ambient temperature	°C	-25 ... +55, humidity 90 % at +20	
Conductor cross-sections • Finely stranded, with end sleeve • AWG (American Wire Gauge)	mm^2	-- --	0.75 ... 25 18 ... 4
Tightening torques	Nm	--	2.5

Selection and ordering data

	Sizes	I_n	U_n	P_v	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm x mm	A DC	V DC	W					Unit(s)		kg
	**Cylindrical fuse links operational class gPV**										
3NW6 004-4	10 x 38	4	1000	1.4		**3NW6 004-4**		1	20 units	016	0.010
		6		2.0		**3NW6 001-4**		1	20 units	016	0.010
		8		1.8		**3NW6 008-4**		1	20 units	016	0.010
		10		2.5		**3NW6 003-4**		1	20 units	016	0.010
		12		2.0		**3NW6 006-4**		1	20 units	016	0.009
		16		2.7		**3NW6 005-4**		1	20 units	016	0.010

	Number of poles	I_n	For fuse links of size	Width	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		A DC	mm x mm	MW					Unit(s)		kg
	**Cylindrical fuse holders with signal detector**										
3NW7 014-4	1P	25	10 x 38	1		**3NW7 014-4**		1	12 units	016	0.068
	2P	25	10 x 38	2		**3NW7 024-4**		1	6 units	016	0.142
	Cylindrical fuse holders without signal detector										
	1P	25	10 x 38	1		**3NW7 013-4**		1	12 units	016	0.063
	2P	25	10 x 38	2		**3NW7 023-4**		1	6 units	016	0.132

* You can order this quantity or a multiple thereof.

PV cumulative fuses

Technical specifications

		Fuse links 3NE1 ...-4 / -4D / -5E					Fuse bases 3NH7 ...-4			
Sizes		1	1L	2L	1XL	2XL	1L	2L	1XL	2XL
Standards		IEC 60269-6					IEC 60269	IEC 60269-6	IEC 60947	
Operational class		gPV								
Rated voltage U_n	V DC	1000 at time constant (L/R) 3 ms 1500 at time constant (L/R) 3 ms					1000		1500	
Rated current I_n	A DC	63 ... 160	200/250	315/400	63 ... 200	250/315	250	400	250	400
Rated short-circuit withstand current	kA	--					30			
Rated breaking capacity	kA DC	30					--			
Switching capacity • Utilization category		--					AC-20B, DC-20B (switching without load)			
Max. power dissipation of the fuse link	W	--					90	110	90	110
No-voltage changing of fuse links		--					Yes			
Sealable when installed		--					Yes			
Mounting position		Any, but preferably vertical								
Current direction		--					Any			
Ambient temperature	°C	-25 ... +55, humidity 90 % at +20								
Tightening torques	Nm	--					20			

Selection and ordering data


3NE1 330-4D

Sizes	I_n	U_n	P_v at U_n	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A DC	V DC	W							kg
Fuse links operational class gPV										
1	63	1000	19		**3NE1 218-4**		1	2 units	016	0.580
	80		20		**3NE1 220-4**		1	2 units	016	0.580
	100		24		**3NE1 221-4**		1	2 units	016	0.580
	125		26		**3NE1 222-4**		1	2 units	016	0.580
	160		32		**3NE1 224-4**		1	2 units	016	0.605
1L	200		51		**3NE1 225-4D**		1	2 units	016	0.796
	250		54		**3NE1 227-4D**		1	2 units	016	0.796
2L	315		73		**3NE1 330-4D**		1	2 units	016	1.090
	400		82		**3NE1 332-4D**		1	2 units	016	1.090
1XL NEW	63	1500	20		**3NE1 218-5E**		1	2 units	016	2.200
	80		25		**3NE1 220-5E**		1	2 units	016	2.200
	100		30		**3NE1 221-5E**		1	2 units	016	2.200
	125		29	▶	**3NE1 222-5E**		1	2 units	016	2.200
	160		34	▶	**3NE1 224-5E**		1	2 units	016	2.200
	200		41	▶	**3NE1 225-5E**		1	2 units	016	2.200
2XL NEW	250		53	▶	**3NE1 327-5E**		1	2 units	016	2.200
	315		63	▶	**3NE1 330-5E**		1	2 units	016	2.200

* You can order this quantity or a multiple thereof.

	For fuse links of size	I_n A DC		DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Fuse bases with flat terminal									
	Standard ceramic fuse base [1]									
 3NH3 230	1	250	1000	▶	**3NH3 230**		1	3 units	017	0.738
	Fuse bases with swiveling mechanism									
 3NH7 360-4	1L	250	1000		**3NH7 260-4**		1	1 unit	016	1.300
	2L	400	1000		**3NH7 360-4**		1	1 unit	016	1.750
	1XL NEW	250	1500		**3NH7 261-4**		1	1 unit	016	1.200
	2XL NEW	400	1500		**3NH7 361-4**		1	1 unit	016	1.600

[1] For further information see Catalog LV11.

Notes