BETA Protecting Low-Voltage Fuse Systems

3

Overview

Devices		Page	Field of application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
	**NEOZED fuse systems**	3/4	Fuse links, MINIZED switch disconnectors, bases, fuse links from 2 to 63 A of operational class gG and accessories. Everything you need for a complete system.	Fuse system: IEC 60269-3; DIN VDE 0636-3; Safety switching devices IEC/EN 60947-3 DIN VDE 0638; DIN VDE 0660-107	✓	✓	✓
	**DIAZED fuse systems**	3/14	Fuse links from 2 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; DIN VDE 0636-3; CEE 16	✓	✓	✓
	**3NW cylindrical fuse systems**	3/23	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	✓	✓	✓
	**3NW. ...-0HG Class CC fuse systems**	3/28	These comply with American standard and have UL and SCA 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	✓	✓	✓
	**5ST2, 5ST3 busbars, for fuse systems**	3/30	Busbars for NEOZED fuse bases, NEOZED fuse disconnectors, MINIZED switch disconnectors, DIAZED fuse systems and cylindrical fuse systems.	EN 60439-1 (VDE 0660-500)	✓	✓	✓
	**3NA, 3ND LV HRC fuse links**	3/36	Fuse links from 2 to 1250 A for selective line protection and plant protection in non-residential buildings, industry and power supply companies.	IEC 60269-1, -2; EN 60269-1; DIN VDE 0636-2	✓	✓	✓
	**3NX1 LV HRC signal detectors**	3/47	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 fuses.		✓	✓	✓
	**3NH LV HRC fuse bases**	3/49	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; DIN VDE 0636-2	✓	✓	✓

Devices		Page	Field of application	Standards	Used in		
					Non-residential buildings	Residential buildings	Industry
	**3NP LV HRC fuse switch disconnectors**	3/63	LV HRC fuse switch disconnectors for power distribution. Versions for mounting on mounting plates, installation in front panels or on busbars.	IEC 60947-1; IEC 60947-3; VDE 0660-107	✓	--	✓

NEOZED fuse systems

Overview

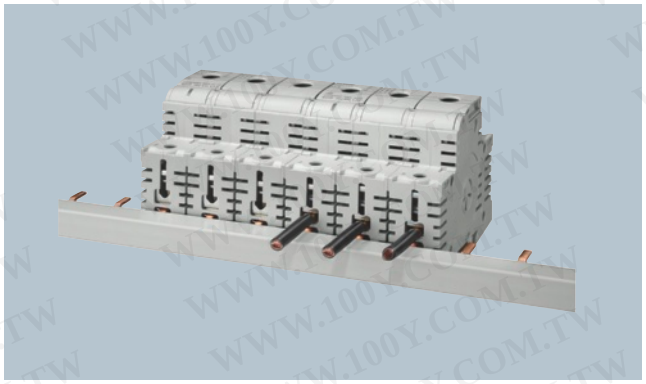
The NEOZED fuse system is primarily used in distribution technology and industrial switchgear assemblies. The system is easy to use and is also approved for domestic installation.

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

Due to its small footprint, the NEOZED disconnector is primarily used in control engineering.

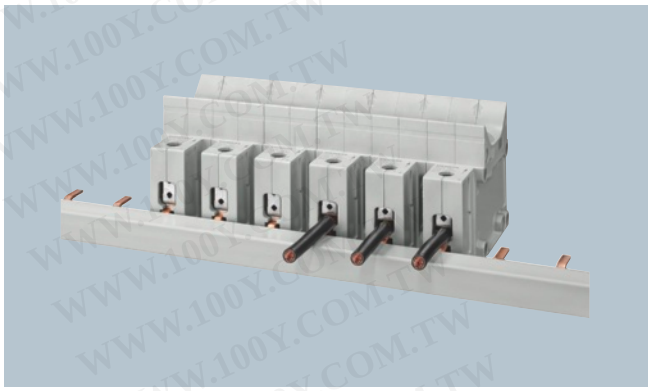
The NEOZED fuse bases are the most cost-effective solution for the application of NEOZED fuses. All NEOZED bases must be fed from the bottom to ensure that the threaded ring is insulated during removal of the fuse link. The terminals of the NEOZED bases are available in different versions and designs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

Benefits



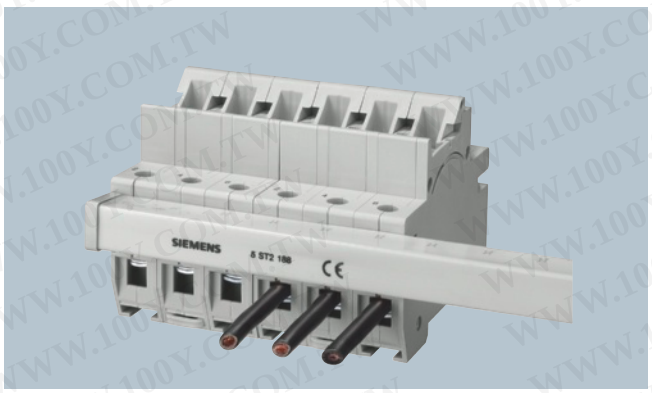
MINIZED switch disconnectors

- Clear and visible conductor connection that can be easily checked. This facilitates insertion of the conductor and saves time.
- With draw-out technology for off-circuit replacement of fuses. This provides enhanced safety.
- The infeed of the devices can be from the top or the bottom. This enables flexible application.



NEOZED fuse bases made of molded plastic

- Clear and visible conductor connection that can be easily checked. This facilitates insertion of the conductor and saves time.
- Greater safety for personnel thanks to terminals with touch-protection according to BGV A3 at incoming and outgoing feeders. This ensures enhanced safety.
- Two type ranges with different terminals offer expanded application options.



NEOZED fuse disconnectors

- With draw-out technology for off-circuit replacement of fuses. This provides enhanced safety.
- Extremely slim design with a single MW per pole. This saves space and costs.

NEOZED fuse bases made of ceramic

- Different terminal versions support a huge range of different installation methods. This ensures greater flexibility.
- These bases are the most widely used devices for applications with NEOZED fuses. An unrivaled cost-effective solution.

Technical specifications

		NEOZED fuse links 5SE2
Standards		IEC 60269-3; DIN VDE 0636-3
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 disconnectors	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; DIN VDE 0660-107 IEC/EN 60947-3		IEC 60269-3; DIN VDE 0636-3				
Main switch characteristic EN 60204-1		Yes	--	--				
Insulation characteristic EN 60664-1		Yes		--				
Rated voltage U_n	V AC	230/400, 240/415		400				
	V DC			250				
• 1P	V DC	65	48	--				
• 2P in series	V DC	130	110	--				
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	--	--				
• DC-22 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 BGVA		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 torque	Nm	4	1.2	1.2	2	3.5/2.5	2.5 ... 3	3

Selection and ordering data

	Size	Number of poles	I_n A	Identification color	MW	DT	Order No.	Price per PU	PG	PU Unit(s)	PS*/ P. unit Unit(s)	Weight per PU approx. kg
	NEOZED fuse links **Rated voltage 400 V AC/250 V DC** **Operational class gG**											
	D01		2	Pink		▶	**5SE2 302**		016	1	10	0.006
			4	Brown		▶	**5SE2 304**		016	1	10	0.006
			6	Green		▶	**5SE2 306**		016	1	10/500	0.006
			10	Red		▶	**5SE2 310**		016	1	10/500	0.007
			13	Black		A	**5SE2 013-2A**		016	1	10	0.007
			16	Gray		▶	**5SE2 316**		016	1	10/500	0.007
	D02		20	Blue		▶	**5SE2 320**		016	1	10	0.012
			25	Yellow		▶	**5SE2 325**		016	1	10	0.013
			32	Black		B	**5SE2 332**		016	1	10	0.014
			35	Black		▶	**5SE2 335**		016	1	10	0.014
			40	Black		B	**5SE2 340**		016	1	10	0.014
			50	White		▶	**5SE2 350**		016	1	10	0.015
			63	Copper		▶	**5SE2 363**		016	1	10	0.016
	D03		80	Blue		▶	**5SE2 280**		016	1	10	0.039
			100	Red		▶	**5SE2 300**		016	1	10	0.042
	MINIZED switch disconnectors with fuses Using draw-out technology and touch protection to BGV A3 (adapter sleeves not included in delivery)											
	D02	1P	63		1.5	▶	**5SG7 113**		016	1	1	0.145
		1P+N	63		3	B	**5SG7 153**		016	1	1	0.267
		2P	63		3	B	**5SG7 123**		016	1	1	0.283
		3P	63		4.5	▶	**5SG7 133**		016	1	1	0.421
		3P+N	63		6	B	**5SG7 163**		016	1	1	0.540
	Versions for Austria only, with permanently fitted adapter sleeves, incl. fuse link											
	D02	3P	25		4.5	B	**5SG7 133-8BA25**		016	1	1	0.420
			35			B	**5SG7 133-8BA35**		016	1	1	0.420
			50			B	**5SG7 133-8BA50**		016	1	1	0.420
	Reducers											
	For fuse links D01 in MINIZED switch disconnectors D02					C	**5SH5 527**		016	1	10/100	0.003
	Auxiliary switches (AS)											
	For MINIZED switch disconnectors D02 1 NO + 1 NC				0.5	▶	**5ST3 010**		027	1	1	0.050

For technical specifications,
see chapter Miniature Circuit Breakers –>
Additional components

* You can order this quantity or a multiple thereof.

	Size	Number of poles	I_n A	Matching cover[1]	MW	DT	Order No.	Price per PU	PG	PU Unit(s)	PS*/ P. unit Unit(s)	Weight per PU approx. kg
	MINIZED fuse switch disconnectors For industrial applications With draw-out technology and touch protection to BGV A3 (not compatible with NEOZED adapter sleeves)											
	D01	1P	16		1	A	**5SG7 610**		016	1	1	0.070
		1P+N	16		2	B	**5SG7 650**		016	1	1	0.150
		2P	16		2	B	**5SG7 620**		016	1	1	0.150
		3P	16		3	A	**5SG7 630**		016	1	1	0.220
		3P+N	16		4	B	**5SG7 660**		016	1	1	0.300
	NEOZED comfort bases made of molded plastic With touch protection according to BGV A3											
	D01	1P	16	--	1.5	▶	**5SG1 301**		016	1	3	0.123
	D02		63	--		▶	**5SG1 701**		016	1	3	0.120
	D01	3P	16	--	4.5	▶	**5SG5 301**		016	1	1	0.371
	D02		63	--		▶	**5SG5 701**		016	1	1	0.360
	NEOZED fuse bases made of molded plastic With touch protection according to BGV A3											
	With cover											
	D01	1P	16	(A1)	1.5	A	**5SG1 330**		016	1	6	0.068
	D02		63	(A1)	1.5	A	**5SG1 730**		016	1	6	0.087
	Without cover											
	D01	1P	16	A1	1.5	B	**5SG1 331**		016	1	6	0.056
	D02		63	A1	1.5	A	**5SG1 731**		016	1	6	0.080
	With cover											
	D01	3P	16	(A2)	4.5	A	**5SG5 330**		016	1	2	0.216
	D02		63	(A2)	4.5	A	**5SG5 730**		016	1	2	0.252

For busbars, see page 3/32 ff.

[1] Covers in brackets are included in the scope of supply.
Covers without brackets are not included in the scope of supply.

*** You can order this quantity or a multiple thereof.**

	Size	Number of poles	I_n A	Matching cover[1]	Terminals[2]	MW	DT	Order No.	Price per PU	PG	PU Unit(s)	PS*/ P. unit Unit(s)	Weight per PU approx. kg
	NEOZED fuse bases made of ceramic												
	With cover												
	D01	1P	16	(A4)	BB	1.5	▶	**5SG1 553**		016	1	6	0.083
	D02		63	(A10)	SS	1.5	▶	**5SG1 653**		016	1	6	0.093
	D02		63	(A10)	KS	1.5	▶	**5SG1 693**		016	1	6	0.090
	Without cover												
	D01	1P	16	A4	BB	1.5	B	**5SG1 595**		016	1	6	0.071
	D02		63	A10	SS	1.5	▶	**5SG1 655**		016	1	6	0.081
	D02		63	A10	KS	1.5	B	**5SG1 695**		016	1	6	0.078
	D03		100	A6, A9	KS	2.5	A	**5SG1 812**		016	1	10	0.176
	For screw fixing only, without cover												
	D01	1P	16	A4	BB	1.5	B	**5SG1 590**		016	1	6	0.061
	D02		63	A10	SS	1.5	B	**5SG1 650**		016	1	6	0.078
	D03		100	A6, A9	KS	2.5	B	**5SG1 810**		016	1	10	0.176
	With cap												
	D01	1P	16	(A8)	BB	1.5	▶	**5SG1 594**		016	1	6	0.105
	D02		63	(A8)	SS	1.5	B	**5SG1 694**		016	1	6	0.115
	D03		100	(A9)	KS	2.5	B	**5SG1 813**		016	1	10	0.242
	With cover												
	D01	3P	16	(A5)	BB	4.5	▶	**5SG5 553**		016	1	2	0.263
	D02		63	(A11)	SS	4.5	▶	**5SG5 653**		016	1	2	0.240
	D02		63	(A11)	KS	4.5	▶	**5SG5 693**		016	1	2	0.290
	Without cover												
	D01	3P	16	A5	BB	4.5	B	**5SG5 555**		016	1	2	0.228
	D02		63	A11	SS	4.5	B	**5SG5 655**		016	1	2	0.265
	D02		63	A11	KS	4.5	B	**5SG5 695**		016	1	2	0.255
	For screw fixing only, without cover												
	D01	3P	16	A5	BB	4.5	B	**5SG5 550**		016	1	2	0.228
	D02		63	A11	SS	4.5	B	**5SG5 650**		016	1	2	0.260
	D02		63	A11	KS	4.5	B	**5SG5 690**		016	1	2	0.250
	NEOZED covers												
	Made of molded plastic, plug-in, for fuse base made of molded plastic												
	D01, D02			A1		1.5	C	**5SH5 244**		016	1	15	0.008
	D01, D02			A2		4.5	C	**5SH5 245**		016	1	5	0.017
	For fuse bases made of ceramic												
	D01			A4		1.5	B	**5SH5 251**		016	1	15	0.012
	D02			A10		1.5	B	**5SH5 253**		016	1	15	0.020

[1] Covers in brackets are included in the scope of supply. Covers without brackets are not included in the scope of supply.

[2] For terminal versions, see page 3/13.

* You can order this quantity or a multiple thereof.

	Size	Matching cover	MW	DT	Order No.	Price per PU	PG	PU Unit(s)	PS*/ P. unit Unit(s)	Weight per PU approx. kg
	NEOZED covers									
	D01	A5	4.5	C	**5SH5 252**		016	1	5	0.035
	D02	A11	4.5	C	**5SH5 254**		016	1	5	0.045
	Screw-on									
	D03	A6	2.5	B	**5SH5 233**		016	1	20	0.021
	NEOZED caps									
	Made of molded plastic, plug-in									
	D01, D02	A8		B	**5SH5 235**		016	1	5	0.034
	Screw-on									
	D03	A9		C	**5SH5 234**		016	1	10	0.066
	NEOZED screw caps									
	Molded plastic, with inspection hole									
	D01			►	**5SH4 116**		016	1	10/1000	0.007
	D02			►	**5SH4 163**		016	1	10/200	0.008
	Ceramic									
	D01, sealable			A	**5SH4 316**		016	1	10	0.014
	D02, sealable			A	**5SH4 363**		016	1	10	0.015
	D03			A	**5SH4 100**		016	1	3	0.070
	Ceramic, with inspection hole									
	D01			►	**5SH4 317**		016	1	20	0.014
	D02			►	**5SH4 362**		016	1	20	0.017

*** You can order this quantity or a multiple thereof.**

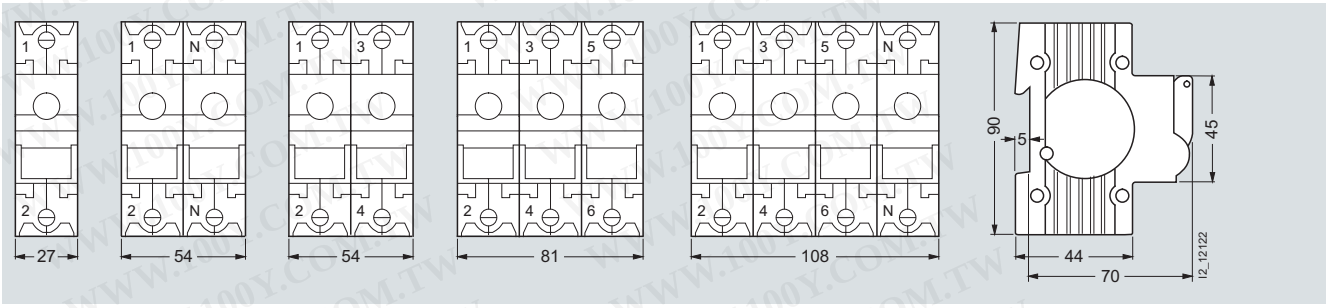
NEOZED fuse systems

	Size	For fuse links A	Identification color	MW	DT	Order No.	Price per PU	PG	PU Unit(s)	PS*/ P. unit Unit(s)	Weight per PU approx. kg
	NEOZED adapter sleeves										
	D01	2	Pink		►	**5SH5 002**		016	1	10	0.001
		4	Brown		►	**5SH5 004**		016	1	10	0.001
		6	Green		►	**5SH5 006**		016	1	10	0.001
		10/13	Red		►	**5SH5 010**		016	1	10	0.001
	D02	20	Blue		►	**5SH5 020**		016	1	10	0.001
		25	Yellow		►	**5SH5 025**		016	1	10	0.001
		32/35/40	Black		►	**5SH5 035**		016	1	10	0.001
		50	White		►	**5SH5 050**		016	1	10	0.001
	D03	80	Silver		A	**5SH5 080**		016	1	25	0.001
	For fuse links D01 in base D02 and MINIZED switch disconnectors D02										
	D02	2	Pink		A	**5SH5 402**		016	1	10	0.001
		4	Brown		A	**5SH5 404**		016	1	10	0.001
		6	Green		A	**5SH5 406**		016	1	10	0.001
		10/13	Red		A	**5SH5 410**		016	1	10	0.001
		16	Gray		A	**5SH5 416**		016	1	10	0.001
	NEOZED adapter sleeve fitters										
					A	**5SH5 100**		016	1	1/10	0.016
	NEOZED retaining springs For fuse links D01 in screw caps										
	D02	2 ... 16			A	**5SH5 400**		016	1	25	0.001
	For fuse links D01 in screw caps DL										
	DL	2 ... 16			A	**5SH5 417**		016	1	25	0.001
	Busbar adapters										
	For mounting MINIZED switch disconnectors on busbars 12 × 5 mm at a distance of 40 mm Rated current 63 A, 16 mm²			4.5	C	**5SH5 503**		016	1	1	0.280

* You can order this quantity or a multiple thereof.

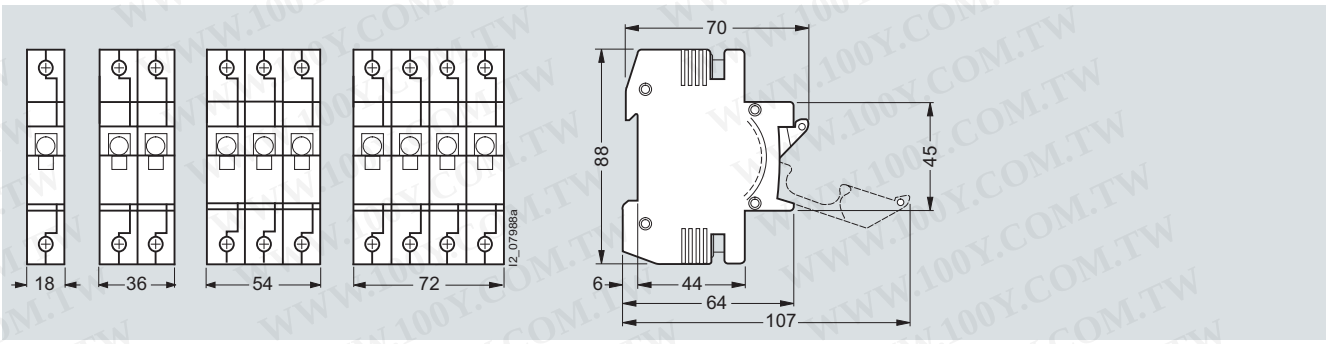
Dimensional drawings

5SG7 1.3 MINIZED switch disconnectors D02, with draw-out technology



1P 1P+N 2P 3P 3P+N

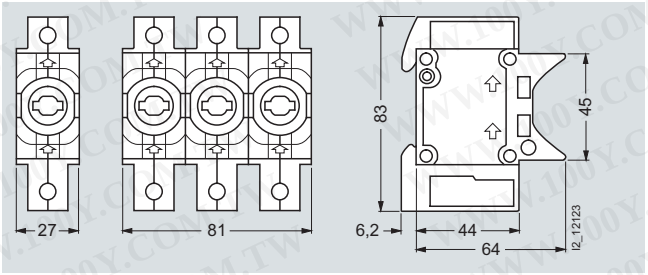
5SG7 6 MINIZED fuse switch disconnectors D01, with draw-out technology



1P 2P 3P 3P+N

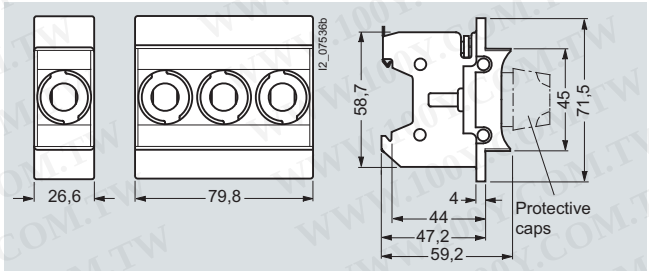
Fuse bases, with touch protection to BGV A3 (VBG4), molded plastic

Sizes D01/D02, with combined terminal, can be busbar mounted



5SG1 301, 5SG1 701, 5SG5 301, 5SG5 701

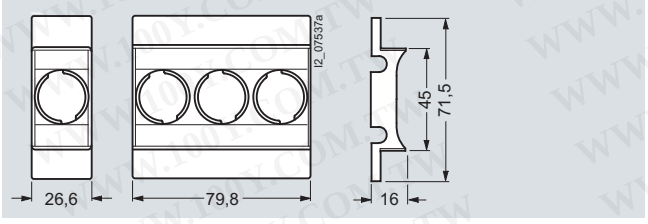
With cover



5SG1 330, 5SG1 331, 5SG1 730, 5SG1 731, 5SG5 330, 5SG5 730

NEOZED covers made of molded plastic

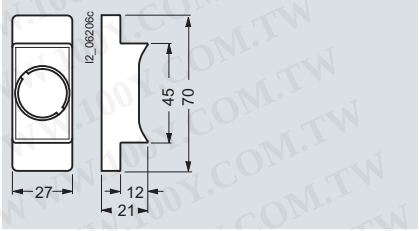
NEOZED covers for NEOZED bases, made of molded plastic



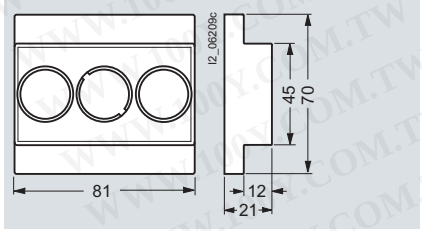
5SH5 244 (A1) and 5SH5 245 (A2)

NEOZED fuse systems

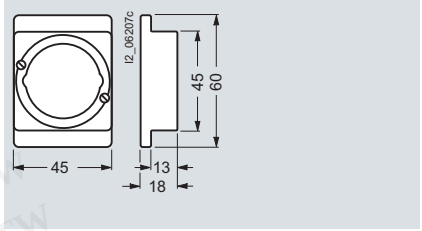
NEOZED covers



5SH5 251 (A4) and 5SH5 253 (A10)



5SH5 252 (A5) and 5SH5 254 (A11)



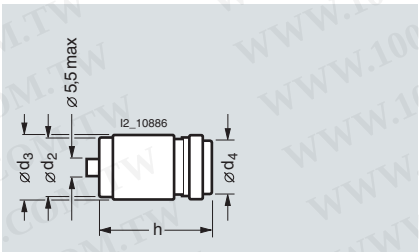
5SH5 233 (A6)

NEOZED screw caps

5SG4

Type	Size	Sealable	For mounting depth	Dimensions	
				a	b
5SH4 116	D01	--	55/70	24.5	23
5SH4 163	D02	--	55/70	24.5	23
5SH4 316	D01	x	70	33	26.5
5SH4 363	D02	x	76	33	26.5
5SH4 100	D03	--	70	37	44
5SH4 317	D01	--	70	29.5	25
5SH4 362	D02	--	70	30.5	25

NEOZED fuse links



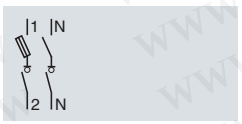
Size/thread	D01/E14	D02/E18	D03/M30
Rated current in A	2 ... 16	20 ... 63	80 ... 100
Dimension $d_{2\ min}$	9.8	13.8	20.8
Dimension d_3	11	15.3	22.5
Dimension $d_{4\ max}$	6	10	18
Dimension h	36	36	43

Schematics

5SG7 1.3 MINIZED switch disconnectors D02, with draw-out technology

5SG7 113

1P

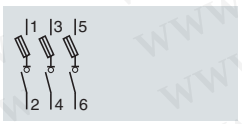


5SG7 153

1P+N

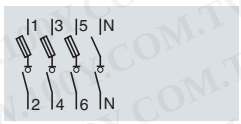
5SG7 123

2P



5SG7 133
5SG7 133-8BA25
5SG7 133-8BA35
5SG7 133-8BA50

3P



5SG7 163

3P+N

5SG7 6 MINIZED fuse switch disconnectors D01, with draw-out technology

5SG7 610

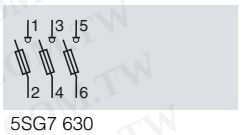
1P

5SG7 650

1P+N

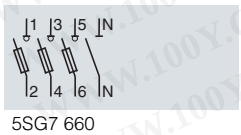
5SG7 620

2P



5SG7 630

3P



5SG7 660

3P+N

5SG1, 5SG5 NEOZED fuse switch disconnectors, made of molded plastic

5SG1

1P

5SG5

3P

More information

Fuse bases D01 with terminal type BB
- Incoming feeders, clamp-type terminal B
- Outgoing feeders, clamp-type terminal B

Fuse bases D02, with terminal type KS
- Incoming feeders, screw head contact K
- Outgoing feeders, saddle terminal S

Fuse bases D02, with terminal type SS
- Incoming feeders, saddle terminal S
- Outgoing feeders, saddle terminal S

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 to 750 V.

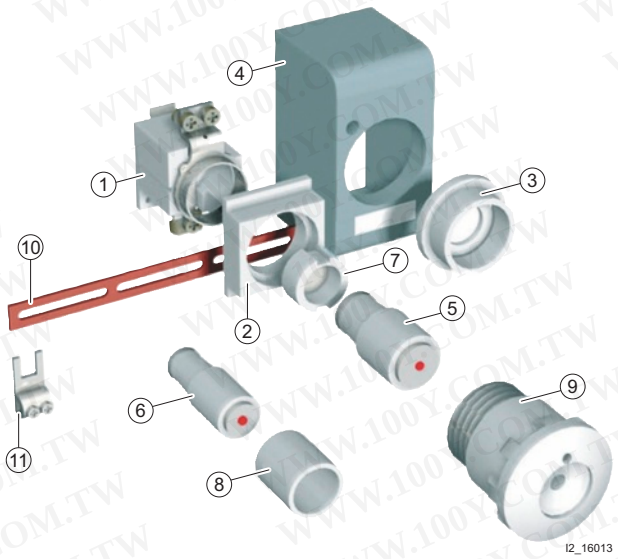
All DIAZED bases must be fed from the bottom to ensure an insulated threaded ring when the fuse link is being removed. Reliable contact of the fuse links is only ensured when used together with DIAZED screw adapters.

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

A key feature is the high-performing EZR bus-mounting system for screw fixing. 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



DIAZED fuse systems area a result of the well-designed modular system, the components can be combined in any way to meet the various requirements and to facilitate different installation methods.

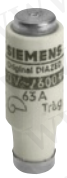
① DIAZED base
② DIAZED cover
③ DIAZED cover ring
④ DIAZED cap
⑤ DIAZED fuse link, DII
⑥ DIAZED fuse link, NDz
⑦ DIAZED screw adapter
⑧ DIAZED adapter sleeve
⑨ DIAZED screw cap
⑩ Busbar, oblong hole, single-phase
⑪ Terminal, fork-type terminal, non-insulated

Technical specifications

			5SA, 5SB, 5SC, 5SD
Standards			IEC 60269-3; DIN VDE 0635; DIN VDE 0636-3; CEE 16
Operational class	Acc. to IEC 60269; DIN VDE 0636		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 type								
		B		K			NO		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 torque										
• Screw M4	Nm	1.2							--	
• Screw M5	Nm	2.0							--	
• Screw M6	Nm	2.5							4	
• Screw M8	Nm	3.5							--	

Selection and ordering data

	Size	U_n	I_n	Identification color	Thread	MW	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
		V AC/ V DC	A								Unit(s)	Unit(s)	kg
	DIAZED fuse links												
	Operational class gG												
	DII	500/500	2	Pink	E27		►	**5SB2 11**		016	1	5	0.026
			4	Brown			►	**5SB2 21**		016	1	5	0.026
			6	Green			►	**5SB2 31**		016	1	5	0.026
			10	Red			►	**5SB2 51**		016	1	5	0.027
			16	Gray			►	**5SB2 61**		016	1	5	0.028
			20	Blue			►	**5SB2 71**		016	1	5	0.029
			25	Yellow			►	**5SB2 81**		016	1	5	0.031
	DIII	500/500	32	Black	E33		B	**5SB4 010**		016	1	5	0.048
			35	Black			A	**5SB4 11**		016	1	5	0.050
			50	White			A	**5SB4 21**		016	1	5	0.051
			63	Copper			A	**5SB4 31**		016	1	5	0.054
	DIV	500/400	80	Silver	R1¼"		B	**5SC2 11**		016	1	3	0.110
			100	Red			B	**5SC2 21**		016	1	3	0.110
	Characteristic: slow												
	TNDz	500/500	2	Pink	E16		B	**5SA2 11**		016	1	10	0.013
			4	Brown			B	**5SA2 21**		016	1	10	0.013
			6	Green			B	**5SA2 31**		016	1	10	0.013
			10	Red			B	**5SA2 51**		016	1	10	0.013
			16	Gray			B	**5SA2 61**		016	1	10	0.013
			20	Blue			B	**5SA2 71**		016	1	10	0.015
			25	Yellow			B	**5SA2 81**		016	1	10	0.016
	Characteristic: quick												
	NDz	500/500	2	Pink	E16		B	**5SA1 11**		016	1	10	0.013
			4	Brown			B	**5SA1 21**		016	1	10	0.013
			6	Green			B	**5SA1 31**		016	1	10	0.013
			10	Red			B	**5SA1 51**		016	1	10	0.013
			16	Gray			B	**5SA1 61**		016	1	10	0.013
			20	Blue			B	**5SA1 71**		016	1	10	0.015
			25	Yellow			B	**5SA1 81**		016	1	10	0.016
	DII	500/500	2	Pink	E27		B	**5SB1 11**		016	1	5	0.026
			4	Brown			B	**5SB1 21**		016	1	5	0.026
			6	Green			B	**5SB1 31**		016	1	5	0.026
			10	Red[1)]			B	**5SB1 41**		016	1	5	0.026
			10	Red			A	**5SB1 51**		016	1	5	0.027
			16	Gray			A	**5SB1 61**		016	1	5	0.028
			20	Blue			A	**5SB1 71**		016	1	5	0.029
			25	Yellow			A	**5SB1 81**		016	1	5	0.031
	DIII	500/500	35	Black	E33		A	**5SB3 11**		016	1	5	0.050
			50	White			A	**5SB3 21**		016	1	5	0.051
			63	Copper			A	**5SB3 31**		016	1	5	0.054
	DIV	500/500	80	Silver	R1¼"		B	**5SC1 11**		016	1	3	0.110
			100	Red			B	**5SC1 21**		016	1	3	0.110
	Operational class gG, use 5SF1 and 5SF5 fuse bases made of ceramic, for 2 A ... 25 A, use DII screw adapters												
	DIII	690/600	2	Pink	E33		B	**5SD8 002**		016	1	5	0.068
			4	Brown			B	**5SD8 004**		016	1	5	0.068
			6	Green			B	**5SD8 006**		016	1	5	0.068
			10	Red			B	**5SD8 010**		016	1	5	0.068
			16	Gray			B	**5SD8 016**		016	1	5	0.069
			20	Blue			B	**5SD8 020**		016	1	5	0.071
			25	Yellow			B	**5SD8 025**		016	1	5	0.072
			35	Black			B	**5SD8 035**		016	1	5	0.078
			50	White			B	**5SD8 050**		016	1	5	0.080
			63	Copper			B	**5SD8 063**		016	1	5	0.082

1) Use screw adapter 6 A.

* You can order this quantity or a multiple thereof.

DIAZED fuse systems

	Size	U_n	I_n	Identification color	Thread	Terminals	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
		V AC/ V DC	A								Unit(s)	Unit(s)	kg
	DIAZED fuse links												
	Characteristic: quick, also for direct current railway facilities for 2 A ... 25 A, use DII screw adapters												
	DIII	750/750	2	Pink	E33		A	**5SD6 01**		016	1	5	0.068
			4	Brown			B	**5SD6 02**		016	1	5	0.068
			6	Green			B	**5SD6 03**		016	1	5	0.068
			10	Red			B	**5SD6 04**		016	1	5	0.068
			16	Gray			B	**5SD6 05**		016	1	5	0.069
			20	Blue			B	**5SD6 06**		016	1	5	0.071
			25	Yellow			A	**5SD6 07**		016	1	5	0.072
			35	Black			B	**5SD6 08**		016	1	5	0.078
			50	White			B	**5SD6 10**		016	1	5	0.080
			63	Copper			B	**5SD6 11**		016	1	5	0.082
	DIAZED fuse bases made of ceramic												
	1P, for standard mounting rail												
	NDz	500/500	25		E16	KK	A	**5SF1 012**		016	1	5	0.060
	DII		25		E27	BB	▶	**5SF1 005**		016	1	5	0.093
	DIII[1]		63		E33	BS	▶	**5SF1 205**		016	1	5	0.191
	DIII[1]		63		E33	SS	B	**5SF1 215**		016	1	5	0.154
	1P, for screw fixing												
	NDz	500/500	25		E16	KK	A	**5SF1 01**		016	1	5	0.055
	DII		25		E27	BB	A	**5SF1 024**		016	1	5	0.093
	DIII[1]		63		E33	BS	A	**5SF1 224**		016	1	5	0.137
	DIII[1]		63		E33	SS	B	**5SF1 214**		016	1	5	0.141
	1P, with flat terminal												
	DIV		100		R1¼"		B	**5SF1 401**		016	1	1	0.380
	3P, for standard mounting rail, with cap and N-type fixpoint terminal												
	DII	500/500	3 × 25		E27	BB	B	**5SF5 067**		016	1	1	0.400
	DIII[1]		3 × 63		E33	BB	B	**5SF5 237**		016	1	1	0.580
	3P, for screw fixing, with cap and N-type fixpoint terminal												
	DII	500/500	3 × 25		E27	KB	B	**5SF5 066**		016	1	1	0.410
	DIII[1]		3 × 63		E33	KB	B	**5SF5 236**		016	1	1	0.590
	DIAZED fuse bases made of molded plastic With touch protection BGV A3												
	1P, for standard mounting rail or screw fixing												
	DII	500/500	25		E27		▶	**5SF1 060**		016	1	3/108	0.152
	DIII[1]		63		E33		▶	**5SF1 260**		016	1	3/108	0.186
	3P												
	DII	500/500	3 × 25		E27		▶	**5SF5 068**		016	1	1/36	0.457
	DIII[1]		3 × 63		E33		▶	**5SF5 268**		016	1	1/36	0.538

[1] Can also be used with 690 V AC/600 V DC.

* You can order this quantity or a multiple thereof.

	Size	U_n	I_n	Thread	Terminals	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
		V AC/V DC	A							Unit(s)	Unit(s)	kg
	DIAZED components 750 V											
	DIAZED fuse bases 1P, for screw fixing, with fine thread and cap											
	DIII	750/750	63	E33S	KK	A	**5SF4 230**		016	1	1	0.460
	DIAZED screw caps made of ceramic, with fine thread											
	DIII	750/750	63	E33S		A	**5SH1 161**		016	1	5	0.084
	DIAZED EZR bus-mounting bases											
	1P, to snap onto EZR busbars for screw fixing											
	DII	500/500	25	E27	B	B	**5SF6 005**		016	1	5	0.072
	DIII	500/500	63	E33	B	B	**5SF6 205**		016	1	5	0.135
	DIAZED screw caps											
	Ceramic											
	NDz	500/500	25	E16		A	**5SH1 11**		016	1	5/200	0.016
	Molded plastic, with inspection hole, black, not for SILIZED fuse links											
	DII	500/500	25	E27		▶	**5SH1 221**		016	1	5/200	0.026
	DIII[1)]		63	E33		▶	**5SH1 231**		016	1	5/5000	0.042
	Ceramic											
	DII	500/500	25	E27		▶	**5SH1 12**		016	1	30	0.034
	DIII[1)]		63	E33		▶	**5SH1 13**		016	1	30	0.059
	Ceramic, with inspection hole, sealable											
	DII	500/500	25	E27		A	**5SH1 22**		016	1	30	0.050
	DIII[1)]		63	E33		A	**5SH1 23**		016	1	30	0.076
	Ceramic											
	DIV	500/500	100	R1¼"		C	**5SH1 141**		016	1	1	0.181
	Ceramic, prolonged version											
	DIII	690/600	63	E33		A	**5SH1 170**		016	1	5	0.086

[1)] Can also be used with 690 V AC/600 V DC.

*** You can order this quantity or a multiple thereof.**

DIAZED fuse systems

	Size	Thread	For fuse links A	DT	Order No.	Price per PU	PG	PU Unit(s)	PS*/ P. unit Unit(s)	Weight per PU approx. kg
	DIAZED screw adapters									
	NDz	E16	2	C	**5SH3 28**		016	1	10	0.002
			4	C	**5SH3 31**		016	1	10	0.002
			6	C	**5SH3 05**		016	1	10	0.002
			10	C	**5SH3 06**		016	1	10	0.002
			16	C	**5SH3 07**		016	1	10	0.002
	Also for 5SF2 30 up to 750 V									
	DII	E27	2	▶	**5SH3 10**		016	1	25	0.015
			4	▶	**5SH3 11**		016	1	25	0.015
			6	▶	**5SH3 12**		016	1	25	0.015
			10	▶	**5SH3 13**		016	1	25	0.015
			16	▶	**5SH3 14**		016	1	25	0.014
			20	▶	**5SH3 15**		016	1	25	0.012
			25	▶	**5SH3 16**		016	1	25	0.012
	Also for 5SF2 30 up to 750 V									
	DIII	E33	35	▶	**5SH3 17**		016	1	25	0.019
			50	▶	**5SH3 18**		016	1	25	0.018
			63	▶	**5SH3 20**		016	1	25	0.017
	DIAZED adapter sleeves									
	DIV	R1¼"	80	C	**5SH3 21**		016	1	10/1000	0.006
			100	C	**5SH3 22**		016	1	10/1000	0.005
	DIAZED adapter sleeves for screw caps									
	For NDz/TNDz fuse links in base DII			C	**5SH3 01**		016	1	10	0.012
	For DII fuse links in base DIII			B	**5SH3 02**		016	1	10	0.023
	DIAZED adapter sleeve fitters									
	DII/DIII			A	**5SH3 703**		016	1	1	0.025
	DIAZED covers made of molded plastic									
	Not for SILIZED fuse links									
	DII 5 bases = 12 MW	E27		▶	**5SH2 032**		016	1	10/620	0.017
	DIII 4 bases = 12 MW	E33		▶	**5SH2 232**		016	1	10/620	0.020
	DIAZED caps made of molded plastic									
	NDz	E16		A	**5SH2 01**		016	1	5	0.028
	DII	E27		A	**5SH2 02**		016	1	5	0.038
	DIII	E33		A	**5SH2 22**		016	1	5	0.048

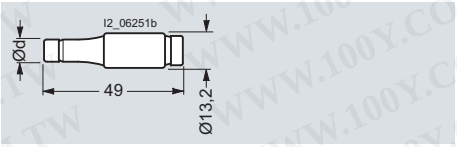
* You can order this quantity or a multiple thereof.

	Size	Thread	DT	Order No.	Price per PU	PG	PU Unit(s)	PS*/ P. unit Unit(s)	Weight per PU approx. kg
	DIAZED cover rings								
	Ceramic DII and DIII, also for EZR bus-mounting base								
	NDz	E16	C	**5SH3 30**		016	1	5	0.020
	DII	E27	B	**5SH3 32**		016	1	10	0.029
	DIII	E33	B	**5SH3 34**		016	1	10	0.035
	Made of molded plastic, also for EZR bus-mounting base								
	DII	E27	A	**5SH3 401**		016	1	5/60	0.013
	DIII	E33	A	**5SH3 411**		016	1	5/60	0.014

Dimensional drawings

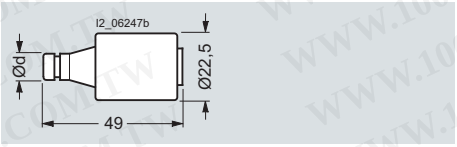
DIAZED fuse links

5SA1, 5SA2



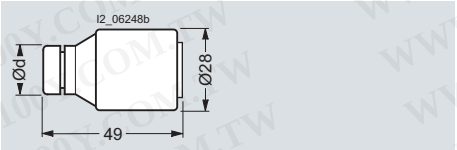
Size/thread	TNDz/E16, NDz/E16						
Rated current in A	2	4	6	10	16	20	25
Dimension d	6	6	6	8	10	12	14

5SB1, 5SB2



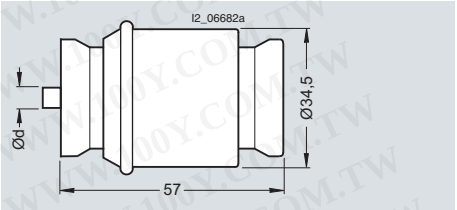
Size/thread	DII/E27						
Rated current in A	2	4	6	10	16	20	25
Dimension d	6	6	6	8	10	12	14

5SB3, 5SB4



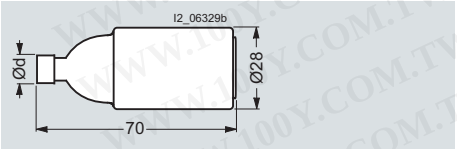
Size/thread	DIII/E33			
Rated current in A	32	35	50	63
Dimension d	16	16	18	20

5SC1, 5SC2



Size/thread	DIV/R1¼"	
Rated current in A	80	100
Dimension d	5	7

5SD6, 5SD8



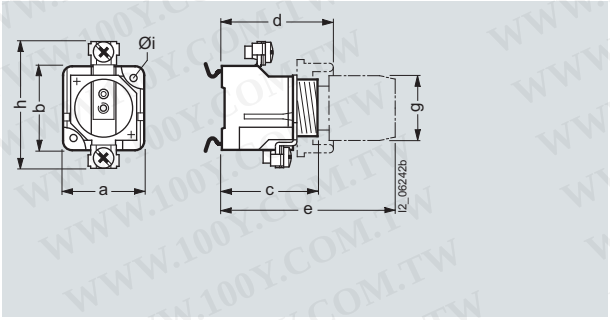
Size/thread	DIII/E33									
Rated current in A	2	4	6	10	16	20	25	35	50	63
Dimension d	6	6	6	8	10	12	14	16	18	20

* You can order this quantity or a multiple thereof.

DIAZED fuse systems

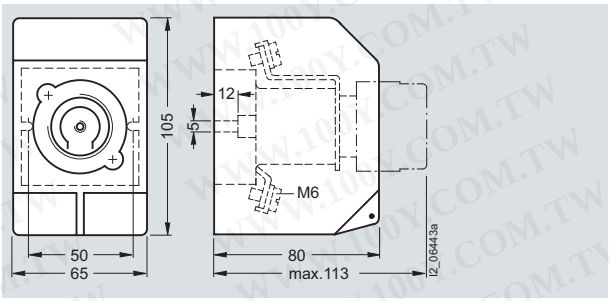
DIAZED fuse bases made of ceramic

5SF1

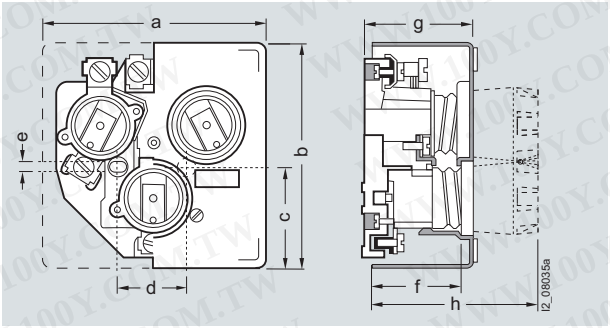


Version Type	Terminal type	Dimensions a	b	c	d	e	Øg	h	Øi
NDz/25 A									
5SF1 012	KK	29	49	44.6	55	75	32	49	--
5SF1 01	KK	29	49	44.6	55	75	32	49	4.2
DII/25 A									
5SF1 005	BB	38.4	41	46.6	53	83	34	63	--
5SF1 024	BB	38.4	41	46.6	53	83	34	63	4.3
DIII/63 A									
5SF1 205	BS	45.5	46	47	54	83	43	78	--
5SF1 215	SS	45.5	46	47	54	83	43	78	--
5SF1 224	BS	45.5	46	47	54	83	43	78	4.3
5SF1 214	SS	45.5	46	47	54	83	43	78	4.3
DIV/100 A									
5SF1 401	Flat connection	68	68	--	79	110	65	116	6.5

5SF4 230



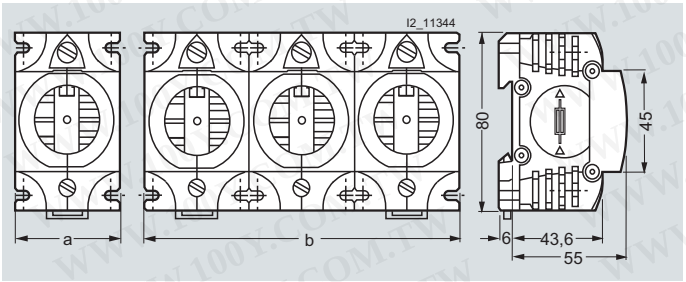
5SF5



Version Type	Terminal type	Dimensions a	b	c	d	e	f	g	h
DII/3 × 25 A									
5SF5 067	BB	106	106	48	--	--	45	52	86
5SF5 066	KB	106	106	48	32	5.2	45	52	86
DIII/3 × 63 A									
5SF5 237	BB	127	130	54	--	--	45	52	85
5SF5 236	KB	127	130	54	32	5.2	45	52	85

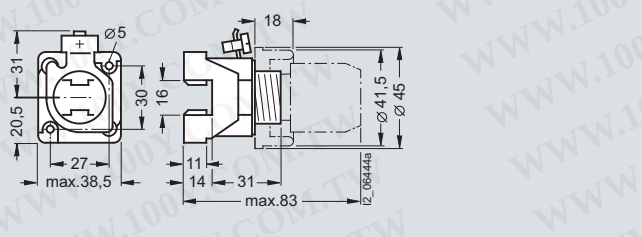
DIAZED fuse bases made of molded plastic

5SF15SF5

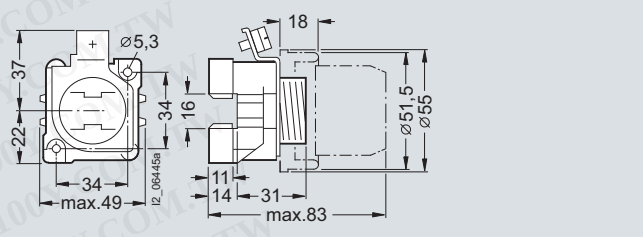


Type	Dimensions a	b
5SF1 060	40	--
5SF1 260	50	--
5SF5 068	--	120
5SF5 268	--	150

DIAZED EZR bus-mounting bases



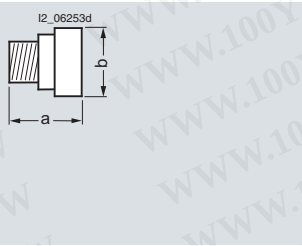
5SF6 005,



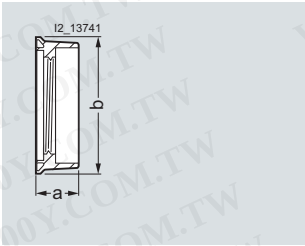
5SF6 205

DIAZED screw caps/cover rings made of molded plastic/ceramic

Screw caps
5SH1



Cover rings
5SH3



Size/thread	Screw caps Type	Dimensions a	∅b	Cover rings Type	Dimensions a	∅b
NDz/E16	5SH1 11	35	28	5SH3 30	16.5	30
DII/E27	5SH1 221	42	33	5SH3 401	17.5	39.5
	5SH1 12	45.5	34	5SH3 32	17.5	41.5
	5SH1 22	43	39			
DIII/E33	5SH1 231	42	40	5SH3 411	17.5	49.5
	5SH1 13	45.5	43	5SH3 34	19	51.5
	5SH1 23	47	45			
	5SH1 161	48	48			
	5SH1 170	68	43			
DIV/R1¼"	5SH1 141	53	65			

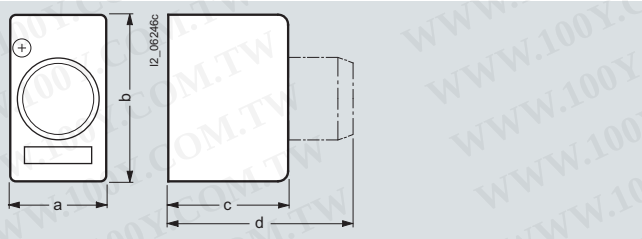
DIAZED covers made of molded plastic

5SH2

Size/thread	Type	Dimensions a	b	∅c	d
DII/E27	5SH2 032	41	51	27.5	19
DIII/E33	5SH2 232	52	51	34.5	18.5

DIAZED caps made of molded plastic

5SH2



Size/thread	Type	Dimensions a_{max}	b_{max}	c_{max}	d_{max}
NDz/E16	5SH2 01	33	68	51.7	75
DII/E27	5SH2 02	43	74.7	53.6	83
DIII/E33	5SH2 22	51	90.5	53.6	83

More information

Fuse based DIII with terminal type BS
- Outgoing feeders (top), saddle terminal S
- Incoming feeders (bottom), clamp-type terminal B

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

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

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

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. They 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 to UL 512. The cylindrical fuse holders are tested and approved as fuse disconnectors in accordance with 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 detectors, 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

An auxiliary switch, which can be laterally mounted, enables the forwarding of the switching state of the fuse holder, and thus an integration of the fuses in the automation processes.

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 plant 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 or 500						
Rated current I_n		A	2 ... 20	2 ... 32	4 ... 50	8 ... 100	0.5 ... 25	2 ... 50	10 ... 100
Rated breaking capacity									
• 500 V versions		kA AC	100						
• 400 V versions		kA AC	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			
Certifications	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 acc. 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		2.5 ... 16	4 ... 35
• AWG (American wire gauge)			--	10 ... 20	6 ... 10	--
Tightening torques		Nm	1.2		2.0	2.5

Selection and ordering data

	Sizes	I_n	U_n	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
	mm × mm	A	V AC					Unit(s)	Unit(s)	kg
	Cylindrical fuse links, operational class gG									
	8 × 32	2	400	B	**3NW6 302-1**		018	1	10	0.004
		4		B	**3NW6 304-1**		018	1	10	0.004
		6		B	**3NW6 301-1**		018	1	10	0.004
		10		B	**3NW6 303-1**		018	1	10	0.004
		16		B	**3NW6 305-1**		018	1	10	0.004
		20		B	**3NW6 307-1**		018	1	10	0.004
	10 × 38	2	500	▶	**3NW6 002-1**		018	1	10	0.008
		4		▶	**3NW6 004-1**		018	1	10	0.008
		6		▶	**3NW6 001-1**		018	1	10	0.008
		8		B	**3NW6 008-1**		018	1	10	0.008
		10		▶	**3NW6 003-1**		018	1	10	0.008
		12		B	**3NW6 006-1**		018	1	10/100	0.008
		16		▶	**3NW6 005-1**		018	1	10	0.008
		20		B	**3NW6 007-1**		018	1	10	0.008
		25		B	**3NW6 010-1**		018	1	10	0.008
		32	400	B	**3NW6 012-1**		018	1	10	0.008
	14 × 51	4	500	B	**3NW6 104-1**		018	1	10	0.019
		6		B	**3NW6 101-1**		018	1	10	0.019
		8		B	**3NW6 108-1**		018	1	10/100	0.019
		10		B	**3NW6 103-1**		018	1	10	0.019
		12		B	**3NW6 106-1**		018	1	10/100	0.019
		16		B	**3NW6 105-1**		018	1	10	0.019
		20		B	**3NW6 107-1**		018	1	10	0.019
		25		B	**3NW6 110-1**		018	1	10	0.019
		32		B	**3NW6 112-1**		018	1	10	0.019
		40		B	**3NW6 117-1**		018	1	10	0.019
		50	400	B	**3NW6 120-1**		018	1	10	0.019
	22 × 58	8	500	B	**3NW6 208-1**		018	1	10/100	0.051
		10		B	**3NW6 203-1**		018	1	10/100	0.051
		12		B	**3NW6 206-1**		018	1	10/100	0.051
		16		B	**3NW6 205-1**		018	1	10	0.051
		20		B	**3NW6 207-1**		018	1	10	0.051
		25		B	**3NW6 210-1**		018	1	10	0.051
		32		B	**3NW6 212-1**		018	1	10	0.051
		40		B	**3NW6 217-1**		018	1	10	0.051
		50		B	**3NW6 220-1**		018	1	10	0.051
		63		B	**3NW6 222-1**		018	1	10	0.051
		80		B	**3NW6 224-1**		018	1	10	0.051
		100	400	B	**3NW6 230-1**		018	1	10	0.051
	Cylindrical fuse links, operational class aM									
	10 × 38	0.5	500	B	**3NW8 000-1**		018	1	10	0.003
		1		B	**3NW8 011-1**		018	1	10	0.008
		2		B	**3NW8 002-1**		018	1	10	0.008
		4		B	**3NW8 004-1**		018	1	10	0.008
		6		B	**3NW8 001-1**		018	1	10	0.008
		8		B	**3NW8 008-1**		018	1	10	0.003
		10		A	**3NW8 003-1**		018	1	10	0.008
		12		B	**3NW8 006-1**		018	1	10/100	0.008
		16		B	**3NW8 005-1**		018	1	10	0.008
		20		B	**3NW8 007-1**		018	1	10	0.008
		25	400	B	**3NW8 010-1**		018	1	10	0.008
	14 × 51	2	500	B	**3NW8 102-1**		018	1	10/50	0.019
		4		B	**3NW8 104-1**		018	1	10	0.019
		6		B	**3NW8 101-1**		018	1	10/50	0.019
		8		B	**3NW8 108-1**		018	1	10/50	0.019
		10		B	**3NW8 103-1**		018	1	10	0.019
		12		B	**3NW8 106-1**		018	1	10/50	0.019
		16		B	**3NW8 105-1**		018	1	10	0.019
		20		B	**3NW8 107-1**		018	1	10	0.019
		25		B	**3NW8 110-1**		018	1	10	0.019
		32		B	**3NW8 112-1**		018	1	10	0.019
		40		B	**3NW8 117-1**		018	1	10	0.019
		50	400	B	**3NW8 120-1**		018	1	10	0.019

* You can order this quantity or a multiple thereof.

	Sizes	I_n	U_n	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
	mm × mm	A	V AC					Unit(s)	Unit(s)	kg
	22 × 58	10	500	B	**3NW8 203-1**		018	1	10/50	0.051
		12		B	**3NW8 206-1**		018	1	10/50	0.051
		16		B	**3NW8 205-1**		018	1	10/50	0.051
		20		B	**3NW8 207-1**		018	1	10	0.051
		25		B	**3NW8 210-1**		018	1	10	0.051
		32		B	**3NW8 212-1**		018	1	10	0.051
		40		B	**3NW8 217-1**		018	1	10	0.051
		50		B	**3NW8 220-1**		018	1	10	0.051
		63		B	**3NW8 222-1**		018	1	10	0.051
		80		B	**3NW8 224-1**		018	1	10	0.051
		100	400	B	**3NW8 230-1**		018	1	10	0.051

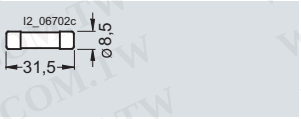
	Number of poles	I_n	For fuse links of size	MW	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
		A	mm × mm						Unit(s)	Unit(s)	kg
	Cylindrical fuse holders With signal detector										
	1P										
		20	8 × 32	1	C	**3NW7 314**		018	1	1	0.059
		32	10 × 38	1	A	**3NW7 014**		018	1	1	0.059
		50	14 × 51	1.5	B	**3NW7 112**		018	1	1	0.095
		100	22 × 58	2	B	**3NW7 212**		018	1	1	0.145
	1P+N										
		20	8 × 32	1	C	**3NW7 354**		018	1	1	0.072
		32	10 × 38	1	A	**3NW7 054**		018	1	1	0.072
		50	14 × 51	3	B	**3NW7 152**		018	1	1	0.215
		100	22 × 58	4	B	**3NW7 252**		018	1	1	0.330
	2P										
		20	8 × 32	2	C	**3NW7 324**		018	1	1	0.123
		32	10 × 38	2	A	**3NW7 024**		018	1	1	0.123
		50	14 × 51	3	B	**3NW7 122**		018	1	1	0.195
		100	22 × 58	4	B	**3NW7 222**		018	1	1	0.300
	3P										
		20	8 × 32	3	C	**3NW7 334**		018	1	1	0.180
		32	10 × 38	3	A	**3NW7 034**		018	1	1	0.180
		50	14 × 51	4.5	B	**3NW7 132**		018	1	1	0.295
		100	22 × 58	6	B	**3NW7 232**		018	1	1	0.480
	3P+N										
		20	8 × 32	3	C	**3NW7 364**		018	1	1	0.193
		32	10 × 38	3	A	**3NW7 064**		018	1	1	0.193
		50	14 × 51	6	B	**3NW7 162**		018	1	1	0.315
		100	22 × 58	8	B	**3NW7 262**		018	1	1	0.475
	Without signal detectors										
	1P										
		20	8 × 32	1	A	**3NW7 313**		018	1	1	0.056
		32	10 × 38	1	▶	**3NW7 013**		018	1	1/12	0.056
		50	14 × 51	1.5	▶	**3NW7 111**		018	1	1	0.095
		100	22 × 58	2	▶	**3NW7 211**		018	1	1	0.145
	1P+N										
		20	8 × 32	1	A	**3NW7 353**		018	1	1	0.069
		32	10 × 38	1	▶	**3NW7 053**		018	1	1	0.069
		50	14 × 51	3	B	**3NW7 151**		018	1	1	0.215
		100	22 × 58	4	B	**3NW7 251**		018	1	1	0.330
	2P										
		20	8 × 32	2	A	**3NW7 323**		018	1	1	0.118
		32	10 × 38	2	▶	**3NW7 023**		018	1	1/6	0.118
		50	14 × 51	3	▶	**3NW7 121**		018	1	1	0.195
		100	22 × 58	4	▶	**3NW7 221**		018	1	1	0.300

* You can order this quantity or a multiple thereof.

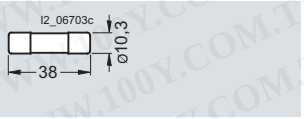
3NW cylindrical fuse systems

	Number of poles	I_n	For fuse links of size	MW	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
		A	mm × mm						Unit(s)	Unit(s)	kg
	3P										
		20	8 ×32	3	A	**3NW7 333**		018	1	1	0.172
		32	10 × 38	3	▶	**3NW7 033**		018	1	1/4	0.172
		50	14 × 51	4.5	▶	**3NW7 131**		018	1	1	0.295
		100	22 × 58	6	▶	**3NW7 231**		018	1	1	0.691
	3P+N										
		20	8 × 32	3	A	**3NW7 363**		018	1	1	0.185
		32	10 × 38	3	▶	**3NW7 063**		018	1	1	0.185
		50	14 × 51	6	A	**3NW7 161**		018	1	1	0.315
		100	22 × 58	8	A	**3NW7 261**		018	1	1	0.475
	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	B	**3NW7 901**		018	1	1	0.050
	For fuse bases		22 × 58		B	**3NW7 902**		018	1	1	0.050
	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			NEW							
	For fuse holders		10 × 38	0.5	B	**3NW7 903**		018	1	1	0.034

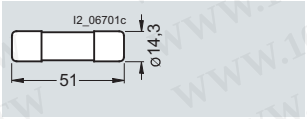
Dimensional drawings



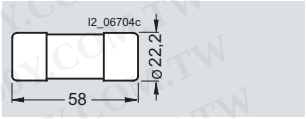
Sizes
8 × 32 mm



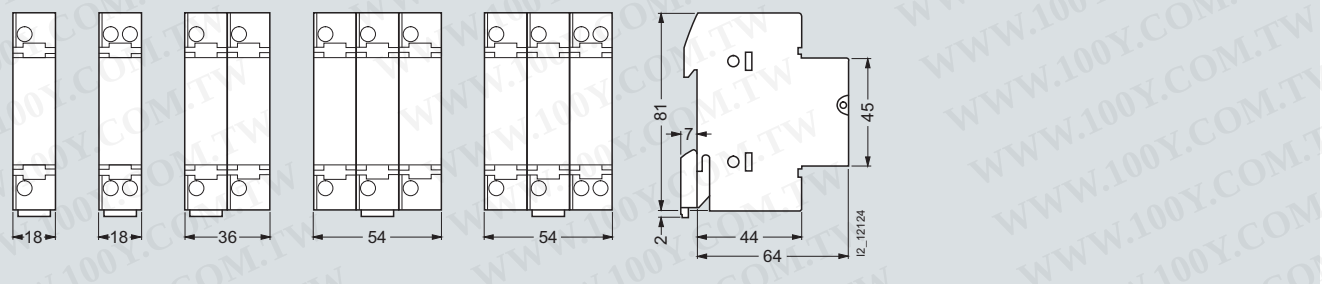
10 × 38 mm



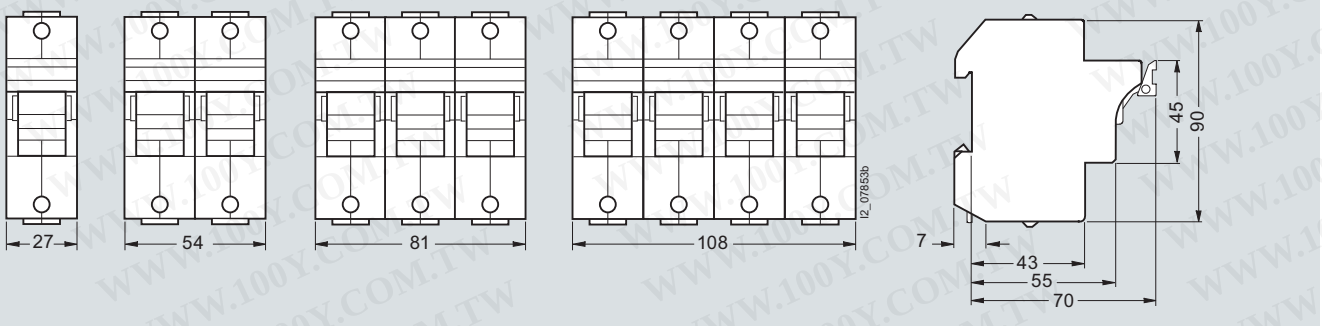
14 × 51 mm



22 × 58 mm

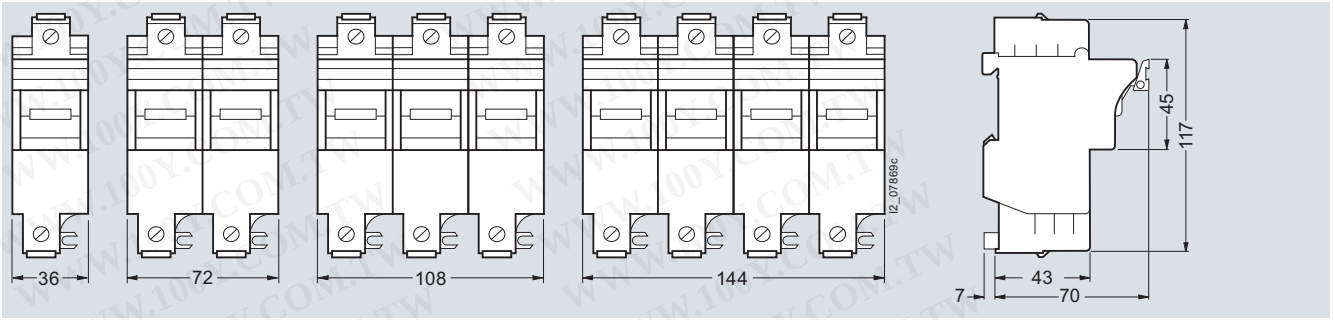


3NW7 0, 3NW7 3
1P 1P+N 2P 3P 3P+N



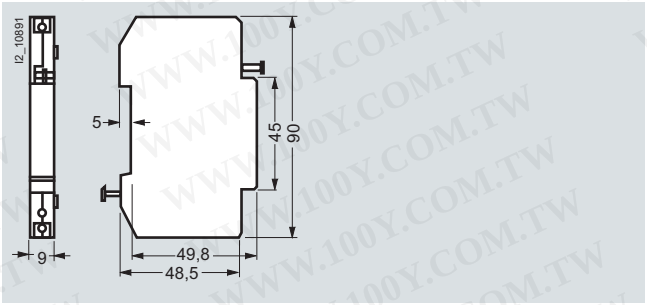
3NW7 1
1P 1P+N / 2P 3P 3P+N

* You can order this quantity or a multiple thereof.

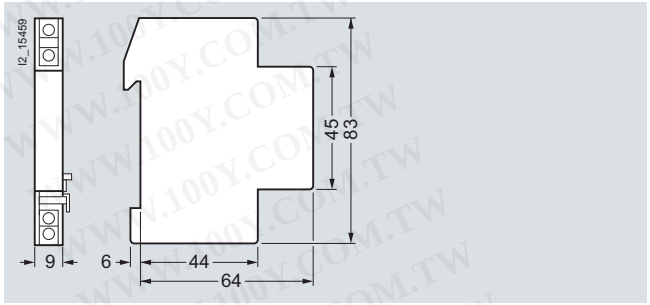


3NW7 2
1P 1P+N / 2P 3P 3P+N

Auxiliary switches



3NW7 901
3NW7 902



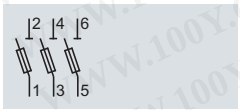
3NW7 903

Schematics

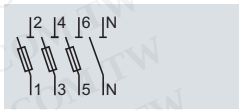
1P

1P+N

2P

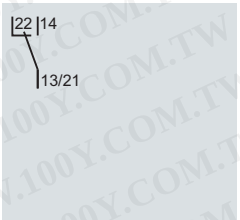


3P

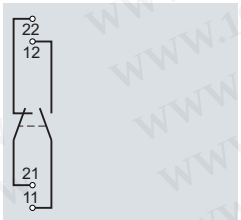


3P+N

Auxiliary switches



3NW7 901
3NW7 902



3NW7 903

More information

Installation

Fuse holders, sizes 8 mm × 32 mm and 10 mm × 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 mm × 32 mm and 10 mm × 38 mm:
The auxiliary switches support the remote display of the ON/OFF switching state of the fuse holder.

Sizes 14 mm × 51 mm and 22 mm × 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.

3NW. ...-0HG Class CC fuse systems

Overview

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

The encapsulated fuse holders are tested and designed to the US National Electrical Code NEC 210.20(A) so that in continuous operation only 80 % of the rated current is permitted as operational current.

An operational current of 100 % of the rated current (30 A) is only permitted 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 of 12 s at $2 \times I_n$ as specified by UL for Class CC fuses.
- 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.

Benefits

- For switchgear assemblies and mechanical engineers who export their plants. Compliance with the American standard is as follows:
- Approved according to UL and CSA for typical "branch circuit protection" applications. This facilitates export.
- Modern design with touch protection to BGV A3 ensures safe installation.

Technical specifications

		Class CC fuse holders 3NW7 5.3-0HG
Standards **Approved acc. to**		UL 512; CSA C22.2 UL 512; UL File No. E171267
Rated voltage	V AC	600
Rated current I_n	A	30
Max. power dissipation of fuse links • With cable, 6 mm² • With cable, 10 mm²	 W W	 3 4.3
Conductor cross-sections • Solid and stranded • AWG Conductor cross-section, solid and stranded	 mm² AWG	 1.5 ... 25 18 ... 4

		Class CC fuse links		
		3NW1 ...-0HG	**3NW2 ...-0HG**	**3NW3 ...-0HG**
Standards **Approved acc. to**		UL 248-4; CSA C22.2 UL 248-4; UL File Number E258218		
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	MW	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
		V	A						Unit(s)	Unit(s)	kg
	Class CC fuse holders										
	1P	600	30	1	C	**3NW7 513-0HG**		018	1	12	0.056
	2P	600	30	2	C	**3NW7 523-0HG**		018	1	6	0.118
	3P	600	30	3	C	**3NW7 533-0HG**		018	1	4	0.172

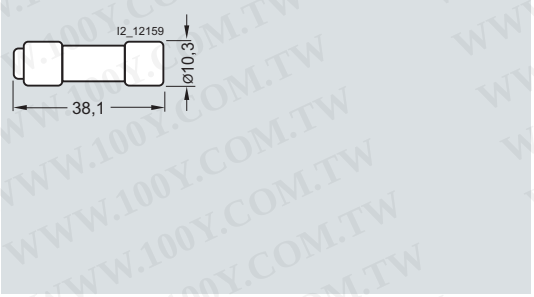
* You can order this quantity or a multiple thereof.

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

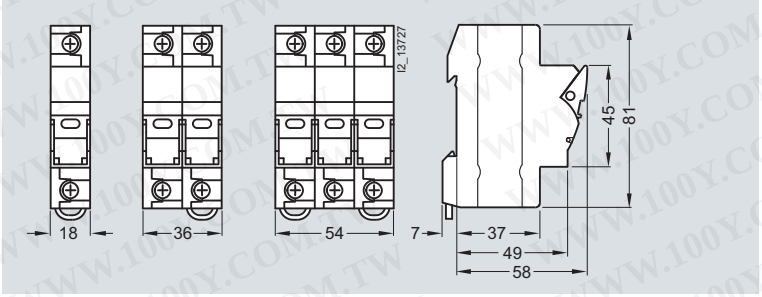
	I_n[1]	DT	Characteristic: slow, current limiting Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
	A					Unit(s)	Unit(s)	kg
	Class CC fuse links							
	0.6 (6/10)		--					
	0.8 (8/10)		--					
	1	C	**3NW3 010-0HG**		018	1	10	0.008
	1.5 (1 ½)		--					
	2	C	**3NW3 020-0HG**		018	1	10	0.008
	3	C	**3NW3 030-0HG**		018	1	10	0.008
	4	C	**3NW3 040-0HG**		018	1	10	0.008
	5	C	**3NW3 050-0HG**		018	1	10	0.008
	6	C	**3NW3 060-0HG**		018	1	10	0.008
	8	C	**3NW3 080-0HG**		018	1	10	0.008
	10	C	**3NW3 100-0HG**		018	1	10	0.008
	12	C	**3NW3 120-0HG**		018	1	10	0.008
	15	C	**3NW3 150-0HG**		018	1	10	0.008
	20	C	**3NW3 200-0HG**		018	1	10	0.008
	25	C	**3NW3 250-0HG**		018	1	10	0.008
	30	C	**3NW3 300-0HG**		018	1	10	0.008

[1] Values in brackets, American English

Dimensional drawings



3NW1 ...-0HG
3NW2 ...-0HG
3NW3 ...-0HG



3NW7 5..-0HG

* You can order this quantity or a multiple thereof.

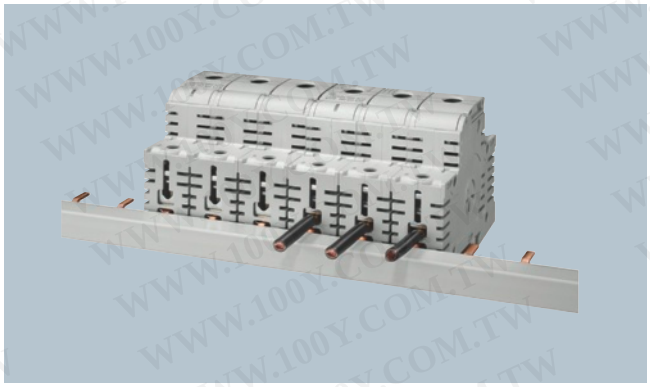
5ST2, 5ST3 busbars, for fuse systems

Overview

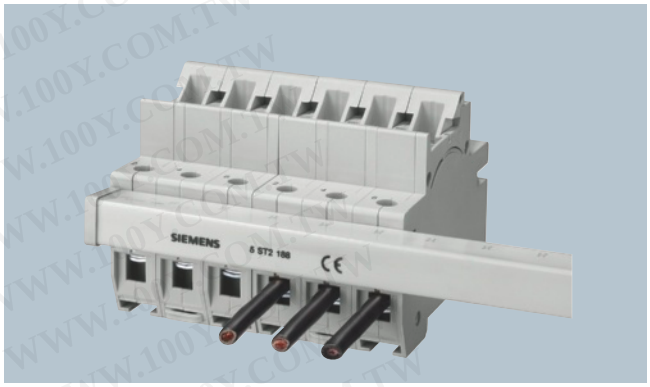
Busbars with pin-type connections can be used for NEOZED safety switching devices and fuse bases. Busbars are available in 10 mm^2 and 16 mm^2.

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

Benefits

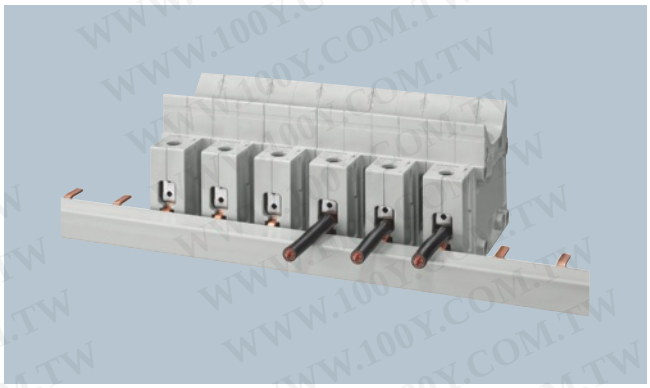


- Clear and visible conductor connection that can be easily checked when using MINIZED switch disconnectors D02. This facilitates the insertion of conductors and saves time.

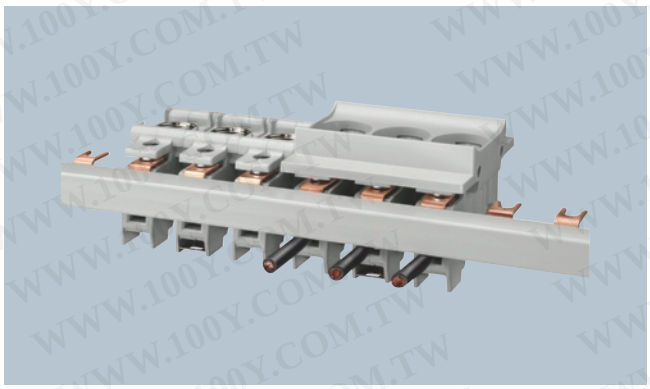


- Bus-mounting of MINIZED fuse switch disconnectors D01 with three-phase pin busbar, which can be cut to length. Tried and tested.

- Single-phase busbar mounting of NEOZED fuse bases.

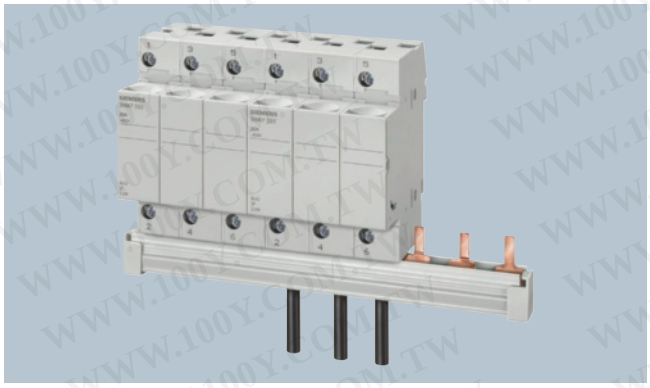


- Clear and visible conductor connection that can be easily checked when using NEOZED comfort base D02. This facilitates the insertion of conductors and saves time.

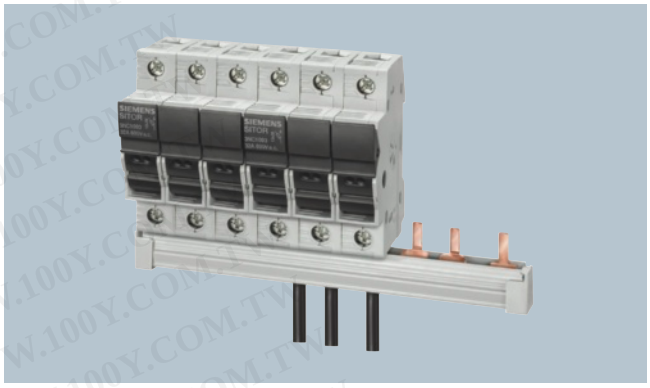


- Bus-mounting of NEOZED fuse bases made of molded plastic on three-phase busbar with fork plug, which can be cut to length. Frequently used.

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



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

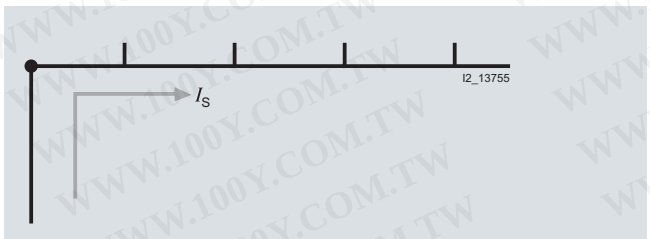


- Bus-mounting of SITOR cylindrical fuse holders 10 mm × 38 mm with the same terminal connection as Class CC fuse holder with three-phase pin busbars, which can be cut to length.

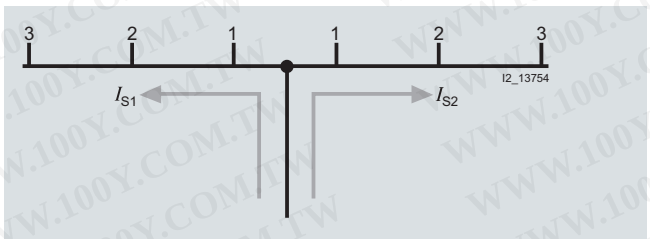
Technical specifications

			5ST, 5SH
Standards			EN 60439-1 (VDE 0660-500): 2005-01
Busbar material			SF-Cu F 24
Partition material			Plastic, Cycoloy 3600 heat-resistant to more than 90 °C flame-retardant and self-extinguishing, dioxin and halogen-free
Rated operational voltage U_c		V AC	400
Rated current I_n			
• Cross-section 10 mm²		A	63
• Cross-section 16 mm²		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
• Degree of pollution			2
Maximum busbar current I_S/phase			
• Infeed at the start of the busbar			
- Cross-section 10 mm²		A	63
- Cross-section 16 mm²		A	80
• Infeed at the center of the busbar			
- Cross-section 10 mm²		A	100
- Cross-section 16 mm²		A	130

Infeed at the start of the busbar

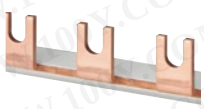
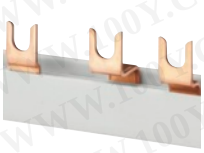


Infeed along the busbar or midpoint infeed

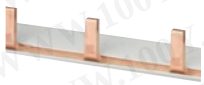


The sum of the output current per branch must not be greater than the busbar current $I_{S1,2}$ / phase.

Selection and ordering data

	Phases	Conductor cross-section	Load capacity up to	Pin spacing	Length	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
		mm^2	A	MW	mm					Unit(s)	Unit(s)	kg
	Busbars											
	For MINIZED switch disconnectors D02 **For NEOZED comfort bases D01/D02** Made of molded plastic 5SG1 01, 5SG5 01											
	For NEOZED fuse bases D01/D02 made of ceramic, **terminal version S** For cylindrical fuse holders 14 x 51 mm For SITOR cylindrical fuse holders 14 x 51 mm, can be cut to length, without end caps											
	Single-phase	16	130	1.5	1016	A	**5ST3 703**		027	1	1	0.190
	Three-phase	16	120	1.5	1016	A	**5ST3 714**		027	1	1	0.430
	For NEOZED fuse switch disconnectors D01											
	Can be cut to length, without end caps											
	Single-phase	16	120	1	1000	B	**5ST2 190**		027	1	1	0.500
	Two-phase					B	**5ST2 191**		027	1	1	0.710
	Three-phase					B	**5ST2 192**		027	1	1	1.100
	Can be cut to length, with 2 end caps											
	Single-phase	16	120	1	220	B	**5ST2 186**		027	1	1	0.090
	Two-phase					B	**5ST2 187**		027	1	1	0.160
	Three-phase					B	**5ST2 188**		027	1	1	0.230
	For NEOZED fuse bases D01/D02 made of molded plastic 5SG1 .30, 5SG1 .31, 5SG5 .30											
	For NEOZED fuse bases D01/D02 made of ceramic **Terminal versions B and K**											
	Non-insulated											
	Single-phase	20	116	1.5	1000	▶	**5SH5 321**		016	1	1	0.214
		36	168	1.5		▶	**5SH5 322**		016	1	1	0.321
	Can be cut to length, without end caps											
	Single-phase	24	160	1.5	1000	A	**5SH5 517**		016	1	1	0.550
	Three-phase	16	120	1.5	1000	▶	**5SH5 320**		016	1	1	0.843

* 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	PG	PU	PS*/ P. unit	Weight per PU approx.
		mm^2	A	MW	mm					Unit(s)	Unit(s)	kg
	For cylindrical fuse holders 8 × 32 mm and 10 × 38 mm For SITOR cylindrical fuse holders 10 × 38 mm For Class CC fuse holders											
	Can be cut to length, without end caps											
	Single-phase	16	120	1	1016	A	**5ST3 701**		027	1	1	0.190
	Two-phase		120	1		A	**5ST3 705**		027	1	1	0.290
	Three-phase	16	120	1	1016	►	**5ST3 710**		027	1	1	0.430
	Cannot be cut to length, fully insulated											
	Single-phase	16		1	214	►	**5ST3 700**		027	1	1	0.040
	Two-phase			1		A	**5ST3 704**		027	1	1	0.060
	Three-phase			1		►	**5ST3 708**		027	1	1	0.100
	End caps for busbars											
	For single-phase 5ST3 7, 5SH5 5 busbars				156	►	**5ST3 748**		027	1	10	0.001
	For three-phase 5ST3 7 and 5SH5 320 busbars					►	**5ST3 750**		027	1	10	0.001
	**Touch protection for free connection of pin busbars**											
	Yellow, (RAL 1004)					A	**5ST3 655**		027	1	10	0.003
	Terminals											
	For NEOZED fuse bases D01/D02 made of ceramic For DIAZED fuse bases DII/DIII, made of ceramic For cylindrical fuse holders											
	Terminal version S For conductors	2 ... 25				►	**5SH5 327**		016	1	10/300	0.014
	Terminal versions B and K For conductors	6 ... 25				►	**5SH5 328**		016	1	10/300	0.014
	For the infeed of fork-type or pin busbars For conductors	6 ... 35				A	**5ST2 157**		027	1	5	0.030

* You can order this quantity or a multiple thereof.

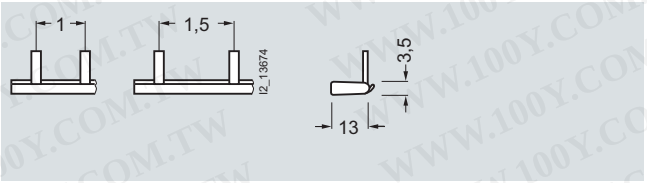
5ST2, 5ST3 busbars, for fuse systems

	Phases	Conductor cross-section	Load capacity up to	Length	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
		mm^2	A	mm					Unit(s)	Unit(s)	kg
	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	A	**5SH3 500**		016	1	1/25	0.095
	Size DIII, for 25 bases Single-phase	39	120	1000	A	**5SH3 501**		016	1	1/25	0.180
	**Busbars For DIAZED bus-mounting bases/EZR with thread for screw adapters**										
	For size DII, 42 5SF6 005 bases Single-phase	48	150	2000	C	**5SH3 54**		016	1	5	0.740
	For size DIII, 34 5SF6 205 bases Single-phase	48	150	2000	C	**5SH3 55**		016	1	5	0.740
	**Bus-mounting terminals** For DIAZED EZR bus-mounting bases										
	Non-insulated										
	For conductors	1.5 ... 16			A	**8JH4 122**		046	1	10	0.012
	For conductors	10 ... 35			A	**8JH4 124**		046	1	10	0.024

Dimensional drawings

5ST3 7

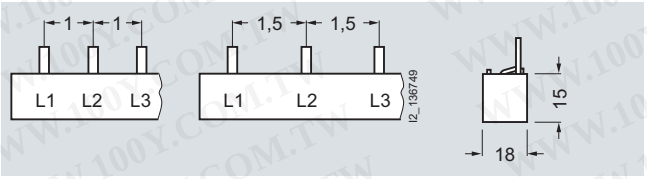
Pin spacing in MW
Dimensions of side views in mm (approx.)



5ST3 700
5ST3 701
Single-phase

5ST3 703
Single-phase

5ST3 704
5ST3 705

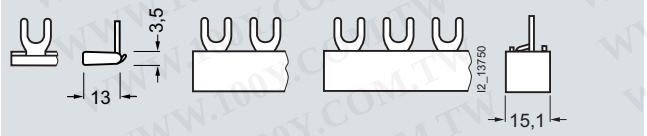


5ST3 708
5ST3 710

5ST3 714

5ST2

Fork spacing in MW
Dimensions of side views in mm (approx.)

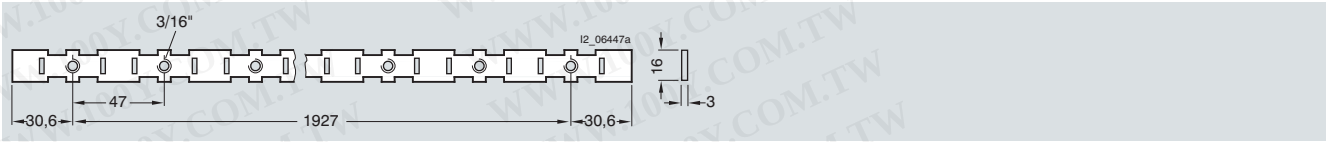


5ST2 186
5ST2 190

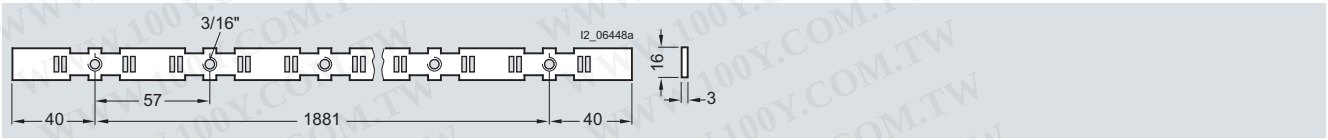
5ST2 187
5ST2 188
5ST2 191
5ST2 192

* You can order this quantity or a multiple thereof.

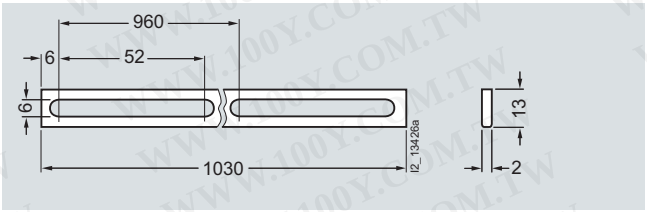
Busbars for DIAZED EZR fuse bases



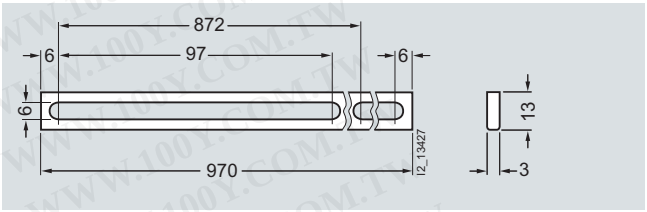
5SH3 54



5SH3 55



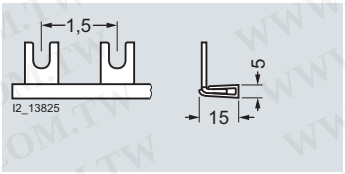
5SH3 500



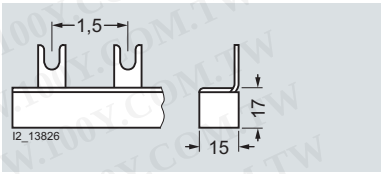
5SH3 501

5SH5

Fork spacing in MW
Dimensions of side views in mm (approx.)



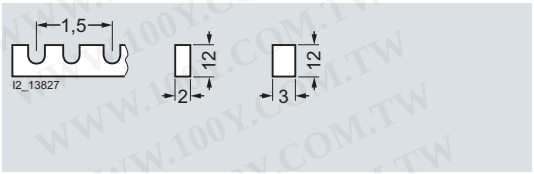
5SH5 517



5SH5 320

5SH5

Fork spacing in MW
Dimensions of side views in mm (approx.)



5SH5 321 5SH5 322

Overview

LV HRC fuses are used for installation systems in non-residential, commercial and industrial buildings, as well as in the switchboards of power supply companies. They therefore protect essential building parts and installations.

LV HRC fuses are fuse systems designed for operation by skilled personnel. 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 fuses or isolation of systems.

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

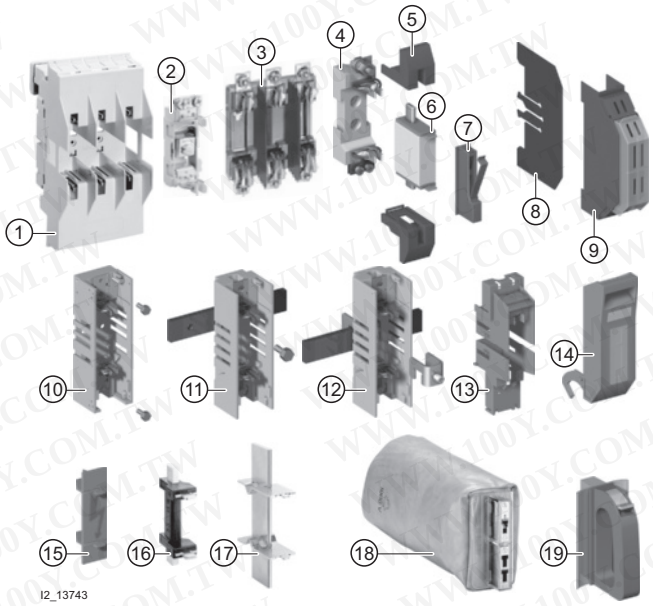
LV HRC fuse links are available in the following operational classes:

- gG for cable and line protection
- aM for the short-circuit protection of switching devices in motor circuits
- gR or aR for the 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 in 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:

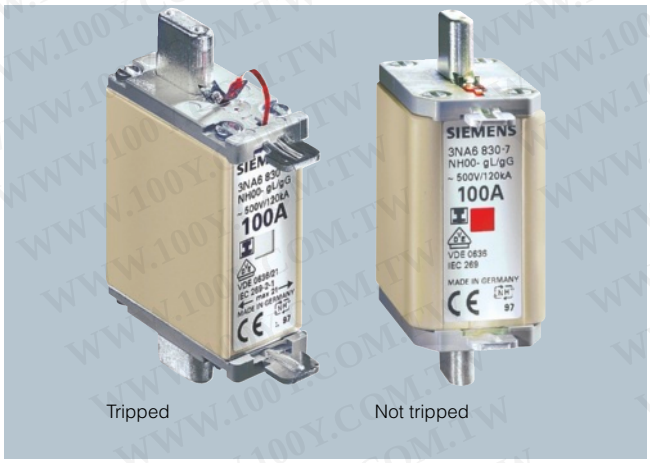


① LV HRC fuse base from the SR60 busbar system
② LV HRC fuse base for busbar mounting
③ LV HRC fuse base, 3P
④ LV HRC fuse base, 1P
⑤ LV HRC contact cover
⑥ LV HRC fuse link
⑦ LV HRC signal detector
⑧ LV HRC partition
⑨ LV HRC protective cover

LV HRC fuse bases with swivel mechanism

⑩ - For screw fixing on mounting plate
⑪ - For screw fixing on busbar system
⑫ - For claw fixing on busbar
⑬ LV HRC protective cover for LV HRC fuse bases with swivel mechanism
⑭ LV HRC swivel mechanism
⑮ LV HRC fuse base cover
⑯ LV HRC isolating link with insulated grip lugs
⑰ LV HRC isolating link with non-insulated grip lugs
⑱ LV HRC fuse puller with sleeve
⑲ LV HRC fuse puller

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 plant 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 when replacing. 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 blades. 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 3NY1 8..	3NA6 ... 3NA6 ...-7 3NA7 ... 3NA7 ...-7	3NA3 ... 3NA3 ...-7	3NA6 ...-6 3NA7 ...-6	3NA3 ...-6	3ND1 3ND2
Standards **Approved acc. to**		IEC 60269-1, -2; EN 60269-1; DIN VDE 0636 DIN VDE 0636-2; CSA 22.2 No.106, File No. 1710842					
Rated voltage U_n							
• Sizes 000 and 00	V AC	400	500	500	690	690	500
	V DC	--	250	250	250	250	--
• Sizes 1 and 2	V AC	400	500	500	690	690	690
	V DC	--	440	440	440	440	--
• Size 3	V AC			500		690	690
	V DC			440		--	
• Sizes (IEC design)	V AC			500		--	
4 and 4a	V DC			400		--	
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					

Selection and ordering data

	Sizes	Mounting width	I_n	U_n	DT	Insulated grip lugs Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
		mm	A	V AC/ V DC					Unit(s)	Unit(s)	kg
	LV HRC fuse links with combination alarm, operational class gG										
	000	21	10	400/--	B	**3NA6 803-4**		013	1	3	0.135
			16		B	**3NA6 805-4**		013	1	3	0.135
			20		B	**3NA6 807-4**		013	1	3	0.135
			25		B	**3NA6 810-4**		013	1	3	0.135
			32		B	**3NA6 812-4**		013	1	3	0.135
			35		B	**3NA6 814-4**		013	1	3	0.135
			40		B	**3NA6 817-4**		013	1	3	0.135
			50		B	**3NA6 820-4**		013	1	3	0.135
			63		B	**3NA6 822-4**		013	1	3	0.135
			80		B	**3NA6 824-4**		013	1	3	0.135
			100		B	**3NA6 830-4**		013	1	3	0.135
	00	30	80	400/--	B	**3NA6 824-4KK**		013	1	3	0.200
			100		B	**3NA6 830-4KK**		013	1	3	0.200
			125		B	**3NA6 832-4**		013	1	3	0.200
			160		B	**3NA6 836-4**		013	1	3	0.200
	1	30	35	400/--	B	**3NA6 114-4**		013	1	3	0.290
			40		B	**3NA6 117-4**		013	1	3	0.290
			50		B	**3NA6 120-4**		013	1	3	0.290
			63		B	**3NA6 122-4**		013	1	3	0.290
			80		B	**3NA6 124-4**		013	1	3	0.290
			100		B	**3NA6 130-4**		013	1	3	0.290
			125		B	**3NA6 132-4**		013	1	3	0.290
			160		B	**3NA6 136-4**		013	1	3	0.290
		47.2	200		B	**3NA6 140-4**		013	1	3	0.430
			224		B	**3NA6 142-4**		013	1	3	0.430
			250		B	**3NA6 144-4**		013	1	3	0.430
	2	47.2	50	400/--	B	**3NA6 220-4**		013	1	3	0.450
			63		B	**3NA6 222-4**		013	1	3	0.450
			80		B	**3NA6 224-4**		013	1	3	0.450
			100		B	**3NA6 230-4**		013	1	3	0.450
			125		B	**3NA6 232-4**		013	1	3	0.450
			160		B	**3NA6 236-4**		013	1	3	0.450
			200		B	**3NA6 240-4**		013	1	3	0.450
			224		B	**3NA6 242-4**		013	1	3	0.450
			250		B	**3NA6 244-4**		013	1	3	0.450
		57.8	300		B	**3NA6 250-4**		013	1	3	0.650
			315		B	**3NA6 252-4**		013	1	3	0.650
			355		B	**3NA6 254-4**		013	1	3	0.650
			400		B	**3NA6 260-4**		013	1	3	0.650

* You can order this quantity or a multiple thereof.

	Size	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	PG	PU	PS*/ P. unit	Weight per PU approx.
			A	V AC/ V DC									Unit(s)	Unit(s)	kg
	LV HRC fuse links with combination alarm, operational class gG														
	000	21	2	500/	B	**3NA7 802**		013	B	**3NA6 802**		013	1	3	0.135
			4	250	B	**3NA7 804**		013	B	**3NA6 804**		013	1	3	0.135
			6		B	**3NA7 801**		013	B	**3NA6 801**		013	1	3	0.135
			10		B	**3NA7 803**		013	B	**3NA6 803**		013	1	3	0.136
			16		▶	**3NA7 805**		013	▶	**3NA6 805**		013	1	3	0.136
			20		▶	**3NA7 807**		013	▶	**3NA6 807**		013	1	3	0.136
			25		▶	**3NA7 810**		013	▶	**3NA6 810**		013	1	3	0.600
			32		B	**3NA7 812**		013	B	**3NA6 812**		013	1	3	0.136
			35		▶	**3NA7 814**		013	▶	**3NA6 814**		013	1	3	0.440
			40		B	**3NA7 817**		013	B	**3NA6 817**		013	1	3	0.136
			50		▶	**3NA7 820**		013	▶	**3NA6 820**		013	1	3	0.128
			63		▶	**3NA7 822**		013	▶	**3NA6 822**		013	1	3	0.120
			80		▶	**3NA7 824**		013	▶	**3NA6 824**		013	1	3	0.128
			100		▶	**3NA7 830**		013	▶	**3NA6 830**		013	1	3	0.120
	00	30	80	500/	B	**3NA7 824-7**		013	B	**3NA6 824-7**		013	1	3	0.211
			100	250	B	**3NA7 830-7**		013	B	**3NA6 830-7**		013	1	3	0.211
			125		▶	**3NA7 832**		013	▶	**3NA6 832**		013	1	3	0.200
			160		▶	**3NA7 836**		013	A	**3NA6 836**		013	1	3	0.200
	1	30	16	500/	B	**3NA7 105**		013	B	**3NA6 105**		013	1	3	0.290
			20	440	B	**3NA7 107**		013	B	**3NA6 107**		013	1	3	0.290
			25		B	**3NA7 110**		013	B	**3NA6 110**		013	1	3	0.290
			35		B	**3NA7 114**		013	B	**3NA6 114**		013	1	3	0.290
			40		B	**3NA7 117**		013	B	**3NA6 117**		013	1	3	0.290
			50		B	**3NA7 120**		013	B	**3NA6 120**		013	1	3	0.290
			63		B	**3NA7 122**		013	B	**3NA6 122**		013	1	3	0.290
			80		B	**3NA7 124**		013	▶	**3NA6 124**		013	1	3	0.290
			100		B	**3NA7 130**		013	▶	**3NA6 130**		013	1	3	0.290
			125		▶	**3NA7 132**		013	▶	**3NA6 132**		013	1	3	0.290
			160		▶	**3NA7 136**		013	▶	**3NA6 136**		013	1	3	0.290
		47.2	200		▶	**3NA7 140**		013	▶	**3NA6 140**		013	1	3	0.440
			224		B	**3NA7 142**		013	B	**3NA6 142**		013	1	3	0.440
			250		▶	**3NA7 144**		013	▶	**3NA6 144**		013	1	3	0.400
	2	47.2	35	500/	B	**3NA7 214**		013	B	**3NA6 214**		013	1	3	0.450
			50	440	B	**3NA7 220**		013	B	**3NA6 220**		013	1	3	0.450
			63		B	**3NA7 222**		013	B	**3NA6 222**		013	1	3	0.450
			80		B	**3NA7 224**		013	B	**3NA6 224**		013	1	3	0.450
			100		B	**3NA7 230**		013	B	**3NA6 230**		013	1	3	0.450
			125		B	**3NA7 232**		013	B	**3NA6 232**		013	1	3	0.450
			160		▶	**3NA7 236**		013	▶	**3NA6 236**		013	1	3	0.450
			200		▶	**3NA7 240**		013	▶	**3NA6 240**		013	1	3	0.450
			224		B	**3NA7 242**		013	B	**3NA6 242**		013	1	3	0.450
			250		▶	**3NA7 244**		013	▶	**3NA6 244**		013	1	3	0.450
		57.8	300			**--**			B	**3NA6 250**		013	1	3	0.641
			315		▶	**3NA7 252**		013	▶	**3NA6 252**		013	1	3	0.660
			355			**--**			B	**3NA6 254**		013	1	3	0.641
			400		▶	**3NA7 260**		013	▶	**3NA6 260**		013	1	3	0.660

* You can order this quantity or a multiple thereof.

3NA, 3ND LV HRC fuse links

	Sizes	Mounting width	I_n	U_n	DT	Non-insulated grip lugs Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
		mm	A	V AC/ V DC					Unit(s)	Unit(s)	kg
	LV HRC fuse links with front indicator, operational class gG										
	000	21	2	500/250	▶	**3NA3 802**		013	1	3	0.133
			4		▶	**3NA3 804**		013	1	3	0.133
			6		▶	**3NA3 801**		013	1	3	0.133
			10		▶	**3NA3 803**		013	1	3	0.133
			16		▶	**3NA3 805**		013	1	3	0.133
			20		▶	**3NA3 807**		013	1	3	0.133
			25		▶	**3NA3 810**		013	1	3	0.133
			32		▶	**3NA3 812**		013	1	3	0.133
			35		▶	**3NA3 814**		013	1	3/90	0.133
			40		▶	**3NA3 817**		013	1	3	0.133
			50		▶	**3NA3 820**		013	1	3/90	0.133
			63		▶	**3NA3 822**		013	1	3/90	0.133
			80		▶	**3NA3 824**		013	1	3/90	0.133
			100		▶	**3NA3 830**		013	1	3/90	0.133
			125		▶	**3NA3 832-8**		013	1	3	0.160
			160	400/250	▶	**3NA3 836-8**		013	1	3	0.160
	00	30	35	500/250	B	**3NA3 814-7**		013	1	3	0.200
			50		B	**3NA3 820-7**		013	1	3	0.200
			63		B	**3NA3 822-7**		013	1	3	0.200
			80		B	**3NA3 824-7**		013	1	3	0.200
			100		B	**3NA3 830-7**		013	1	3	0.200
			125		▶	**3NA3 832**		013	1	3	0.217
			160		▶	**3NA3 836**		013	1	3	0.217
	0	30	6	500/440	B	**3NA3 001**		013	1	3	0.340
			10		B	**3NA3 003**		013	1	3	0.340
			16		B	**3NA3 005**		013	1	3	0.340
			20		B	**3NA3 007**		013	1	3	0.340
			25		B	**3NA3 010**		013	1	3	0.340
			32		B	**3NA3 012**		013	1	3	0.340
			35		B	**3NA3 014**		013	1	3	0.340
			40		B	**3NA3 017**		013	1	3	0.340
			50		B	**3NA3 020**		013	1	3	0.340
			63		A	**3NA3 022**		013	1	3	0.340
			80		B	**3NA3 024**		013	1	3	0.340
			100		A	**3NA3 030**		013	1	3	0.340
			125		A	**3NA3 032**		013	1	3	0.340
			160		A	**3NA3 036**		013	1	3	0.340
	1	30	16	500/440	B	**3NA3 105**		013	1	3	0.290
			20		B	**3NA3 107**		013	1	3	0.290
			25		B	**3NA3 110**		013	1	3	0.290
			35		B	**3NA3 114**		013	1	3	0.300
			40		B	**3NA3 117**		013	1	3	0.300
			50		B	**3NA3 120**		013	1	3	0.300
			63		▶	**3NA3 122**		013	1	3	0.300
			80		▶	**3NA3 124**		013	1	3	0.300
			100		▶	**3NA3 130**		013	1	3	0.300
			125		▶	**3NA3 132**		013	1	3	0.300
			160		▶	**3NA3 136**		013	1	3	0.300
		47.2	200		▶	**3NA3 140**		013	1	3	0.440
			224		A	**3NA3 142**		013	1	3	0.440
			250		▶	**3NA3 144**		013	1	3	0.440

* 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	PG	PU	PS*/ P. unit	Weight per PU approx.
		mm	A	V AC/ V DC					Unit(s)	Unit(s)	kg
	LV HRC fuse links with front indicator, operational class gG										
	2	47.2	35	500/440	B	**3NA3 214**		013	1	3	0.453
			50		B	**3NA3 220**		013	1	3	0.453
			63		A	**3NA3 222**		013	1	3	0.453
			80		A	**3NA3 224**		013	1	3	0.453
			100		A	**3NA3 230**		013	1	3	0.453
			125		A	**3NA3 232**		013	1	3	0.453
			160		▶	**3NA3 236**		013	1	3	0.453
			200		▶	**3NA3 240**		013	1	3	0.453
			224		▶	**3NA3 242**		013	1	3	0.453
			250		▶	**3NA3 244**		013	1	3	0.453
		57.8	300		A	**3NA3 250**		013	1	3	0.647
			315		▶	**3NA3 252**		013	1	3	0.647
			355		▶	**3NA3 254**		013	1	3	0.647
			400		▶	**3NA3 260**		013	1	3	0.647
	3	57.8	200	500/440	B	**3NA3 340**		013	1	3	0.647
			224		B	**3NA3 342**		013	1	3	0.640
			250		A	**3NA3 344**		013	1	3	0.647
			300		B	**3NA3 350**		013	1	3	0.647
			315		▶	**3NA3 352**		013	1	3	0.647
			355		A	**3NA3 354**		013	1	3	0.647
			400		▶	**3NA3 360**		013	1	3	0.647
		71.2	425		A	**3NA3 362**		013	1	3	1.000
			500		▶	**3NA3 365**		013	1	3	1.000
			630		▶	**3NA3 372**		013	1	3	1.000
	Can only be used for 3NH3 530 LV HRC fuse base										
	4 (IEC design)	101.8	630	500/440	B	**3NA3 472**		013	1	1	2.500
			800		A	**3NA3 475**		013	1	1	2.500
			1000		A	**3NA3 480**		013	1	1	2.500
			1250		A	**3NA3 482**		013	1	1	2.500
	Can only be used for 3NH7 520 LV HRC fuse base										
	4a	101.8	500	500/440	B	**3NA3 665**		013	1	1	2.700
			630		B	**3NA3 672**		013	1	1	2.700
			800		A	**3NA3 675**		013	1	1	2.700
			1000		A	**3NA3 680**		013	1	1	2.840
			1250		A	**3NA3 682**		013	1	1	2.840

* You can order this quantity or a multiple thereof.

3NA, 3ND LV HRC fuse links

	Size	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	PG	PU	PS*/ P. unit	Weight per PU approx.
			A	V AC/ V DC									Unit(s)	Unit(s)	kg
	LV HRC fuse links with combination alarm, operational class gG														
	000	21	2	690/ 250	B	**3NA7 802-6**		013	B	**3NA6 802-6**		013	1	3	0.136
			4		B	**3NA7 804-6**		013	B	**3NA6 804-6**		013	1	3	0.136
			6		B	**3NA7 801-6**		013	B	**3NA6 801-6**		013	1	3	0.136
			10		B	**3NA7 803-6**		013	B	**3NA6 803-6**		013	1	3	0.136
			16		B	**3NA7 805-6**		013	B	**3NA6 805-6**		013	1	3	0.136
			20		B	**3NA7 807-6**		013	B	**3NA6 807-6**		013	1	3	0.136
			25		B	**3NA7 810-6**		013	B	**3NA6 810-6**		013	1	3	0.136
			32		B	**3NA7 812-6**		013	B	**3NA6 812-6**		013	1	3	0.136
			35		B	**3NA7 814-6**		013	B	**3NA6 814-6**		013	1	3	0.136
	00	30	40	690/ 250	B	**3NA7 817-6**		013	B	**3NA6 817-6**		013	1	3	0.211
			50		B	**3NA7 820-6**		013	B	**3NA6 820-6**		013	1	3	0.211
			63		B	**3NA7 822-6**		013	B	**3NA6 822-6**		013	1	3	0.211
			80		B	**3NA7 824-6**		013	B	**3NA6 824-6**		013	1	3	0.211
			100		B	**3NA7 830-6**		013	B	**3NA6 830-6**		013	1	3	0.211
	1	30	50	690/ 440	B	**3NA7 120-6**		013	B	**3NA6 120-6**		013	1	3	0.290
			63		B	**3NA7 122-6**		013	B	**3NA6 122-6**		013	1	3	0.290
			80		B	**3NA7 124-6**		013	B	**3NA6 124-6**		013	1	3	0.290
			100		B	**3NA7 130-6**		013	B	**3NA6 130-6**		013	1	3	0.290
			125		B	**3NA7 132-6**		013	B	**3NA6 132-6**		013	1	3	0.290
			160		B	**3NA7 136-6**		013	B	**3NA6 136-6**		013	1	3	0.290
		47.2	200		B	**3NA7 140-6**		013	B	**3NA6 140-6**		013	1	3	0.440
	2	47.2	80	690/ 440	B	**3NA7 224-6**		013	B	**3NA6 224-6**		013	1	3	0.450
			100		B	**3NA7 230-6**		013	B	**3NA6 230-6**		013	1	3	0.450
			125		B	**3NA7 232-6**		013	B	**3NA6 232-6**		013	1	3	0.450
			160		B	**3NA7 236-6**		013	B	**3NA6 236-6**		013	1	3	0.450
			200		B	**3NA7 240-6**		013	B	**3NA6 240-6**		013	1	3	0.450
		57.8	224		B	**3NA7 242-6**		013	B	**3NA6 242-6**		013	1	3	0.660
			250		B	**3NA7 244-6**		013	B	**3NA6 244-6**		013	1	3	0.660
			300		B	**3NA7 250-6**		013	B	**3NA6 250-6**		013	1	3	0.660
			315		B	**3NA7 252-6**		013	B	**3NA6 252-6**		013	1	3	0.660

* 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	PG	PU	PS*/ P. unit	Weight per PU approx.
		mm	A	V AC/ V DC					Unit(s)	Unit(s)	kg
	LV HRC fuse links with front indicator, operational class gC										
	000	21	2	690/250	►	**3NA3 802-6**		013	1	3	0.135
			4		►	**3NA3 804-6**		013	1	3	0.135
			6		►	**3NA3 801-6**		013	1	3	0.135
			10		►	**3NA3 803-6**		013	1	3	0.135
			16		►	**3NA3 805-6**		013	1	3	0.135
			20		►	**3NA3 807-6**		013	1	3	0.135
			25		►	**3NA3 810-6**		013	1	3	0.135
			32		B	**3NA3 812-6**		013	1	3	0.135
			35		►	**3NA3 814-6**		013	1	3	0.135
	00	30	40	690/250	B	**3NA3 817-6**		013	1	3	0.200
			50		►	**3NA3 820-6**		013	1	3	0.200
			63		►	**3NA3 822-6**		013	1	3	0.200
			80		►	**3NA3 824-6**		013	1	3	0.200
			100		►	**3NA3 830-6**		013	1	3	0.200
	1	30	50	690/440	B	**3NA3 120-6**		013	1	3	0.290
			63		B	**3NA3 122-6**		013	1	3	0.290
			80		B	**3NA3 124-6**		013	1	3	0.290
			100		►	**3NA3 130-6**		013	1	3	0.290
			125		►	**3NA3 132-6**		013	1	3	0.290
			160		►	**3NA3 136-6**		013	1	3	0.290
		47.2	200		►	**3NA3 140-6**		013	1	3	0.426
	2	47.2	80	690/440	B	**3NA3 224-6**		013	1	3	0.426
			100		B	**3NA3 230-6**		013	1	3	0.426
			125		B	**3NA3 232-6**		013	1	3	0.426
			160		►	**3NA3 236-6**		013	1	3	0.426
			200		►	**3NA3 240-6**		013	1	3	0.426
		57.8	224		B	**3NA3 242-6**		013	1	3	0.660
			250		►	**3NA3 244-6**		013	1	3	0.680
			300		B	**3NA3 250-6**		013	1	3	0.660
			315		►	**3NA3 252-6**		013	1	3	0.680
	3	57.8	250	690/440	B	**3NA3 344-6**		013	1	3	0.660
			315		B	**3NA3 352-6**		013	1	3	0.660
		71.2	355		B	**3NA3 354-6**		013	1	3	1.000
			400		►	**3NA3 360-6**		013	1	3	1.000
			425		B	**3NA3 362-6**		013	1	3	1.000
			500		►	**3NA3 365-6**		013	1	3	1.000

* You can order this quantity or a multiple thereof.

3NA, 3ND LV HRC fuse links

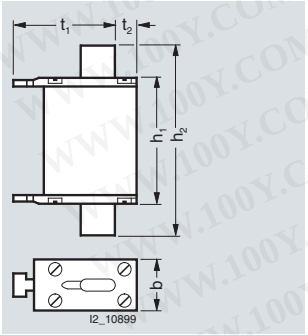
	Sizes	Mounting width	I_n	U_n	DT	Non-insulated grip lugs Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
		mm	A	V AC/ V DC					Unit(s)	Unit(s)	kg
	LV HRC fuse links with front indicator, operational class aM										
	000	21	6	500/--	B	**3ND1 801**		014	1	3	0.130
			10		B	**3ND1 803**		014	1	3	0.130
			16		B	**3ND1 805**		014	1	3	0.130
			20		B	**3ND1 807**		014	1	3	0.130
			25		B	**3ND1 810**		014	1	3	0.130
			32		B	**3ND1 812**		014	1	3	0.130
			35		B	**3ND1 814**		014	1	3	0.130
			40		B	**3ND1 817**		014	1	3	0.130
			50		B	**3ND1 820**		014	1	3	0.130
			63		B	**3ND1 822**		014	1	3	0.130
			80		B	**3ND1 824**		014	1	3	0.130
	00	30	100	500/--	B	**3ND1 830**		014	1	3	0.192
			125		B	**3ND1 832**		014	1	3	0.192
			160		B	**3ND1 836**		014	1	3	0.192
	1	30	63	690/--	B	**3ND2 122**		014	1	3	0.290
			80		B	**3ND2 124**		014	1	3	0.290
			100		B	**3ND2 130**		014	1	3	0.440
		47.2	125		B	**3ND2 132**		014	1	3	0.440
			160		B	**3ND2 136**		014	1	3	0.440
			200		B	**3ND2 140**		014	1	3	0.440
			250		B	**3ND2 144**		014	1	3	0.440
	2	47.2	125	690/--	B	**3ND2 232**		014	1	3	0.440
			160		B	**3ND2 236**		014	1	3	0.440
			200		B	**3ND2 240**		014	1	3	0.440
			250		B	**3ND2 244**		014	1	3	0.440
		57.8	315		B	**3ND2 252**		014	1	3	0.650
			355		B	**3ND2 254**		014	1	3	0.650
			400		A	**3ND2 260**		014	1	3	0.650
	3	57.8	315	690/--	B	**3ND2 352**		014	1	3	0.650
			355		B	**3ND2 354**		014	1	3	0.650
			400		B	**3ND2 360**		014	1	3	0.650
		71.2	500		B	**3ND1 365**		014	1	3	1.030
			630		B	**3ND1 372**		014	1	3	1.000

* You can order this quantity or a multiple thereof.

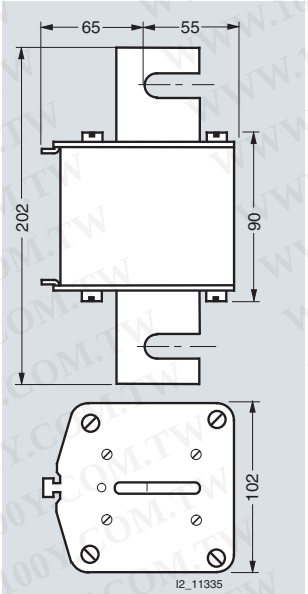
Dimensional drawings

LV HRC fuse links, operational class gG

Sizes 000 to 3 and 4a



Size 4 (IEC design)

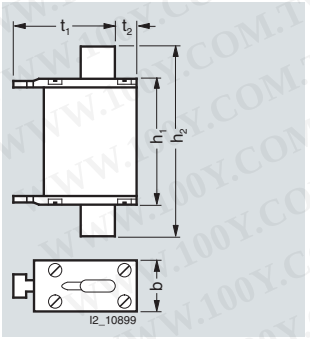


Size	I_n A	U_n V	Type	Dimensions b	h_1	h_2	t_1	t_2
000	2 ... 35	690 V AC/ 250 V DC	3NA3 8..-6	21	54	80	45	8
	2 ... 160	500 V AC	3NA3 8../-8					
	2 ... 100	500 V AC/250 V DC	3NA6 8..					
	10 ... 100	400 V AC	3NA6 8..-4					
	2 ... 35	690 V AC/250 V DC	3NA6 8..-6					
	10 ... 100	500 V AC/250 V DC	3NA7 8..					
	2 ... 35	690 V AC/250 V DC	3NA7 8..-6					
00	35 ... 160	500 V AC/250 V DC	3NA3 8..	30	54	80	45	14
	40 ... 100	690 V AC/250 V DC	3NA3 8..-6					
	80 ... 160	500 V AC/250 V DC	3NA6 8../-7					
	80 ... 160	400 V AC	3NA6 8..-4 (KK)					
	40 ... 100	690 V AC/250 V DC	3NA6 8..-6					
	80 ... 160	500 V AC/250 V DC	3NA7 8../-7					
	40 ... 100	690 V AC/250 V DC	3NA7 8..-6					
0	6 ... 160	500 V AC/440 V DC	3NA3 0..	30	67	126	45	14
1	16 ... 160	500 V AC/440 V DC	3NA3 1..	30	75	137	50	15
	50 ... 160	690 V AC/440 V DC	3NA3 1..-6					
	16 ... 160	500 V AC/440 V DC	3NA6 1..					
	35 ... 160	400 V AC	3NA6 1..-4					
	50 ... 160	690 V AC/440 V DC	3NA6 1..-6					
	16 ... 160	500 V AC/440 V DC	3NA7 1..					
	50 ... 160	690 V AC/440 V DC	3NA7 1..-6					
	200 ... 250	500 V AC/440 V DC	3NA3 1..	47	75	137	51	9
	200	690 V AC/440 V DC	3NA3 1..-6					
	200 ... 250	500 V AC/440 V DC	3NA6 1..					
	200 ... 250	400 V AC	3NA6 1..-4					
	200	690 V AC/440 V DC	3NA6 1..-6					
	200 ... 250	500 V AC/440 V DC	3NA7 1..					
	200	690 V AC/440 V DC	3NA7 1..-6					
2	35 ... 250	500 V AC/440 V DC	3NA3 2..	47	75	151	58	10
	80 ... 200	690 V AC/440 V DC	3NA3 2..-6					
	35 ... 250	500 V AC/440 V DC	3NA6 2..					
	50 ... 250	400 V AC	3NA6 2..-4					
	80 ... 200	690 V AC/440 V DC	3NA6 2..-6					
	35 ... 250	500 V AC/440 V DC	3NA7 2..					
	80 ... 200	690 V AC/440 V DC	3NA7 2..-6					
	300 ... 400	500 V AC/440 V DC	3NA3 2..	58	74	151	59	13
	224 ... 250	690 V AC/440 V DC	3NA3 2..-6					
	300 ... 400	500 V AC/440 V DC	3NA6 2..					
	300 ... 400	400 V AC	3NA6 2..-4					
	224 ... 315	690 V AC/440 V DC	3NA6 2..-6					
	300 ... 400	500 V AC/440 V DC	3NA7 2..					
	224 ... 315	690 V AC/440 V DC	3NA7 2..-6					
3	200 ... 400	500 V AC/440 V DC	3NA3 3..	58	74	151	71	13
	250, 315	690 V AC/440 V DC	3NA3 3..-6					
	425 ... 630	500 V AC/440 V DC	3NA3 3..	71	74	151	70	13
	355 ... 500	690 V AC/440 V DC	3NA3 3..-6					
4	630 ... 1250	500 V AC/440 V DC	3NA3 4..	See adjacent drawing				
4a	500 ... 1250	500 V AC/440 V DC	3NA3 6..	102	97	201	95	20

3NA, 3ND LV HRC fuse links

LV HRC fuse links, operational class aM

Size 000 to 3



Size	I_n	U_n	Type	Dimensions				
	A	V		b	h_1	h_2	t_1	t_2
000	6 ... 80	500 V AC	3ND1 8..	21	54	80	45	8
00	100 ... 160			30	54	80	45	14
1	63 ... 100	690 V AC	3ND2 1..	30	75	137	50	15
	125 ... 250			47	75	137	51	9
2	125 ... 250	690 V AC	3ND2 2..	47	75	151	58	10
	315 ... 400			58	74	151	59	13
3	315 ... 400	690 V AC	3ND2 3..	58	74	151	71	13
	500, 630		3ND1 3..	71	74	151	70	13

Overview

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

- 3NX1 021 signal detectors with signal detector link 3

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 LV HRC fuse signaling 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 monitors

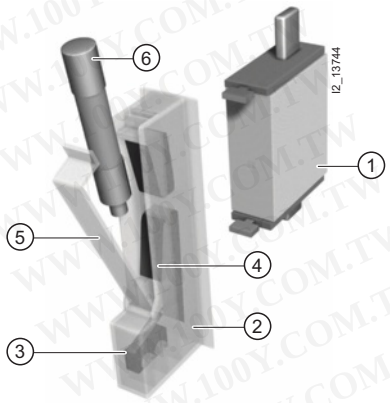
If a fuse is tripped, the front indicator springs open and switches a floating microswitch. This solution should not be used for safety-relevant plants. For this purpose, we recommend our electronic fuse monitors.

Benefits

Uniform solution for all sizes

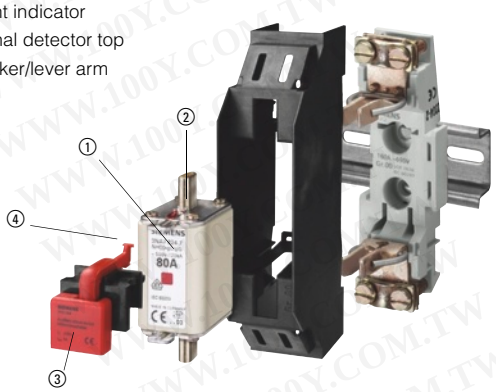
LV HRC signal detectors reliably indicate when a fuse has tripped. Tripped fuses are quickly located. This saves time and increases plant availability.

① LV HRC fuse link
② LV HRC signal detector
③ Microswitch
④ Spring contact
⑤ Hinged lid
⑥ Signal detector link



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.

① LV HRC fuse link
② Front indicator
③ Signal detector top
④ Rocker/lever arm



Selection and ordering data

		Sizes	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
							Unit(s)	Unit(s)	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	A	**3NX1 021**		014	1	1	0.036
	**Signal detector links** • Rated voltage up to 690 V AC/ 600 V DC	000 ... 4							
	Response value > 9 V; 2.5 A; For standard applications		A	**3NX1 022**		014	1	3	0.015
	Response value > 2 V; 7 A; Only for meshed networks		C	**3NX1 023**		014	1	3	0.015
	**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: Microswitches 230 V AC, 5 A, 1 W • Connection: flat termination 2.3 mm	000, 00, 1, 2	►	**3NX1 024**		014	1	1	0.010

* You can order this quantity or a multiple thereof.

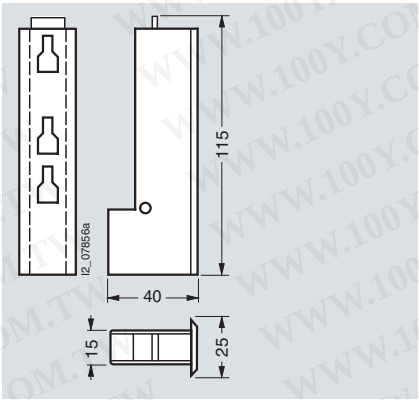
3NX1 LV HRC signal detectors

	U_e	I_n	U_c	MW	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
	V AC	A	V						Unit(s)	Unit(s)	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	3 380 ... 415 AC	2	▶	**5TT3 170**		027	1	1	0.150

For more information on fuse monitors, please refer to the chapter "Monitoring of electrical values".

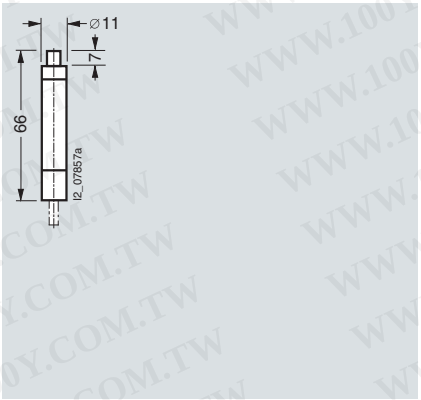
Dimensional drawings

LV HRC signal detector



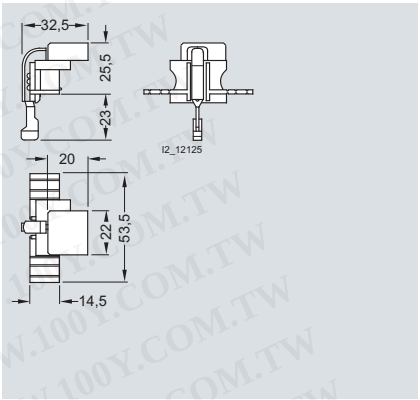
3NX1 021

Signal detector link



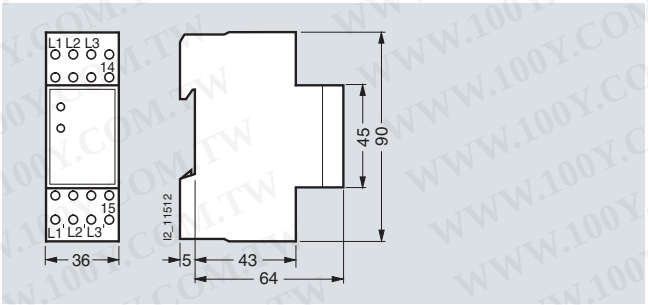
3NX1 022, 3NX1 023

Signal detector top



3NX1 024

Fuse monitor



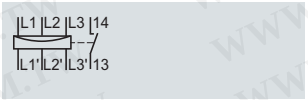
5TT3 170

Schematics

LV HRC signal detector
Signal detector top

3NX1 021
3NX1 024

Fuse monitor



5TT3 170

* You can order this quantity or a multiple thereof.

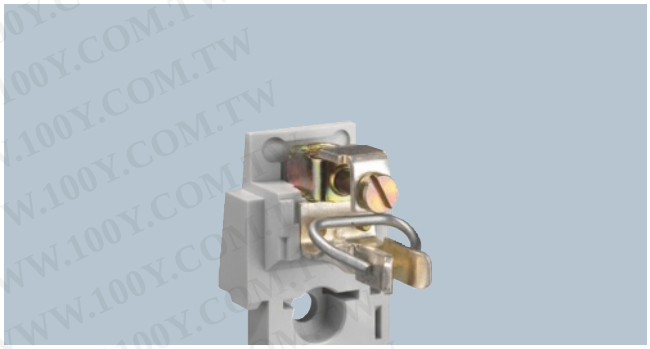
Overview

Terminals for all applications

Terminals are as different as the requirements of individual systems.

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.

In the case of flat terminals with nuts, connection of the nut to the terminal lug is torsion-proof. When tightening the nut, the torque must be observed because of the considerable leverage effect.

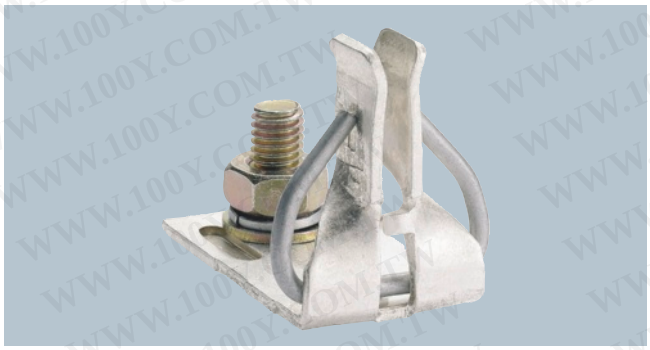
Up to three conductors can be clamped to the terminal strip.

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

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

3NH LV HRC fuse bases

Benefits



- The silver-plated Lyra contact provides a large contact area for the contact blade of the LV HRC fuse link. This improves heat transmission and lowers the temperature. It also minimizes 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 that tensions the contact is mechanically galvanized. This prevents 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; DIN VDE 0636-2					
Rated current I_n	A	160	160	250	400	630	1250
Rated voltage U_n	V AC	690	690 (Also suitable for 1000 V SITOR fuse links)				
	V DC	250	440				
Rated breaking capacity	kA AC	120					
	kA DC	25					
Flat terminals							
Screw		M8		M10		M12	
Nut		M8	--				
Max. tightening torque	Nm	14		38			65
Plug-in terminals							
Conductor cross-section	mm^2	2.5 ... 50		--			
Saddle-type terminals							
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			--

		LV HRC fuse bases with swivel mechanism			
Size		**000/00**	**1**	**3**	**4a**
Rated voltage U_n	V AC	690			
	V DC	440			
Power loss	W	4	5	20	32
Flat terminals					
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	PG	PU Unit(s)	PS*/ P. unit Unit(s)	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**		014	1	1/10	0.119
		With saddle-type terminals	▶	**3NH3 052**		014	1	1/10	0.114
	125	With box terminals, up to 50 mm^2	▶	**3NH3 053**		014	1	1/10	0.109
Made of ceramic for screw fixing									
000/00	160	1P							
		With flat terminals, screw	▶	**3NH3 030**		014	1	3	0.235
		With plug-in terminals	B	**3NH3 031**		014	1	3	0.230
		With saddle-type terminals	▶	**3NH3 032**		014	1	3	0.266
		With flat terminals and terminal strip	B	**3NH3 035**		014	1	3	0.230
		With flat terminals, nut	B	**3NH3 038**		014	1	3	0.207
		With flat and saddle-type terminals	B	**3NH3 050**		014	1	3	0.227
		3P (incl. two partitions)							
		With flat terminals	▶	**3NH4 030**		014	1	1	0.700
		With plug-in terminals	B	**3NH4 031**		014	1	1	0.800
		With saddle-type terminals	B	**3NH4 032**		014	1	1	0.800
		With flat terminals and terminal strip	B	**3NH4 035**		014	1	1	0.750
Made of ceramic for screw fixing									
0	160	1P							
		With flat terminals	A	**3NH3 120**		014	1	3	0.460
		With plug-in terminals	B	**3NH3 122**		014	1	3	0.460
Made of ceramic for screw fixing									
1	250	1P							
		With flat terminals	▶	**3NH3 230**		014	1	3	0.789
		With double busbar terminals	B	**3NH3 220**		014	1	3	0.789
Ceramic supports on base plate for screw fixing									
1	250	3P (incl. two partitions)							
		With flat terminals	A	**3NH4 230**		014	1	1	2.100
Made of ceramic for screw fixing									
2	400	1P							
		With flat terminals	▶	**3NH3 330**		014	1	1	0.843
		With double busbar terminals	A	**3NH3 320**		014	1	1	1.000
Made of ceramic for screw fixing									
3	630	1P							
		With flat terminals	▶	**3NH3 430**		014	1	1	1.100
		With double busbar terminals	A	**3NH3 420**		014	1	1	1.100

* You can order this quantity or a multiple thereof.

3NH LV HRC fuse bases

	Sizes	I_n A	Version	DT	Order No.	Price per PU	PG	PU Unit(s)	PS*/ P. unit Unit(s)	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	A	**3NH3 530**		014	1	1	3.000
	LV HRC bus-mounting bases made of molded plastic									
	For busbars 12 mm × 5 mm to 12 mm × 10 mm, busbar spacing 40 mm									
	**000/00**	160	1P							
			With top saddle-type terminals	B	**3NH3 036**		014	1	1	0.150
			With bottom saddle-type terminals	B	**3NH3 037**		014	1	1	0.150
	**000/00**	80	3P, in tandem design 3 outgoing feeders at top and bottom respectively, with saddle-type terminals							
			With 4 barriers	B	**3NH4 037**		014	1	1	0.800
			With 2 non-interrupted barriers	B	**3NH4 045**		014	1	1	0.800
	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	A	**3NH7 030**		014	1	1	1.000
			With claw fixing for non-perforated busbar	B	**3NH7 031**		014	1	1	1.000
			With screw fixing for perforated busbar	B	**3NH7 032**		014	1	1	1.000
	**1**	250	1P							
			With screw fixing for mounting plate	A	**3NH7 230**		014	1	1	2.500
			With claw fixing for non-perforated busbar	B	**3NH7 231**		014	1	1	2.500
			With screw fixing for perforated busbar	B	**3NH7 232**		014	1	1	2.500
	Can also be used for fuse links of size 2									
	**3**	630	1P							
			With screw fixing for mounting plate	B	**3NH7 330**		014	1	1	4.800
			With claw fixing for non-perforated busbar	B	**3NH7 331**		014	1	1	4.800
			With screw fixing for perforated busbar, can be used as disconnector	B	**3NH7 332**		014	1	1	4.800

* You can order this quantity or a multiple thereof.

	Sizes	I_n	Version	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
		A						Unit(s)	Unit(s)	kg
	LV HRC fuse bases with swivel mechanism									
	**4a**	1250	1P							
			With screw fixing for mounting plate	A	**3NH7 520**		014	1	1	5.200
	**LV HRC contact covers for LV HRC fuse bases**									
	Touch protection for contact pieces									
	000/00			▶	**3NX3 105**		014	1	2/20	0.013
	0			B	**3NX3 114**		014	1	2/40	0.010
	1			▶	**3NX3 106**		014	1	2/20	0.027
	2			▶	**3NX3 107**		014	1	2/12	0.031
	3			▶	**3NX3 108**		014	1	2/10	0.038
	**LV HRC partitions for LV HRC fuse bases**									
	As intermediate phase and end barrier									
	000/00		Type							
			3NH3 0/3NH4 0	▶	**3NX2 023**		014	1	2	0.025
	0		3NH3 1	B	**3NX2 030**		014	1	2	0.050
	1		3NH3 2	▶	**3NX2 024**		014	1	2	0.053
	2		3NH3 3	▶	**3NX2 025**		014	1	2	0.066
	3		3NH3 4	▶	**3NX2 026**		014	1	2	0.101
	**LV HRC protective covers IP2X**									
	For LV HRC fuse bases									
	000/00		1P and 3P	B	**3NX3 115**		014	1	10	0.039
	**LV HRC covers**									
	000/00		For plugging into IP2X LV HRC protective covers	B	**3NX3 116**		014	1	10	0.014
	**LV HRC contact covers for LV HRC bus-mounting bases**									
	000/00		Touch protection for contact pieces							
			Outgoing terminal	▶	**3NX3 105**		014	1	2/20	0.013
			Incoming terminal	B	**3NX3 113**		014	1	2/50	0.006
	**LV HRC partitions for 3NH3 0 LV HRC bus-mounting bases**									
	000/00		As intermediate phase barrier	C	**3NX2 027**		014	1	2	0.017
	**000/00**		As end barrier	C	**3NX2 028**		014	1	2/50	0.020

* You can order this quantity or a multiple thereof.

3NH LV HRC fuse bases

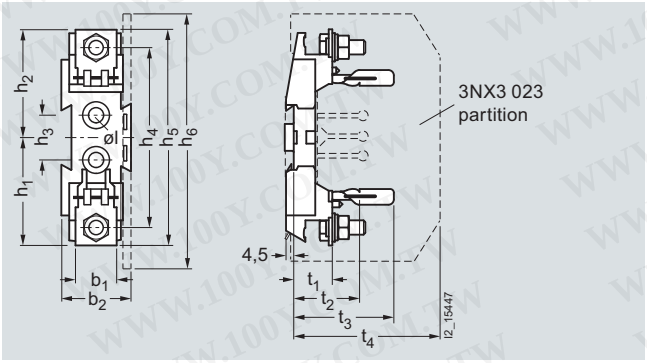
	Sizes	Version	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
							Unit(s)	Unit(s)	kg
	**Non-interrupted barriers**								
	000/00	For 3NH4 0 LV HRC bus-mounting bases	C	**3NX2 031**		014	1	2/30	0.050
	**Fuse-base covers**								
	For LV HRC fuse bases, red with inscription "Isolating point"								
	000/00		C	**3NX1 003**		014	1	3	0.050
	1, 2, 3		C	**3NX1 004**		014	1	3	0.100
 	**Fuse pullers**								
	000 ... 4	For LV HRC fuse links							
		Without sleeve	►	**3NX1 013**		014	1	1	0.280
		With sleeve	►	**3NX1 014**		014	1	1	0.480
	**Isolating links For LV HRC fuse bases and fuse switch disconnectors**								
	With insulated grip lugs								
	000/00	Silver-plated	►	**3NG1 002**		014	1	3/30	0.080
	0		C	**3NG1 102**		014	1	1/10	0.110
	1		►	**3NG1 202**		014	1	1/10	0.170
	2		►	**3NG1 302**		014	1	1/5	0.240
	3		►	**3NG1 402**		014	1	1/5	0.290
	With non-insulated grip lugs								
	4	Tinned	B	**3NG1 503**		014	1	6	0.708
	4a	Nickel-plated	B	**3NG1 505**		014	1	1/5	0.730

* You can order this quantity or a multiple thereof.

Dimensional drawings

LV HRC fuse bases made of molded plastic

Size 000/00, 1P

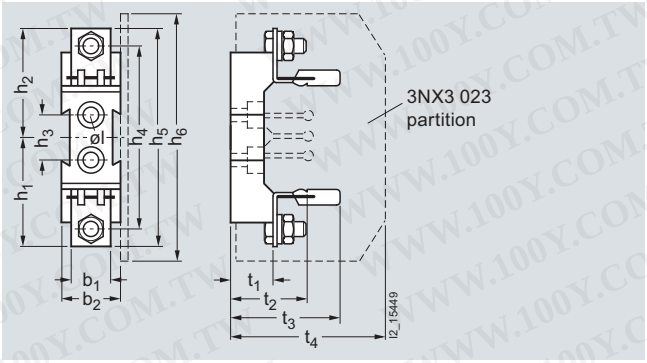


3NH3 051 to 3NH3 053

Sizes	I_n A	Poles	Connection	Type	b_1	b_2	h_1	h_2	h_3	h_4	h_5	h_6	ø I	t_1	t_2	t_3	t_4
000/00	160	1P	M8 flat terminal, screw	3NH3 051	23	39	61	61	25	101	121	139	7.5	26	42	61	86
			Saddle-type terminal	3NH3 052	--	39	60	60	25	108	120	139	7.5	26	42	61	86
	125		Box terminal	3NH3 053	--	39	59	50	25	99	117	139	7.5	23	39	61	86

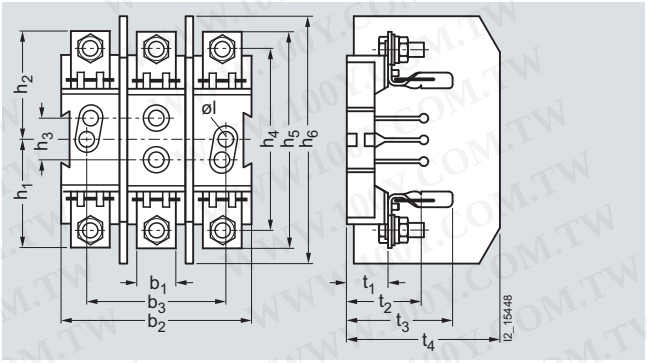
LV HRC fuse bases made of ceramic

Size 000/00
1P



3NH3 03., 3NH3 050

3P

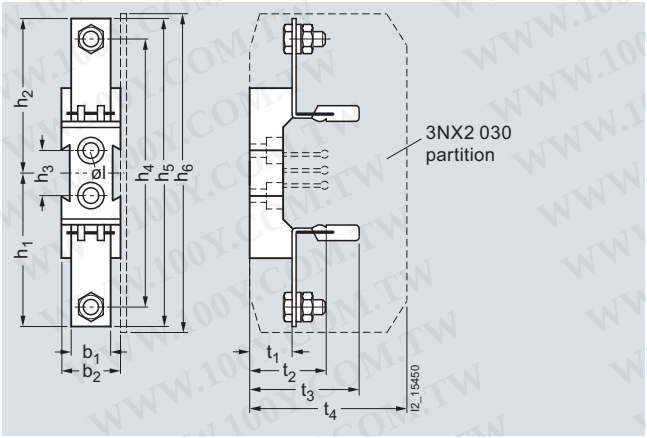


3NH4 03.

Sizes	I_n A	Poles	Connection	Type	b_1	b_2	b_3	h_1	h_2	h_3	h_4	h_5	h_6	ø I	t_1	t_2	t_3	t_4
000/00	160	1P	Flat terminal, screw	3NH3 030	23	34	--	61	61	25	102	122	139	7.5	24	40	60	86
			M8 plug-in terminal	3NH3 031	31	34	--	64	64	25	102	128	139	7.5	24	40	60	86
			Saddle-type terminal	3NH3 032	29	34	--	61	61	25	109	122	139	7.5	24	40	60	86
			Flat terminal, terminal strip	3NH3 035	26	34	--	61	70	25	113	130	139	7.5	24	40	60	86
			Flat terminal, nut	3NH3 038	23	34	--	61	61	25	102	122	139	7.5	24	40	60	86
			Flat and saddle-type terminals	3NH3 050	29	34	--	61	61	25	102	122	139	7.5	24	40	60	86
		3P	Flat terminal	3NH4 030	23	102	70	61	61	25	102	122	139	7.5	24	40	60	86
			M8 plug-in terminal	3NH4 031	31	102	70	64	64	25	102	128	139	7.5	24	40	60	86
			Saddle-type terminal	3NH4 032	29	102	70	61	61	25	102	122	139	7.5	24	40	60	86
			Flat terminal, terminal strip	3NH4 035	26	102	70	61	70	25	113	130	139	7.5	24	40	60	86

3NH LV HRC fuse bases

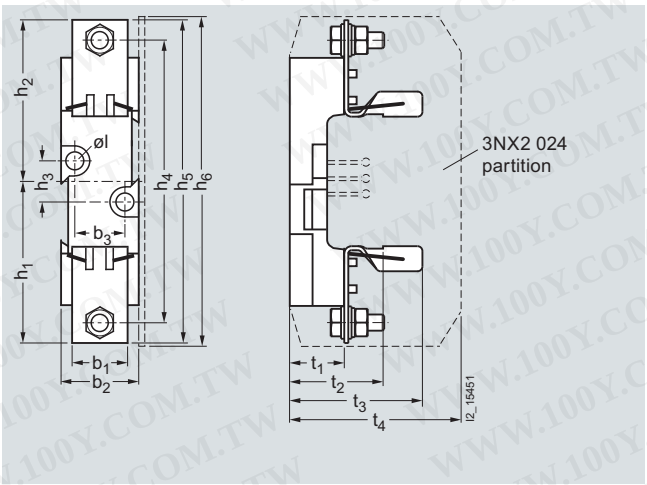
Size 0, 1P



3NH3 12.

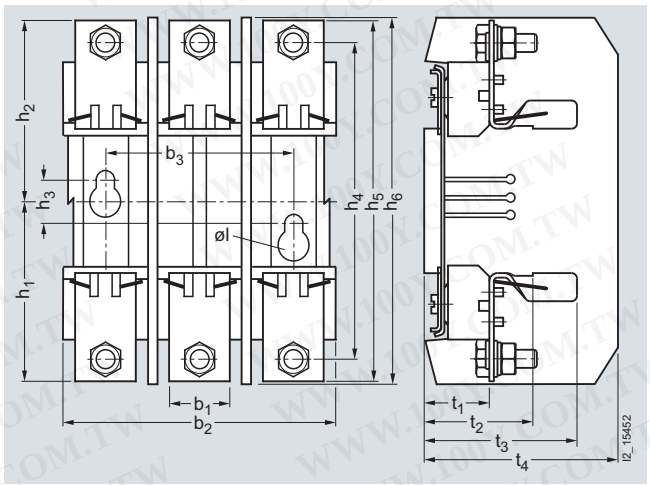
Sizes	I_n A	Poles	Connection	Type	b_1	b_2	h_1	h_2	h_3	h_4	h_5	h_6	ø I	t_1	t_2	t_3	t_4
0	160	1P	Flat terminal	3NH3 120	23	38	87	87	25	150	173	179	7.5	24	40	60	88
			Plug-in terminal	3NH3 122	31	38	87	87	25	150	173	179	7.5	24	40	60	88

Size 1
1P



3NH3 2.0

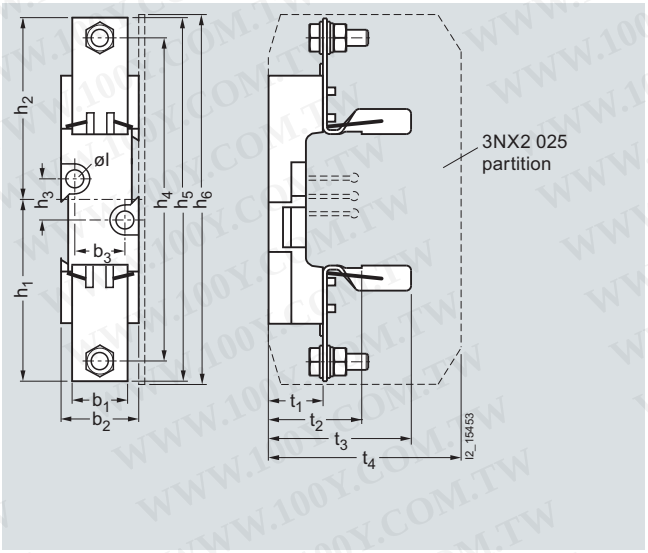
3P



3NH4 230

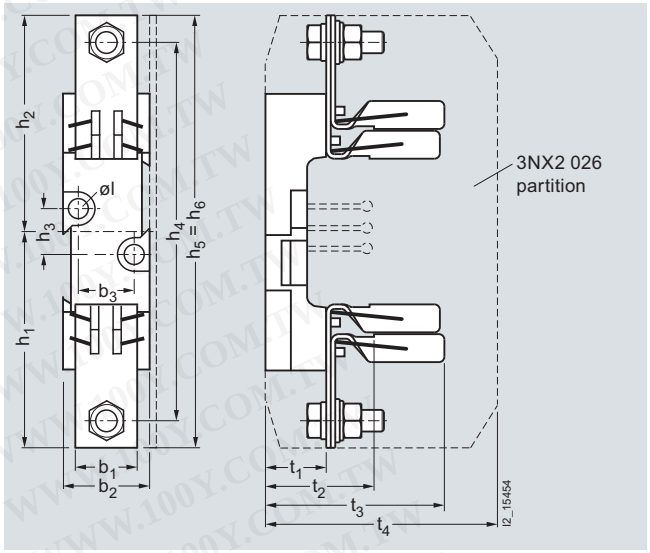
Sizes	I_n A	Poles	Connection	Type	b_1	b_2	b_3	h_1	h_2	h_3	h_4	h_5	h_6	ø I	t_1	t_2	t_3	t_4
1	250	1P	M10 flat terminal	3NH3 230	35	49	--	101	101	25	177	202	203	10.5	35	55	84	107
			Double busbar terminal	3NH3 220	35	49	--	101	101	25	177	202	203	10.5	35	55	84	107
		3P	M10 flat terminal	3NH4 230	35	146	111	101	101	25	177	202	203	10.5	35	55	84	107

Size 2
1P



3NH3 3.0

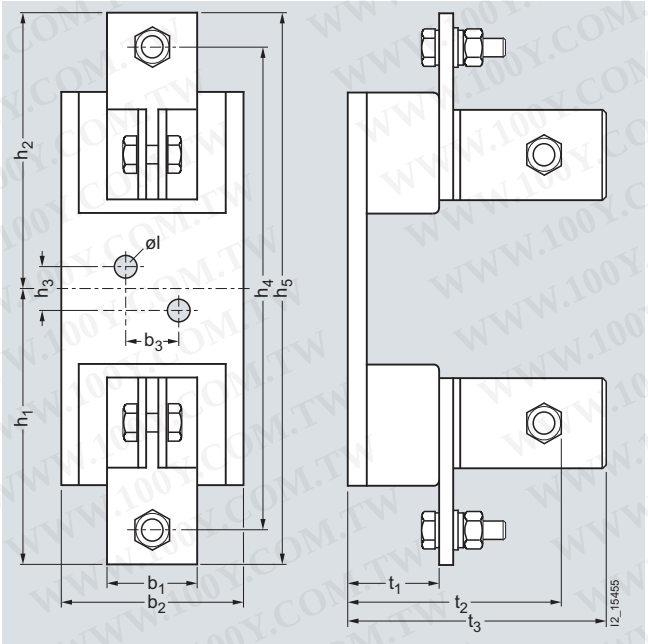
Size 3
1P



3NH3 4.0

Sizes	I_n A	Poles	Connection	Type	b_1	b_2	h_1	h_2	h_3	h_4	h_5	h_6	⌀ I	t_1	t_2	t_3	t_4
2	400	1P	M10 flat terminal	3NH3 330	35	49	113	113	25	202	227	228	10.5	35	55	90	115
			Double busbar terminal	3NH3 320	35	49	113	113	25	202	227	228	10.5	35	55	90	115
3	630	1P	M12 flat terminal	3NH3 430	35	49	121	121	25	212	242	242	10.5	35	57	101	130
			Double busbar terminal	3NH3 420	35	49	121	121	25	212	242	242	10.5	35	57	101	130

Size 4, 1P



3NH3 530

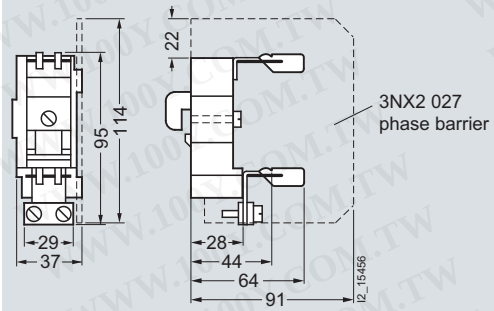
Sizes	I_n A	Poles	Connection	Type	b_1	b_2	b_3	h_1	h_2	h_3	h_4	h_5	⌀ I	t_1	t_2	t_3
4[1)]	1250	1P	M12 flat terminal	3NH3 530	50	102	30	156	156	25	270	312	13	51	116	144
4a	Can only be used in bases with swivel mechanism															

[1)] Size 4 LV HRC fuse links are also screwed onto the base.

3NH LV HRC fuse bases

LV HRC bus-mounting bases[1)]

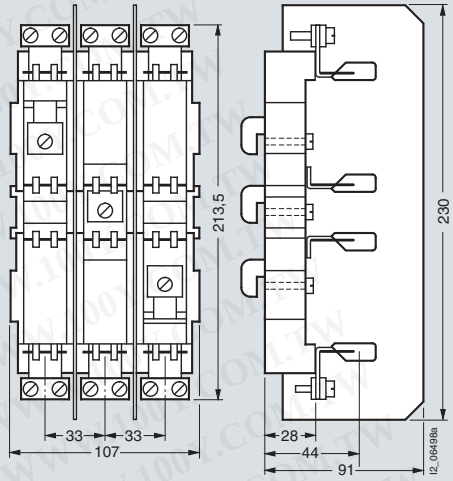
Size 000/00, 160 A
1P



3NH3 036, 3NH3 037

LV HRC fuse bases with tandem design

Size 000/00, 80 A
3P

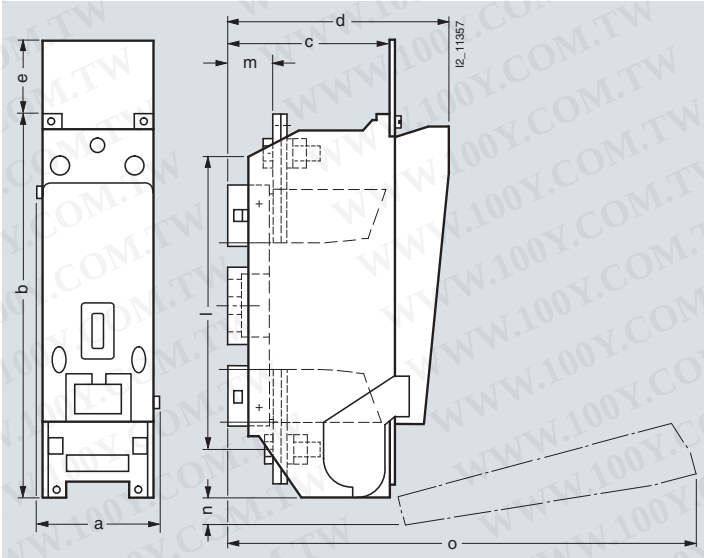


Busbar center-to-center clearance 40 mm
3NH4 037, 3NH4 045

[1)] LV HRC bus-mounting bases are only connected on one side using terminals, the second connection is made through the bottom of the base.

LV HRC fuse bases with swivel mechanism

Sizes 000/00, 1, 3 and 4a

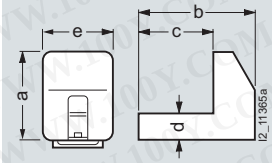


3NH7 03., 3NH7 23., 3NH7 33., 3NH7 520

Sizes	I_n A	Type	a	b	c	d	e	l	m	n	o
000/00	160	3NH7 030, 3NH7 031, 3NH7 032	44	149	45	88.5	22.5	120	17	18	200
1	250	3NH7 230, 3NH7 231, 3NH7 232	68	230	68	123.5	23	177	25	40	300
3	630	3NH7 330, 3NH7 331, 3NH7 332	90	270	96	153.5	15.5	220.5	30.5	35	350
4a	1250	3NH7 520	116	350	154.5	217.5	69	270	40	26	440

LV HRC contact covers for LV HRC fuse bases and LV HRC bus-mounting bases[1)]

Size 000/00 to 3

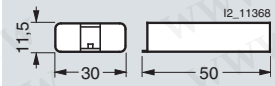


3NX3 105 to 3NX3 108, 3NX3 114

Sizes	Type	a	b	c	d	e
000/00	3NX3 105[1)]	38	47.5	34	11.5	30
0	3NX3 114	51.5	47.5	34	11.5	30
1	3NX3 106	61.5	57	42.5	35	46
2	3NX3 107	74	65	51	35	46
3	3NX3 108	81.5	77.5	57.5	35	46

[1)] The 3NX3 105 LV HRC contact covers can be used for both LV HRC fuse bases and LV HRC bus-mounting bases.

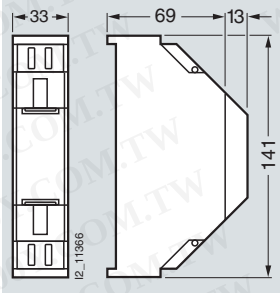
LV HRC contact covers for LV HRC bus-mounting bases



3NX3 113 for the incoming terminal, dimensional drawing 3NX3 105, for the outgoing terminal, see dimensional drawing above

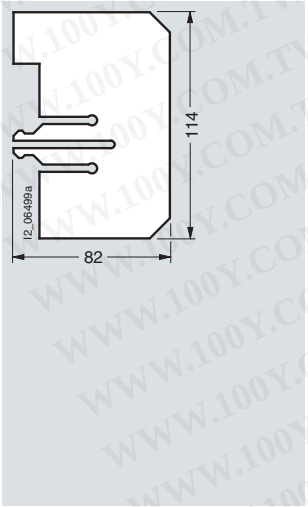
3NX3 115 LV HRC protective covers, with 3NX3 116 LV HRC covers

Size 000/00, degree of protection IP2X

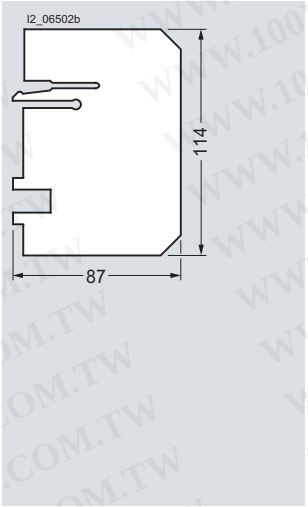


LV HRC partitions for LV HRC bus-mounting bases

Size 000/00



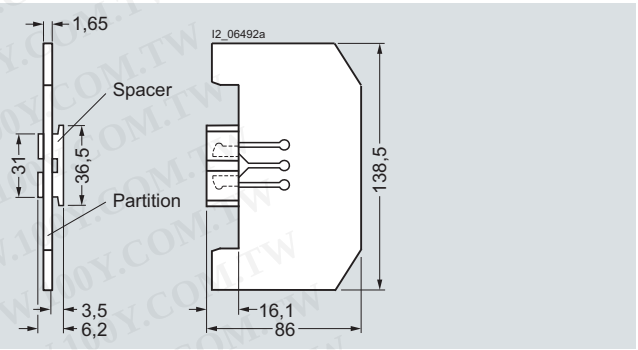
Phase barrier
3NX2 027



End barrier
3NX2 028

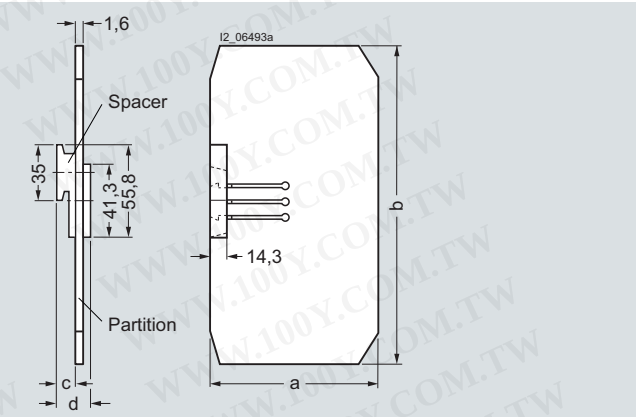
LV HRC partitions for LV HRC fuse bases

Size 000/00



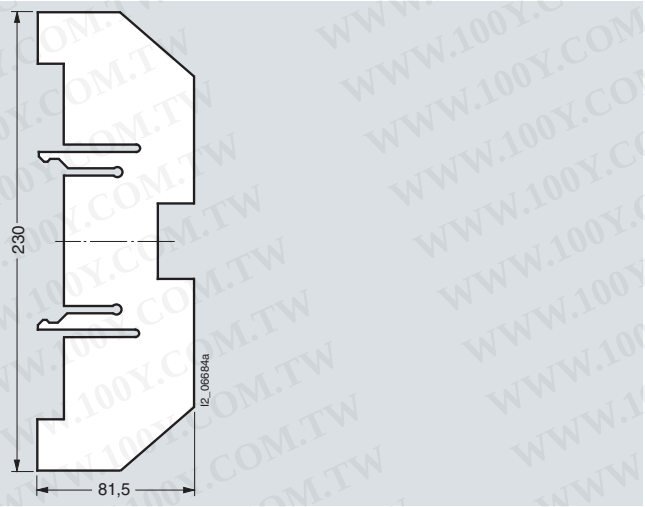
3NX3 023

Sizes 0 to 3



3NX2 030, 3NX2 024 to 3NX2 026

Sizes	Type	a	b	c	d
0	3NX2 030	87.6	178.5	7.7	12.3
1	3NX2 024	107.3	202.5	7.7	12.3
2	3NX2 025	115.3	227.5	14.2	25.1
3	3NX2 026	129.8	242	20.2	37.2

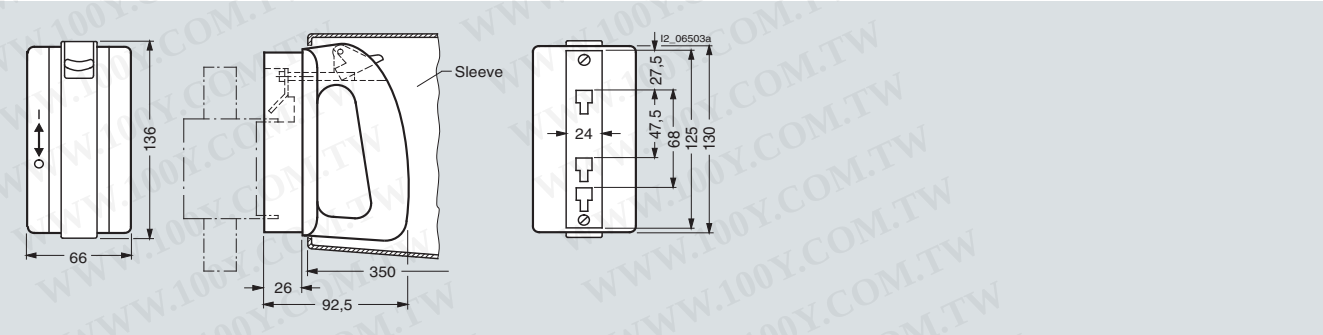


For LV HRC bus-mounting bases in tandem design
3NX2 031

3NH LV HRC fuse bases

Fuse pullers

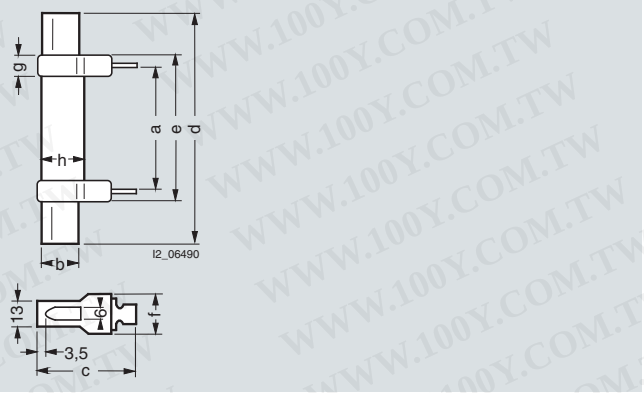
Sizes 000 to 4



3NX1 013 (without sleeve), 3NX1 014 (with sleeve)

Isolating links with insulated grip lugs

Size 000/00 to 3

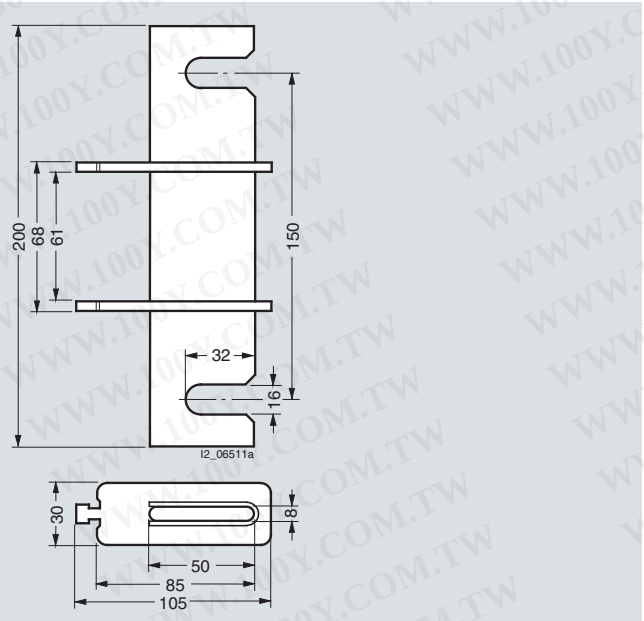


3NG1 .02

Sizes	Type	a	b	c	d	e	f	g	h
000/00	3NG1 002	44	15	48	78	54	20.5	8	19
0	3NG1 102	60.5	15	48	125	68	20.5	8	19
1	3NG1 202	61	20	53	135	72	23	9	24
2	3NG1 302	61	26	61	150	72	23	9	29
3	3NG1 402	61	32	73	150	72	23	9	36

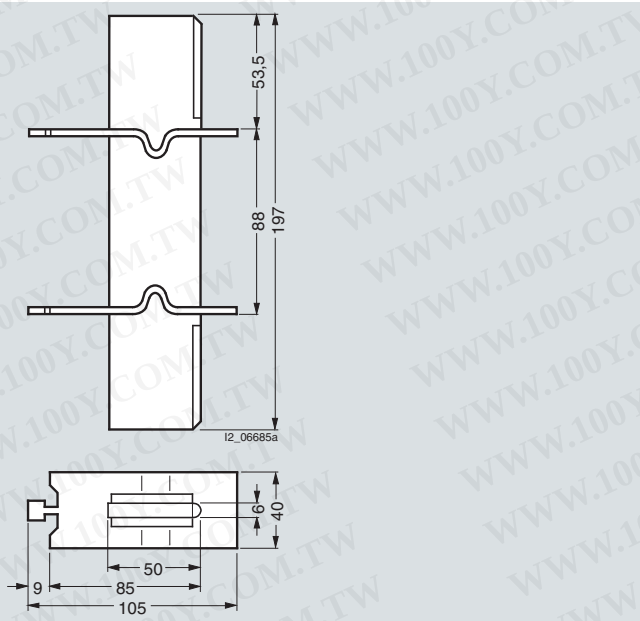
Isolating links with non-insulated grip lugs

Size 4



3NG1 503

Size 4a

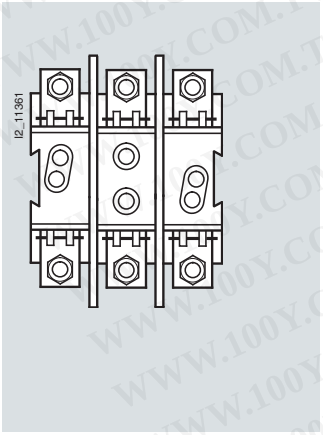


3NG1 505

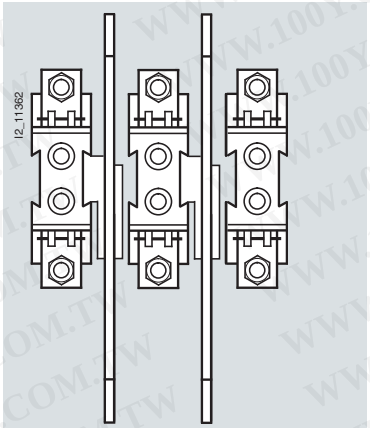
More information

Space requirements when installing LV HRC fuse bases

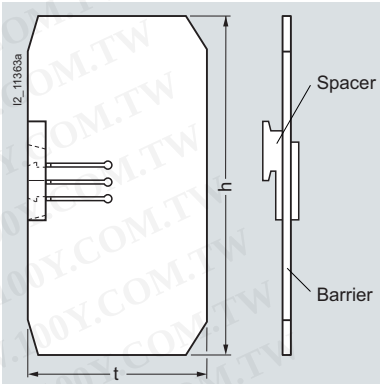
1 LV HRC fuse base, 3P



3 LV HRC fuse bases, 1P



LV HRC partition



Size	Mounting width (mm) of LV HRC fuse bases					Mounting height (mm)	Mounting depth (mm)
	1 unit, 3P		3 units, 1P		Distance through spacer	3NX2 0.. barriers with matching bases[1]	
	Bases with phase barrier, without end barrier	Bases with phase barrier and 2 end barriers	Bases with phase barrier, without end barrier	Bases with phase barrier and 2 end barriers		h	d
000/00	102	106	100	104[2]	2	138	86
	LV HRC bus-mounting bases see page 3/58				–	114	90
0	--	--	128	142	7	178	90
1	163	177	158	172	7	202	110
2	--	--	184	224	20[3]	227	118
3	--	--	208	272	32[3]	242	132
4	Installation without barriers; for mounting see page 3/58					n/a	
4a	Can only be used in bases with swivel mechanism					n/a	

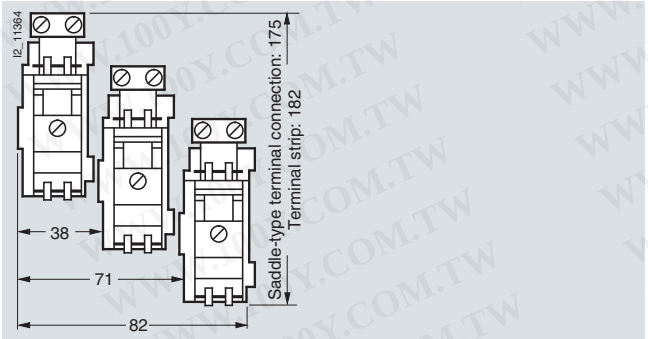
1) This measurement specifies the required overall mounting depth with base d and the overall mounting height h.

2) Placing an additional base on the barrier and plug-on part does not increase the distance, rather the bases lie flat directly on top of one another.

3) If the bases are installed directly on a side wall in the distribution board, one spacer part can be broken off. This would reduce the distance measurement.

Space requirements when installing LV HRC bus-mounting bases

Space requirements for 3-piece, 1-pole 3NH3 036 and 3NH3 037 LV HRC bus-mounting bases, staggered

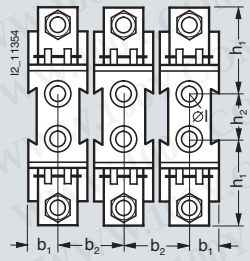


3NH LV HRC fuse bases

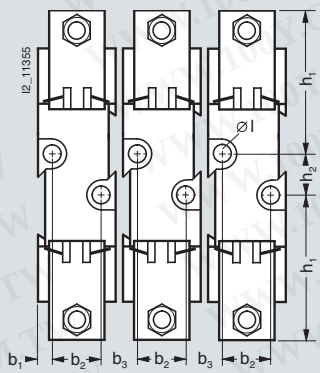
Drill hole dimensions for base plate mounting

LV HRC fuse bases, 3 units, 1P

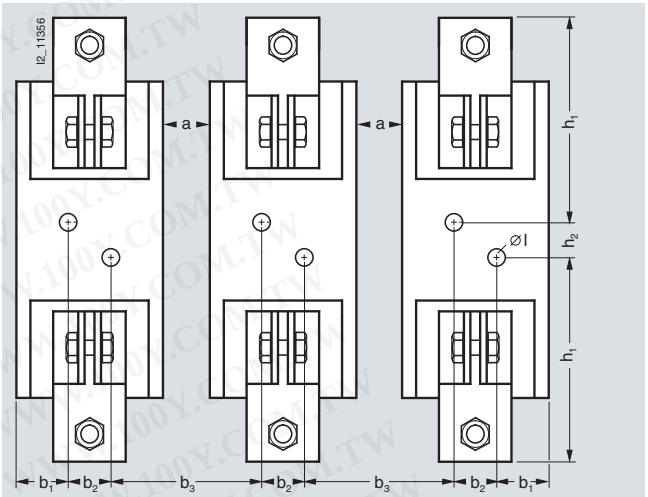
Sizes 000/00 and 0



Sizes 1, 2 and 3



Size 4



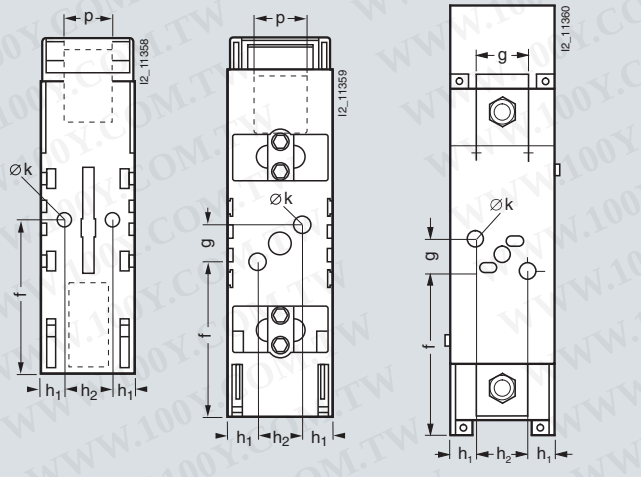
Sizes	Type	b_1	b_2	b_3	h_1	h_2	l
000/00	3NH3 030, 3NH3 031, 3NH3 032, 3NH3 035, 3NH3 038, 3NH3 050	17	34	--	48	25.5	7.5
0	3NH3 120, 3NH3 122	19	45	--	74	25	7.5
1	3NH3 220, 3NH3 230	9	30	25.5	88	25	10.5
2	3NH3 320, 3NH3 330	9	30	38.5	100	25	10.5
3	3NH3 420, 3NH3 430	9	30	50.5	108	25	10.5
4	3NH3 530	36	30	95	141	25	13

Note:

These LV HRC fuse bases are mounted without phase barriers.
A minimum clearance of a = 25 mm is required.

LV HRC fuse bases with swivel mechanism

Size 000/00 Sizes 1 and 3 Size 4a



Sizes	I_n A	Type	f	g	h_1	h_2	⌀ k	p
000/00	160	3NH7 030, 3NH7 031, 3NH7 032	79	--	9.5	25	7	20
1	250	3NH7 230, 3NH7 231, 3NH7 232	102.5	25	19	30	10.5	25
3	630	3NH7 330, 3NH7 331, 3NH7 332	122.5	25	30	30	10.5	40
4a	1250	3NH7 520	170	30	31.5	45	13	50

Overview

SENTRON 3NP4 and 3NP5 fuse switch disconnectors are switching devices for the occasional manual switching/isolating of loads and distribution boards. They are able to switch on, lead and switch off the specified rated current (including a specific overload).

With the SENTRON 3NP4 and 3NP5 fuse switch disconnectors, all poles of downstream electric loads can be safely disconnected from the system under load.

The SENTRON 3NP4 and 3NP5 fuse switch disconnectors are ideal for surface mounting and installation on and in distribution boards (e.g. ALPHA, SIKUS), meter cabinets (e.g. ALPHA 400-ZS) and molded-plastic distribution systems, such as 8HP.

The ability to mount them on a range of different busbar systems allows their very diverse implementation in control cabinet and control engineering.

The sizes SENTRON 3NP4 LV HRC 000[1)] and LV HRC 00 can be snapped onto 35 mm standard mounting rails and are ideal for combining with other switching devices e.g. in capacitor modules for p.f. compensation.

The SENTRON 3NP4 and 3NP5 fuse switch disconnectors are used in conjunction with SITOR semiconductor fuses for the effective protection of frequency converters and soft starters (see chapter "SITOR semiconductor fuses").

Benefits

- The SENTRON 3NP4 and 3NP5 fuse switch disconnectors comprise a base and a removable fuse carrier with view and measuring window. The fuse links can be replaced without tools. This considerably facilitates installation
- The three conducting paths in the base and the fuse links in the fuse carrier are separated by partitions that overlap when opening and closing the device. This type of failsafe protection is called "complete compartmentalization" and effectively prevents phase arcing.
- SENTRON 3NP5 fuse switch disconnectors are also equipped with locating springs, which are fitted to the side of the base. These enable the "high speed closing" of devices, regardless of the actuation speed of the operator.
- The SENTRON 3NP4 and 3NP5 fuse switch disconnectors are used with LV HRC fuse links of sizes LV HRC 000 to LV HRC 3 according to IEC 60269-2 and DIN VDE 43620. SITOR semiconductor fuses can continue to be used for a wide range of applications.
- With its LV HRC fuse links, size 000 with a rated current of 125 and 160 A, Siemens offers an extremely compact solution.

1) Corresponds to the fuse size LV HRC 000 according to IEC 60269-2.

Technical specifications

		3NP40 1	3NP40 7	3NP42 7	3NP43 7	3NP44 7
Standards **Approved acc. to**		IEC 60947-1; IEC 60947-3; VDE 0660-107 UL508				
Rated uninterrupted current I_u For fuse links acc. to DIN 43620	A Size	160[1)] 00C/000	160 00	250 1 and 0	400 2 and 1	630 3 and 2
Conventional thermal current I_{th}	A	160[1)]	160	250	400	630
Rated operational voltage U_e 50 Hz/60 Hz	V AC V DC	690 220 (3 conducting paths series-connected)		690 440 (2 conducting paths series-connected)		
Rated insulation voltage U_i	V	690		800 For safety monitoring max. 690 V.		
Rated impulse withstand voltage U_{imp}	kV	6				
Rated conditional short-circuit current with fuses (by fast switch on)						
With fuse links Rated current At 400 V AC (690 V)	Size/A kA (r.m.s. value)	000/100 (35) 50 (50)	00/160 50	1/250 50	2/400 50	3/630 50
Maximum permissible let-through I^2t value	kA^2s	56 (7.8)	158	551	1515	4340
Permissible let-through current of the fuse	kA (peak value)	11 (5)	15	25	35	55
Short-circuit strength with fuses (with closed disconnector)						
With fuse links Rated current At 690 V	Size/A kA (r.m.s. value)	000/100 100	00/160 50	1/250 50	2/400 50	3/630 50
Permissible let-through current of the fuse	kA (peak value)	15	15	25	35	55
Rated making and breaking capacity (infeed from top or bottom)						
At 400 V AC, with fuse links or isolating links Rated breaking current I_c (p.f. = 0.35)	Size A (r.m.s. value)	000 800 (p.f. = 0.45)	00 800	1 2000	2 3200	3 5040
Rated operational current I_e at AC-21B, AC-22B AC-23B	 A A	 160 100	 160 100	 250 250	 400 400	 630 630
At 500 V AC, with fuse links or isolating links Rated breaking current I_c (p.f. = 0.35)	Size A (r.m.s. value)	000 320 (p.f. = 0.45)	00 320	1 750	2 1200	3 1890
Rated operational current I_e at AC-21B AC-22B AC-23B	 A A A	 160 100 40	 160 100 40	 250 250 --	 400 400 --	 630 630 --
At 690 V AC, with fuse links or isolating links Rated breaking current I_c (p.f. = 0.35)	Size A (r.m.s. value)	000 200/240 (at p.f. = 0.45/0.95)	00 200/240 (at p.f. = 0.45/0.95)	1 375	2 600	3 945
Rated operational current I_e at AC-21B AC-22B AC-23B	 A A A	 160 50 25	 160 50 25	 250 -- --	 400 -- --	 630 -- --
At 220/240 V DC, with fuse links[2)] or isolating links Rated operational current I_e at 220 V DC-23B/DC-21B 440 V DC-21B	Size A A	000 80/160 --	00 80/160 --	1 -- 250	2 -- 400	3 -- 630

1) 125/160 A only with 3NY1 236 feeder terminals and 21 mm wide 3NY1 822 (125 A) and 3NY1 824 (160 A) fuse links;
see page 3/76.

2) When switching without load (AC-20 B, DC-20 B), direct voltages up to 690 V DC can be applied.
For degree of pollution 2, the disconnectors can be used up to 1000 V AC-20 B, DC-20 B (switching without load).
Conducting paths in series: 3 for 3NP40; 2 for 3NP42, 3NP43 and 3NP44.

		3NP40 1	3NP40 7	3NP42 7	3NP43 7	3NP44 7
Capacitor switching capacity						
At 400 V AC						
Capacitor rating	kvar	50	50	--	--	--
Rated current I_n	A	72	72	--	--	--
At 525 V AC						
Capacitor rating	kvar	50	50	--	--	--
Rated current I_n	A	55	55	--	--	--
Permissible ambient temperature	°C	-25 ... +55[1] for operation -50 ... +80 for storage				
Mechanical service life	Operating cycles	2000	2000	1600	1000	1000
Degree of protection (operator side)						
Without molded-plastic cover/cable lug cover		IP00 (3NP40 with box terminal and properly connected conductors: IP20)				
With molded-plastic cover/cable lug cover		IP30 (switch closed), IP20 (switch open)				
Power loss of switch at I_{th} (plus power dissipation of fuse links)						
Without busbar adapter	W	4.5 (at 100 A)	10	15	30	47
with busbar adapter	W	8.5 (at 100 A)	20	47	83	127
Main conductor connections						
Flat terminal for cable lug acc. to DIN 46234, Max. conductor cross-section (stranded)	mm^2	--	Up to 2 × 70 (M8)	Up to 150 (M10)	Up to 240 (M10)	Up to 2 × 240 (M12)
Box terminal/terminal (finely stranded, with end sleeve)	mm^2	1.5 ... 50 (35)	2.5 ... 70 (50)	70 ... 150	120 ... 240	150 ... 300
Busbars (width × thickness)	mm × mm	--	22 × 5	22 ... 30 × 5 ... 10	22 ... 30 × 5 ... 10	25 ... 40 × 5 ... 10
Laminated Cu strips, non-perforated in terminals (width × thickness)	mm × mm	8 × 8	Up to 9 × 8	Up to 16 × 8	Up to 20 × 10	Up to 24 × 10
Tightening torques for terminal screws						
For flat terminals	Nm	--	10 ... 12	30 ... 35	30 ... 35	35 ... 40
With SIGUT box terminal/terminal	Nm	3 ... 3.5	8 ... 10	6	8	8
Auxiliary switch 1 CO (accessories)						
3NY3 035 50 Hz/60 Hz to 230 V AC rated operational current I_e at AC-14	A	0.25 (I_{th} = 5 A), at 24 V DC: I_e = 0.45 A; flat termination according to DIN 46244: A 2.8 × 0.5				
3NY3 030 50 Hz/60 Hz to 230 V AC Rated operational current I_e at AC-13	A	0.1 (I_{th} = 0.1 A); quick-connect terminal according to DIN 46245: A 2.8 ... 1				
Permissible mounting positions		Vertical or horizontal installation (no reduction of specified switching capacity)				

[1] Only with isolating links; otherwise, please observe specifications of fuse manufacturer.

		3NP50	3NP52	3NP53	3NP54
Standards **Approved acc. to**		IEC 60947-1, IEC 60947-3, VDE 0660-107 UL508			
Rated uninterrupted current I_u For fuse links acc. to DIN 43620 (if using semiconductor protection fuse links, the rated current must be reduced – see catalog "Configuring SITOR", Order No. E20001-A700-P302)	A Size	160 00	250 1 and 0	400 2 and 1	630 3 and 2
Conventional free air thermal current I_{th}	A	160	250	400	630
Rated operational voltage U_e 50 Hz/60 Hz	V AC V DC	690 440 (3 conducting paths in series), 220 (2 conducting paths in series and for fuse monitoring through 3RV)			
Rated insulation voltage U_i	V	690[1]			
Rated impulse withstand voltage U_{imp}	kV	6			
Rated conditional short-circuit current with fuses (by fast switch on)					
With fuse links					
Rated current	Size/A	00/160	1/250	2/400	3/630
At 500 V AC	kA (r.m.s. value)	50	50	50	50
Permissible let-through current of the fuses	kA (peak value)	15	25	40	50

[1] Implementation up to U_i = 1000 V is also possible if maintaining degree of pollution 2 (instead of 3).

3NP LV HRC fuse switch disconnectors

		3NP50	3NP52		3NP53		3NP54	
Short-circuit strength with fuses (with closed disconnector) With fuse links								
Rated current	Size/A	00/160	1/250		2/400		3/630	
At 500 V AC	kA (r.m.s. value)	100	100		50		50	
Maximum permissible let-through I^2t value	kA^2s	223	780		2150		5400	
Permissible let-through current of the fuses	kA (peak value)	23	32		40		60	
Rated short-circuit making capacity With isolating links[1]	Size	00	1		2		3	
At 500 V AC	kA (peak value)	6	17		17		17	
Rated making and breaking capacity[1] (infeed from top or bottom)[2]								
	Size	00	1	0	2	1	3	2
At 400 V AC, with fuse links								
Breaking current I_c (p.f. = 0.35)	A (r.m.s. value)	1600	2500	1600	4000	2500	5040	4000
Rated operational current I_e for AC-21B, AC-22B, AC-23B	A	160	250	160	400	250	630	400
At 500 V AC, with fuse links								
Breaking current I_c (p.f. = 0.35)	A (r.m.s. value)	1300	2500	1600	4000	2500	5040	4000
Rated operational current I_e for AC-21B, AC-22B, AC-23B	A	160	250	160	400	250	630	400
At 690 V AC, with fuse links								
Breaking current I_c (p.f. = 0.35)	A (r.m.s. value)	800	1280	1000	2520	1600	3200	2520
Rated operational current I_e at								
AC-21B, AC-22B	A	160	250	160	400	250	630	400
AC-23B	A	100	160	125	315	200	400	315
At 220 (440) V DC, with 2 (3) conducting paths in series and fuse links								
Breaking current I_c (L/R = 15 ms)	A	640	1000	640	1600	1600	2520	1600
Rated operational current I_e for DC-23B	A	160	250	160	250	250	630	400
Switching capacity with isolating links[3] (infeed from top or bottom)								
At 400 V AC, with isolating links	Size	00	1		2		3	
Breaking current I_c (p.f. = 0.35)	A (r.m.s. value)	1600	2500		2500		4000	
Rated operational current I_e at								
AC-21B, AC-22B	A	160	250		400		630	
AC-23B	A	160	250		315		500	
At 500 V AC, with isolating links								
Breaking current I_c (p.f. = 0.35)	A (r.m.s. value)	1300	2500		2500		4000	
Rated operational current I_e at								
AC-21B, AC-22B	A	160	250		400		630	
AC-23B	A	160	250		315		500	
At 690 V AC, with isolating links								
Breaking current I_c (p.f. = 0.35)	A (r.m.s. value)	800	1280		1600		2520	
Rated operational current I_e at								
AC-21B, AC-22B	A	160	250		400		630	
AC-23B	A	100	160		200		315	
At 220 V DC, with isolating links								
Breaking current I_c (L/R = 15 ms)	A	640	1000		1600		1600	
Rated operational current I_e for DC-23B	A	160	200		400		400	
Switching capacity for horizontal installation Up to 690 V AC-22B		No reduction of the specified switching capacity (values for AC-23B to 690 V on request)						

1) Rated making and breaking current according to IEC 60947-3
rated making current
$I = 10 \times I_e$ (AC-23); $3 \times I_e$ (AC-22); $1.5 \times I_e$ (AC-21)
rated breaking current
$I = 8 \times I_e$ (AC-23); $3 \times I_e$ (AC-22); $1.5 \times I_e$ (AC-21).

2) When electronic fuse monitors are used, infeed must be from the top.

3) Insert silver-plated isolating links.

		3NP50	3NP52	3NP53	3NP54
Capacitor switching capacity					
At 400 V AC					
Capacitor rating	kvar	80	90	150	250
Rated current I_n	A	116	130	216	361
At 525 V AC					
Capacitor rating	kvar	100	125	200	300
Rated current I_n	A	110	137	220	330
Permissible ambient temperature	°C	-25 ... +55 for operation[1)] -50 ... +80 for storage			
Mechanical service life	Operating cycles	1600			
Degree of protection					
Without molded-plastic cover		IP00[2)]			
With molded-plastic cover and closed fuse carrier on the operator side		IP30			
With open fuse carrier		IP10			
Power loss of switches at I_{th} (plus power loss of the fuse links) without busbar adapter	W	7.8 (16.3[3)])	7.5	15	39
Main conductor connections					
Cable lug, max. conductor cross-section (stranded)	mm^2	2.5 ... 120	6 ... 150	6 ... 240	6 ... 2 × 240
Busbars	mm	16 ... 22	22 ... 30	22 ... 30	22 ... 30
Clamp terminal	mm^2	2.5 ... 50	35 ... 120	--	--
Tightening torques					
With cable lugs	Nm	18 ... 22	25 ... 30	25 ... 30	25 ... 30
With busbars	Nm	18 ... 22	25 ... 30	25 ... 30	25 ... 30
With clamp terminal	Nm	9 ... 11	5 ... 6	--	--
Terminal screws					
With cable lugs		M8	M10	M10	M10
With busbars		M8	M10	M10	M10
With clamp terminal		M8	2 × M6	--	--
PE/ground terminal					
Cable lug acc. to DIN 46234	mm^2	--	2.5 ... 70	6 ... 2 × 70	6 ... 2 × 120
Busbars	mm	--	25	25	30
Terminal screws		--	M8	M10	M10
Auxiliary switch 1 NO + 1 NC (accessories) (the same voltage potential must be applied to both NO and NC contact)					
At 50 Hz/60 Hz to 400 V AC, Rated operational current I_e at AC-12/AC-15	A	16/6			
Flat plug-in terminal (DIN 46244)	mm × mm	6.3 × 0.8			
Permissible mounting positions		Vertical or horizontal installation (switching capacity is sometimes reduced with horizontal installation)			
Fuse monitors with 3RV motor starter protectors		See motor starter protectors in Catalog LV 1.			
Electronic fuse monitoring					
Rated voltage AC 50 Hz/60 Hz	V	400 -15 % ... 500 +10 %, self-powered (infeed from above)			
Max. starting current	A	20			
Continuous current	A	5			
Breaking current	A	5			
Switching capacity	VA	1000			
Short-circuit strength (1 ms)	A	100			
Response time	s	< 1			
Temperature range (operation)	°C	-10 ... +75			
Plug-in connectors/connections		6P			
Minimum potential difference required between top and bottom connections of the switch (e.g. for use in meshed networks)	V	>10			
Signal contact for electronic fuse monitoring		2 NO + 1 NC			
Rated operational current I_e					
At 250 V, DC-13	A	0.27			
At 240 V, AC-15	A	1.5			
Rated free air thermal current I_{th}	A	5			

1) When using isolating links. If using fuse links, please observe specifications of fuse manufacturer.

2) For 3NP52 with clamp terminal, degree of protection IP10.

3) With busbar adapter.

Selection and ordering data

Rated residual current	Connection type (double-ended)		For LV HRC fuse links acc. to DIN 43620[1]	For isolating links[2]	DT	Degree of protection IP00, without fuse links, without isolating links, with terminal screws		PG	PU	PS*/ P. unit	Weight per PU approx.
I_u	Connection	For conductor cross-section				Order No.	Price per PU				
A		mm²	Size	Size					Unit(s)	Unit(s)	kg
Up to 160 A, also clip-on for standard mounting rail											
160[3]	Box terminals	1.5 ... 50	000[4]	00	►	**3NP40 10-0CH01**		103	1	1	0.512
160	Flat terminals	Up to 2 × 70 (M8)	00 a. 000	00	►	**3NP40 70-0CA01**		103	1	1	0.749
	Box terminals	2.5 ... 70 or 2 × 2.5 ... 16			►	**3NP40 70-0CH01**		103	1	1	0.800
250	Flat terminals	Up to 150 (M10)	1 and 0	1 and 0	►	**3NP42 70-0CA01**		103	1	1	2.436
400		Up to 240 (M10)	2 and 1	2 and 1	►	**3NP43 70-0CA01**		103	1	1	3.614
630		Up to 2 × 240 (M12)	3 and 2	3 and 2	►	**3NP44 70-0CA01**		103	1	1	4.984
For 40 mm busbar system											
For busbars of width 12 mm or 15 mm and thickness 5 mm or 10 mm[5]											
With adapter, deep, e.g. for installation in ALPHA meter cabinets (ALPHA 400-ZS) and ALPHA distribution boards											
160[3]	Box terminals	1.5 ... 50									
		Connection, top	000[4]	00	A	**3NP40 15-0CK01**		103	1	1	0.952
		Connection, bottom			A	**3NP40 15-0CJ01**		103	1	1	0.970
160	Flat terminals	Up to 2 × 70 (M8)									
		Connection, top	00 a. 000	00	A	**3NP40 75-0CE01**		103	1	1	1.210
		Connection, bottom			A	**3NP40 75-0CF01**		103	1	1	1.244
	Box terminals	2.5 ... 70 or 2 × 2.5 ... 16									
		Connection, top	00 a. 000	00	A	**3NP40 75-0CK01**		103	1	1	1.290
		Connection, bottom			A	**3NP40 75-0CJ01**		103	1	1	1.274

3NP40 15-0CK01

All fuse switch disconnectors with flat terminals must be used with the appropriate cable lug covers (3NY7 101 to 3NY7 141) for finger-safe cover according to BGV A2, see page 3/76.

1) See LV HRC Fuse Links.

2) Insert silver-plated isolating links.

3) 125/160 A only possible with 21-mm wide 3NY1 822 (125 A) and 3NY1 824 (160 A) LV HRC fuse links, see page 3/77.

4) Corresponds to LV HRC fuse link size 00 with maximum width 21 mm (according to IEC 60269-2-1 and DIN 43620).

5) Can only be mounted on 5 mm thick busbars, a busbar thickness compensator is required for 3NP42 and 3NP43; see page 3/77.
3NP44 can only be mounted on busbars with a thickness of 10 mm!

* You can order this quantity or a multiple thereof.

Rated residual current	Connection type (double-ended)		For LV HRC fuse links acc. to DIN 43620[1]	For isolating links[2]		Degree of protection IP00, without fuse links, without isolating links, with terminal screws		PG	PU	PS*/ P. unit	Weight per PU approx.
I_u	Connection	For conductor cross-section			DT	Order No.	Price per PU				
A		mm²	Size	Size					Unit(s)	Unit(s)	kg
For 40 mm busbar system											
For busbars of width 12 mm or 15 mm and thickness 5 mm or 10 mm[3]											
With flat adapter according to DIN 43620 -6, for ALPHA distribution boards (STAB/SIKUS)											
160[4]	Box terminals	1.5 ... 50									
		Connection, top	000[5]	00	A	**3NP40 15-1CK01**		103	1	1	0.892
		Connection, bottom			B	**3NP40 15-1CJ01**		103	1	1	0.888
160	Flat terminals	Up to 2 × 70 (M8)									
		Connection, top	00 a. 000	00 a. 000	A	**3NP40 75-1CE01**		103	1	1	1.186
		Connection, bottom			A	**3NP40 75-1CF01**		103	1	1	1.189
	Box terminals	2.5 ... 70 or 2 × 2.5 ... 16									
		Connection, top	00 a. 000	00 a. 000	A	**3NP40 75-1CK01**		103	1	1	1.261
		Connection, bottom			A	**3NP40 75-1CJ01**		103	1	1	1.213
250	Flat terminals	Up to 240 (M10)									
		Connection, top or bottom	1 and 0	1 and 0	A	**3NP42 75-1CG01**		103	1	1	3.719
For 60 mm busbar system											
For busbars of width 12 mm or 30 mm and thickness 5 mm or 10 mm[3]											
As flat, T and I profiles, as well as Rittal PLS systems											
160[4]	Box terminals[6]	1.5 ... 50									
		Connection, top	000[3]	00	A	**3NP40 16-1CK01**		103	1	1	0.916
		Connection, bottom			►	**3NP40 16-1CJ01**		103	1	1	0.950

All fuse switch disconnectors with flat terminals must be used with the appropriate cable lug covers (3NY7 101 to 3NY7 141) for finger-safe cover according to BGV A2, see page 3/76.

1) See LV HRC Fuse Links.

2) Insert silver-plated isolating links.

3) Can only be mounted on 5 mm thick busbars, a busbar thickness compensator is required for 3NP42 and 3NP43; see page 3/77.
3NP44 can only be mounted on busbars with a thickness of 10 mm!

4) 125/160 A only possible with 21 mm 3NY1 822 (125 A) and 3NY1 824 (160 A) LV HRC fuse links, see page 3/77.

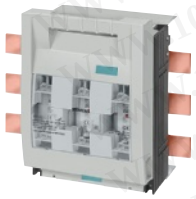
5) Corresponds to LV HRC fuse link size 00 with maximum width 21 mm (according to IEC 60269-2-1 and DIN 43620).

6) No further cover required for 3NP40 with box terminal.

*** You can order this quantity or a multiple thereof.**

3NP LV HRC fuse switch disconnectors

Rated residual current	Connection type (double-ended)		For LV HRC fuse links acc. to DIN 43620[1]	For isolating links[2]		Degree of protection IP00, without fuse links, without isolating links, with terminal screws		PG	PU	PS*/ P. unit	Weight per PU approx.
I_u	Connection	For conductor cross-section			DT	Order No.	Price per PU				
A		mm²	Size	Size					Unit(s)	Unit(s)	kg
For 60 mm busbar system											
For busbars of width 12 mm or 30 mm and thickness 5 mm or 10 mm[3]											
As flat, T and I profiles, as well as Rittal PLS systems											
160	Flat terminals	Up to 2 × 70 (M8)									
		Connection, top	00 a. 000	00	A	**3NP40 76-1CE01**		103	1	1	1.203
		Connection, bottom			▶	**3NP40 76-1CF01**		103	1	1	1.201
	Box terminals[4]	2.5 ... 70 or 2 × 2.5 ... 16									
		Connection, top	00 a. 000	00	B	**3NP40 76-1CK01**		103	1	1	1.295
		Connection, bottom			▶	**3NP40 76-1CJ01**		103	1	1	1.249
250	Flat terminals	Up to 150 (M10)									
		Connection, top or bottom	1 and 0	1 and 0	▶	**3NP42 76-1CG01**		103	1	1	3.713
400	Flat terminals	Up to 240 (M10)									
		Connection, top or bottom	2 and 1	2 and 1	▶	**3NP43 76-1CG01**		103	1	1	5.440
630	Flat terminals	Up to 2 × 240 (M12)									
		Connection, top or bottom	3 and 2	3 and 2	▶	**3NP44 76-1CG01**		103	1	1	7.688
Surface mounting and installation											
With fuse monitoring by SIRIUS motor starter protector[5] [6]											
Up to 160 A, also clip-on for standard mounting rail											
160	Flat terminals	Up to 2 × 70 (M8)	00 a. 000	00	A	**3NP40 70-0FA01**		103	1	1	1.276
	Box terminals	2.5 ... 70 or 2 × 2.5 ... 16			A	**3NP40 70-0FH01**		103	1	1	1.350
250	Flat terminals	Up to 150 (M10)	1 and 0	1 and 0	A	**3NP42 70-0FA01**		103	1	1	2.940
400	Flat terminals	Up to 240 (M10)	2 and 1	2 and 1	A	**3NP43 70-0FA01**		103	1	1	4.174
630	Flat terminals	Up to 2 × 240 (M12)	3 and 2	3 and 2	A	**3NP44 70-0FA01**		103	1	1	5.495



All fuse switch disconnectors with flat terminals must be used with the appropriate cable lug covers (3NY7 101 to 3NY7 141) for finger-safe cover according to BGV A2, see page 3/76.

1) See LV HRC Fuse Links.

2) Insert silver-plated isolating links.

3) Can only be mounted on 5 mm thick busbars, a busbar thickness compensator is required for 3NP42 and 3NP43; see page 3/77.
3NP44 can only be mounted on busbars with a thickness of 10 mm!

4) No further cover required for 3NP40 with box terminal.

5) SIRIUS motor starter protector with auxiliary switch 1 NO + 1 NC as standard. 3NP40 7 also available with auxiliary switch 2 NOs or 2 NCs on request.

6) For 3NP40 7 with output socket for auxiliary switch, the signal lead must be ordered separately, see page 3/77. In the case of 3NP41 to 3NP44, the auxiliary switch must be connected over a 2.8 mm × 0.5 mm flat terminal according to DIN 46244-A.

* You can order this quantity or a multiple thereof.

Rated residual current	Connection type (double-ended)		For LV HRC fuse links acc. to DIN 43620[1]	For isolating links[2]		Degree of protection IP00, without fuse links, without isolating links, with terminal screws		PG	PU	PS*/ P. unit	Weight per PU approx.
I_u	Connection	For conductor cross-section			DT	Order No.	Price per PU				
A		mm²	Size	Size					Unit(s)	Unit(s)	kg
For 40 mm busbar system											
For busbars of width 12 mm or 15 mm and thickness 5 mm or 10 mm[3]											
With fuse monitoring by SIRIUS motor starter protector[4][5]											
With deep adapter, e.g. for installation in ALPHA meter cabinets and ALPHA distribution boards (STAB/SIKUS)											
160	Flat terminals	Up to 2 × 70 (M8) Connection, top	00 a. 000	00 a. 000	B	**3NP40 75-0FE01**		103	1	1	1.812
		Connection, bottom			B	**3NP40 75-0FF01**		103	1	1	1.780
	Box terminals	2.5 ... 70 or 2 × 2.5 ... 16 Connection, top	00 a. 000	00 a. 000	B	**3NP40 75-0FK01**		103	1	1	1.820
		Connection, bottom			B	**3NP40 75-0FJ01**		103	1	1	1.831
With flat adapter according to DIN 43620 -6, for ALPHA distribution boards (STAB/SIKUS)											
160	Flat terminals	Up to 2 × 70 (M8) Connection, top	00 a. 000	00 a. 000	B	**3NP40 75-1FE01**		103	1	1	1.616
		Connection, bottom			B	**3NP40 75-1FF01**		103	1	1	1.620
	Box terminals	2.5 ... 70 or 2 × 2.5 ... 16 Connection, top	00 a. 000	00 a. 000	B	**3NP40 75-1FK01**		103	1	1	1.717
		Connec-tion, bottom			B	**3NP40 75-1FJ01**		103	1	1	1.630
250	Flat terminals	Up to 240 (M10) Connection, top or bottom	1 and 0	1 and 0	A	**3NP42 75-1FG01**		103	1	1	4.210

All fuse switch disconnectors with flat terminals must be used with the appropriate cable lug covers (3NY7 101 to 3NY7 141) for finger-safe cover according to BGV A2, see page 3/76.

1) See LV HRC Fuse Links.

2) Insert silver-plated isolating links.

3) Can only be mounted on 5 mm thick busbars, a busbar thickness compensator is required for 3NP42 and 3NP43; see page 3/77.
3NP44 can only be mounted on busbars with a thickness of 10 mm!

4) SIRIUS motor starter protectors, as standard with auxiliary switches 1 NO + 1 NC. See Catalog LV 1

5) For 3NP40 7 with output socket for auxiliary switch, the signal lead must be ordered separately, see page 3/77. In the case of 3NP41 to 3NP44, the auxiliary switch must be connected over a 2.8 mm × 0.5 mm flat terminal according to DIN 46244-A.

*** You can order this quantity or a multiple thereof.**

3NP LV HRC fuse switch disconnectors

Rated residual current	Connection type (double-ended)		For LV HRC fuse links acc. to DIN 43620[1]	For isolating links[2]		Degree of protection IP00, without fuse links, without isolating links, with terminal screws		PG	PU	PS*/ P. unit	Weight per PU approx.
I_u	Connection	For conductor cross-section			DT	Order No.	Price per PU				
A		mm²	Size	Size					Unit(s)	Unit(s)	kg
For 60 mm busbar system											
For busbars of width 12 mm or 15 mm and thickness 5 mm or 10 mm[3]											
Flat, T and I profiles, as well as on Rittal PLS systems											
With fuse monitoring by SIRIUS motor starter protector[4][5]											
160	Flat terminals	Up to 2 × 70 (M8)									
		Connection, top	00 and 000	00	B	**3NP40 76-1FE01**		103	1	1	1.670
		Connection, bottom			A	**3NP40 76-1FF01**		103	1	1	1.890
	Box terminals	2.5 ... 70 or 2 × 2.5 ... 16									
		Connection, top	00 and 000	00	B	**3NP40 76-1FK01**		103	1	1	1.755
		Connection, bottom			B	**3NP40 76-1FJ01**		103	1	1	1.915
250	Flat terminals	Up to 150 (M10)									
		Connection, top or bottom	1 and 0	1 and 0	A	**3NP42 76-1FG01**		103	1	1	4.171
400	Flat terminals	Up to 240 (M10)									
		Connection, top or bottom	2 and 1	2 and 1	A	**3NP43 76-1FG01**		103	1	1	5.845
630	Flat terminals	Up to 2 × 240 (M12)									
		Connection, top or bottom	3 and 2	3 and 2	A	**3NP44 76-1FG01**		103	1	1	8.235

All fuse switch disconnectors with flat terminals must be used with the appropriate cable lug covers (3NY7 101 to 3NY7 141) for finger-safe cover according to BGV A2, see page 3/76.

1) See LV HRC Fuse Links.

2) Insert silver-plated isolating links.

3) Can only be mounted on 5 mm thick busbars, a busbar thickness compensator is required for 3NP42 and 3NP43; see page 3/77.
3NP44 can only be mounted on busbars with a thickness of 10 mm!

4) SIRIUS motor starter protectors, as standard with auxiliary switches 1 NO + 1 NC. See Catalog LV 1

5) For 3NP40 7 with output socket for auxiliary switch, the signal lead must be ordered separately, see page 3/77. In the case of 3NP41 to 3NP44, the auxiliary switch must be connected over a 2.8 mm × 0.5 mm flat terminal according to DIN 46244-A.

* You can order this quantity or a multiple thereof.

	Rated residual current	Connection type (double-ended)		For LV HRC fuse links acc. to DIN 43620[1]	For isolating links	AS on switch disconnector		Degree of protection IP00, without fuse links, without isolating links, with terminal screws		PG	PU	PS*/ P. unit	Weight per PU approx.
	I_u	Connection	For conductor cross-section				DT	Order No.	Price per PU				
	A		mm^2	Size	Size						Unit(s)	Unit(s)	kg
	For surface mounting and installation on and in distribution boards completely compartmentalized, with high speed closing feature												
	160	Flat terminals[2]	2.5 ...150[3]	00 a. 000	00	Without[4]	▶	**3NP50 60-0CA00**		103	1	1	1.608
						1 NO + 1 NC	B	**3NP50 60-0CA10**		103	1	1	1.650
		Clamp terminals	1-wire 2.5 ... 50 or 2 conductors 1 × 2.5 ... 50 1 × 2.5 ... 35	00 a. 000	00	Without[4]	A	**3NP50 60-0CB00**		103	1	1	1.739
						1 NO + 1 NC	B	**3NP50 60-0CB10**		103	1	1	1.748
	250	Flat terminals	6 ... 150[5]	1 and 0	1	Without	▶	**3NP52 60-0CA00**		103	1	1	5.475
						1 NO + 1 NC	A	**3NP52 60-0CA10**		103	1	1	5.491
		Clamp terminals	35 ... 120	1 and 0	1	Without	C	**3NP52 60-0CB00**		103	1	1	5.605
						1 NO + 1 NC	B	**3NP52 60-0CB10**		103	1	1	5.814
	400	Flat terminals	6 ... 240[5]	2 and 1	2	Without	▶	**3NP53 60-0CA00**		103	1	1	6.532
						1 NO + 1 NC	A	**3NP53 60-0CA10**		103	1	1	6.551
	630	Flat terminals	2 × 6 ... 240[5]	3 and 2	3	Without	▶	**3NP54 60-0CA00**		103	1	1	7.945
						1 NO + 1 NC	B	**3NP54 60-0CA10**		103	1	1	7.958
	For 40 mm busbar system Completely compartmentalized, with high speed closing[6] Busbar width: 12 mm and 5 mm or 10 mm thickness												
	160	Flat terminals	2.5 ...150[3] Connection, bottom	00 a. 000		Without	C	**3NP50 65-1CF00**		103	1	1	2.380
						1 NO + 1 NC	B	**3NP50 65-1CF10**		103	1	1	2.370
		Clamp terminals	1-wire 2.5 ... 50 or 2 conductors 1 × 2.5 ... 50 1 × 2.5 ... 35 bottom connection	00 a. 000		Without	B	**3NP50 65-1CG00**		103	1	1	2.433
						1 NO + 1 NC	B	**3NP50 65-1CG10**		103	1	1	2.437
	For 60 mm busbar system Surface mounting and installation completely compartmentalized, with high speed closing Use switch version "Surface mounting and installation" and busbar adapter, see page 3/82.												

1) See LV HRC Fuse Links.

2) The relevant 3NY1 106 cable lug covers must be used for 3NP50 60 with flat terminals (see Accessories) for the purpose of protection against accidental contact according to DIN VDE 0106-100 (see page 3/76).

3) According to DIN 46234 or 16 mm^2 ... 95 mm^2 according to DIN 46235 (use M10 cable lug if necessary).

4) If auxiliary switch is retrofitted, additional drill holes are required on the switch.

5) According to DIN 46234 or DIN 46235; with cable lug according to DIN 46235; conductor cross-section min. 16 mm^2 (use M12 cable lug if necessary).

6) According to DIN 46234 or 16 ... 95 mm^2 according to DIN 46235 (use M cable lug if necessary).

*** You can order this quantity or a multiple thereof.**

3NP LV HRC fuse switch disconnectors

Rated residual current	Connection type (double-ended)		For LV HRC fuse links acc. to DIN 43620[1]	Auxiliary switches (AS)			Degree of protection IP00, without fuse links, without isolating links, with terminal screws					
				On	On							
I_u	Connection	For conductor cross-section		Switch disconnectors	Motor starter protectors	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
A		mm²	Size							Unit(s)	Unit(s)	kg
Surface mounting and installation **Completely compartmentalized, with high speed closing feature and fuse monitoring by SIRIUS motor starter protectors[2]**												
With plug-in connection of the auxiliary switch connecting cable (length approx. 1 m) to the motor starter protector												
160	Flat terminals[3]	2.5 ... 150[4]	00 a. 000	1 NO + 1 NC	1 NO + 1 NC	►	**3NP50 60-0EA86**		103	1	1	2.484
				1 NO + 1 NC	2 NO	B	**3NP50 60-0EA26**		103	1	1	2.550
	Clamp terminals	1 conductor 2.5 ... 50	00 a. 000	1 NO + 1 NC	1 NO + 1 NC	B	**3NP50 60-0EB86**		103	1	1	2.616
		2 conductors 1 × 2.5 ... 50 1 × 2.5 ... 35		1 NO + 1 NC	2 NO	B	**3NP50 60-0EB26**		103	1	1	2.650
250	Flat terminals	6 ... 150[5]	1 and 0	1 NO + 1 NC	1 NO + 1 NC	►	**3NP52 60-0EA86**		103	1	1	6.014
				1 NO + 1 NC	2 NO	B	**3NP52 60-0EA26**		103	1	1	6.867
	Clamp terminals	35 ... 120	1 and 0	1 NO + 1 NC	1 NO + 1 NC	B	**3NP52 60-0EB86**		103	1	1	7.095
				1 NO + 1 NC	2 NO	B	**3NP52 60-0EB26**		103	1	1	6.659
400	Flat terminals	6 ... 240[5]	2 and 1	1 NO + 1 NC	1 NO + 1 NC	►	**3NP53 60-0EA86**		103	1	1	7.083
				1 NO + 1 NC	2 NO	B	**3NP53 60-0EA26**		103	1	1	5.410
630	Flat terminals	6 ... 2 × 240[5]	3 and 2	1 NO + 1 NC	1 NO + 1 NC	►	**3NP54 60-0EA86**		103	1	1	8.462
				1 NO + 1 NC	2 NO	B	**3NP54 60-0EA26**		103	1	1	9.233
For 40 mm busbar system **Completely compartmentalized, with high speed closing and fuse monitoring by SIRIUS motor starter protectors[2] [6]**												
Busbar width: 12 mm and 5 mm or 10 mm thickness												
160	Flat terminals	2.5 ... 150[4]	00 a. 000	1 NO + 1 NC	1 NO + 1 NC	A	**3NP50 65-1EF86**		103	1	1	2.908
		Connection, bottom		1 NO + 1 NC	2 NO	B	**3NP50 65-1EF26**		103	1	1	2.950
	Clamp terminals	1-wire	00 a. 000	1 NO + 1 NC	1 NO + 1 NC	B	**3NP50 65-1EG86**		103	1	1	3.020
		2.5 ... 50 2 conductors 1 × 2.5 ... 50 1 × 2.5 ... 35 with bottom connection		1 NO + 1 NC	2 NO	C	**3NP50 65-1EG26**		103	1	1	2.973
For 60 mm busbar system												
Use switch version "Surface mounting and installation" and busbar adapter, see page 3/82.												

1) See LV HRC Fuse Links.

2) SIRIUS motor starter protectors: auxiliary switches, 2 NC also available on request.

3) The relevant 3NY1 106 cable lug covers must be used for 3NP50 60 with flat terminals (see Accessories) for the purpose of protection against accidental contact according to DIN VDE 0106-100 (see page 3/76).

4) According to DIN 46234 or 16 mm² ... 95 mm² according to DIN 46235 (use M10 cable lug if necessary).

5) According to DIN 46234 or DIN 46235, with cable lug according to DIN 46235: min. conductor cross-section 16 mm² (use M12 cable lugs if required).

6) For accessories and further devices on busbar systems, see Accessories and Switchgear, SIVACON Distribution Boards and Cabinet Systems -> Components for 8US, 8UC, 4NC distribution board systems -> 8US busbar systems.

* You can order this quantity or a multiple thereof.

	Rated residual current	Connection type (double-ended)		For LV HRC fuse links acc. to DIN 43620[1]	Auxiliary switches			Degree of protection IP00, without fuse links, without isolating links, with terminal screws					
					On	On							
	I_u	Connection	For conductor cross-section		Switch disconnectors	Fuse monitoring	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
	A		mm²	Size	Version	Version					Unit(s)	Unit(s)	kg
	Surface mounting and Installation **Completely compartmentalized, with high speed closing feature** **With electronic fuse monitoring EF (self-powered), open-circuit principle** **For rated operational voltages U_e of 400 V to 500 V AC, infeed must be from the top!** With plug-in connection of auxiliary switch connecting cable (length approx. 1 m) for fuse monitoring, status display: green LED, illuminated, fault indication: green LED, flashing, fuse failure: red LED (display per phase)												
	160	Flat terminals[2]	2.5 ...120[3]	00 a. 000	1 NO + 1 NC	2 NO + 1 NC	B	**3NP50 60-0HA13**		103	1	1	2.375
		Clamp terminals	1-wire: 2.5 ... 50 2-wire: 1× 2.5 ... 50 1× 2.5 ... 35	00 a. 000	1 NO + 1 NC	2 NO + 1 NC	B	**3NP50 60-0HB13**		103	1	1	2.500
	250	Flat terminals	6 ... 150[4]	1 and 0	1 NO + 1 NC	2 NO + 1 NC	B	**3NP52 60-0HA13**		103	1	1	5.865
	400	Flat terminals	6 ... 240[4]	2 and 1	1 NO + 1 NC	2 NO + 1 NC	B	**3NP53 60-0HA13**		103	1	1	6.951
	630	Flat terminals	6 ... 240[4]	3 and 2	1 NO + 1 NC	2 NO + 1 NC	B	**3NP54 60-0HA13**		103	1	1	8.513

1) See LV HRC Fuse Links.

2) The relevant 3NY1 106 cable lug covers must be used for 3NP50 60 with flat terminals (see Accessories) for the purpose of protection against accidental contact according to DIN VDE 0106-100 (see page 3/76).

3) According to DIN 46234 or 16 mm² ... 95 mm² according to DIN 46235 (use M10 cable lug if necessary).

4) According to DIN 46234 or DIN 46235; with cable lug according to DIN 46235: Conductor cross-section min 16 mm² (use M12 cable lugs if required).

*** You can order this quantity or a multiple thereof.**

3NP LV HRC fuse switch disconnectors

	Rated residual current	Connection type (double-ended)		For LV HRC fuse links acc. to DIN 43620[1]	Auxiliary switches			Degree of protection IP00, without fuse links, without isolating links, with terminal screws						
					On	On								
	I_u	Connection	Conductor cross-section		Switch disconnectors	Fuse monitoring	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
	A		mm²	Size							Unit(s)	Unit(s)	kg
	For 40 mm busbar system **Completely compartmentalized, with high speed closing feature** **With electronic fuse monitoring EF (self-powered), open-circuit principle** **For rated operational voltages U_e of 400 V to 500 V AC, infeed must be from the top!** For busbar width: 12 mm and 5 mm or 10 mm thickness													
	160	Flat terminals	2.5 ...120[2] with bottom connection	00 and 000	1 NO + 1 NC	2 NO + 1 NC	B	**3NP50 65-1HF13**		103	1	1	2.776
	For 60 mm busbar system Use switch version "Surface mounting and installation" and busbar adapter, see page 3/82.													

[1] See LV HRC Fuse Links.

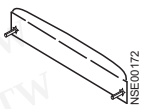
[2] According to DIN 46234 or 16 mm² ... 95 mm² according to DIN 46235 (use M10 cable lug if necessary).

All fuse switch disconnectors with flat connections must be used with the relevant cable lug covers (3NY7 101 to 3NY7 141) in order to ensure protection against finger touch according to BGVA3, see the following table.

	Version	For fuse switch disconnectors	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
							Unit(s)	Unit(s)	kg
	Quick retaining plates Between two support rails to EN 60715								
	Busbar center-to-center clearance 125 mm	3NP40 10, 3NP40 70	B	**3NY1 995**		103	1	1/200	0.135
3NY1 995	Busbar center-to-center clearance 125 mm	3NP42 70	B	**3NY7 322**		103	1	1	0.249
	Cable lug covers								
	and finger-safe cover to BGV A3 (1 set = 2 units) for 1 single mounting or 2 adapter devices	3NP40 7 with flat terminal[1]	►	**3NY7 101**		103	1	1	0.065
		3NP42 7	►	**3NY7 121**		103	1	1	0.220
		3NP43	►	**3NY7 131**		103	1	1	0.221
		3NP44	►	**3NY7 141**		103	1	1	0.319
	Terminals (1 set = 3 units) Conductor cross-section								
	70 mm² ... 150 mm²	3NP42 7	A	**3NY7 120**		103	1	1	0.333
	120 mm² ... 240 mm²	3NP43	A	**3NY7 130**		103	1	1	0.583
	150 mm² ... 300 mm²	3NP44	A	**3NY7 140**		103	1	1	0.725
	Triple terminals (1 set = 3 units)								
	For retrofitting on box terminals conductor cross-section solid/stranded: 2.5 mm² ... 16 mm²	3NP40 1 3NP40 7	A	**3NY7 102**		103	1	1	0.131
3NY7 102	For mounting on flat terminals finely stranded with end sleeve: 2.5 mm² ... 10 mm²	3NP40 7	B	**3NY7 105**		103	1	1	0.113

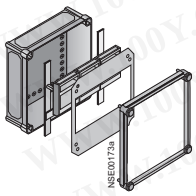
[1] The fuse switch disconnector with mounted cable lug covers, together with molded-plastic covers for distributor/device field/incoming feeder unit, is easy to install in the meter cabinet.

* You can order this quantity or a multiple thereof.

	Version	For fuse switch disconnectors	DT	Order No.	Price per PU	PG	PU Unit(s)	PS*/ P. unit Unit(s)	Weight per PU approx. kg
 3NY1 237	**Three-phase busbars** Modular width 90 mm = 5 MW For I_u max = 225 A For 2 switch disconnectors	3NP40 1	A	**3NY1 237**		103	1	1	0.265
 3NY1 238	Permissible connection 25 mm² or supply terminal For 3 switch disconnectors For 4 switch disconnectors		A A	**3NY1 238** **3NY1 438**		103 103	1 1	1 1	0.434 0.650
 3NY1 263	Link rails		A	**3NY1 263**		103	1	1	0.267
	Covers For 1 blank space in 3NY1 238	3NP40 1	A	**3NY1 265**		103	1	1	0.012
 3NY1 236	**Feeder terminals** (1 Set = 3 units) For I_u max = 225 A Conductor cross-section solid/stranded: 25 mm² ... 95 mm² Finely stranded with end sleeve: 16 mm² ... 70 mm	3NP40 1	A	**3NY1 236**		103	1	1	0.262
 3NY7 481	**Overreaching protections**	3NP42 7 3NP43 3NP44	A	**3NY7 481**		103	1	1	0.021
	Sealing pins (1 package = 10 units)	3NP42 7 3NP43 3NP44	A	**3NY7 482**		103	1	10	0.056
	Bar thickness compensations (1 Assembly kit = 5 units) for only 5 mm thick busbars	3NP42 7 3NP43	A	**3NY7 381**		103	1	1	0.064
	Fuse carriers Gray with inscription label with voltage inspection holes	3NP40 1 3NP40 7	B B	**3NY7 003** **3NY7 001**		103 103	1 1	1 1	0.160 0.220
 3NY3 035	**Auxiliary switches 1 CO** For sizes 000 and 00 with self-tapping screws for sizes 1 to 3 to clip on	3NP40 1 up to 3NP44	►	**3NY3 035**		103	1	1	0.004
	Electronically optimized		B	**3NY3 030**		103	1	1	0.004
	Fuse links **Size 000** With non-insulated grip lugs, operational class gL/gG for cable and line protection, mounting width 21 mm according to IEC 60269-2-1 and DIN 43620	3NP40 1							
	400 V/125 A 400 V/160 A		A B	**3NY1 822** **3NY1 824**		013 013	1 1	3 3	0.130 0.129
	Signal leads For connection to output socket of fuse monitoring, size 00 1-m cable with connector 3-m cable with connector	3NP40 7 3NP40 7	B B	**3NY1 910** **3NY1 911**		103 103	1 1	1 1	0.097 0.261

* You can order this quantity or a multiple thereof.

3NP LV HRC fuse switch disconnectors

	Version	For fuse switch disconnectors	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
	mm × mm						Unit(s)	Unit(s)	kg
	Masking frames **For flush mounting in 40 mm and 60 mm busbar systems**								
	Touch protection covers[1]								
		3NP40 75 3NP40 76	B	**3NY7 601**		103	1	1	0.125
	Masking frames **For installation in any distribution boards**[2]								
	Molded-plastic masking frames								
	215 × 130	3NP40 1	A	**3NY1 251**		103	1	1	0.052
	215 × 130	3NP40 7 with box terminals ►		**3NY7 200**		103	1	1	0.037
	215 × 130	3NP40 7 with flat terminals ►		**3NY7 201**		103	1	1	0.046
	375 × 220	3NP42 7 ►		**3NY7 220**		103	1	1	0.112
	375 × 245	3NP43	A	**3NY7 230**		103	1	1	0.117
3NY1 251	375 × 290	3NP44	A	**3NY7 240**		103	1	1	0.125
	Masking frames **For installation in ALPHA 400-ZS meter cabinets**								
	Molded-plastic masking frames								
	Suitable for distribution board/device panel or for incoming feeder unit in the meter cabinet (busbar mounted)								
	197 × 215.5	2 × 3NP40 1	A	**3NY1 258**		103	1	1	0.063
	197 × 215.5	1 x 3NP40 1 left	A	**3NY1 262**		103	1	1	0.093
	197 × 215.5	1 x 3NP40 1 right	A	**3NY1 264**		103	1	1	0.091
	208 × 229	1 x 3NP40 7 left	A	**3NY7 500**		103	1	1	0.120
	208 × 229	1 x 3NP40 7 right	A	**3NY7 501**		103	1	1	0.120
	208 × 236	2 × 3NP40 7	A	**3NY7 502**		103	1	1	0.054
	309 × 216	3NP42 7 ►		**3NY7 220**		103	1	1	0.112
	375 × 245	3NP43	A	**3NY7 230**		103	1	1	0.117
	375 × 290	3NP44	A	**3NY7 240**		103	1	1	0.125
	Masking frames **For installation in ALPHA 160- and ALPHA 400 wall-mounted distribution boards (STAB 160/STAB 400), and ALPHA 630 floor-mounted distribution boards (SIKUS 630)**								
	Touch protection covers[1][3]								
		3NP40 76	B	**3NY7 600**		103	1	1	0.095
	Molded-plastic masking frames								
	For mounting on mounting plates or busbars. Further information see Catalog ET A1 "ALPHA distribution boards and terminal blocks"								
	166 × 199	1 × 3NP40 1 right	A	**3NY1 260**		103	1	1	0.082
	166 × 199	1 × 3NP40 1 left	A	**3NY1 261**		103	1	1	0.086
	166 × 199	2 × 3NP40 1	A	**3NY1 248**		103	1	1	0.036
	208 × 229	1 × 3NP40 7 left	A	**3NY7 500**		103	1	1	0.120
	208 × 229	1 × 3NP40 7 right	A	**3NY7 501**		103	1	1	0.120
	208 × 236	2 × 3NP40 7	A	**3NY7 502**		103	1	1	0.054
	309 × 216[4]	3NP42 7	A	**3NY7 820**		103	1	1	0.113
	375 × 245	3NP43	A	**3NY7 230**		103	1	1	0.117
	375 × 290	3NP44	A	**3NY7 240**		103	1	1	0.125
	Masking frames **For installation in 8HP molded-plastic distribution systems**								
	Molded-plastic masking frames								
	For installation in 8HP complete enclosures with fuse switch disconnectors 8HP enclosure (size)								
	1	1 × 3NP40 10	A	**8HP6 431**		046	1	1	0.221
	1	1 × 3NP40 70	A	**8HP6 422**		046	1	1	0.224
	2	2 × 3NP40 10	A	**8HP6 432**		046	1	1	0.465
	2	3 × 3NP40 10	A	**8HP6 432**		046	1	1	0.465
	2	1 × 3NP40 70	A	**8HP6 423**		046	1	1	0.230
	2	2 × 3NP40 70	A	**8HP6 424**		046	1	1	0.203
	2.5	1 × 3NP40 70	A	**8HP6 423**		046	1	1	0.230
	2.5	2 × 3NP40 70	A	**8HP6 424**		046	1	1	0.203
	2.5	1 × 3NP42 70	A	**8HP6 427**		046	1	1	0.250

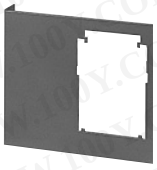
1) When using LV HRC fuse links, size 00 (160 A), the permissible load current is 0.9 x I_n.

2) To some extent, special masking frames are required for installation in ALPHA wall-mounted and floor-mounted distribution boards (STAB, SIKUS), and ALPHA 400-ZS meter cabinets; see page 3/78.

3) In 60 mm busbar systems, the conductor cross-section is limited to 16 mm^2 if the outgoing feeder is at the bottom.

4) If 8GE3 818-0 mounting plates are used, 3NY7 220 molded-plastic masking frames can also be used (for installation in any distribution boards).

* You can order this quantity or a multiple thereof.

	Version	For fuse switch disconnectors	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
	mm × mm						Unit(s)	Unit(s)	kg
	Molded-plastic masking frames For installation in 8HP molded-plastic distribution systems								
	For mounting between 2 standard mounting rails with 3NY1 995 quick retaining plate								
	197 × 215.5	1 × 3NP40 10 right, with and without auxiliary switch	A	**3NY1 256**		103	1	1	0.116
	197 × 215.5	1 × 3NP40 10 left, with and without auxiliary switch	A	**3NY1 257**		103	1	1	0.118
	In a field of width B1 197 × 215.5	2 × 3NP40 10, with and without auxiliary switch	A	**3NY1 258**		103	1	1	0.063
 3NY1 250	In a field of width B2/2 197 × 235	2 × 3NP40 10, with and without auxiliary switch	A	**3NY1 250**		103	1	1	0.075
 3NY1 253	In a field of width B2 197 × 485	3 × 3NP40 10 with and without auxiliary switch (supports included in delivery)	B	**3NY1 253**		103	1	1	0.225
	197 × 485	4 × 3NP40 10 with and without auxiliary switch (supports included in delivery)	B	**3NY1 254**		103	1	1	0.188
 3NY1 255	197 × 485	5 × 3NP40 10, with and without auxiliary switch	A	**3NY1 255**		103	1	1	0.125
	Supports								
	(1 set = 10 units) for 3NY1 253 and 3NY1 254 molded-plastic masking frames	3NP40 1	C	**3NY1 271**		103	1	1	0.100
	Molded-plastic masking frames								
 3NY1 260	For mounting on 3NP40 1 switch disconnectors, 166 × 199	1 × 3NP40 1 right with and without auxiliary switch	A	**3NY1 260**		103	1	1	0.082
	On standard mounting rails with special 8GD9 equipment rack and for mounting on busbars (except 3NY1 247) 166 × 199	1 × 3NP40 1 left, with and without auxiliary switch	A	**3NY1 261**		103	1	1	0.086
	In a field of width B1 166 × 199	2 × 3NP40 1, with and without auxiliary switch	A	**3NY1 248**		103	1	1	0.036
 3NY1 247	In a field of width B2 166 × 469	5 × 3NP40 1, with and without auxiliary switch	A	**3NY1 247**		103	1	1	0.072
	Blanking covers (1 set = 10 units) for covering blank spaces in the 3NY1 2 molded-plastic masking frames, width 90	3NP40 1	B	**3NY1 270**		103	1	1	0.040

* You can order this quantity or a multiple thereof.

3NP LV HRC fuse switch disconnectors

	Version	For fuse switch disconnectors	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
	mm × mm						Unit(s)	Unit(s)	kg
	Molded-plastic masking frames								
	For mounting between two standard mounting rails								
	208 × 219	1 × 3NP40 7 left	B	**3NY7 800**		103	1	1	0.100
	208 × 219	1 × 3NP40 7 right	B	**3NY7 801**		103	1	1	0.120
	With 3NY1 995 quick retaining plate 208 × 222	2 × 3NP40 7	B	**3NY7 802**		103	1	1	
	With 3NY1 322 quick retaining plate 309 × 216	1 × 3NP42 7	A	**3NY7 820**		103	1	1	0.113
	Molded-plastic masking frames								
	For fixing on 8GD9 100 mounting plates								
	208 × 229	1 × 3NP40 7 left	A	**3NY7 500**		103	1	1	0.120
	208 × 229	1 × 3NP40 7 right	A	**3NY7 501**		103	1	1	0.120
	208 × 236	2 × 3NP40 7	A	**3NY7 502**		103	1	1	0.054
	309 × 216[1]	1 × 3NP42 70	A	**3NY7 820**		103	1	1	0.113
	Molded-plastic masking frames								
	For fixing on 8GD9 591 mounting plates								
	375 × 245	1 × 3NP43 70	A	**3NY7 230**		103	1	1	0.117
	For fixing on 8GD9 592 mounting plates								
	375 × 290	1 × 3NP44 70	A	**3NY7 240**		103	1	1	0.125
	Fuse carriers								
 3NY1 074		3NP50 6.-.C..0	B	**3NY1 074**		103	1	1	0.620
		3NP52 60-.C..0	B	**3NY1 371**		103	1	1	0.263
		3NP53 60-.C..0	B	**3NY1 372**		103	1	1	1.510
		3NP54 60-.C..0	B	**3NY1 373**		103	1	1	1.690
	With fuse monitoring by 3RV1 motor starter protectors (with auxiliary switches, 1 NO + 1 NC), with plug-in connection, without connector and connecting cable	3NP50 6.-.E..6	B	**3NY1 420**		103	1	1	1.405
		3NP52 60-.E..6	B	**3NY1 421**		103	1	1	1.900
		3NP53 60-.E..6	B	**3NY1 422**		103	1	1	1.980
		3NP54 60-.E..6	B	**3NY1 423**		103	1	1	2.600
	Connector and connecting cable								
	1 m long	3NP5 with 3RV1	B	**3NY1 910**		103	1	1	0.097
	3 m long		B	**3NY1 911**		103	1	1	0.261
 3NY1 513-3	With electronic fuse monitoring for 400 V ... 500 V DC (with auxiliary switches, 2 NO + 1 NC), with plug-in connection, without connector and connecting cable	3NP50 6.-.H.13	B	**3NY1 513-0**		103	1	1	1.235
		3NP52 60-.H.13	C	**3NY1 513-2**		103	1	1	2.130
		3NP53 60-.H.13	B	**3NY1 513-3**		103	1	1	2.146
		3NP54 60-.H.13	C	**3NY1 513-4**		103	1	1	0.325
 3NY1 915	Connector and connecting cable (6P) 3 m long	3NP5 with EF	B	**3NY1 915**		103	1	1	0.372
	Auxiliary switches 1 NO + 1 NC								
 3NY3 033	With actuating cams, screws and washers (mounting kit)	3NP50[2]	B	**3NY3 033**		103	1	1	0.015
 3NY3 034	With fixing bracket and screws (mounting kit)	3NP52 ... 3NP54	B	**3NY3 034**		103	1	1	0.015

[1] For mounting on 8GD9 590 mounting plate, the 3NY7 220 molded-plastic masking frame can also be used.

[2] If retrofitted, drill holes required.

* You can order this quantity or a multiple thereof.

	Version	For fuse switch disconnectors	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
	mm × mm						Unit(s)	Unit(s)	kg
	Arc chutes								
 3NY4 031	(for 3NP52, 3NP53 and 3NP54, 3 units each are required)	3NP50	B	**3NY4 031**		103	1	1	0.218
		3NP52	B	**3NY4 011**		103	1	1	0.215
 3NY4 011		3NP53, 3NP54	B	**3NY4 012**		103	1	1	0.240
	Molded-plastic masking frames								
	As replacement for masking frames from assembly kits for flush mounting (without fixing brackets and small components)								
	300 × 220	3NY1 210	A	**3NY1 102**		103	1	1	0.071
	300 × 245	3NY1 211	A	**3NY1 103**		103	1	1	0.075
	300 × 290	3NY1 212	A	**3NY1 104**		103	1	1	0.084
	Molded-plastic masking frames, for installation in any distribution board								
	For installation in cabinet								
	215 × 135	3NP50 with and without auxiliary switch	A	**3NY1 105**		103	1	1/400	0.045
	215 × 135	With auxiliary switch	A	**3NY1 115**		103	1	1/400	0.044
	For installation in metal front panels								
	220 × 160	With and without auxiliary switch	A	**3NY1 125**		103	1	1	0.062
	For covering connection terminals								
	265 × 135	3NP50 with and without auxiliary switch	A	**3NY1 107**		103	1	1	0.073
	For covering cable lug connections								
	290 × 135	3NP50 with and without auxiliary switch	A	**3NY1 106**		103	1	1/225	0.071
	For separate covering of top and bottom cable lug connections								
	290 × 135	With auxiliary switch	A	**3NY1 116**		103	1	1/225	0.071
	290 × 135	3NP50 with and without auxiliary switch	A	**3NY1 108**		103	1	1/200	0.048
 3NY1 212	**Assembly kits for flush mounting** With molded-plastic masking frames, fixing brackets and small components. For disconnectors with and without auxiliary switch								
	250 × 149	3NP50 60	B	**3NY1 208**		103	1	1	0.531
	300 × 220	3NP52 60	B	**3NY1 210**		103	1	1	0.287
	300 × 245	3NP53 60	B	**3NY1 211**		103	1	1	0.298
	300 × 290	3NP54 60	B	**3NY1 212**		103	1	1	0.313

* You can order this quantity or a multiple thereof.

3NP LV HRC fuse switch disconnectors

	Version	For fuse switch disconnectors	DT	Order No.	Price per PU	PG	PU	PS*/ P. unit	Weight per PU approx.
							Unit(s)	Unit(s)	kg
	Covers for cable lug connection (1 set = 6 units) screw-on to free screw end for protection against unintentional contact								
 3TX6 546-3B	Covering length, 99	3NP52	A	**3NY1 241**		103	1	1	0.205
	Covering length, 95	3NP53 3NP54	B	**3TX6 546-3B**		101	1	1	0.260
	Covering length, 120		B	**3NY1 245**		103	1	1	0.336
 3NY1 907	**Clamp terminals** (1 set = 3 units)								
	2.5 ... 50 mm^2 [1]	3NP50	B	**3NY1 903**		103	1	1	0.108
	35 ... 120 mm^2	3NP52	B	**3NY1 907**		103	1	1	0.225
 8US12 10-4AG00	**Busbar adapters** For 60 mm busbar system Busbar width								
	108	3NP50	A	**8US12 91-4SB00**		143	1	1	0.551
	250 (length 320 mm, M10 terminal screws, connecting cables must be made)	3NP52, 3NP53, 3NP54[2]	A	**8US12 10-4AG00**		143	1	1	3.060
	Sealing eyes								
	Can be retrofitted (1 package = 10 units)	3NP50	B	**3NY1 940**		103	1	1	0.010

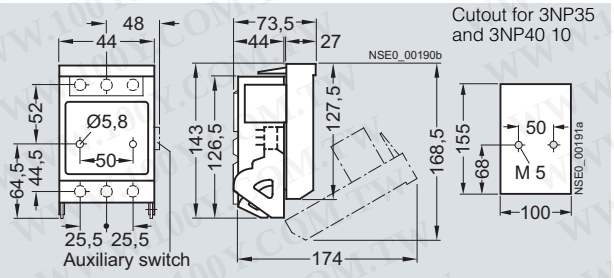
[1] Also available in 2-wire version: 1 × 2.5 mm^2 ... 50 mm^2 and 1 × 2.5 ... 35 mm^2.

[2] Switch is wider than adapter; however, this can be expanded to 276 mm using two 8US19 98–2BM00 lateral modules.

* You can order this quantity or a multiple thereof.

Dimensional drawings

3NP40 10



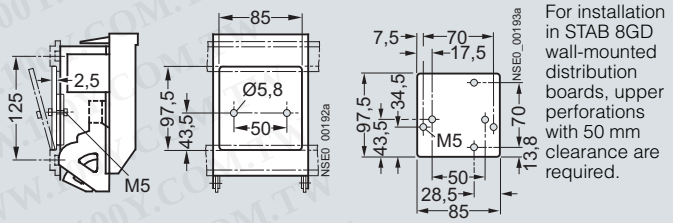
Cutout for 3NP35 and 3NP40 10

3NP40 10

With 3NY1 995 quick retaining plate, mounting rail center-to-center clearance: 125 mm

3NY1 995 quick retaining plate

For 3NP40 10 and 3NP40 70



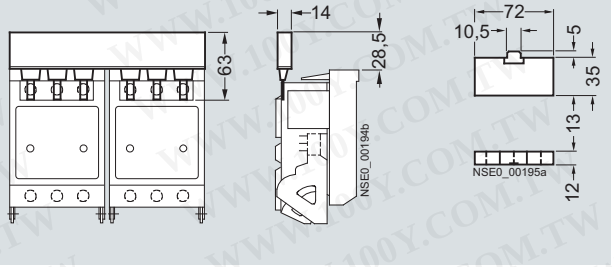
For installation in STAB 8GD wall-mounted distribution boards, upper perforations with 50 mm clearance are required.

3NP40 10

With three-phase **3NY1 237** busbars
For 2 fuse switch disconnectors

3NY1 265 caps

For three-phase **3NY1 238** busbars

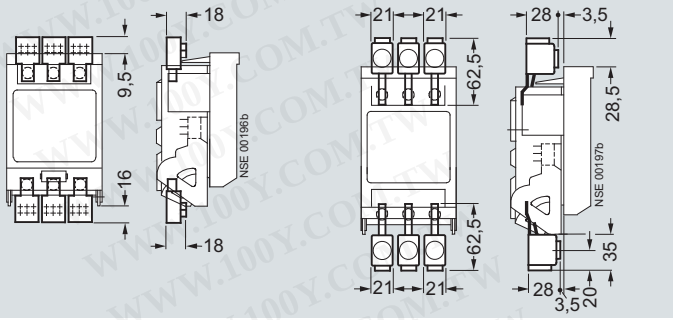


3NP40 10

With **3NY1 235** triple terminals

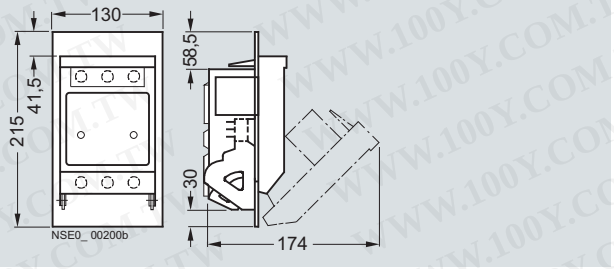
3NP40 10

With **3NY1 236** feeder terminals



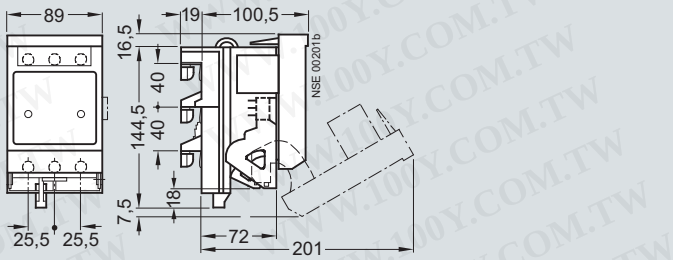
3NP40 10

With **3NY1 251** molded-plastic masking frames



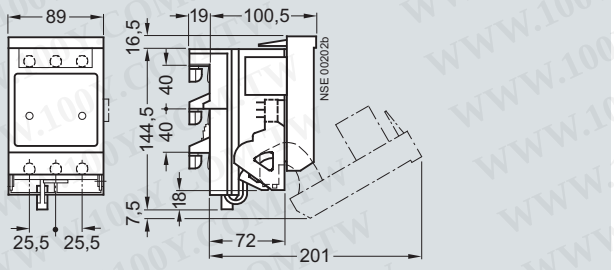
3NP40 15-1CJ01

With busbar adapter, flat, busbar width 12 mm or 15 mm and thickness 5 mm or 10 mm, with bottom connection



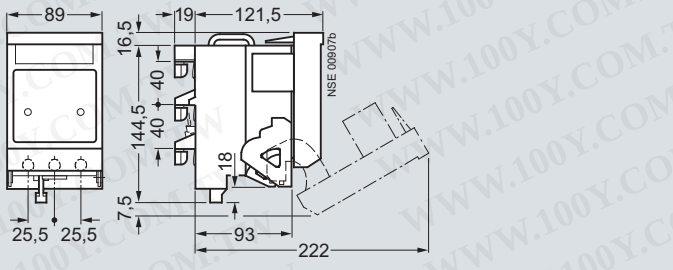
3NP40 15-1CK01

With busbar adapter, flat, busbar width 12 mm or 15 mm and thickness 5 mm or 10 mm, with top connection



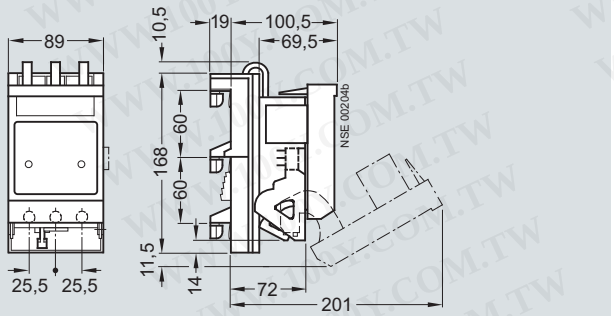
3NP40 15-0CJ01

With busbar adapter, deep, busbar width 12 mm or 15 mm and thickness 5 mm or 10 mm, with bottom connection



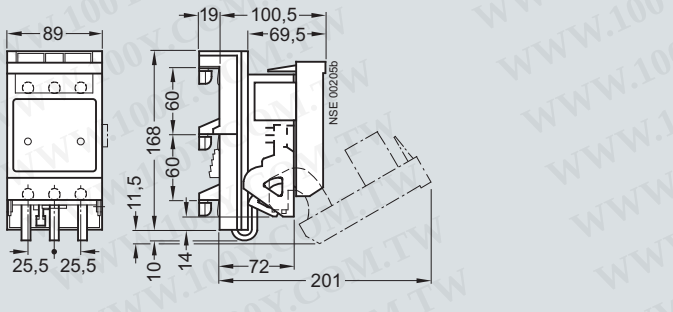
3NP40 16-1CJ01

With busbar adapter, rails of width 12, 15, 20 mm or 30 mm and thickness 5 mm or 10 mm, flat, T, I profiles and other renowned busbar systems, with bottom connection



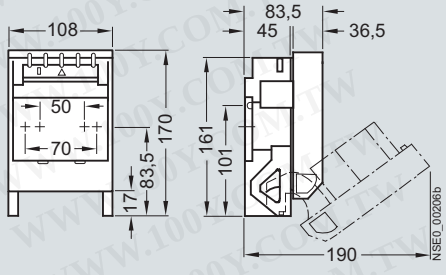
3NP40 16-1CK01

With busbar adapter, rails of width 12, 15, 20, 25 mm or 30 mm and thickness 5 mm or 10 mm, flat, T, I profiles and other renowned busbar systems, with top connection

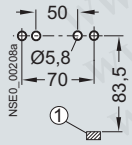


3NP LV HRC fuse switch disconnectors

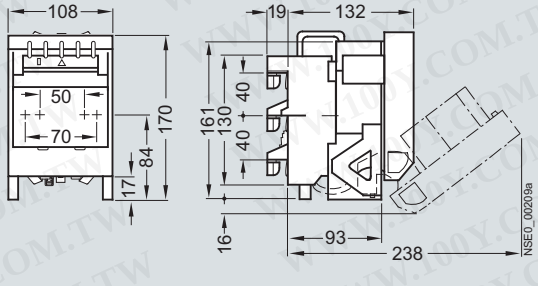
3NP40 70
For mounting



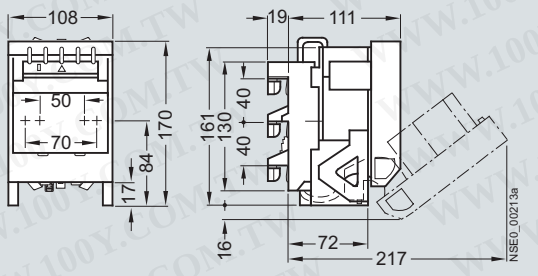
Drilling pattern for 3NP40 70



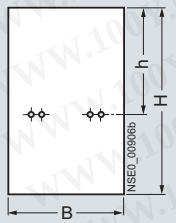
3NP40 75-0
With busbar adapter, deep,
busbar width 12 mm or 15 mm and thickness 5 mm or 10 mm



3NP40 75-1
With busbar adapter, flat,
busbar width 12 mm or 15 mm and thickness 5 mm or 10 mm



For metal frames
Cutouts for 3NP4

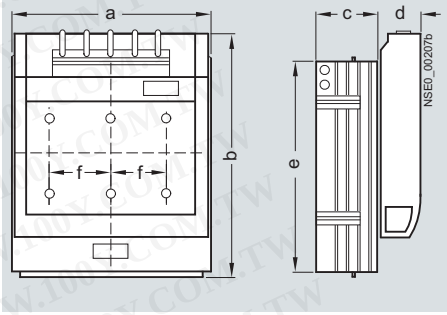


Type	Masking frame between assembly kit Molded-plastic masking frame behind panel Type	B	H	Min. panel cutout B	H	h[1]
3NP40 1	3NY1 251	130	215	100	180	100
3NP40 7	3NY7 200, 3NY7 201	130	215	118	195	110
3NP42 7	3NY7 220	220	375	210	275	157
3NP43 7	3NY7 230	245	375	235	315	174
3NP44 7	3NY7 240	290	375	280	325	178

Type	Molded-plastic masking frame in front of panel Type	B	H	B	H	h[1]
3NP40 1	3NY1 251	130	215	100	155	87
3NP40 7	3NY7 200, 3NY7 201	130	215	118	195	110
3NP42 7	3NY7 220	220	375	198	275	157
3NP43 7	3NY7 230	245	375	224	315	174
3NP44 7	3NY7 240	290	375	270	325	178

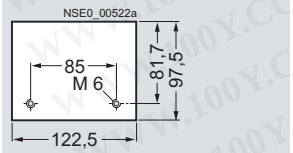
[1] h = distance from upper edge of switchboard cutout to center of disconnector mounting.

3NP42 70, 3NP43 70, 3NP44 70
For mounting

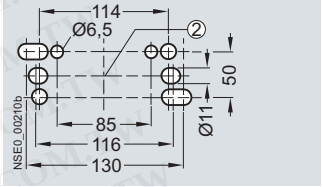


Type	a	b	c	d	e	f
3NP42 70	184	243	66	45.5	215	57
3NP43 70	210	288	80	48	255	65
3NP44 70	256	300	94.5	48	267	81

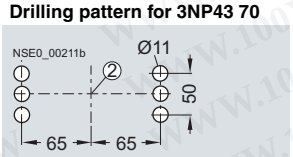
3NY73 22 quick retaining plate



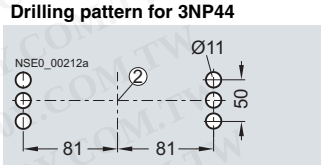
Drilling pattern for 3NP42 70



Drilling pattern for 3NP43 70

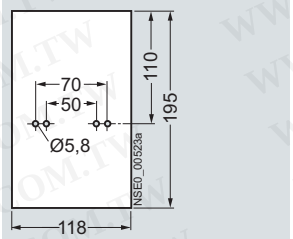


Drilling pattern for 3NP44

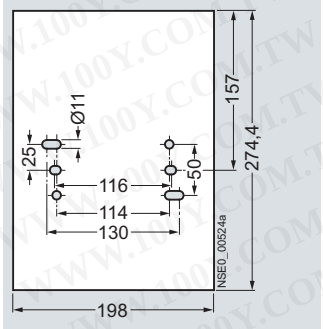


① Bottom edge disconnector-base
② Center disconnector-base

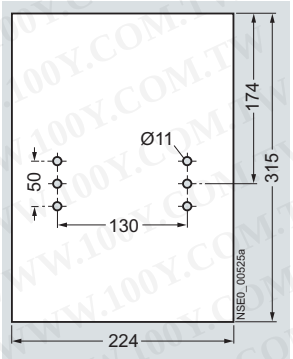
For plastic frames
Cutouts[2] for 3NP40 70



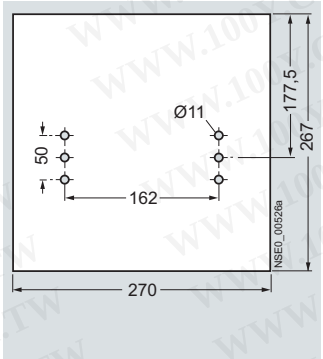
Cutouts[2] for 3NP42



Cutouts[2] for 3NP43

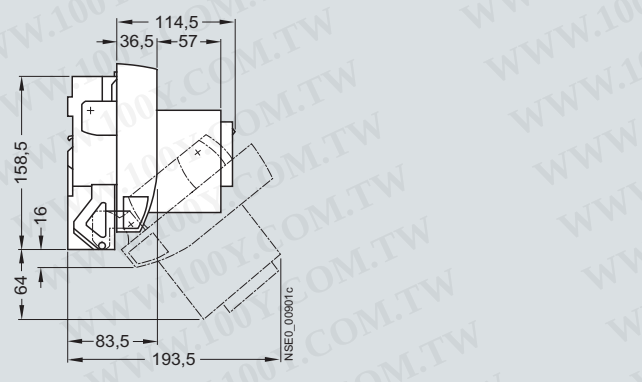


Cutouts[2] for 3NP44

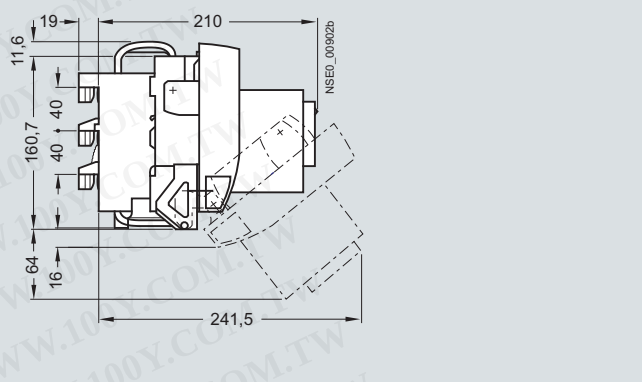


[2] Masking frame is placed open on the switchgear cabinet panel, for cover behind control cabinet panel: cutout dimensions on request.

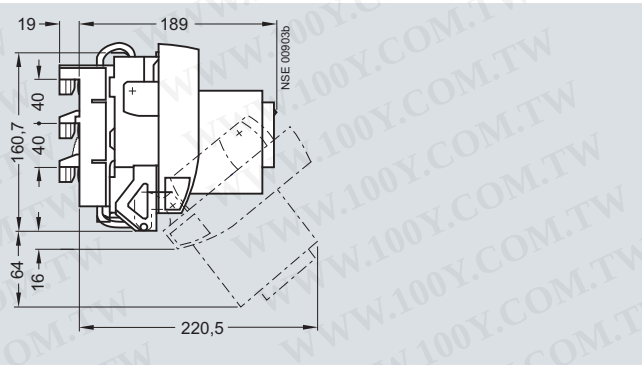
3NP40 70-0F
For mounting and installation



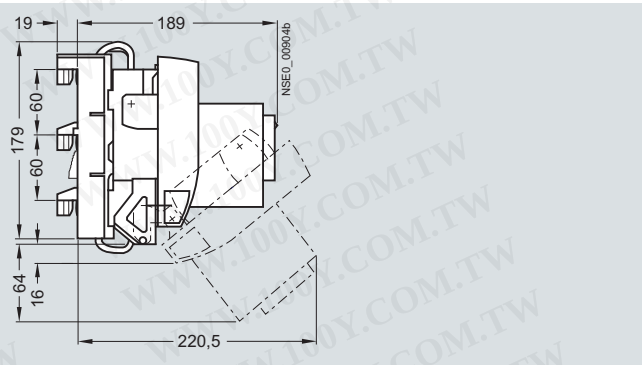
3NP40 75-0F
With busbar adapter, deep, 40 mm
Busbar width 12 mm or 15 mm and thickness 5 mm or 10 mm



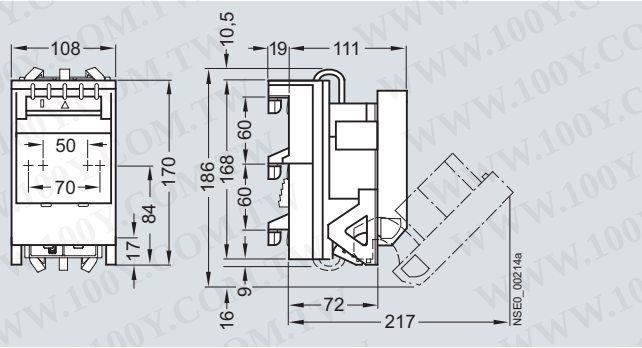
3NP40 75-1F
With busbar adapter, flat, 40 mm
Busbar width 12 mm or 15 mm and thickness 5 mm or 10 mm



3NP40 76-0F
With busbar adapter, flat, 60 mm
Busbar width 12 mm or 30 mm and thickness 5 mm or 10 mm

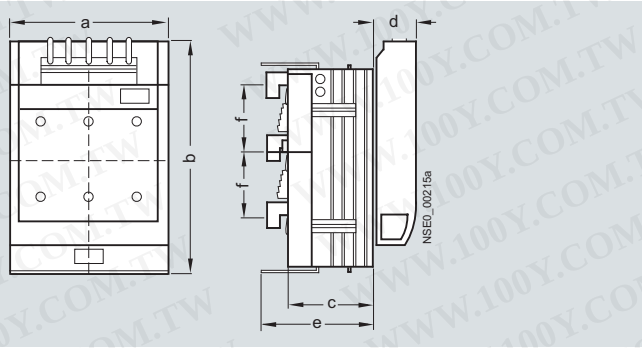


3NP40 76-1
With busbar adapter,
busbar width 12 mm to 30 mm
and thickness 5 mm or 10 mm,
flat, T and I profile



3NP42 75-1
3NP42 76-1
3NP43 76-1
3NP44 76-1

With busbar adapter,
busbar width 12 mm to 30 mm
and thickness 5 mm or 10 mm,
flat, T and I profile



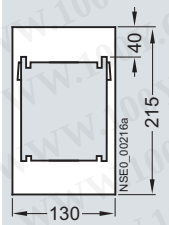
Type	a	b[1)]	c	d	e	f
3NP42 75-1	184	243	83[2)]	45.5	111	40
3NP42 76-1	184	243	83[2)]	45.5	111	60
3NP43 76-1	210	288	97	48	125	60
3NP44 76-1	256	300	112	48	139	60

1) For VBG4 plus dimension c of cable lug covers (see page 3/76).

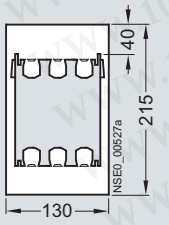
2) When installed together with size 000 or size 00 in STAB/SIKUS distribution boards, 3NY7 820 molded-plastic masking frame is used as a depth compensation (below).

3NP LV HRC fuse switch disconnectors

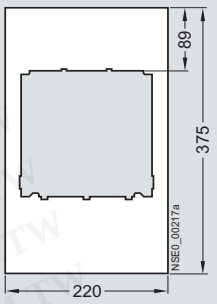
3NY7 200 molded-plastic masking frame
For 3NP40 7
For installation in any distribution boards



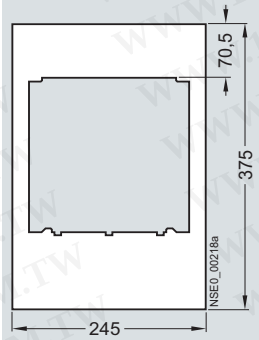
3NY7 201 molded-plastic masking frame
For 3NP40 7.-
For 3NP40 7.-CA01



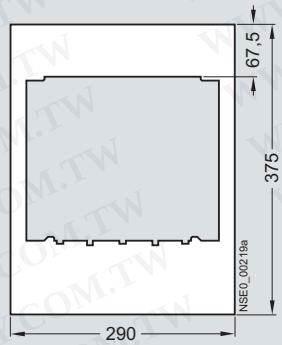
3NY7 220 molded-plastic masking frame
For 3NP42
For installation in any distribution boards



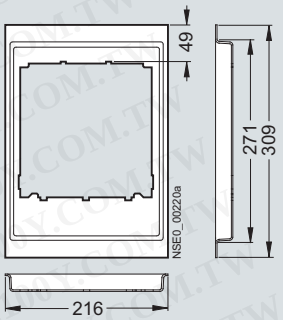
3NY7 230 molded-plastic masking frame
For 3NP43
For installation in any distribution boards



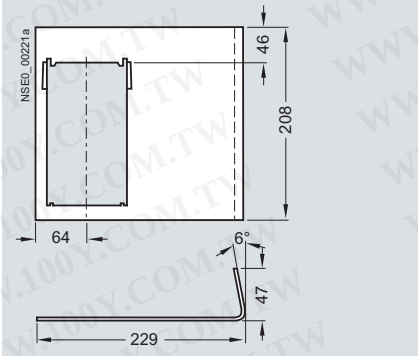
3NY7 240 molded-plastic masking frame
For 3NP44
For installation in any distribution boards



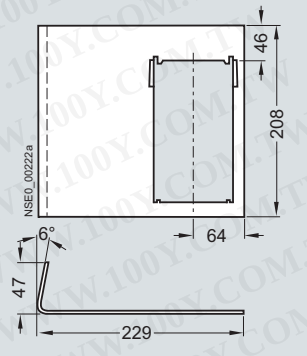
3NY7 820 molded-plastic masking frame
For 1 3NP42 70 switch disconnector
For installation in STAB-/SIKUS distribution boards



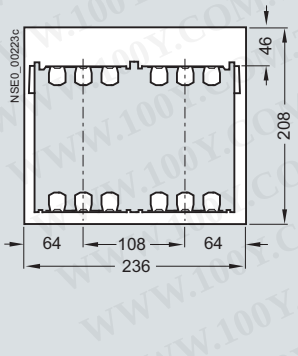
3NY7 500 molded-plastic masking frame
For 1 3NP40 switch disconnector, left
For installation in SIKUS 3200-, STAB 160- and 400- and SIKUS 630 distribution boards



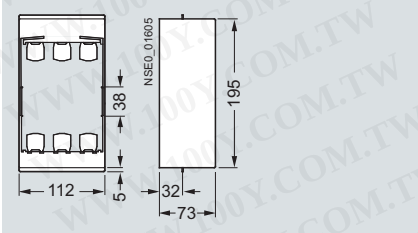
3NY7 501 molded-plastic masking frames
For one 3NP40 switch disconnector, right
For installation in SIKUS 3200, STAB 160 and 400 and SIKUS 630 distribution boards



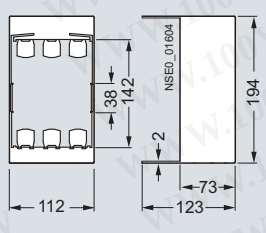
3NY7 502 molded-plastic masking frame
For 2 3NP40 switch disconnectors
For installation in SIKUS 3200-, STAB 160- and 400- and SIKUS 630 distribution boards



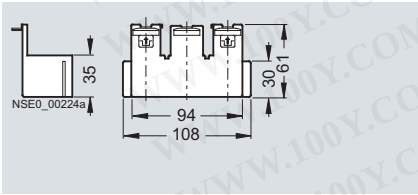
3NY7 600 touch protection cover
For installation in ALPHA distribution boards
For 3NP40 76 switch disconnectors



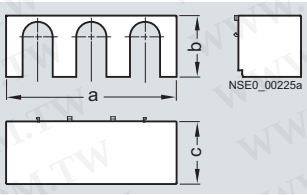
3NY7 601 touch protection cover
For 3NP40 75 and 3NP40 76 switch disconnectors



Cable lug cover for 3NP40 7, with 3NY7 101 flat terminal

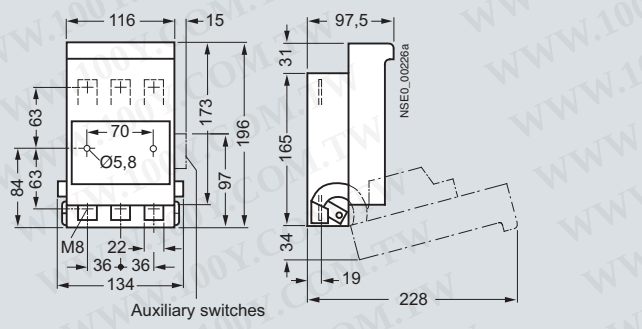


Cable lug cover for 3NP42 to 3NP44, 3NY7 121, 3NY7 131, 3NY7 141

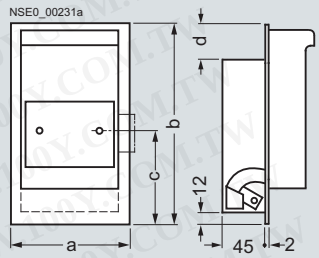


Type	a	b	c
3NY7 121	181	65	67
3NY7 131	207	79	50
3NY7 141	253	94	47

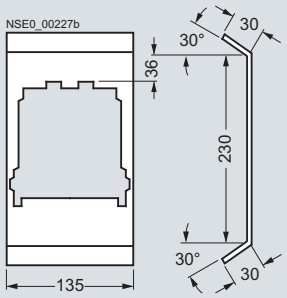
3NP50 60, 160 A
For mounting



3NP50 60, 160 A
With molded-plastic masking frame
For any type of installation

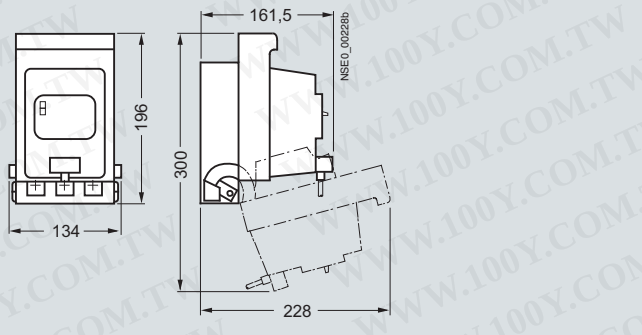


3NY1 107 molded-plastic masking frames



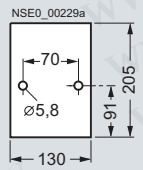
Type	a	b	c	d
3NY1 105	135	215	95.5	38
3NY1 115	135	215	95.5	38
3NY1 106	135	290	144.5	64
3NY1 108	135	290	144.5	64
3NY1 208	149	250	115	53.5

3NP50 60, 160 A
With fuse monitoring by 3RV1 motor starter protectors, with plug-in connector

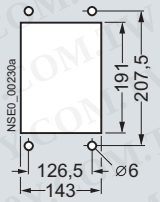


For plastic frames

Cutout
For 3NP50 60, with and without auxiliary switches

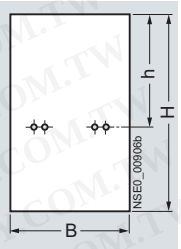


Cutout
For 3NY1 208 mounting kit



For metal frames

Cutouts for 3NP5



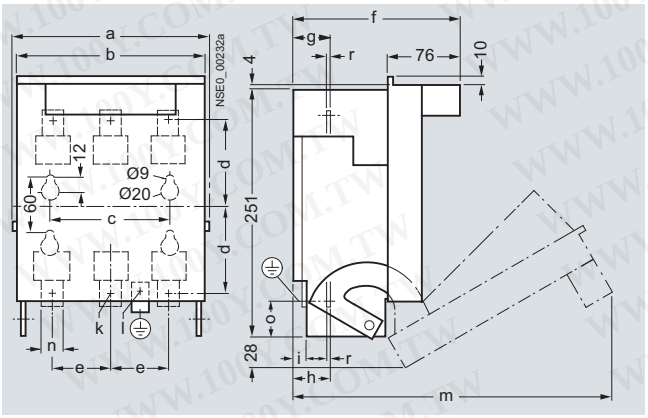
Type	Masking frame between assembly kit		Min. panel cutout		
	Molded-plastic masking frame behind panel				
	Type	B	H	B	H	h[1]
3NP50 6	3NY1 105[2]	135	215	130	206	115
3NP50 6	3NY1 125					
3NP52 6	3NY1 210	222	300	210	293	146
3NP53 6	3NY1 211	245	300	235	293	146
3NP54 6	3NY1 212	290	300	280	293	146
	Molded-plastic masking frame in front of panel					
	Type	B	H	B	H	h[1]
3NP50 6	3NY1 105	135	215	130	205	115
3NP50 6	3NY1 208	149	250	143	191	--
3NP52 6	3NY1 210	220	300	210	262	132

1) h = distance from upper edge of switchboard cutout to center of disconnector mounting.

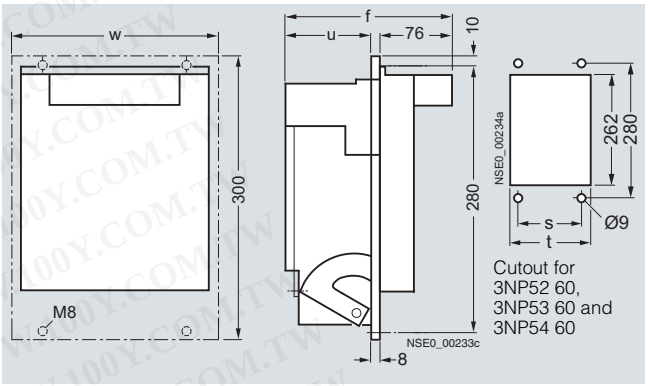
2) With standard molded-plastic masking frame behind panel and corresponding switchboard cutout, the standard switching capacity is reduced to the following AC 23B values: at 400 V I_e 160 A, at 500 V from I_e 160 A to 125 A and at 690 V from I_e 100 A to 50 A.

3NP LV HRC fuse switch disconnectors

3NP5. 60, 250 to 630 A for mounting



3NP5. 60, 250 to 630 A with molded-plastic masking frame, for mounting



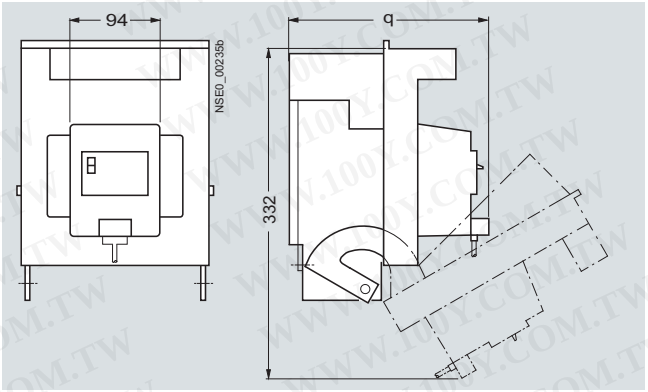
Type	a	b	c	d	e	f	g	h	i
3NP52 60	207	202	130	93	62	176	38	41	11.5
3NP53 60	231	226	130	106	70	192	39	39	11.5
3NP54 60	276	271	200	111	85	207	40.5	40.5	11.5

	k[1]	l[1]	m	n	o	q	r	s	t
3NP52 60	M10	M8	336	25	32	212	3.6	156	210
3NP53 60	M10	M10	352	25	25	228	4.4	180	234
3NP54 60	M10	M10	367	30	25	243	6	225	279

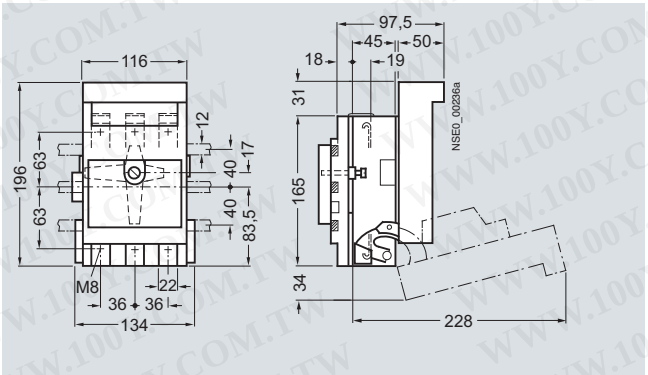
	u	w	x	y
3NP52 60	89.5	220	186.5	200.5
3NP53 60	105.5	245	202.5	216.5
3NP54 60	120.5	290	217.5	231.5

[1] Through-hole for screw.

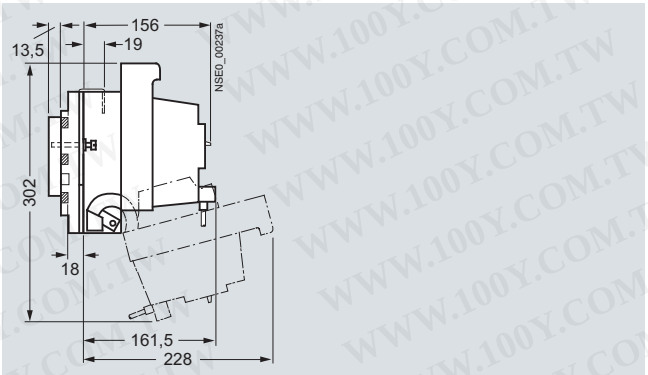
3NP5. 60, 250 to 630 A with fuse monitoring
by 3RV motor starter protectors, with plug-in connection



3NP50 65, 160 A with busbar adapter,
busbar width 12 mm and thickness 5 mm or 10 mm

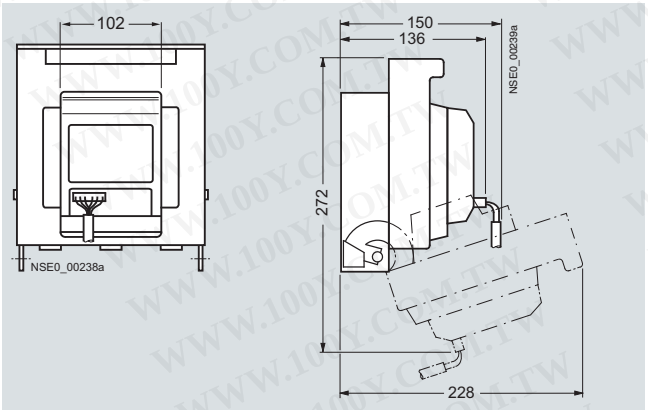


3NP50 65, 160 A with busbar adapter,
with fuse monitoring by 3RV motor starter protectors,
with plug-in connection

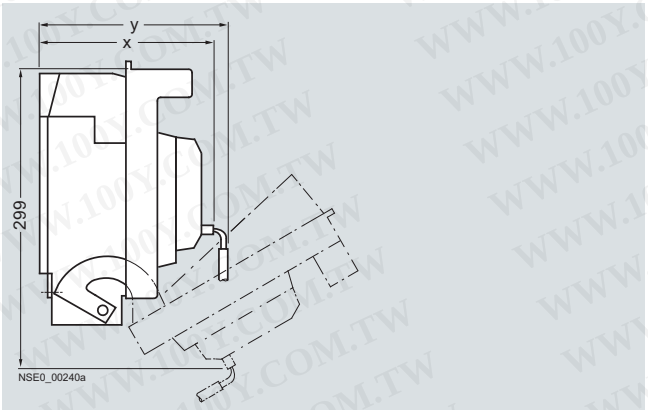


3NP5. 60, 160 to 630 A
With electronic fuse monitoring EF,
with plug-in connection and control cable

3NP50 60, 160 A
With electronic fuse monitoring EF, with
plug-in connection and control cable

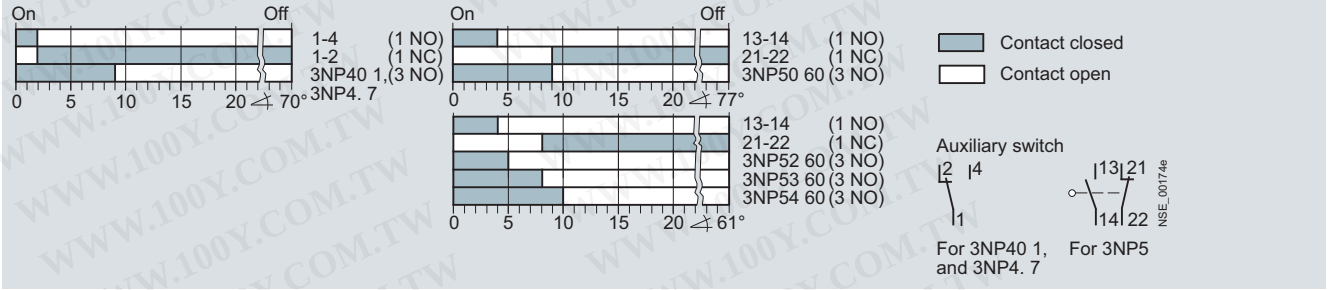


3NP5. 60, 250 to 630 A
With electronic fuse monitoring EF,
with plug-in connection and control cable



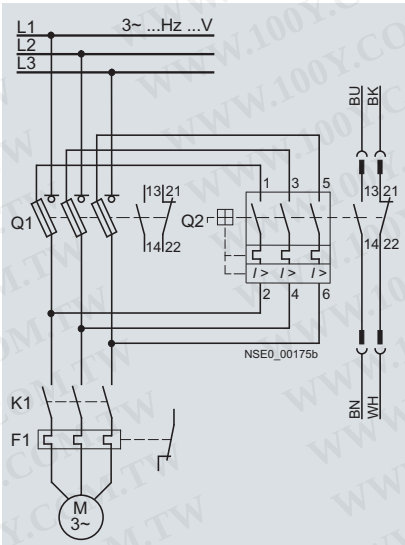
Schematics

Function auxiliary contact – main contact at SENTRON 3NP4 and 3NP5

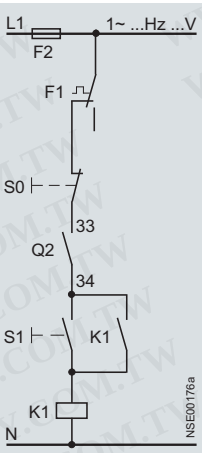


SENTRON 3NP fuse switch disconnectors with fuse monitoring (with 3RV1 motor starter protector, with auxiliary switch 1 NO + 1 NC)

Circuit diagram of main circuit



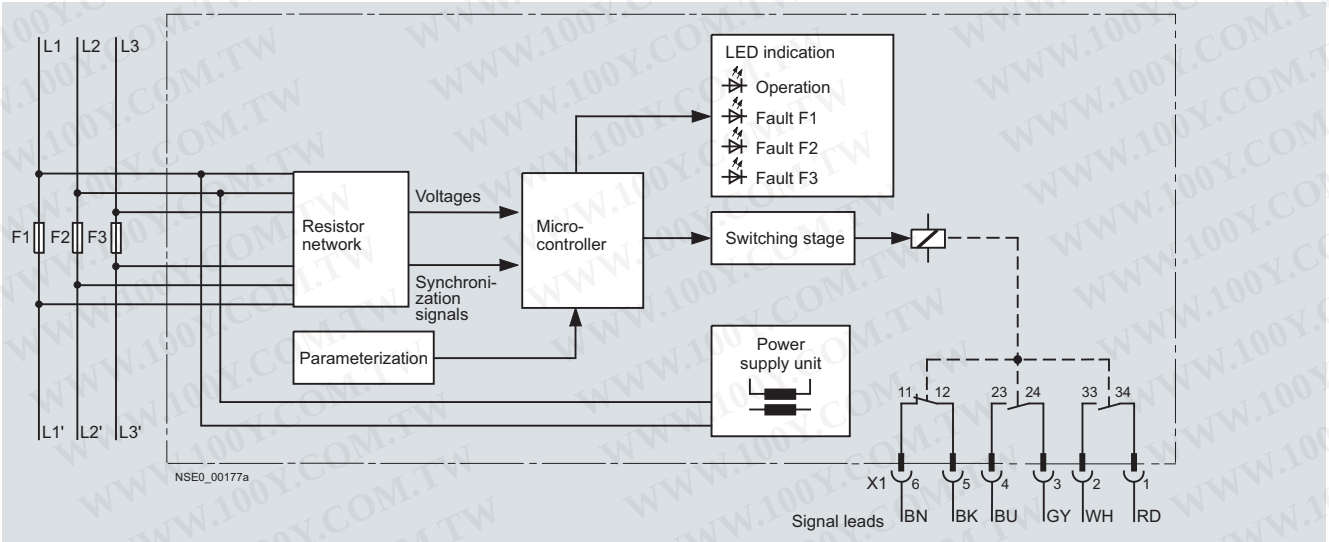
Circuit diagram of auxiliary circuit



Q1 = Fuse switch disconnector
Q2 = Motor starter protector
K1 = Contactor
S1 = ON pushbutton
S0 = OFF pushbutton
F1 = Overload relay
F2 = Control-circuit fuse

SENTRON 3NP5 fuse switch disconnectors with electronic fuse monitoring

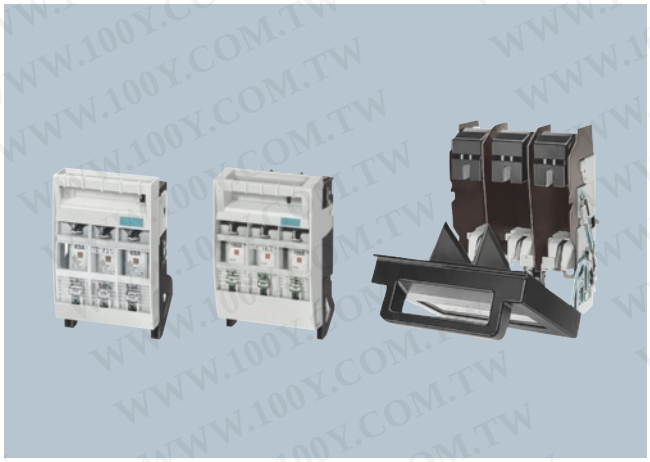
Block diagram



Version "A" (open-circuit principle):
Auxiliary switches only pick up if fuse faulty and voltage is applied.
Version "R" (closed-circuit principle):
Auxiliary contacts pick up as soon as voltage is applied and as long as fuses are intact.

More information

SENTRON 3NP fuse switch disconnectors



3NP40 10 3NP40 70 3NP52 with opened fuse carrier

The SENTRON 3NP4 and 3NP5 fuse switch disconnectors are climate-proof and meet the requirements of IEC 60947-1, IEC 60947-3 and DIN VDE 0660-107.
For use in heavily sulfurous atmospheres, the SENTRON 3NP5 series and the 3NP40 1 and 3NP40 7 versions are available as tinned modules (delivery on request). The SENTRON 3NP5 fuse switch disconnector series also complies with the standard BS 5419 and is approved for use in shipboard systems (use approved fuse links).

All SENTRON 3NP4 and 3NP5 fuse switch disconnectors can be sealed as standard or can be sealed through accessories.

Fuse monitoring by SIRIUS motor starter protector

For fuse monitoring, a SIRIUS motor starter protector is factory-fitted and hard-wired to the fuse carrier of the SENTRON 3NP4 and 3NP5 fuse switch disconnectors. If the fuse carrier is closed, the three conducting paths of the SIRIUS motor starter protector are switched in parallel to the fuse links to be monitored. If the fuse carrier is open, all main current paths of the motor starter protector are off circuit. The internal resistance of the motor starter protector is great enough not to impair the protective function of the monitored fuse links. Failure of a fuse will trip the motor starter protector.

Electronic fuse monitoring EF

For electronic fuse monitoring, the EF monitor is factory-fitted and hard-wired to the fuse carrier of SENTRON 3NP5 fuse switch disconnectors.

The EF monitor works independently of any loads. Failure of a fuse can be relayed to a control room through integrated auxiliary switches (2 NO + 1 NC) by means of a centralized fault indication or used to isolate the load through e.g. a contactor. Actuation of the auxiliary switch depends on the EF version. Version "A" stands for "open-circuit principle", version "R" for "closed-circuit principle" (see block diagram).

If a fuse is tripped, a green LED signal flashes (general fault) and the location of the failed fuse is indicated by a red LED. Using more than one device facilitates identification of the affected branch circuit. The EF monitor is automatically reset to the standby position once the faulty fuses are replaced. This state is indicated visually by the status display (green LED). The EF monitor is also suitable for use in industrial systems badly afflicted by harmonics.

Auxiliary switches

The SENTRON 3NP4 and 3NP5 fuse switch disconnectors can also be retrofitted with auxiliary switches for indicating the switching position of the fuse carrier. One switch block (1 CO) can be mounted on SENTRON 3NP4 fuse switch disconnectors size LV HRC 000 and two switch blocks (1 CO) on sizes LV HRC 00 to LV HRC 3 respectively. SENTRON 3NP5 fuse switch disconnectors can also be delivered with a 2-pole auxiliary switch (1 NO + 1 NC) if required. The version with fuse monitoring is fitted with this auxiliary switch as standard.

The auxiliary switch of the motor starter protector can be used for indication purposes or to disconnect the main circuit, e.g. through a contactor. The signal lead for the SENTRON 3NP4 fuse switch disconnector size LV HRC 00 needs to be ordered separately. Sizes LV HRC 1 to LV HRC 3 are connected using flat terminations. Delivery of the SENTRON 3NP5 fuse switch disconnectors includes the signal lead, complete with connector. SIRIUS motor starter protectors cannot be used for fuse monitoring in branch circuits by motor starter protectors where a fault may result in > 220 V DC feedback. In the case of parallel cables and meshed networks, only a voltage difference of > 24 V at the switch will trigger the motor starter protector.