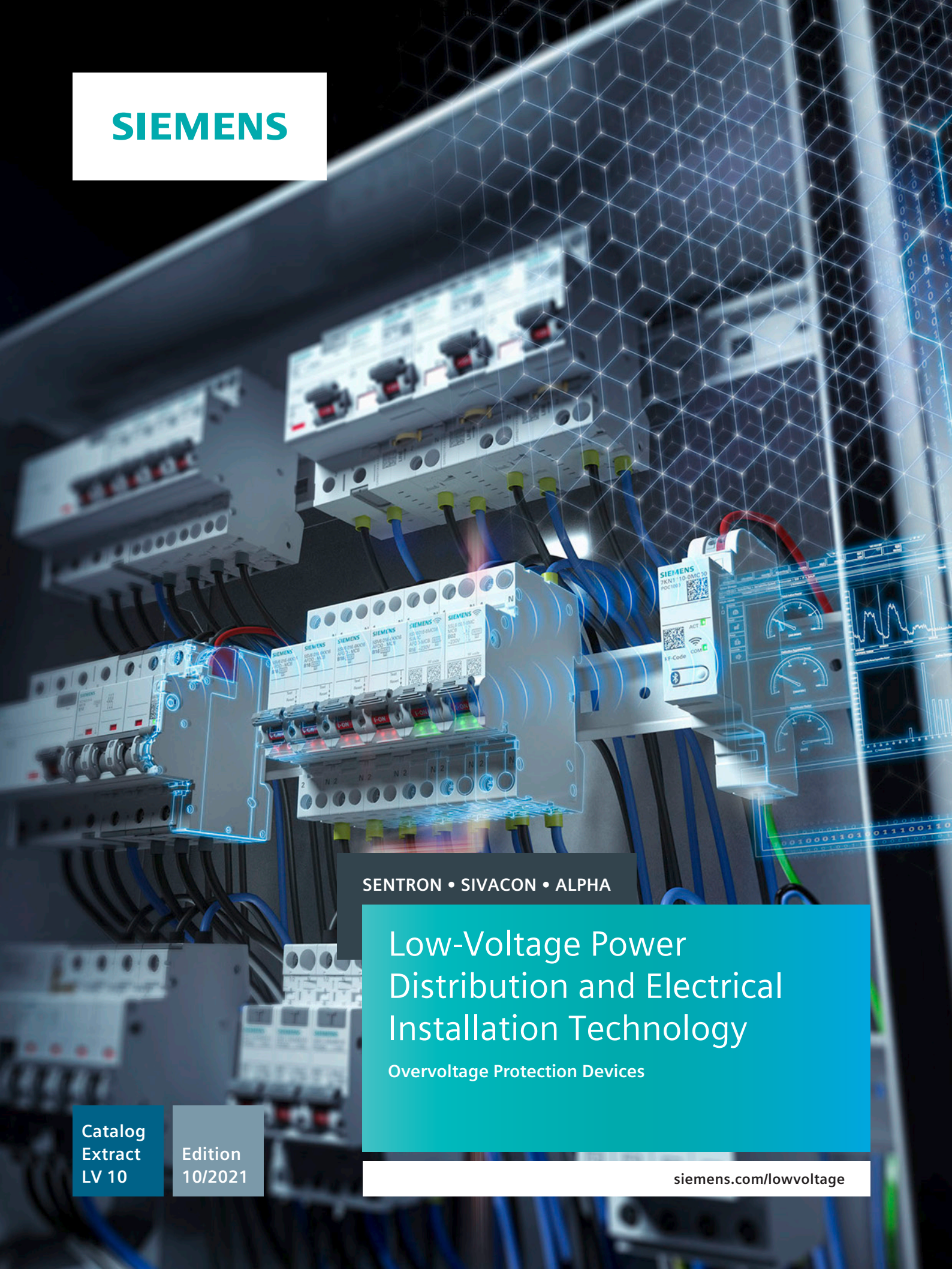
SIEMENS



SENTRON • SIVACON • ALPHA

Low-Voltage Power Distribution and Electrical Installation Technology

Overvoltage Protection Devices

Catalog Extract LV 10

Edition 10/2021

siemens.com/lowvoltage

Innovative solutions for industrial controls and power distribution

In ensuring smooth operation of digital production environments and in the construction and operation of industrial or commercial buildings, the underlying power distribution and industrial controls are decisive:

SIRIUS, SENTRON, SIVACON and ALPHA provide a broad portfolio of systems and components for this purpose that can be used for standard-compliant, requirement-based electrification.

Efficient engineering tools and cloud-based solutions are part of the portfolio, which you can flexibly adapt to your specific requirements over the entire value-added process.

We are there when you need us

Your personal contact can be found at
www.siemens.com/lowvoltage/contact

Catalog LV 10 · 10/2021

You will find the latest edition and all future editions in the Siemens Industry Online Support at
www.siemens.com/lowvoltage/catalogs

Refer to the Industry Mall for current prices
www.siemens.com/industrymall

The products and systems described in this catalog are manufactured/distributed under application of a certified quality management system in accordance with EN ISO 9001 (for the Certified Registration Nos., see **www.siemens.com/system-certificates/ep**).
The certificate is recognized by all IQNet countries.

Technical specifications
The technical specifications are for general information purposes only. Always heed the operating instructions and notices on individual products during assembly, operation and maintenance.

All illustrations are not binding.

Low-Voltage Power Distribution and Electrical Installation Technology

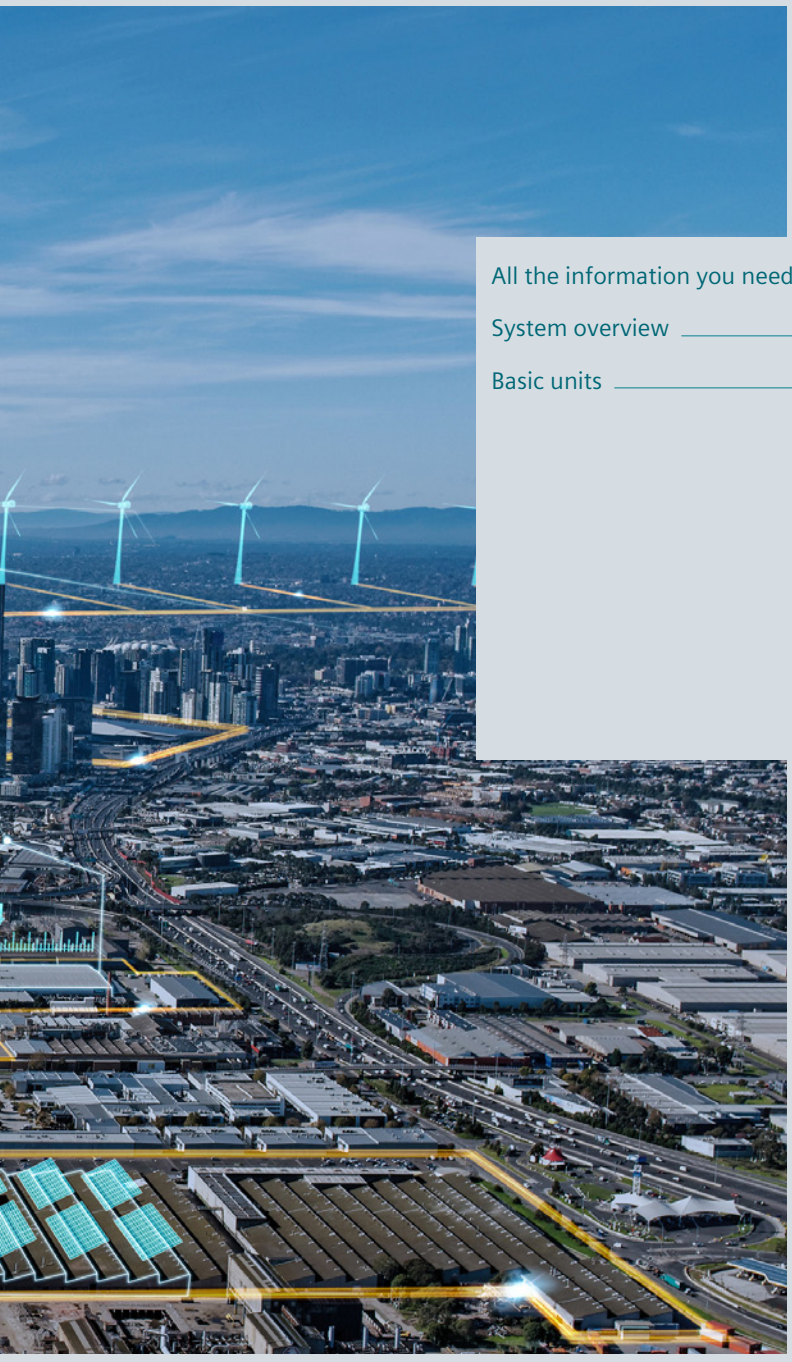
Overvoltage protection devices

The more than one million lightning strikes in Germany every year pose a considerable risk for buildings and systems that can be damaged due to the unhindered effect of lightning currents, overvoltage and power surges. In many cases however, it is not apparent that such damage has been caused by lightning currents, overvoltage and power surges.

Overvoltage results in considerable damage to electrical and electronic equipment.
Even brief transients in power supply lines or between electrical lines and other conductive parts (e.g. grounded metallic parts, ground) are sufficient to cause such damage. The damage patterns of destroyed lines, circuit boards or switchgear demonstrate this. Such damage can be prevented employing suitable overvoltage protection means.

Reliably protected by Siemens lightning and surge arresters!

Overvoltage Protection Devices



A multitude of additional information ...

Information + ordering

All the important things at a glance

For information about overvoltage protection devices, please visit our website
www.siemens.com/overvoltage-protection

Your product in detail

The Siemens Industry Online Support (SIOS) provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Technology primer – Overvoltage protection devices (109756965)

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products www.siemens.com/conversion-tool

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Overvoltage protection devices sie.ag/2kTfytV

Direct forwarding to the individual products in the Industry Mall by clicking on the article number in the catalog or by entering this web address incl. article number
www.siemens.com/product?Article No.

The fast track to the experts

Contact persons in your region

We offer a comprehensive portfolio of services.
You can find your local contacts at
www.siemens.com/lowvoltage/components/contact

You can find further information on services at
www.siemens.com/service-catalog

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
www.siemens.com/support-request

… can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support (SIOS) provides detailed technical information
www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Comprehensive mobile support via the Siemens Industry Online Support app available for download from the App Store and Play Store
You will find further information under:
www.siemens.com/support-app

Provision of 3D data (step and u3d data formats)

- Siemens Industry Mall
  www.siemens.com/lowvoltage/mall
- Image database
  www.siemens.com/lowvoltage/picturedb

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
www.siemens.com/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support (SIOS) at
www.siemens.com/lowvoltage/manuals

- Configuration manual – Overvoltage protection devices (45315289)

Classroom or online training

Our training courses can be found at
www.siemens.com/sitrain-lowvoltage

- Basic principles of electrical engineering (WT-LVBGET)
- Protection concept (WT-LVBPC)

Technical overview – Overvoltage protection devices

The fast way to get you to our online services

This page provides you with comprehensive information and links on overvoltage protection devices
www.siemens.com/lowvoltage/product-support (109769084)

System overview

Basic units

5SD74 lightning arresters, type 1

5SD74 combination surge arresters, type 1 + type 2

5SD74 surge arresters, type 1 + type 2 + type 3 for 40 mm busbar system new

5SD74 combination surge arresters, type 1/type 2

5SD74 surge arresters, type 2 (standard design)

5SD74 surge arresters, type 3

Spare part plugs

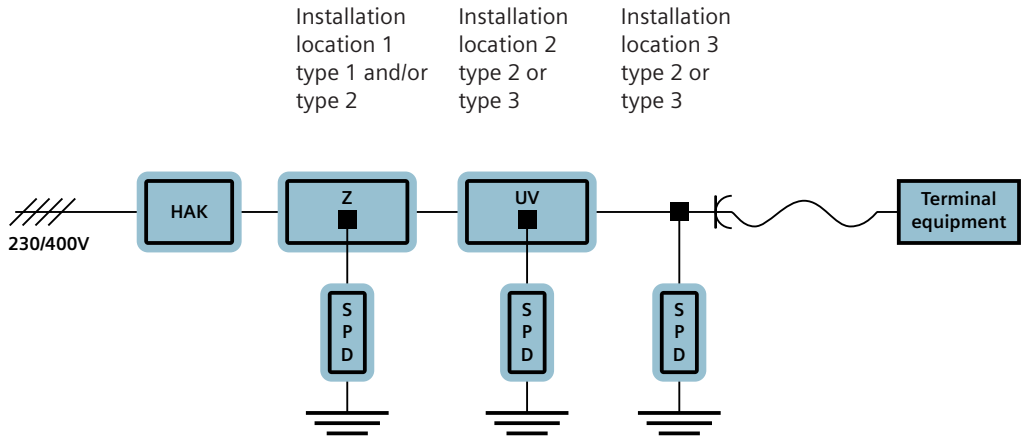
N-PE

L-N, L-PEN (type 1)

L-PEN

Note:
You will find a detailed range of accessories with the basic units.

Installation locations for surge protection devices (SPDs)



HAK: Main terminal box Z/HV: In or close to the central meter system/main distribution board UV: Subdistribution board

Installation location 1 must be as close as possible to the supply point for the electrical system, so that the downstream installations are protected. The SPDs at installation locations 2 and 3 shall not be used without SPDs at installation location 1, and they must be coordinated with these SPDs (i.e. SPDs all from the same manufacturer).

5SD74 lightning arresters, type 1

	For TN-C and IT systems	For TN-C systems	For TN-S and TT systems	
Protection paths	L-PE	L-PEN	L-N, L-PE and N-PE	L-N, L-PE and N-PE
Rated voltage U_n	690 V AC	240/415 V AC	240 V AC	240/415 V AC
Maximum continuous voltage U_c	800 V AC	350 V AC	350 V AC	350 V AC
				

Circuit	Mounting width				
With remote signaling					
1 + 0	–[1)]	5SD7411-2	–	–	–
1 + 1	4 MW	–	–	5SD7412-1	–
3 + 0	6 MW	–	5SD7413-1	–	–
3 + 1	8 MW	–	–	–	5SD7414-1

[1)] No modular installation device.

6

Further technical specifications

		5SD7411-2	5SD7412-1	5SD7413-1	5SD7414-1
Standards					
Standards		IEC 61643-11, EN 61643-11			
Approvals		–	KEMA, UL/cUL		
Voltage					
Protection level U_p	L-N and L-PEN	≤4.50 kV	≤1.50 kV		
	L-PE	–	≤2.50 kV	–	≤2.50 kV
	N-PE	–	≤1.50 kV	–	≤1.50 kV
Current					
Lightning impulse current I_{imp} (10/350 µs)	L-N and L-PEN, 1P/3P	35 kA	25 kA	25/75 kA	
	N-PE	–	100 kA	–	100 kA
Rated discharge surge current I_n (8/20 µs)	L-N and L-PEN, 1P/3P	35 kA	25 kA	25/75 kA	
	N-PE	–	100 kA	–	100 kA
Follow current discharge capacity I_{fi} (AC)	L-N and L-PEN for 264/350 V	–	50/25 kA		
	N-PE	–	100 A	–	100 A
Function					
Response time t_A	L-N and L-PEN	≤100 ns			
	L-N and N-PE	–	≤100 ns	–	≤100 ns
Connections					
Conductor cross-section	Finely stranded	16 ... 50 mm²	2.5 ... 25 mm²		
	Solid	16 ... 50 mm²	2.5 ... 35 mm²		
Protection devices					
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	400 A	315 A		
	For V wiring (gL/gG)	125 A	125 A		
Short-circuit withstand current	With max. back-up fuse	50 kA	50 kA		
Environmental conditions					
Degree of protection		IP20, with connected conductors			
Temperature range		–40 ... +80 °C			

System overview, page 6/4

Accessories

Spare part plugs

Protection paths	Basic units	Article No.
N-PE	5SD7412-1 and 5SD7414-1	5SD7418-0
L-N and L-PEN	For 5SD7412-1, 5SD7413-1 and 5SD7414-1	5SD7418-1

System overview, page 6/4

5SD74 combination surge arresters, type 1 + type 2

	For TN-C systems	For TN-S and TT systems	
Protection paths	L-PEN	L-N, L-PE and N-PE	L-N, L-PE and N-PE
Rated voltage U_n	240/415 V AC	240 V AC	240 V AC
Maximum continuous voltage U_c	350 V AC	350 V AC	350 V AC
			

Circuit	Mounting width			
With remote signaling				
1 + 1	4 MW	–	5SD7442-1	–
3 + 0	6 MW	5SD7443-1	–	–
3 + 1	8 MW	–	–	5SD7444-1

6

Further technical specifications

		5SD7442-1	5SD7443-1	5SD7444-1
Standards				
Standards		IEC 61643-11; EN 61643-11		
Approvals		KEMA, UL/cUL		
Voltage				
Protection level U_p	L-N and L-PEN	≤1.50 kV		
	L-PE	≤2.20 kV	–	≤2.20 kV
	N-PE	≤1.50 kV	–	≤1.50 kV
Current				
Lightning impulse current I_{imp} (10/350 µs)	L-N and L-PEN	25 kA		
	N-PE	100 kA	–	100 kA
Rated discharge surge current I_n (8/20 µs)	L-N and L-PEN	25 kA		
	N-PE	100 kA	–	100 kA
Follow current discharge capacity I_{fi} (AC)	L-N and L-PEN	25 kA		
	N-PE	100 A	–	100 A
Function				
Response time t_A	L-N and L-PEN	≤25 ns		
	L-N and N-PE	≤100 ns	–	≤100 ns
Connections				
Conductor cross-section	Finely stranded	2.5 … 25 mm²		
	Solid	2.5 … 35 mm²		
Protection devices				
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	315 A		
	For V wiring (gL/gG)	125 A		
Short-circuit withstand current	With max. back-up fuse	25 kA		
Environmental conditions				
Degree of protection		IP20, with connected conductors		
Temperature range		–40 … +80 °C		
Display				
Visual function/fault indication		Yes		

System overview, page 6/4

Accessories

Spare part plugs

Protection paths	Type	Basic units	Article No.
N-PE	–	5SD7442-1 and 5SD7444-1	5SD7418-0
L-N and L-PEN	1	5SD7442-1, 5SD7443-1 and 5SD7444-1	5SD7448-1
	2	5SD7442-1, 5SD7443-1 and 5SD7444-1	5SD7428-1

System overview, page 6/4

5SD74 surge arresters, type 1 + type 2 + type 3 for 40 mm busbar system new

	For TN-C systems			
Protection paths	L-PEN			
Rated voltage U_n	240/415 V AC	240/415 V AC	240/415 V AC	240/415 V AC
Maximum continuous voltage U_c	350 V AC	350 V AC	350 V AC	350 V AC
				
Circuit / **Mounting width**				
With remote signaling				
3 + 0 / 47 mm	5SD7443-8KK21	–	5SD7443-8KK11	–
3 + 1 / 47 mm	–	–	–	–
With remote signaling and phase tap				
3 + 0 / 47 mm	–	5SD7443-8KK22	–	5SD7443-8KK12
3 + 1 / 47 mm	–	–	–	–

6

Further technical specifications

Standards				
Standards		IEC 61643-11		
Approvals		VDE		
Voltage				
Protection level U_p	L-N and L-PEN	≤1.50 kV		
	L-N/N-PE	–		≤1,5/1.5 kV
Current				
Lightning impulse current I_{imp} (10/350 µs)	L-N/N-PEN and N-PE	12.5 kA	7.5 kA	12.5/50 kA
Rated discharge surge current I_n (8/20 µs)	L-N/L-PEN and N-PE	20 kA		20/80 kA
Follow current discharge capacity I_{fi} (AC)	N-PE	–		100 A RMS
Connections				
Conductor cross-section	Finely stranded	25 mm²		
	Solid	35 mm²		
Type of mounting				
40 mm busbar system		5 and 10 mm		
Protection devices				
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	315 A		
Short-circuit withstand current	With max. back-up fuse	25 kA		
Environmental conditions				
Degree of protection		IP20		
Temperature range		–40 ... +80 °C		
Display				
Visual function/fault indication		Yes		

System overview, page 6/4

For TN-S and TT systems			
L-N, L-PE and N-PE			
240/415 V AC	240/415 V AC	240/415 V AC	240/415 V AC
350 V AC	350 V AC	350 V AC	350 V AC
			
–	–	–	–
5SD7444-8KK21	–	5SD7444-8KK11	–
–	–	–	–
–	5SD7444-8KK22	–	5SD7444-8KK12

System overview, page 6/4

5SD74 combination surge arresters, type 1/type 2

	For TN-C and IT systems	For TN-C systems	For TN-S and TT systems		For photovoltaic systems
Protection paths	L-PE	L-PEN	L-N, L-PE and N-PE	L-N, L-PE and N-PE	(L+) – (L–)
Rated voltage U_n	690 V AC	240/415 V AC	240 V AC	240/415 V AC	–
Maximum continuous voltage U_c	800 V AC	335 V AC	335 V AC	335 V AC	1000 V DC
					

Circuit	Mounting width					Plug-in
With remote signaling						
1 + 0	–[1]	5SD7411-2	–	–	–	–
3 + 0	3 MW	–	5SD7413-3	–	–	
3 + 1	4 MW	–	–	–	5SD7414-3	–
Without remote signaling						
1 + 1	2 MW	–	–	5SD7412-2	–	–
3 + 0	3 MW	–	5SD7413-2	–	–	5SD7483-6
3 + 1	4 MW	–	–	–	5SD7414-2	–

[1] No modular installation device.

Further technical specifications

		5SD7411-2	5SD7412-2	5SD7413-2 5SD7413-3	5SD7414-2 5SD7414-3	5SD7483-6
Standards						
Standards		IEC 61643-11				EN 50539
Approvals		–	KEMA			
Voltage						
Protection level U_p	L-N and L-PEN	≤4.50 kV	≤1.20 kV			≤3.50 kV
	L-PE	–			≤2.0 kV	–
	N-PE	–	≤1.70 kV	–	≤1.70 kV	–
Current						
Lightning impulse current I_{imp} (10/350 µs)	L-N and L-PEN	35 kA	12.5 kA			≤5 kA
	N-PE	–	50 kA	–	50 kA	–
Rated discharge surge current I_n (8/20 µs)	L-N and L-PEN	35 kA	12.5 kA			15 kA
	N-PE	–	50 kA	–		
Max. discharge surge current $I_{max.}$ (8/20 µs)	L-N	100 kA	12.5 kA	50 kA		40 kA
	N-PE	–	50 kA	–	50 kA	–
Function						
Response time t_A	L-N and L-PEN	<100 ns	≤25 ns			
	L-N and N-PE	–	≤100 ns	–	≤100 ns	≤25 ns
Connections						
Conductor cross-section	Finely stranded	16 … 50 mm²	1.5 … 25 mm²			
	Solid	16 … 50 mm²	1.5 … 35 mm²			
Protection devices						
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	400 A	160 A			–
	For V wiring (gL/gG)	125 A	80 A			–
Short-circuit withstand current	With max. back-up fuse	50 kA	25 kA			–
Environmental conditions						
Degree of protection		IP20, with connected conductors				
Temperature range		–40 … +80 °C				

System overview, page 6/4

Accessories

Spare part plugs

	Protection paths	Type	Basic units	Article No.
	N-PE	–	5SD7412-2, 5SD7412-3, 5SD7414-2 and 5SD7414-3	5SD7418-2
	L-N and L-PEN	1	5SD7412-2, 5SD7412-3, 5SD7413-2, 5SD7413-3, 5SD7414-2 and 5SD7414-3	5SD7418-3
	L-PE (PV)	2	5SD7483-6	5SD7498-3

System overview, page 6/4

5SD74 surge arresters, type 2

Standard design

	For TN and TT systems		For TN-C and IT systems	For TN-C systems	For IT systems		For TN-S and TT systems
Protection paths	N-PE	L-PEN and L-N	L-PEN and L-N	L-PEN	L-PEN and L-PE	L-PEN and L-PE	L-N, L-PE and N-PE
Rated voltage U_n	240/415 V AC	240/415 V AC	400/690 V AC	240/415 V AC	400/690 V AC	554/960 V AC	240/415 V AC
Maximum continuous voltage U_c	260 V AC	350 V AC	800 V AC	350 V AC	580 V AC	760 V AC	350 V AC (L-N, L-PE) 260 V AC (N-PE)
							

Circuit	Mounting width							
With remote signaling								
1 + 0	1 MW	–	5SD7461-1	–	–	–	–	–
	2 MW	–	–	5SD7481-1	–	–	–	–
3 + 0	3 MW	–	–	–	5SD7463-1	5SD7473-1	5SD7483-5	–
3 + 1	4 MW	–	–	–	–	–	–	5SD7464-1
Without remote signaling								
1 + 0	1 MW	5SD7481-0	5SD7461-0	–	–	–	–	–
3 + 0	3 MW	–	–	–	5SD7463-0	–	–	–
3 + 1	4 MW	–	–	–	–	–	–	5SD7464-0

Further technical specifications

		5SD7481-0	5SD7461-0 5SD7461-1	5SD7481-1	5SD7463-0 5SD7463-1	5SD7464-0 5SD7464-1	5SD7473-1	5SD7483-5
Standards								
Standards		IEC 61643-11; EN 61643-11						
Approvals		KEMA					–	KEMA, UL/cUL
Voltage								
Protection level U_p	L-N and L-PEN	–	≤1.50 kV	≤5 kV	≤1.50 kV	≤1.60 kV	≤2.50 kV	≤2.90 kV
	L-PE	–				≤1.90 kV	–	
	N-PE	≤1.50 kV	–			≤1.50 kV	–	
Current								
Rated discharge surge current I_n (8/20 µs)	L-N and L-PEN	–	20 kA	15 kA	20 kA		15 kA	
	N-PE	20 kA	–			20 kA	–	
Max. discharge surge current $I_{max.}$ (8/20 µs)	L-N	–	40 kA	30 kA	40 kA		30 kA	
	N-PE	40 kA	–			40 kA	–	
Function								
Response time t_A	L-N and L-PEN	–	≤25 ns	≤100 ns	≤25 ns			
	L-N and N-PE	≤100 ns	–			≤100 ns	–	
Connections								
Conductor cross-section	Finely stranded	1.5 ... 25 mm²						
	Solid	1.5 ... 35 mm²						
Protection devices								
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	–	125 A	100 A	125 A			100 A
	For V wiring (gL/gG)	–		80 A				
Short-circuit withstand current	With max. back-up fuse	25 kA						
Environmental conditions								
Degree of protection		IP20, with connected conductors						
Temperature range		–40 ... +80 °C						

System overview, page 6/4

Accessories

Spare part plugs

	Protection paths	Basic units	Article No.
	N-PE	5SD7481-0, 5SD7464-0 and 5SD7464-1	5SD7488-0
	L-N and L-PEN	5SD7461-0, 5SD7461-1, 5SD7463-0, 5SD7463-1, 5SD7464-0 and 5SD7464-1	5SD7468-1
	L-PEN	5SD7481-1 and 5SD7483-5	5SD7488-2
		5SD7481-1	5SD7488-4

System overview, page 6/4

5SD74 surge arresters, type 2

Narrow design

	For TN-S and TT systems	
Protection paths	L-N and N-PE	L-N and N-PE
Rated voltage U_n	240 V AC	240/415 V AC
Rated arrester voltage U_C; L-N, N-PE, L-(PE)N	350 V AC	350 V AC
Rated arrester voltage U_C; N-PE	264 V AC	264 V AC
		

Circuit	Mounting width	Rated discharge surge current I_n (8/20 µs)			
		L-N or L-(PE)N	N-PE		
With remote signaling					
1 + 1	24 mm (1 1/3 MW)	20 kA	20 kA	5SD7422-1	–
3 + 1	48 mm (2 2/3 MW)	20 kA	20 kA	–	5SD7424-1
		20 kA	40 kA	–	–
Without remote signaling					
1 + 1	24 mm (1 1/3 MW)	20 kA	20 kA	5SD7422-0	–
3 + 1	48 mm (2 2/3 MW)	20 kA	20 kA	–	5SD7424-0
		20 kA	40 kA	–	–

Further technical specifications

		5SD7422-0 5SD7422-1	5SD7424-0 5SD7424-1
Standards			
Standards		IEC 61643-11, EN 61643-11	
Approvals		KEMA/UL/cUL	
Voltage			
Protection level U_p	L-N and L-PEN	≤1.50 kV	
	L-PE	≤1.90 kV	
	N-PE	≤1.50 kV	
Current			
Rated discharge surge current I_n (8/20 µs)	L-N and L-PEN	20 kA	
	N-PE	20 kA	
Max. discharge surge current $I_{max.}$ (8/20 µs)	L-N	40 kA	
	N-PE	40 kA	
Function			
Response time t_A	L-N and L-PEN	≤25 ns	
	L-N and N-PE	≤100 ns	
Connections			
Conductor cross-section	Finely stranded	2.5 ... 16 mm²	
	Solid	2.5 ... 25 mm²	
Protection devices			
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	315 A	
	For V wiring (gL/gG)	63 A	
Short-circuit withstand current	With max. back-up fuse	25 kA	
Environmental conditions			
Degree of protection		IP20, with connected conductors	
Temperature range		–40 ... +80 °C	

System overview, page 6/4

Accessories

Spare part plugs

	Protection paths	Basic units	Article No.
	N-PE	5SD7422-0, 5SD7422-1, 5SD7424-0 and 5SD7424-1	5SD7428-0
	L-N and L-PEN	5SD7422-0, 5SD7422-1, 5SD7424-0 and 5SD7424-1	5SD7428-1

6

System overview, page 6/4

5SD74 surge arresters, type 3

		For TN-S and TT systems		
Protection paths		L-N, L-PE, N-PE, (L+) – (L–) and (L+/L–) – PE	L-N, L-PE, N-PE, (L+) – (L–) and (L+/L–) – PE	L-N, L-PE, N-PE, (L+) – (L–) and (L+/L–) – PE
Rated voltage U_n		24 V AC	120 V AC	230 V AC
Rated arrester voltage U_C		34 V AC	150 V AC	264 V AC
				
Circuit	**Mounting width**			
With remote signaling				
1 + 0	1 MW	5SD7432-5	5SD7432-6	5SD7432-7

6

Further technical specifications

		5SD7432-5	5SD7432-6	5SD7432-7
Standards				
Standards		IEC 61643-11; EN 61643-11		
Approvals		KEMA/UL/cUL		
Voltage				
Protection level U_p	L-N, L-PE and N-PE	≤200/≤600 V	≤750/≤850 V	≤1250/≤1400 V
Current				
Rated load current I_L (at 30 °C)		26 A		
Rated discharge surge current I_n (8/20 µs)		1 kA	5 kA	
Combined surge $U_{open\ collector}$		2 kV	6 kV	
Function				
Response time t_A		≤100 ns		
Connections				
Conductor cross-section	Finely stranded	0.2 ... 2.5 mm²		
	Solid	0.2 ... 4 mm²		
Protection devices				
Required back-up fuse, max.	(gG/B/C)	25 A		
Environmental conditions				
Degree of protection		IP20, with connected conductors		
Temperature range		–40 ... +80 °C		
Display				
Visual function/fault indication		Yes		

System overview, page 6/4

System overview, page 6/4

Appendix

Conditions of sale and delivery

1. General Provisions

By using this catalog you can purchase products (hardware, software and services) described therein from Siemens Aktiengesellschaft subject to the following Terms and Conditions of Sale and Delivery (hereinafter referred to as „T&C"). Please note that the scope, the quality and the conditions for supplies and services, including software products, by any Siemens entity having a registered office outside Germany, shall be subject exclusively to the General Terms and Conditions of the respective Siemens entity. The following T&C apply exclusively for orders placed with Siemens Aktiengesellschaft, Germany.

1.1 For customers with a seat or registered office in European Union

For customers with a seat or registered office in European Union, the following terms and conditions apply subordinate to T&C:

- for products, which include specific terms and conditions in the description text, these specific terms and conditions shall apply and subordinate thereto,
- for stand-alone software products and software products forming a part of a product or project, the „General License Conditions for Software Products for Automation and Drives for Customers with a Seat or registered Office in Germany"[1)] and/or
- for consulting services the "Allgemeine Geschäftsbedingungen für Beratungsleistungen der Division DF – Deutschland" (available only in German) and/or
- for other services, the „Supplementary Terms and Conditions for Services ("BL")[1)] and/or
- for other supplies the „General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"[1)].
  In case such supplies should contain Open Source Software, the conditions of which shall prevail over the „General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"[1)], a notice will be contained in the scope of delivery in which the applicable conditions for Open Source Software are specified. This shall apply mutatis mutandis for notices referring to other third party software components.

1.2 For customers with a seat or registered office outside European Union

For customers with a seat or registered office outside European Union, the following terms and conditions apply subordinate to T&C:

- for products, which include specific terms and conditions in the description text, these specific terms and conditions shall apply and subordinate thereto,
- for consulting services the „Standard Terms and Conditions for Consulting Services of the Division DF for Customers with a Seat or Registered Office Outside of Germany"[1)] and/or
- for other services the „International Terms & Conditions for Services"[1)] supplemented by „Software Licensing Conditions"[1)] and/or
- for other supplies of hard- and software the „International Terms & Conditions for Products"[1)] supplemented by „Software Licensing Conditions"[1)]

1.3 For customers with master or framework agreement

To the extent our supplies and/or services offered are covered by an existing master or framework agreement, the terms and conditions of that agreement shall apply instead of T&C.

2. Additional Terms and Conditions

The dimensions are in mm. In Germany, according to the German law on units in measuring technology, data in inches apply only to devices for export.

Illustrations are not binding.

Insofar as there are no remarks on the individual pages of this catalog – especially with regard to data, dimensions and weights given – these are subject to change without prior notice.

[1)] The text of the Terms and Conditions of Siemens AG can be downloaded at https://mall.industry.siemens.com/legal/ww/en/terms_of_trade_en.pdf

3. Export Regulations

We shall not be obligated to fulfill any agreement if such fulfillment is prevented by any impediments arising out of national or international foreign trade or customs requirements or any embargoes and/or other sanctions.

Export may be subject to license. We shall indicate in the delivery details whether licenses are required under German, European and US export lists.

Our products are controlled by the U.S. Government (when labeled with „ECCN" unequal „N") and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations. Products labeled with „AL" unequal „N" are subject to European/national export authorization.

The export indications can be viewed in advance in the description of the respective goods on the Industry Mall, our online catalog system. Only the export labels „AL" and „ECCN" indicated on order confirmations, delivery notes and invoices are authoritative.

Products without label, with label „AL:N"/„ECCN:N", or label „AL:9X9999"/„ECCN: 9X9999" may require authorization from responsible authorities depending on the final end-use, or the destination.

If you transfer goods (hardware and/or software and/or technology as well as corresponding documentation, regardless of the mode of provision) delivered by us or works and services (including all kinds of technical support) performed by us to a third party worldwide, you shall comply with all applicable national and international (re-)export control regulations. In any event of such transfer of goods, works and services you shall comply with the (re-) export control regulations of the Federal Republic of Germany, of the European Union and of the United States of America.

Prior to any transfer of goods, works and services provided by us to a third party you shall in particular check and guarantee by appropriate measures that

- there will be no infringement of an embargo imposed by the European Union, by the United States of America and/or by the United Nations by such transfer, by brokering of contracts concerning those goods, works and services or by provision of other economic resources in connection with those goods, works and services, also considering the limitations of domestic business and prohibitions of by-passing those embargos;
- such goods, works and services are not intended for use in connection with armaments, nuclear technology or weapons, if and to the extent such use is subject to prohibition or authorization, unless required authorization is provided;
- the regulations of all applicable Sanctioned Party Lists of the European Union and the United States of America concerning the trading with entities, persons and organizations listed therein are considered.

If required to enable authorities or us to conduct export control checks, you, upon request by us, shall promptly provide us with all information pertaining to the particular end customer, the particular destination and the particular intended use of goods, works and services provided by us, as well as any export control restrictions existing.

You acknowledge that under the EU embargo regulations against Iran, Syria and Russia respectively the sale of certain listed goods and related services is subject to authorization by the competent export control authorities of the European Union. If (1) the goods or services ordered by you are destined for Iran, Syria or Russia, and (2) the contract for our supplies and/or services is subject to prior authorization of the competent export control authorities of the European Union, the contract between you and us shall come into force in this respect only upon granting of such authorization.

The products listed in this catalog may be subject to European/German and/or US export regulations. Any export requiring approval is therefore subject to authorization by the relevant authorities. Errors excepted and subject to change without prior notice.

Link directory

Catalog LV 10

General information

Information on low-voltage power distribution and electrical installation technology	www.siemens.com/lowvoltage
Tender specifications	www.siemens.com/lowvoltage/tenderspecifications
Conversion tool	www.siemens.com/conversion-tool
Image database	www.siemens.com/lowvoltage/picturedb
CAx download manager	www.siemens.com/cax
Newsletter system	www.siemens.com/lowvoltage/newsletter
Siemens YouTube channel	www.youtube.com/Siemens
Brochures/catalogs	www.siemens.com/lowvoltage/catalogs
Operating instructions/manuals	www.siemens.com/lowvoltage/manuals
Siemens Industry Online Support (SIOS)	www.siemens.com/lowvoltage/product-support
Siemens Industry Online Support app	www.siemens.com/support-app
My Documentation Manager (MDM)	www.siemens.com/lowvoltage/mdm
Configurators	www.siemens.com/lowvoltage/configurators
Siemens Industry Mall – product catalog and online ordering system	www.siemens.com/lowvoltage/mall
Direct forwarding to the Industry Mall	www.siemens.com/product?Article No.
Training	www.siemens.com/sitrain-lowvoltage
Local contacts	www.siemens.com/lowvoltage/contact www.siemens.com/lowvoltage/components/contact www.siemens.com/lowvoltage/systems/contact www.siemens.com/lowvoltage/software/contact
Technical Support	www.siemens.com/support-request
Information on services	www.siemens.com/service-catalog
Manual for the generation, transmission and distribution of electrical energy	www.siemens.com/power-engineering-guide
Control panels for the North American market	www.siemens.com/northamerican-standards
Control panel building	www.siemens.com/controlpanel
Energy savings and amortization	www.automation.siemens.com/sinasave
Energy Suite	www.siemens.com/energysuite
SITOP power supplies	www.siemens.com/sitop
Power distribution with Totally Integrated Power	www.siemens.com/tip

Catalogs and further information

LV 10
Low-Voltage Power Distribution and Electrical Installation Technology
SENTRON • SIVACON • ALPHA

Protection, Switching, Measuring and Monitoring Devices, Switchboards and Distribution Systems

PDF (E86060-K8280-A101-B4-7600)

LV 14
Power Monitoring Made Simple
SENTRON

PDF (E86060-K1814-A101-A8-7600)

LV 18
Air Circuit Breakers and Molded Case Circuit Breakers with UL Certification
SENTRON

PDF (E86060-K8280-E347-A7-7600)

ET D1
Switches and Socket Outlets
DELTA

PDF

IC 10
Industrial Controls
SIRIUS

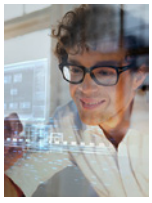
PDF (E86060-K1010-A101-B3-7600)

Industry Mall
Information and Ordering Platform on the Internet:

www.siemens.com/industrymall

Siemens TIA Selection Tool
for the selection, configuration and ordering of TIA products and devices

www.siemens.com/tst



SITRAIN
Digital Industry Academy

www.siemens.com/sitrain

The catalogs listed above and additional catalogs are available in PDF format at Siemens Industry Online Support www.siemens.com/lowvoltage/catalogs

Further information on low-voltage power distribution and electrical installation technology is available on the Internet at www.siemens.com/lowvoltage

Get more information

www.siemens.com/lowvoltage

Published by
Siemens AG

Smart Infrastructure
Electrical Products
Siemensstraße 10
93055 Regensburg, Germany

For the U.S. published by
Siemens Industry Inc.

100 Technology Drive
Alpharetta, GA 30005
United States

PDF (Catalog Extract E86060-K8280-A101-B4-7600)
KG 1021 26 En
Produced in Germany

Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the Internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place.

For additional information on industrial security measures that may be implemented, please visit
https://www.siemens.com/industrialsecurity

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under
https://www.siemens.com/industrialsecurity