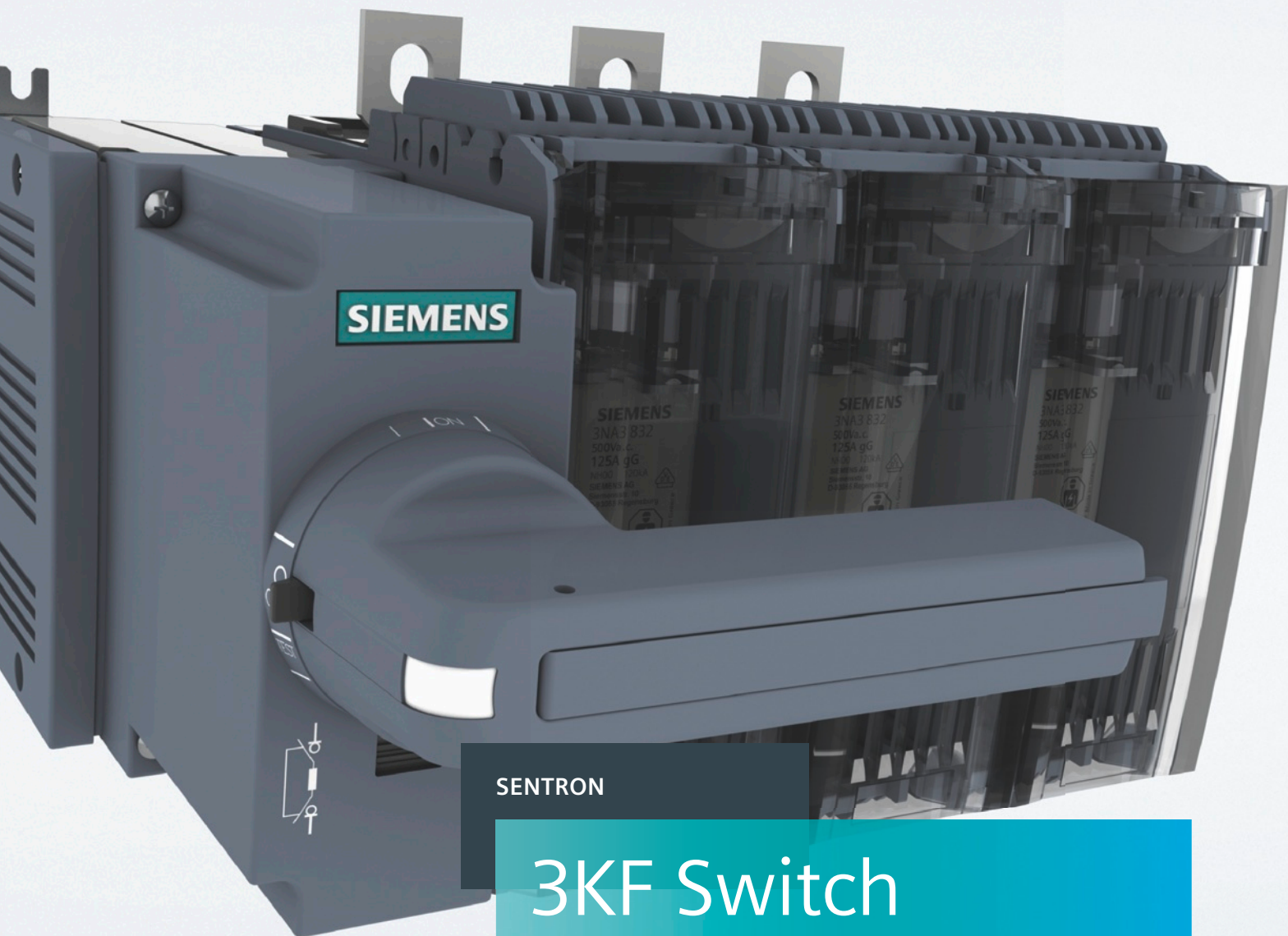


**SIEMENS**



SENTRON

# 3KF Switch Disconnectors with Fuses

Edition  
10/2016

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# 3KF Switch Disconnectors with Fuses

SENTRON



## 3KF Switch Disconnectors with Fuses · 10/2016

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Introduction

1

3KF Switch Disconnectors with Fuses up to 800 A

2

Appendix

3



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The products and systems listed in this  
 catalog are developed and manufactured  
 using a certified quality management system  
 in accordance with EN ISO 9001:2008.





Our products lay the foundations for safe, reliable and efficient electrical infrastructure at medium and low-voltage levels in buildings and industrial applications.

Our portfolio includes, among other devices, distribution boards, communication-capable protection, switching, measuring and monitoring devices, as well as switches and socket outlets.

Our components reliably protect against accidents, faults and fires caused by electricity. Furthermore, they allow consumers to utilize electrical power in a sustainable and responsible manner and support automated operation of buildings and industrial applications.

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## Comprehensive support

At the same time, you benefit from our broad portfolio of personalized and automated maintenance and support services.

Clear ordering channels, transparent product availability data and high delivery reliability coupled with swift global spare part provision, comprehensive online services, expert consulting and fast, efficient and reliable processes ensure that you are optimally covered throughout the entire product life cycle.

# Planning Efficiency

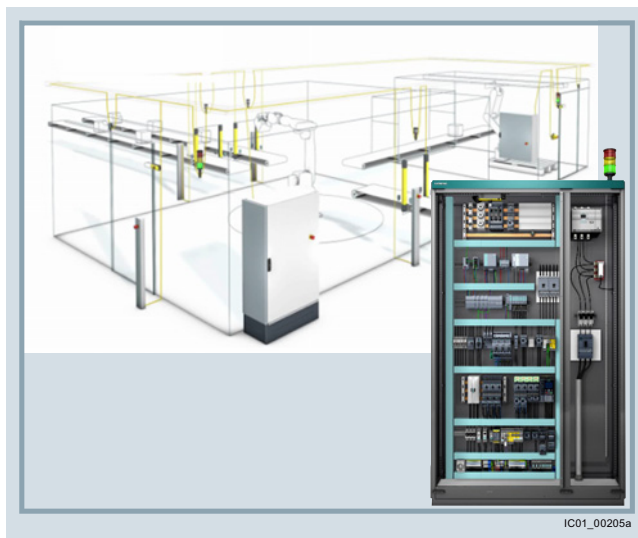
## Overview

With Planning Efficiency, Siemens supplies answers to typical questions that often present themselves in electrical planning:

- What is the appropriate product for my application?
- Where can I find product data?
- How can I make processes more efficient and save more time?

The entire electronic support offered by Siemens is merged under Planning Efficiency. At each phase of the project, online functions make the everyday work of the planners easier and more efficient. Planning Efficiency focuses on optimizing the control cabinet configuration among other things.

Especially in this early phase, up to 80% of time and costs can be saved.



In order to supply the planners with all they need and to simplify the modern electrical planning of every aspect of the control cabinet configuration, the electrical support of Planning Efficiency focuses on four benefits:

- Finding the right product faster using intuitive product selection
- Time savings of up to 80% with universal product data for your CAE and CAD systems
- User-friendly compilation of project-specific documentation
- Comprehensive support – at any time, whatever your location



## Process phases

At each phase of the process, Siemens provides comprehensive online functions free of charge.

This ensures that all the necessary information and product data are available around the clock at any location worldwide.



### Configurators for products and systems

With just a few mouse clicks, you will find yourself guided by the configurator to a suitable product or system. Simply enter the relevant parameters and select your individual solution.

#### CAX Download Manager

The CAX Download Manager can supply you with all the necessary CAX file types for the products of your choice for use in all common CAE and CAD systems. The data contained in the files is continuously updated. The whole process involves only four selection steps and is free of charge. All the files you select will then be compiled into a zip file and made available for you to download for further use. This results in a time saving of up to 80% because there is no need for manual data collection thanks to the universal manufacturer data for all commonly used CAE and CAD systems.

#### My Documentation Manager

To provide support when creating the plant documentation, we have developed a manual configurator. My Documentation Manager enables you to assemble the standard-compliant plant documentation individually with just a few clicks of the mouse. Simply select the required sections from the existing manuals of the installed Siemens products.

#### EPLAN Electric P8 Macro – a big plus for EPLAN users

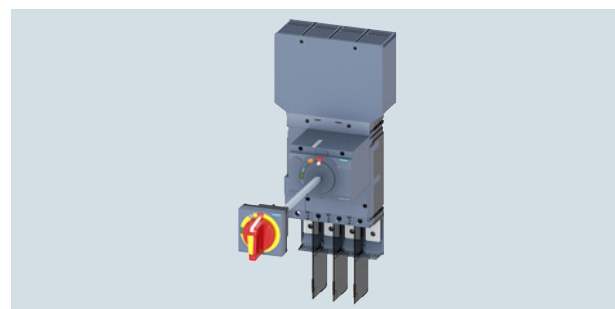
Using the EPLAN Electric P8 Macro in .edz exchange format (EPLAN Data Archived Zipped) the overall time required for data integration can be further reduced. With just a few clicks, the data types for any number of article numbers can be imported and combined. In this way, it is possible for the installed Siemens products to be displayed across different pages of the circuit diagram quickly and easily.

#### At a glance

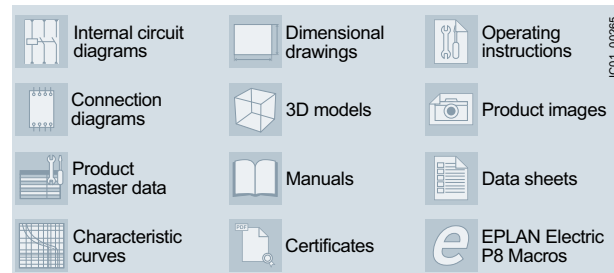
Without Planning Efficiency a lot of time would often be lost due to manual data transmission. Now you are able to concentrate on the essentials. All necessary information and product data is provided by Siemens for easy retrieval.

This makes the control cabinet configuration process more efficient and simplifies your everyday work.

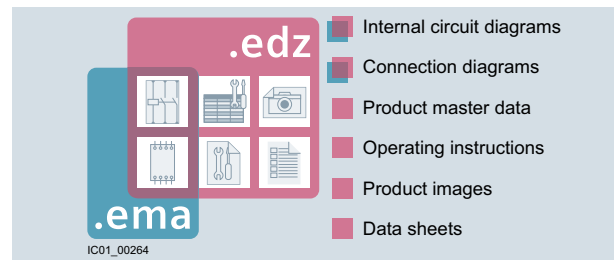
For more information, go to [www.siemens.com/planning-efficiency](http://www.siemens.com/planning-efficiency).



The configurator supplies the appropriate 3D models and dimension drawings for the control cabinet construction diagram.



The CAX Download Manager makes 11 universal data types available, as well as the EPLAN Electric P8 macro.



The EPLAN Electric P8 macro in .edz exchange format offers even more compared to the .ema exchange format.



Find out more about Planning Efficiency in our informative videos



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Competent and fast specialist advice on:

- Product selection
- Commissioning
- Issues during operation
- Possible special versions
- Special requirements
- Product features
- Device communication



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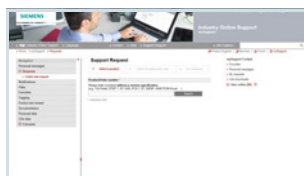


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[www.siemens.com/online-support](http://www.siemens.com/online-support)

In the Product Support area, you will find FAQs, manuals, certificates, applications & tools etc.

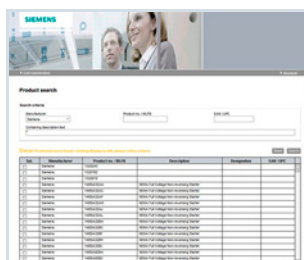
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Requirement for taking part in the courses:  
Basic principles of electrical engineering and power distribution

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## Circuit breaker courses

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Maintenance and operation of  
SENTRON 3WL circuit breakers:  
2 days

### LV-CBPROJ

Basic principles of configuring and  
selecting SENTRON circuit breakers:  
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Information	Planning/order	Operation/service	Training
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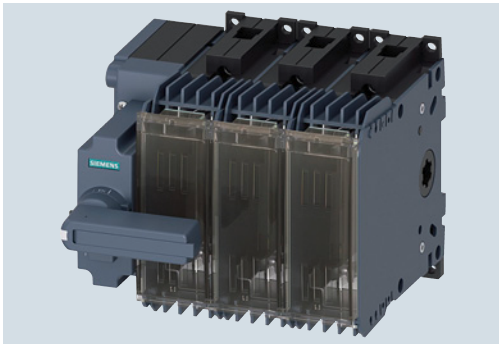
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We support you from the planning stages to commissioning to operation.

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# Notes



The new 3KF switch disconnectors with fuses provide reliable protection for personnel and ensure high system availability – in buildings, infrastructure and industrial plants. With these switch disconnectors you can implement your projects more efficiently and thus safeguard your competitiveness.

#### **Avoid electrical accidents**

The 3KF switch disconnectors with fuses are designed to systematically avoid electrical accidents. Thus, when maintenance work is being carried out on machines, for example, you can help to prevent unauthorized operation by means of appropriate locking functions. The terminal covers of the 3KF switch disconnectors with fuses ensure enhanced touch protection and prevent electric shocks. Thanks to a transparent cover for the fuse enclosure, the condition of the inserted fuse can be easily inspected at all times.

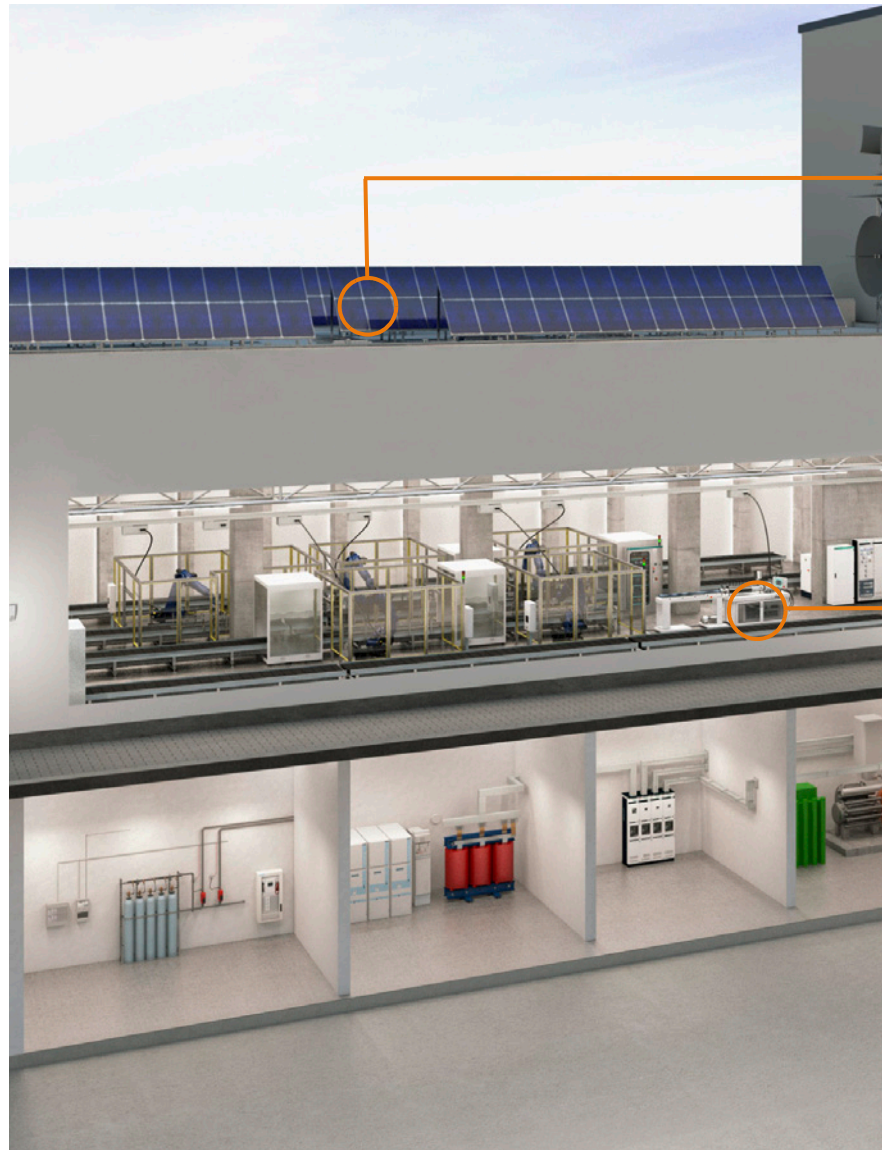
#### **Increase productivity**

The 3KF switch disconnectors with fuses provide fast and easy installation. Additional functions can be retrofitted at any time – thanks to their modular design and a comprehensive range of accessories. Easy ordering and fast delivery also contribute to optimized stockkeeping. You therefore benefit from reduced time and low costs. You can even work much more efficiently during the planning phase:

You will be provided free of charge with all the CAx data relevant for the entire engineering process.

#### **Improve flexibility**

The wide variety of applications of the 3KF switch disconnectors with fuses will enable you to satisfy all your requirements – whether as main control, EMERGENCY-STOP or maintenance switches. This is supported by a large selection of possible connection methods, operating mechanism designs, suitable LV HRC fuse links and the comprehensive accessories.





3KF switch disconnecter with fuses as maintenance switch in plants for safe operation during maintenance work in voltage-free state



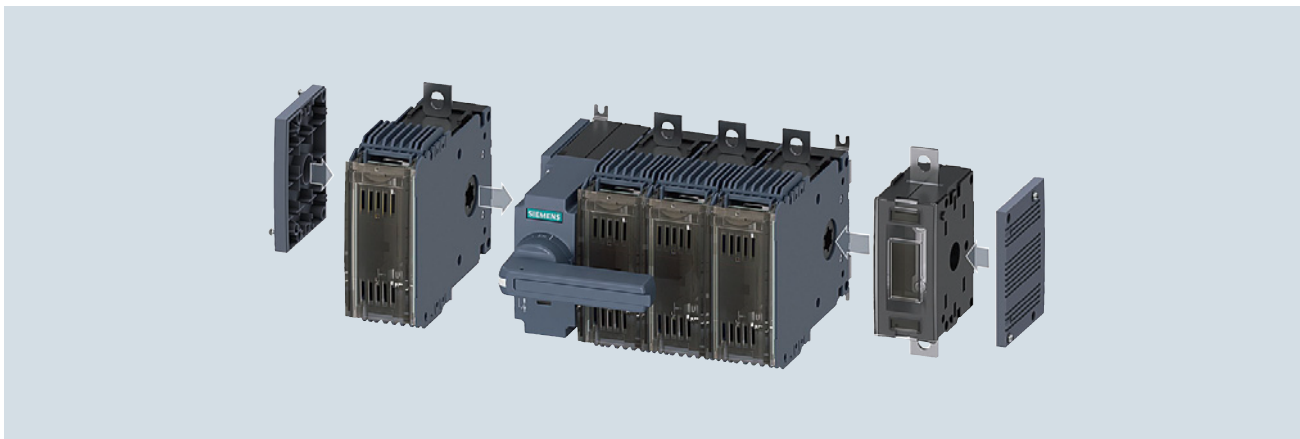
3KF switch disconnecter with fuses as EMERGENCY-STOP switch in a production plant for protection of operating personnel



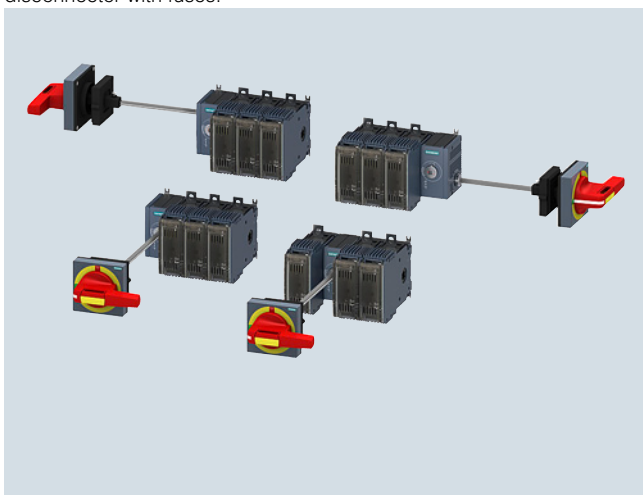
3KF switch disconnecter with fuses as main switch in the building distribution board to protect against short-circuit and overload



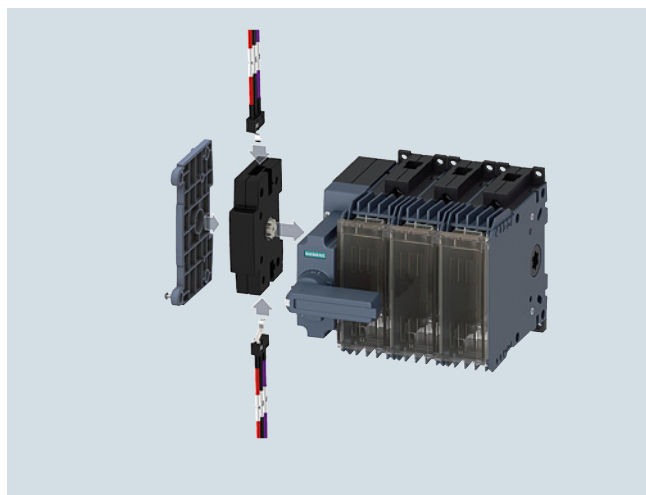
# Highlights



Retrofitting an N or an N/PE terminal or an additional pole as a 4th contact element is a fast, easy operation thanks to the modular design of the switch disconnector with fuses.



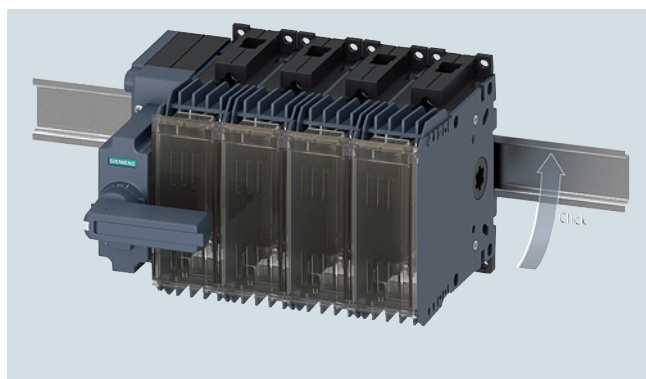
Wide variety of applications thanks to a range of different operating mechanism designs: Side operating mechanism or front operating mechanism positioned in the center, or to the side of the switch disconnector.



The control circuitry can be function-tested by means of the auxiliary switch test function.

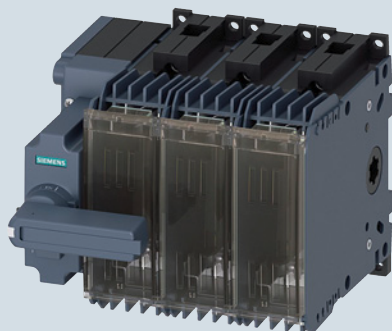


High level of protection for personnel and plant afforded by locking functions.



3KF switch disconnectors with fuses up to 80 A can be mounted on standard mounting rails for speedy installation.

## Introduction



### 3KF Switch disconnectors with fuses up to 800 A

1/2

1/10

General data

Technical features

#### For further technical product information:

Siemens Industry Online Support:

[www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

→ Entry type:  
Application example  
Certificate  
Characteristic  
Download  
FAQ  
Manual  
Product note  
Software archive  
Technical data

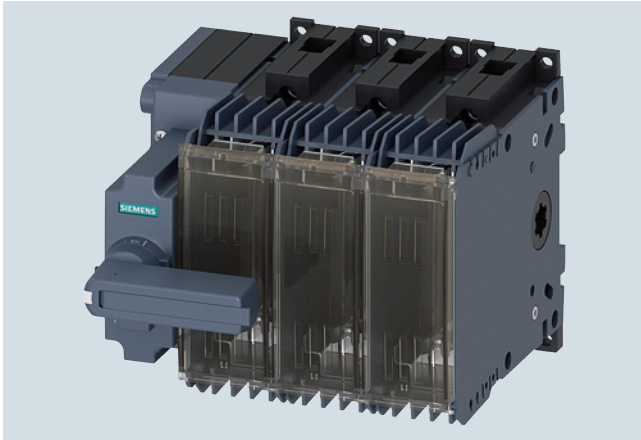
## Introduction

### 3KF Switch Disconnectors with Fuses up to 800 A

1

#### General data

#### Overview



3KF switch disconnector with fuse, complete unit, 3-pole

#### Features

- 3-pole and 4-pole versions in 5 different sizes
- Supplied as a complete assembly including direct operating mechanism or as a basic unit without a handle
- Direct operating mechanism with handle on switch disconnector with fuses
- Door-coupling rotary operating mechanism for operation of switch disconnector outside the control cabinet door
- Versions with side wall operating mechanism left and right
- Connections in the form of box terminals or flat terminals
- Floor mounting or mounting on a standard mounting rail (size 1)
- Additional poles can be retrofitted: 4th contact element, N or N/PE terminals
- Auxiliary switch for querying the switch positions
- Suitable for AC applications up to 690 V + 10 % (wind power)
- Suitable for DC applications up to 440 V
- Suitable LV HRC fuse links up to 800 A
- Double contact interruption

#### Benefits

- Enhanced touch protection
- Locking functions help to prevent unauthorized operation
- Enhanced protection against inter-phase arcing
- Safe use in wind farms
- Compact design saves space
- Wide variety of applications thanks to a range of different operating mechanisms
- Supplementary functions can be retrofitted
- Various service positions are possible thanks to optimized heat dissipation
- Test function to ensure safe commissioning
- Comprehensive support through provision of CAx data
- Protection against short-circuit and overload

#### Application

3KF switch disconnectors with fuses protect against overload and short-circuits as main control and EMERGENCY-STOP switches of switchboard assemblies, power distribution boards, power supply and motor outgoing feeders. In conjunction with SITOP semiconductor fuses, they are also used in UPS systems, frequency converters and capacitor control systems.

3KF switch disconnectors with fuses are designed to switch the specified rated current on and off under load. At the same time, they constitute a safety isolating function and isolating distance in all low-voltage circuits.

All 3KF switch disconnectors with fuses are climate-proof and meet the requirements of IEC 60947-1, IEC 60947-3 and VDE 0660-107.



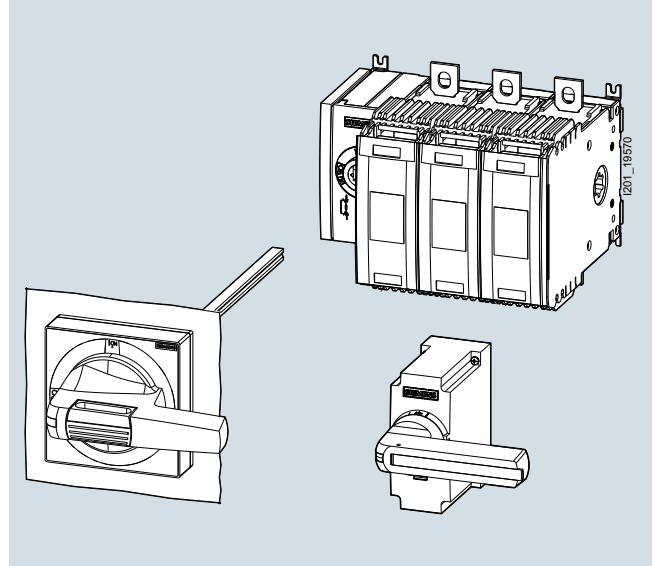
**Design**

A 3KF switch disconnector with fuses consists of an operating mechanism module, three or four switching poles and a handle to operate the switch disconnector.

**Handles**

The direct operating mechanism version of the handle is mounted directly on the switch disconnector. It can also be supplied in the form of a door-coupling rotary operating mechanism for actuation of the switch disconnector outside the control cabinet door. The handle is available in gray, or colored red/yellow for use as an EMERGENCY-STOP switch.

Commonly used switch disconnector variants comprising basic unit and handle are available as complete assemblies.



Handle either as direct operating mechanism or door-coupling rotary operating mechanism

**Position of operating mechanism modules**

To allow optimum utilization of the available installation space, units with front operating mechanisms can be supplied with the operating mechanism module in various positions – mounted on the left-hand side of the 3KF switch disconnector with fuses or in the center between the switching poles.

On units with side operating mechanisms, the operating mechanism module is positioned on the right or left-hand side of the 3KF switch disconnector with fuses.

Number of poles	Front operating mechanism on side	Front operating mechanism in center	Side operating mechanism, left	Side operating mechanism, right
3-pole				
4-pole				

## Introduction

### 3KF Switch Disconnectors with Fuses up to 800 A

1

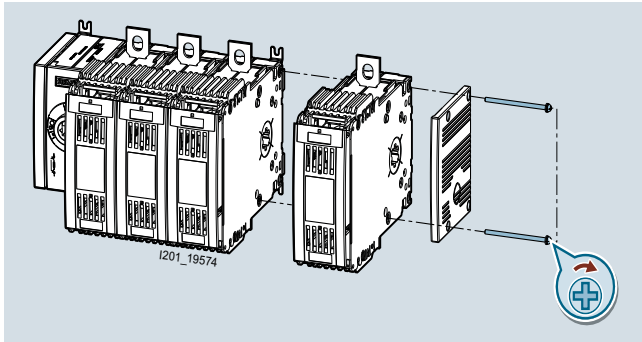
#### General data

##### Additional poles

All sizes of the 3KF switch disconnectors with fuses can be retrofitted with additional poles on a modular basis.

When installing additional poles, it is important to note that only a 3-pole 3KF switch disconnector with fuses may be retrofitted with an additional switching pole with contact system (4th contact element).

Additional poles (4th contact element, N or N/PE terminal) must always be mounted directly adjacent to the switch disconnector on the left or right, i.e. with sizes 1 and 2, therefore, it is not permissible to install an auxiliary switch module between the basic unit and an additional pole.



Installation of an additional pole

##### Available versions:

Fourth contact element:

The 4th contact element includes a contact system and is identical to the poles installed at the factory. It can be installed to upgrade a 3-pole switch disconnector to a disconnector with 4 poles.

N — N

Fourth contact element as an additional pole

N terminal (neutral conductor terminal):

The N terminal does not include a contact system. A jumper can be removed to interrupt the electrical connection between the two terminals. An N terminal can be installed to add a non-switching N pole to a 3-pole disconnector.

N — N

N terminal as non-switching pole

N/PE terminal:

The N/PE terminal is identical to the neutral conductor terminal. However, the electrical connection between the two terminals is permanent and cannot be interrupted by removal of a jumper. The N/PE terminal is normally deployed for applications in which it is vital to ensure that this connection can never be interrupted.

N — N

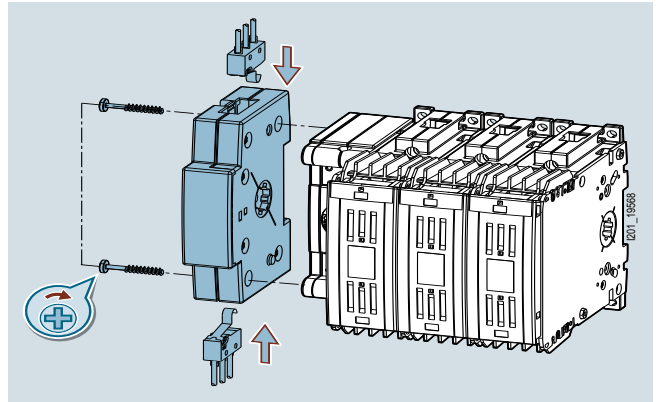
N/PE terminal with permanent connections

##### Auxiliary switches

Auxiliary switches allow remote interrogation of the contact position of the 3KF switch disconnector with fuses.

##### Installation of auxiliary switches for size 1

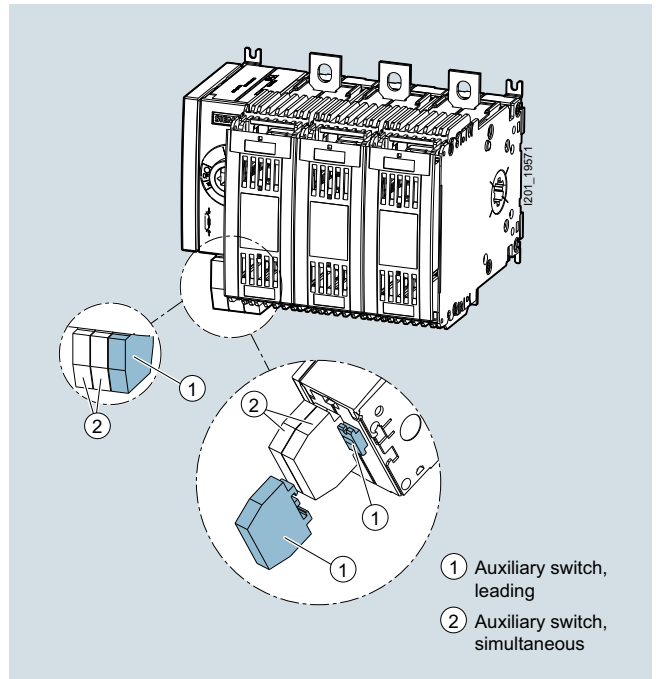
The auxiliary switches used for size 1 are microswitches (changeover contacts), which can be snapped into an auxiliary switch module. This auxiliary switch module is mounted on the side of the switch disconnector with fuses in the same way as an additional pole. A maximum of two microswitches can be installed in each auxiliary switch module.



Auxiliary switch with auxiliary switch module for size 1

##### Installation of auxiliary switches for sizes 2 to 5

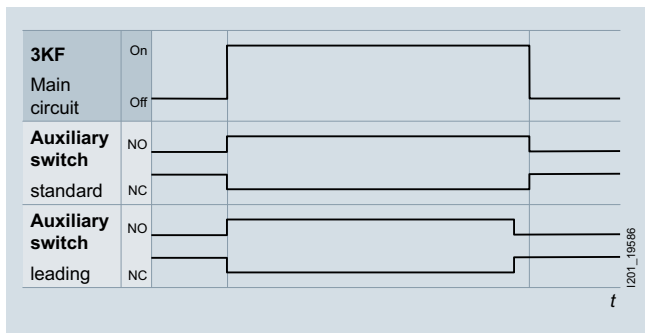
With sizes 2 to 5, the auxiliary switches are directly attached to the operating mechanism module. The auxiliary switch with the leading switch function is always installed in the right-hand mounting location. The other locations are provided for simultaneously switching with the main contacts.



Auxiliary switches directly attached to the operating mechanism module with sizes 2 to 5. The leading auxiliary switch is highlighted in the drawing.

Switching instants of auxiliary switches

The auxiliary switches can operate either simultaneously with the main contacts or function as leading switches with all sizes.



One of the possible functions of leading auxiliary switches is to disconnect the circuit with the assistance of a higher-level switching device, such as a circuit breaker, before the main contacts of the 3KF switch disconnector with fuses open.

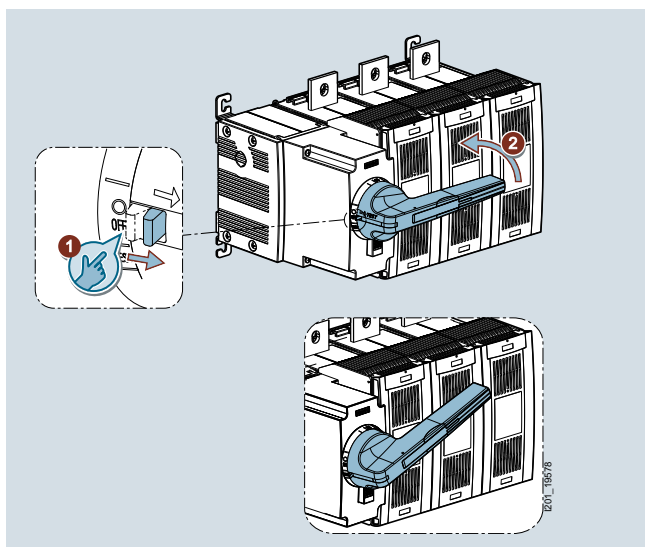
With size 1, the selection of the appropriate auxiliary switch module determines whether the switching instant will be leading or simultaneous.

With sizes 2 to 5, the switching instant is determined by the selection of the mounting location for the auxiliary switch on the operating mechanism module.

Test function for auxiliary switches

The test function allows a wiring check to be performed on the auxiliary switches without necessitating closure of the main contacts of the 3KF switch disconnector with fuses. The test function can be used as part of the commissioning process.

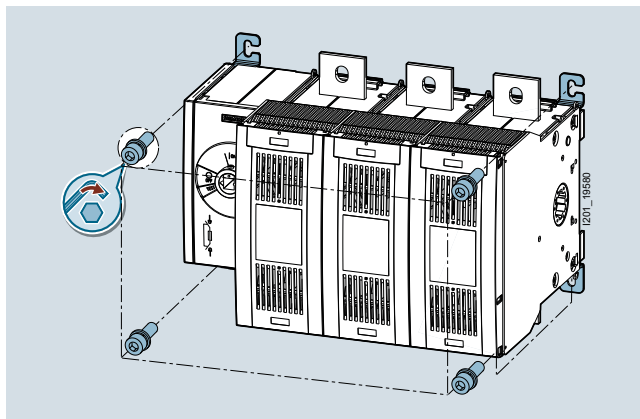
The test function is activated by turning the handle of a direct operating mechanism in the OFF position by 25° in the counter-clockwise direction. The handle must be turned 90° in the clockwise direction in order to switch the main contacts.



The auxiliary switch module including test function must be used for size 1. With sizes 2 to 5, all installed auxiliary switches are switched when the test function is activated.

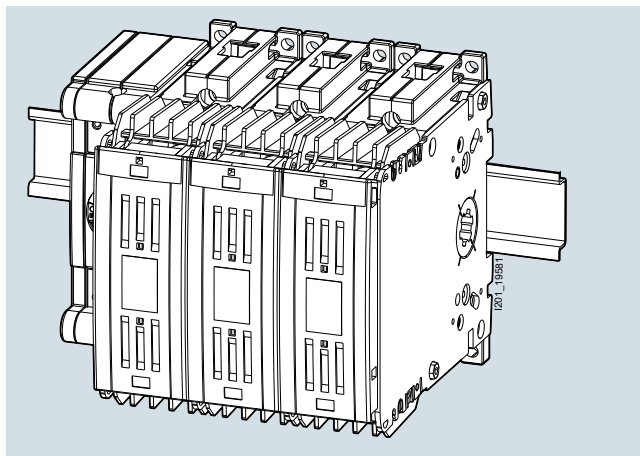
Types of mounting

All 3KF switch disconnectors with fuses are designed for floor mounting. To ensure that the switch can be flexibly adapted to the relevant installation conditions, the mounting bracket can be rotated through 90° with size 2 or larger.



Floor mounting method

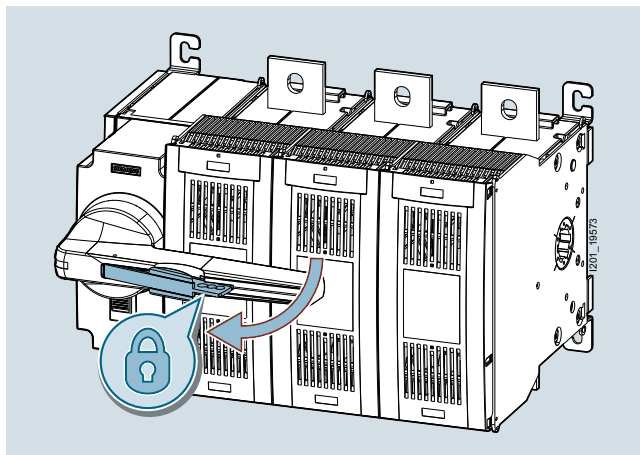
Sizes 1 and 2 can be snapped onto a standard mounting rail (TH35 according to EN 60715) as an alternative mounting method.



Mounting on a standard mounting rail

Locking functions

3KF switch disconnectors with fuses can be locked by up to three padlocks to prevent unauthorized switch operation.



Locking functions involving one or more padlocks

## Introduction

### 3KF Switch Disconnectors with Fuses up to 800 A

1

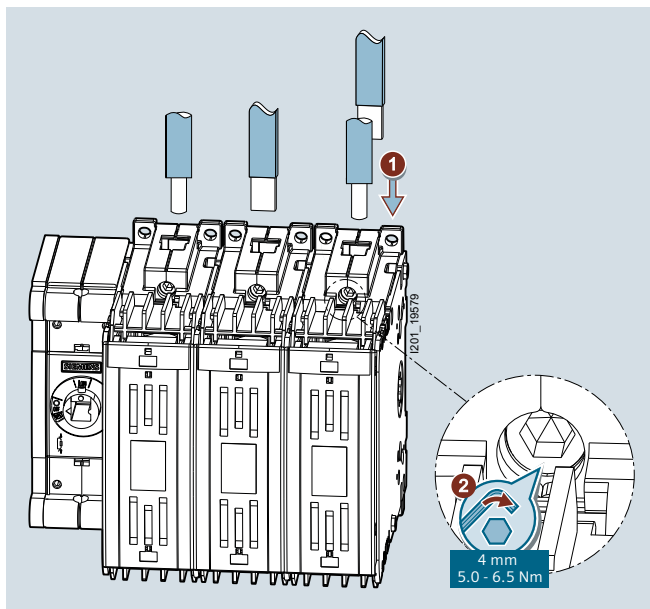
#### General data

##### Electrical connection

3KF switch disconnectors with fuses feature different connection options.

##### Box terminals

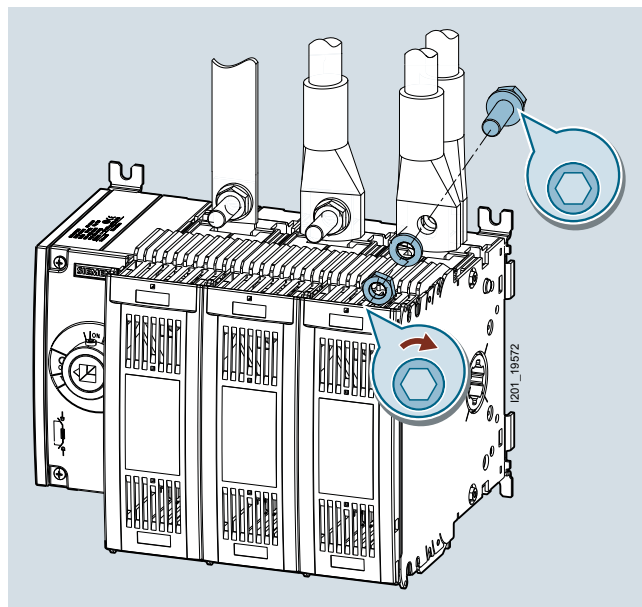
Box terminals for size 1 (rated currents 32 A to 80 A) are designed to allow the speedy connection of stripped conductors.



Connection via box terminals

##### Flat terminals

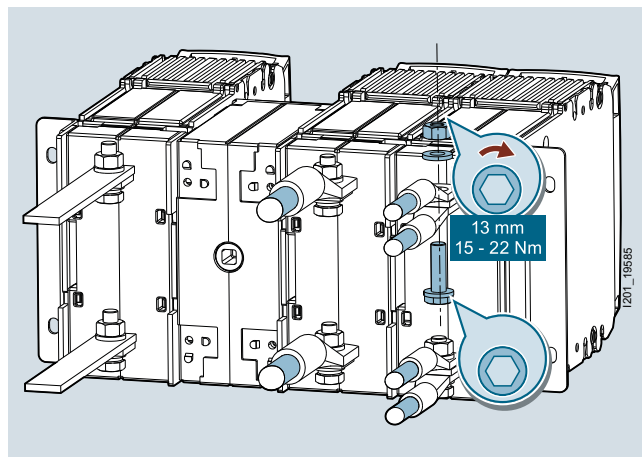
Sizes 2 to 5 (rated currents 125 to 800 A) are available with flat terminals for the connection of cable lugs or busbar systems.



Connection via flat terminals

##### Flat terminals at rear

Sizes 1 to 2 (rated currents up to 125 A) are available with rear flat terminals for the connection of cable lugs or busbar systems.



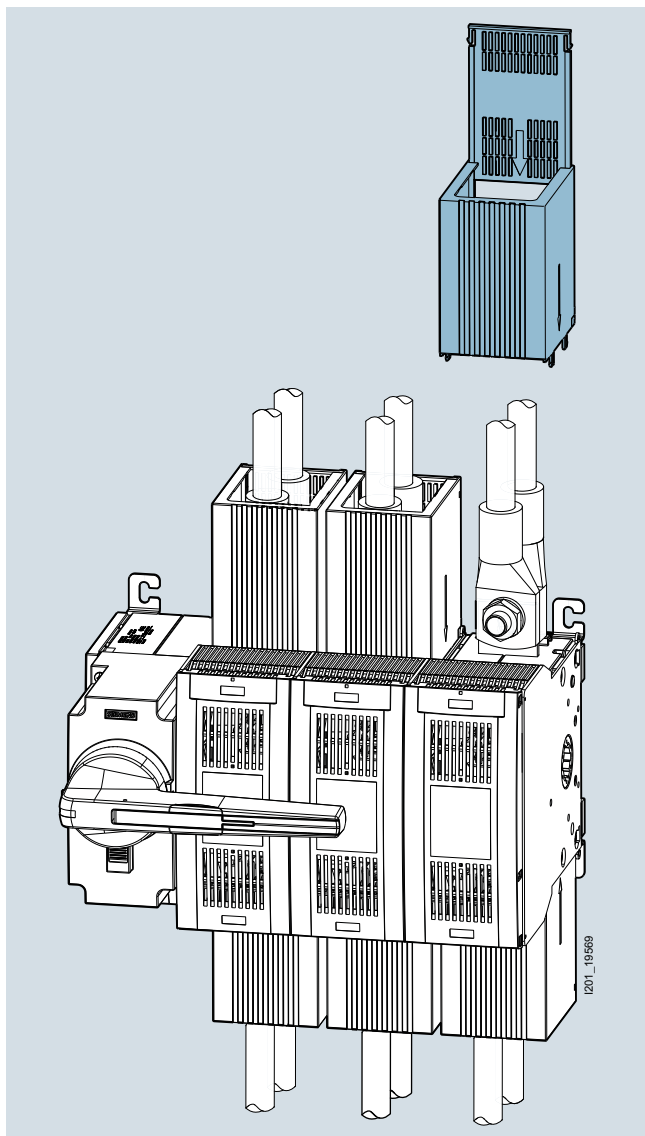
Connection of rear flat terminals



Terminal covers and phase barriers can be supplied for 3KF switch disconnectors with fuses with flat terminals.

#### Terminal covers

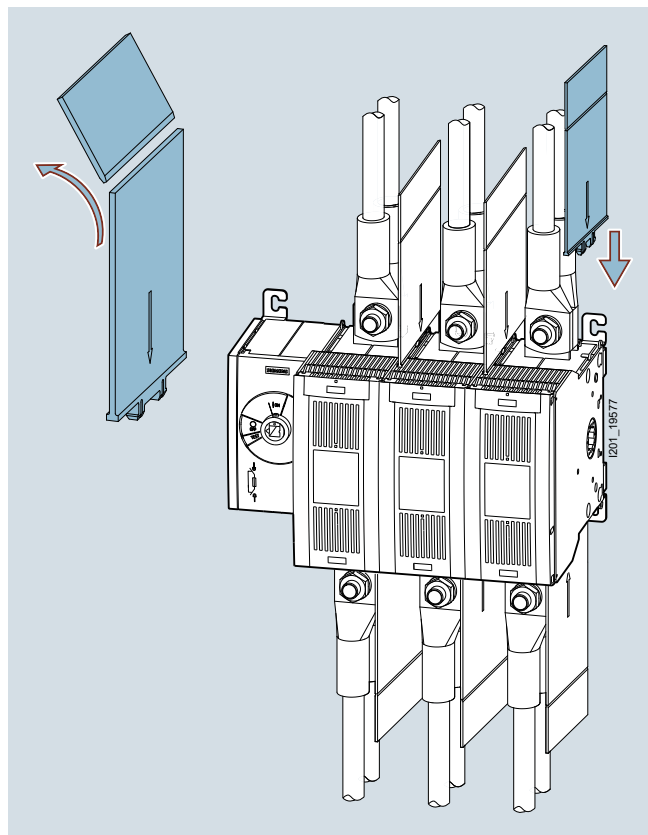
If the 3KF switch disconnector with fuses is erected outside a control cabinet, terminal covers can be installed to provide touch protection for all terminals.



Terminal covers

#### Phase barriers

When long, non-insulated cable lugs are used, phase barriers provide enhanced protection against arcing.



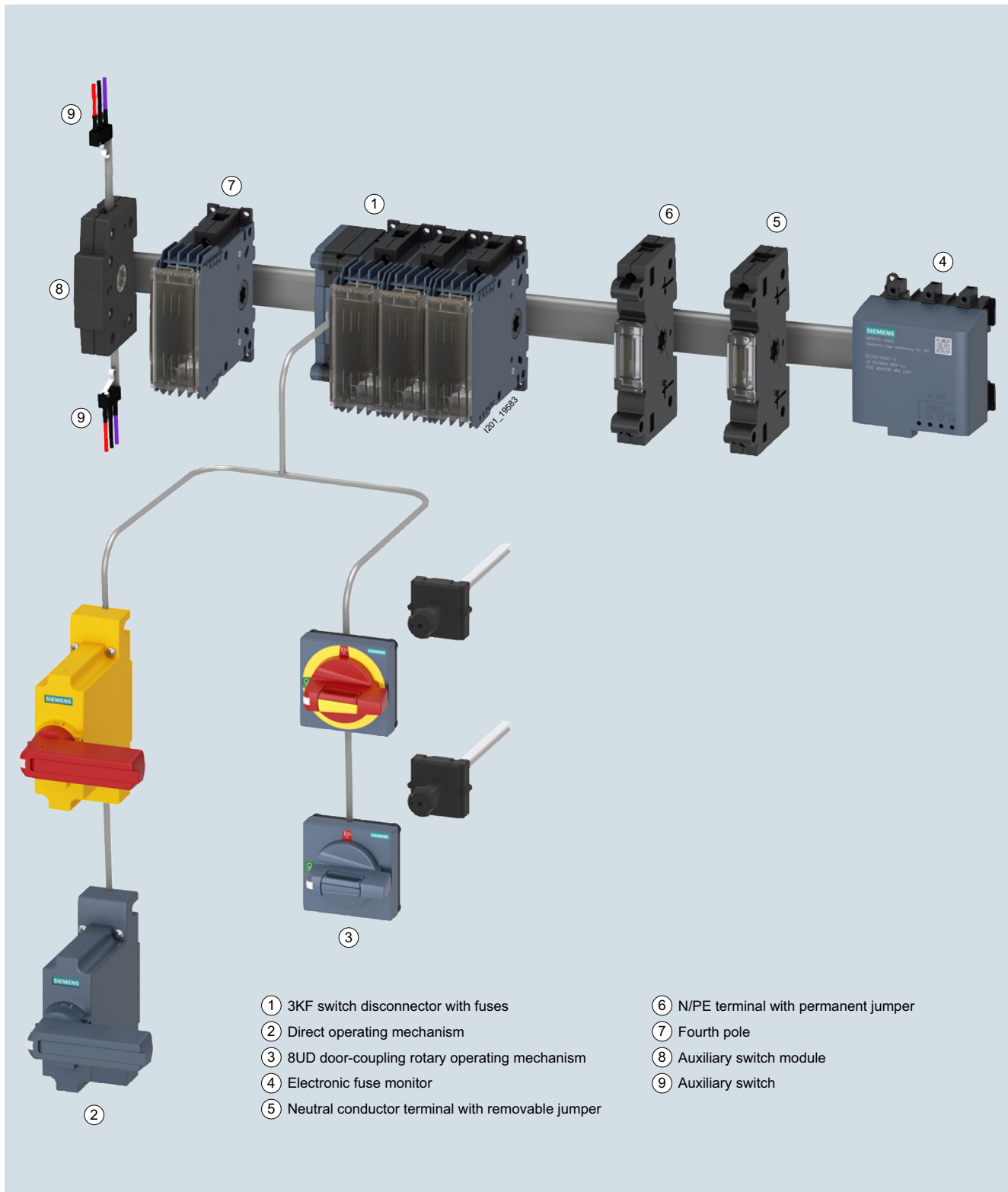
Phase barriers

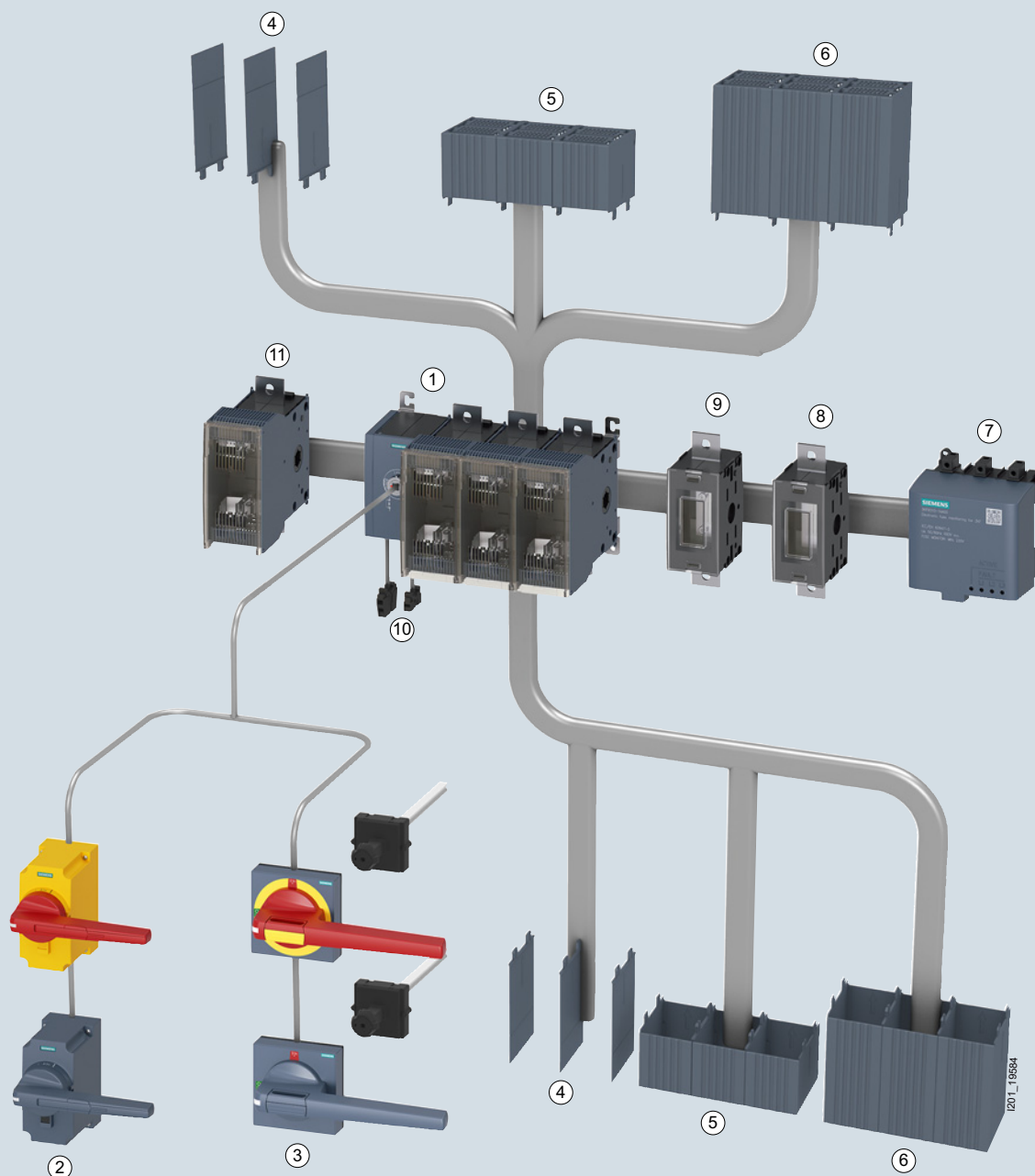
## Introduction

3KF Switch Disconnectors with Fuses up to 800 A

### General data

#### Overview of components and accessories: 3KF switch disconnectors with fuses in size 1



**Overview of components and accessories: 3KF switch disconnectors with fuses in sizes 2 to 5**

- |  |  |
|--|--|
| ① 3KF switch disconnector with fuses           | ⑥ Cable connection cover                             |
| ② Direct operating mechanism                   | ⑦ Electronic fuse monitor                            |
| ③ 8UD door-coupling rotary operating mechanism | ⑧ N/PE terminal (with permanent jumper)              |
| ④ Phase barriers                               | ⑨ Neutral conductor terminal (with removable jumper) |
| ⑤ Cable connection cover, short                | ⑩ Auxiliary switch                                   |
|  | ⑪ Fourth pole  |

## Introduction

### 3KF Switch Disconnectors with Fuses up to 800 A

#### Technical features

#### Technical specifications

To some extent, values do not apply to 3KF with rear flat terminals - [For details, see Siemens Industry Online Support](#)

Standards		IEC 60947-1, IEC 60947-3, VDE 0660 Part 107									
Size		1	2			3	4	5			
General technical details											
Rated uninterrupted current $I_u$	A	32	63	80	125	160	250	400	630	800	
Conventional free air thermal current $I_{th}^{1)}$	A	32	63	80	125	160	250	400	630	800	
For fuse links acc. to IEC 60269-2		00 and 000					1 and 0	2 and 1	3 and 2		
Rated operational voltage $U_e$											
• At 50 Hz/60 Hz AC (tolerance up to +10% permissible)	V	690									
• At DC (3 conducting paths series-connected)	V	440									
• At DC (2 conducting paths series-connected)	V	220									
Rated insulation voltage $U_i$	V	1000									
Rated impulse withstand voltage $U_{imp}$	kV	12									
Overvoltage category		IV									
Operating and short-circuit behavior											
Rated operational current $I_e^{2)}$											
• At AC-21A, AC-22A, AC-23A, 400 V...690 V	A	32	63	80	125	160	250	400	630	800	
• At DC-21A, DC-22A, DC-23A, 220 V...440 V	A	32	63	80	125	160	250	400	630	800	
Motor switching capacity AC-23A <sup>3)</sup>											
• At 400 V	kW	15	30	37	55	90	132	220	355	400	
• At 500 V	kW	18.5	37	55	75	110	160	280	400	560	
• At 690 V	kW	30	55	75	110	132	250	400	630	800	
Rated short-time withstand current $I_{cw}$ (with t = 1 s, rms value, 690 V AC/440 V DC)	kA	2.5	5				8	12	22		
Rated short-circuit making capacity $I_{cm}$ (at 690 V AC/440 V DC)	kA	3.55	7.65				13.6	24	44		
Rated conditional short-circuit current with fuse <sup>4)</sup>											
• At 400/500 V AC	kA	100									
• At 690 V AC	kA	100								80	
Let-through current $I_c$ combined with fuse <sup>4)</sup>											
• At 400/500 V AC	kA	10.4	18.2			28.7	39.4	58.5			
• At 690 V AC	kA	11.2	16.87			30.31	41.14	49.95			
Let-through $I^2t$ value combined with fuse <sup>4)</sup>											
• At 400/500 V AC	kA²s	33.2	150.6			437.0	1205	4100			
• At 690 V AC	kA²s	40.7	89.64			490.1	1300	2050			
Let-through current $I_c$ of usable fuses, max.											
• At 400/500 V AC	kA	11.8	18			33.7	37.1	77.4			
• At 690 V AC	kA	11.5	25.5			37.7	47	65			
Let-through $I^2t$ value of usable fuses, max.											
• At 400/500 V AC	kA²s	34	223			1500	2150	10400			
• At 690 V AC	kA²s	55	360			940	2600	7000			
Power loss per pole of the switch at $I_{th}$ (plus fuses)	W	0.4	1.7	2.8	4.2	7.2	15	26	40	50	
Maximum power loss of the usable fuses (per fuse)	W	6.5	7.5	8.5	11	12	25.5	34	48	60	
Endurance, operating cycles											
• Mechanical		15000			12000		10000	8000	6000		
• Electrical, at AC-23A, 690 V/50...60 Hz		6000			5000		4000	2000	1000		
• Electrical, at AC-23A, 440 V/50...60 Hz		10000			8000		5000	3000	1500		
• Electrical, at DC-23A, 440 V		1500			1000		500				
Degree of protection (operator side)											
• With masking plate or cable connection cover		IP20									
• Without masking plate or terminal cover		IP20			IP00						
Ambient conditions											
• Ambient temperature during operation	°C	-25 ... +70									
• Ambient temperature during storage	°C	-50 ... +80									
• Mounting position		Any									
Main conductor connections											
Conductor cross-section, max.	mm²	25			95		240	2 x 150	2 x 300		
Busbar systems, max. dimensions (number x width x thickness)	mm	1 x 9 x 2			1 x 20 x 3		1 x 25 x 3	1 x 30 x 10	1 x 50 x 10		
Tightening torque	Nm	5 ... 6.5			15 ... 22		30 ... 44	30 ... 44	50 ... 75		

<sup>1)</sup> Max. permissible operating temperature at connections 125 °C

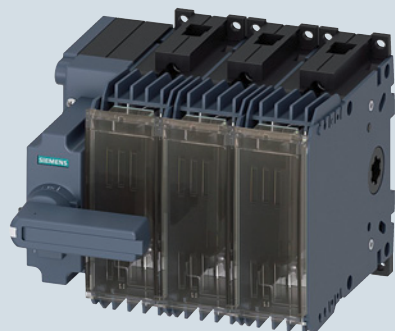
<sup>2)</sup> Values valid even at +10 % line voltage tolerance in case of AC

<sup>3)</sup> Values are provided as a guide only and may vary depending on the make of motor

<sup>4)</sup> Valid for combination of 3KF and fuse type 3NA/3ND, characteristic gG/aM



## Switch Disconnectors and Transfer Switching Equipment



### 3KF switch disconnectors with fuses up to 800 A

- 2/2 Introduction
- 2/3 Complete assemblies
- 2/4 Basic units
- 2/8 Accessories and spare parts

2

### NEW

Direct reference to the products in the Industry Mall from the selection and ordering data tables:

Article No.  
[www.siemens.com/  
 product?Article No.](http://www.siemens.com/product?ArticleNo.)

3VA2025-5HL36-0AA0

Paper catalog:  
 To get more  
 product information  
 enter the Web  
 address plus  
 Article No.



PDF catalog:  
 Get more product information  
 with just a mouse click.

### For further technical product information:

Siemens Industry Online Support:  
[www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

- Entry type:
- Application example
  - Certificate
  - Characteristic
  - Download
  - FAQ
  - Manual
  - Product note
  - Software archive
  - Technical data

# Switch Disconnectors and Transfer Switching Equipment

## 3KF Switch Disconnectors with Fuses up to 800 A

### Introduction

#### Overview

2

Devices	Description	Page
<b>Complete assemblies</b>		
	<b>Complete assemblies with direct operating mechanisms</b> Ready-to-install combinations comprising switch disconnectors and operating mechanisms <ul style="list-style-type: none"> <li>• 3 and 4-pole switch disconnectors with front operating mechanisms</li> <li>• Connections in form of box terminal or flat terminal incl. direct operating mechanism with gray handle</li> </ul>	<a href="#">2/3</a>
<b>Basic units</b>		
	<b>Front operating mechanisms</b> 3/4-pole up to 690 V AC / 440 V DC <ul style="list-style-type: none"> <li>• 3 and 4-pole versions</li> <li>• Connections in form of flat terminal (size 2 to 5) or box terminal (size 1 and 2)</li> <li>• Operating mechanism module in center or on left-hand side of switch disconnector</li> </ul>	<a href="#">2/4</a> <a href="#">2/4</a>
	<b>Side operating mechanism</b> Switch disconnectors with side operating mechanisms <ul style="list-style-type: none"> <li>• 3 and 4-pole versions</li> <li>• Connections in form of flat terminal (size 2 to 5) or box terminal (size 1 and 2)</li> <li>• Operating mechanism module on the right or left-hand side of switch disconnector</li> </ul>	<a href="#">2/6</a>
<b>Accessories and spare parts</b>		
 <p>Left: Box terminal Right: Flat terminal</p>	<b>Additional poles</b> Additional poles for enhanced functionality <ul style="list-style-type: none"> <li>• 4th contact element (switching pole)</li> <li>• N terminal (neutral conductor terminal with removable jumper)</li> <li>• N/PE terminal (with permanent jumper)</li> </ul>	<a href="#">2/8</a>
	<b>Direct operating mechanisms</b> Different handles for mounting on basic units <ul style="list-style-type: none"> <li>• Direct operating mechanisms for direct mounting on switch disconnector</li> <li>• Handles available in colors gray or red/yellow</li> </ul>	<a href="#">2/9</a>
 <p>Door-coupling rotary operating mechanism, gray, for size 1</p>	<b>Door-coupling rotary operating mechanisms</b> Different handles for mounting on basic units <ul style="list-style-type: none"> <li>• Door-coupling rotary operating mechanisms for operation of switch disconnector outside the control cabinet door</li> <li>• Handles available in colors gray or red/yellow</li> </ul>	<a href="#">2/10</a>
	<b>Auxiliary switches</b> Auxiliary switches <ul style="list-style-type: none"> <li>• For querying the switch position</li> <li>• Optionally available with leading NO contacts (auxiliary switch contacts open before the main contacts of the 3KD switch disconnector)</li> <li>• Optionally available with test function (switch can be tested without closure of main contacts)</li> </ul>	<a href="#">2/14</a>
 <p>Left: Cable connection cover Right: Phase barrier</p>	<b>Other accessories</b> <ul style="list-style-type: none"> <li>• Terminal covers</li> <li>• Phase barriers</li> <li>• Cable connection cover As touch protection for termination area (for installation outside control cabinet)</li> <li>• Mounting bracket for wall mounting (spare part)</li> </ul>	<a href="#">2/15</a>

# Switch Disconnectors and Transfer Switching Equipment

## 3KF Switch Disconnectors with Fuses up to 800 A

### Complete assemblies

#### Selection and ordering data

Rated uninterrupted current $I_u$ A	for LV HRC fuse	Size	DT	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
---	--------------------	------	----	---	-----------------	-------------------------	-----------------	----	-----------------------------------

#### Complete assemblies with direct operating mechanism gray, front operating mechanism for LV HRC fuses

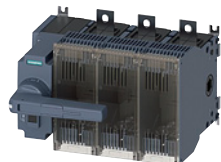
The switch disconnectors are designed for floor mounting, size 1 can optionally also be mounted on standard mounting rails

##### 3-pole,

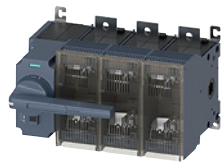
##### Flat terminals



3-pole, flat terminal,  
size 2



3-pole, flat terminal,  
size 4

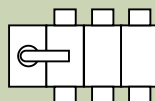


3-pole, flat terminal,  
size 5

##### Box terminals



3-pole, box terminal,  
size 2



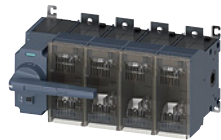
125	00/000	2	<a href="#">3KF2312-2LF11</a>	1	1 unit	1CL	2.500
160	00/000	2	<a href="#">3KF2316-2LF11</a>	1	1 unit	1CL	2.500
250	1	3	<a href="#">3KF3325-2LF11</a>	1	1 unit	1CL	4.550
400	2/1	4	<a href="#">3KF4340-2LF11</a>	1	1 unit	1CL	6.650
630	3/2	5	<a href="#">3KF5363-2LF11</a>	1	1 unit	1CL	16.150
800	3/2	5	<a href="#">3KF5380-2LF11</a>	1	1 unit	1CL	16.150

##### 4-pole

##### Flat terminals



4-pole, flat terminal,  
size 2

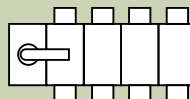


4-pole, flat terminal,  
size 5

##### Box terminals



4-pole, box terminal,  
size 1



125	00/000	2	<a href="#">3KF2412-2LF11</a>	1	1 unit	1CL	3.050
160	00/000	2	<a href="#">3KF2416-2LF11</a>	1	1 unit	1CL	3.050
250	1	3	<a href="#">3KF3425-2LF11</a>	1	1 unit	1CL	5.650
400	2/1	4	<a href="#">3KF4440-2LF11</a>	1	1 unit	1CL	8.150
630	3/2	5	<a href="#">3KF5463-2LF11</a>	1	1 unit	1CL	19.800
800	3/2	5	<a href="#">3KF5480-2LF11</a>	1	1 unit	1CL	19.800





32	00/000	1	<a href="#">3KF1403-2LB11</a>	1	1 unit	1CL	1.800
63	00/000	1	<a href="#">3KF1406-2LB11</a>	1	1 unit	1CL	1.800
80	00/000	1	<a href="#">3KF1408-2LB11</a>	1	1 unit	1CL	1.800

# Switch Disconnectors and Transfer Switching Equipment

## 3KF Switch Disconnectors with Fuses up to 800 A

### Basic units

2


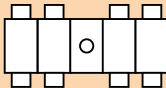


				Operating mechanism on left			Operating mechanism in center						
	Rated uninterrupted current $I_u$ A	For LV HRC fuse	Size	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Basic units without handle, front operating mechanisms, for LV HRC fuses													
The switch disconnectors are designed for floor mounting, size 1 can optionally also be mounted on standard mounting rails													
3-pole													
Flat terminals													
	125	00/000	2		3KF2312-0LF11			3KF2312-0MF11		1	1 unit	1CL	2.200
	160	00/000	2		3KF2316-0LF11			3KF2316-0MF11		1	1 unit	1CL	2.200
	250	1	3		3KF3325-0LF11			3KF3325-0MF11		1	1 unit	1CL	4.250
	400	2/1	4		3KF4340-0LF11			3KF4340-0MF11		1	1 unit	1CL	6.150
	630	3/2	5		3KF5363-0LF11			3KF5363-0MF11		1	1 unit	1CL	15.150
	800	3/2	5		3KF5380-0LF11			3KF5380-0MF11		1	1 unit	1CL	15.150
3-pole, flat terminal, size 5, oper. mechanism on left													
3-pole, flat terminal, size 2, oper. mechanism in center													
3-pole, flat terminal, size 5, oper. mechanism in center													
Flat terminals at rear													
	32	00/000	1	B	---			3KF1303-0MR11		1	1 unit	1CL	1.200
	63	00/000	1	B	---			3KF1306-0MR11		1	1 unit	1CL	1.200
	125	00/000	2	B	---			3KF2312-0MR11		1	1 unit	1CL	2.200
Box terminals													
	32	00/000	1		3KF1303-0LB11			3KF1303-0MB11		1	1 unit	1CL	1.300
	63	00/000	1		3KF1306-0LB11			3KF1306-0MB11		1	1 unit	1CL	1.300
	80	00/000	1		3KF1308-0LB11			3KF1308-0MB11		1	1 unit	1CL	1.300
3-pole, box terminal, size 1, oper. mechanism on left													
3-pole, box terminal, size 1, oper. mechanism in center													



# Switch Disconnectors and Transfer Switching Equipment

## 3KF Switch Disconnectors with Fuses up to 800 A

### Basic units


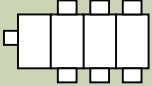
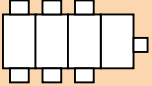





		Operating mechanism on left				Operating mechanism in center							
Rated uninterrupted current $I_u$ A	For LV HRC fuse	Size	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	
<b>4-pole</b>													
<b>Flat terminals</b>													
													
125	00/000	2		<a href="#">3KF2412-0LF11</a>			<a href="#">3KF2412-0MF11</a>		1	1 unit	1CL	2.750	
160	00/000	2		<a href="#">3KF2416-0LF11</a>			<a href="#">3KF2416-0MF11</a>		1	1 unit	1CL	2.750	
250	1	3		<a href="#">3KF3425-0LF11</a>			<a href="#">3KF3425-0MF11</a>		1	1 unit	1CL	5.350	
400	2/1	4		<a href="#">3KF4440-0LF11</a>			<a href="#">3KF4440-0MF11</a>		1	1 unit	1CL	7.650	
630	3/2	5		<a href="#">3KF5463-0LF11</a>			<a href="#">3KF5463-0MF11</a>		1	1 unit	1CL	18.850	
800	3/2	5		<a href="#">3KF5480-0LF11</a>			<a href="#">3KF5480-0MF11</a>		1	1 unit	1CL	18.850	
<b>Box terminals</b>													
													
32	00/000	1		<a href="#">3KF1403-0LB11</a>			<a href="#">3KF1403-0MB11</a>		1	1 unit	1CL	1.650	
63	00/000	1		<a href="#">3KF1406-0LB11</a>			<a href="#">3KF1406-0MB11</a>		1	1 unit	1CL	1.650	
80	00/000	1		<a href="#">3KF1408-0LB11</a>			<a href="#">3KF1408-0MB11</a>		1	1 unit	1CL	1.650	
<b>4-pole, flat terminal, size 1, operating mechanism on left</b>													
													
<b>4-pole, flat terminal, size 1, operating mechanism in center</b>													

# Switch Disconnectors and Transfer Switching Equipment

## 3KF Switch Disconnectors with Fuses up to 800 A

### Basic units

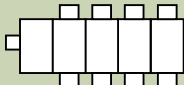
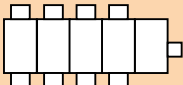





2

		Operating mechanism on left			Operating mechanism on right				
Rated uninterrupted current $I_u$ A	For LV HRC fuse	Size	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)
									PS*/ P. unit
									PG
									Weight per PU approx. kg
<b>Basic units without handle, side operating mechanisms</b>									
The switch disconnectors with side operating mechanism are suitable for door-coupling rotary operating mechanisms.									
<b>3-pole</b>									
<b>Flat terminals</b>									
									
125	00/000	2		<a href="#">3KF2312-4LF11</a>			<a href="#">3KF2312-4RF11</a>		1 1 unit 1CL 2.300
160	00/000	2		<a href="#">3KF2316-4LF11</a>			<a href="#">3KF2316-4RF11</a>		1 1 unit 1CL 2.300
250	1	3		<a href="#">3KF3325-4LF11</a>			<a href="#">3KF3325-4RF11</a>		1 1 unit 1CL 4.450
400	2/1	4		<a href="#">3KF4340-4LF11</a>			<a href="#">3KF4340-4RF11</a>		1 1 unit 1CL 6.200
630	3/2	5		<a href="#">3KF5363-4LF11</a>			<a href="#">3KF5363-4RF11</a>		1 1 unit 1CL 15.250
800	3/2	5		<a href="#">3KF5380-4LF11</a>			<a href="#">3KF5380-4RF11</a>		1 1 unit 1CL 15.250
									
3-pole, flat terminal, size 5, oper. mechanism on left									
									
3-pole, flat terminal, size 2, oper. mechanism on right									
									
3-pole, flat terminal, size 5, oper. mechanism on right									
<b>Box terminals</b>									
				<a href="#">3KF1303-4LB11</a>			<a href="#">3KF1303-4RB11</a>		1 1 unit 1CL 1.400
32	00/000	1		<a href="#">3KF1306-4LB11</a>			<a href="#">3KF1306-4RB11</a>		1 1 unit 1CL 1.400
63	00/000	1		<a href="#">3KF1308-4LB11</a>			<a href="#">3KF1308-4RB11</a>		1 1 unit 1CL 1.400
80	00/000	1							
									
3-pole, box terminal, size 1, oper. mechanism on right									

# Switch Disconnectors and Transfer Switching Equipment

## 3KF Switch Disconnectors with Fuses up to 800 A

### Basic units

Operating mechanism on left							Operating mechanism on right						
Rated uninterrupted current <i>I<sub>u</sub></i> A	For LV HRC fuse	Size	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	
<b>4-pole</b>													
<b>Flat terminals</b>													
	125	00/000	2	<a href="#">3KF2412-4LF11</a>			<a href="#">3KF2412-4RF11</a>		1	1 unit	1CL	2.800	
	160	00/000	2	<a href="#">3KF2416-4LF11</a>			<a href="#">3KF2416-4RF11</a>		1	1 unit	1CL	2.800	
	250	1	3	<a href="#">3KF3425-4LF11</a>			<a href="#">3KF3425-4RF11</a>		1	1 unit	1CL	5.500	
	400	2/1	4	<a href="#">3KF4440-4LF11</a>			<a href="#">3KF4440-4RF11</a>		1	1 unit	1CL	7.700	
	630	3/2	5	<a href="#">3KF5463-4LF11</a>			<a href="#">3KF5463-4RF11</a>		1	1 unit	1CL	19.050	
	800	3/2	5	<a href="#">3KF5480-4LF11</a>			<a href="#">3KF5480-4RF11</a>		1	1 unit	1CL	19.050	
3-pole, flat terminal, size 2, operating mechanism on left													
													
3-pole, flat terminal, size 5, operating mechanism on left													
													
4-pole, flat terminal, size 2, operating mechanism on right													
													
4-pole, flat terminal, size 5, operating mechanism on right													
<b>Box terminals</b>													
	32	00/000	1	<a href="#">3KF1403-4LB11</a>			<a href="#">3KF1403-4RB11</a>		1	1 unit	1CL	1.750	
	63	00/000	1	<a href="#">3KF1406-4LB11</a>			<a href="#">3KF1406-4RB11</a>		1	1 unit	1CL	1.750	
	80	00/000	1	<a href="#">3KF1408-4LB11</a>			<a href="#">3KF1408-4RB11</a>		1	1 unit	1CL	1.750	
4-pole, flat terminal, size 1, operating mechanism on right													

# Switch Disconnectors and Transfer Switching Equipment

## 3KF Switch Disconnectors with Fuses up to 800 A

### Accessories and spare parts

#### Selection and ordering data

##### Additional poles

	Version	For LV HRC fuses	Circuit symbol	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg			
	<b>4th contact element (switching pole) for LV HRC fuses<sup>1)</sup></b>												
	If a 4th contact element is used to switch neutral in a 3+N net an isolating link has to be used for neutral												
	<b>Flat terminals</b>												
	for size 2; 3KF2...	00/000	<a href="#">3KF9205-0AA00</a>	1							1 unit	1CL	0.600
	for size 3; 3KF3...	1	<a href="#">3KF9305-0AA00</a>	1	1 unit	1CL	0.400						
	for size 4; 3KF4...	2/1	<a href="#">3KF9405-0AA00</a>	1	1 unit	1CL	0.500						
	for size 5; 3KF5...	3/2	<a href="#">3KF9505-0AA00</a>	1	1 unit	1CL	4.000						
	<b>Flat terminals at rear</b>												
	for size 1; 3KF1...	00/000	<a href="#">3KF9105-1AA00</a>	1	1 unit	1CL	0.400						
	for size 2; 3KF2...	00/000	<a href="#">3KF9205-1AA00</a>	1	1 unit	1CL	0.600						
	<b>Box terminals</b>				<a href="#">3KF9105-2AA00</a>	1	1 unit	1CL	0.400				
	for size 1; 3KF1...	00/000											
	<b>Neutral conductor terminal with removable jumper</b>												
	<b>Flat terminals</b>												
	for size 2; 3KF2...		<a href="#">3KF9206-0AA00</a>	1							1 unit	1CL	0.300
	for size 3; 3KF3...		<a href="#">3KF9306-0AA00</a>	1							1 unit	1CL	1.200
	for size 4; 3KF4...		<a href="#">3KF9406-0AA00</a>	1							1 unit	1CL	1.600
for size 5; 3KF5...		<a href="#">3KF9506-0AA00</a>	1	1 unit	1CL	1.900							
	<b>Flat terminals at rear</b>				<a href="#">3KF9106-1AA00</a>	1	1 unit	1CL	0.100				
	for size 1; 3KF1...		<a href="#">3KF9206-1AA00</a>	1						1 unit	1CL	0.300	
	<b>Box terminals</b>				<a href="#">3KF9106-2AA00</a>	1	1 unit	1CL	0.150				
	for size 1; 3KF1...												



# Switch Disconnectors and Transfer Switching Equipment

## 3KF Switch Disconnectors with Fuses up to 800 A

### Accessories and spare parts

2

Version	For LV HRC fuses	Circuit symbol	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
<b>N/PE terminals with permanent jumper</b>									
<b>Flat terminals</b>									
for size 2; 3KF2...				3KF9206-7AA00		1	1 unit	1CL	0.300
for size 3; 3KF3...				3KF9306-7AA00		1	1 unit	1CL	0.650
for size 4; 3KF4...				3KF9406-7AA00		1	1 unit	1CL	0.750
for size 5; 3KF5...				3KF9506-7AA00		1	1 unit	1CL	1.800
<b>Flat terminals at rear</b>									
for size 1; 3KF1...				3KF9106-6AA00		1	1 unit	1CL	0.100
for size 2; 3KF2...				3KF9206-6AA00		1	1 unit	1CL	0.200
<b>Box terminals</b>									
for size 1; 3KF1...				3KF9106-8AA00		1	1 unit	1CL	0.150

### Direct operating mechanisms

Version	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
<b>Direct operating mechanisms</b>							
Can be locked with up to max. 3 padlocks							
<b>Gray</b>							
for size 1; 3KF1...				3KF9101-1AA00	1	1 unit	1CL 0.150
for size 2; 3KF2...				3KF9201-1AA00	1	1 unit	1CL 0.250
for size 3; 3KF3...				3KF9301-1AA00	1	1 unit	1CL 0.100
for size 4; 3KF4...				3KF9401-1AA00	1	1 unit	1CL 0.050
for size 5; 3KF5...				3KF9501-1AA00	1	1 unit	1CL 0.950
<b>Red/yellow</b>							
for size 1; 3KF1...				3KF9101-2AA00	1	1 unit	1CL 0.150
for size 2; 3KF2...				3KF9201-2AA00	1	1 unit	1CL 0.250
for size 3; 3KF3...				3KF9301-2AA00	1	1 unit	1CL 0.300
for size 4; 3KF4...				3KF9401-2AA00	1	1 unit	1CL 0.500
for size 5; 3KF5...				3KF9501-2AA00	1	1 unit	1CL 0.950

Direct operating mechanism, gray,  
for size 1

Direct operating mechanism,  
red/yellow, for size 1

## Switch Disconnectors and Transfer Switching Equipment

### 3KF Switch Disconnectors with Fuses up to 800 A

#### Accessories and spare parts

##### Door-coupling rotary operating mechanisms

###### Note

For 3KF switch disconnectors with fuses and side operating mechanism (left or right), only door-coupling rotary operating mechanisms without "Test" can be used.

Version	Handle length	Shaft size	DT	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	mm	mm x mm							kg

##### Door-coupling rotary operating mechanisms, complete

###### Labeling Test - 0 - I

###### Gray



for size 1; 3KF1	45	8 x 8	<a href="#">8UD1171-2AF21</a>	1	1 unit	1CL	0.530
for size 2; 3KF2...	100	8 x 8	<a href="#">8UD1141-2AF21</a>	1	1 unit	1CL	1.110
for size 3; 3KF3...	100	10 x 10	<a href="#">8UD1141-3AF21</a>	1	1 unit	1CL	0.852
for size 4; 3KF4...	140	10 x 10	<a href="#">8UD1151-3AF21</a>	1	1 unit	1CL	1.206
for size 5; 3KF5...	200	12 x 12	<a href="#">8UD1161-4AF21</a>	1	1 unit	1CL	1.363

Door-coupling rotary operating mechanism, gray, for size 1

###### Red/yellow



for size 1; 3KF1	45	8 x 8	<a href="#">8UD1171-2AF25</a>	1	1 unit	1CL	0.511
for size 2; 3KF2...	100	8 x 8	<a href="#">8UD1141-2AF25</a>	1	1 unit	1CL	1.116
for size 3; 3KF3...	100	10 x 10	<a href="#">8UD1141-3AF25</a>	1	1 unit	1CL	0.853
for size 4; 3KF4...	140	10 x 10	<a href="#">8UD1151-3AF25</a>	1	1 unit	1CL	1.216
for size 5; 3KF5...	200	12 x 12	<a href="#">8UD1161-4AF25</a>	1	1 unit	1CL	1.350

Door-coupling rotary operating mechanism, gray, for size 1

# Switch Disconnectors and Transfer Switching Equipment

## 3KF Switch Disconnectors with Fuses up to 800 A

### Accessories and spare parts

Version	Handle length mm	Shaft size mm x mm	DT	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
<b>Handles for door-coupling rotary operating mechanisms</b>									
<b>Handles without extension shaft and coupling driver, labeling 0 - I</b>									
<ul style="list-style-type: none"> <li>• With masking plate</li> <li>• Labeling 0 - I</li> </ul>									
<b>Gray</b>									
	for size 1; 3KF1..	45	--	<b>8UD1771-2AD01</b>		1	1 unit	1CL	0.165
	for sizes 2/3; 3KF2/3...	100	--	<b>8UD1841-2AD01</b>		1	1 unit	1CL	0.637
	for size 4; 3KF4...	140	--	<b>8UD1851-3AD01</b>		1	1 unit	1CL	0.654
	for size 5; 3KF5...	200	--	<b>8UD1861-4AD01</b>		1	1 unit	1CL	0.690
Handle, gray, for size 1									
<b>Red/yellow</b>									
	for size 1; 3KF1..	45	--	<b>8UD1771-2AD05</b>		1	1 unit	1CL	0.165
	for sizes 2/3; 3KF2/3...	100	--	<b>8UD1841-2AD05</b>		1	1 unit	1CL	0.640
	for size 4; 3KF4...	140	--	<b>8UD1851-3AD05</b>		1	1 unit	1CL	0.657
	for size 5; 3KF5...	200	--	<b>8UD1861-4AD05</b>		1	1 unit	1CL	0.709
Handle red/yellow for size 1									
<b>Handles without extension shaft and coupling driver, labeling Test - 0 - I</b>									
<ul style="list-style-type: none"> <li>• With masking plate</li> <li>• Labeling Test - 0 - I</li> </ul>									
<b>Gray</b>									
	for size 1; 3KF1..	45	--	<b>8UD1771-2AF01</b>		1	1 unit	1CL	0.165
	for sizes 2/3; 3KF2/3...	100	--	<b>8UD1841-2AF01</b>		1	1 unit	1CL	0.637
	for size 4; 3KF4...	140	--	<b>8UD1851-3AF01</b>		1	1 unit	1CL	0.654
	for size 5; 3KF5...	200	--	<b>8UD1861-4AF01</b>		1	1 unit	1CL	0.690
Handle, gray, for size 1									
<b>Red/yellow</b>									
	for size 1; 3KF1..	45	--	<b>8UD1771-2AF05</b>		1	1 unit	1CL	0.165
	for sizes 2/3; 3KF2/3...	100	--	<b>8UD1841-2AF05</b>		1	1 unit	1CL	0.636
	for size 4; 3KF4...	140	--	<b>8UD1851-3AF05</b>		1	1 unit	1CL	0.654
	for size 5; 3KF5...	200	--	<b>8UD1861-4AF05</b>		1	1 unit	1CL	0.692
Handle red/yellow for size 1									

## Switch Disconnectors and Transfer Switching Equipment

### 3KF Switch Disconnectors with Fuses up to 800 A

#### Accessories and spare parts

2

	Version	Handle length mm	Shaft size mm x mm	DT	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
<b>Handles, illuminated, without extension shaft and coupling driver, labeling 0 - I</b>										
<ul style="list-style-type: none"> <li>• With masking plate</li> <li>• Illuminated</li> <li>• Labeling 0 - I</li> </ul>										
	<b>Gray</b>									
	for size 1; 3KF1..	45	--		<b>8UD1771-2CD01</b>		1 1 unit	1CL		0.131
	for sizes 2/3; 3KF2/3...	100	--		<b>8UD1841-2CD01</b>		1 1 unit	1CL		0.645
	for size 4; 3KF4...	140	--		<b>8UD1851-3CD01</b>		1 1 unit	1CL		0.664
	for size 5; 3KF5...	200	--		<b>8UD1861-4CD01</b>		1 1 unit	1CL		0.697
<b>Red/yellow</b>										
	for size 1; 3KF1..	45	--		<b>8UD1771-2CD05</b>		1 1 unit	1CL		0.131
	for sizes 2/3; 3KF2/3...	100	--		<b>8UD1841-2CD05</b>		1 1 unit	1CL		0.642
	for size 4; 3KF4...	140	--		<b>8UD1851-3CD05</b>		1 1 unit	1CL		0.665
	for size 5; 3KF5...	200	--		<b>8UD1861-4CD05</b>		1 1 unit	1CL		0.704
<b>Handles, illuminated, without extension shaft and coupling driver, labeling Test - 0 - I</b>										
<ul style="list-style-type: none"> <li>• With masking plate</li> <li>• Illuminated</li> <li>• Labeling Test - 0 - I</li> </ul>										
	<b>Gray</b>									
	for size 1; 3KF1..	45	--		<b>8UD1771-2CF01</b>		1 1 unit	1CL		0.131
	for sizes 2/3; 3KF2/3...	100	--		<b>8UD1841-2CF01</b>		1 1 unit	1CL		0.645
	for size 4; 3KF4...	140	--		<b>8UD1851-3CF01</b>		1 1 unit	1CL		0.662
	for size 5; 3KF5...	200	--		<b>8UD1861-4CF01</b>		1 1 unit	1CL		0.698
<b>Red/yellow</b>										
	for size 1; 3KF1..	45	--		<b>8UD1771-2CF05</b>		1 1 unit	1CL		0.131
	for sizes 2/3; 3KF2/3...	100	--		<b>8UD1841-2CF05</b>		1 1 unit	1CL		0.644
	for size 4; 3KF4...	140	--		<b>8UD1851-3CF05</b>		1 1 unit	1CL		0.659
	for size 5; 3KF5...	200	--		<b>8UD1861-4CF05</b>		1 1 unit	1CL		0.699

Handle without extension shaft,  
gray, for sizes 1/2

Handle without extension shaft,  
red/yellow, for sizes 1/2



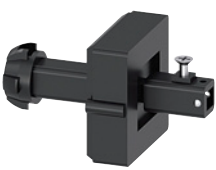


Handle without extension shaft,  
gray, for sizes 1/2

Handle without extension shaft,  
red/yellow, for sizes 1/2

# Switch Disconnectors and Transfer Switching Equipment

## 3KF Switch Disconnectors with Fuses up to 800 A

### Accessories and spare parts

Version	Handle length	Shaft size	DT	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
	mm	mm x mm							kg
<b>Other accessories for door-coupling rotary operating mechanisms, 8UD1 series</b>									
				<b>Extension shafts</b>					
				<b>300 mm long</b>					
	for sizes 1/2; 3KF1/2...			--	8 x 8	<a href="#">8UC6032</a>	1 1 unit	1CL	0.135
	for sizes 3/4; 3KF3/4...			--	10 x 10	<a href="#">8UC6033</a>	1 1 unit	1CL	0.215
									
				<b>600 mm long</b>					
	for sizes 1/2; 3KF1/2...			--	8 x 8	<a href="#">8UC6082</a>	1 1 unit	1CL	0.265
	for sizes 3/4; 3KF3/4...			--	10 x 10	<a href="#">8UC6083</a>	1 1 unit	1CL	0.424
									
				<b>Coupling drivers with tolerance compensation</b>					
	for size 1; 3KF1...			--	8 x 8	<a href="#">8UD1900-2GA00</a>	1 1 unit	1CB	0.061
	for size 2; 3KF2...			--	8 x 8	<a href="#">8UD1900-6GA00</a>	1 1 unit	1CL	0.329
									
				<b>Coupling drivers without tolerance compensation</b>					
	for size 1; 3KF1			--	8 x 8	<a href="#">8UD1900-2HA00</a>	1 1 unit	1CB	0.015
	for size 2; 3KF2...			--	8 x 8	<a href="#">8UD1900-6HA00</a>	1 1 unit	1CL	0.083
									
				<b>Shaft couplings</b>					
	for sizes 1/2 3KF1/2...			--	8 x 8	<a href="#">8UC6022</a>	1 1 unit	1CL	0.022
	for sizes 3/4; 3KF3/4...			--	10 x 10	<a href="#">8UC6023</a>	1 1 unit	1CL	0.084
	for size 5; 3KF5...			--	12 x 12	<a href="#">8UC6024</a>	1 1 unit	1CL	0.078



# Switch Disconnectors and Transfer Switching Equipment

## 3KF Switch Disconnectors with Fuses up to 800 A

### Accessories and spare parts


#### Auxiliary switches

	Version	For size	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
<b>Auxiliary switches for size 1</b>									
 3KD9103-3	With soldered-on 50 cm connecting cables								
	• 1 CO contact	1		3KD9103-1		1	1 unit	1CL	0.112
	• 1 CO contact, solid-state compatible	1		3KD9103-3		1	1 unit	1CL	0.118
<b>Auxiliary switches for size 1</b>									
 3KD9103-2/-4	Without soldered-on connecting cables								
	• 1 CO contact	1		3KD9103-2		1	1 unit	1CL	0.030
	• 1 CO contact, solid-state compatible	1		3KD9103-4		1	1 unit	1CL	0.030
<b>Auxiliary switch modules for size 1<sup>1)</sup></b>									
 3KD9103-5/-6/-7	• Standard	1		3KD9103-5		1	1 unit	1CL	0.154
	• With test function	1		3KD9103-6		1	1 unit	1CL	0.158
	• With leading NO contact and with test function	1		3KD9103-7		1	1 unit	1CL	0.160
<b>Mounting brackets for auxiliary switch modules</b>									
	• for mounting auxiliary switch modules on 3KF switch disconnectors with rear terminal	1		3KF9112-0AB00		1	1 unit	1CL	0.050
<b>Auxiliary switches for sizes 2 to 5<sup>2)</sup></b>									
 3SB3400-0B auxiliary switch	Auxiliary switches with screw terminal for installation on operating mechanism module. Auxiliary switches with spring-type terminal 3SB3403-.. from the 3SB3 program can also be used								
	• 1 NO	2 to 5	▶	3SB3400-0B		1	1 unit	41J	0.011
 3SB3400-0A auxiliary switch	• 1 NO with gold-plated contacts	2 to 5		3SB3400-0BA		1	1 unit	41J	0.011
	• 1 NC	2 to 5	▶	3SB3400-0C		1	1 unit	41J	0.011
	• 1 NC with gold-plated contacts	2 to 5		3SB3400-0CA		1	1 unit	41J	0.011
	• 1 NO + 1 NC	2 to 5	▶	3SB3400-0A		1	1 unit	41J	0.016
	• 1 NO + 1 NC with gold-plated contacts	2 to 5		3SB3400-0AA		1	1 unit	41J	0.016
	• 2 S	2 to 5		3SB3400-0D		1	1 unit	41J	0.017
	• 2 NO with gold-plated contacts	2 to 5		3SB3400-0DA		1	1 unit	41J	0.017
	• 2 NC	2 to 5		3SB3400-0E		1	1 unit	41J	0.017
	• 2 NC with gold-plated contacts	2 to 5		3SB3400-0EA		1	1 unit	41J	0.017

<sup>1)</sup> Unit is supplied without auxiliary switches; a maximum of 2 auxiliary switches can be installed. The 3KF9112-0AB00 mounting bracket is additionally required for mounting the auxiliary switch modules with rear terminal

<sup>2)</sup> Auxiliary switches with screw terminal for installation on operating mechanism module. Auxiliary switches with spring-type terminal 3SB3403-.. from the 3SB3 program can also be used.

#### Fuse monitoring






	Version	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
<b>Electronic fuse monitoring for remote display of tripped fuses</b>								
	Remote display by auxiliary contact (1 CO), local detection by integrated LED							
	• For all sizes		3KF9010-1AA00		1	1 unit	1CL	0.190

# Switch Disconnectors and Transfer Switching Equipment

## 3KF Switch Disconnectors with Fuses up to 800 A

### Accessories and spare parts

#### Other accessories

Version	For size/ for LV HRC fuse	DT	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
<b>Phase barriers</b>								
	For 3KF with flat terminals							
	<b>For 3-pole devices (6 units)</b>							
		2	3KD9308-6		1	1 unit	1CL	0.169
		3..4	3KD9408-6		1	1 unit	1CL	0.203
		5	3KD9508-6		1	1 unit	1CL	0.480
	<b>For 4-pole devices (8 units)</b>							
		2	3KD9308-8		1	1 unit	1CL	0.194
		3..4	3KD9408-8		1	1 unit	1CL	0.244
		5	3KD9508-8		1	1 unit	1CL	0.540
<b>Cable connection covers</b>								
	For 3KD with flat terminals							
	<b>For 3-pole devices (6 units)</b>							
	<b>Standard length</b>							
		2	3KD9304-6		1	1 unit	1CL	0.560
		3	3KF9304-6		1	1 unit	1CL	0.200
	<b>Short version</b>							
		2	3KD9304-7		1	1 unit	1CL	0.404
		3	3KF9304-7		1	1 unit	1CL	0.300
		4	3KD9404-7		1	1 unit	1CL	0.600
	<b>For 4-pole devices (8 units)</b>							
	<b>Standard length</b>							
		2	3KD9304-8		1	1 unit	1CL	0.616
		3	3KF9304-8		1	1 unit	1CL	0.150
		4	3KD9404-8		1	1 unit	1CL	1.664
		5	3KD9504-8		1	1 unit	1CL	2.088
	<b>Short version</b>							
		2	3KD9304-5		1	1 unit	1CL	0.502
		3	3KF9304-5		1	1 unit	1CL	0.050
		4	3KD9404-5		1	1 unit	1CL	0.847

## Switch Disconnectors and Transfer Switching Equipment

3KF Switch Disconnectors with Fuses up to 800 A

### Accessories and spare parts

2

	Version	For size/ for LV HRC fuse	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
<b>Spare part for cable connection cover (1 unit)</b>									
	<b>Standard length</b>								
		5		<b>3KD9504-1</b>		1	1 unit	1CL	0.434
	<b>Short version</b>								
		2		<b>3KD9304-1</b>		1	1 unit	1CL	0.110
		3		<b>3KF9304-1</b>		1	1 unit	1CL	0.300
		4		<b>3KD9404-1</b>		1	1 unit	1CL	0.126
<b>LV HRC isolating blades</b>									
With isolated grip lugs									
		LV HRC 000/00		<b>3NG1002</b>		1	3/30 units	1BM	0.079
		LV HRC 1		<b>3NG1202</b>		1	1/10 units	1BM	0.169
		LV HRC 2		<b>3NG1302</b>		1	1/5 units	1BM	0.229
		LV HRC 3		<b>3NG1402</b>		1	1/5 units	1BM	0.301
<b>Blocking pin test function</b>									
Enables permanent deactivation of the test function for auxiliary switches; it is installed in the operating mechanism module of the 3KF switch disconnector									
Scope of supply: Blocking pins for 10 3KF switch disconnectors									
		1		<b>3KF9112-1AA00</b>		1	1 unit	1CL	0.060
		2 and 4		<b>3KF9412-1AA00</b>		1	1 unit	1CL	0.050
		5		<b>3KF9512-1AA00</b>		1	1 unit	1CL	0.200

# Switch Disconnectors and Transfer Switching Equipment

## 3KF Switch Disconnectors with Fuses up to 800 A

### Accessories and spare parts

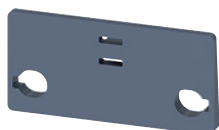
#### Spare parts

Version	For size/ for LV HRC fuse	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
---------	------------------------------	----	--	-----------------	-------------------------	-----------------	----	-----------------------------------

All parts are included in scope of supply of the 3KF switch disconnector

#### Mounting brackets<sup>1)</sup>

Mounting brackets for one 3KF switch disconnector are included in the scope of supply



1<sup>1)</sup>

3KF9112-0AA00

1 1 unit 1CL 0.050



2<sup>1)</sup>

3KF9212-0AA00

1 1 unit 1CL 0.100



3 and 4

3KF9412-0AA00

1 1 unit 1CL 0.100



5

3KF9512-0AA00

1 1 unit 1CL 0.150

#### Mounting bracket for 3KF switch disconnectors with rear flat terminal<sup>2)</sup>

- Scope of supply: 2 units (2 units are required for one 3KF switch disconnector)

1 and 2

3KF9212-0AB00

1 1 unit 1CL 0.050

#### Slide for mounting on a standard mounting rail

Contains 5 parts



1

3KF9112-0BA00

1 1 unit 1CL 0.050

<sup>1)</sup> Cannot be used for 3KF with rear flat terminal

<sup>2)</sup> The 3KF9112-0AB00 mounting bracket is needed if an auxiliary switch module is mounted on a 3KF1 switch disconnector with rear flat terminal (delivered quantity: 1 unit)

## Switch Disconnectors and Transfer Switching Equipment

### 3KF Switch Disconnectors with Fuses up to 800 A

#### Accessories and spare parts

2

Version	For size/ for LV HRC fuse	DT	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
---------	------------------------------	----	--	-----------------	-------------------------	-----------------	----	-----------------------------------

All parts are included in scope of supply of the 3KF switch disconnector

#### Fuse covers



1

3KF9112-0CA00

1 1 unit

1CL

0.050

2<sup>1)</sup>

3KF9212-0CA00

1 1 unit

1CL

0.050



3

3KF9312-0CA00

1 1 unit

1CL

0.120



4

3KF9412-0CA00

1 1 unit

1CL

0.700



5

3KF9512-0CA00

1 1 unit

1CL

0.050

<sup>1)</sup> Use 3KF9212-0CB00 fuse cover for 3KF2 with rear terminal



Appendix



3/2	Catalog notes
3/3	Ordering notes
3/5	Further documentation
3/9	Quality management
3/10	Standards and approvals
3/12	Siemens contacts
3/13	Service & Support
3/14	Comprehensive support from A to Z
3/15	Software licenses
3/17	Article No. index incl. export markings
3/20	Conditions of sale and delivery

## Appendix

### Catalog notes

#### Overview

##### Trademarks

All product designations may be registered trademarks or product names of Siemens AG or supplier companies whose use by third parties for their own purposes may violate the rights of the owner.

##### Amendments

Unless stated otherwise on the individual pages of this catalog, we reserve the right to make changes, in particular to the specified values, measurements and weights.

##### Dimensions

All dimensions are given in mm.

##### Illustrations

The illustrations are not binding.

##### 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.

Further technical information is available at [www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

- under "Entry type":
  - Application example
  - Certificate
  - Characteristic
  - Download
  - FAQ
  - Manual
  - Product note
  - Software archive
  - Technical data




Configurators can be found under [www.siemens.com/lowvoltage/configurators](http://www.siemens.com/lowvoltage/configurators)

##### Assembly, operation and maintenance

Always heed the operating instructions and notices on individual products during assembly, operation and maintenance.

##### Symbols

In the table below, you will find all symbols concerning connections that can occur in this catalog. In combination with orange highlighting, these identify special selection criteria.

Connections	
	Screw connection
	Ring cable lug connection
	Spring-loaded terminals

## Logistics

### General

With regard to delivery service, communications and environmental protection, our logistics service ensures "quality from the moment of ordering right through to delivery". By designing our infrastructure according to customer requirements and implementing electronic order processing, we have successfully optimized our logistics processes.

We are proud of our personal consulting service, on-time deliveries and 1-day transport within Germany.

**To this end, we supply preferred types marked with ► ex works.**

We regard the DIN ISO 9001 certification and consistent quality checks as an integral part of our services.

Electronic order processing is fast, cost-efficient and error-free. Please contact us if you want to benefit from these advantages.

### Packaging, packing units

The packaging in which our equipment is dispatched provides protection against dust and mechanical damage during transport, thus ensuring that all our products arrive in perfect condition.

We select our packaging for maximum environmental compatibility and reusability (e.g. crumpled paper for protection during transport in packages up to 32 kg) and, in particular, with a view to reducing waste.

With our multi-unit and reusable packaging, we offer you specific types of packaging that are both kind to the environment and tailored to your requirements:

#### Your advantages at a glance:

- Lower ordering costs.
- Cost savings through same-material type packaging: Low/no disposal costs.
- Reduced time and cost thanks to short unpacking times.
- "Just-in-time" delivery directly to the production line helps reduce stock: Cost savings through reduction of storage areas.
- Fast assembly thanks to supply in sets.
- Standard Euro boxes - corresponding to the Euro pallet modular system - suitable for most conveyor systems.
- Active contribution to environmental protection.

Unless stated otherwise in the "Selection and ordering data" of this catalog, our products are supplied individually packed.

For small parts/accessories, we offer you cost-effective packaging units as standard packs containing more than one item, e.g. 5, 10, 50 or 100 units. It is essential that whole number multiples of these quantities be ordered to ensure satisfactory quality of the products and problem-free order processing.

The products are delivered in a neutral carton. The label includes warning notices, the CE marking, and device descriptions in English and German.

In addition to the Article No. (MLFB) and the number of items in the packaging, the operating instructions order number (Instr.-Order-No.) is also specified. They can be obtained from your local Siemens representative (you will find a list at [www.siemens.com/lowvoltage/contact](http://www.siemens.com/lowvoltage/contact)).

Most device Article No.'s can be obtained by means of the EAN barcode to simplify ordering and storage logistics.

The associated master data, too, is available from your local Siemens representative.

## Appendix

### Ordering notes

#### Overview

##### Ordering special versions

When ordering products that differ from the standard versions listed in the catalog, "**-Z**" must be added to the Article No. indicated and the required features must be specified using alphanumeric order codes or plain text.

##### Ordering very small quantities

When very small orders are placed, the costs associated with order processing are greater than the order value. We therefore recommend that you combine several small orders. Where this is not possible, we regret that we are obliged to make a small processing charge: for orders with a net goods value of less than € 250 we charge an € 20 supplement to cover our order processing and invoicing costs.

#### Explanations of Selection and Ordering Data

##### Delivery time class (DT)

DT	Meaning	
►	Preferred type	Preferred types are device types that can be delivered immediately ex works, i.e. they are dispatched within 24 hours.
A	Two working days	If ordered in normal quantities, the products are usually delivered within the specified delivery times, calculated from the date we receive your order.
B	One week	In exceptional cases, delivery times may vary from those specified.
C	Three weeks	The delivery times are valid ex works from Siemens AG (products ready for dispatch).
D	Six weeks	Shipping times depend on the destination and the method of shipping. The standard shipping time for Germany is one day.
X	On request	The specified delivery times are correct at the time of going to print and are subject to constant optimization. Up-to-date information can be found at <a href="http://www.siemens.com/industrymall">www.siemens.com/industrymall</a> .

##### Price units (PU)

The price unit defines the number of units, sets or meters to which the specified price and weight apply.

##### PS/P. unit (packaging size/packaging unit)

The packaging size/packaging unit defines the number, e.g. of units, sets or meters, contained within outer packaging:

- The **first digit** in the PS/P. unit column (packaging size/packaging unit) indicates the minimum order quantity. You can only order this specified quantity or a multiple thereof.
- The **second digit** in the PS/P. unit column (packaging size/packaging unit) specifies the number of units contained within the outer packaging (e.g. in a carton). You must order this quantity or a multiple thereof if you want the items to be delivered in discrete packaging quantities.

Examples:

PS/P. unit	Meaning
1 unit	You can order one item or a multiple thereof.
5 units	Five units are packed in a bag, for example. Because the bags cannot be opened, you can only order a multiple of the quantity contained in the bag: 5, 10, 15, 20 etc.
5/100 units	One carton contains (for example) 20 bags, each containing 5 units, i.e. a total of 100 units. If only cartons are available for delivery, you need to order a multiple of the carton quantity: 100, 200, 300, etc. Ordering a quantity of 220 units would result in the following delivery: two cartons, each containing 100 units (= 200 units) and 4 bags, each containing 5 units (= 20 units).
1 set	A set comprises a defined number of different parts.

##### Price group (PG)

Each product is allocated to a price group.

##### Weight

The defined weight is the net weight in kg and refers to the price unit (PU).

##### Examples

DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS/ P. unit	PG	Weight per PU approx. kg	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS/ P. unit	PG
►	3NW7013		1	1/12 units	1BM	0.076		3VA1196-3ED26-0AA0		1	1 unit	1CB
DT:	Preferred type						PU:	One unit (on which price is based)				
PS/P. unit:	1 = minimum order quantity / 12 = quantity per carton						PS/P. unit:	1 = minimum order quantity				
PG:	1BM						PG:	1CB				
Weight per PU	76 g, always given in kg											

Note:

The article numbers shown here are examples only. They are not necessarily included in this catalog, nor is it essential that their specifications regarding selection and ordering data be up to date. When ordering, always use the selection and ordering data.

## Low-Voltage Power Distribution and Electrical Installation Technology on the WWW



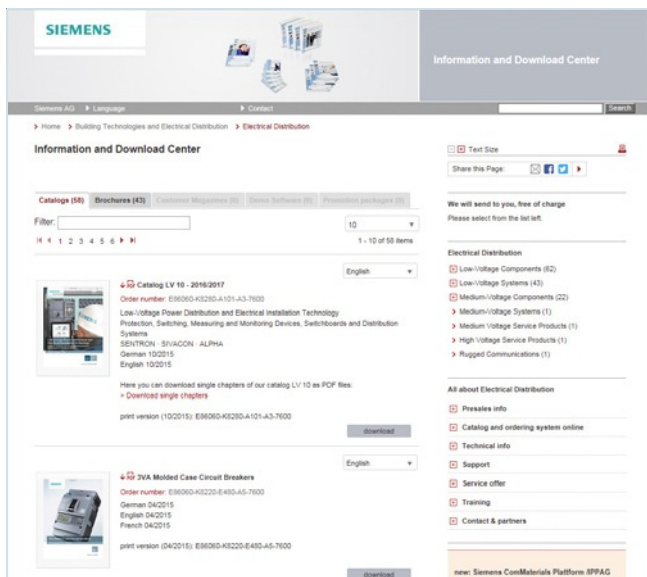
We regard product support to be just as important as the products and systems themselves.

Visit our website for a comprehensive offering of support for low-voltage power distribution and electrical installation products, such as:

- Overview of the entire product portfolio
  - Keeping up to date via newsletters, podcasts, blogs and Twitter
  - Access to interesting videos on YouTube
  - Contact with partners around the world
  - Operating instructions and manuals for direct download
- and much more - all conveniently and easily accessible.

[www.siemens.com/lowvoltage](http://www.siemens.com/lowvoltage)

## Information and Download Center



You will find regularly updated informational material (such as catalogs and brochures) for low-voltage power distribution and electrical installations on the Internet at

[www.siemens.com/lowvoltage/infomaterial](http://www.siemens.com/lowvoltage/infomaterial)

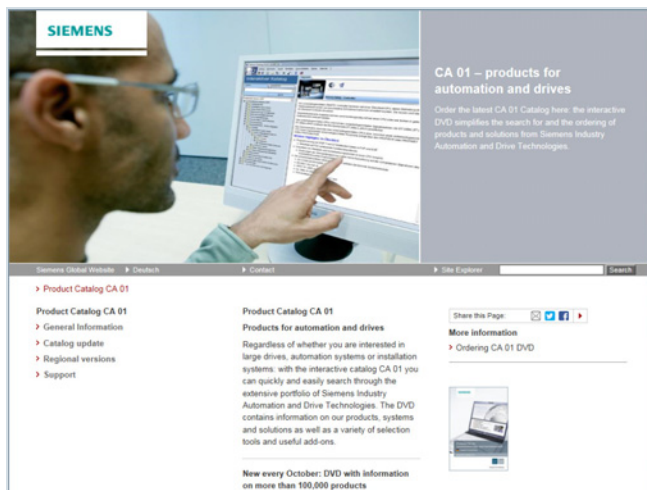
Here you can order your copy of the available documentation or download it in common file formats (PDF, ZIP).



## Appendix

### Further documentation

#### Product selection using the interactive catalog CA 01



#### **Detailed information together with user-friendly interactive functions:**

The CA 01 interactive catalog covers more than 100,000 products thus providing a comprehensive overview of the product range offered by Siemens.

You can find everything you need here for solving automation, switching, installation and drive technology tasks. All information is provided over a user interface that is both user-friendly and intuitive.

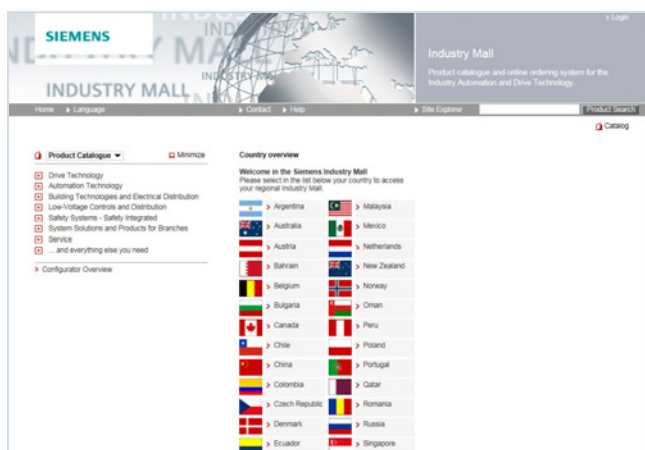
After selecting the product of your choice you can order at the press of a button, by fax or by online link.

Information about the interactive catalog CA 01 can be found on the Internet at:

[www.siemens.com/automation/ca01](http://www.siemens.com/automation/ca01)

or on DVD.

#### Industry Mall



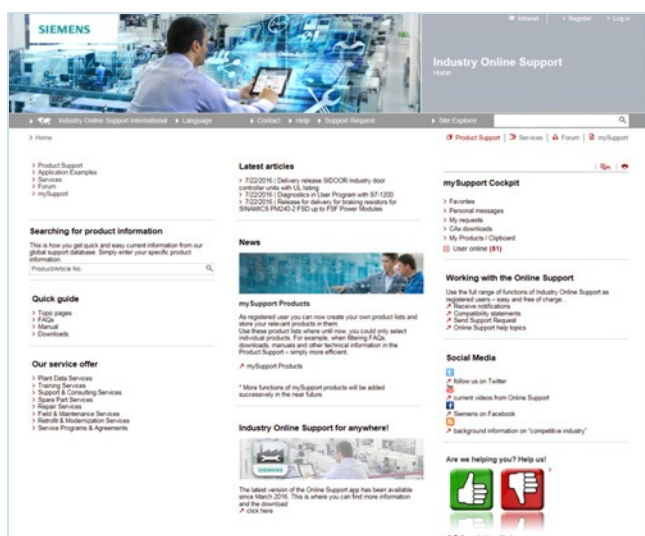
#### **The Industry Mall – for online information, product selection and ordering**

- Detailed information including product data, illustrations, certificates and CAx data
- Simple configuring of systems
- Possible to request individualized quotations
- Availability check
- Online ordering facility
- Order tracking/order overview
- Fast access to relevant training offers and services

You can find the Industry Mall on the Internet at

[www.siemens.com/industrymall](http://www.siemens.com/industrymall)

#### Industry Online Support



#### **Comprehensive support – at any time, whatever your location**

- FAQs, sample applications, information about successor products and product news
- Prompt assistance with technical queries
- Discussions and best practice sharing with other users in the forum
- Provision of high-quality product data for your planning programs
- Faster access to information – with helpful filter and folder functions in mySupport
- Automatic notification service to keep you up to date with the latest information about topics of interest to you

You can find Siemens Industry Online Support on the Internet at

[www.siemens.com/online-support](http://www.siemens.com/online-support)

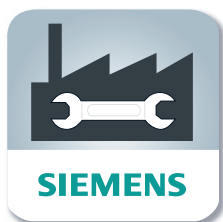
## Industry Online Support App

**Main functions at a glance**

- Scanning of product codes (EAN/QR and data matrix codes) with direct display of all technical information on the product, including graphic data (CAx data).
- Sending of product information or entries by email, so that the information can immediately be processed at the workplace.
- Submission of queries to Technical Support (Support Requests). With photo function for transmitting detailed information.
- Contents and interfaces available in six languages (German, English, French, Italian, Spanish and Chinese) – including option of temporary switchover to English.
- Offline cache function for all favorites stored in "mySupport". These entries can also be retrieved without network reception.
- Import of PDF documents into a library (e.g. iBooks or similar).

You can find information on the Industry Online Support App on the Internet at

[www.siemens.com/industry/online-support-app](http://www.siemens.com/industry/online-support-app)

**Android:**

Industry Online  
Support App  
ANDROID

**Apple iOS:**

Industry Online  
Support App  
iOS

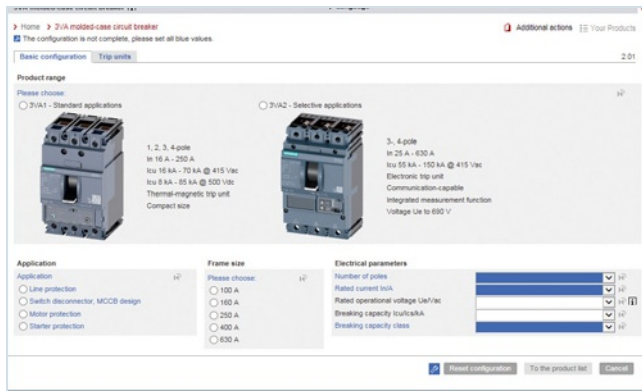
**Windows:**

Industry Online  
Support App  
WINDOWS

## Appendix

### Further documentation

#### Product configurator



#### Finding the right product faster

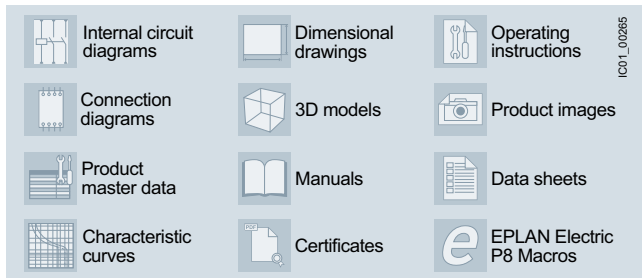
- Complete selection of products and systems based on technical characteristics or application requirements
- Simple, intuitive operation
- Option to save the configuration and order lists in a file format of your choice (txt, pdf, xls, csv)
- Direct transfer of the order list into the shopping cart of the Siemens Industry Mall
- Fast access to product data, diagrams, certificates and CAx data for the selected product and system configuration
- Available in multiple languages for use by customers anywhere in the world

The configurators are available online in the Siemens Industry Mall and offline in Catalog CA 01.

You can find our configurators at the following website:

[www.siemens.com/lowvoltage/configurators](http://www.siemens.com/lowvoltage/configurators)

#### CAx Download Manager



You can find the CAx Download Manager on the Internet at

[www.siemens.com/lowvoltage/cax](http://www.siemens.com/lowvoltage/cax)

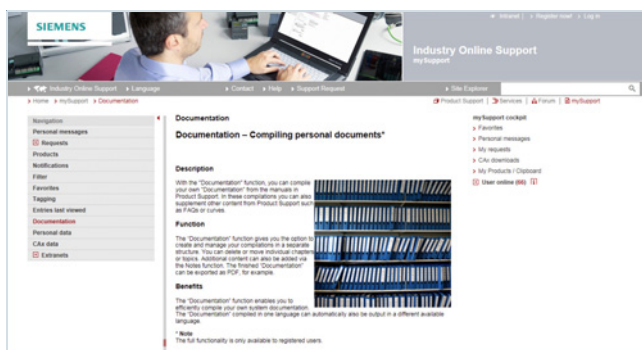
Time savings of up to 80% with universal product data for your CAE and CAD systems

The CAx Download Manager can supply you with all the necessary CAx file types for the products of your choice for use in all common CAE and CAD systems free of charge in just four selection steps. The data is updated on a daily basis. All your selected files are packed into a zip file which you can download for further use.

Siemens makes up to 12 file types available around the clock to support your mechanical (CAD) and electrical (CAE) planning processes.

- No manual data collection necessary
- Universal manufacturer data for all common CAE and CAD systems
- Standardized documentation is simple to generate
- Choice of different languages for system commissioning anywhere in the world

#### My Documentation Manager



In "mySupport" you can compile individual documentation for your project by dragging and dropping

\* e.g. Low Voltage Directive 2006/95/EC and EC Machinery Directive 2006/42/EC

You can find My Documentation Manager on the Internet at

[www.siemens.com/lowvoltage/mdm](http://www.siemens.com/lowvoltage/mdm)

#### User-friendly compilation of project-specific documentation

In accordance with directives\*, the documentation is part of the plant and requires certification, thus giving the purchaser the right to full plant documentation.

To support you in this, a manual configurator has been developed with which you can put together individual and standard-compliant documentation – fully in accordance with the relevant project-specific requirements.

You can thus select the chapters relevant to the respective project from the available manuals of the installed Siemens components. FAQs, certificates, data sheets and your own content can also be incorporated.

- Compile and structure manuals, data sheets, FAQs and certificates simply by dragging and dropping
- Insert personalized content via the Notes function
- Further processing possible thanks to selectable export formats (pdf, xml, rtf)
- After generating the documentation, automatic translation into the desired language is possible
- Always up-to-the minute thanks to the Update function

**Overview**

The quality management system of our "Low Voltage & Products" Business Unit in the "Energy Management" Division complies with the international EN ISO 9001 standard.

The products and systems listed in this catalog are developed and manufactured using a certified quality management system in accordance with EN ISO 9001:2008.

## Appendix

### Standards and approvals

#### Overview

##### Certificates

An overview, updated on a daily basis, of our products certified in accordance with CE, UL, CSA, FM, shipping authorizations etc. for low-voltage power distribution and electrical installation products can be found on the Internet at

[www.siemens.com/lowvoltage/certificates](http://www.siemens.com/lowvoltage/certificates)

The screenshot shows the Siemens Industry Online Support website. The main content area displays a list of 3964 entries filtered by 'Electrical Distribution' and 'Certificate'. The list includes details such as certificate type, date, and product information. A sidebar on the right shows the 'mySupport Cockpit' with links to favorites, personal messages, and other support resources.

In the **Entry list**, you can **filter the view** in order to quickly find comprehensive information on the following subjects:

- Product or search term
- Date
- Type of certificate (general product approval, test certificates, shipping approval, ...)
- Certificate (confirmations, UL, VDE, ...)
- Approval office (TÜV, VDE, UL, ...)
- Country

The screenshot shows the Siemens Industry Online Support website with a different filter applied. The main content area displays a list of 323 entries filtered by 'Electrical Distribution (323)' and 'VDE'. The list includes details such as certificate type, date, and product information. A sidebar on the right shows the 'mySupport Cockpit' with links to favorites, personal messages, and other support resources.



### Approval requirements valid in different countries

Siemens low-voltage switchgear and controlgear are designed, manufactured and tested according to the relevant German standards (DIN and VDE), IEC publications and European standards (EN) as well as CSA and UL standards. You will find the standards assigned to the single devices in the relevant certificates at

[www.siemens.com/lowvoltage/certificates](http://www.siemens.com/lowvoltage/certificates)

In addition to the pertinent VDE, EN and IEC standards, the requirements of the various regulations valid in other countries have also been taken into account in the design of the equipment in some cases, in order that the devices can be deployed globally as far as possible.

In some countries an approval is required for certain low-voltage switchgear and controlgear components. Depending on the market requirements, these devices have been submitted for approval to the authorized testing institutes.

In some cases, CSA for Canada and UL for the USA only approve special versions. Such special versions are listed separately from the standard versions in the relevant parts of this catalog.

For this equipment, there are sometimes limits with regard to the maximum permissible voltages, currents and rated outputs or special approvals and, in some cases, special identification may be required.

For use on board ship, the specifications of the marine classification societies must be observed. In some cases, they require type tests of the components to be approved.

For more information on UL, visit

[www.siemens.com/applicationconsulting/ul](http://www.siemens.com/applicationconsulting/ul)

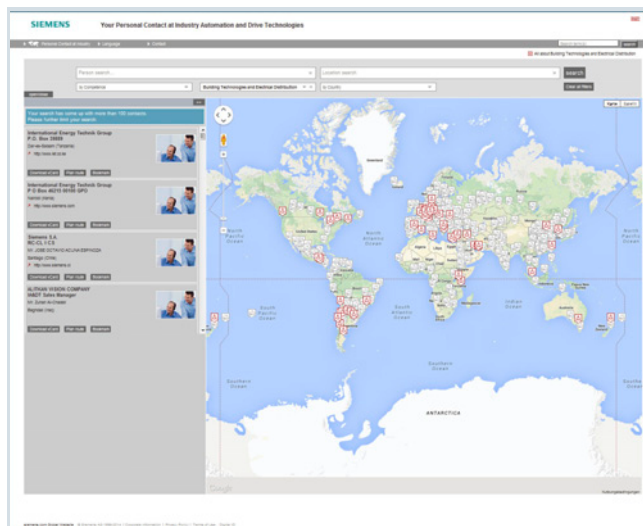
If you have any questions concerning UL/CSA approvals, please contact Technical Support:

[www.siemens.com/lowvoltage/contact](http://www.siemens.com/lowvoltage/contact)

## Appendix

### Siemens contacts

#### Contacts for low-voltage power distribution and electrical installation technology



With low-voltage power distribution and electrical installation technology we consistently pursue one goal:

long-term improvement of your competitive ability.

We are committed to this goal. Thanks to our dedication, we are continually setting new standards. In all industries – worldwide.

At your service, locally, around the globe: Partners for consulting, sales, training, service, support, spare parts ... on the entire range of low-voltage power distribution and electrical installation technology.

Your personal contact can be found in our Contact Database at

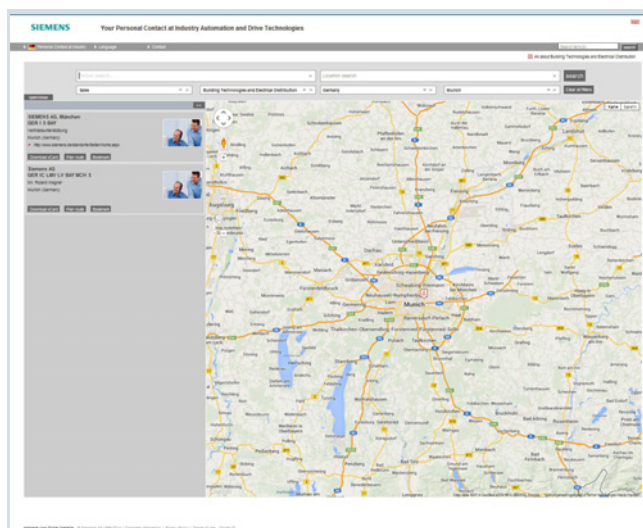
[www.siemens.com/lowvoltage/contact](http://www.siemens.com/lowvoltage/contact)

You start by selecting a

- Required competence
- Product or sector
- Country
- City

or by performing a

- search for a specific location or
- individual.



Unrivalled complete range of services over the entire life cycle

### Industry Online Support



Industry Online Support is an extensive information system for all questions relating to products, systems and solutions developed for industry by Siemens.

You will find further information at  
[www.siemens.com/online-support](http://www.siemens.com/online-support)  
[www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

### Field Service



Siemens Field Service offers support with all aspects of maintenance – so that the availability of your machines and plants is assured whatever the case.

You will find further information at  
[www.siemens.com/lowvoltage/contact](http://www.siemens.com/lowvoltage/contact)

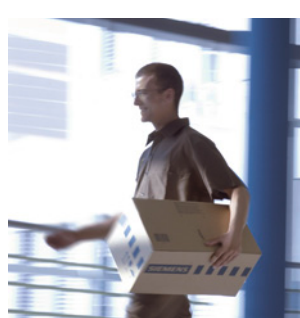
### Technical Support



The competent consulting service for technical issues with a broad range of customer-oriented services for all our products and systems.

You will find further information at  
[www.siemens.com/lowvoltage/contact](http://www.siemens.com/lowvoltage/contact)

### Spare Parts



Plants and systems in all industries worldwide are expected to meet ever higher levels of availability.

We can help you rule out unexpected stoppages: with a global network and optimum logistics chains.

You will find further information at  
[www.siemens.com/lowvoltage/contact](http://www.siemens.com/lowvoltage/contact)

### Training



Extend your lead – with practical know-how straight from the manufacturer.

You will find further information at  
[www.siemens.com/lowvoltage/training](http://www.siemens.com/lowvoltage/training)

### Specification texts

You can obtain qualified, free support to help you produce specifications for technically equipping non-residential and industrial buildings at

[www.siemens.com/specifications](http://www.siemens.com/specifications)

## Appendix

### Comprehensive support from A to Z

#### Overview

##### Product information

<b>Website</b>	Fast and targeted information on low-voltage power distribution and electrical installation technology: <a href="http://www.siemens.com/lowvoltage">www.siemens.com/lowvoltage</a>
<b>Newsletter</b>	Always up to date about our trend-setting products and systems: <a href="http://www.siemens.com/lowvoltage/newsletter">www.siemens.com/lowvoltage/newsletter</a>

##### Product information/product & system selection

<b>Information and Download Center</b>	Current information (e.g. catalogs and brochures): <a href="http://www.siemens.com/lowvoltage/infomaterial">www.siemens.com/lowvoltage/infomaterial</a>
<b>Industry Mall</b>	Comprehensive information and order platform for the Siemens Industry Basket: <a href="http://www.siemens.com/lowvoltage/mall">www.siemens.com/lowvoltage/mall</a>
<b>CA 01</b>	Every product for automation and drive technology, interactive catalog, DVD

##### Product and system engineering

<b>SIMARIS Planning tools</b>	Support in planning and configuring electrical power distribution: <a href="http://www.siemens.com/simaris">www.siemens.com/simaris</a>
<b>SIMARIS configuration software</b>	Support throughout the entire configuration cycle from the configuration of ALPHA distribution boards and SIVACON S4 power distribution boards, cost calculations and quotation preparation, right through to the creation of plant documentation: <a href="http://www.siemens.com/simarisconfig">www.siemens.com/simarisconfig</a>
<b>Software for power loss calculations - SIMARIS therm</b>	Support in performing power loss calculations for the dimensioning of control cabinets: <a href="http://www.siemens.com/simaristherm">www.siemens.com/simaristherm</a>

##### Product documentation

<b>Siemens Industry Online Support</b>	Comprehensive technical information - from planning to configuration and operation: <a href="http://www.siemens.com/online-support">www.siemens.com/online-support</a> <a href="http://www.siemens.com/lowvoltage/product-support">www.siemens.com/lowvoltage/product-support</a>
<b>Product configurator</b>	Complete selection of products and systems based on technical characteristics or application requirements: <a href="http://www.siemens.com/lowvoltage/configurators">www.siemens.com/lowvoltage/configurators</a>
<b>CAX Download Manager</b>	Collation of CAX data types for standard CAE and CAD systems: <a href="http://www.siemens.com/lowvoltage/cax">www.siemens.com/lowvoltage/cax</a>
<b>My Documentation Manager</b>	Compilation of project-specific documentation: <a href="http://www.siemens.com/lowvoltage/mdm">www.siemens.com/lowvoltage/mdm</a>
<b>Image database</b>	Collection of product photographs and graphics, such as dimensional drawings and internal circuit diagrams: <a href="http://www.siemens.com/lowvoltage/picturedb">www.siemens.com/lowvoltage/picturedb</a>

##### Product training

<b>SITRAIN Portal</b>	Comprehensive training program for our products, systems and engineering tools: <a href="http://www.siemens.com/lowvoltage/training">www.siemens.com/lowvoltage/training</a>
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##### Product hotline

<b>Technical Support</b>	Support for all technical queries about our products: <a href="http://www.siemens.com/lowvoltage/contact">www.siemens.com/lowvoltage/contact</a> <a href="http://www.siemens.com/lowvoltage/technical-support">www.siemens.com/lowvoltage/technical-support</a>
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## Overview

### Software types

Software requiring a license is categorized into types. The following software types have been defined:

- Engineering software
- Runtime software

### Engineering software

This includes all software products for creating (engineering) user software, e.g. for configuring, programming, parameterizing, testing, commissioning or servicing.

Data generated with engineering software and executable programs can be duplicated for your own use or for use by third-parties free-of-charge.

### Runtime software

This includes all software products required for plant/machine operation, e.g. operating system, basic system, system expansions, drivers, etc.

The duplication of the runtime software and executable programs created with the runtime software for your own use or for use by third-parties is subject to a charge.

You can find information about license fees according to use in the ordering data (e.g. in the catalog). Examples of categories of use include per CPU, per installation, per channel, per instance, per axis, per control loop, per variable, etc.

Information about extended rights of use for parameterization/configuration tools supplied as integral components of the scope of delivery can be found in the readme file supplied with the relevant product(s).

### License types

Siemens Industry Automation & Drive Technologies offers various types of software license:

- Floating license
- Single license
- Rental license
- Rental floating license
- Trial license
- Demo license
- Demo floating license

### Floating license

The software may be installed for internal use on any number of devices by the licensee. Only the concurrent user is licensed. The concurrent user is the person using the program. Use begins when the software is started.

A license is required for each concurrent user.

### Single license

Unlike the floating license, a single license permits only one installation of the software per license.

The type of use licensed is specified in the ordering data and in the Certificate of License (CoL). Types of use include for example per instance, per axis, per channel, etc.

One single license is required for each type of use defined.

### Rental license

A rental license supports the "sporadic use" of engineering software. Once the license key has been installed, the software can be used for a specific period of time (the operating hours do not have to be consecutive).

One license is required for each installation of the software.

### Rental floating license

The rental floating license corresponds to the rental license, except that a license is not required for each installation of the software. Rather, one license is required per object (for example, user or device).

### Trial license

A trial license supports "short-term use" of the software in a non-productive context, e.g. for testing and evaluation purposes. It can be transferred to another license.

### Demo license

The demo license support the "sporadic use" of engineering software in a non-productive context, for example, use for testing and evaluation purposes. It can be transferred to another license. After the installation of the license key, the software can be operated for a specific period of time, whereby usage can be interrupted as often as required.

One license is required per installation of the software.

### Demo floating license

The demo floating license corresponds to the demo license, except that a license is not required for each installation of the software. Rather, one license is required per object (for example, user or device).

### Certificate of license (CoL)

The CoL is the licensee's proof that the use of the software has been licensed by Siemens. A CoL is required for every type of use and must be kept in a safe place.

### Downgrading

The licensee is permitted to use the software or an earlier version/release of the software, provided that the licensee owns such a version/release and its use is technically feasible.

### Delivery versions

Software is constantly being updated.

The following delivery versions

- PowerPack
- Upgrade

can be used to access updates.

Existing bug fixes are supplied with the ServicePack version.

### PowerPack

PowerPacks can be used to upgrade to more powerful software. The licensee receives a new license agreement and CoL (Certificate of License) with the PowerPack. This CoL, together with the CoL for the original product, proves that the new software is licensed.

A separate PowerPack must be purchased for each original license of the software to be replaced.

### Upgrade

An upgrade permits the use of a new version of the software on the condition that a license for a previous version of the product is already held.

The licensee receives a new license agreement and CoL with the upgrade. This CoL, together with the CoL for the previous product, proves that the new version is licensed.

A separate upgrade must be purchased for each original license of the software to be upgraded.

## Appendix

### Software licenses

#### Overview

##### **ServicePack**

ServicePacks are used to debug existing products. ServicePacks may be duplicated for use as prescribed according to the number of existing original licenses.

##### **License key**

Siemens Industry Automation & Drive Technologies supplies software products with and without license keys.

The license key serves as an electronic license stamp and is also the "switch" for activating the software (floating license, rental license, etc.).

The complete installation of software products requiring license keys includes the program to be licensed (the software) and the license key (which represents the license).

##### **Software Update Service (SUS)**

As part of the SUS contract, all software updates for the respective product are made available to you free of charge for a period of one year from the invoice date. The contract will automatically be extended for one year if it is not canceled three months before it expires.

The possession of the current version of the respective software is a basic condition for entering into an SUS contract.

You can download explanations concerning license conditions from [www.siemens.com/automation/salesmaterial-as/catalog/en/terms\\_of\\_trade\\_en.pdf](http://www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf)



## Overview

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## Anhang

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-- kein Zuschlag

Unter [www.siemens.de/industrymall](http://www.siemens.de/industrymall) sind die gültigen Exportkennzeichen/Metallzuschläge eines Erzeugnisses tagesaktuell einsehbar.

## Appendix

### Conditions of sale and delivery

#### 1. General standards

By using this catalog you can acquire hardware and software products described therein from Siemens AG subject to these conditions of sale and delivery (hereinafter: CSD). Please note: the scope, the quality and the conditions for supplies and services, including software products, by any Siemens group or Regional Company having a registered office outside of Germany, shall be subject exclusively to the General Terms and Conditions of the respective Siemens entity. These CSD apply exclusively for orders placed with Siemens AG, Germany.

##### 1.1 For customers with a seat or registered office in Germany

For customers with a seat or registered office in Germany, the following shall be subordinate to these CSD

- the "General Terms of Payment"<sup>1)</sup> and
- for software products, the "General License Conditions for Software Products for Automation and Drives for Customers with a Seat or Registered Office in Germany"<sup>1)</sup> and
- the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"<sup>1)</sup> for other deliveries and services.

##### 1.2 For customers with a seat or registered office outside of Germany

For customers with a seat or registered office outside of Germany, the following shall be subordinate to these CSD

- the "General Terms of Payment"<sup>1)</sup> and
- for software products, the "General License Conditions for Software Products for Automation and Drives for Customers with a Seat or Registered Office outside of Germany"<sup>1)</sup> and
- the "General Conditions for Supplies of Siemens Industry for Customers with a Seat or Registered Office outside of Germany"<sup>1)</sup> for other deliveries and services.

#### 2. Prices

The prices are in € (Euro) ex works, excluding packaging.

The sales tax (value added tax) is not included in the prices. It shall be debited separately at the respective rate according to the applicable legal regulations.

Prices are subject to change without prior notice. We will debit the prices valid at the time of delivery.

To compensate fluctuating prices of raw materials (for example silver, copper, aluminum, lead, gold, dysprosium and neodymium), surcharges are calculated on a daily basis for products containing these raw materials using the metal factor. A surcharge for the particular raw material is added to the price of a product if the basic quotations for this raw material are exceeded.

Each product's metal factor dictates for which raw materials the metal surcharges are calculated, from which quotation and with which calculation method (weight or percentage method).

An exact explanation of the metal factor can be found on the page entitled "Metal surcharges".

The surcharge will be calculated (except in the case of dysprosium and neodymium) on the basis of the official price on the day prior to receipt of the order or prior to the release order for calculation of the surcharge.

In the event of placement of an order, the relevant three-month average price from the quarter prior to order receipt or the release order shall be used with a one-month buffer to calculate the dysprosium and neodymium surcharge ("rare earths") (you will find details in the aforementioned explanation of the metal factor).

#### 3. Additional terms and conditions

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

Illustrations are not binding.

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

#### 4. Export regulations

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## Appendix

### Notes

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## Appendix

### Notes

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GAMMA Building Control	ET G1	
<b>Drive Systems</b>		
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SINAMICS G150 Drive Converter Cabinet Units		
SINAMICS GM150, SINAMICS SM150 Medium-Voltage Converters	D 12	
SINAMICS PERFECT HARMONY GH180 Medium-Voltage Air-Cooled Drives (Germany Edition)	D 15.1	
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SINAMICS S120 Chassis Format Units and Cabinet Modules	D 21.3	
SINAMICS S150 Converter Cabinet Units		
SINAMICS S120 and SIMOTICS	D 21.4	
SINAMICS DCM DC Converter, Control Module	D 23.1	
SINAMICS DCM Cabinet	D 23.2	
SINAMICS Inverters for Single-Axis Drives and SIMOTICS Motors	D 31	
SINAMICS G120P and SINAMICS G120P Cabinet pump, fan, compressor converters	D 35	
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• Series H-compact		
• Series H-compact PLUS		
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Three-Phase Induction Motors SIMOTICS HV, Series H-compact	D 86.1	
Synchronous Motors with Permanent-Magnet Technology, HT-direct	D 86.2	
DC Motors	DA 12	
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SIMOREG K 6RA22 Analog Chassis Converters	DA 21.2	
<i>Digital: SIMOREG DC MASTER 6RM70 Digital Converter Cabinet Units</i>	DA 22	
SIMOVERT PM Modular Converter Systems	DA 45	
SIEMOSYN Motors	DA 48	
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