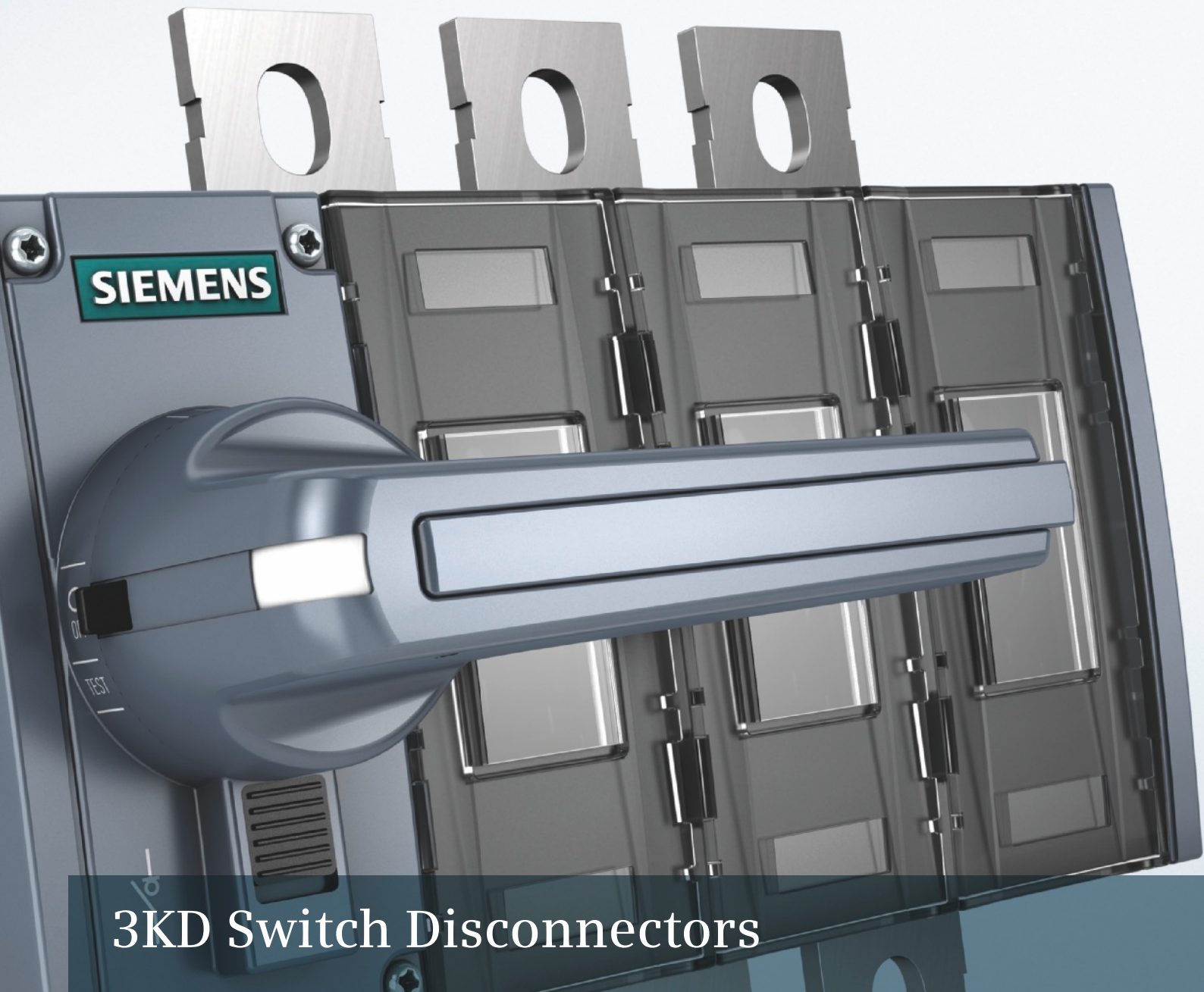


SIEMENS



3KD Switch Disconnectors

SENTRON

Edition
December
2013

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System overview • Cubicle racks • Enclosures • Cubicle expansions • Preconfigured cubicles • Special cubicles • System lighting • System air-conditioning

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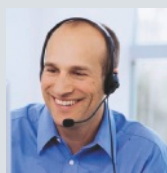
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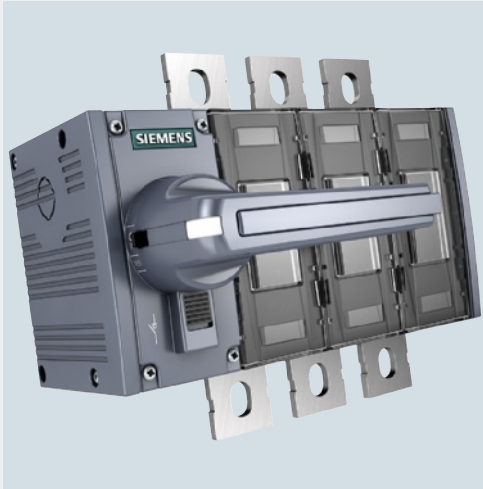


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SETRON

3KD Switch Disconnectors



VDE

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Introduction

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3KD Switch Disconnectors up to 1600 A

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Appendix

3



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The right one for everyone

Our portfolio includes switchboards, distribution boards, protection, switching, measuring and monitoring devices, switches and socket outlets. All over the world, the universality, modularity and intelligence of our components and systems give you innumerable benefits – all the time they are in use. Developed according to the respective international standards, we offer forward-looking design with innovative functions and ensure the highest quality standards world-wide

Sustainability in focus

As a worldwide leader in the provision of high-quality, standards-compliant products and systems for low-voltage power distribution, we contribute to the sustainable and responsible handling of electrical energy. With our integrated portfolio which ranges from power supply and distribution, through short-circuit protection and overload protection through to power monitoring, we support the implementation of environmentally friendly energy concepts on the basis of wind power, photovoltaics, intelligent buildings and electromobility.



Universal, safe and intelligent power distribution

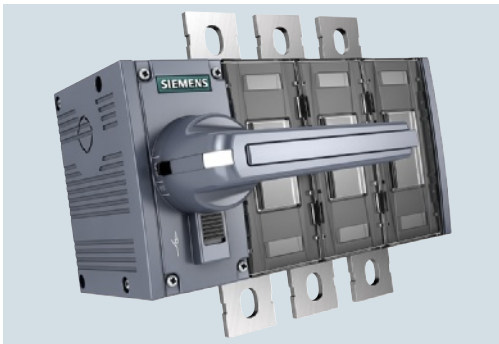
Whether in industrial plants, in infrastructure or in buildings: every technical plant depends on the reliable supply of electricity. Our products provide a safe, reliable and efficient electrical infrastructure at the medium- and low-voltage levels. Our components reliably protect against accidents, disturbances and fires caused by electrical installations and allow consumers to utilize electrical power in a sustainable, responsible manner. We are happy to help you with comprehensive support from the initial information through to operation.

Everything for power distribution

Consistent solutions are required for electrical power distribution in buildings. Our answer is Totally Integrated Power (TIP). TIP stands for innovative products, systems and software tools which ensure the safe and reliable distribution of electric power. They are supplemented by communication-capable circuit breakers and modules which connect the power distribution system to the building automation system or industrial automation solutions. These in turn can be linked to a comprehensive energy management system which contributes to optimizing the consumption of electricity and hence to lowering the costs of operation.

Excellent support

As a competent and reliable partner, we also offer you comprehensive support – from the initial information, through planning, configuring and ordering to commissioning, operation and technical support. We know the needs of your working environment and your daily business. Based on this, we give you flexible and high quality support, which allows you to concentrate on your customers and their needs.



The new 3KD switch disconnectors 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 3KD switch disconnectors are designed to systematically avoid electrical accidents. For example when maintenance work is being carried out on machines, you can help to prevent unauthorized operation by means of appropriate locking functions. The terminal covers of the 3KD switch disconnectors ensure enhanced touch protection and prevent electric shocks. Thanks to transparent contact covers, contact positions are clearly visible at all times.

Increase productivity

The 3KD switch disconnectors 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 with all the CAX data relevant for the entire engineering process.

Improve flexibility

The wide variety of applications of the 3KD switch disconnectors 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 and operating mechanism designs and the comprehensive accessories.





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

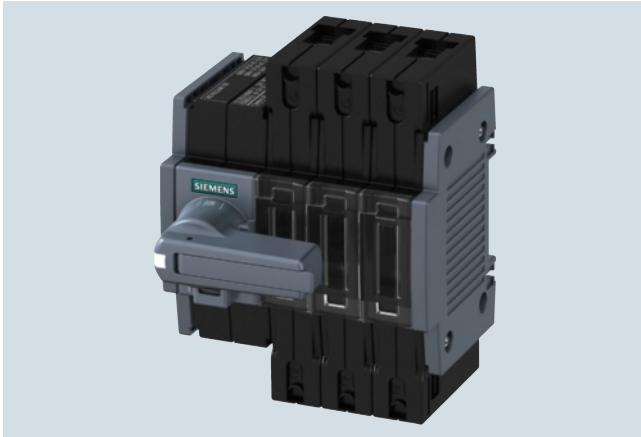


3KD switch disconnecter as EMERGENCY-STOP switch in a production plant for protection of operating personnel

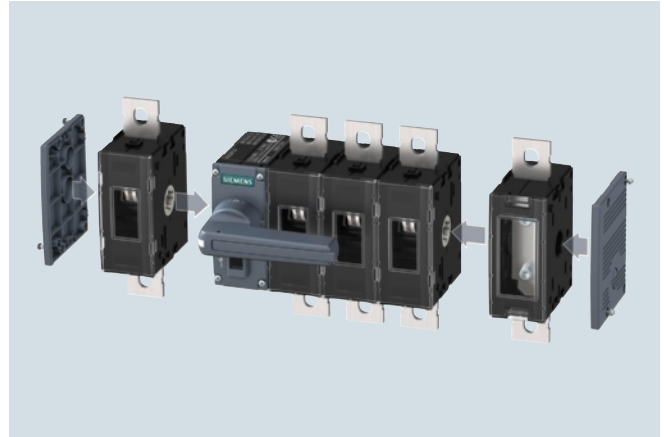


3KD switch disconnecter as main control switch in floor distribution system for isolation from the supply

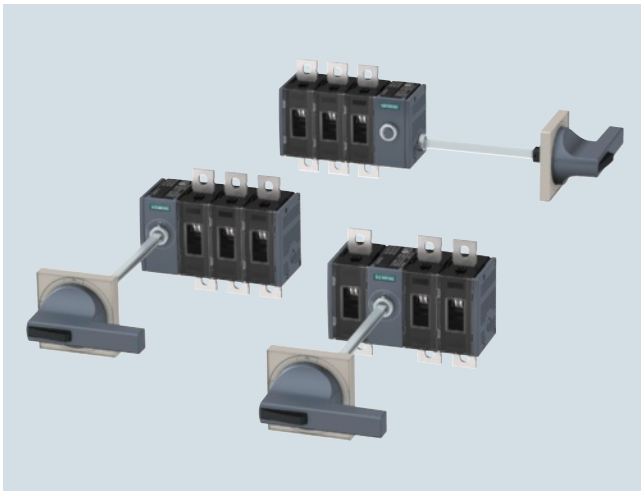
Highlights



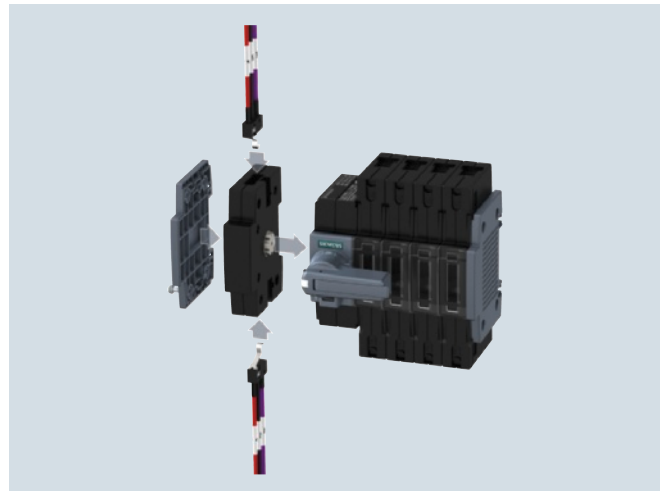
Compact outer dimensions for optimum space utilization in the power distribution board, control cabinet or distribution board.



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.



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 left of the switch disconnector.



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

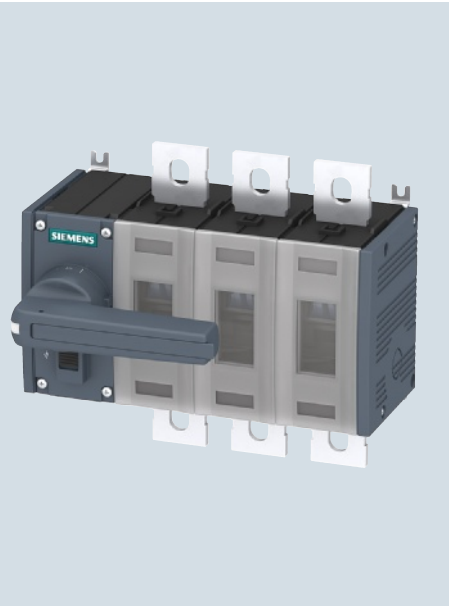


High level of protection for personnel and plant, even in confined installation spaces, afforded by locking functions.



3KD switch disconnectors up to 200 A can be mounted on standard mounting rails for speedy installation.

Introduction



3KD Switch Disconnectors

1/2	General data
1/6	Technical features

3KD Switch Disconnectors up to 1600 A

Introduction

General data

1

Application

3KD switch disconnectors are designed for applications with exacting requirements. They are deployed as main control, EMERGENCY-STOP and maintenance switches in industrial plants, infrastructure and buildings. 3KD switch disconnectors 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 3KD switch disconnectors are climate-proof and meet the requirements of IEC 60947-1, IEC 60947-3 and VDE 0660-107.

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 handle
- Direct operating mechanism with handle on switch disconnector
- Door-coupling rotary operating mechanism for operation of the switch disconnector outside the control cabinet door
- Versions with side operating mechanisms
- Connections in the form of box terminals or flat terminals
- Floor mounting or mounting on a standard mounting rail (sizes 1 and 2)
- Additional poles can be retrofitted: 4th contact element, N or N/PE terminals
- Auxiliary switch for querying the switch position
- Suitable for AC or DC applications

Benefits

- Enhanced touch protection
- Contact position is clearly visible
- Locking functions help to prevent unauthorized operation
- Enhanced protection against inter-phase arcing
- 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

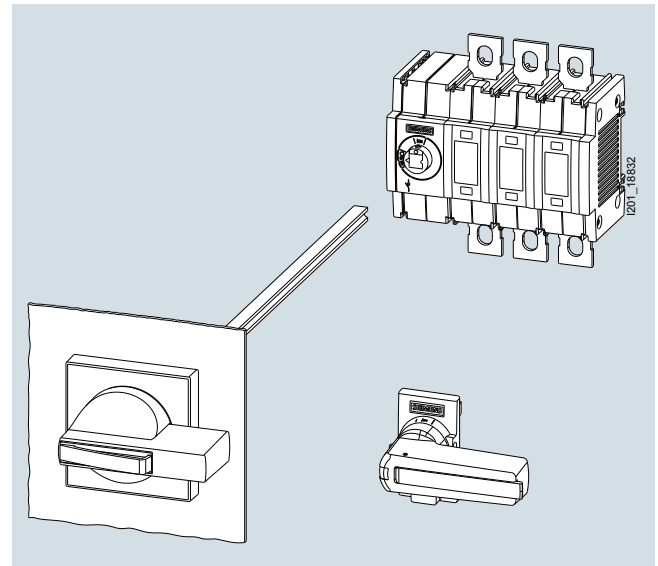
Design

A 3KD switch disconnector 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 3KD switch disconnector or in the center between the switching poles.

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

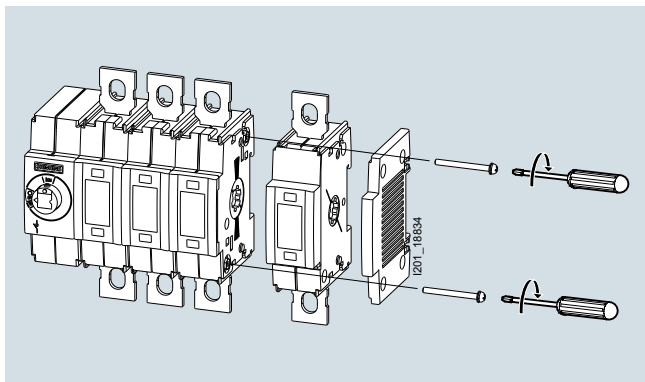
	Front operating mechanism on side	Front operating mechanism in center	Side operating mechanism
3-pole			
4-pole			

Additional poles

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

When installing additional poles, it is important to note that only a 3-pole 3KD switch disconnector 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 in order 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.

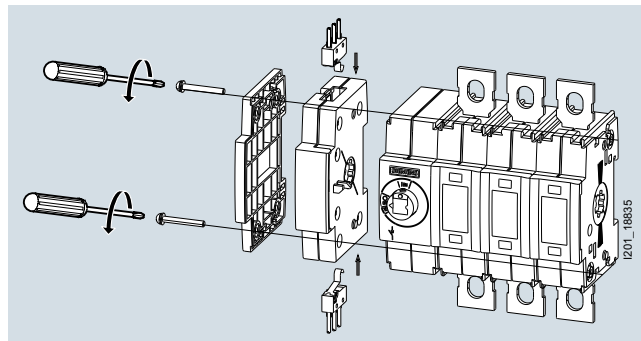
N — N

N/PE terminal with permanent connections**Auxiliary switches**

Auxiliary switches allow remote interrogation of the contact position of the switch disconnector.

Installation of auxiliary switches for sizes 1 and 2

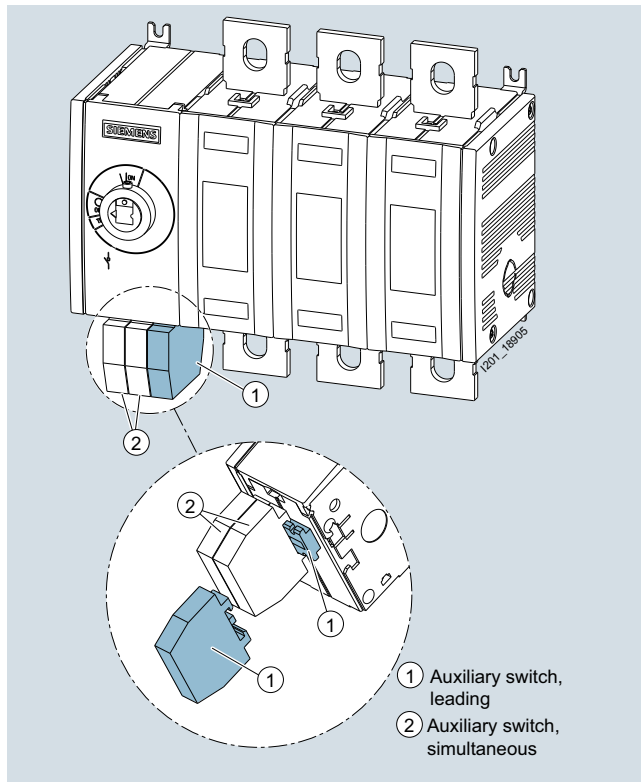
The auxiliary switches used for sizes 1 and 2 are microswitches (changeover contacts) which can be snapped into an auxiliary switch module. This auxiliary switch module is mounted on the side of the switch disconnector in the same way as an additional pole. A maximum of two microswitches can be installed in each auxiliary switch module.



Auxiliary switches with auxiliary switch module for sizes 1 and 2

Installation of auxiliary switches for sizes 3 to 5

With sizes 3 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 3 to 5. The leading auxiliary switch is highlighted in the drawing.

3KD Switch Disconnectors up to 1600 A

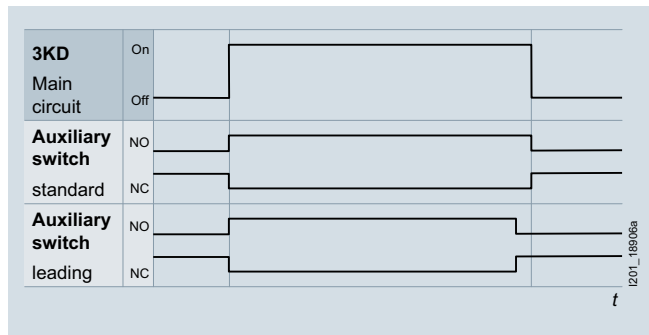
Introduction

General data

1

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 3KD switch disconnector open.

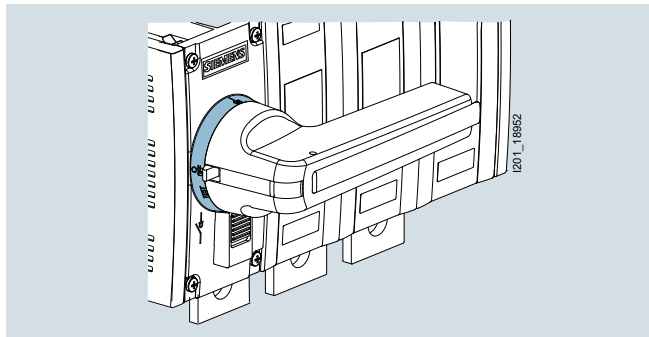
With sizes 1 and 2, the selection of the appropriate auxiliary switch module determines whether the switching instant will be leading or simultaneous.

With sizes 3, 4 and 5, the switching instant is determined by the selection of the mounting location for the auxiliary switch on the operating mechanism module. In this case, only 3SB3 auxiliary switches with NO contacts (1 or 2) can be used as leading auxiliary switches.

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 3KD switch disconnector. The test function can be used as part of the commissioning process.

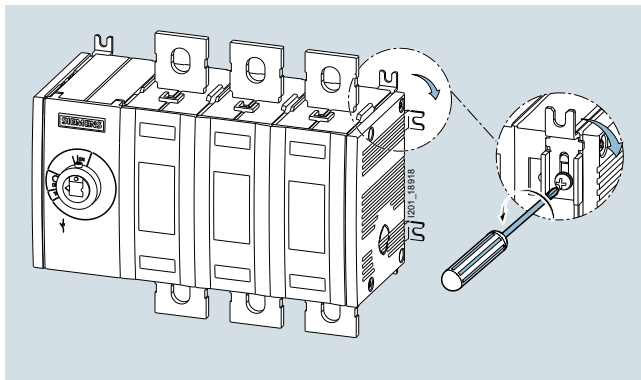
The test function is activated by turning the handle of a direct operating mechanism in the OFF position by 25° in the anti-clockwise direction. The handle must be turned 90° in the clockwise direction in order to switch the main contacts.



The auxiliary switch module including test function must be used for sizes 1 and 2. With sizes 3, 4 and 5, all installed auxiliary switches are switched when the test function is activated.

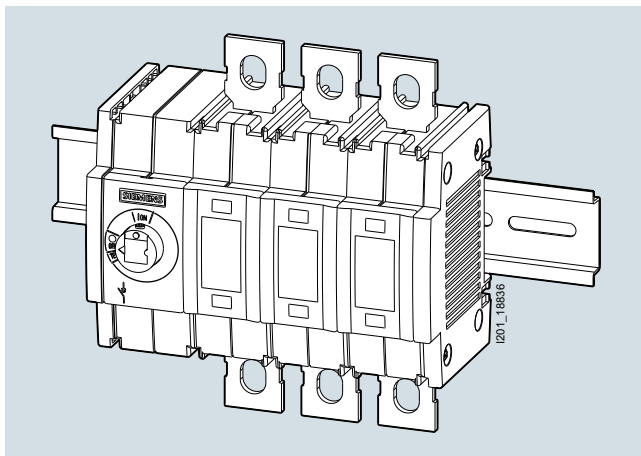
Types of mounting

All 3KD switch disconnectors 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 3 or larger.



Floor mounting method

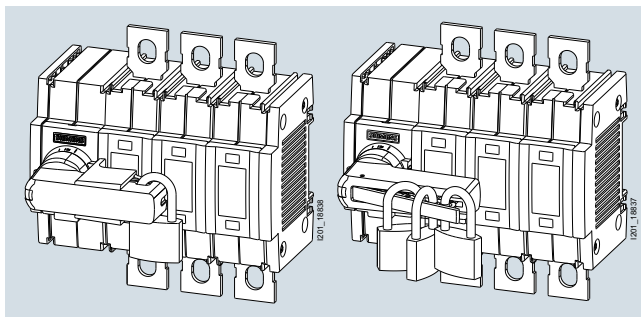
Sizes 1 and 2 can be snapped onto a standard mounting rail (TH35 according to DIN EN 60715) as an alternative mounting method.



Mounting on a standard mounting rail

Locking functions

3KD switch disconnectors can be locked by up to three padlocks in order to prevent unauthorized switch operation. A flat version of the direct operating mechanisms is available for use in confined installation spaces. This can be secured with a lock without increasing the required mounting depth.



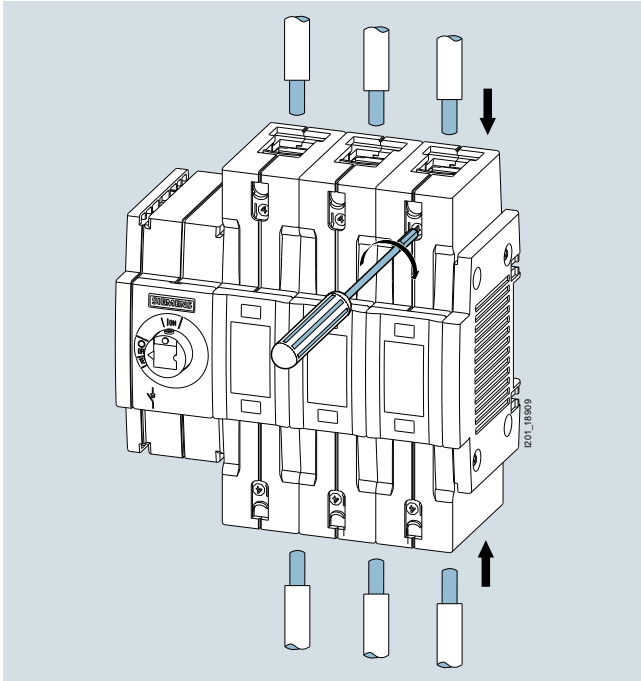
Locking functions involving one or more padlocks

Electrical connection

3KD switch disconnectors are available with a number of different terminal types.

Box terminals

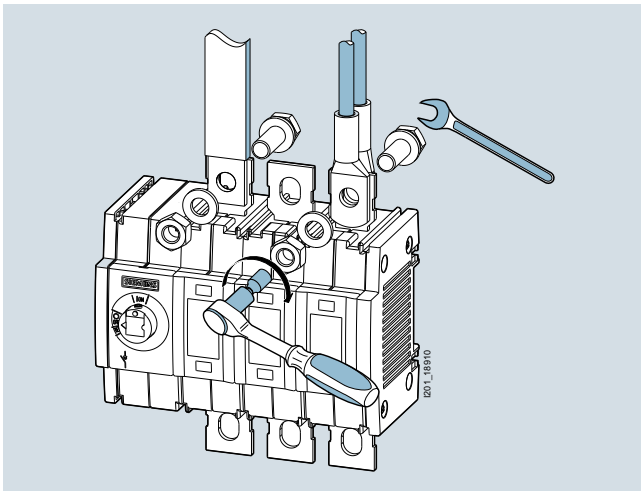
Box terminals for sizes 1 and 2 (rated currents 16 A to 160 A) are designed to allow the speedy connection of stripped conductors.



Connection via box terminals

Flat terminals

Sizes 2 to 5 (rated currents 80 A to 1600 A) are available with flat terminals – for the connection of cable lugs or busbar systems.

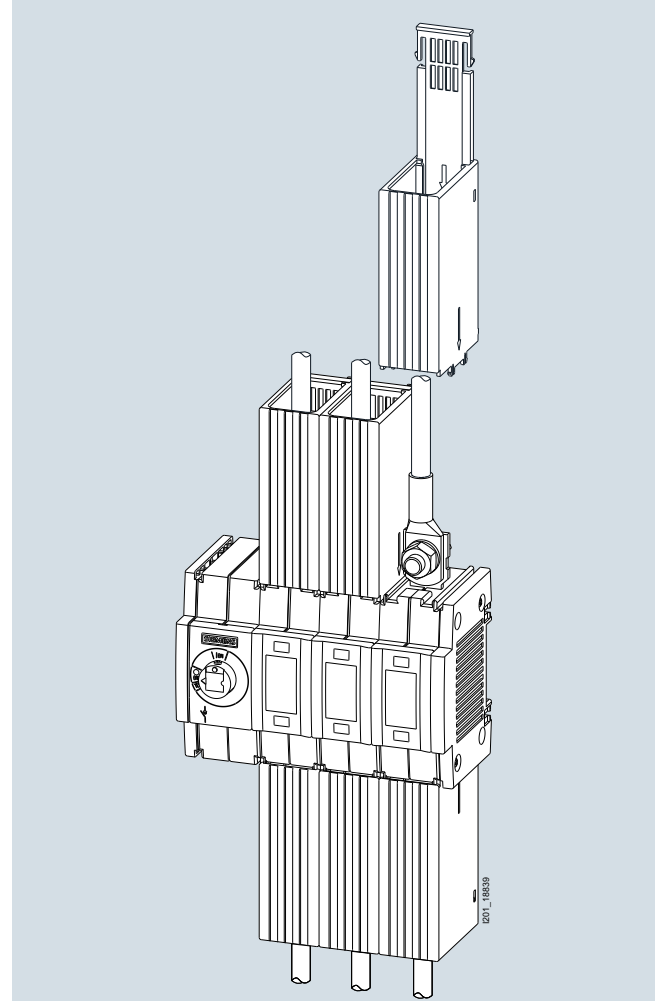


Connection via flat terminals

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

Terminal covers

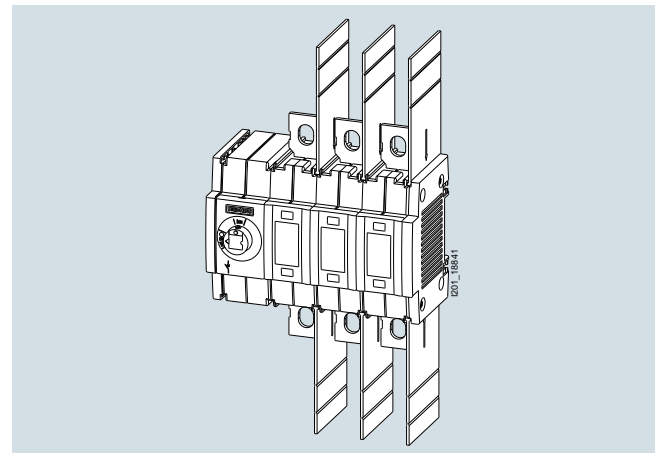
Terminal covers can be installed to provide touch protection for all terminals.



Terminal covers

Phase barriers

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



Phase barriers


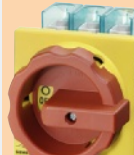



3KD Switch Disconnectors up to 1600 A

Introduction

Technical features

1

Overview

3LD main control and EMERGENCY-STOP switches																
3KD switch disconnectors: Box terminals																
3KD switch disconnectors: Flat terminals																
Size					1				2							
Type	3LD2 0	3LD2 1	3LD2 2	3LD2 5	3KD...-M			3LD2 7	3LD2 8	3LD2 3	3KD...-N					
		3LD main control and EMERGENCY-STOP switches				3KD switch disconnectors			3LD main control and EMERGENCY-STOP switches			3KD switch disconnectors				
Rated current I_n	A	16	25	32	63	16	32	63	100	125	160	80	100	125	160	200
Number of poles																
• 3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
• 4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Connections																
• Flat terminals	--	--	--	--	--	--	--	--	--	--	--	✓	✓	✓	✓	✓
• Box terminals	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	--
Operating mechanism																
• Front operating mechanism	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Side operating mechanisms	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Operating and short-circuit behavior																
• Rated short-time withstand current I_{cw} (1 s current, rms value)	kA	0.34	0.64	0.64	1.26	3	3	3	2	2	4	4	4	4	4	4
• Rated conditional short-circuit current with upstream fuses at 690 V ¹⁾	kA _{rms}	50	50	50	50	100	100	100	50	20	50	65	65	65	65	50

¹⁾ Valid for the combination of 3KD switch disconnector and fuse type 3NA..., characteristic gG


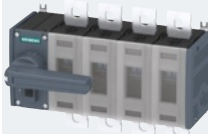
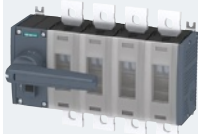
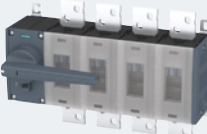
✓ Available

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For further information about 3LD main control and EMERGENCY-STOP switches, [see](#)

- [Catalog LV 10, Chapter 7](#)
- [Industry Mall, section "Building Technologies"](#)
 - > ["Low-Voltage Controls and Distribution"](#)
 - > ["SENTRON protection, switching, measuring and monitoring devices"](#)
 - > ["Switching devices"](#)
 - > ["Switch disconnectors"](#)
 - > ["3LD main and EMERGENCY-STOP switches up to 250 A"](#)

Overview (continued)

3LD main control and EMERGENCY-STOP switches												
3KD switch disconnectors: Box terminals												
3KD switch disconnectors: Flat terminals												
Size			3				4			5		
Type		3LD24	3KD....-P				3KD....-Q			3KD....-R		
		3LD main control and EMERGENCY- STOP switches	3KD switch disconnectors									
Rated current I_n	A	250	200	250	315	400	500	630	800	1000	1250	1600
Number of poles												
• 3		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
• 4		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Connections												
• Flat terminals		--	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Box terminals		✓	--	--	--	--	--	--	--	--	--	--
Operating mechanism												
• Front operating mechanism		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Side operating mechanisms		--	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Operating and short-circuit behavior												
• Rated short-time withstand current I_{cw} (1 s current, rms value)	kA	4	13	13	13	13	30	30	30	50	50	50
• Rated conditional short-circuit current with upstream fuses at 690 V ¹⁾	kA _{rms}	50	65	65	35	35	65	65	50	--	--	--

¹⁾ Valid for the combination of 3KD switch disconnector and fuse type 3NA..., characteristic gG

✓ Available

-- Not available

For further information about 3LD main control and EMERGENCY-STOP switches, [see](#)

- [Catalog LV 10, Chapter 7](#)
- [Industry Mall, page "Building Technologies"](#)
 - > "Low-Voltage Controls and Distribution"
 - > "SENTRON protection, switching, measuring and monitoring devices"
 - > "Switching devices"
 - > "Switch disconnectors"
 - > "3LD main and EMERGENCY-STOP switches up to 250 A"

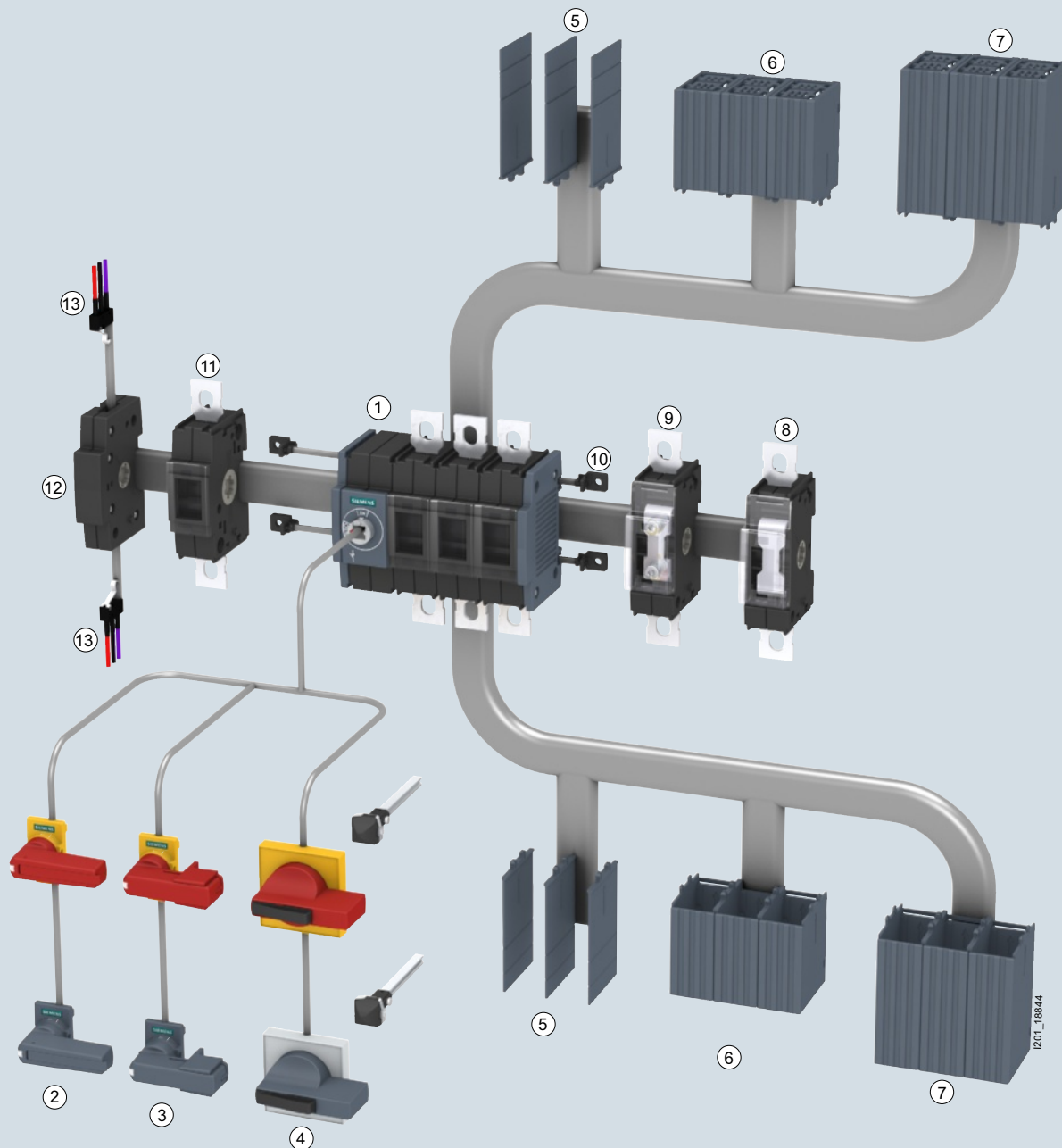
3KD Switch Disconnectors up to 1600 A

Introduction

Technical features

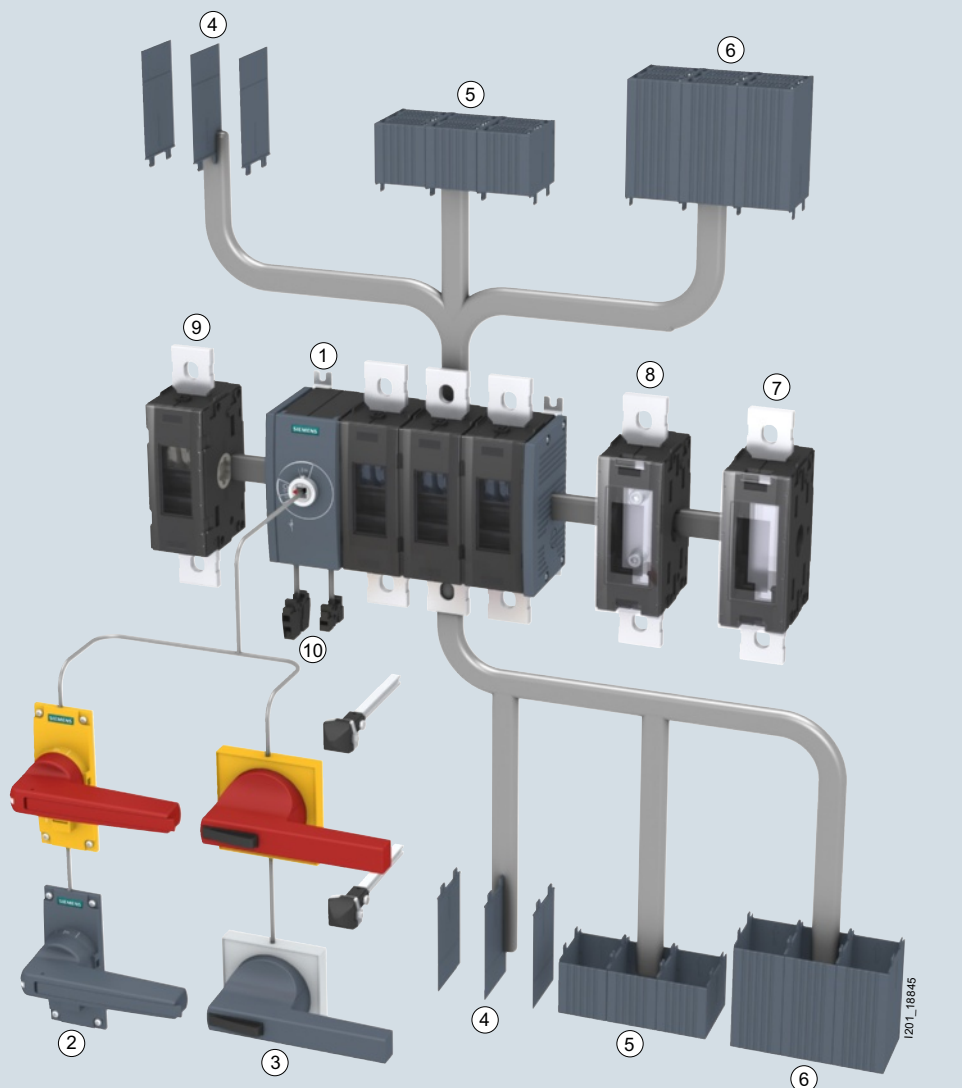
1

Overview of components and accessories: Sizes 1 and 2 of 3KD switch disconnectors



- ① 3KD switch disconnectors
- ② Direct operating mechanism (standard version)
- ③ Direct operating mechanism (suitable for distribution boards)
- ④ Door-coupling rotary operating mechanism
- ⑤ Phase barriers
- ⑥ Cable connection cover, short
- ⑦ Cable connection covers

- ⑧ N/PE terminal (with permanent jumper)
- ⑨ Neutral conductor terminal (with removable jumper)
- ⑩ Mounting bracket (spare part)
- ⑪ 4th contact element
- ⑫ Auxiliary switch module
- ⑬ Auxiliary switch

Overview of components and accessories: Sizes 3 to 5 of 3KD switch disconnectors

- | | |
|--|--|
| ① 3KD switch disconnectors | ⑥ Cable connection cover |
| ② Direct operating mechanism | ⑦ N/PE terminal (with permanent jumper) |
| ③ Door-coupling rotary operating mechanism | ⑧ Neutral conductor terminal (with removable jumper) |
| ④ Phase barriers | ⑨ 4th contact element |
| ⑤ Cable connection cover, short | ⑩ Auxiliary switch |

3KD Switch Disconnectors up to 1600 A

Introduction

Technical features

Technical specifications

Sizes 1 and 2

Standards		IEC 60947-1, IEC 60947-3							
Type		3KD16	3KD22	3KD26	3KD28	3KD30	3KD32	3KD34	3KD36...N
Size		1	1	1	2	2	2	2	2
General technical details									
Rated uninterrupted current I_u	A	16	32	63	80	100	125	160	200
Continuous free-air thermal current $I_{th}^{1)}$	A	16	32	63	80	100	125	160	200
Rated operational voltage U_e									
• At 50/60 Hz AC	V	690							
• At DC - 2 conducting paths series-connected	V	220							
• At DC - 3 conducting paths series-connected	V	440							
Rated insulation voltage U_i	V	1000							
Rated impulse withstand voltage U_{imp}	kV	8	8	8	8	8	8	8	8
Overvoltage category		III	III	III	III	III	III	III	III
Pollution degree		3	3	3	3	3	3	3	3
Operating and short-circuit behavior									
Rated operational current I_e									
• At AC-21A, AC-22A, 400 to 690 V	A	16	32	63	80	100	125	160	200
• At AC-23, 400V	A	16	32	63	80	100	125	160	160
• At AC-23, 500V	A	16	32	63	80	100	125	160	160
• At AC-23, 690 V	A	16	32	63	80	100	125	125	125
• At DC-21A, 220/440 V	A	16	32	63	80	100	125	160	160
• At DC-22A, 220/440 V	A	16	32	63	80	100	125	160	160
• At DC-23A, 220/440 V	A	16	32	63	80	100	125	160	160
Motor switching capacity AC-23A ²⁾									
• At 400 V	kW	7.5	15	30	37	55	55	90	90
• At 500 V	kW	7.5	18.5	37	55	55	75	110	110
• At 690 V	kW	11	30	55	75	90	110	110	110
Rated short-time withstand current I_{cw} (with t = 1 s, rms value, 690 V AC / 440 V DC)	kA	3	3	3	4	4	4	4	4
Rated short-circuit making capacity I_{cm} (at 690 V AC / 440 V DC)	kA	7	7	7	12	12	12	12	12
Rated current of upstream fuse ³⁾	A	63	63	63	160	160	160	160	200
Rated conditional short-circuit current with upstream fuse ³⁾									
• At 400/500 V AC	kA	100	100	100	100	100	100	100	50
• At 690 V AC	kA	100	100	100	65	65	65	65	50
Let-through current combined with upstream fuse ³⁾									
• At 400/500 V AC	kA	7	7	7	17.9	17.9	17.9	17.9	18
• At 690 V AC	kA	7.5	7.5	7.5	18.7	18.7	18.7	18.7	19
Let-through I^2t value combined with upstream fuse ³⁾									
• At 400/500 V	kA ² s	13.3	13.3	13.3	135.6	135.6	135.6	135.6	211
• At 690 V	kA ² s	13.7	13.7	13.7	178.3	178.3	178.3	178.3	226
Power loss per pole with thermal current I_{th}	W	0.2	0.6	2	2	3	4.5	7	10
Service life, operating cycles									
• Mechanical		15000	15000	15000	15000	15000	15000	15000	15000
• Electrical, at AC-23A, 690 V/50...60 Hz		6000	6000	6000	1500	1500	1500	1500	1500
• Electrical, at DC-23A, 220/440 V		1500	1500	1500	1500	1500	1000	1000	1000
Degree of protection									
• With masking plate or cable connection cover		IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20
• Without masking plate or terminal cover		IP20	IP20	IP20	IP00 ⁴⁾ /IP20				IP00
Ambient conditions									
• Ambient temperature during operation	°C	-25 ... +70 (no derating of I _{th} at -5 to +55°C)							
• Ambient temperature during storage	°C	-50 ... +80							
• Mounting position ⁵⁾		Any							
Main conductor connections									
Conductor cross-section, max.	mm ²	35	35	35	70 (95) ⁶⁾	70 (95) ⁶⁾	70 (95) ⁶⁾	70 (95) ⁶⁾	95
Busbar systems, max. dimensions (number x width x thickness)									
• Flat terminals	mm	--			1 x 20 x 3 ⁷⁾				
• Box terminals	mm	1 x 9 x 2			1 x 14 x 3				
Tightening torque									
• Flat terminals	Nm	--			15 ... 22				
• Box terminals	Nm	5...6.5			6.5...8				

1) Configuring note: Max. permissible operating temperature at connections 125°C

2) These values are provided as a guide only and may vary depending on the make of motor

3) Valid for the combination of 3KD and fuse type 3NA38 for $I_u = 16 \dots 160$ A; 3NA31 for $I_u = 200$ A; characteristic gG

4) Relevant only for devices with flat terminals

5) With mounting positions other than the vertical, please contact Technical Support

6) 95 mm² valid for variants with flat terminals

7) If 20-mm-wide busbars are used, insulated busbars are necessary.

Technical specifications (continued)

Sizes 3 to 5

Standards		IEC 60947-1, IEC 60947-3									
Type		3KD36...-P	3KD38	3KD40	3KD42	3KD44	3KD46	3KD48	3KD50	3KD52	3KD54
Size		3	3	3	3	4	4	4	5	5	5
General technical details											
Rated uninterrupted current I_U	A	200	250	315	400	500	630	800	1000	1250	1600
Continuous free-air thermal current $I_{th}^{1)}$	A	200	250	315	400	500	630	800	1000	1250	1600
Rated operational voltage U_e											
• At 50/60 Hz AC	V	690									
• At DC - 2 conducting paths series-connected	V	220									
• At DC - 3 conducting paths series-connected	V	440									
Rated insulation voltage U_i	V	1000									
Rated impulse withstand voltage U_{imp}	kV	12	12	12	12	12	12	12	12	12	12
Overvoltage category		IV	IV	IV	IV	IV	IV	IV	IV	IV	IV
Pollution degree		3	3	3	3	3	3	3	3	3	3
Operating and short-circuit behavior											
Rated operational current $I_e^{2) 3)}$											
• At AC-21A, AC-22A, 400 to 690 V	A	200	250	315	400	500	630	800	1000	1250	1600
• At AC-23, 400V	A	200	250	315	400	500	630	670	800	800	800
• At AC-23, 500V	A	200	250	315	350	500	630	630	800	800	800
• At AC-23, 690 V	A	200	250	315	315	500	500	500	800	800	800
• At DC-21A, 220/440 V	A	200	250	315	400	500	630	800	1000	1250	1600
• At DC-22A, 220/440 V	A	200	250	315	400	500	630	800	--	--	--
• At DC-23A, 220/440 V	A	200	250	315	400	500	630	800	--	--	--
Motor switching capacity AC-23A ⁴⁾											
• At 400 V	kW	110	132	160	220	280	355	355	400	400	400
• At 500 V	kW	132	160	220	250	355	400	400	560	560	560
• At 690 V	kW	185	220	280	315	500	500	500	800	800	800
Rated short-time withstand current I_{cw} (with t = 1 s, rms value, 690 V AC / 440 V DC)	kA	13	13	13	13	30	30	30	50	50	50
Rated short-circuit making capacity I_{cm} (at 690 V AC / 440 V DC)	kA	26	26	26	26	63	63	63	105	105	105
Rated current of upstream fuse ⁵⁾	A	250	250	400	400	630	630	800	1000	1250	1600
Rated conditional short-circuit current with upstream fuse ⁵⁾											
• At 400/500 V AC	kA	100	100	65	65	100	100	100	100	80	80
• At 690 V AC	kA	65	65	35	35	65	65	50	--	--	--
Let-through current combined with upstream fuse ⁵⁾											
• At 400/500 V AC	kA	25.1	25.1	35.2	35.2	61.6	61.6	63.7	95.9	103.4	110
• At 690 V AC	kA	22.7	22.7	27.96	27.96	54.5	54.5	70.4	--	--	--
Let-through I^2t value combined with upstream fuse ⁵⁾											
• At 400/500 V	kA ² s	427	427	1165	1165	3687	3687	7471	15400	25960	30900
• At 690 V	kA ² s	348	348	1157	1157	4450	4450	10300	--	--	--
Power loss per pole with thermal current I_{th}	W	4	7	10	17	15	22	35	47	70	120
Service life, operating cycles											
• Mechanical		10000	10000	10000	10000	8000	8000	8000	6000	6000	6000
• Electrical, at AC-23A, 690 V/50...60 Hz		1000	1000	1000	1000	1000	1000	1000	500	500	500
• Electrical, at DC-23A, 220/440 V		1000	1000	1000	1000	1000	1000	500	500	500	500
Degree of protection											
• With masking plate or cable connection cover		IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20
• Without masking plate or terminal cover		IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00	IP00
Ambient conditions											
• Ambient temperature during operation	°C	-25 ... +70 (no derating of I_{th} at -5 to +55°C)									
• Ambient temperature during storage	°C	-50 ... +80									
• Mounting position ⁶⁾		Any									
Main conductor connections											
Conductor cross-section, max.	mm ²	240				2 x 240			2 x 240		
Busbar systems, max. dimensions (number x width x thickness)											
• Flat terminals	mm	1 x 30 x 10				2 x 40 x 5			2 x 60 x 10		
• Box terminals	mm	1 x 30 x 10				2 x 40 x 5			2 x 60 x 10		
Tightening torque											
• Flat terminals	Nm	30 ... 44				50 ... 75			50 ... 75		
• Box terminals	Nm	--				--			--		

1) Configuring note: Max. permissible operating temperature at connections 125°C

2) With size 3 switch disconnectors, phase barriers or terminal covers (accessories) are required for:
- Busbar systems at AC-21A, AC-22A and $U_e > 400$ V, AC-23A and
- when cable lugs are connected

3) With size 4 at AC-23A, phase barriers or terminal covers must be installed (accessories)

4) These values are provided as a guide only and may vary depending on the make of motor

5) Valid for the combination of 3KD and fuse type 3NA..., characteristic gG

6) With mounting positions other than the vertical, please contact Technical Support

3KD Switch Disconnectors up to 1600 A

Introduction

Notes

1

3KD Switch Disconnectors up to 1600 A

2



3KD Switch Disconnectors up to 1600 A

- 2/2 Introduction
- 2/3 Complete assemblies
- 2/4 Basic units
- 2/6 Accessories and spare parts
- 2/12 Dimensions and typical circuit diagrams

2



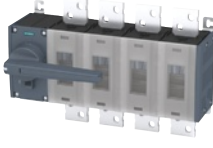
3KD Switch Disconnectors up to 1600 A

Introduction

Overview

Devices		Description	Page
Complete assemblies			
	Complete assemblies with direct operating mechanisms	Ready-to-install combinations comprising switch disconnectors and operating mechanisms <ul style="list-style-type: none"> • 3- and 4-pole switch disconnectors with front operating mechanisms • Connections in form of box terminal or flat terminal incl. direct operating mechanism with gray handle 	3
Basic units			
	Front operating mechanisms	Switch disconnectors with front operating mechanisms without handle <ul style="list-style-type: none"> • 3- and 4-pole versions • Connections in form of box terminal or flat terminal • Operating mechanism module in center or on left-hand side of switch disconnector 	4
	Side operating mechanisms	Switch disconnectors with side operating mechanisms <ul style="list-style-type: none"> • 3- and 4-pole versions • Connections in form of box terminal or flat terminal • Operating mechanism module on right-hand side of switch disconnector 	5
Accessories and spare parts			
	Additional poles	Additional poles for enhanced functionality <ul style="list-style-type: none"> • 4th contact element (switching pole) • N terminal (neutral conductor terminal with removable jumper) • N/PE terminal (with permanent jumper) 	6
Additional poles: Left: Box terminal Right: Flat terminal			
	Direct operating mechanisms	Different handles for mounting on basic units <ul style="list-style-type: none"> • Direct operating mechanisms for direct mounting on switch disconnector • Handles available in colors gray or red/yellow 	7
	Door-coupling rotary operating mechanisms	Different handles for mounting on basic units <ul style="list-style-type: none"> • Door-coupling rotary operating mechanisms for operation of switch disconnector outside the control cabinet door • Handles available in colors gray or red/yellow 	7
	Auxiliary switches	Auxiliary switches <ul style="list-style-type: none"> • For querying the switch position • Optionally available with leading NO contacts (auxiliary switch contacts open before the main contacts of the 3KD switch disconnector) • Optionally available with test function (switch can be tested without closure of main contacts) 	9
	Other accessories	<ul style="list-style-type: none"> • Terminal covers • Phase barriers • Cable connection cover as touch protection for termination area (for installation outside control cabinet) • Mounting bracket for wall mounting (spare part) 	10
Left: Cable connection cover Right: Phase barrier			


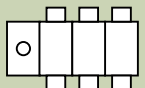
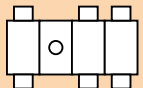
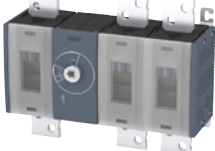

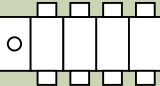
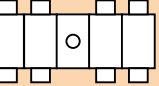

Selection and ordering data

	Rated uninterrupted current I_U	Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
A									
Complete assemblies with direct operating mechanism gray, front operating mechanism									
The switch disconnectors are designed for floor mounting; sizes 1 and 2 can optionally be mounted on standard mounting rails									
3-pole									
	Flat terminal ¹⁾								
	80	2		3KD2832-0NE10-0	1	1 unit	143	0.850	
	100			3KD3032-0NE10-0	1	1 unit	143	0.850	
	125			3KD3232-0NE10-0	1	1 unit	143	0.850	
	160			3KD3432-0NE10-0	1	1 unit	143	0.850	
	200			3KD3632-0NE10-0	1	1 unit	143	0.850	
	250	3		3KD3632-0PE10-0	1	1 unit	143	2.850	
	315			3KD3832-0PE10-0	1	1 unit	143	2.850	
	400			3KD4032-0PE10-0	1	1 unit	143	2.850	
	500	4		3KD4232-0PE10-0	1	1 unit	143	2.850	
	630			3KD4432-0QE10-0	1	1 unit	143	7.700	
	800			3KD4632-0QE10-0	1	1 unit	143	7.700	
	1000	5		3KD4832-0QE10-0	1	1 unit	143	7.700	
	1250			3KD5032-0RE10-0	1	1 unit	143	16.700	
	1600			3KD5232-0RE10-0	1	1 unit	143	16.700	
				3KD5432-0RE10-0	1	1 unit	143	16.700	
	Box terminal								
	16	1		3KD1632-2ME10-0	1	1 unit	143	0.750	
	32			3KD2232-2ME10-0	1	1 unit	143	0.750	
	63			3KD2632-2ME10-0	1	1 unit	143	0.750	
80	2		3KD2832-2NE10-0	1	1 unit	143	0.850		
100			3KD3032-2NE10-0	1	1 unit	143	0.850		
125			3KD3232-2NE10-0	1	1 unit	143	0.850		
160			3KD3432-2NE10-0	1	1 unit	143	0.850		
4-pole									
	Flat terminal ¹⁾								
	80	2		3KD2842-0NE10-0	1	1 unit	143	1.050	
	100			3KD3042-0NE10-0	1	1 unit	143	1.050	
	125			3KD3242-0NE10-0	1	1 unit	143	1.050	
	160			3KD3442-0NE10-0	1	1 unit	143	1.050	
	200			3KD3642-0NE10-0	1	1 unit	143	1.050	
	250	3		3KD3642-0PE10-0	1	1 unit	143	3.700	
	315			3KD3842-0PE10-0	1	1 unit	143	3.700	
	400			3KD4042-0PE10-0	1	1 unit	143	3.700	
	500	4		3KD4242-0PE10-0	1	1 unit	143	3.700	
	630			3KD4442-0QE10-0	1	1 unit	143	9.400	
	800			3KD4642-0QE10-0	1	1 unit	143	9.400	
	1000	5		3KD4842-0QE10-0	1	1 unit	143	9.400	
	1250			3KD5042-0RE10-0	1	1 unit	143	20.700	
	1600			3KD5242-0RE10-0	1	1 unit	143	20.700	
				3KD5442-0RE10-0	1	1 unit	143	20.700	
	Box terminal								
	16	1		3KD1642-2ME10-0	1	1 unit	143	0.800	
	32			3KD2242-2ME10-0	1	1 unit	143	0.800	
	63			3KD2642-2ME10-0	1	1 unit	143	0.800	
80	2		3KD2842-2NE10-0	1	1 unit	143	1.250		
100			3KD3042-2NE10-0	1	1 unit	143	1.250		
125			3KD3242-2NE10-0	1	1 unit	143	1.250		
160			3KD3442-2NE10-0	1	1 unit	143	1.250		

¹⁾ Cable connection covers must be provided for switch disconnectors with flat terminals and direct operating mechanisms

3KD Switch Disconnectors up to 1600 A


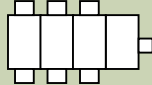
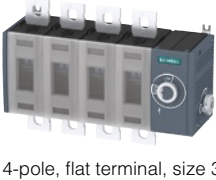
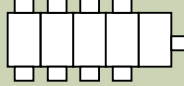
Basic units

		Operating mechanism on left			Operating mechanism in center			PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg				
Rated uninterrupted current I_u A	Size	DT	Article No.	Price per PU	DT	Article No.	Price per PU								
Basic units without handle, front operating mechanisms															
The switch disconnectors are designed for floor mounting; sizes 1 and 2 can optionally be mounted on DIN rails															
3-pole															
															
Flat terminal ¹⁾															
80	2		3KD2830-0NE10-0			3KD2830-0NE20-0		1	1 unit	143	0.830				
100			3KD3030-0NE10-0			3KD3030-0NE20-0		1	1 unit	143	0.830				
125			3KD3230-0NE10-0			3KD3230-0NE20-0		1	1 unit	143	0.830				
160			3KD3430-0NE10-0			3KD3430-0NE20-0		1	1 unit	143	0.830				
200			3KD3630-0NE10-0			3KD3630-0NE20-0		1	1 unit	143	0.830				
200	3		3KD3630-0PE10-0			3KD3630-0PE20-0		1	1 unit	143	2.800				
250			3KD3830-0PE10-0			3KD3830-0PE20-0		1	1 unit	143	2.800				
315			3KD4030-0PE10-0			3KD4030-0PE20-0		1	1 unit	143	2.800				
400			3KD4230-0PE10-0			3KD4230-0PE20-0		1	1 unit	143	2.800				
500	4		3KD4430-0QE10-0			3KD4430-0QE20-0		1	1 unit	143	7.300				
630			3KD4630-0QE10-0			3KD4630-0QE20-0		1	1 unit	143	7.300				
800			3KD4830-0QE10-0			3KD4830-0QE20-0		1	1 unit	143	7.300				
1000	5		3KD5030-0RE10-0			3KD5030-0RE20-0		1	1 unit	143	15.700				
1250			3KD5230-0RE10-0			3KD5230-0RE20-0		1	1 unit	143	15.700				
1600			3KD5430-0RE10-0			3KD5430-0RE20-0		1	1 unit	143	15.700				
															
Box terminal															
16	1		3KD1630-2ME10-0			3KD1630-2ME20-0		1	1 unit	143	0.720				
32			3KD2230-2ME10-0			3KD2230-2ME20-0		1	1 unit	143	0.720				
63			3KD2630-2ME10-0			3KD2630-2ME20-0		1	1 unit	143	0.720				
80	2		3KD2830-2NE10-0			3KD2830-2NE20-0		1	1 unit	143	0.850				
100			3KD3030-2NE10-0			3KD3030-2NE20-0		1	1 unit	143	0.850				
125			3KD3230-2NE10-0			3KD3230-2NE20-0		1	1 unit	143	0.850				
160			3KD3430-2NE10-0			3KD3430-2NE20-0		1	1 unit	143	0.850				
4-pole															
															
Flat terminal ¹⁾															
80	2		3KD2840-0NE10-0			3KD2840-0NE20-0		1	1 unit	143	1.000				
100			3KD3040-0NE10-0			3KD3040-0NE20-0		1	1 unit	143	1.000				
125			3KD3240-0NE10-0			3KD3240-0NE20-0		1	1 unit	143	1.000				
160			3KD3440-0NE10-0			3KD3440-0NE20-0		1	1 unit	143	1.000				
200			3KD3640-0NE10-0			3KD3640-0NE20-0		1	1 unit	143	1.000				
200	3		3KD3640-0PE10-0			3KD3640-0PE20-0		1	1 unit	143	3.400				
250			3KD3840-0PE10-0			3KD3840-0PE20-0		1	1 unit	143	3.400				
315			3KD4040-0PE10-0			3KD4040-0PE20-0		1	1 unit	143	3.400				
400			3KD4240-0PE10-0			3KD4240-0PE20-0		1	1 unit	143	3.400				
500	4		3KD4440-0QE10-0			3KD4440-0QE20-0		1	1 unit	143	8.900				
630			3KD4640-0QE10-0			3KD4640-0QE20-0		1	1 unit	143	8.900				
800			3KD4840-0QE10-0			3KD4840-0QE20-0		1	1 unit	143	8.900				
1000	5		3KD5040-0RE10-0			3KD5040-0RE20-0		1	1 unit	143	19.700				
1250			3KD5240-0RE10-0			3KD5240-0RE20-0		1	1 unit	143	19.700				
1600			3KD5440-0RE10-0			3KD5440-0RE20-0		1	1 unit	143	19.700				
															
Box terminal															
16	1		3KD1640-2ME10-0			3KD1640-2ME20-0		1	1 unit	143	0.770				
32			3KD2240-2ME10-0			3KD2240-2ME20-0		1	1 unit	143	0.770				
63			3KD2640-2ME10-0			3KD2640-2ME20-0		1	1 unit	143	0.770				
80	2		3KD2840-2NE10-0			3KD2840-2NE20-0		1	1 unit	143	1.200				
100			3KD3040-2NE10-0			3KD3040-2NE20-0		1	1 unit	143	1.200				
125			3KD3240-2NE10-0			3KD3240-2NE20-0		1	1 unit	143	1.200				
160			3KD3440-2NE10-0			3KD3440-2NE20-0		1	1 unit	143	1.200				

¹⁾ Phase barriers for size 2 included in scope of supply

3KD Switch Disconnectors up to 1600 A

Basic units








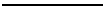

	Rated uninterrupted current I_u A	Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Basic units without handle, side operating mechanisms									
3-pole									
 <p>3-pole, flat terminal, size 3</p>	Flat terminal								
	200	3		3KD3634-0PE40-0		1	1 unit	143	2.800
	250			3KD3834-0PE40-0		1	1 unit	143	2.800
	315			3KD4034-0PE40-0		1	1 unit	143	2.800
	400			3KD4234-0PE40-0		1	1 unit	143	2.800
	500	4		3KD4434-0QE40-0		1	1 unit	143	7.300
	630			3KD4634-0QE40-0		1	1 unit	143	7.300
	800			3KD4834-0QE40-0		1	1 unit	143	7.300
	1000	5		3KD5034-0RE40-0		1	1 unit	143	15.700
	1250			3KD5234-0RE40-0		1	1 unit	143	15.700
	1600			3KD5434-0RE40-0		1	1 unit	143	15.700
4-pole									
 <p>4-pole, flat terminal, size 3</p>	Flat terminal								
	200	3		3KD3644-0PE40-0		1	1 unit	143	3.400
	250			3KD3844-0PE40-0		1	1 unit	143	3.400
	315			3KD4044-0PE40-0		1	1 unit	143	3.400
	400			3KD4244-0PE40-0		1	1 unit	143	3.400
	500	4		3KD4444-0QE40-0		1	1 unit	143	8.900
	630			3KD4644-0QE40-0		1	1 unit	143	8.900
	800			3KD4844-0QE40-0		1	1 unit	143	8.900
	1000	5		3KD5044-0RE40-0		1	1 unit	143	19.700
	1250			3KD5244-0RE40-0		1	1 unit	143	19.700
	1600			3KD5444-0RE40-0		1	1 unit	143	19.700

3KD Switch Disconnectors up to 1600 A








Accessories and spare parts

Selection and ordering data

Additional poles





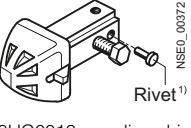
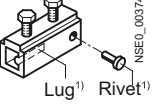
	Type	Circuit symbol	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
		mm							
 <p>4th contact element, flat terminal, for size 2</p>	4th contact element (switching pole)		N —  N						
	Flat terminal								
	for size 2; 3KD....-N		--	3KD9205-0		1	1 unit	143	0.260
	for size 3; 3KD....-P			3KD9305-0		1	1 unit	143	0.556
	for size 4; 3KD....-Q			3KD9405-0		1	1 unit	143	1.433
	for size 5; 3KD....-R			3KD9505-0		1	1 unit	143	3.567
 <p>4th contact element, box terminal, for size 2</p>	Box terminal								
	for size 1; 3KD....-M			3KD9105-2		1	1 unit	143	0.180
	for size 2; 3KD....-N			3KD9205-2		1	1 unit	143	0.300
 <p>Neutral conductor terminal, flat terminal, for size 2</p>	Neutral conductor terminal with removable jumper								
	Flat terminal								
	for size 2; 3KD....-N			3KD9206-0		1	1 unit	143	0.151
	for size 3; 3KD....-P			3KD9306-0		1	1 unit	143	0.435
	for size 4; 3KD....-Q			3KD9406-0		1	1 unit	143	1.177
	for size 5; 3KD....-R			3KD9506-0		1	1 unit	143	2.936
 <p>Neutral conductor terminal, box terminal, for size 2</p>	Box terminal								
	for size 1; 3KD....-M			3KD9106-2		1	1 unit	143	0.167
	for size 2; 3KD....-N			3KD9206-2		1	1 unit	143	0.279
 <p>N/PE terminal, flat terminal, for size 2</p>	N/PE terminal with permanent jumper								
	Flat terminal								
	for size 2; 3KD....-N			3KD9206-7		1	1 unit	143	0.129
	for size 3; 3KD....-P			3KD9306-7		1	1 unit	143	0.396
	for size 4; 3KD....-Q			3KD9406-7		1	1 unit	143	1.057
	for size 5; 3KD....-R			3KD9506-7		1	1 unit	143	2.656
 <p>N/PE terminal, box terminal, for size 2</p>	Box terminal								
	for size 1; 3KD....-M			3KD9106-8		1	1 unit	143	0.167
	for size 2; 3KD....-N			3KD9206-8		1	1 unit	143	0.279

Operating mechanisms

	Type	Shaft size handle end ¹⁾	Shaft size switch end ¹⁾	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
		mm x mm	mm x mm							
Direct operating mechanisms										
	Standard version									
	Can be locked with up to max. 3 padlocks, requires additional mounting depth in locked state									
	Gray									
	for size 1; 3KD....-M				3KD9101-1		1	1 unit	143	0.040
	for size 2; 3KD....-N				3KD9201-1		1	1 unit	143	0.061
	for size 3; 3KD....-P				3KD9301-1		1	1 unit	143	0.137
	for size 4; 3KD....-Q				3KD9401-1		1	1 unit	143	0.285
	for size 5; 3KD....-R				3KD9501-1		1	1 unit	143	0.572
	Red/yellow									
	Flat version (suitable for distribution boards)									
	Can be locked with one padlock, requires no additional mounting depth in locked state									
	Gray									
	for size 1; 3KD....-M				3KD9101-0		1	1 unit	143	0.029
	for size 2; 3KD....-N				3KD9201-0		1	1 unit	143	0.059
	Red/yellow									
	for size 1; 3KD....-M				3KD9101-8		1	1 unit	143	0.029
	for size 2; 3KD....-N				3KD9201-8		1	1 unit	143	0.059
	Red/yellow									
	Door-coupling rotary operating mechanism incl. 300 mm extension shaft and coupling driver									
	Gray									
	for size 1; 3KD....-M	8 x 8	8 x 8		3KD9115-1		1	1 unit	143	0.347
	for size 2; 3KD....-N	8 x 8	8 x 8		3KD9215-1		1	1 unit	143	0.347
	for size 3; 3KD....-P	10 x 10	8 x 8		3KD9315-1		1	1 unit	143	1.155
	for size 4; 3KD....-Q	10 x 10	10 x 10		3KD9415-1		1	1 unit	143	1.155
	for size 5; 3KD....-R	12 x 12	12 x 12		3KD9515-1		1	1 unit	143	1.155
	Red/yellow									
	for size 1; 3KD....-M	8 x 8	8 x 8		3KD9115-2		1	1 unit	143	0.347
	for size 2; 3KD....-N	8 x 8	8 x 8		3KD9215-2		1	1 unit	143	0.347
	for size 3; 3KD....-P	10 x 10	8 x 8		3KD9315-2		1	1 unit	143	0.999
	for size 4; 3KD....-Q	10 x 10	10 x 10		3KD9415-2		1	1 unit	143	0.999
	for size 5; 3KD....-R	12 x 12	12 x 12		3KD9515-2		1	1 unit	143	0.999
	Red/yellow									
	for size 1; 3KD....-M	8 x 8	8 x 8		3KD9115-2		1	1 unit	143	0.347

3KD Switch Disconnectors up to 1600 A


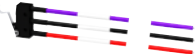


Accessories and spare parts

	Type	Shaft size handle end ¹⁾	Shaft size switch end ¹⁾	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
		mm x mm	mm x mm							
 <p>Handle without extension shaft, gray, for size 1</p>	Handles without extension shaft and coupling driver									
	Gray									
	for size 1; 3KD....-M	8 x 8	--		3KD9115-3		1	1 unit	143	0.182
	for size 2; 3KD....-N	8 x 8	--		3KD9215-3		1	1 unit	143	0.191
	for size 3; 3KD....-P	10 x 10	--		3KD9315-3		1	1 unit	143	0.473
	for size 4; 3KD....-Q	10 x 10	--		3KD9415-3		1	1 unit	143	0.460
	for size 5; 3KD....-R	12 x 12	--		3KD9515-3		1	1 unit	143	0.529
 <p>Handle without extension shaft, red/yellow, for size 1</p>	Red/yellow									
	for size 1; 3KD....-M	8 x 8	--		3KD9115-4		1	1 unit	143	0.182
	for size 2; 3KD....-N	8 x 8	--		3KD9215-4		1	1 unit	143	0.191
	for size 3; 3KD....-P	10 x 10	--		3KD9315-4		1	1 unit	143	0.450
	for size 4; 3KD....-Q	10 x 10	--		3KD9415-4		1	1 unit	143	0.485
	for size 5; 3KD....-R	12 x 12	--		3KD9515-4		1	1 unit	143	0.522
 <p>Extension shaft, 300 mm long, for size 3</p>	Extension shafts									
	300 mm long									
	for size 1/2	8 x 8	8 x 8		8UC6032		1	1 unit	103	0.135
	for size 3; 3KD....-P	10 x 10	8 x 8		3KD9302-0		1	1 unit	143	0.217
	for size 4; 3KD....-Q	10 x 10	10 x 10		8UC6033		1	1 unit	103	0.215
	for size 5; 3KD....-R	12 x 12	12 x 12		8UC6034		1	1 unit	103	0.316
 <p>Extension shaft, 600 mm long, for size 3</p>	600 mm long									
	for size 1/2	8 x 8	8 x 8		8UC6082		1	1 unit	103	0.265
	for size 3; 3KD....-P	10 x 10	8 x 8		3KD9302-1		1	1 unit	143	0.415
	for size 4; 3KD....-Q	10 x 10	10 x 10		8UC6083		1	1 unit	103	0.424
	for size 5; 3KD....-R	12 x 12	12 x 12		8UC6084		1	1 unit	103	0.628
 <p>8UC6013 coupling driver</p>	Coupling drivers									
	for 8 x 8 mm shafts				8UC6017-2AA		1	1 unit	103	0.046
	for 10 x 10 mm shafts				8UC6013		1	1 unit	103	0.235
	for 12 x 12 mm shafts				8UC6014		1	1 unit	103	0.233
 <p>Shaft coupling</p>	Shaft couplings									
	for 8 x 8 mm shafts				8UC6022		1	1 unit	103	0.022
	for 10 x 10 mm shafts				8UC6023		1	1 unit	103	0.083
	for 12 x 12 mm shafts				8UC6024		1	1 unit	103	0.078

¹⁾ With different shaft sizes at the handle/at the switch, the shaft cross-section changes over the length of the shaft

Accessories and spare parts

Auxiliary switches

	Type	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Auxiliary switch modules for sizes 1 and 2¹⁾							
	Standard version		3KD9103-5		1	1 unit	143	0.071
	Version with test function		3KD9103-6		1	1 unit	143	0.077
	Version with leading NO contacts + test function		3KD9103-7		1	1 unit	143	0.077
	Auxiliary switches for sizes 1 and 2²⁾							
	1 CO		3KD9103-1		1	1 unit	143	0.024
	1 CO contact, solid-state compatible		3KD9103-3		1	1 unit	143	0.024
	for sizes 3 to 5³⁾							
 	1 NO	▶	3SB3400-0B		1	1 unit	41J	0.011
	1 NO with gold-plated contacts		3SB3400-0BA		1	1 unit	41J	0.011
	1 NC	▶	3SB3400-0C		1	1 unit	41J	0.010
	1 NO with gold-plated contacts		3SB3400-0CA		1	1 unit	41J	0.011
	1 NO + 1 NC	▶	3SB3400-0A		1	1 unit	41J	0.016
	1 NO + 1 NC with gold-plated contacts		3SB3400-0AA		1	1 unit	41J	0.016
	2 NO		3SB3400-0D		1	1 unit	41J	0.017
	2 NO with gold-plated contacts		3SB3400-0DA		1	1 unit	41J	0.017
	2 NC		3SB3400-0E		1	1 unit	41J	0.017
	2 NC with gold-plated contacts		3SB3400-0EA		1	1 unit	41J	0.017

¹⁾ Unit is supplied without auxiliary switches, a maximum of 2 auxiliary switches can be installed





²⁾ Unit is shipped with soldered-on 50 cm connecting cables

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

3KD Switch Disconnectors up to 1600 A

Accessories and spare parts

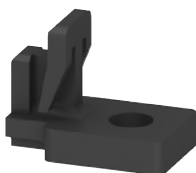
Other accessories

Type	For size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
Phase barriers								
	For 3KD with flat terminal							
	For 3-pole devices (1 set = 6 units)							
		2; 3KD.....N	3KD9108-6		1	1 unit	143	0.044
		3; 3KD.....P	3KD9308-6		1	1 unit	143	0.084
		4; 3KD.....Q	3KD9408-6		1	1 unit	143	0.111
		5; 3KD.....R	3KD9508-6		1	1 unit	143	0.197
	For 4-pole devices (1 set = 8 units)							
		2; 3KD.....N	3KD9108-8		1	1 unit	143	0.059
		3; 3KD.....P	3KD9308-8		1	1 unit	143	0.112
		4; 3KD.....Q	3KD9408-8		1	1 unit	143	0.148
		5; 3KD.....R	3KD9508-8		1	1 unit	143	0.263
Cable connection covers								
	For 3KD with flat terminal							
	For 3-pole devices (1 set = 6 units)							
	Standard length							
		2; 3KD.....N	3KD9204-6		1	1 unit	143	0.141
		3; 3KD.....P	3KD9304-6		1	1 unit	143	0.296
		4; 3KD.....Q	3KD9404-6		1	1 unit	143	0.429
		5; 3KD.....R	3KD9504-6		1	1 unit	143	0.890
	Short version							
		2; 3KD.....N	3KD9204-7		1	1 unit	143	0.103
		3; 3KD.....P	3KD9304-7		1	1 unit	143	0.171
		4; 3KD.....Q	3KD9404-7		1	1 unit	143	0.243
	For 4-pole devices (1 set = 8 units)							
	Standard length							
		2; 3KD.....N	3KD9204-8		1	1 unit	143	0.188
		3; 3KD.....P	3KD9304-8		1	1 unit	143	0.395
		4; 3KD.....Q	3KD9404-8		1	1 unit	143	0.572
		5; 3KD.....R	3KD9504-8		1	1 unit	143	1.187
	Short version							
		2; 3KD.....N	3KD9204-5		1	1 unit	143	0.137
		3; 3KD.....P	3KD9304-5		1	1 unit	143	0.228
		4; 3KD.....Q	3KD9404-5		1	1 unit	143	0.324
	Short version							
		2; 3KD.....N	3KD9204-5		1	1 unit	143	0.137
		3; 3KD.....P	3KD9304-5		1	1 unit	143	0.228
		4; 3KD.....Q	3KD9404-5		1	1 unit	143	0.324

3KD Switch Disconnectors up to 1600 A

Accessories and spare parts

Type	For size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
Spare cable connection cover (1 unit)								
Standard length	5; 3KD.....R		3KD9504-1		1	1 unit	143	0.148
Short version	2; 3KD.....N		3KD9204-1		1	1 unit	143	0.025
	3; 3KD.....P		3KD9304-1		1	1 unit	143	0.028
	4; 3KD.....Q		3KD9404-1		1	1 unit	143	0.040
Mounting bracket (1 set = 4 units)								
Spare part, is included in the scope of supply of the 3KD.								
Mounting bracket	1 and 2		3KD9120-1		1	1 unit	143	0.003

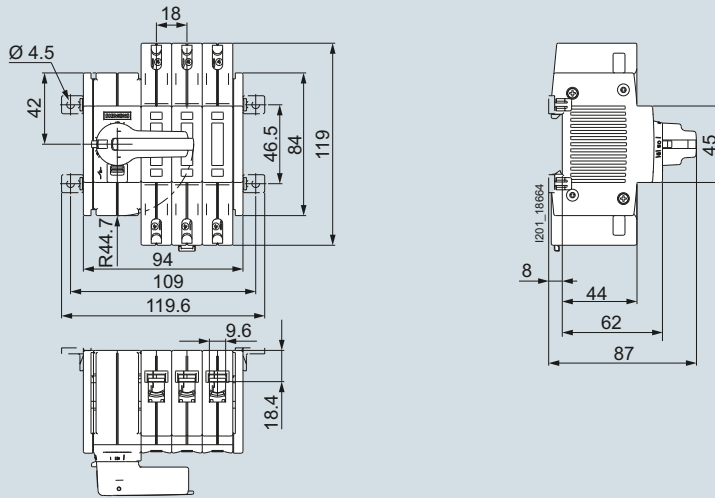


3KD Switch Disconnectors up to 1600 A

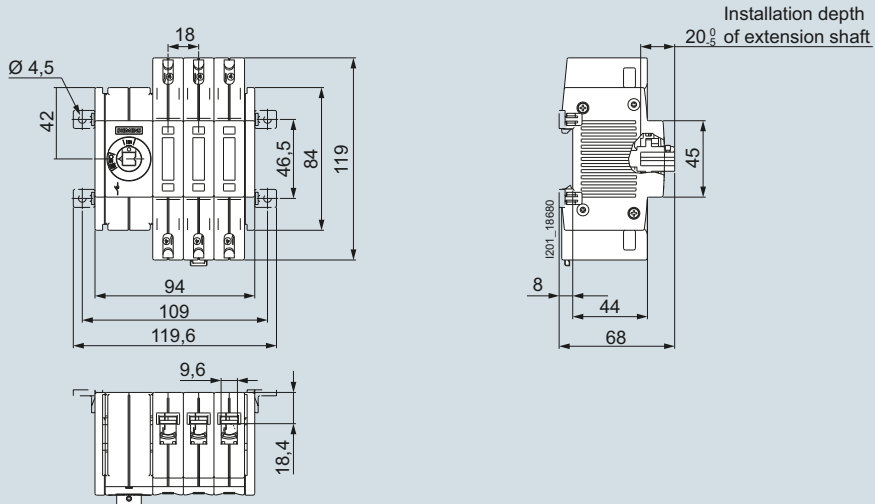
Dimensions and typical circuit diagrams

Dimensional drawings

Size 1

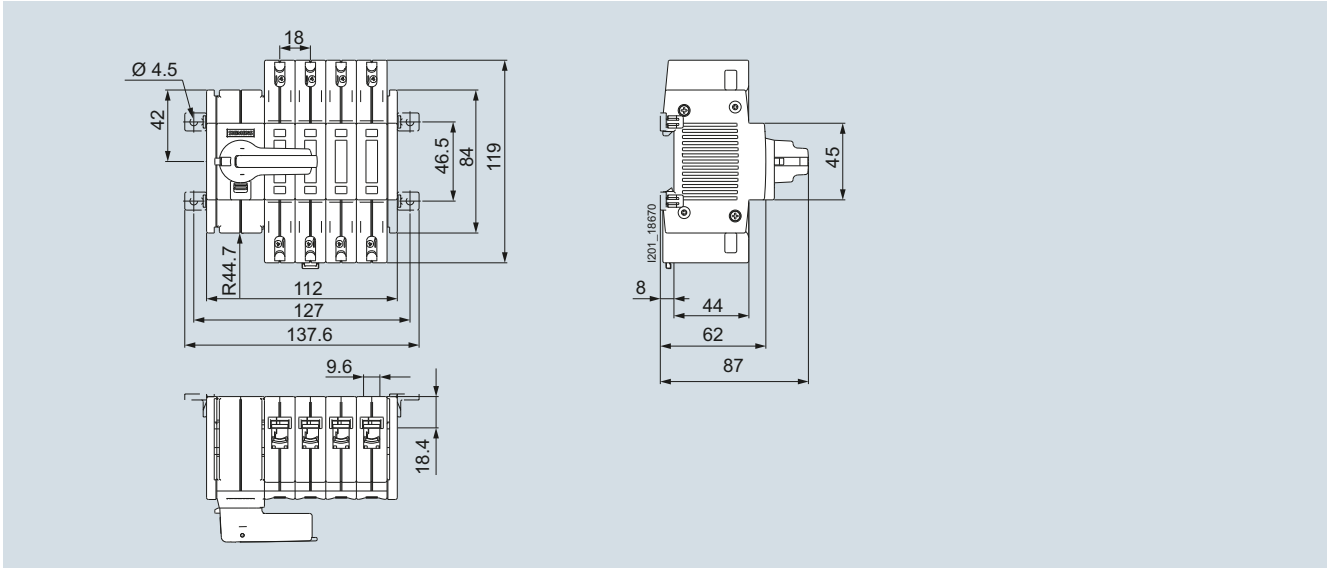


Complete assembly with direct operating mechanism, 3-pole, box terminal

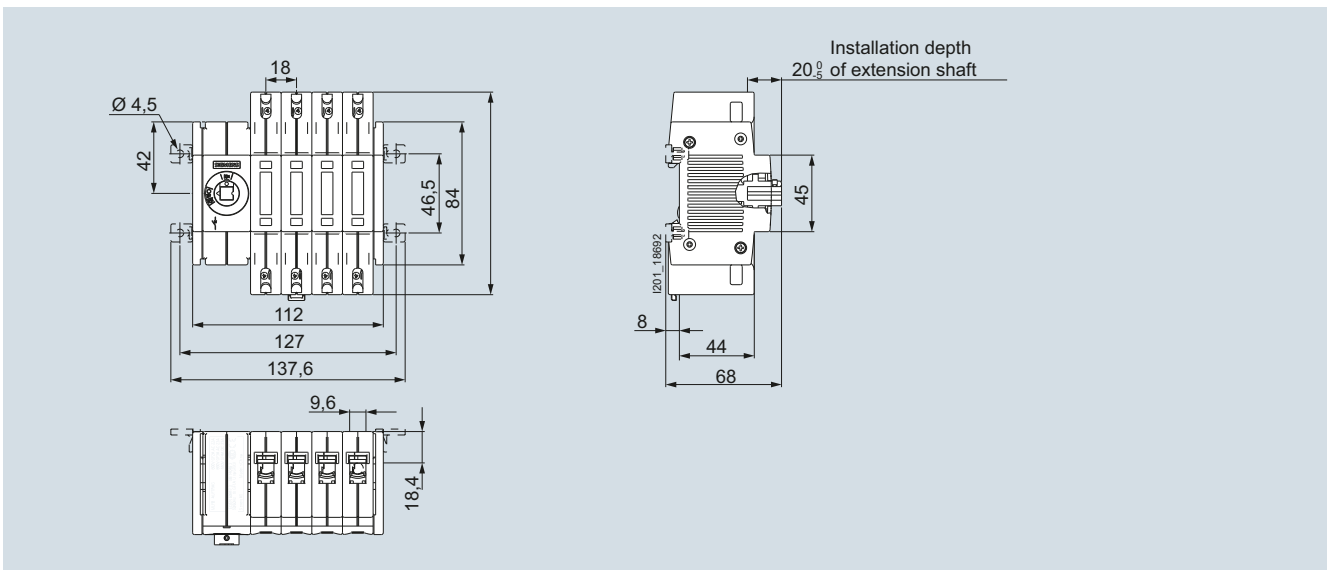


Basic unit without handle, 3-pole, box terminal

Size 1 (continued)



Complete assembly with direct operating mechanism, 4-pole, box terminal



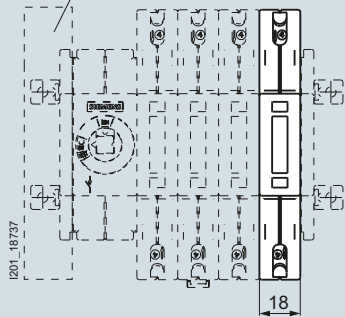
Basic unit without handle, 4-pole, box terminal

3KD Switch Disconnectors up to 1600 A

Dimensions and typical circuit diagrams

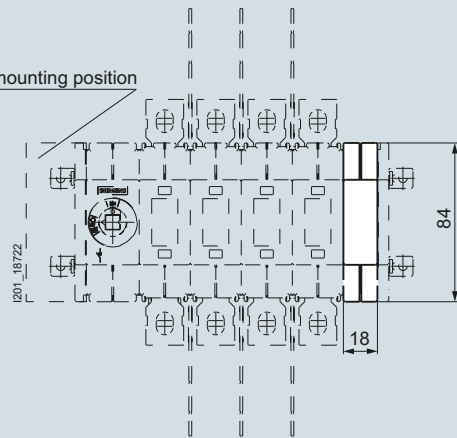
Size 1 (continued)

Optional mounting position

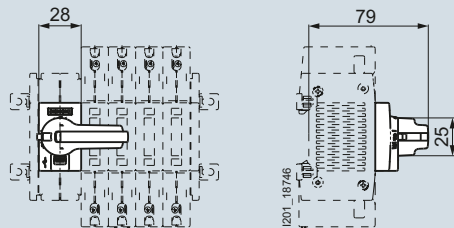
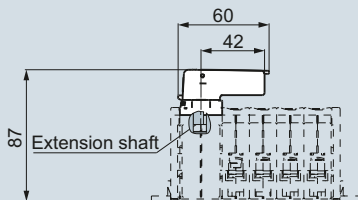


Accessories: 4th contact element, neutral conductor terminal, N/PE terminal
Note: 4th contact element can only be installed on 3-pole basic units; for side view dimensions, [see basic unit](#)

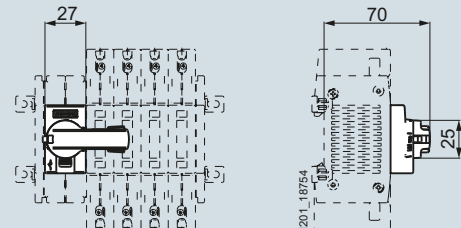
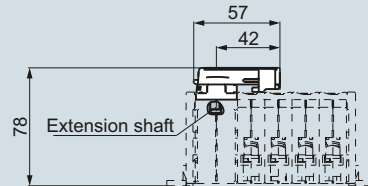
Optional mounting position



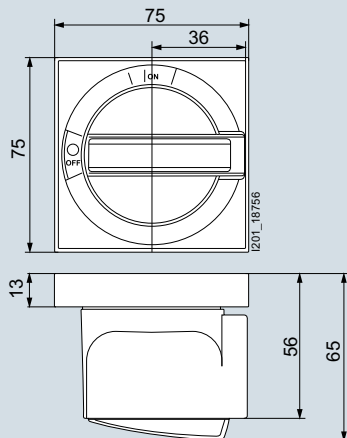
Accessories: Auxiliary switch module
Note: Auxiliary switch modules with test function must always be installed directly adjacent to the operating mechanism unit



Accessories: Direct operating mechanism, standard version

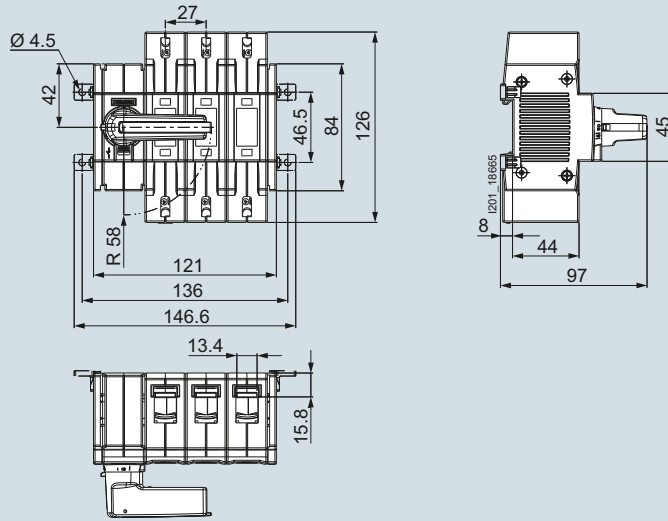


Accessories: Direct operating mechanism, flat version

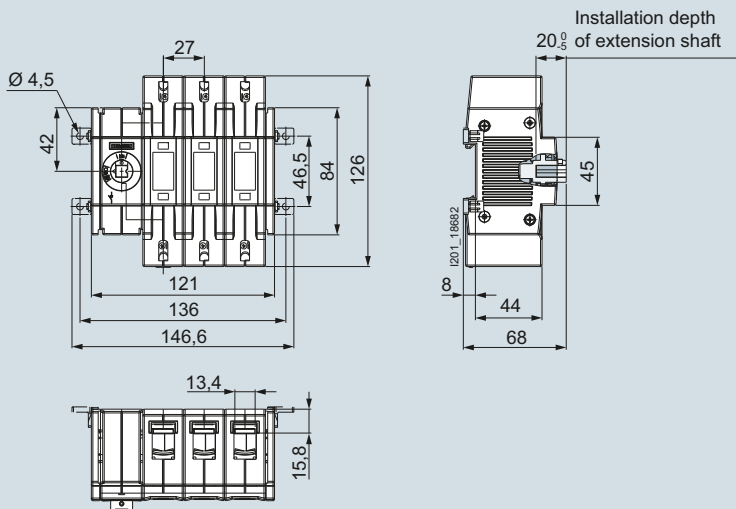


Accessories: Handle of door-coupling rotary operating mechanism

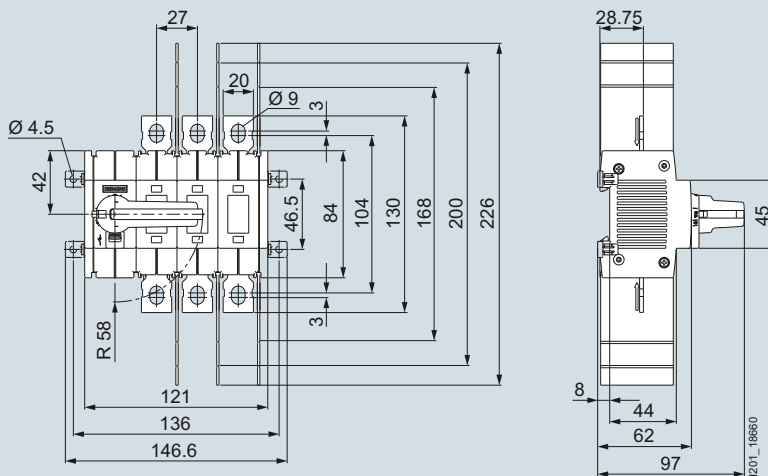
Size 2



Complete assembly with direct operating mechanism, 3-pole, box terminal



Basic unit without handle, 3-pole, box terminal

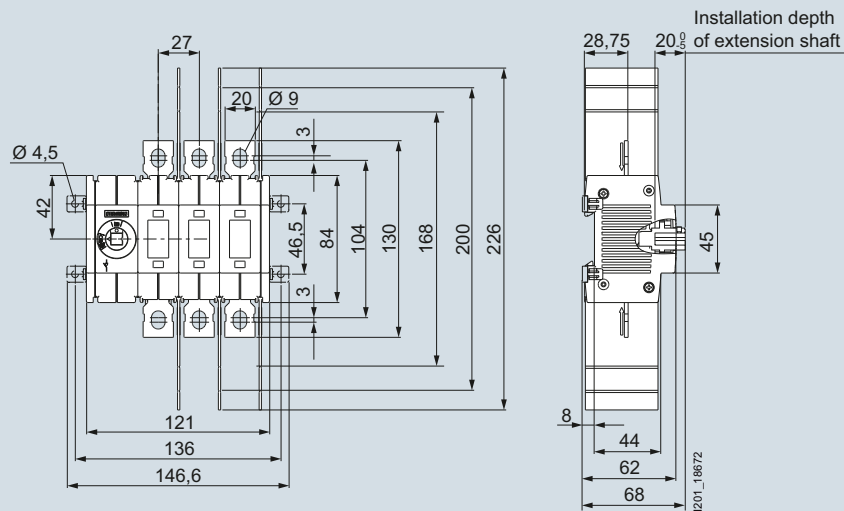


Complete assembly with direct operating mechanism, 3-pole, flat terminal

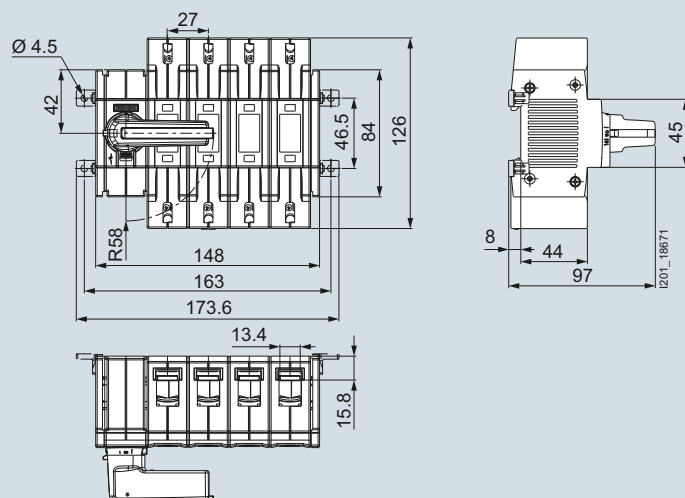
3KD Switch Disconnectors up to 1600 A

Dimensions and typical circuit diagrams

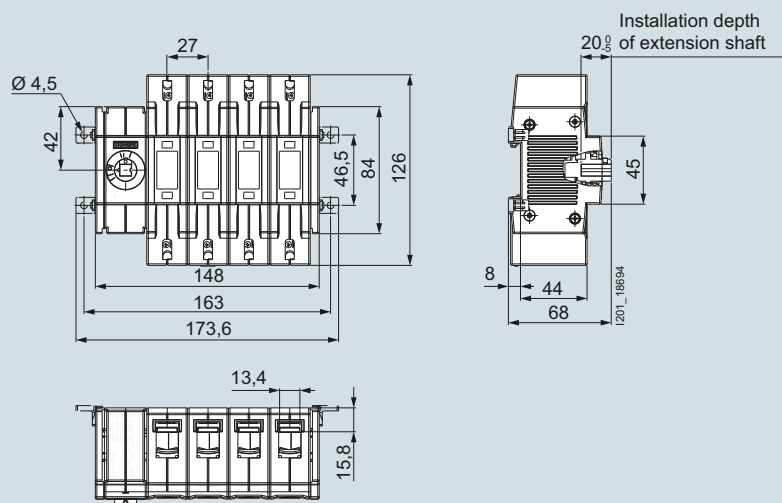
Size 2 (continued)



Basic unit without handle, 3-pole, flat terminal



Complete assembly with direct operating mechanism, 4-pole, box terminal

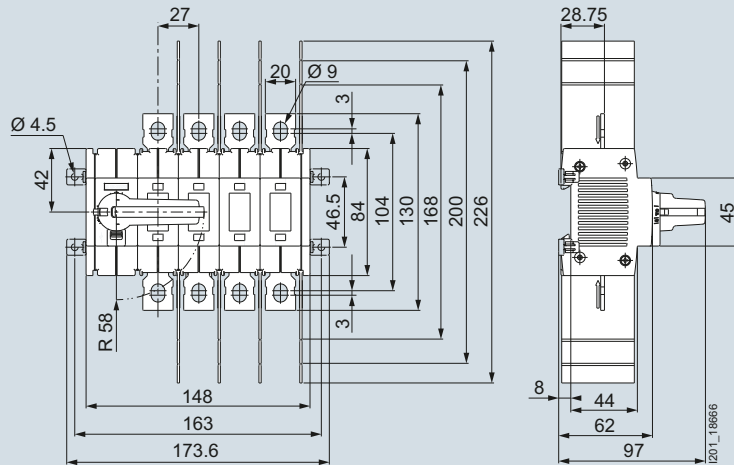


Basic unit without handle, 4-pole, box terminal

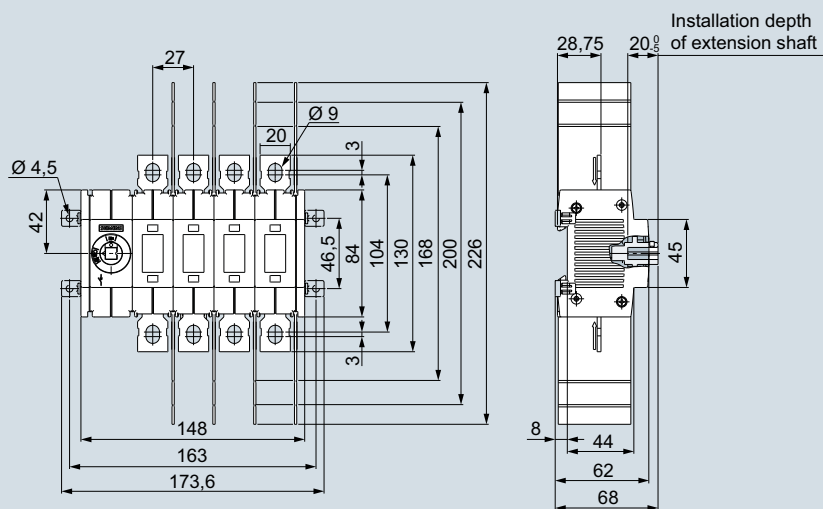
3KD Switch Disconnectors up to 1600 A

Dimensions and typical circuit diagrams

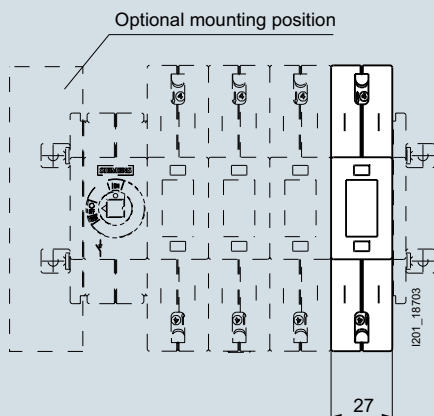
Size 2 (continued)



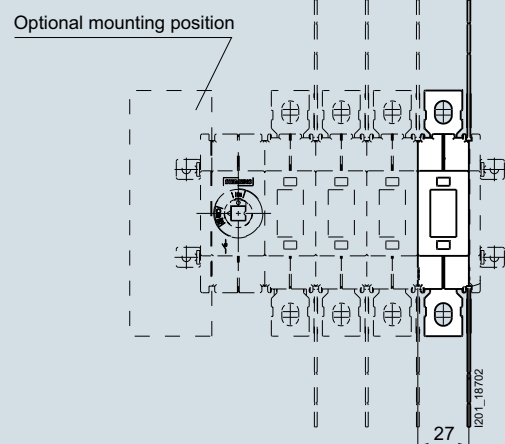
Complete assembly with direct operating mechanism, 4-pole, flat terminal



Basic unit without handle, 4-pole, flat terminal



Accessories: 4th contact element, neutral conductor terminal, N/PE terminal with box terminal
Note: 4th contact element can only be installed on 3-pole basic units; for side view dimensions, [see basic unit](#)



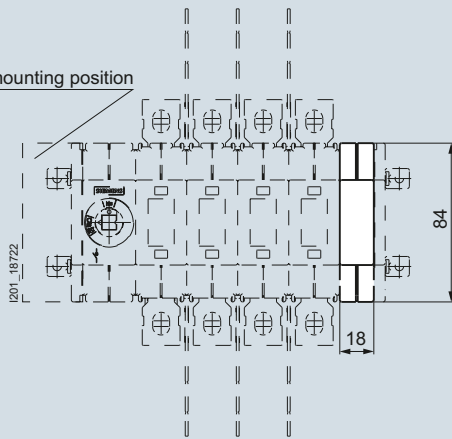
Accessories: 4th contact element, neutral conductor terminal, N/PE terminal with flat terminal
Notes: 4th contact element can only be installed on 3-pole basic units; for side view dimensions, [see basic unit](#)

3KD Switch Disconnectors up to 1600 A

Dimensions and typical circuit diagrams

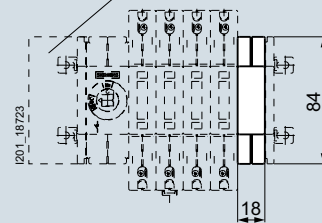
Size 2 (continued)

Optional mounting position

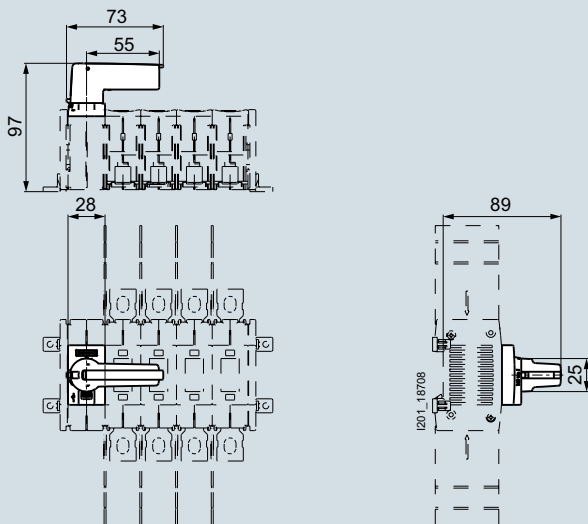


Accessories: Auxiliary switch module, installed on 3KD switch disconnector with box terminal
Note: Auxiliary switch modules with test function must always be installed directly adjacent to the operating mechanism unit

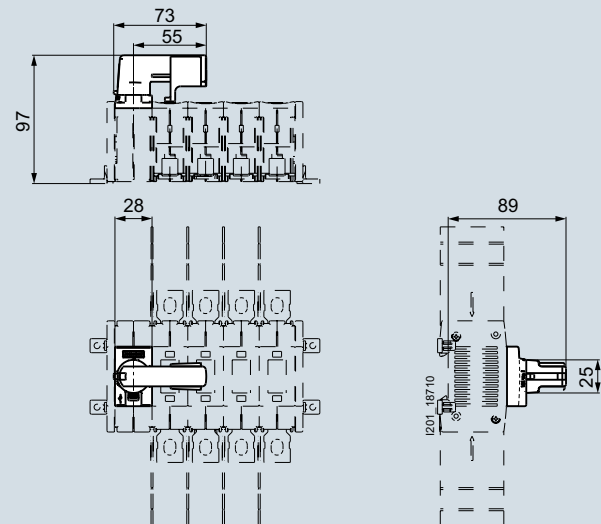
Optional mounting position



Accessories: Auxiliary switch module, installed on 3KD with flat terminal
Note: Auxiliary switch modules with test function must always be installed directly adjacent to the operating mechanism unit



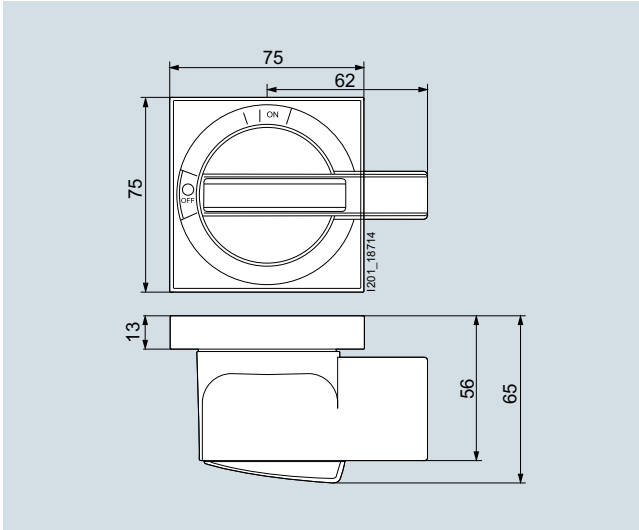
Accessories: Direct operating mechanism, standard version



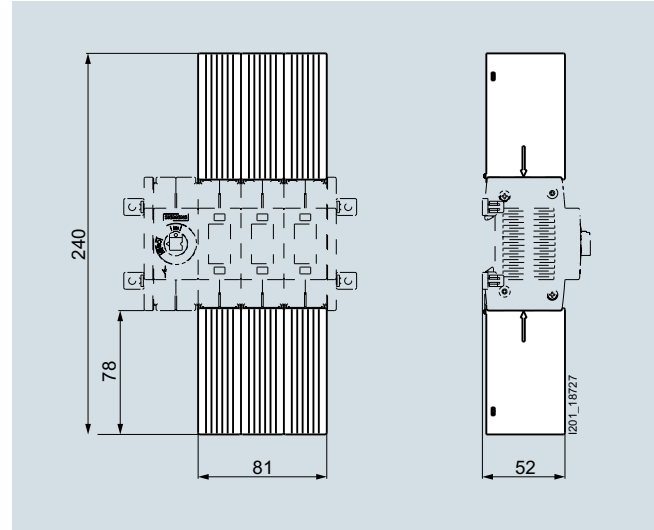
Accessories: Direct operating mechanism, flat version

Dimensions and typical circuit diagrams

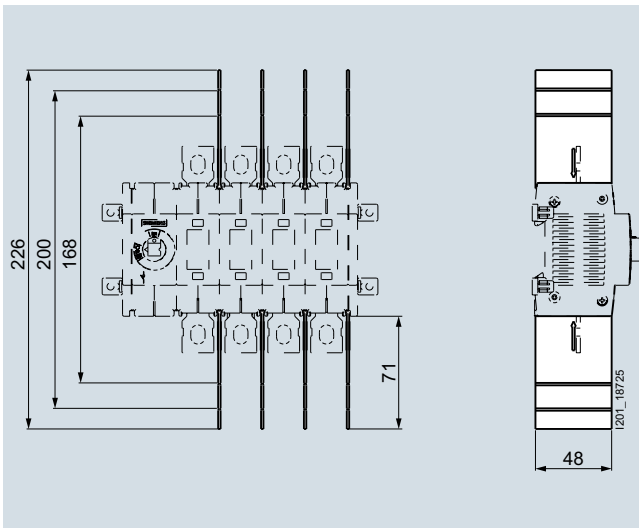
Size 2 (continued)



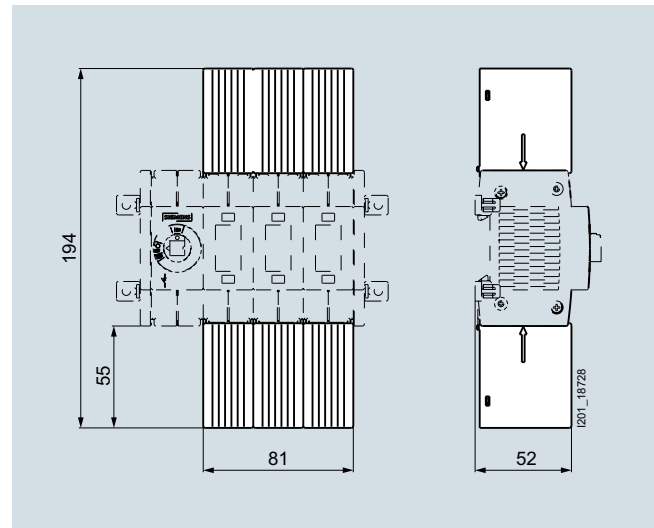
Accessories: Handle of door-coupling rotary operating mechanism



Accessories: Cable connection covers, standard version



Accessories: Phase barriers

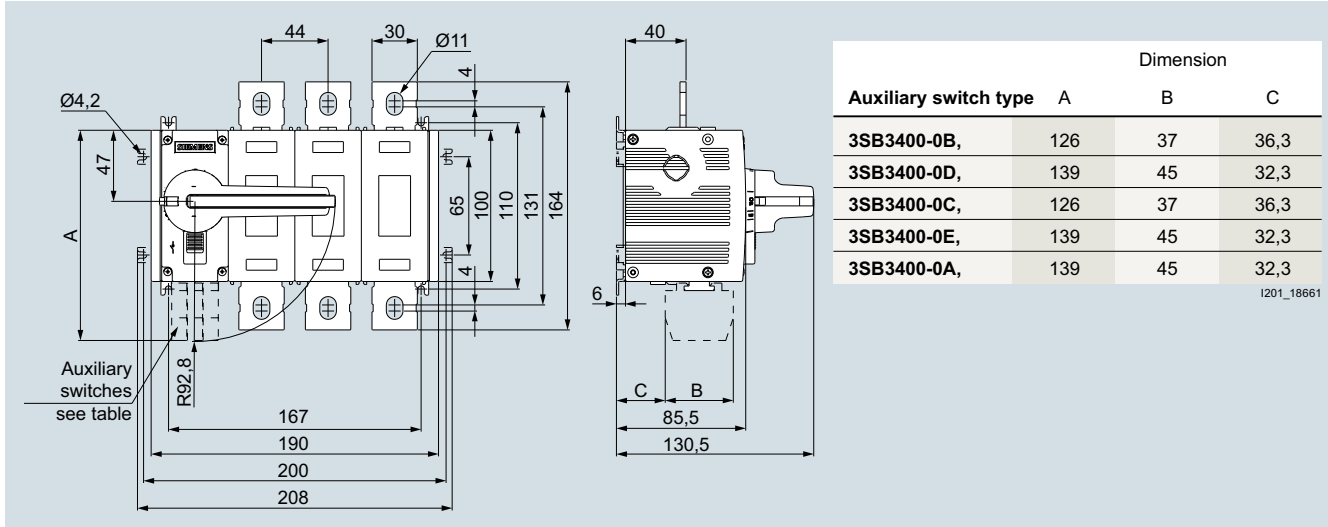


Accessories: Cable connection covers, short version

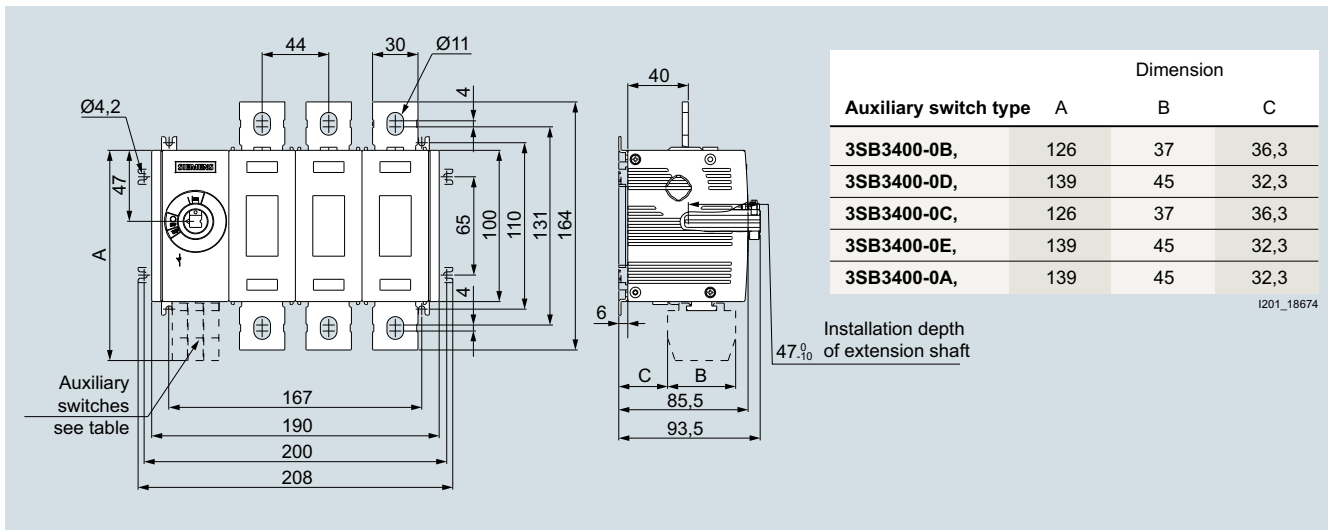
3KD Switch Disconnectors up to 1600 A

Dimensions and typical circuit diagrams

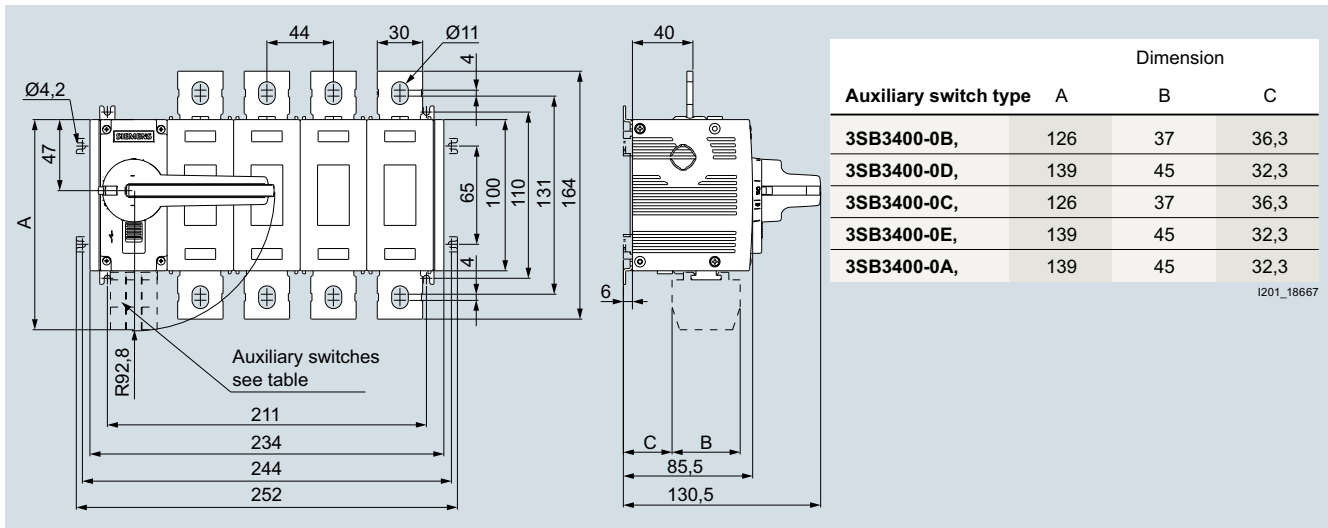
Size 3



Complete assembly with direct operating mechanism, 3-pole, flat terminal



Basic unit without handle, 3-pole, flat terminal

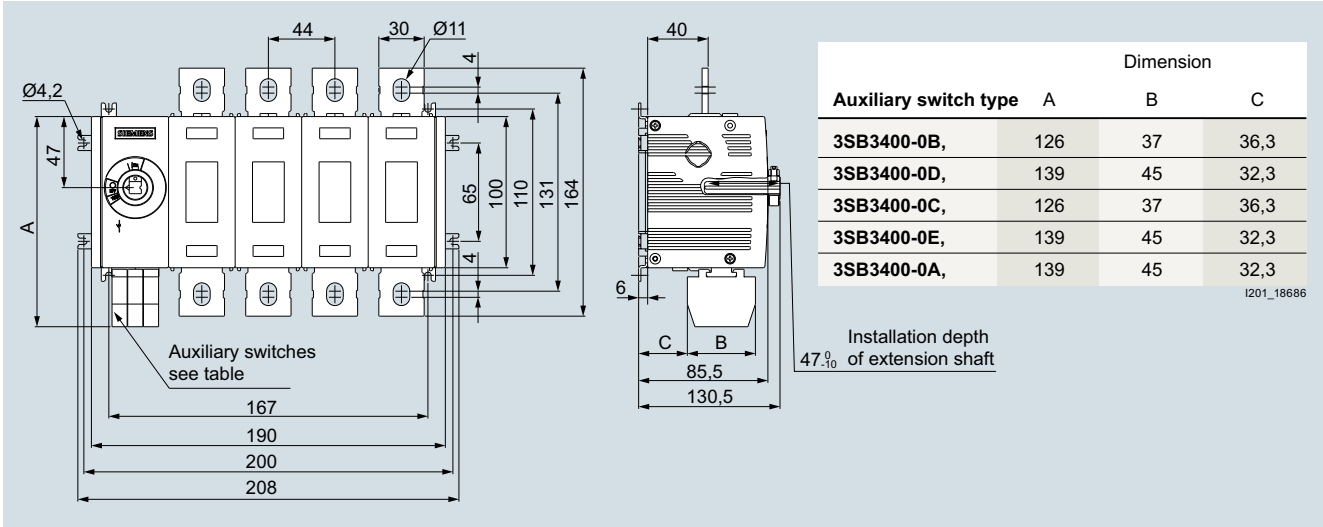


Complete assembly with direct operating mechanism, 4-pole, flat terminal

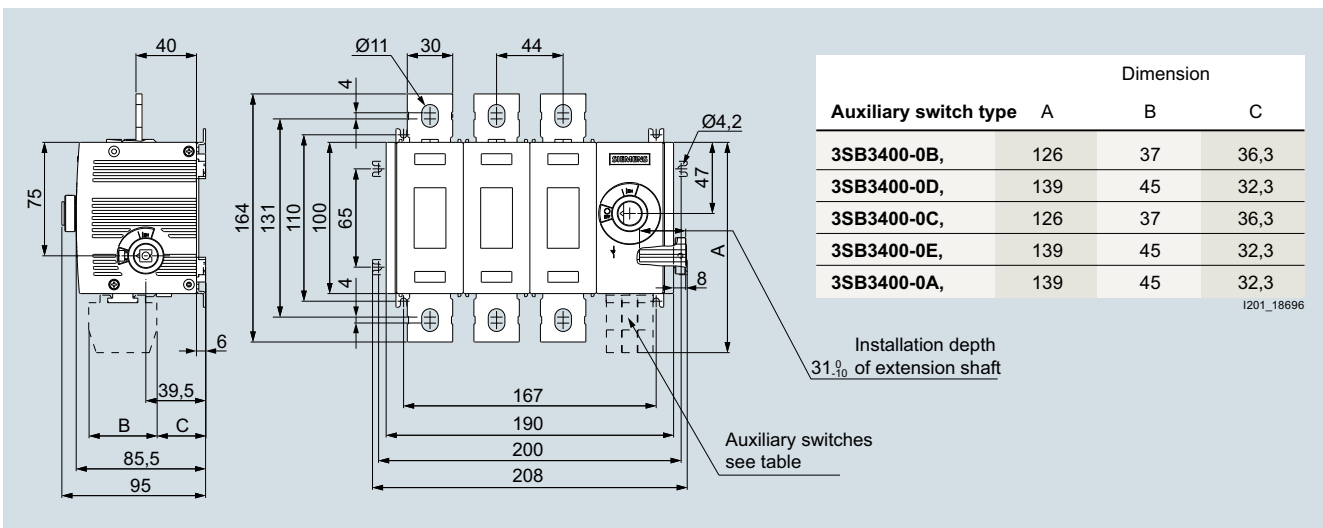
3KD Switch Disconnectors up to 1600 A

Dimensions and typical circuit diagrams

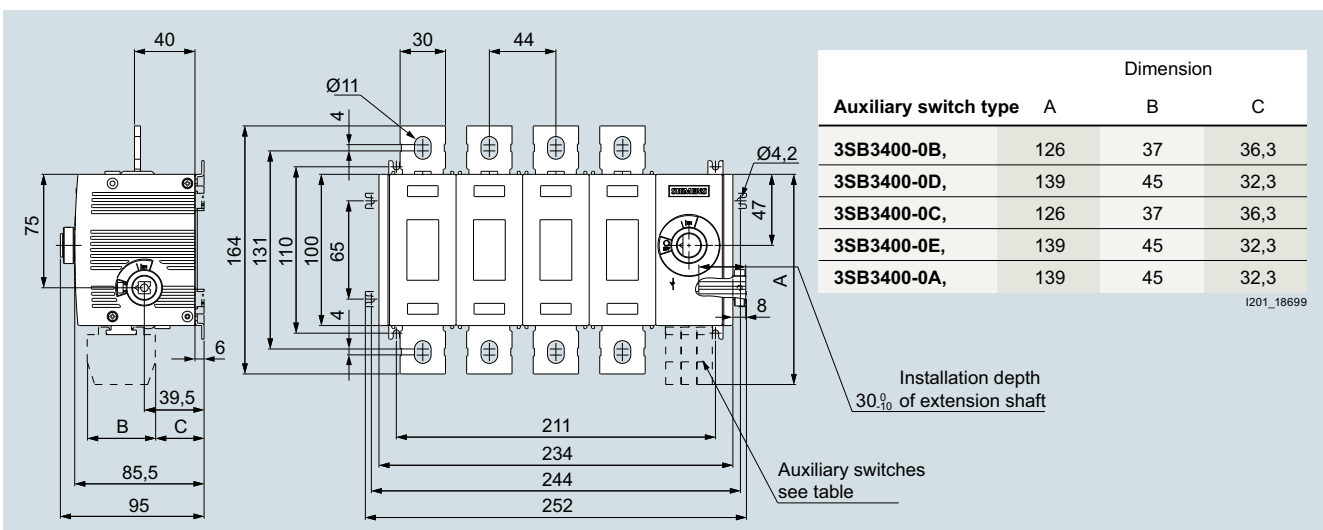
Size 3 (continued)



Basic unit without handle, front operating mechanism, 4-pole, flat terminal



Basic unit without handle, side operating mechanism, 3-pole, flat terminal



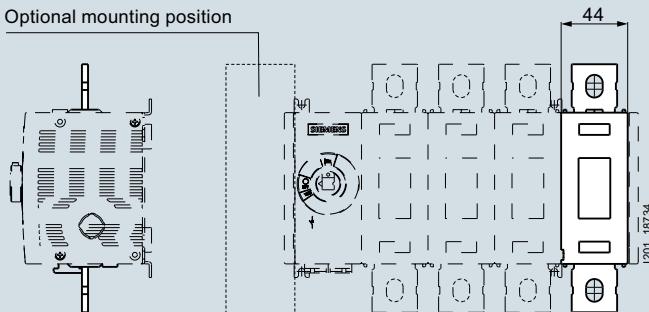
Basic unit without handle, side operating mechanism, 4-pole, flat terminal

3KD Switch Disconnectors up to 1600 A

Dimensions and typical circuit diagrams

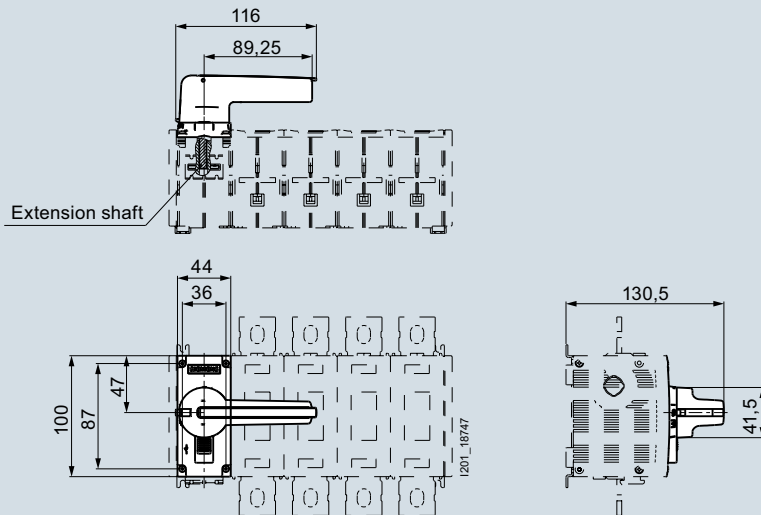
Size 3 (continued)

Optional mounting position

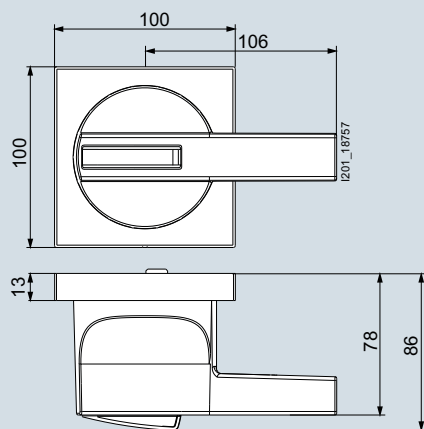


Accessories: 4th contact element, neutral conductor terminal, N/PE terminal with flat terminal

Notes: 4th contact element can only be installed on 3-pole basic units;
for side view dimensions, see [basic unit](#)

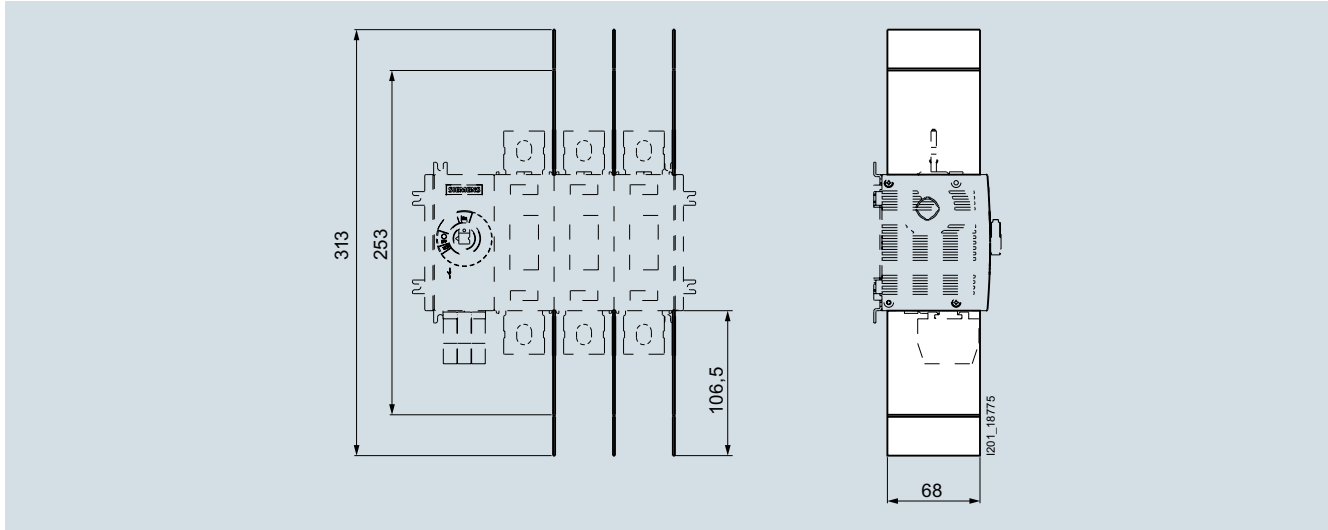


Accessories: Direct operating mechanism, standard version

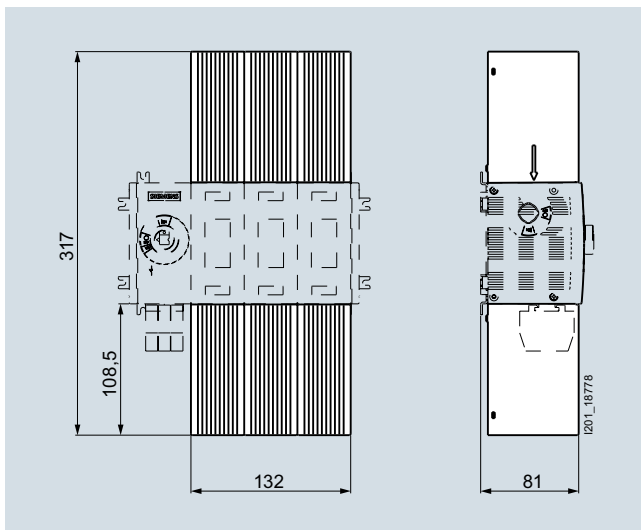


Accessories: Handle of door-coupling rotary operating mechanism

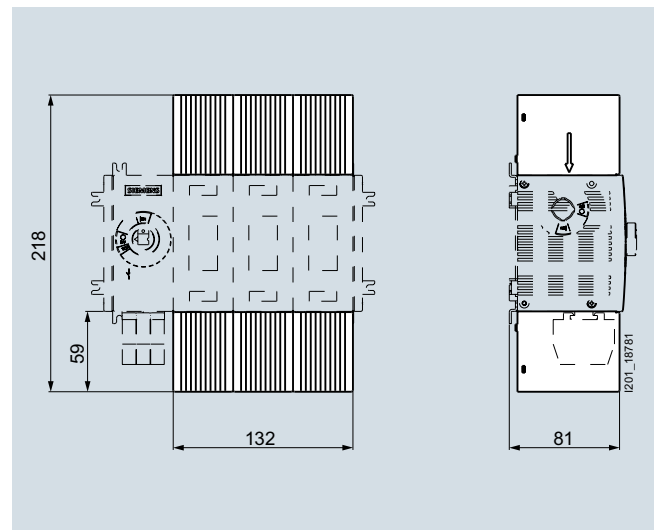
Size 3 (continued)



Accessories: Phase barriers



Accessories: Cable connection covers, standard version

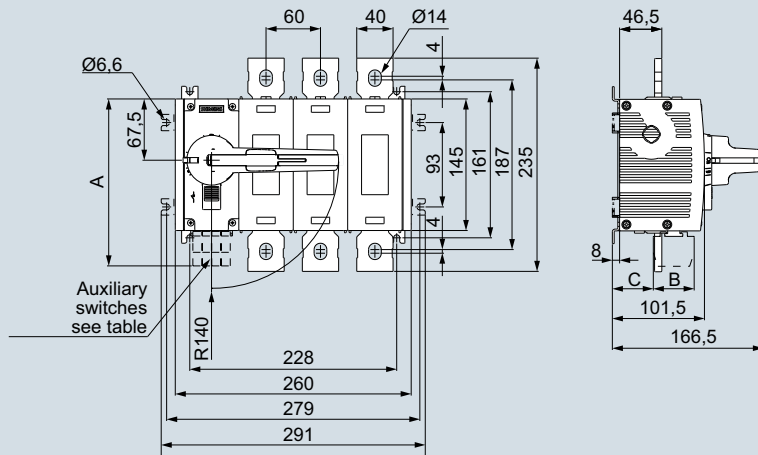


Accessories: Cable connection covers, short version

3KD Switch Disconnectors up to 1600 A

Dimensions and typical circuit diagrams

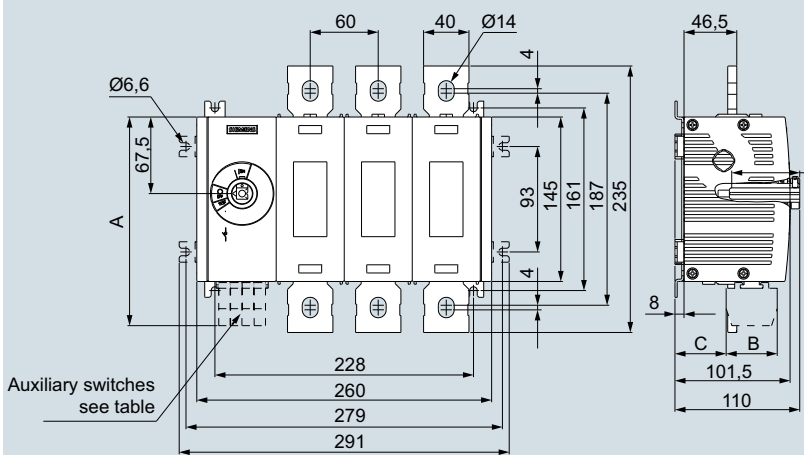
Size 4



Auxiliary switch type	Dimension		
	A	B	C
3SB3400-0B,	171	37	49,15
3SB3400-0D,	184	45	45,15
3SB3400-0C,	171	37	49,15
3SB3400-0E,	184	45	45,15
3SB3400-0A,	184	45	45,15

I201_18662

Complete assembly with direct operating mechanism, 3-pole, flat terminal

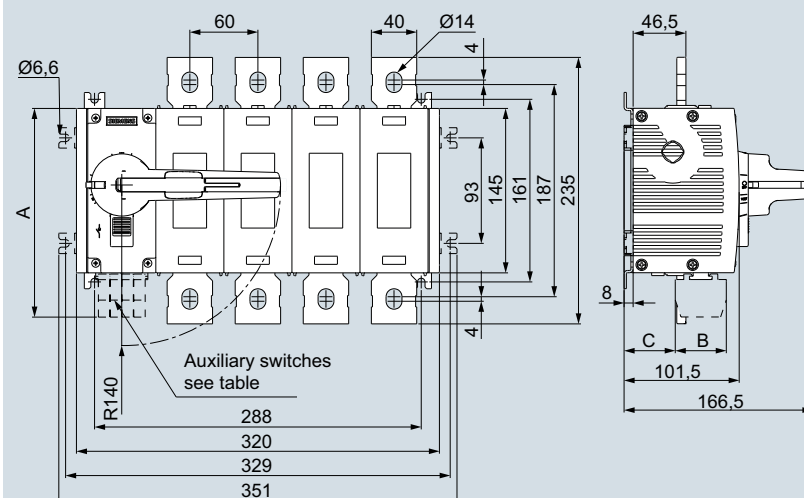


Auxiliary switch type	Dimension		
	A	B	C
3SB3400-0B,	171	37	49,15
3SB3400-0D,	184	45	45,15
3SB3400-0C,	171	37	49,15
3SB3400-0E,	184	45	45,15
3SB3400-0A,	184	45	45,15

I201_18676

Installation depth
60⁰/₁₀ of extension shaft

Basic unit without handle, front operating mechanism, 3-pole, flat terminal



Auxiliary switch type	Dimension		
	A	B	C
3SB3400-0B,	171	37	49,15
3SB3400-0D,	184	45	45,15
3SB3400-0C,	171	37	49,15
3SB3400-0E,	184	45	45,15
3SB3400-0A,	184	45	45,15

I201_18668

Complete assembly with direct operating mechanism, 4-pole, flat terminal

2

Auxiliary switch type	A	B	C
3SB3400-0B,	171	37	49,15
3SB3400-0D,	184	45	45,15
3SB3400-0C,	171	37	49,15
3SB3400-0E,	184	45	45,15
3SB3400-0A,	184	45	45,15

Installation depth
60⁺⁰₋₁₀ of extension shaft

[illegible]

Auxiliary switch type	Dimension		
	A	B	C
3SB3400-0B,	171	37	49,15
3SB3400-0D,	184	45	45,15
3SB3400-0C,	171	37	49,15
3SB3400-0E,	184	45	45,15
3SB3400-0A,	184	45	45,15

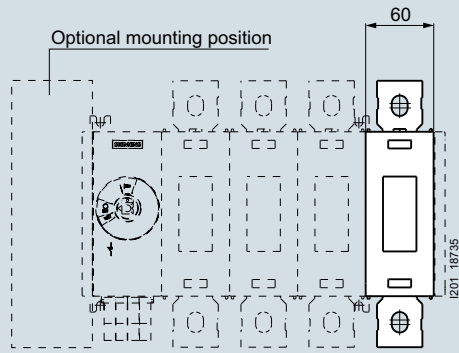
I201_18700

2/25

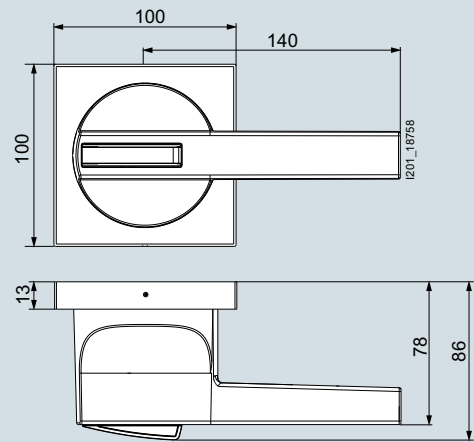
3KD Switch Disconnectors up to 1600 A

Dimensions and typical circuit diagrams

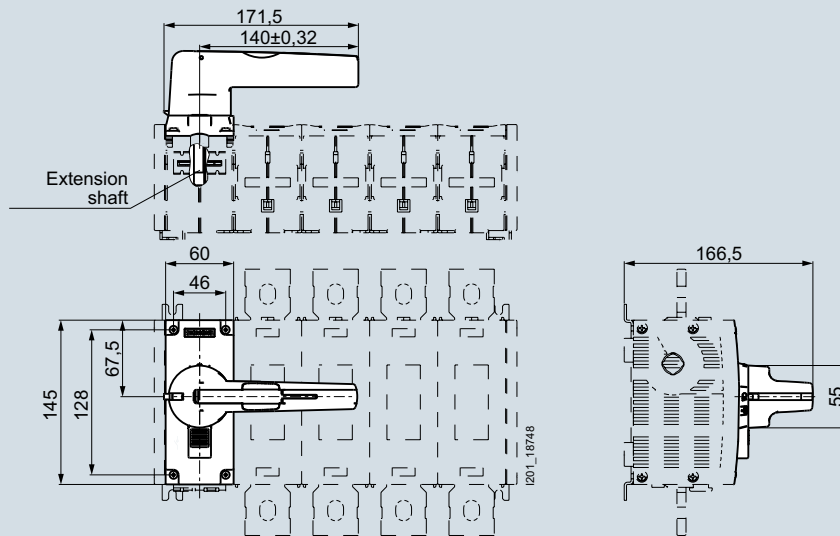
Size 4 (continued)



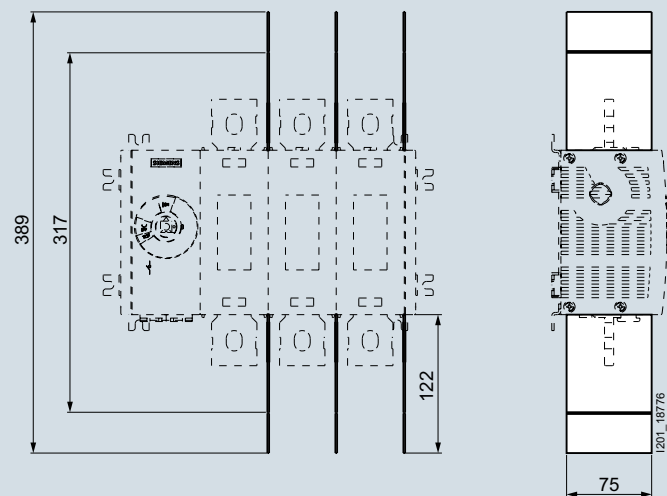
Accessories: 4th contact element, neutral conductor terminal, N/PE terminal with flat terminal
 Note: 4th contact element can only be installed on 3-pole basic units; for side view dimensions, see [basic unit](#)



Accessories: Handle of door-coupling rotary operating mechanism

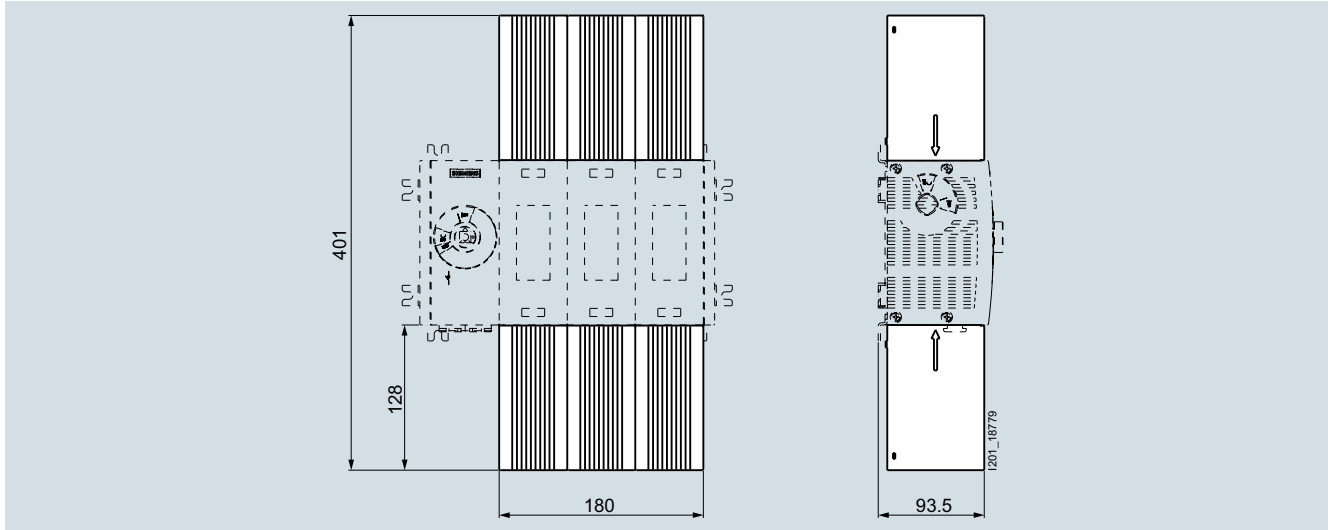


Accessories: Direct operating mechanism, standard version

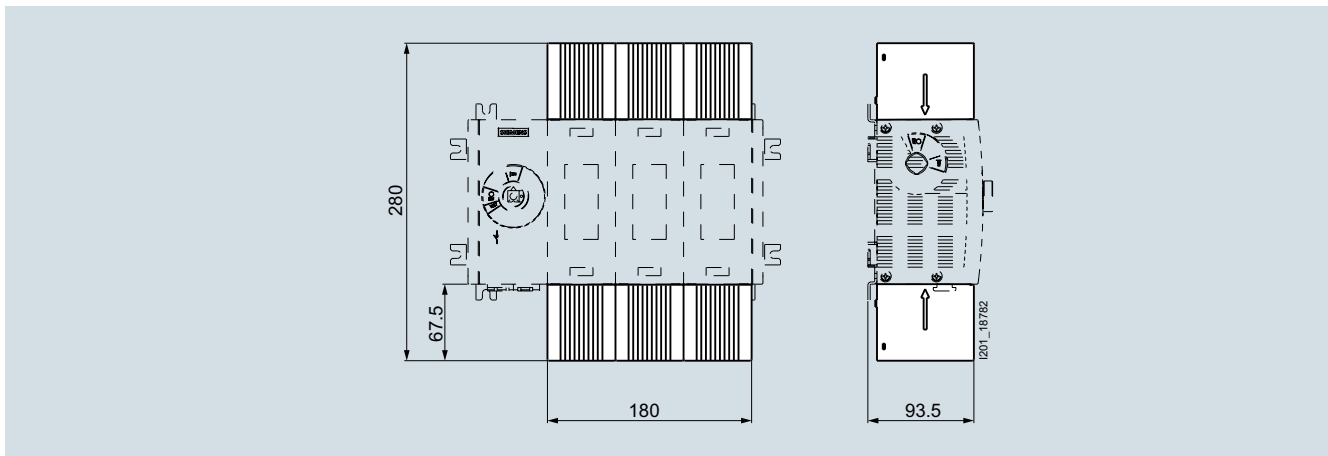


Accessories: Phase barriers

Size 4 (continued)



Accessories: Cable connection covers, standard version

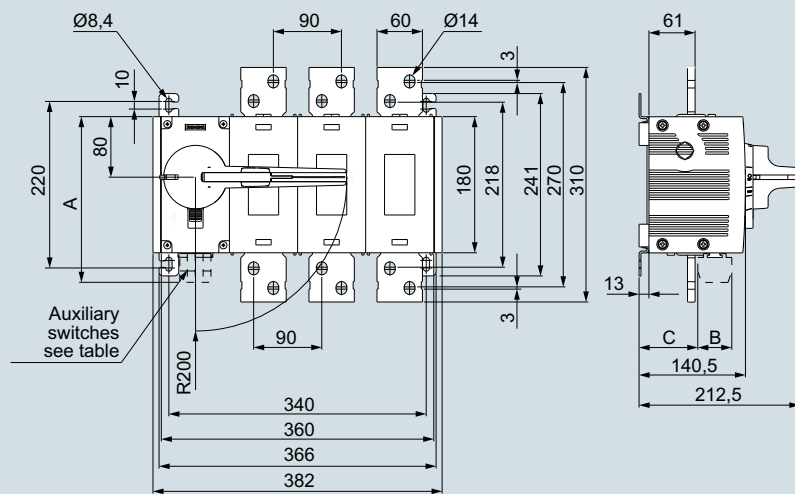


Accessories: Cable connection covers, short version

3KD Switch Disconnectors up to 1600 A

Dimensions and typical circuit diagrams

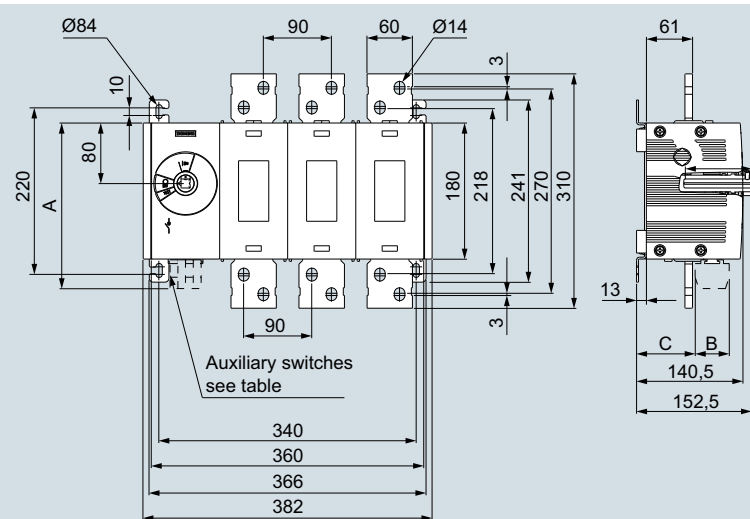
Size 5



Auxiliary switch type	Dimension		
	A	B	C
3SB3400-0B,	206	37	81,5
3SB3400-0D,	219	45	77,5
3SB3400-0C,	206	37	81,5
3SB3400-0E,	219	45	77,5
3SB3400-0A,	219	45	77,5

I201_18663

Complete assembly with direct operating mechanism, 3-pole, flat terminal

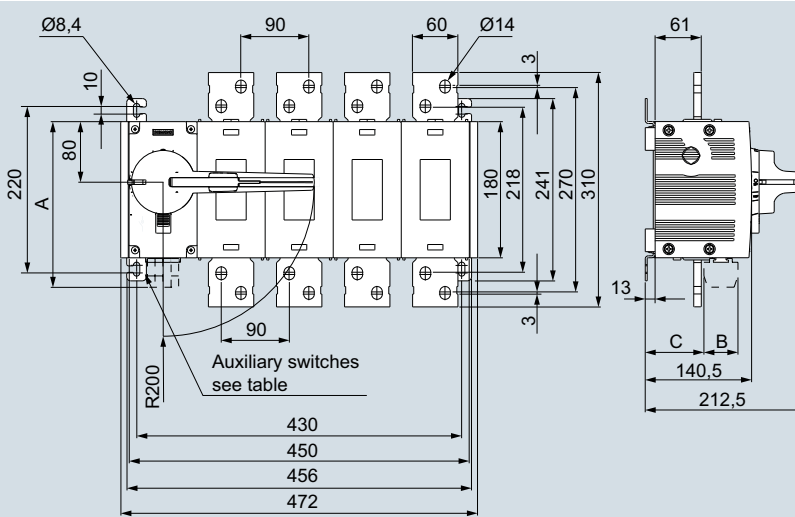


Auxiliary switch type	Dimension		
	A	B	C
3SB3400-0B,	206	37	81,5
3SB3400-0D,	219	45	77,5
3SB3400-0C,	206	37	81,5
3SB3400-0E,	219	45	77,5
3SB3400-0A,	219	45	77,5

I201_18678

Installation depth
88₋₁₀ of extension shaft

Basic unit without handle, front operating mechanism, 3-pole, flat terminal



Auxiliary switch type	Dimension		
	A	B	C
3SB3400-0B,	206	37	81,5
3SB3400-0D,	219	45	77,5
3SB3400-0C,	206	37	81,5
3SB3400-0E,	219	45	77,5
3SB3400-0A,	219	45	77,5

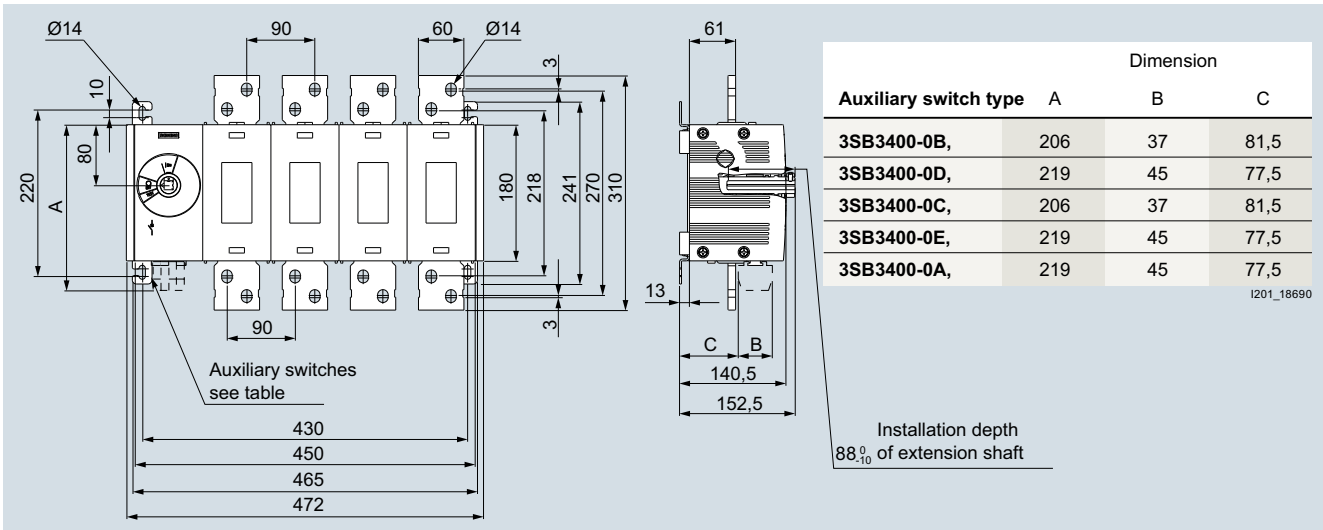
I201_18669

Complete assembly with direct operating mechanism, 4-pole, flat terminal

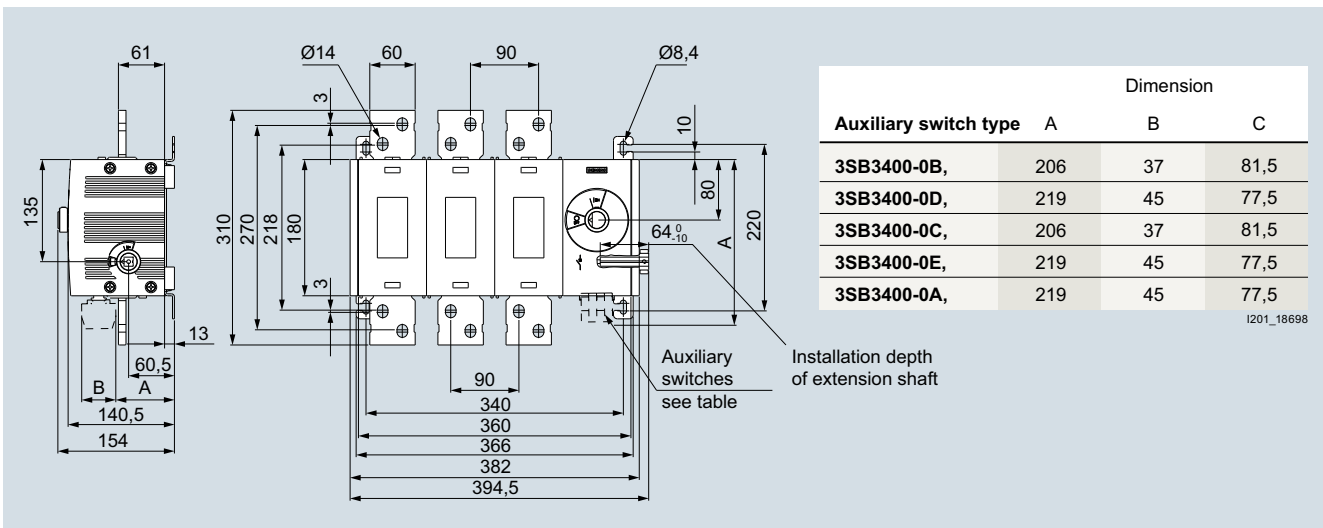
3KD Switch Disconnectors up to 1600 A

Dimensions and typical circuit diagrams

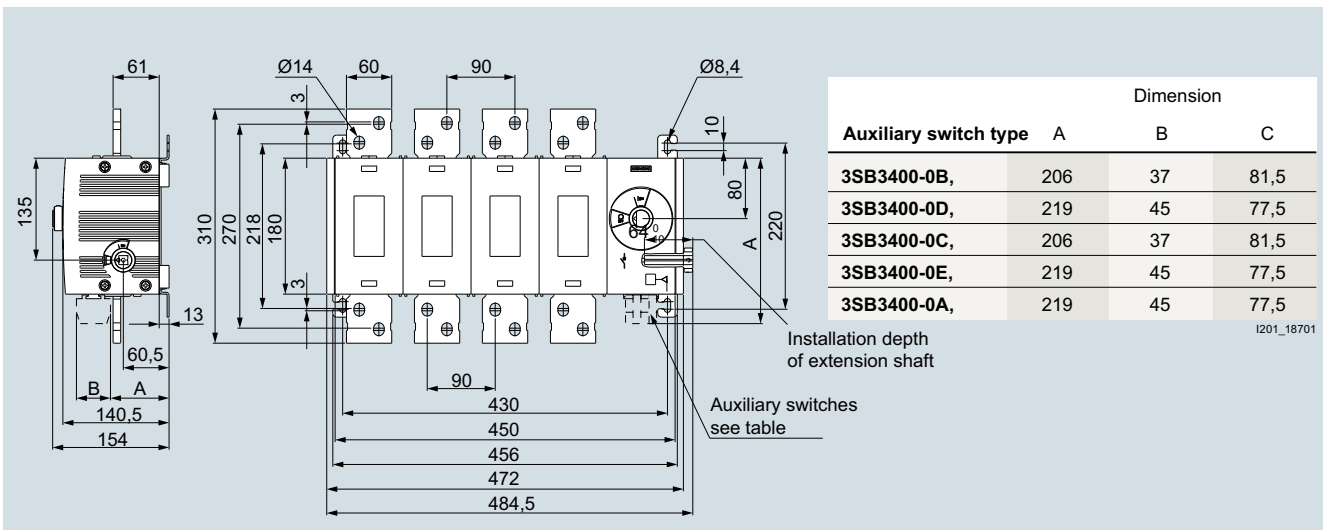
Size 5 (continued)



Basic unit without handle, front operating mechanism, 4-pole, flat terminal



Basic unit without handle, side operating mechanism, 3-pole, flat terminal

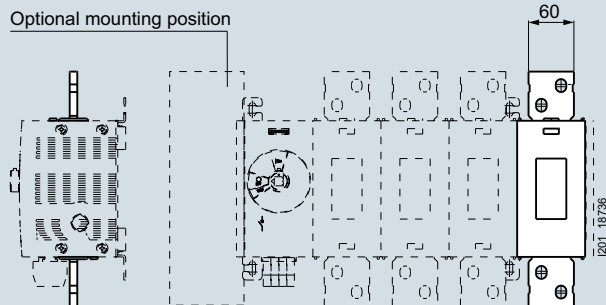


Basic unit without handle, side operating mechanism, 4-pole, flat terminal

3KD Switch Disconnectors up to 1600 A

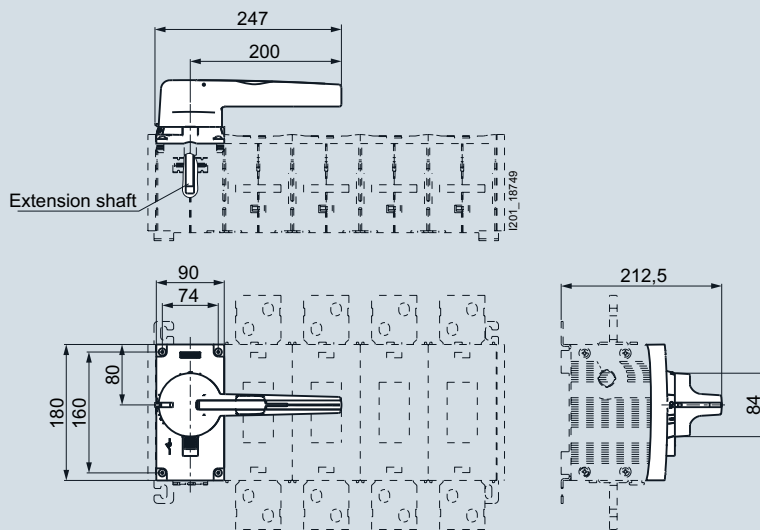
Dimensions and typical circuit diagrams

Size 5 (continued)

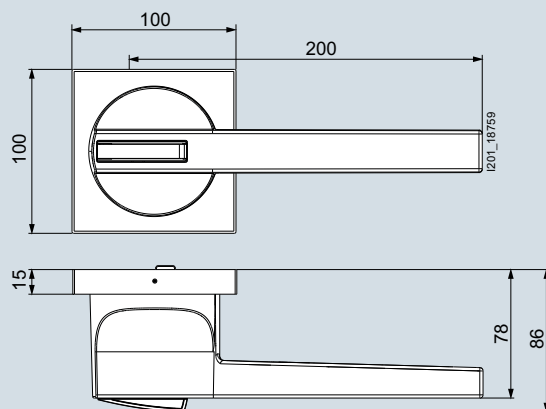


Accessories: 4th contact element, neutral conductor terminal, N/PE terminal with flat terminal

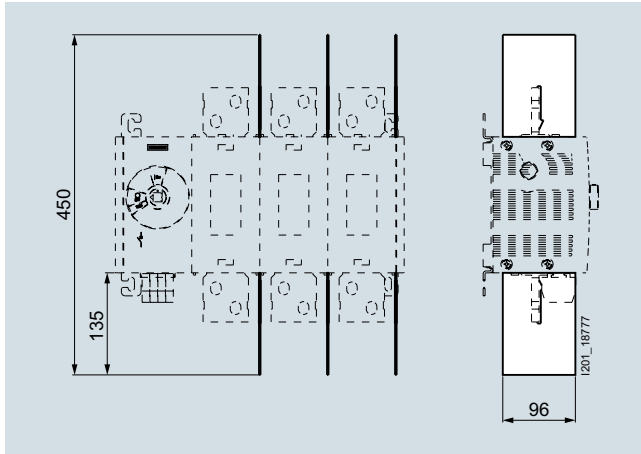
Notes: 4th contact element can only be installed on 3-pole basic units; for side view dimensions, [see basic unit](#)



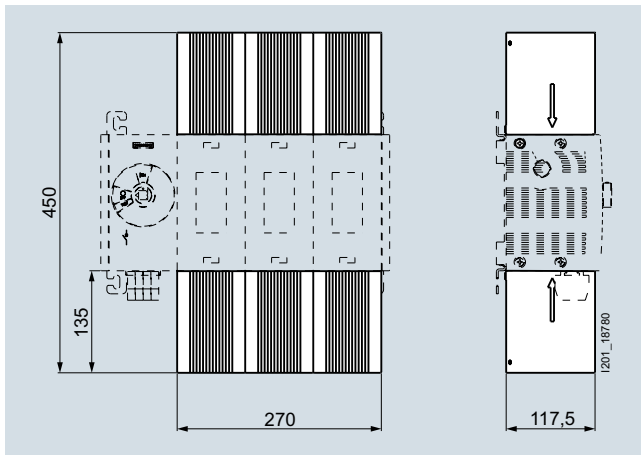
Accessories: Direct operating mechanism, standard version



Accessories: Handle of door-coupling rotary operating mechanism

Size 5 (continued)

Accessories: Phase barriers



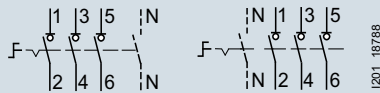
Accessories: Cable connection covers, standard version

3KD Switch Disconnectors up to 1600 A

Dimensions and typical circuit diagrams

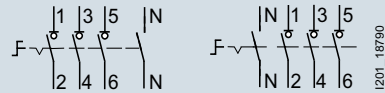
Circuit diagrams

AC applications

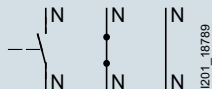


AC applications, 3-pole

Note: 4th contact element is an optional accessory

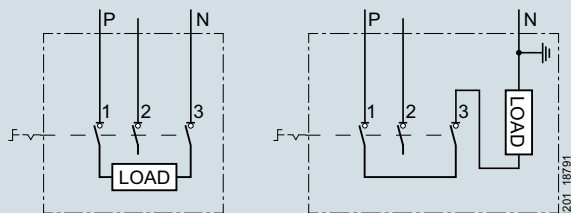


AC applications, 4-pole

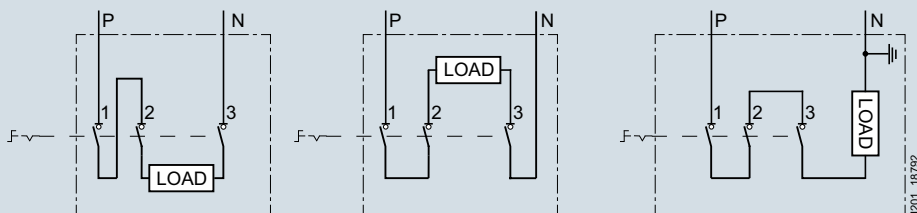


Options for additional poles

DC applications

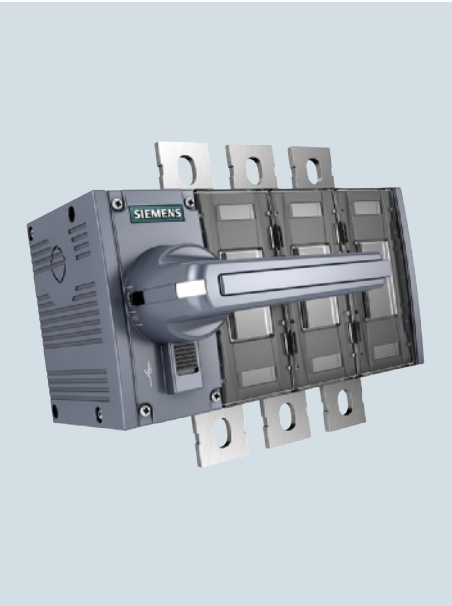


DC applications, 2 series-connected switching poles - max. 220 V DC



DC applications, 3 series-connected switching poles - max. 440 V DC

Appendix



3/2	Catalog notes
3/3	Ordering notes
3/5	Further documentation
3/8	Quality management
3/9	Standards and approvals
3/10	Siemens contacts
3/11	Service & Support
3/12	Article number index incl. export markings
3/18	Conditions of sale and delivery

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

All technical data, dimensions and weights are subject to change without notice unless otherwise specified on the pages of this catalog.

Dimensions

All dimensions are in mm.

Images

The illustrations are not binding.

Technical data

The technical data in the catalog are for general information. The instruction manuals and the operating instructions on the products must be observed during assembly, operation and maintenance.

Further technical information is available at www.siemens.com/lowvoltage/product-support

- under Product List:
 - Technical specifications
- under Entry List:
 - Updates
 - Downloads
 - FAQ
 - Manuals
 - Operating instructions
 - Characteristic curves
 - Certificates

Configurators can be found at www.siemens.com/lowvoltage/configurators

Assembly, operation and maintenance

The instruction manuals and the operating instructions on the products must be observed during assembly, operation and maintenance.

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 the preferred types marked with ► ex works.

We regard the 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 instead of polystyrene chips for protection during transport in packages up to 32 kg) and, in particular, with a view to reducing waste.

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 economical 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 mark, the open arrow recycling symbol, and product description information in English and German. In addition to the Order No. (MLFB) and the number of items in the packaging, the Instr. Order No. is also specified for the operating instructions. It can be obtained from your local Siemens representative (you will find a list of your local Siemens representatives at www.siemens.com/automation/partner).

The device Order No. of most devices can also be acquired through the EAN barcode to simplify ordering and storage logistics.

The Order Nos. and EAN codes are assigned electronically in the master data of the products for low-voltage power distribution and electrical installation.

Ordering notes

Overview

Ordering very small quantities

When 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 on the 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 workdays	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 www.siemens.com/industrymall .

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, for 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 in larger packaging (e. g. in a carton). You must order this quantity or a multiple thereof if you want the item to be delivered in a larger packaging quantity.

Examples:

PS/P. unit	Meaning
1 unit	You can order one item or a multiple thereof.
5 units	For example, five units are packed in a bag. 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 groups (PG)

Each product is allocated to a price group.

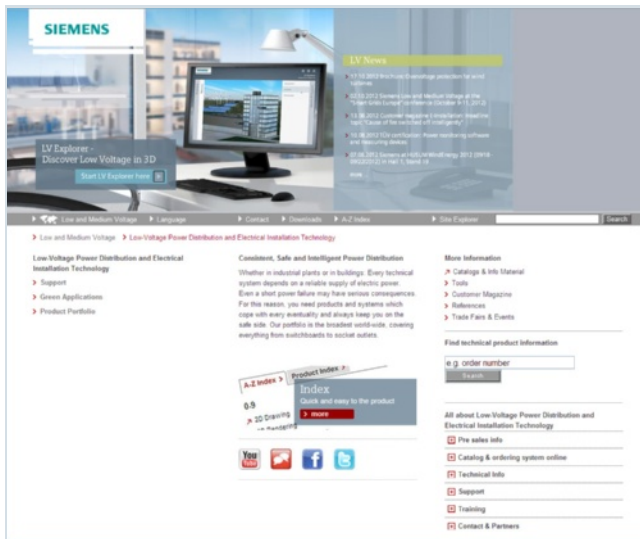
Weight

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

Example

DT	For 3KD	PU (UNIT, SET, M)	PS/ P. unit	PG
	Article No. Price per PU			
	3KD3030-0NE10-0	1	1 unit	143
PU:	One unit (on which price is based)			
PS/P. unit:	1 = minimum order quantity			
PG:	143			

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



Siemens low-voltage power distribution and electrical installation technology offers switchboards, distribution boards, protection, switching, measuring and monitoring devices, switches and socket outlets. All over the world, the universality, modularity and intelligence of our components and systems give you innumerable benefits – for the entire duration of their service life. Developed according to the respective international standards, we offer forward-looking designs with innovative functions and ensure the highest quality standards around the globe.

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

Visit our site on the Internet for a comprehensive offering of support for low-voltage power distribution and electrical installation products, such as

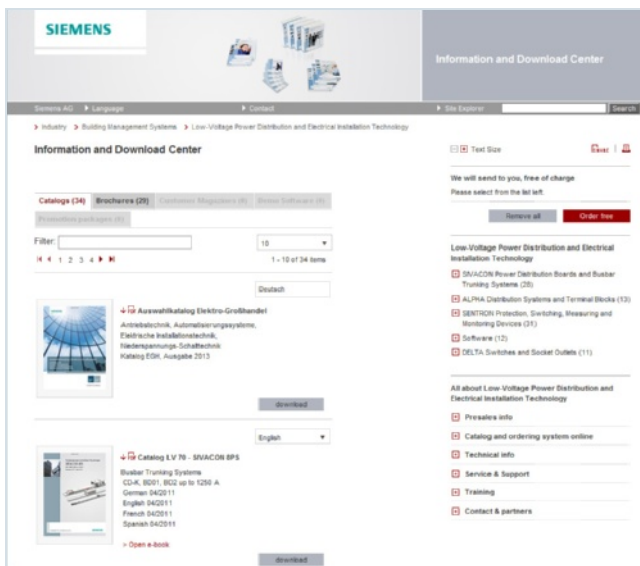
- Operating instructions and manuals for direct download
- Online registration for seminars and events
- Up-to-date answers to your queries and problems
- Software upgrades and updates for fast download
- Telephone assistance in more than 190 countries
- Photos and graphics for external use

and much more - all conveniently and easily accessible:

www.siemens.com/lowvoltage

3

Information and download center



You will find regularly updated information material such as catalogs, customer magazines, brochures and trial versions of software for low-voltage power distribution and electrical installation on the Internet at

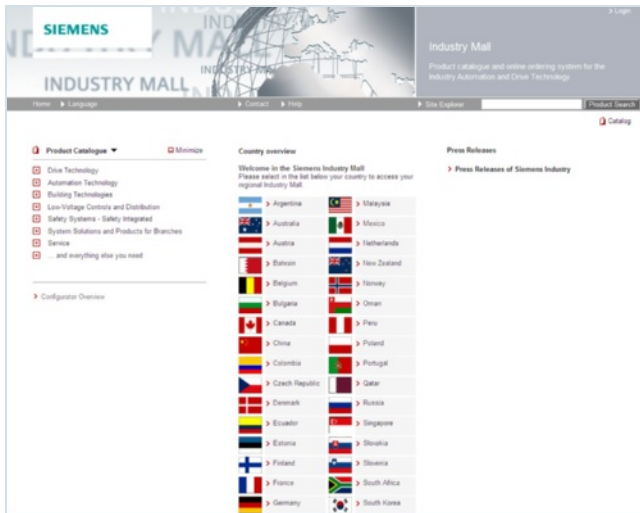
www.siemens.com/lowvoltage/infomaterial

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

Appendix

Further documentation

Industry Mall



The catalog and ordering system for Siemens automation and drive technology and low-voltage power distribution and electrical installation products. You can access this site round the clock to find out everything you need to know about our product portfolio – and much more besides. From intelligent tools designed to simplify the configuring of products and systems to software downloads and documentation.

By utilizing our personalized access service, you can make full use of all the Industry Mall functions. Once you are registered, our system provides you with a broad range of tools to help you conduct your business with Siemens efficiently:

The Industry Mall - for online information, product selection and ordering:

- Detailed information including product data, illustrations, certificates and dimensional drawings
- Simple configuring of systems
- Possibility 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

Industry Online Support



Whether you need help with implementing your project or you want to expand your plant or plan a new one: Siemens Industry Online Support will provide you with round-the-clock technical assistance and allow you to access all the product information and data that you need.

Your initial registration is free of charge. Once you are registered, you can utilize the full scope of functions provided and benefit from the useful online functions in mySupport.

You can also discuss any queries or requirements relating to planning and design with our experts in the online forum.

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 exchange of experience 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

To find the link to the Service & Support portal, go to

www.siemens.com/lowvoltage/technical-support

Further documentation

Siemens Industry Online Support App



Industry Online
Support App



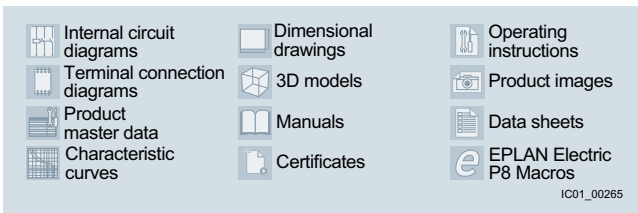
Whether you are out and about or standing right next to one of our installations or machines – if you need product information, you can access it at any time and from any location using the Siemens Industry Online Support App – quick, easy and well organized:

Scan in the product code, for example, and you will receive all the product information you need. You can send your search results conveniently by e-mail to your work place or store them in your Favorites folder for later offline retrieval.

The Siemens Industry Online Support App is available for Android and iOS.

CAx Download Manager

The 12 CAx data types are listed below:



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 service will cut the time it takes you to integrate product data into your CAE and CAD system by up to 80%.

Siemens makes available up to 12 file types to support your mechanical (CAD) and electrical (CAE) planning processes for you to download at any time of the day.

**Universal product data for your CAE and CAD systems
reduces data integration time by up to 80 %**

- 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

Quality management

Overview

The quality management system of our IC LMV LP Business Unit complies with the international standard EN ISO 9001.

The products and systems listed in this catalog are marketed using a VDE-approved quality management system according to ISO 9001.

VDE certificate

Siemens AG
Infrastructure & Cities Sector
Low and Medium Voltage Division
Low Voltage & Products
Reg. No.: 40017/QM/03.06

Certificates

Information on the certificates available (CE, UL, CSA, FM, shipping authorizations) for low-voltage power distribution and electrical installation products can be found on the Internet at

www.siemens.com/lowvoltage/product-support.

In the Entry List you can use the certificate type (general product approval, explosion protection, test certificates, shipbuilding,...) as a filter criterion.

The screenshot displays the Siemens website interface for 'Low-Voltage Power Distribution and Electrical Installation Technology'. It features a search bar at the top with filters for 'Product for' (BIMBA), 'Entry type' (Certificates), 'Certificate Type' (all), 'Approval office' (all), and 'Country' (all). Below the search bar, a table lists various certificates with columns for 'Title' and 'Date'. The table includes entries for 'Certificates Test Certificates, Special Test Certificate, Manufacturer' (2010-12-22), 'Certificates Declaration of Conformity, Manufacturer' (2010-12-19), 'Certificates General Product Approval, CB-Testreport, CB-Attestations' (2010-12-08), 'Certificates Test Certificates, Type Test Certificates/Test Report, Manufacturer' (2010-12-08), and 'Certificates Test Certificates, Type Test Certificates/Test Report, Manufacturer' (2010-12-08). A sidebar on the right lists various product categories like 'Power Distribution', 'Switchgear', 'Circuit Breakers', etc.

Title	Date
Certificates Test Certificates, Special Test Certificate, Manufacturer for products: 3FA2 more>	2010-12-22 ID: 4000088
Certificates Declaration of Conformity, Manufacturer for products: 7VM200-3A000-0A00 more>	2010-12-19 ID: 4000017
Certificates General Product Approval, CB-Testreport, CB-Attestations for products: 3UL3FM more>	2010-12-08 ID: 4000014
Certificates Test Certificates, Type Test Certificates/Test Report, Manufacturer for products: 3FU2 more>	2010-12-08 ID: 4000009
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Standards and approvals

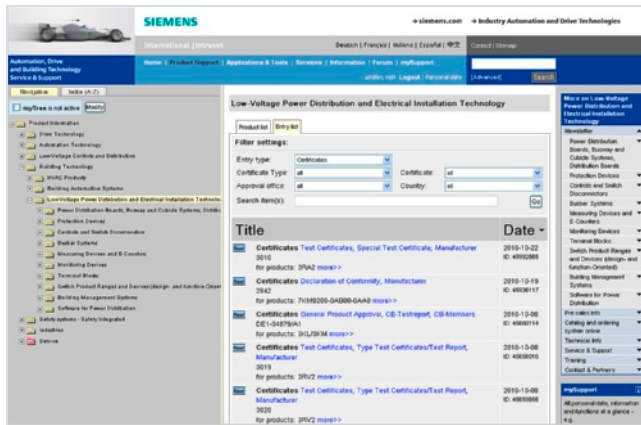
Overview

Approvals, test certificates, characteristic curves

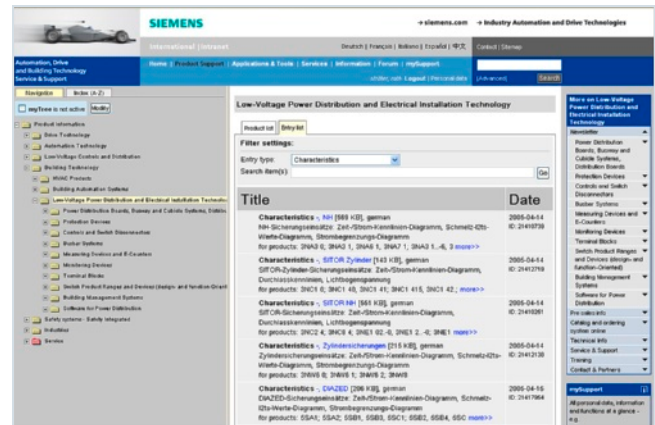
An overview of the certificates available for low-voltage power distribution and electrical installation products along with more

technical documentation can be consulted daily on the Internet at

www.siemens.com/lowvoltage/product-support



Product support: Approvals / Certificates



Product support: Characteristic curves

Approval requirements valid in different countries

Siemens low-voltage switchgear and controlgear are designed, manufactured and tested according to the relevant German standards (VDE and DIN), IEC publications and European standards.

As far as is economically viable, in addition to the pertinent VDE, EN and IEC standards, the requirements of the various regula-

tions valid in other countries are also taken into account in the design of the devices.

The currently available approvals, test certificates and certificates can be viewed in the Service & Support Portal via the following link

www.siemens.com/lowvoltage/product-support

CE marking

Manufacturers of products which fall within the scope of EC directives must identify their products, operating instructions or packaging with a CE mark.

The CE mark confirms that a product fulfills the appropriate basic requirements of all pertinent directives. The mark is a mandatory requirement for putting products into circulation throughout the EC.

All the products in this catalog are in conformance with the EC directives and bear the CE mark.

- Low-voltage directive
- EMC directive

The CE mark of conformity: **CE**.

Accident prevention

Test certificates and approvals from the BIA (German statutory industrial accident insurance institution in Bonn) and from SUVA (Swiss institute for accident prevention) are available for some devices in safety control systems. For details, see the respective product descriptions.

Siemens contacts

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Contact partners at Siemens Industry



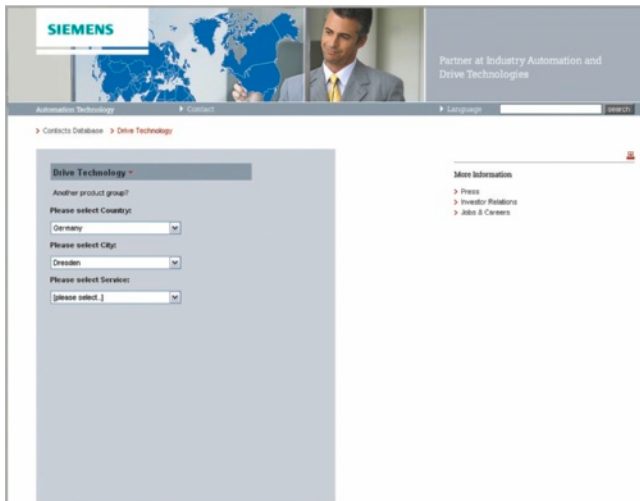
At Siemens Industry, more than 85 000 people are resolutely pursuing the same goal: long-term improvement of your competitive ability. We are committed to this goal. Thanks to our dedication, we are continually setting new standards. In all industries – worldwide.

At your service, locally, around the globe: Partners for consulting, sales, training, service, support, spare parts ... on the entire Siemens Industry range.

Your personal contact can be found in our Contact Database at www.siemens.com/automation/partner.

You start by selecting a

- Product group,
- Country,
- City,
- Service.

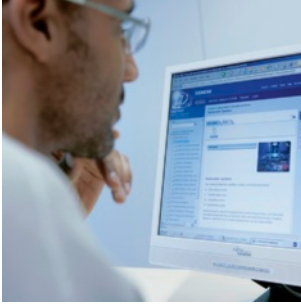


Appendix

Service & Support

The unmatched complete service
for the entire life cycle

Online support



Our comprehensive online information platform covers every aspect of our Service & Support and is available whenever, wherever.

More detailed information is available at
www.siemens.com/lowvoltage/support

Field Service



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

More detailed information is available at
www.siemens.com/lowvoltage/technical-support

Technical support



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

More detailed information is available at
www.siemens.com/lowvoltage/technical-support

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.

More detailed information is available at
www.siemens.com/lowvoltage/technical-support

Training



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

More detailed information is available at
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

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Overview

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8UC6033	2/8	N	N
8UC6034	2/8	N	N
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8UC6083	2/8	N	N
8UC6084	2/8	N	N

A product's export markings are updated daily at
www.siemens.com/industrymail

Notes

3

Appendix

Notes

3

Notes

3

Conditions of sale and delivery

Overview

By using this catalog you can acquire hardware and software products described therein from Siemens AG subject to the following terms. Please note! The scope, the quality and the conditions for supplies and services, including software products, by any Siemens entity having a registered office outside of Germany, shall be subject exclusively to the General Terms and Conditions of the respective Siemens entity. The following terms apply exclusively for orders placed with Siemens AG.

For customers with a seat or registered office in Germany

The "General Terms of Payment" as well as the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry" shall apply.

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General

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

Illustrations are not binding.

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

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

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The surcharge will be calculated on the basis of the official price on the day prior to receipt of the order or prior to the release order.

The metal factor determines the official price as of which the metal surcharges are charged and the calculation method used. The metal factor, provided it is relevant, is included with the price information of the respective products.

You will find

- an exact explanation of the metal factor
- the text of the Comprehensive Terms and Conditions of Sale and Delivery of Siemens AG

in the Internet under

www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf

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According to current provisions, the following export regulations must be observed with respect to the products featured in this catalog / price list:

AL	<p>Number of the <u>German Export List</u></p> <p>Products marked other than "N" require an export license. In the case of software products, the export designations of the relevant data medium must also be generally adhered to.</p> <p>Goods labeled with an "AL" not equal to "N" are subject to European or German export authorization when being exported out of the EU.</p>
ECCN	<p><u>Export Control Classification Number</u></p> <p>Products marked other than "N" are subject to a reexport license to specific countries.</p> <p>In the case of software products, the export designations of the relevant data medium must also be generally adhered to.</p> <p>Goods labeled with "ECCN" not equal to "N" are subject to US re-export authorization.</p>

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In addition, you can preview the export designations via our "Industry Mail" online catalog system in the respective product description. The deciding factors are the AL or ECCN export authorization indicated on order confirmations, delivery notes and invoices.

Errors excepted and subject to change without prior notice.

Industry Automation, Drive Technologies and Low-Voltage Power Distribution

Further information can be obtained from our branch offices listed at www.siemens.com/automation/partner

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Interactive Catalog on DVD		
Products of automation and drives technology and of low-voltage power distribution and electrical installation technology	CA 01	
Building Control		
GAMMA Building Control	ET G1	
Drive Systems		
SINAMICS G130 Drive Converter Chassis Units	D 11	
SINAMICS G150 Drive Converter Cabinet Units		
SINAMICS GM150, SINAMICS SM150 Medium-Voltage Converters	D 12	
ROBICON Perfect Harmony	D 15.1	
Medium-Voltage Air-Cooled Drives Germany Edition		
<i>Digital: SINAMICS G180 Converters – Compact Units, Cabinet Systems, Cabinet Units Air-Cooled and Liquid-Cooled</i>	D 18.1	
SINAMICS S120 Chassis Format Units and Cabinet Modules	D 21.3	
SINAMICS S150 Converter Cabinet Units		
SINAMICS DCM Converter Units	D 23.1	
SINAMICS DCM Cabinet	D 23.2	
SINAMICS and Motors for Single-Axis Drives	D 31	
Three-Phase Induction Motors SIMOTICS HV, SIMOTICS TN	D 84.1	
• Series H-compact		
• Series H-compact PLUS		
Asynchronous Motors Standardline	D 86.1	
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DC Motors	DA 12	
SIMOREG DC MASTER 6RA70 Digital Chassis Converters	DA 21.1	
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	
MICROMASTER 420/430/440 Inverters	DA 51.2	
MICROMASTER 411/COMBIMASTER 411	DA 51.3	
SIMOVERT MASTERDRIVES Vector Control	DA 65.10	
SIMOVERT MASTERDRIVES Motion Control	DA 65.11	
Synchronous and asynchronous servomotors for SIMOVERT MASTERDRIVES	DA 65.3	
SIMODRIVE 611 universal and POSMO	DA 65.4	
<i>Note: Additional catalogs on SIMODRIVE or SINAMICS drive systems and SIMOTICS motors with SINUMERIK and SIMOTION can be found under Motion Control</i>		
<u>Low-Voltage Three-Phase-Motors</u>		
SIMOTICS Low-Voltage Motors	D 81.1	
MOTOX Geared Motors	D 87.1	
SIMOGEAR Geared Motors	MD 50.1	
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<u>Mechanical Driving Machines</u>		
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Products for Weighing Technology	WT 10	
<i>Digital: Process Analytical Instruments</i>	PA 01	
<i>Digital: Process Analytics, Components for the System Integration</i>	PA 11	
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Low-Voltage Power Distribution and Electrical Installation Technology		<i>Catalog</i>
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<i>Digital: 3VT Molded Case Circuit Breakers up to 1600 A</i>	LV 36	
<i>Digital: SIVACON System Cubicles, System Lighting and System Air-Conditioning</i>	LV 50	
<i>Digital: ALPHA Distribution Systems</i>	LV 51	
ALPHA FIX Terminal Blocks	LV 52	
SIVACON S4 Power Distribution Boards	LV 56	
SIVACON 8PS Busbar Trunking Systems	LV 70	
<i>Digital: DELTA Switches and Socket Outlets</i>	ET D1	
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SINUMERIK 840D sl Type 1B Equipment for Machine Tools	NC 62	
SINUMERIK 808 Equipment for Machine Tools	NC 81.1	
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