

SIEMENS

SETRON • SIVACON • ALPHA

# Low-Voltage Power Distribution and Electrical Installation Technology

Transfer Switching Equipment and  
Load Transfer Switches

Catalog  
Extract  
LV 10

Edition  
04/2019

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

## Related catalogs

**Low-Voltage Power Distribution and Electrical Installation Technology** LV 10  
 SENTRON • SIVACON • ALPHA  
 Protection, Switching, Measuring and Monitoring  
 Devices, Switchboards and Distribution Systems

PDF (E86060-K8280-A101-A9-7600)  
 Print (E86060-K8280-A101-A6-7600)



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

PDF (E86060-K8280-E347-A2-7600)



**Industrial Controls** IC 10  
 SIRIUS

PDF (E86060-K1010-A101-A9-7600)



**Industrial Communication** IK PI  
 SIMATIC NET

E86060-K6710-A101-B8-7600



**DELTA** ET D1  
 Switches and Socket Outlets

PDF



**SITRAIN**  
 Training for Industry

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



## Catalog PDF / Contact

### Catalog PDF

Digital versions of the catalogs are available in the Siemens Industry Online Support.

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



### Contact

Your personal contact can be found in our Contacts Database at:

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



## Industry Mall / TIA ST / CA 01

### Industry Mall

Information and Ordering Platform on the Internet:

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



### Siemens TIA Selection Tool

for the selection, configuration and ordering of TIA products and devices

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



**Products for Automation and Drives** CA 01  
 Interactive Catalog  
 Download

[www.siemens.com/ca01download](http://www.siemens.com/ca01download)

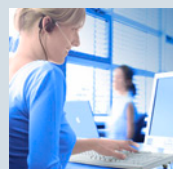


## Trademarks

All product designations may be registered trademarks or product names of Siemens AG or other supplying companies. Third parties using these trademarks or product names for their own purposes may infringe upon the rights of the trademark owners. Further information about low-voltage power distribution and electrical installation technology is available on the Internet at:

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

## Technical Support



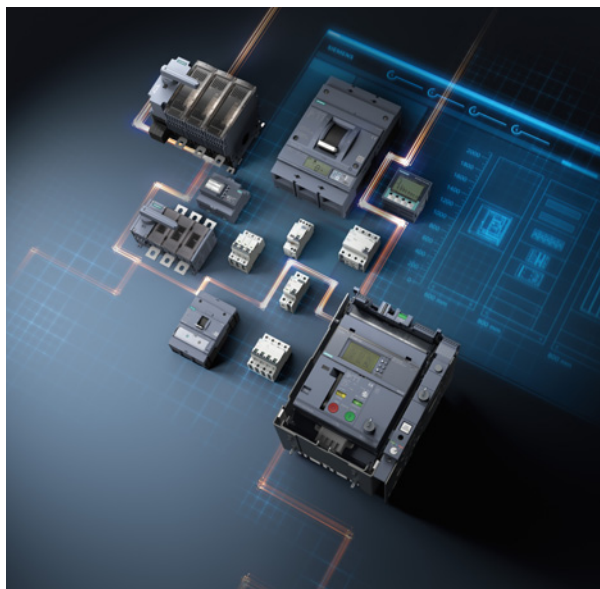
Expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

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

# Low-Voltage Power Distribution and Electrical Installation Technology

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

SENTRON · SIVACON · ALPHA



### Catalog LV 10 · 04/2019

You can find the updated catalog valid from October 2019 in the Siemens Industry Online Support under [www.siemens.com/lowvoltage/catalogs](http://www.siemens.com/lowvoltage/catalogs)

Supersedes:  
Catalog LV 10 · 10/2018

Refer to the Industry Mall for current prices:  
[www.siemens.com/industrymall](http://www.siemens.com/industrymall)

The products in this catalog can also be found in the Interactive Catalog CA 01:  
[www.siemens.com/ca01download](http://www.siemens.com/ca01download)

Please contact your local Siemens branch.

© Siemens AG 2019

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

Protection, Switching, Measuring and Monitoring Devices	Air Circuit Breakers	1
	Molded Case Circuit Breakers	2
	Miniature Circuit Breakers	3
	Residual Current Protective Devices / Arc-Fault Detection Devices (AFDDs)	4
	Fuse Systems	5
	Overvoltage Protection Devices	6
	Switch Disconnectors	7
	<b>Transfer Switching Equipment and Load Transfer Switches</b>	<b>8</b>
	Switching Devices	9
	Transformers, Power Supply Units and Socket Outlets	10
	Busbar Systems	11
	Measuring Devices and Power Monitoring	12
	Monitoring Devices	13
	Terminal Blocks	14
	Software	15
Switchboards and Distribution Systems	Switchboards	16
	Busbar Trunking Systems	17
	System Cubicles, System Lighting and System Air-Conditioning	18
	Power Distribution Boards / Distribution Boards	19
	Appendix	20

## Opening Information

### Ordering notes

#### Overview

##### Ordering special versions

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

##### Ordering very small quantities

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

#### Explanations of Selection and ordering data

##### Standard delivery time (SD)

- Preferred type Preferred types are device types that can be delivered immediately ex works, i.e. they are dispatched within 24 hours.

##### Price units (PU)

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

##### Packaging size (PS)

The packaging size defines the number of units, sets or meters, for example, for outer packaging. Only the quantity defined by the packaging size or a multiple thereof can be ordered.

##### Price group (PG)

Each product is allocated to a price group.

##### Example

5TT3400  
SD: Preferred type  
PG: 13C  
Ordering quantity 1 unit or a multiple thereof

8US1923-5CA02  
PG: 14O  
Ordering quantity 10 units or a multiple thereof

8WH9000-1GA00  
PG: 12X  
Ordering quantity 50 units or a multiple thereof

SD	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
►	<b>5TT3400</b>		1	1 unit	1BK
	<b>8US1923-5CA02</b>		1	10 units	1CU
	<b>8WH9000-1GA00</b>		100	50 units	1BT

##### Note:

The article numbers shown here and the specifications regarding selection and ordering data are examples only. When ordering, always use the selection and ordering data in the product chapters.

##### Metal surcharges/export markings

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

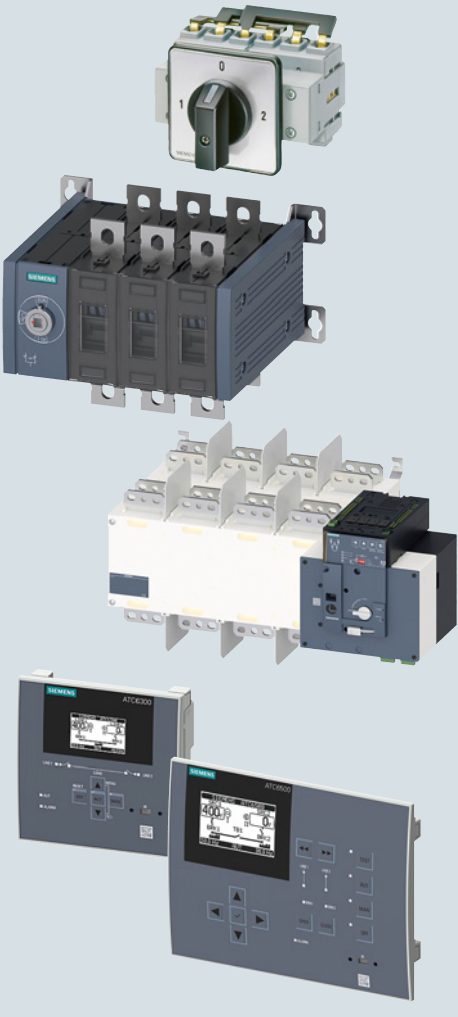
Each product's metal factor dictates for which raw materials the metal surcharges are calculated, from which quotation and with which calculation method (weight or percentage method).

An exact explanation of the metal factor can be found at: [www.siemens.com/automation/salesmaterial-as/catalog/en/terms\\_of\\_trade\\_en.pdf](http://www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf)

A product's export markings/metal surcharges are updated daily at [www.siemens.com/industrymall](http://www.siemens.com/industrymall).



## Transfer Switching Equipment and Load Transfer Switches

**3LD2 load transfer switches  
up to 250 A**

- 8/2 Introduction
- 8/3 Technical features
- 8/5 Front mounting
- 8/6 Floor mounting
- 8/7 Molded-plastic enclosures
- 8/8 Accessories

**3KC transfer switching equipment  
up to 3200 A**

- 8/12 Introduction
- 8/14 General data
- Technical features
- 8/24 Manual transfer switching equipment (MTSE)
- 8/27 Remote transfer switching equipment (RTSE) / Automatic transfer switching equipment (ATSE)
- 8/30 Integrated controllers of the ATSE  
40 to 160 A and 250 to 3200 A
- 8/31 Introduction (order part)
- 3KC0 manual transfer switching equipment (MTSE) from 16 to 1600 A
- 8/32 Basic units
- 8/34 Accessories and spare parts
- 3KC3 remote transfer switching equipment (RTSE) from 40 to 160 A
- 8/43 Basic units
- 3KC4 remote transfer switching equipment (RTSE) from 250 to 3200 A
- 8/44 Basic units
- 3KC6 automatic transfer switching equipment (ATSE) from 40 to 160 A
- 8/46 Basic units
- 3KC8 automatic transfer switching equipment (ATSE) from 250 to 3200 A
- 8/47 Basic units
- 3KC3 transfer switching equipment (RTSE) and 3KC6 (ATSE) from 40 to 160 A
- 8/49 Accessories and spare parts
- 3KC4 transfer switching equipment (RTSE) and 3KC8 (ATSE) from 250 to 3200 A
- 8/50 Accessories and spare parts

**Transfer control devices**

- 8/58 Introduction
- 8/59 General data
- 8/63 3KC ATC6300 transfer control device **NEW**
- 8/64 3KC ATC6500 transfer control device **NEW**
- 8/65 Accessories for 3KC ATC6300 and ATC6500 transfer control devices
- 8/66 3KC ATC3100 transfer control device

**For further technical  
product information:**

Configuration Manual

Switch disconnectors

Article No.: 3ZW1012-3NP11-0AC1

Siemens Industry Online Support:

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

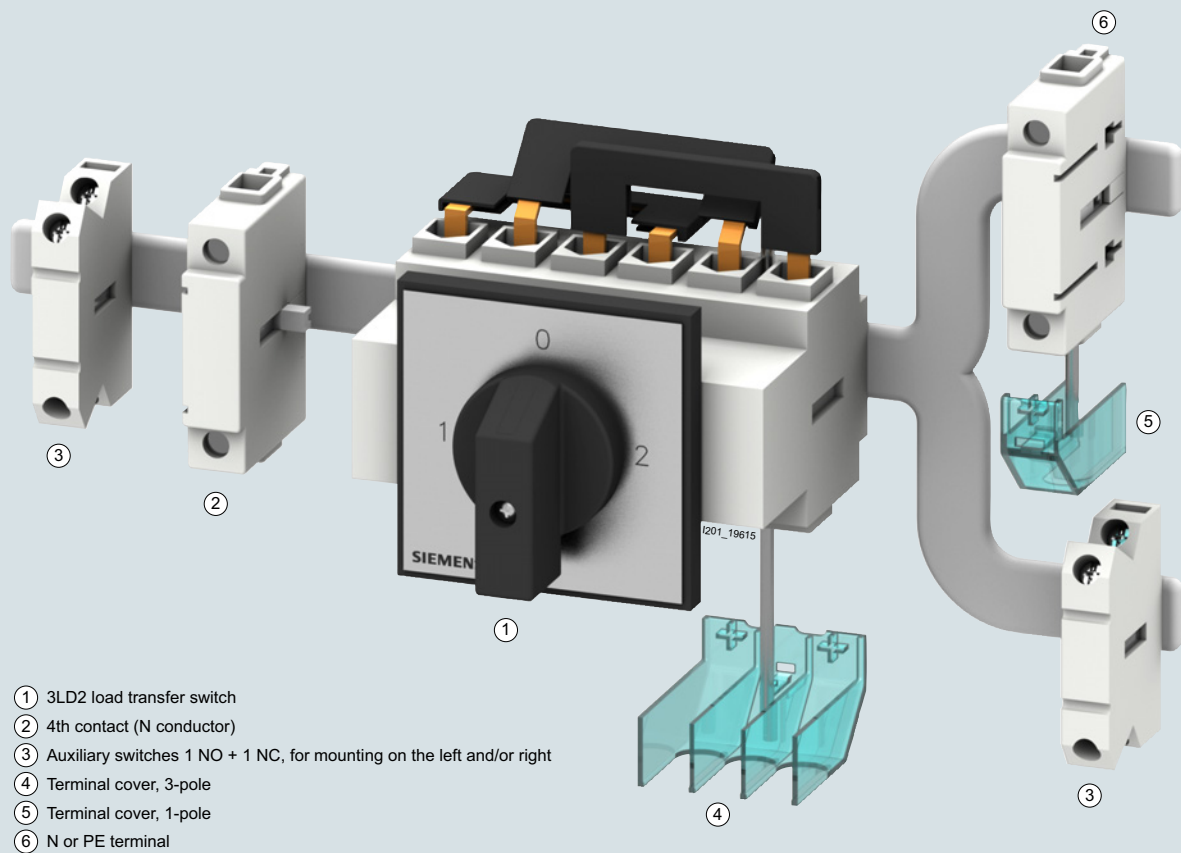
- Entry type:
- Application example
  - Certificate
  - Characteristic
  - Download
  - FAQ
  - Manual
  - Product note
  - Software archive
  - Technical data

## Transfer Switching Equipment and Load Transfer Switches

### 3LD2 Load Transfer Switches up to 250 A

#### Introduction

#### Overview



The 3LD2 load transfer switches are based on the 3LD2 main control and EMERGENCY-STOP switches and are manually operated switch disconnectors according to IEC 60947-3 / VDE 0660 Part 107 (EN 60947-3) and comply with the conditions for switch disconnectors.

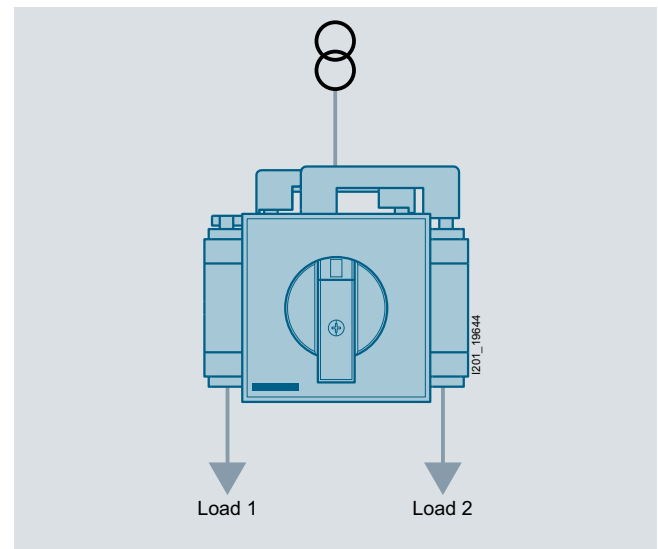
The load transfer switches from 25 to 250 A are approved according to UL 508 and can be used as "manual motor controllers" and "motor disconnects".

In addition, the 3LD load transfer switches have CCC certification.

#### Application

The 3LD2 load transfer switches are used for alternate switching between two loads with an incoming power supply. They have the switch position I-0-II which means that one of the two loads can be switched on alternately. This means it is possible to switch between two three-phase motors and other loads.

#### Load transfer (schematic representation)



Load transfer switches (IEC 60947-3)

# Transfer Switching Equipment and Load Transfer Switches

## 3LD2 Load Transfer Switches up to 250 A

### Technical features

#### Technical specifications

Standards			DIN VDE 0660, IEC 60947					
Switches		Type	3LD21	3LD22	3LD25	3LD27	3LD23	3LD24
Rated insulation voltage $U_i$		V	690					
Rated operational voltage $U_e$		V AC	690					
Rated frequency		Hz	50 ... 60					
Rated impulse withstand voltage $U_{imp}$		kV	6	6	6	6	6	6
Rated short-time withstand current (1 s current, rms value)		A	640	640	1260	2000	4000	4000
Short-circuit protection, max. back-up fuse (gL)		A	25	40	63	100	160	250
Rated conditional short-circuit current with upstream fuses at 690 V AC 50/60 Hz		kArms	50	50	50	50	50	50
Maximum permissible let-through $I^2t$ value		kA <sup>2</sup> s	4	9	21	64	185	557
Permissible let-through current of the fuse		kA	3.5	4.5	6	10	15	15
Rated uninterrupted current $I_u$		A	25	32	63	100	160	250
AC-21A load-break switch	Rated operational current $I_e$	A	25	32	63	100	160	250
AC-3 motor load switch	Rating							
In-service switching	At 220 ... 240 V	kW	4.0	5.5	11.0	18.5	35.0	55.0
of individual motors	At 380 ... 440 V	kW	7.5	9.5	18.5	30.0	50.0	110.0
	At 660/690 V	kW	7.5	9.5	15.0	22.0	37.0	45.0
AC-23A main control switch	Rating							
Repair switch	At 220 ... 240 V	kW	5.0	6.0	11.0	18.5	45.0	75.0
Frequent, but not in-service switching	At 380 ... 440 V	kW	9.5	11.5	22.0	37.0	75.0	132.0
of individual motors	At 660/690 V	kW	9.5	11.5	18.5	30.0	45.0	55.0
Power loss per current path at $I_e$		W	1.1	1.8	4.5	7.5	36.0	36.0
Endurance mechanical	Operating cycles		100 000					
Switching frequency		1/h	50					
Permissible ambient temperature		°C	-25 ... +55					
Isolating features		Up to max.	V	690				
Conductor cross-sections for main conductors <sup>1)</sup>								
Solid or stranded		mm <sup>2</sup>	1.5 ... 16	1.5 ... 16	2.5 ... 35	4 ... 50	16 ... 185	16 ... 185
Finely stranded with end sleeve (max.)		mm <sup>2</sup>	10	10	16	35	150	150
Conductor cross-sections	Cu cable	AWG	14 ... 8	14 ... 8	14 ... 6	12 ... 1		
Torque for terminal		Nm	2 ... 2.5	2 ... 2.5	2.5 ... 3	2.5 ... 3	9.5 ... 10	9.5 ... 10
Touch protection according to EN 50274			Yes					
Auxiliary switches								
Rated insulation voltage $U_i$		V	500					
Rated operational voltage $U_e$		V AC	500					
Rated uninterrupted current $I_u$		A	10					
Rated operational current $I_e$ , AC-15	At 120 V	A	6					
	At 220 ... 240 V	A	3					
	At 380 ... 415 V	A	1.8					
	At 500 V	A	1.4					
Short-circuit protection, aux. switch, max. back-up fuse (gL/gG)		A	10					
Conductor cross-sections for auxiliary conductors								
Connection type			Screw terminals					
Solid or stranded		mm <sup>2</sup>	2 × (0.75 ... 2.5), 1 × 4					
Finely stranded with end sleeve		mm <sup>2</sup>	2 × (0.75 ... 1.5), 1 × 2.5					
Torque for terminal		Nm	0.8					

<sup>1)</sup> Depending on the cable infeed, only small cross-sections are possible with devices in molded-plastic enclosures.

# Transfer Switching Equipment and Load Transfer Switches

## 3LD2 Load Transfer Switches up to 250 A

### Technical features

#### 3LD switches for UL/CSA as "manual motor controllers" <sup>1)</sup>

Standards		UL/CSA						
Switches		Type	3LD21	3LD22	3LD25	3LD27	3LD23	3LD24
<b>Rated operational voltage <math>U_e</math></b>		V AC	600	600	600	600	600	600
<b>Rated uninterrupted current <math>I_u</math></b>		A	20	30	60	100	160	250
	Current rating		A 600	A 600	--	--	--	--
	Pilot duty		P 600	P 600	--	--	--	--
<b>Conventional thermal current <math>I_{th}</math></b>		A	25	32	63	100	160	250
<b>Maximum rated power (AC-3)</b>	3 ~ 120 V	HP	3	3	5	10	--	--
<b>Alternating current motors 40 ... 60 Hz (HP = PS)</b>	240 V	HP	7.5	10 (7.5) <sup>2)</sup>	15	30	40	50
	480 V	HP	10	20 (15) <sup>2)</sup>	40	60	75	100
	600 V	HP	15	30 (20) <sup>2)</sup>	50	75	75	75
	1 ~ 120 V	HP	2	2	3	--	--	--
	240 V	HP	3	3	10	--	--	--
<b>Conductor cross-sections</b>	Cu cable	AWG	14 ... 8	14 ... 8	14 ... 6	12 ... 1	1 ... MCM400	
<b>Torque</b>		Nm	2 ... 2.5	2 ... 2.5	2.5 ... 3	2.5 ... 3	10	

<sup>1)</sup> The 3LD switches for UL/CSA are approved in accordance with UL/CSA as "manual motor controllers", and they can be used as repair switches in the molded-plastic enclosure, for example. However, they do not have UL approval as main control switches.

<sup>2)</sup> Values in brackets apply to devices in molded-plastic enclosure.





## Transfer Switching Equipment and Load Transfer Switches

3LD2 Load Transfer Switches up to 250 A

Front mounting

## Selection and ordering data

Number and version of the contacts		Rated data at 50 ... 60 Hz, 380 ... 440 V			SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
Main contact elements	Aux. cont. elements	P/AC-3	P/AC-23A	$I_u$	d					
		kW	kW	A						
<b>Transfer switches with direct operating mechanism (knob-operated mechanism)</b>										
<ul style="list-style-type: none"> <li>• Black actuator</li> <li>• Knob-operated mechanism: <ul style="list-style-type: none"> <li>- on 3LD23, 3LD24 lockable with up to 3 padlocks, shackle diameter from 4 to 6 mm</li> <li>- on all other versions non-lockable</li> </ul> </li> <li>• Degree of protection at front side IP65</li> <li>• Bridging bars already pre-mounted</li> </ul>										
<b>Four-hole mounting</b>										
	3	--	7.5	9.5	25	<b>3LD2123-7UK01</b>		1	1 unit	1CL
			9.5	11.5	32	<b>3LD2223-7UK01</b>		1	1 unit	1CL
			18.5	22.0	63	<b>3LD2524-7UK01</b>		1	1 unit	1CL
			30.0	37.0	100	<b>3LD2724-7UK01</b>		1	1 unit	1CL
			50	75	160	<b>3LD2305-7UK01</b>		1	1 unit	1CL
			110	132	250	<b>3LD2405-7UK01</b>		1	1 unit	1CL
	3 + N	--	50	75	160	<b>3LD2305-7UL01</b>		1	1 unit	1CL
			110	132	250	<b>3LD2405-7UL01</b>		1	1 unit	1CL

3LD2123-7UK01

3LD2405-7UL01

# Transfer Switching Equipment and Load Transfer Switches

## 3LD2 Load Transfer Switches up to 250 A

### Floor mounting

#### Selection and ordering data

Number and version of the contacts		Rated data at 50 Hz ... 60 Hz, 380 V ... 440 V			SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
Main contact elements	Aux. cont. elements	P/AC-3	P/AC-23A	$I_u$	d					
		kW	kW	A						
<b>Transfer switches with door-coupling rotary operating mechanism</b> <ul style="list-style-type: none"> <li>• Lockable in 0 position with up to 3 padlocks, shackle diameter from 4 to 6 mm</li> <li>• Handle and cover black</li> <li>• Door-coupling rotary operating mechanism as a knob</li> <li>• Degree of protection at front side IP65</li> <li>• Bridging bars already pre-mounted</li> </ul>										

#### Four-hole mounting



3LD2318-7UK01

3	50	75	160	<b>3LD2318-7UK01</b>	1	1 unit	1CL
	110	132	250	<b>3LD2418-7UK01</b>	1	1 unit	1CL
3 + N	50	75	160	<b>3LD2318-7UL01</b>	1	1 unit	1CL
	110	132	250	<b>3LD2418-7UL01</b>	1	1 unit	1CL


# Transfer Switching Equipment and Load Transfer Switches

## 3LD2 Load Transfer Switches up to 250 A

### Molded-plastic enclosures

#### Selection and ordering data

Number and version of the contacts		Base terminal	Rated data at 50 ... 60 Hz, 380 ... 440 V			SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
Main contact elements	Aux. contact elements		P/AC-3 kW	P/AC-23A kW	$I_u$ A	d					
<b>Transfer switches with direct operating mechanism (knob-operated mechanism)</b>											
<ul style="list-style-type: none"><li>• With N and PE base terminal</li><li>• Black actuator</li><li>• Lockable in 0 position with up to 3 padlocks, shackle diameter from 4 to 6 mm (for 25 A and 32 A)</li><li>• Metric screw connection</li><li>• Degree of protection IP65</li><li>• Bridging bars already pre-mounted</li></ul>											
3	--	PE + N	7.5	9.5	25						
		PE + N	9.5	11.5	32						
		PE + N	18.5	22.0	63						
		PE + N	30.0	37.0	100						
							<b>3LD2165-7UB01</b>		1	1 unit	1CL
							<b>3LD2265-7UB01</b>		1	1 unit	1CL
							<b>3LD2566-7UB01</b>		1	1 unit	1CL
							<b>3LD2766-7UB01</b>		1	1 unit	1CL



3LD2165-7UB01





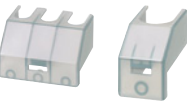


3LD2165-7UB01

# Transfer Switching Equipment and Load Transfer Switches

## 3LD2 Load Transfer Switches up to 250 A

### Accessories

#### Selection and ordering data



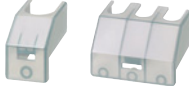
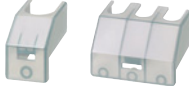




Version		SD	3LD21 (25 A) and 3LD22 (32 A)	PU (UNIT, SET, M)	PS	PG
		d	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU		
<b>For front mounting</b>						
 3LD9220-0B (left) 3LD9220-2B (right)	<b>4th contact (N conductor)</b>		<b>3LD9220-0B</b>	1	1 unit	1CL
	<ul style="list-style-type: none"> <li>Leading switch-on, lagging switch-off</li> <li>Bridging bars for the switchable N pole are not included in the scope of supply</li> </ul>					
 3LD9200-5B	<b>N or PE terminals</b>		<b>3LD9220-2B</b>	1	1 unit	1CL
	Through-type					
	<b>Auxiliary switches</b>					
	For mounting on the left and/or right, lagging switch-on, leading switch-off For 3-pole load transfer switches only Indicate the switch position of the respective switch disconnecter (I or II) to which the auxiliary switch is connected		<b>3LD9200-5B</b>	1	1 unit	1CL
	<ul style="list-style-type: none"> <li>1 NO + 1 NC</li> </ul> For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information		<b>3LD9200-5BF</b>	1	1 unit	1CL
 3LD9221-2A (left) 3LD9221-0A (right)	<b>Terminal covers as additional touch protection</b>					
	Can be snapped on at top and bottom <ul style="list-style-type: none"> <li>1-pole</li> <li>3-pole</li> </ul>		<b>3LD9221-2A</b> <b>3LD9221-0A</b>	100 1	4 units 4 units	1CL 1CL
<b>For molded-plastic enclosures</b>						
 3LD9220-0C	<b>4th contact (N conductor)</b>		<b>3LD9220-0C</b>	1	1 unit	1CL
	<ul style="list-style-type: none"> <li>Leading switch-on, lagging switch-off</li> <li>Bridging bars for the switchable N pole are not included in the scope of supply</li> </ul>					
 3LD9200-5C or 3LD9200-5CF (left) 3LD9200-6C (right)	<b>N or PE terminals</b>		<b>3LD9220-2C</b>	1	1 unit	1CL
	Through-type					
	<b>Auxiliary switches</b>					
	For mounting on the left and/or right, lagging switch-on, leading switch-off For 3-pole load transfer switches only Indicate the switch position of the respective switch disconnecter (I or II) to which the auxiliary switch is connected		<b>3LD9200-5C</b> <b>3LD9200-6C</b>	1 1	1 unit 1 unit	1CL 1CL
	<ul style="list-style-type: none"> <li>1 NO + 1 NC</li> <li>2 NO</li> </ul> For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information		<b>3LD9200-5CF</b>	1	1 unit	1CL
	<ul style="list-style-type: none"> <li>1 NO + 1 NC</li> </ul>					



# Transfer Switching Equipment and Load Transfer Switches

## 3LD2 Load Transfer Switches up to 250 A




### Accessories

Version		SD	3LD25 (63 A)	PU (UNIT, SET, M)	PS	PG
		d	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU		
For front mounting						
	<b>4th contact (N conductor)</b>		<b>3LD9250-0BA</b>	1	1 unit	1CL
	<ul style="list-style-type: none"><li>Leading switch-on, lagging switch-off</li><li>Bridging bars for the switchable N pole are not included in the scope of supply</li></ul>					
	<b>N or PE terminals</b>		<b>3LD9250-2BA</b>	1	1 unit	1CL
	Through-type					
	<b>Auxiliary switches</b>		<b>3LD9200-5B</b>	1	1 unit	1CL
	For mounting on the left and/or right, lagging switch-on, leading switch-off For 3-pole load transfer switches only Indicate the switch position of the respective switch disconnector (I or II) to which the auxiliary switch is connected <ul style="list-style-type: none"><li>1 NO + 1 NC</li></ul> For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information <ul style="list-style-type: none"><li>1 NO + 1 NC</li></ul>					
	<b>Terminal covers as additional touch protection</b>		<b>3LD9200-5BF</b>	1	1 unit	1CL
	Can be snapped on at top and bottom <ul style="list-style-type: none"><li>1-pole</li><li>3-pole</li></ul>		<b>3LD9251-2A</b> <b>3LD9251-0A</b>	100 1	4 units 4 units	1CL 1CL
For molded-plastic enclosures						
	<b>4th contact (N conductor)</b>		<b>3LD9250-0CA</b>	1	1 unit	1CL
	<ul style="list-style-type: none"><li>Leading switch-on, lagging switch-off</li><li>Bridging bars for the switchable N pole are not included in the scope of supply</li></ul>					
	<b>N or PE terminals</b>		<b>3LD9250-2CA</b>	1	1 unit	1CL
	Through-type					
	<b>Auxiliary switches</b>		<b>3LD9200-5C</b> <b>3LD9200-6C</b>	1 1	1 unit 1 unit	1CL 1CL
	For mounting on the left and/or right, lagging switch-on, leading switch-off For 3-pole load transfer switches only Indicate the switch position of the respective switch disconnector (I or II) to which the auxiliary switch is connected <ul style="list-style-type: none"><li>1 NO + 1 NC</li><li>2 NO</li></ul> For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information <ul style="list-style-type: none"><li>1 NO + 1 NC</li></ul>					
			<b>3LD9200-5CF</b>	1	1 unit	1CL

# Transfer Switching Equipment and Load Transfer Switches

## 3LD2 Load Transfer Switches up to 250 A







### Accessories

Version		SD	3LD27 (100 A)	PU (UNIT, SET, M)	PS	PG
		d	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU		
<b>For front mounting</b>						
 <p>3LD9280-0B (left) 3LD9280-2B (right)</p>		<b>4th contact (N conductor)</b> <ul style="list-style-type: none"> <li>Leading switch-on, lagging switch-off</li> <li>Bridging bars for the switchable N pole are not included in the scope of supply</li> </ul>		3LD9280-0B	1	1 unit 1CL
		<b>N or PE terminals</b> Through-type		3LD9280-2B	1	1 unit 1CL
 <p>3LD9200-5B or 3LD9200-5BF</p>		<b>Auxiliary switches</b> For mounting on the left and/or right, lagging switch-on, leading switch-off For 3-pole load transfer switches only Indicate the switch position of the respective switch disconnecter (I or II) to which the auxiliary switch is connected <ul style="list-style-type: none"> <li>1 NO + 1 NC</li> </ul>		3LD9200-5B	1	1 unit 1CL
		For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information <ul style="list-style-type: none"> <li>1 NO + 1 NC</li> </ul>		3LD9200-5BF	1	1 unit 1CL
 <p>3LD9281-2A</p>		<b>Terminal covers as additional touch protection</b> Can be snapped on at top and bottom <ul style="list-style-type: none"> <li>1-pole (1 pack = 4 units)</li> </ul>		3LD9281-2A	1	4 units 1CL

# Transfer Switching Equipment and Load Transfer Switches

## 3LD2 Load Transfer Switches up to 250 A

### Accessories

Version		SD	3LD23 (160 A) and 3LD24 (250 A)	PU (UNIT, SET, M)	PS	PG
		d	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?ArticleNo.</a>	Price per PU		
<b>For front mounting</b>						
	<b>4th contact (N conductor)</b> Leading switch-on, lagging switch-off		<b>3LD9240-0B</b>	1	1 unit	1CL
	<b>N or PE terminals</b> Through-type		<b>3LD9240-2B</b>	1	1 unit	1CL
	<b>Auxiliary switches</b> For mounting on the left and/or right, lagging switch-on, leading switch-off For 3-pole load transfer switches only Indicate the switch position of the respective switch disconnecter (I or II) to which the auxiliary switch module is connected • 1 NO + 1 NC		<b>3LD9200-5B</b>	1	1 unit	1CL
	For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information • 1 NO + 1 NC		<b>3LD9200-5BF</b>	1	1 unit	1CL
<b>For front and floor mounting</b>						
	<b>Terminal covers as additional touch protection</b> Can be snapped on at top and bottom • 1-pole		<b>3LD9241-2A</b>	1	4 units	1CL
<b>For floor mounting</b>						
	<b>Shaft coupling</b> No ON-lock		<b>3LD9242-4F</b>	1	5 units	1CL
	<b>4th contact (N conductor)</b> Leading switch-on, lagging switch-off		<b>3LD9240-0C</b>	1	1 unit	1CL
	<b>N or PE terminals</b> Through-type		<b>3LD9240-2C</b>	1	1 unit	1CL
	<b>Auxiliary switches</b> For mounting on the left and/or right, lagging switch-on, leading switch-off For 3-pole load transfer switches only Indicate the switch position of the respective switch disconnecter (I or II) to which the auxiliary switch module is connected • 1 NO + 1 NC		<b>3LD9200-5C</b>	1	1 unit	1CL
	• 2 NO		<b>3LD9200-6C</b>	1	1 unit	1CL
	For mounting on the left and/or right, lagging switch-on, leading switch-off, with gold-plated contacts for requesting electronic information • 1 NO + 1 NC		<b>3LD9200-5CF</b>	1	1 unit	1CL





# Transfer Switching Equipment and Load Transfer Switches

## 3KC Transfer Switching Equipment up to 3200 A

### Introduction

#### Overview


#### 3KC0 manual transfer switching equipment (MTSE) for 16 to 160 A

Rated current $I_n$ (A)	16	32	63	80	100	125	160	
								

#### Manual transfer switching equipment (MTSE)

Size (MTSE type)	1 (3KC0...-M)			2 (3KC0...-N)			
<b>Number of poles</b>							
• 3-pole	✓	✓	✓	✓	✓	✓	✓
• 4-pole	✓	✓	✓	✓	✓	✓	✓
<b>Connection</b>							
• Flat terminals	--	--	--	--	--	--	--
• Box terminals	✓	✓	✓	✓	✓	✓	✓

#### 3KC3/6 transfer switching equipment with motorized operating mechanism (RTSE/ATSE) for 40 to 160 A

Rated current $I_n$ (A)	40	63	80	100	125	160
						

#### Remote transfer switching equipment (RTSE)

RTSE type	3KC3424	3KC3426	3KC3428	3KC3430	3KC3432	3KC3434
<b>Number of poles</b>						
• 3-pole	--	--	--	--	--	--
• 4-pole	✓	✓	✓	✓	✓	✓
<b>Connection</b>						
• Flat terminals	--	--	--	--	--	--
• Box terminals	✓	✓	✓	✓	✓	✓



#### Automatic transfer switching equipment (ATSE)

ATSE type	3KC6424	3KC6426	3KC6428	3KC6430	3KC6432	3KC6434
<b>Number of poles</b>						
• 3-pole	--	--	--	--	--	--
• 4-pole	✓	✓	✓	✓	✓	✓
<b>Connection</b>						
• Flat terminals	--	--	--	--	--	--
• Box terminals	✓	✓	✓	✓	✓	✓

✓ Available

-- Not available





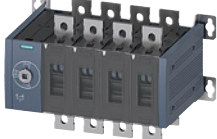
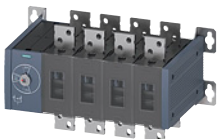


# Transfer Switching Equipment and Load Transfer Switches

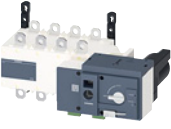
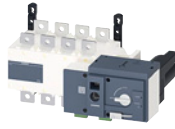
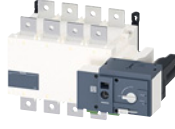
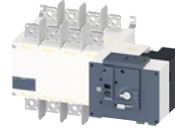
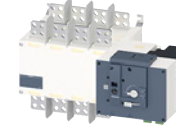
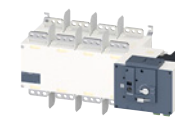
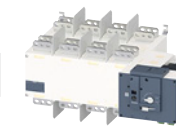


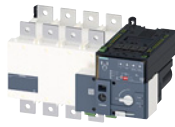
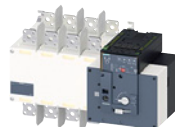
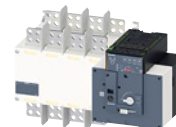
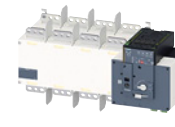
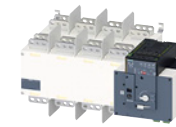
## 3KC Transfer Switching Equipment up to 3200 A

Introduction

### 3KC0 manual transfer switching equipment (MTSE) for 200 to 1600 A

200	250	315	400	500	630	800	1000	1250	1600
									
									
3 (3KC0...-P)				4 (3KC0...-Q)			5 (3KC0...-R)		
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
--	--	--	--	--	--	--	--	--	--

### 3KC4/8 transfer switching equipment with motorized operating mechanism (RTSE/ATSE) for 250 to 3200 A

250	400	630	800/1000	1250	1600	2000/2500/3200
						
						
3KC4.38	3KC4.42	3KC4.46	3KC4.48/50	3KC4.52	3KC4.54	3KC4.56/58/60
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
--	--	--	--	--	--	--
						
						
3KC8.38	3KC8.42	3KC8.46	3KC8.48/50	3KC8.52	3KC8.54	3KC8.56/58/60
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
--	--	--	--	--	--	--

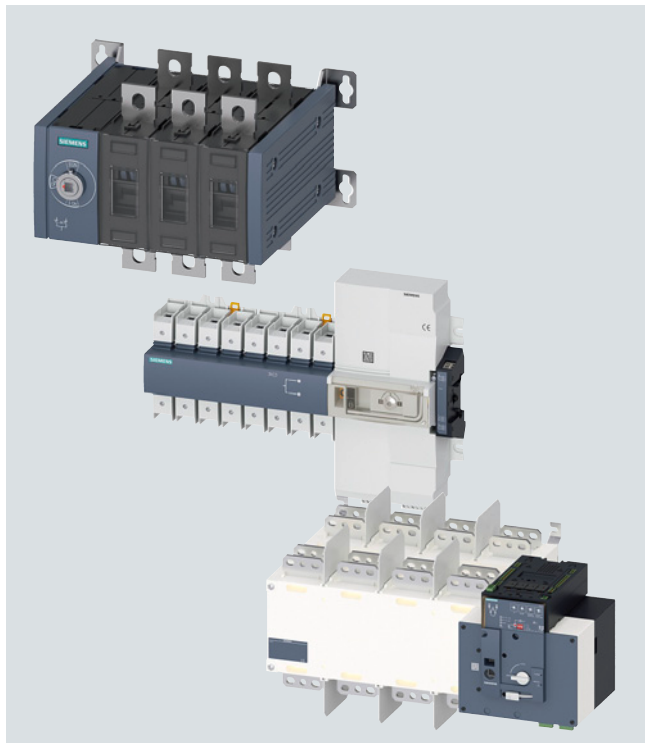
✓ Available  
-- Not available

## Transfer Switching Equipment and Load Transfer Switches

### 3KC Transfer Switching Equipment up to 3200 A

#### General data

#### Overview



3KC transfer switching equipment:  
top left MTSE up to 1600 A, center RTSE up to 160 A,  
bottom right ATSE up to 3200 A

3KC transfer switching equipment of class PC offers a convenient and safe solution for switching over from one supply network to an alternative network in the event of network fluctuations.

Systems are switched over with an interruption of the power supply during the switching operation. Fast transfer switching in the case of the ATSE ensures a short load downtime. Integration of transfer switching and control in one single unit enables the combination of high performance and easy installation.

#### Features

##### Common features

- Simple installation
- Conformity with IEC 90947-6-1 and IEC 90947-3

##### Integrated solution

- Particularly easy installation of a complete solution with an integrated ATSE for the entire 40 ... 3200 A current range

##### Modular design for the MTSE and the RTSE/ATSE from 250 A and higher

- Controller (electronic module) and motorized operating mechanism can be replaced individually on the RTSE/ATSE
- MTSE can be expanded by an additional pole

##### Maximum safety

- Maximum safety thanks to electrical and mechanical interlocking of switches (I, II)
- RTSE/ATSE: Supplied as standard with a manual emergency handle to enable fast intervention in an emergency
- Switching position indication
- Shutting off with a padlock in position 0 enables safe maintenance work
- In the case of RTSE/ATSE transfer switches up to 160 A, locking with a padlock can be configured for every position before installation: I, 0 or II
- Ensuring device availability by means of constant monitoring of the device's operating conditions

##### Easy installation in the case of transfer switches up to 160 A

- Compact design of the ATSE with integrated controller, already wired ready for operation (including power supply)
- Easy access to network connection thanks to an extremely low overall depth
- Fast and easy mounting on a DIN rail or a mounting plate
- Easy wiring thanks to box terminals and the bridging bars provided for them, enabling a common outgoing assembly point. Thanks to the bridging bars, the connection capacity of the box terminal is not reduced

##### High switching capacity

- Closing and opening under load, also for inductive loads (AC-33)
- Resilient to voltage fluctuations in the supply system thanks to stable switch positions. The switching operations are fault-tolerant by a fail-safe power supply that is either integrated in the controller or is connected separately
- High dynamic strength for enhanced safety when switching to a short-circuit
- For RTSE up to 160 A: Extremely low load downtimes (< 90 ms) thanks to electromagnetic operating mechanism

##### Note

The 3KD switch disconnecter can be used as a disconnecting means in compliance with IEC 60204-1, [see chapter "Switch Disconnectors"](#).

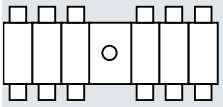
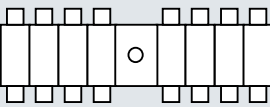
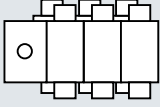
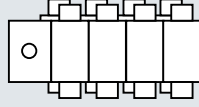
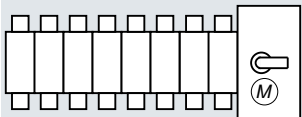
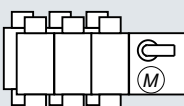
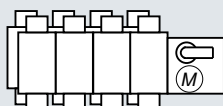
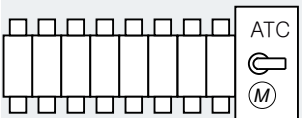
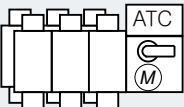
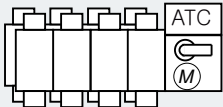
Transfer Switching Equipment and Load Transfer Switches  
3KC Transfer Switching Equipment up to 3200 A

General data

Switch versions

The following versions of the 3KC transfer switching equipment are available:

- Manual transfer switching equipment (MTSE)
- Remote transfer switching equipment (RTSE)
- Automatic transfer switching equipment (ATSE)

Number of poles	3-pole	4-pole	3-pole	4-pole
Rated current	16 ... 160 A		200 ... 1600 A	
MTSE 3KC0				
Rated current	40 ... 160 A		250 ... 3200 A	
RTSE	--	3KC3 	3KC4 	
ATSE	--	3KC6 	3KC8 	

# Transfer Switching Equipment and Load Transfer Switches

## 3KC Transfer Switching Equipment up to 3200 A

### General data

#### Benefits

- 3-/4-pole version
- Transfer switching equipment up to 3200 A (MTSE up to 1600 A)
- Very short switching time (for transfer switches up to 160 A)
- Compact design in the case of transfer switches up to 160 A
- Switching from network to network and from network to generator for ATSE from 250 A
- No additional software needed for parameterization
- Auto-configuration of voltage and frequency levels
- Watchdog relay ensures operability of the switch
- Direct control of the generator via a control signal for ATSE from 250 A
- Integrated dual power supply for ATSE from 250 A
- Resistant to shock and vibrations
- Additionally fail-safe mechanical interlock
- External display for installation in control cabinet door

#### Application

##### Industries

Residential/non-residential:

- Safety devices in high buildings
- Computing centers (banks, insurance companies, etc.)
- Fire pumps, air conditioning systems, cold rooms
- Lighting systems in shopping malls

Industry:

- Production lines in continuous operation
- Engine rooms
- Auxiliary facilities in essentially important thermal power stations
- Pumps
- Cooling systems
- Fans

Infrastructure:

- Installations in ports and loading stations
- Airports
- Lighting

##### Network configurations

All versions of the 3KC transfer switching equipment can be used for all conventional network configurations, including:

- TT systems
- TN systems
  - TN-C systems
  - TN-C-S systems
  - TN-S systems
- IT systems



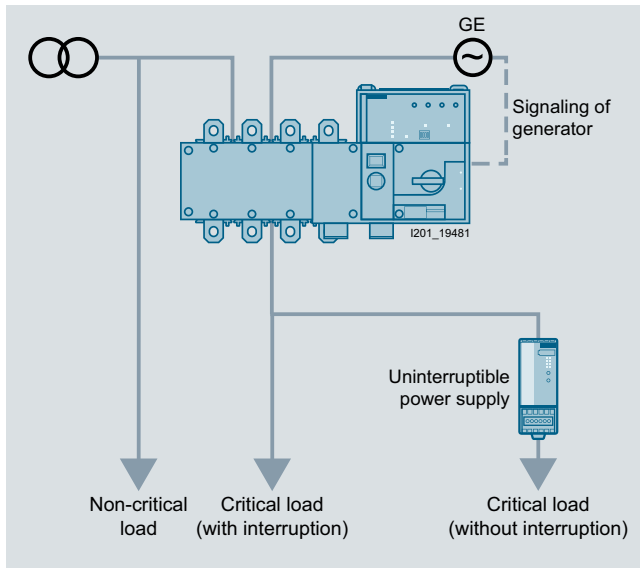
# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

General data

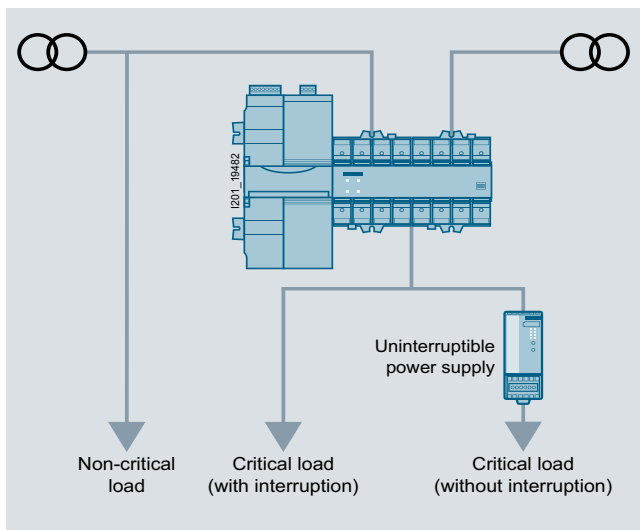
## Applications

### Network/generator transfer



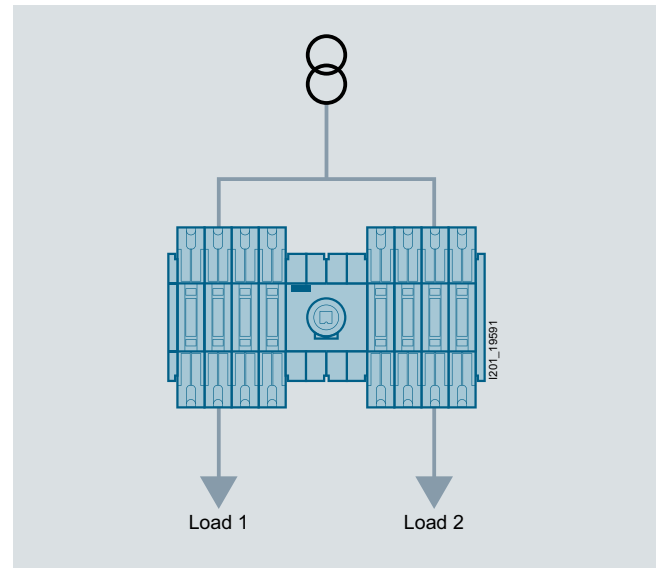
Network/generator operation (IEC 60947-6-1)

### Network/network transfer



Network/network operation (IEC 60947-6-1)

### Load transfer



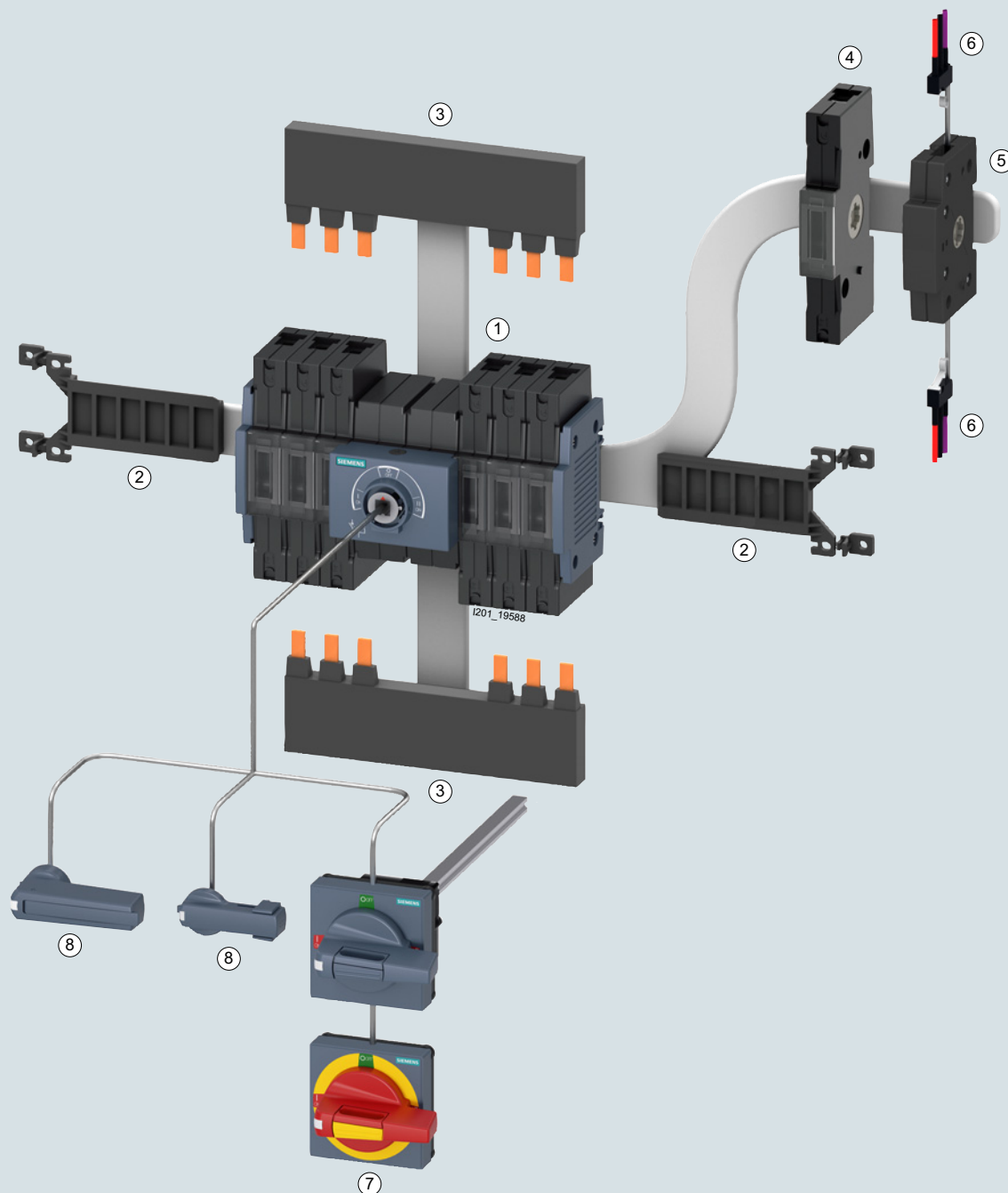
Load transfer switches (IEC 60947-3)

## Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

### General data

**Overview of components and accessories: 3KC0 manual transfer switching equipment (MTSE) for 16 to 160 A, 3/4-pole**



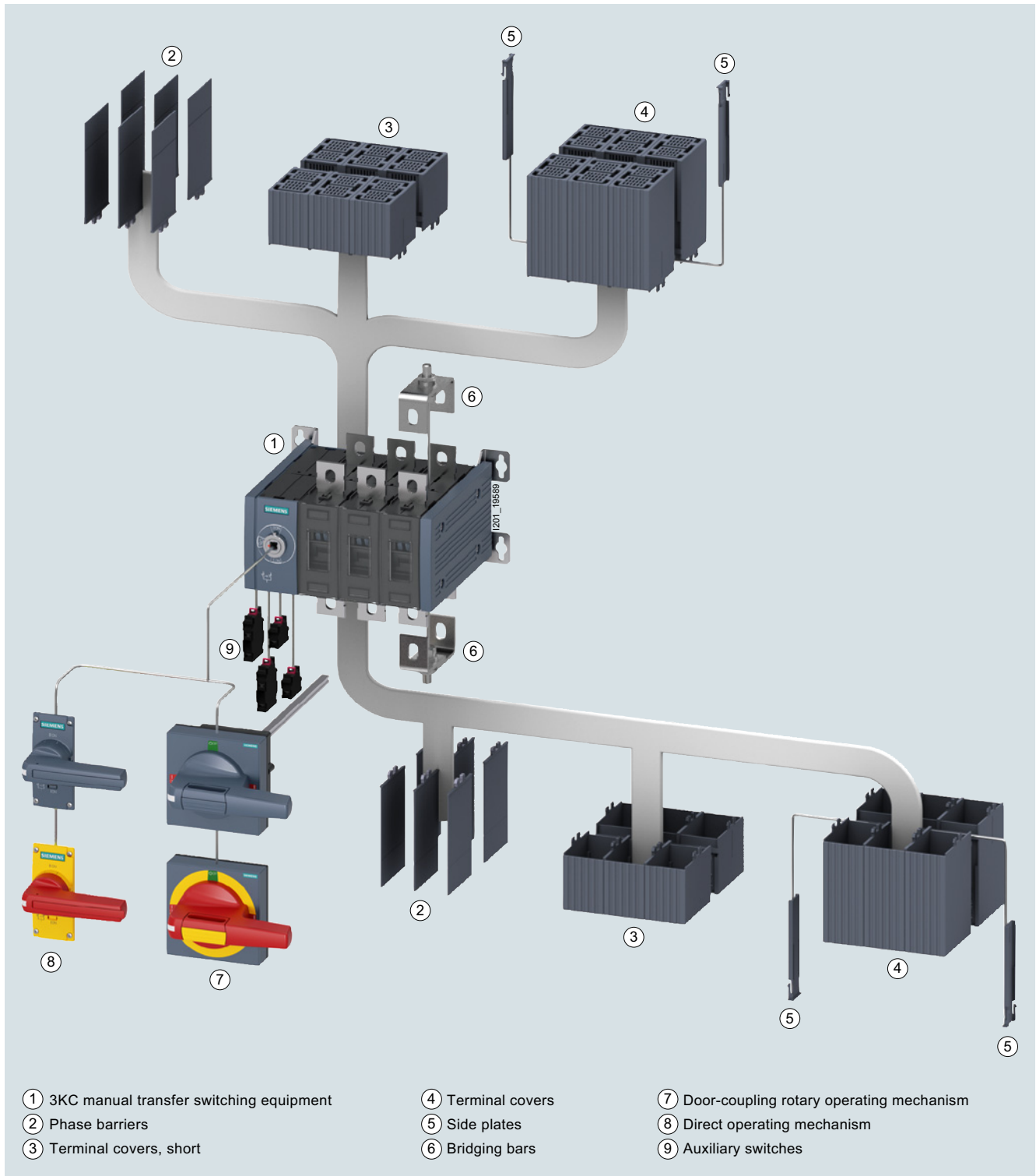
- |   |  |
|---|--|
| ① 3KC manual transfer switching equipment | ⑤ Auxiliary switch module                  |
| ② Mounting kit for floor mounting         | ⑥ Auxiliary switches                       |
| ③ Bridging bars                           | ⑦ Door-coupling rotary operating mechanism |
| ④ 4th pole                                | ⑧ Direct operating mechanism               |

# Transfer Switching Equipment and Load Transfer Switches

## 3KC Transfer Switching Equipment up to 3200 A

General data

**Overview of components and accessories: 3KC0 manual transfer switching equipment (MTSE) in sizes 3 to 5, for 200 to 1600 A, 3/4-pole**

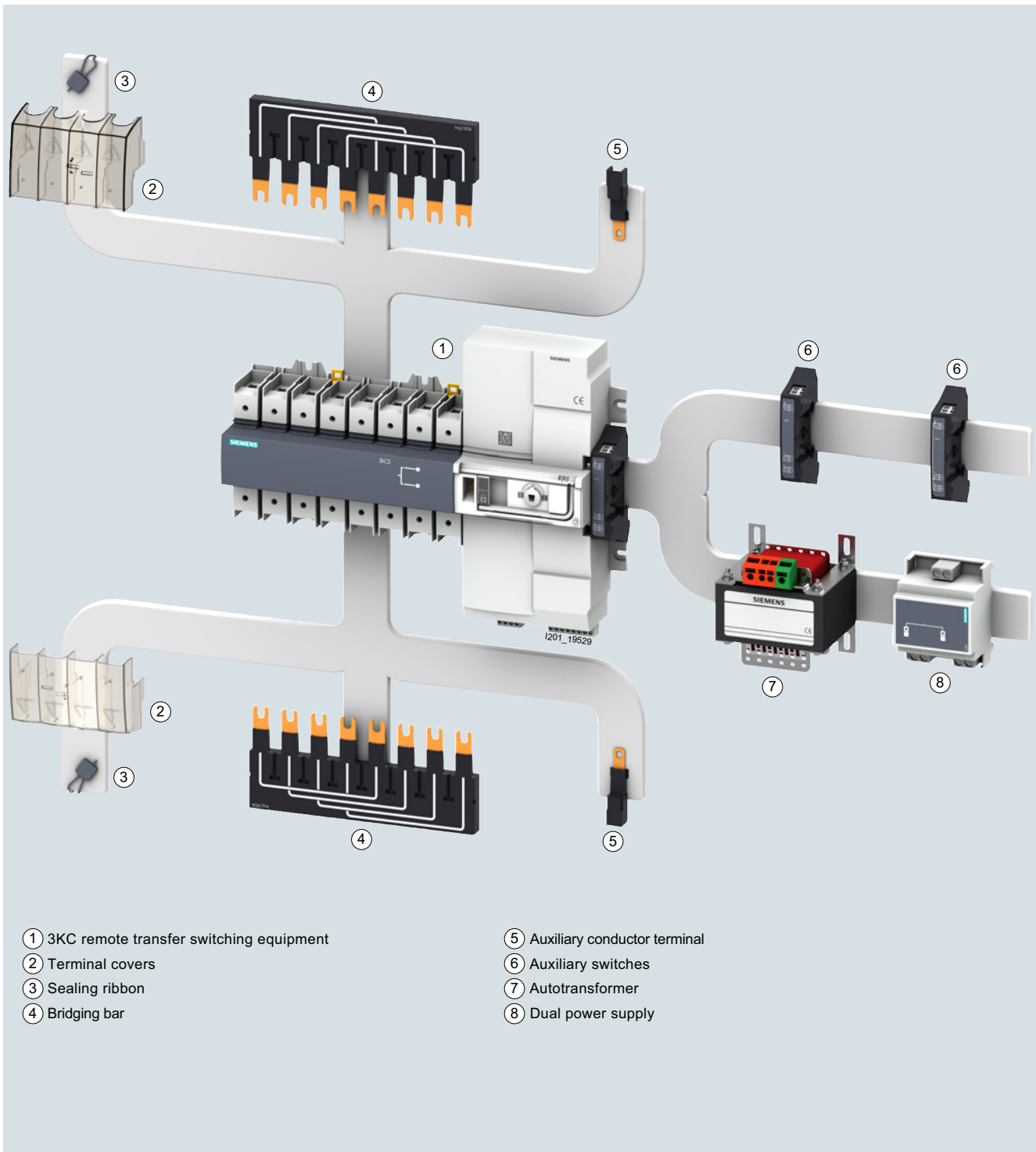


## Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

### General data

**Overview of components and accessories: 3KC3 remote transfer switching equipment (RTSE) for 40 to 160 A, 4-pole**

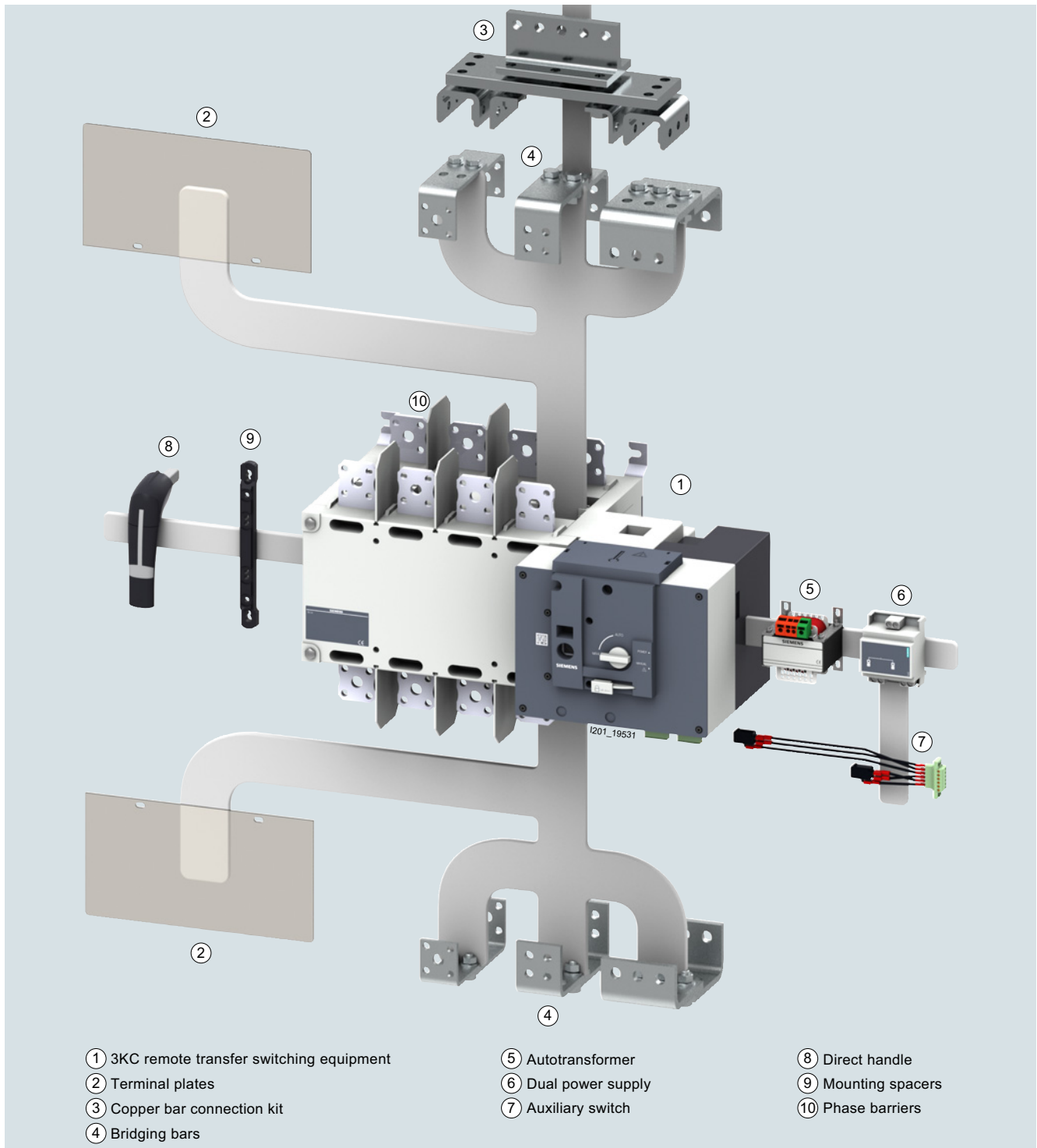


# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

General data

**Overview of components and accessories: 3KC4 remote transfer switching equipment (RTSE) for 250 to 3200 A, 3-/4-pole**

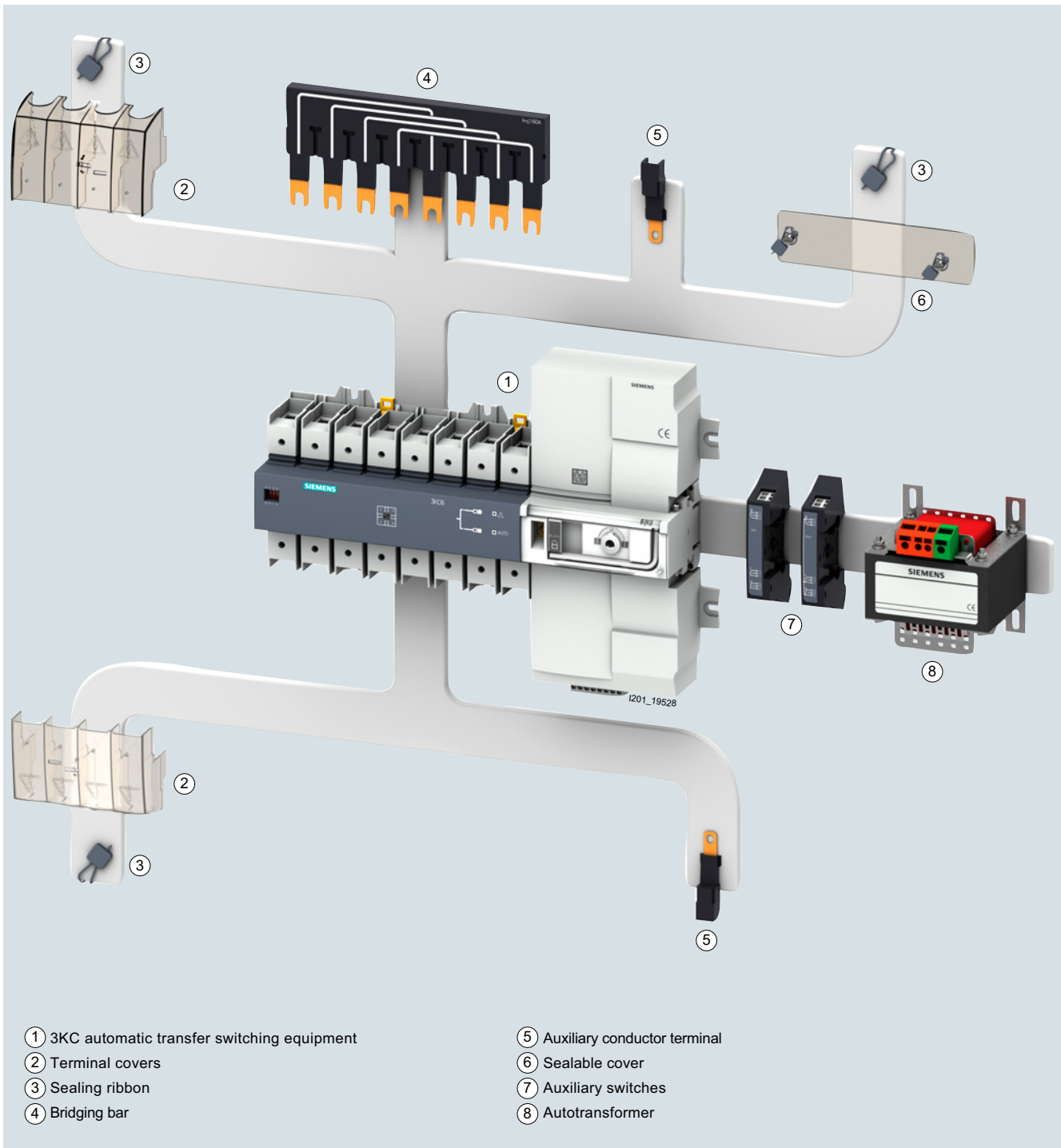


## Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

### General data

**Overview of components and accessories: 3KC6 automatic transfer switching equipment (ATSE) for 40 to 160 A, 4-pole**

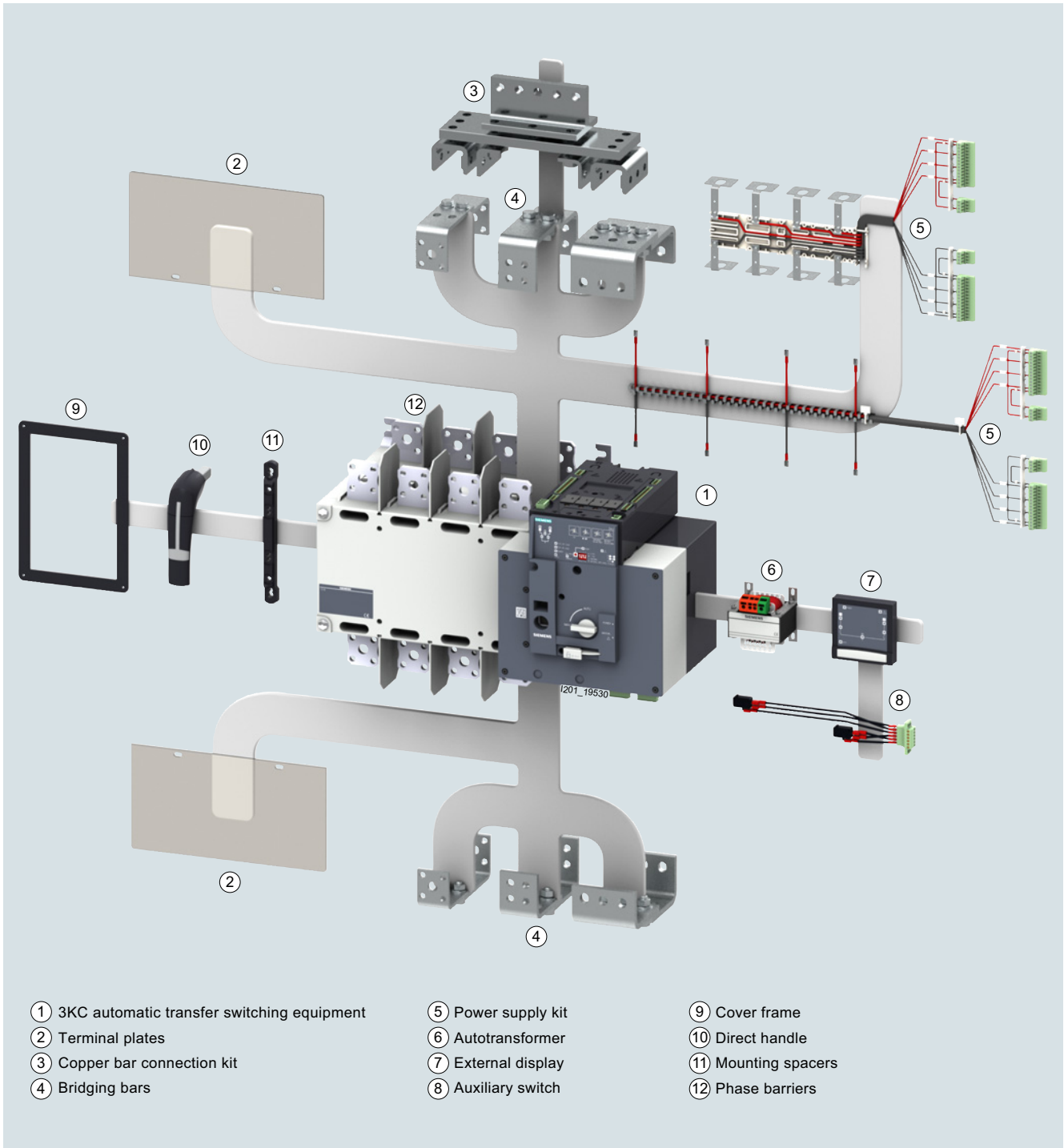


# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

General data

Overview of components and accessories: 3KC8 automatic transfer switching equipment (ATSE) for 250 to 3200 A, 3-/4-pole





# Transfer Switching Equipment and Load Transfer Switches

## 3KC Transfer Switching Equipment up to 3200 A

### Technical Features

#### Manual transfer switching equipment (MTSE)

#### Technical specifications

3KC0 manual transfer switching equipment (MTSE) from 16 to 160 A		3KC0.16	3KC0.22	3KC0.26	3KC0.28	3KC0.30	3KC0.32	3KC0.34
Size		1			2			
Continuous current A		16	32	63	80	100	125	160
General technical details								
Operating voltage at 50/60 Hz AC in compliance with IEC 60947-6-1	V	415						
Operating voltage at 50/60 Hz AC in compliance with IEC 60947-3	V	690						
Insulation voltage ( $U_i$ )	V	AC 1000						
Impulse withstand voltage ( $U_{imp}$ )	kV	8						
Overvoltage category with pollution degree 3		III						
Operational current in compliance with IEC 60947-6-1:								
• AC-31 B, at 415 V	A	16	32	63	80	100	125	160
• AC-32 B, at 415 V	A	16	32	63	80	100	125	160
• AC-33 B, at 415 V	A	16	32	63	80	100	125	160
• AC-35 B, at 400 V	A	16	32	63	80	100	125	160
Operational current in compliance with IEC 60947-3:								
• AC-21 A, at AC-22 A, at 415 ... 690 V	A	16	32	63	80	100	125	160
• AC-23 A, at 415 V	A	16	32	63	80	100	125	160
• AC-23 A, at 500 V	A	16	32	63	80	100	125	160
• AC-23 A, at 690 V	A	16	32	63	80	100	125	160
Operational power in compliance with IEC 60947-3:								
• AC-23 A, at 415 V	kW	7.5	15	30	37	55	55	90
• AC-23 A, at 500 V	kW	7.5	18.5	37	55	55	75	110
• AC-23 A, at 690 V	kW	11	30	55	75	90	110	110
Short-circuit behavior								
Short-circuit current ratings in compliance with IEC 60947-6-1:								
• Short-time withstand current ( $I_{cw}$ , 100 ms, 415 V) in compliance with IEC 60947-6-1 kA		5			10			
• Short-circuit current making capacity ( $I_{cm}$ , 415 V) in compliance with IEC 60947-6-1 kA		7.7			17			
Short-circuit current ratings in compliance with IEC 60947-3:								
• Short-time withstand current ( $I_{cw}$ , 1 s, 415 V / 690 V) in compliance with IEC 60947-3 kA		3			4			
• Short-circuit current making capacity ( $I_{cm}$ , 690 V) in compliance with IEC 60947-3 kA		7			12			
Conditional short-circuit current with fuse:								
• Continuous current of upstream gG fuse, 500 V / 690 V	A	63			160			
• Conditional short-circuit current with gG fuse (415 V) in compliance with IEC 60947-6-1	kA	100			100			
• Conditional short-circuit current with gG fuse (415 V) in compliance with IEC 60947-3	kA	100			100			
• Conditional short-circuit current with gG fuse (690 V) in compliance with IEC 60947-3	kA	100			65			
• Let-through current of gG fuse 500 V; max. permissible	kA	8.1			18			
• Let-through current of gG fuse 690 V; max. permissible	kA	8.8			16			
• $I^2t$ value of gG fuse 500 V; max. permissible	kA <sup>2</sup> s	13.3			135.6			
• $I^2t$ value of gG fuse 690 V; max. permissible	kA <sup>2</sup> s	13.7			178.3			
Main conductor connections <sup>1)</sup>								
Cu conductor, solid	mm <sup>2</sup>	1 x (1 ... 16)			1 x (2.5 ... 16)			
Cu conductor, stranded	mm <sup>2</sup>	1 x (6 ... 35)			1 x (10 ... 70)			
With cable lug (DIN 46234)	mm <sup>2</sup>	--			--			
Cu busbar	mm	1 x 2 x 9			1 x 3 x 14			
Tightening torque for main contacts	Nm	5 ... 6.5			6.5 ... 8			
Other properties								
Power loss per pole with thermal current $I_{th}$	W	0.1	0.4	1	1.1	1.8	3.2	4.6
Mechanical endurance		15000			15000			
Electrical endurance (AC-23 A at 415 V / 690 V)		6000			1500			
IP protection class / with cover		IP20			IP20			
Ambient temperature								
• Operation	°C	-20 ... +70						
• Storage	°C	-50 ... +80						
Width x height x depth (3-pole transfer switching equipment)	mm	201.6 x 119 x 84.5			255.6 x 126 x 84.5			
Width x height x depth (4-pole transfer switching equipment)	mm	237.6 x 119 x 84.5			309.6 x 126 x 84.5			

<sup>1)</sup> Values for connection of aluminum cables can be found in the product data sheet, see [Siemens Industry Online Support at www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

# Transfer Switching Equipment and Load Transfer Switches

## 3KC Transfer Switching Equipment up to 3200 A

### Technical Features

#### Manual transfer switching equipment (MTSE)

3KC0 manual transfer switching equipment (MTSE) from 200 to 500 A		3KC0.36 3	3KC0.38 250	3KC0.40 315	3KC0.42 400	3KC0.44 4 500
Size Continuous current A		200	250	315	400	500
<b>General technical details</b>						
Operating voltage at 50/60 Hz AC in compliance with IEC 60947-6-1	V	415				
Operating voltage at 50/60 Hz AC in compliance with IEC 60947-3	V	690				
Insulation voltage ( $U_i$ )	V AC	1000				
Impulse withstand voltage ( $U_{imp}$ )	kV	12				
Overvoltage category with pollution degree 3	IV					
Operational current in compliance with IEC 60947-6-1:						
• AC-31 B, at 415 V	A	200	250	315	400	500
• AC-32 B, at 415 V	A	200	250	315	350	500
• AC-33 B, at 415 V	A	200	250	315	315	500
• AC-35 B, at 400 V	A	200	250	315	350	500
Operational current in compliance with IEC 60947-3:						
• AC-21 A, at AC-22 A, at 415 ... 690 V	A	200	250	315	400	500
• AC-23 A, at 415 V	A	200	250	315	400	500
• AC-23 A, at 500 V	A	200	250	315	350	500
• AC-23 A, at 690 V	A	200	250	315	315	500
Operational power in compliance with IEC 60947-3:						
• AC-23 A, at 415 V	kW	110	132	160	220	280
• AC-23 A, at 500 V	kW	132	160	220	250	355
• AC-23 A, at 690 V	kW	185	220	280	355	500
<b>Short-circuit behavior</b>						
Short-circuit current ratings in compliance with IEC 60947-6-1:						
• Short-time withstand current ( $I_{cw}$ , 100 ms, 415 V) in compliance with IEC 60947-6-1 kA		18				30
• Short-circuit current making capacity ( $I_{cm}$ , 415 V) in compliance with IEC 60947-6-1 kA		36				63
Short-circuit current ratings in compliance with IEC 60947-3:						
• Short-time withstand current ( $I_{cw}$ , 1 s, 415 V / 690 V) in compliance with IEC 60947-3 kA		13				30
• Short-circuit current making capacity ( $I_{cm}$ , 690 V) in compliance with IEC 60947-3 kA		26				63
Conditional short-circuit current with fuse:						
• Continuous current of upstream gG fuse, 500 V / 690 V	A	250		400		630
• Conditional short-circuit current with gG fuse (415 V) in compliance with IEC 60947-6-1	kA	100		65		100
• Conditional short-circuit current with gG fuse (415 V) in compliance with IEC 60947-3	kA	100		65		100
• Conditional short-circuit current with gG fuse (690 V) in compliance with IEC 60947-3	kA	65		35		65
• Let-through current of gG fuse 500 V; max. permissible	kA	24.8		34.3		65.5
• Let-through current of gG fuse 690 V; max. permissible	kA	25		33		54
• $I^2t$ value of gG fuse 500 V; max. permissible	kA <sup>2</sup> s	426.5	426.5	1165	1165	3687.5
• $I^2t$ value of gG fuse 690 V; max. permissible	kA <sup>2</sup> s	348	348	1157.5	1157.5	4450
<b>Main conductor connections<sup>1)</sup></b>						
Cu conductor, solid	mm <sup>2</sup>	-				-
Cu conductor, stranded	mm <sup>2</sup>	-				-
With cable lug (DIN 46234)	mm <sup>2</sup>	1 x (6 ... 240), 2 x (6 ... 150)				1 x (25 ... 240), 2 x (25 ... 240)
Cu busbar	mm	1 x 30 x 10				1 x 40 x 10, 2 x 40 x 5
Tightening torque for main contacts	Nm	30 ... 44				50 ... 75
<b>Other properties</b>						
Power loss per pole with thermal current $I_{th}$	W	4	6	10	14	12
Mechanical endurance		10000				8000
Electrical endurance (AC-23 A at 415 V / 690 V)		1000				1000
IP protection class / with cover		IP00 / IP20				IP00 / IP20
Ambient temperature:						
• Operation	°C	-20 ... +70				
• Storage	°C	-50 ... +80				
Width x height x depth (3-pole transfer switching equipment)	mm	235 x 164 x 197.2				319 x 235 x 232.5
Width x height x depth (4-pole transfer switching equipment)	mm	279 x 164 x 197.2				379 x 235 x 232.5

<sup>1)</sup> Values for connection of aluminum cables can be found in the product data sheet, see [Siemens Industry Online Support](http://Siemens Industry Online Support)  
[www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

# Transfer Switching Equipment and Load Transfer Switches

## 3KC Transfer Switching Equipment up to 3200 A

### Technical Features

#### Manual transfer switching equipment (MTSE)

3KC0 manual transfer switching equipment (MTSE) from 630 to 1600 A		3KC0.46	3KC0.48	3KC0.50	3KC0.52	3KC0.54
Size		4		5		
Continuous current A		630	800	1000	1250	1600
<b>General technical details</b>						
Operating voltage at 50/60 Hz AC in compliance with IEC 60947-6-1	V	415				
Operating voltage at 50/60 Hz AC in compliance with IEC 60947-3	V	690				
Insulation voltage ( $U_i$ )	V	AC 1000				
Impulse withstand voltage ( $U_{imp}$ )	kV	12				
Overvoltage category with pollution degree 3	IV					
Operational current in compliance with IEC 60947-6-1:						
• AC-31 B, at 415 V	A	630	800	1000	1250	1600
• AC-32 B, at 415 V	A	630	800	1000	1250	1250
• AC-33 B, at 415 V	A	500	500	800	800	800
• AC-35 B, at 400 V	A	630	800	1000	1250	1250
Operational current in compliance with IEC 60947-3:						
• AC-21 A, at AC-22 A, at 415 ... 690 V	A	630	800	1000	1250	1600
• AC-23 A, at 415 V	A	630	670	800	800	800
• AC-23 A, at 500 V	A	630	630	800	800	800
• AC-23 A, at 690 V	A	500	500	800	800	800
Operational power in compliance with IEC 60947-3:						
• AC-23 A, at 415 V	kW	355	355	400	400	400
• AC-23 A, at 500 V	kW	400	400	560	560	560
• AC-23 A, at 690 V	kW	500	500	800	800	800
<b>Short-circuit behavior</b>						
Short-circuit current ratings in compliance with IEC 60947-6-1:						
• Short-time withstand current ( $I_{cw}$ , 100 ms, 415 V) in compliance with IEC 60947-6-1 kA		30		50		
• Short-circuit current making capacity ( $I_{cm}$ , 415 V) in compliance with IEC 60947-6-1 kA		63		105		
Short-circuit current ratings in compliance with IEC 60947-3:						
• Short-time withstand current ( $I_{cw}$ , 1 s, 415 V / 690 V) in compliance with IEC 60947-3 kA		30		50		
• Short-circuit current making capacity ( $I_{cm}$ , 690 V) in compliance with IEC 60947-3 kA		63		105		
Conditional short-circuit current with fuse:						
• Continuous current of upstream gG fuse, 500 V / 690 V	A	630	800	1000 / -	1250 / -	1600 / -
• Conditional short-circuit current with gG fuse (415 V) in compliance with IEC 60947-6-1	kA	100	65	100	80	80
• Conditional short-circuit current with gG fuse (415 V) in compliance with IEC 60947-3	kA	100	65	100	80	80
• Conditional short-circuit current with gG fuse (690 V) in compliance with IEC 60947-3	kA	65	50	-	-	-
• Let-through current of gG fuse 500 V; max. permissible	kA	65.5	70.8	95.2	112.6	112.6
• Let-through current of gG fuse 690 V; max. permissible	kA	54	65	-	-	-
• $I^2t$ value of gG fuse 500 V; max. permissible	kA <sup>2</sup> s	3687.5	7471.7	15400	25960	30900
• $I^2t$ value of gG fuse 690 V; max. permissible	kA <sup>2</sup> s	4450	103000	-	-	-
<b>Main conductor connections<sup>1)</sup></b>						
Cu conductor, solid	mm <sup>2</sup>	--		--		
Cu conductor, stranded	mm <sup>2</sup>	--		--		
With cable lug (DIN 46234)	mm <sup>2</sup>	1 x (25 ... 240), 2 x (25 ... 240)		1 x (120 ... 240), 2 x (95 ... 240)		
Cu busbar	mm	1 x 40 x 10, 2 x 40 x 5		2 x 60 x 10		
Tightening torque for main contacts	Nm	50 ... 75		50 ... 75		
<b>Other properties</b>						
Power loss per pole with thermal current $I_{th}$	W	17	25	20	32	57
Mechanical endurance		8000		6000		
Electrical endurance (AC-23 A at 415 V / 690 V)		1000		500		
IP protection class / with cover		IP00 / IP20		IP00 / IP20		
Ambient temperature:						
• Operation	°C	-20 ... +70				
• Storage	°C	-50 ... +80				
Width x height x depth (3-pole transfer switching equipment)	mm	319 x 235 x 232.5		475 x 310 x 311.5		
Width x height x depth (4-pole transfer switching equipment)	mm	379 x 235 x 232.5		565 x 310 x 311.5		

<sup>1)</sup> Values for connection of aluminum cables can be found in the product data sheet, see [Siemens Industry Online Support at www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

## Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

Technical Features

## Remote transfer switching equipment (RTSE) / Automatic transfer switching equipment (ATSE)

## Technical specifications

3KC3 transfer switching equipment (RTSE) from 40 to 160 A		3KC3424	3KC3426	3KC3428	3KC3430	3KC3432	3KC3434
3KC6 transfer switching equipment (ATSE) from 40 to 160 A		3KC6424	3KC6426	3KC6428	3KC6430	3KC6432	3KC6434
Continuous current A		40	63	80	100	125	160
General technical details							
Operating voltage at 50/60 Hz AC	V	415					
Insulation voltage	V	800 AC					
Impulse withstand voltage ( $U_{imp}$ ) of the main circuit	kV	6					
Impulse withstand voltage ( $U_{imp}$ ) of the control circuit	kV	RTSE: 4 / ATSE: 2.5					
Overvoltage category with pollution degree 3		RTSE: III / ATSE: II					
Operational current in compliance with IEC 60947-6-1:							
• AC-31 A/B, at 415 V	A	40	63	80	100	100/125	100/160
• AC-32 A/B, at 415 V	A	40	63	80	100	100/125	100/160
• AC-33 B, at 415 V	A	40	63	80	100	125	125
Operational current in compliance with IEC 60947-3:							
• AC-21 A/B, at 415 V	A	40	63	80	100	125	125/160
• AC-21 A/B, at 690 V	A	40	63	80	100	125	125
• AC-22 A/B, at 415 V	A	40	63	80	100	125	125/160
• AC-22 A/B, at 690 V	A	40	63	80	80	100/125	100/125
• AC-23 A/B, at 415 V	A	40	63	80	100	125	125/160
• AC-23 A/B, at 690 V	A	40	63	63	80	80	80
Operational power in compliance with IEC 60947-3:							
• AC-23 A/B, at 415 V	kW	22	37	45	55	60	75
• AC-23 A/B, at 690 V	kW	37	55	55	75	75	75
Short-circuit behavior							
Short-circuit current ratings in compliance with IEC 60947-3:							
• Short-time withstand current ( $I_{cw}$ , 1 s, 415 V)	kA	4					
• Short-time withstand current ( $I_{cw}$ , 50 ms, 415 V)	kA	10					
• Short-circuit current making capacity ( $I_{cm}$ , 415 V)	kA	5.88					
Conditional short-circuit current with fuse:							
• Continuous current of series-connected fuse	A	40	63	80	100	125	160
• Conditional short-circuit current with fuse (415 V), IEC 60947-6-1	kA	50	50	50	50	50	40
• Conditional short-circuit current with fuse (415 V), IEC 60947-3	kA	50	50	50	50	50	40
• Let-through current of gG fuse at 415 V; max. permissible	kA	14	14	14	14	14	17
• $I^2t$ value of gG fuse at 400/500 V; max. permissible	kA <sup>2</sup> s	61.3	61.3	61.3	61.3	64.3	109
Transfer switching properties							
Switching time I-0 & II-0	ms	45					
Switch-off time I-0-II & II-0-I, IEC 60947-6-1	ms	150					
Transfer time I-0-II & II-0-I, IEC 60947-6-1	ms	180					
Transfer time I-0-II & II-0-I, IEC 60947-6-1 with network monitoring	s	1.4					
Motorized operating mechanism rated apparent power at 230 V AC	VA	6					
Motorized operating mechanism peak inrush current at 230 V AC	A	30					
Main conductor connections <sup>1)</sup>							
• Cu conductor, solid	mm <sup>2</sup>	1 x (10 ... 70)					
• Cu conductor, stranded	mm <sup>2</sup>	1 x (10 ... 70)					
• With cable lug (DIN 46234)	mm <sup>2</sup>	--					
• Cu busbar	mm	--					
Tightening torque for main contacts	Nm	5					
Other properties							
Power loss per pole	W	0.5	1.2	2.2	4	5.2	8.7
Mechanical endurance		8500				7000	
Electrical endurance (AC-23 A at 415 V)		1500				1000	
IP protection class / with cover		IP00 / IP20					
Ambient temperature:							
• Operation	°C	-20 ... +70					
• Storage	°C	-40 ... +70					
Width x height x depth (4-pole switch)	mm	340 x 245 x 73.5					

<sup>1)</sup> Values for connection of aluminum cables can be found in the product data sheet, see [Siemens Industry Online Support](http://Siemens Industry Online Support) at [www.siemens.com/lowvoltage/product-support](http://www.siemens.com/lowvoltage/product-support)

# Transfer Switching Equipment and Load Transfer Switches

## 3KC Transfer Switching Equipment up to 3200 A

### Technical Features

#### Remote transfer switching equipment (RTSE) / Automatic transfer switching equipment (ATSE)

#### Technical specifications

3KC4 transfer switching equipment (RTSE) from 250 A to 1000 A		3KC4.38	3KC4.42	3KC4.46	3KC4.48	3KC4.50
3KC8 transfer switching equipment (ATSE) from 250 A to 1000 A		3KC8.38	3KC8.42	3KC8.46	3KC8.48	3KC8.50
Continuous current A		250	400	630	800	1000
<b>General technical details</b>						
Operating voltage at 50/60 Hz AC in compliance with IEC 60947-6-1 V		415				
Operating voltage at 50/60 Hz AC in compliance with IEC 60947-3 V		690				
Insulation voltage V		1000 AC / 1000 DC				
Impulse withstand voltage ( $U_{imp}$ ) of the main circuit kV		12	12	12	12	12
Impulse withstand voltage ( $U_{imp}$ ) of the control circuit kV		4	4	4	4	4
Overvoltage category with pollution degree 3		RTSE: IV / ATSE: III				
Operational current in compliance with IEC 60947-6-1:						
• AC-31 B, at 415 V	A	250	400	630	800	1000
• AC-32 B, at 415 V	A	200	400	500	800	1000
• AC-33 B, at 415 V	A	200	200	400	800	800
Operational current in compliance with IEC 60947-3:						
• AC-21 A/B, at 415 V	A	250	400	630	800	1000
• AC-21 A/B, at 690 V	A	200	200	500	800	1000
• AC-22 A/B, at 415 V	A	250	400	630	800	1000
• AC-22 A/B, at 690 V	A	160	160	400	630	800
• AC-23 A/B, at 415 V	A	200	400	500/630	800	1000
• AC-23 A/B, at 690 V	A	125	125	400	630	630
• DC-21/-22 A, at 220 V	A	250	250	630	800	1000
• DC-21/-22/-23 A 440 V; DC-23 220 V	A	200	200	630	800	1000
Operational power in compliance with IEC 60947-3:						
• AC-23 A/B 415 V	kW	110	220	335	450	700
• AC-23 A/B 690 V	kW	110	110	400	400	630
<b>Short-circuit behavior</b>						
Short-circuit current ratings in compliance with IEC 60947-6-1:						
• Short-time withstand current ( $I_{cw}$ , 60 ms, 415 V)	kA	10 at 30 ms	10 at 30 ms	12.6	20	20
• Short-circuit current making capacity ( $I_{cm}$ , at 415 V)	kA	17	17	25.2	40	40
Short-circuit current ratings in compliance with IEC 60947-3:						
• Short-time withstand current ( $I_{cw}$ , 60 ms, 415 V)	kA	8 at 690 V	8 at 690 V	10 at 690 V	35	35
• Short-circuit current making capacity ( $I_{cm}$ , at 415 V)	kA	22 at 690 V	30 at 690 V	17 at 690 V	73.5	73.5
Conditional short-circuit current with fuse:						
• Continuous current of series-connected fuse	A	250	400	630	800	1000
• Conditional short-circuit current with fuse (690 V), IEC 60947-3	kA	50	50	50	50	50
• Conditional short-circuit current with fuse (415 V), IEC 60947-6-1	kA	50	50	50	50	50
• Let-through current of gG fuse at 415 V; max. permissible	kA	22	30	42	51	60
• $I^2t$ value of gG fuse at 400/500 V; max. permissible	kA <sup>2</sup> s	200	600	3000	6000	6300
<b>Transfer switching properties</b>						
Switching time I-0 & II-0	s	0.5	0.5	0.6	1.4	1.4
Switch-off time I-0-II & II-0-I, IEC 60947-6-1	s	0.4	0.4	0.4	1.4	1.4
Transfer time I-0-II & II-0-I, IEC 60947-6-1	s	0.9	0.9	1	2.8	2.8
Transfer time I-0-II & II-0-I, IEC 60947-6-1 with network monitoring	s	1	1	1.1	3.1	3.1
Motorized operating mechanism rated apparent power at 230 V AC VA		115	115	150	184	184
Motorized operating mechanism peak inrush current at 230 V AC A		1.2	1.2	1.2	2	2
<b>Main conductor connections</b>						
• Cu conductor, solid	mm <sup>2</sup>	1 x (95 ... 150)	1 x (185 ... 240)	2 x (150 ... 300)	2 x (185 ... 300)	2 x 240 ... 4 x 185
• Cu conductor, stranded	mm <sup>2</sup>	1 x (95 ... 150)	1 x (185 ... 240)	2 x (150 ... 300)	2 x (185 ... 300)	2 x 240 ... 4 x 185
• With cable lug (DIN 46234)	mm <sup>2</sup>	1 x 150	1 x 240	2 x 300	2 x 300	4 x 185
• Cu busbar	mm	1 x 32 x 5	1 x 32 x 8	2 x 40 x 5	2 x 50 x 5	2 x 60 x 5
• Tightening torque for main contacts	Nm	20 ... 26	20 ... 26	40 ... 45	8.3 ... 13	8.3 ... 13
<b>Other properties</b>						
Power loss per pole	W	5.9	15.1	32.4	41.7	46.9
Mechanical endurance		7000	4000	4000	2500	2500
Electrical endurance (AC-23 B at 415 V)		1000	1000	1000	500	500
IP protection class / with cover		IP00 / IP20				
Ambient temperature during operation	°C	-20 ... +70				
Ambient temperature during storage	°C	-40 ... +70				
Width x height x depth (3-pole switch)	mm	328 x 160 x 292	328 x 170 x 292	377 x 260 x 369	504 x 370 x 440	504 x 370 x 440
Width x height x depth (4-pole switch)	mm	378 x 160 x 292	378 x 170 x 292	437 x 260 x 369	584 x 370 x 440	584 x 370 x 440

# Transfer Switching Equipment and Load Transfer Switches

## 3KC Transfer Switching Equipment up to 3200 A

### Technical Features

#### Remote transfer switching equipment (RTSE) / Automatic transfer switching equipment (ATSE)

3KC4 transfer switching equipment (RTSE) from 1250 to 3200 A 3KC8 transfer switching equipment (ATSE) from 1250 to 3200 A		Continuous current A	3KC4.52 1250	3KC4.54 1600	3KC4.56 2000	3KC4.58 2500	3KC4.60 3200
<b>General technical details</b>							
Operating voltage at 50/60 Hz AC in compliance with IEC 60947-6-1	V	415					
Operating voltage at 50/60 Hz AC in compliance with IEC 60947-3	V	690					
Insulation voltage	V	1000 AC / 1000 DC					
Impulse withstand voltage ( $U_{imp}$ ) of the main circuit	kV	12	12	12	12	12	12
Impulse withstand voltage ( $U_{imp}$ ) of the control circuit	kV	4	4	4	4	4	4
Overvoltage category with pollution degree 3		RTSE: IV / ATSE: III					
Operational current in compliance with IEC 60947-6-1:							
• AC-31 B, at 415 V	A	1250	1600	2000	2500	3200	
• AC-32 B, at 415 V	A	1250	1600	2000	2000	2000	
• AC-33 B, at 415 V	A	1000	1000	1250	1250	1250	
Operational current in compliance with IEC 60947-3:							
• AC-21 A/B, at 415 V	A	1250	1600	-/2000	-/2500	-/3200	
• AC-21 A/B, at 690 V	A	1250	1600	-/2000	-/2000	-/2000	
• AC-22 A/B, at 415 V	A	1250	1600	-/2000	-/2500	-/3200	
• AC-22 A/B, at 690 V	A	1000	1000	-	-	-	
• AC-23 A/B, at 415 V	A	1250	1250	-/1600	-/1600	-/1600	
• AC-23 A/B, at 690 V	A	800	800	-	-	-	
• DC-21/-22 A, at 220 V	A	1250	1250	--	--	--	
• DC-21/-22/-23 A, at 440 V; DC-23 220 V	A	1250	1250	--	--	--	
Operational power in compliance with IEC 60947-3:							
• AC-23 A/B, at 415 V	kW	800	900	--	--	--	
• AC-23 A/B, at 690 V	kW	800	800	--	--	--	
<b>Short-circuit behavior</b>							
Short-circuit current ratings in compliance with IEC 60947-6-1:							
• Short-time withstand current ( $I_{cw}$ , 60 ms, 415 V)	kA	25	32	50	50	50	
• Short-circuit current making capacity ( $I_{cm}$ , 415 V)	kA	52.5	67.2	105	105	105	
Short-circuit current ratings in compliance with IEC 60947-3:							
• Short-time withstand current ( $I_{cw}$ , 60 ms, 415 V)	kA	35	50	50	50	50	
• Short-circuit current making capacity ( $I_{cm}$ , 415 V)	kA	73.5	105	105	105	105	
Conditional short-circuit current with fuse:							
• Continuous current of series-connected fuse	A	1250	2 x 800	--	--	--	
• Conditional short-circuit current with fuse (690 V), IEC 60947-3	kA	100	100	--	--	--	
• Conditional short-circuit current with fuse (415 V), IEC 60947-6-1	kA	100	100	--	--	--	
• Let-through current of gG fuse at 415 V; max. permissible	kA	100	100	--	--	--	
• $I^2t$ value of gG fuse at 400/500 V; max. permissible	kA <sup>2</sup> s	--	--	--	--	--	
<b>Transfer switching properties</b>							
Switching time I-O & II-O RTSE / ATSE	s	1.4	1.4	1.6	1.6	1.6	
Switch-off time I-O-II & II-O-I, IEC 60947-6-1	s	1.4	1.5	1.2	1.2	1.2	
Transfer time I-O-II & II-O-I, IEC 60947-6-1	s	2.8	2.9	2.8	2.8	2.8	
Transfer time I-O-II & II-O-I, IEC 60947-6-1 with network monitoring	s	3.1	3.3	2.8	2.8	2.8	
Motorized operating mechanism rated apparent power at 230 V AC	VA	184	230	322	322	322	
Motorized operating mechanism peak inrush current at 230 V AC	A	2	2	3.5	3.5	3.5	
<b>Main conductor connections</b>							
• Cu conductor, solid	mm <sup>2</sup>	4 x 185	6 x 185	--	--	--	
• Cu conductor, stranded	mm <sup>2</sup>	4 x 185	6 x 185	--	--	--	
• With cable lug (DIN 46234)	mm <sup>2</sup>	4 x 185	6 x 185	--	--	--	
• Cu busbar	mm	2 x 60 x 7	2 x 100 x 5	3 x 100 x 5	2 x 100 x 10	3 x 100 x 10	
• Tightening torque for main contacts	Nm	20 ... 26	40 ... 45	40 ... 45	40 ... 45	40 ... 45	
<b>Other properties</b>							
Power loss per pole	W	93.3	122	178	255	330	
Mechanical endurance		2500	2500	1500	1500	1500	
Electrical endurance (AC-23 B at 415 V)		500	500	500	500	500	
IP protection class / with cover		IP00 / IP20					
Ambient temperature during operation	°C	-20 ... +70					
Ambient temperature during storage	°C	-40 ... +70					
Width x height x depth (3-pole switch)	mm	504 x 370 x 440	596 x 380 x 440	596 x 380 x 569	596 x 380 x 569	596 x 380 x 569	
Width x height x depth (4-pole switch)	mm	584 x 370 x 440	716 x 380 x 440	716 x 380 x 569	716 x 380 x 569	716 x 380 x 569	

# Transfer Switching Equipment and Load Transfer Switches

## 3KC Transfer Switching Equipment up to 3200 A

### Technical Features

#### Integrated controllers of the ATSE 40 to 160 A and 250 to 3200 A

#### Technical specifications

		3KC6 (40 to 160 A)	3KC8 (250 to 3200 A)
<b>ATS settings</b>			
• Network variants		3, 3 + N	1+N, 3, 3+N
• Transfer delay	s	0 ... 30	0 ... 60
• Return transfer delay	min	0 ... 30	0 ... 60
• Frequency deviation	%	10 or 20	±3 ... 10
• Voltage	%	10 or 20	±5 ... 20
<b>Measuring inputs</b>			
Maximum rated voltage ( $U_n$ )			
• Phase-phase	V AC	415	480
• Phase-neutral	V AC	230	277
Metering range (L-N)	V	166 ... 288	30 ... 332
Metering range (L-L)	V	288 ... 498	30 ... 600
Measuring frequency	Hz	30 ... 70	30 ... 70
Input impedance (L-L)	MΩ	5.5	12
Number of monitored phases		3	1 or 3
Measuring method		Three-phase, true RMS	True RMS
Relative error of measurement method	%	1	0.5
<b>Auxiliary supply</b>			
Connection type		Integrated dual power supply with internal wiring	Integrated dual power supply
Rated voltage (AC)	V	230	230
Supply voltage range (AC)	V	176 ... 288	166 ... 332
Frequency	Hz	45 ... 65	45 ... 65
Power loss (230 V AC) <sup>1)</sup>	W	2	2.5
Impulse withstand voltage ( $U_{imp}$ ) of the control circuit	kV	2.5	4
Overvoltage category of the control circuit		III	III
<b>Digital inputs</b>			
Number of inputs		3	Motorized operating mechanism: 5 Electronic module: 6
Digital input <sup>2)</sup>		0 position; inhibition of automatic mode selection of system priority	Motorized operating mechanism: 0 position, I position, II position, 0 position with priority, release for remote control mode  Electronic module: inhibition of automatic mode, inhibition of automatic return transfer, priority and selection of system, test off load, test on load, priority for test on load, deactivation of stabilization delay
Input delay time	ms	30	46
Number of relay outputs		1 NO: 2A/250 V AC / 2A/30 V DC	Motor unit: 4 NO Electronic module: 1 NO + 1 CO 2A/250 V AC / 2A/24 V DC
Supplementary notes on relay outputs <sup>2)</sup>		Plant availability	Motorized operating mechanism: Availability of the motorized operating mechanism, switch positions I, 0, II Electronic module: Availability of the device, generator start/stop signal
<b>Connections</b>			
Terminals		Removable/insertable	Removable/insertable
Connectable conductor cross-section / stranded, solid	mm <sup>2</sup>	0.5 ... 1.5	1.5 ... 2.5
Connectable conductor cross-section / solid	AWG	20 ... 14	16 ... 14
Connectable conductor cross-section / stranded	AWG	20 ... 16	16 ... 14
Tightening torque	Nm	0.5	0.5 ... 0.6

<sup>1)</sup> In addition to power loss of motorized operating mechanism

<sup>2)</sup> For more information, see 3KC manual at [www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals)








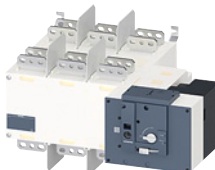


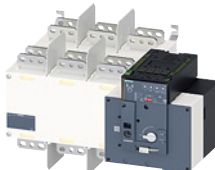
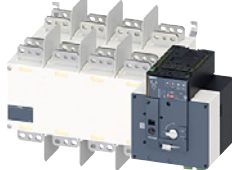

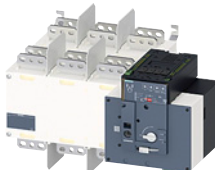
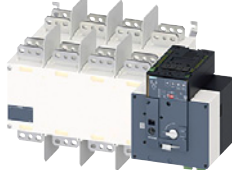


# Transfer Switching Equipment and Load Transfer Switches

## 3KC Transfer Switching Equipment up to 3200 A

Introduction (order part)

### Overview

Devices		Description	Page
<b>Switch versions</b>			
<b>3-pole</b>	<b>4-pole</b>		
		<b>3KC0 (MTSE) from 16 ... 1600 A</b>	<b>Manual transfer switching equipment (MTSE)</b> <a href="#">8/32</a> <ul style="list-style-type: none"> <li>• Ready-to-install combinations comprising switch disconnectors and operating mechanisms</li> <li>• 3- and 4-pole transfer switching equipment with front operating mechanism</li> <li>• 3KC0 (MTSE) from 16 ... 160 A: connection via box terminals, operating mechanism in the center</li> <li>• 3KC0 (MTSE) from 200 ... 1600 A: connection via flat terminals, operating mechanism left</li> </ul>
		<b>3KC0 (MTSE) from 16 ... 160 A</b>	
		<b>3KC0 (MTSE) from 200 ... 1600 A</b>	
--		<b>3KC3 (RTSE) from 40 ... 160 A</b>	
		<b>3KC4 (RTSE) from 250 ... 3200 A</b>	<b>Remote transfer switching equipment (RTSE)</b> <a href="#">8/43</a> <ul style="list-style-type: none"> <li>• Ready-to-install combinations comprising switch disconnectors, motorized operating mechanisms and handle</li> <li>• External control supported</li> <li>• 4-pole transfer switching equipment with motorized operating mechanism on the right</li> <li>• connection via box terminals</li> </ul>
--		<b>3KC6 (ATSE) from 40 ... 160 A</b>	
		<b>3KC8 (ATSE) from 250 ... 3200 A</b>	<b>Automatic transfer switching equipment (ATSE)</b> <a href="#">8/44</a> <ul style="list-style-type: none"> <li>• Ready-to-install combinations comprising switch disconnectors, motorized operating mechanisms and handle</li> <li>• External control supported</li> <li>• 3- and 4-pole transfer switching equipment with motorized operating mechanism on the right</li> <li>• Connection via flat terminals</li> </ul>
--		<b>3KC6 (ATSE) from 40 ... 160 A</b>	<b>Automatic transfer switching equipment (ATSE)</b> <a href="#">8/46</a> <ul style="list-style-type: none"> <li>• Ready-to-install combinations comprising switch disconnectors, motorized operating mechanism, handle and integrated controller</li> <li>• Already wired ready for operation</li> <li>• 4-pole transfer switching equipment with motorized operating mechanism on the right</li> <li>• connection via box terminals</li> </ul>
		<b>3KC8 (ATSE) from 250 ... 3200 A</b>	<b>Automatic transfer switching equipment (ATSE)</b> <a href="#">8/47</a> <ul style="list-style-type: none"> <li>• Ready-to-install combinations comprising switch disconnectors, motorized operating mechanism, handle and integrated controller</li> <li>• Direct control signal for generator supported</li> <li>• 3- and 4-pole transfer switching equipment with motorized operating mechanism on the right</li> <li>• Connection via flat terminals</li> </ul>






# Transfer Switching Equipment and Load Transfer Switches

## 3KC Transfer Switching Equipment up to 3200 A

## 3KC0 Manual Transfer Switching Equipment (MTSE) from 16 to 1600 A

### Basic units

### Selection and ordering data

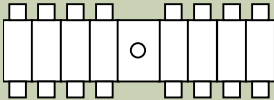



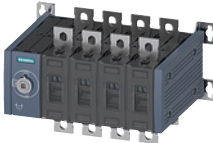
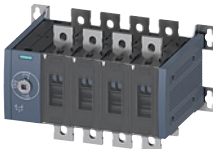
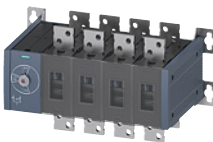
	Rated uninterrupted current $I_u$	Size	SD	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
	A		d					
<b>MTSE basic units without handle, front operating mechanism</b>								
Bridging bars are additionally required for the connection side.								
<b>3-pole</b>								
	<b>Box terminals</b>							
	The transfer switches are suitable for DIN rail mounting and can also optionally be used for floor mounting (assembly kit for floor mounting necessary)							
	16	1		<b>3KC0316-2ME00-0AA0</b>		1	1 unit	1CL
	32			<b>3KC0322-2ME00-0AA0</b>		1	1 unit	1CL
	63			<b>3KC0326-2ME00-0AA0</b>		1	1 unit	1CL
	80	2		<b>3KC0328-2NE00-0AA0</b>		1	1 unit	1CL
	100			<b>3KC0330-2NE00-0AA0</b>		1	1 unit	1CL
	125			<b>3KC0332-2NE00-0AA0</b>		1	1 unit	1CL
	160			<b>3KC0334-2NE00-0AA0</b>		1	1 unit	1CL
	<b>3-pole</b>							
	<b>Flat terminals</b>							
	The transfer switches are designed for floor mounting							
	200	3		<b>3KC0336-0PE00-0AA0</b>		1	1 unit	1CL
	250			<b>3KC0338-0PE00-0AA0</b>		1	1 unit	1CL
	315			<b>3KC0340-0PE00-0AA0</b>		1	1 unit	1CL
	400			<b>3KC0342-0PE00-0AA0</b>		1	1 unit	1CL
	500	4		<b>3KC0344-0QE00-0AA0</b>		1	1 unit	1CL
	630			<b>3KC0346-0QE00-0AA0</b>		1	1 unit	1CL
	800			<b>3KC0348-0QE00-0AA0</b>		1	1 unit	1CL
	1000	5		<b>3KC0350-0RE00-0AA0</b>		1	1 unit	1CL
	1250			<b>3KC0352-0RE00-0AA0</b>		1	1 unit	1CL
	1600			<b>3KC0354-0RE00-0AA0</b>		1	1 unit	1CL

# Transfer Switching Equipment and Load Transfer Switches

## 3KC Transfer Switching Equipment up to 3200 A

### 3KC0 Manual Transfer Switching Equipment (MTSE) from 16 to 1600 A

#### Basic units

	Rated uninterrupted current $I_U$	Size	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
	A		d					
<b>4-pole</b>								
<b>Box terminals</b>								
The transfer switches are suitable for DIN rail mounting and can also optionally be used for floor mounting (assembly kit for floor mounting necessary)								
	16	1		<b>3KC0416-2ME00-0AA0</b>	1	1 unit	1CL	
	32			<b>3KC0422-2ME00-0AA0</b>	1	1 unit	1CL	
	63			<b>3KC0426-2ME00-0AA0</b>	1	1 unit	1CL	
	80	2		<b>3KC0428-2NE00-0AA0</b>	1	1 unit	1CL	
	100			<b>3KC0430-2NE00-0AA0</b>	1	1 unit	1CL	
	125			<b>3KC0432-2NE00-0AA0</b>	1	1 unit	1CL	
	160			<b>3KC0434-2NE00-0AA0</b>	1	1 unit	1CL	
<b>4-pole</b>								
<b>Flat terminals</b>								
The transfer switches are designed for floor mounting								
	200	3		<b>3KC0436-0PE00-0AA0</b>	1	1 unit	1CL	
	250			<b>3KC0438-0PE00-0AA0</b>	1	1 unit	1CL	
	315			<b>3KC0440-0PE00-0AA0</b>	1	1 unit	1CL	
	400			<b>3KC0442-0PE00-0AA0</b>	1	1 unit	1CL	
	500	4		<b>3KC0444-0QE00-0AA0</b>	1	1 unit	1CL	
	630			<b>3KC0446-0QE00-0AA0</b>	1	1 unit	1CL	
	800			<b>3KC0448-0QE00-0AA0</b>	1	1 unit	1CL	
	1000	5		<b>3KC0450-0RE00-0AA0</b>	1	1 unit	1CL	
	1250			<b>3KC0452-0RE00-0AA0</b>	1	1 unit	1CL	
	1600			<b>3KC0454-0RE00-0AA0</b>	1	1 unit	1CL	

# Transfer Switching Equipment and Load Transfer Switches


3KC Transfer Switching Equipment up to 3200 A

3KC0 Manual Transfer Switching Equipment (MTSE) from 16 to 1600 A

## Accessories and spare parts

### Selection and ordering data

#### Additional poles

	Version	Circuit symbol	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
		mm	d					
	<b>4th contact element (switching pole)</b>	N — N						
	<b>Box terminals</b>							
	For size 1, 3KC0...-M For size 2, 3KC0...-N			<b>3KD9105-2</b> <b>3KD9205-2</b>		1 1	1 unit 1 unit	1CL 1CL

3KD9205-2

#### Direct operating mechanisms

	Version	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
		d					

#### Direct operating mechanisms in standard version and flat version

##### Standard version

- Can be locked with up to max. 3 padlocks
- Requires additional mounting depth in locked state

##### Gray

For sizes 1/2; 3KC0...-M/N

**3KC9201-3** 1 1 unit 1CL

For size 3, 3KC0...-P

**3KC9301-1** 1 1 unit 1CL

For size 4, 3KC0...-Q

**3KC9401-1** 1 1 unit 1CL

For size 5, 3KC0...-R

**3KC9501-1** 1 1 unit 1CL

##### Red/yellow

For size 3, 3KC0...-P



**3KC9301-2** 1 1 unit 1CL

# Transfer Switching Equipment and Load Transfer Switches


## 3KC Transfer Switching Equipment up to 3200 A

### 3KC0 Manual Transfer Switching Equipment (MTSE) from 16 to 1600 A

#### Accessories and spare parts

	Version	SD	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
		d					
	For size 4, 3KC0...-Q		<b>3KC9401-2</b>		1	1 unit	1CL
	For size 5, 3KC0...-R		<b>3KC9501-2</b>		1	1 unit	1CL
	<b>Flat version</b> <b>(suitable for distribution boards)</b> <ul style="list-style-type: none"> <li>• Can be locked with one padlock</li> <li>• No additional mounting depth in locked state</li> </ul> <b>Gray</b> For size 1, 3KC0...-M		<b>3KC9101-4</b>		1	1 unit	1CL

#### Door-coupling rotary operating mechanisms


	Version	Handle length	Shaft size	SD	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
		mm	mm x mm	d					
<b>Door-coupling rotary operating mechanisms, complete, 8UD1 series</b>									
	<b>Door-coupling rotary operating mechanisms, complete, labeling I - 0 - II</b> <ul style="list-style-type: none"> <li>• Handle with masking plate</li> <li>• Coupling driver with tolerance compensation</li> <li>• Shaft 300 mm</li> <li>• Can be locked with up to max. 3 padlocks</li> <li>• Labeling I - 0 - II</li> </ul> <b>Gray</b> For sizes 1/2; 3KC0...-M/N	55	8 x 8		<b>8UD1131-2AE21</b>		1	1 unit	1CL
	For size 3, 3KC0...-P	100	8 x 8		<b>8UD1141-2AE21</b>		1	1 unit	1CL
	For size 4, 3KC0...-Q	140	10 x 10		<b>8UD1151-3AE21</b>		1	1 unit	1CL
	For size 5, 3KC0...-R	200	12 x 12		<b>8UD1161-4AE21</b>		1	1 unit	1CL

## Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

3KC0 Manual Transfer Switching Equipment (MTSE) from 16 to 1600 A

### Accessories and spare parts


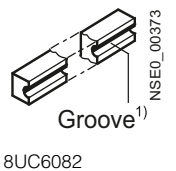




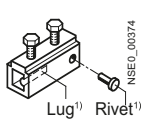
	Version	Handle length	Shaft size	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
		mm	mm x mm	d					
<b>Handles for door-coupling rotary operating mechanisms, 8UD1 series</b>									
<b>Handles without extension shaft, without coupling driver, labeling I - 0 - II</b>									
<ul style="list-style-type: none"> <li>• With masking plate</li> <li>• Can be locked with up to max. 3 padlocks</li> <li>• Labeling I - 0 - II</li> </ul>									
<b>Gray</b>									
	For sizes 1/2; 3KC0...-M/N	55	8 x 8		<b>8UD1731-2AE01</b>		1	1 unit	1CL
	For size 3, 3KC0...-P	100	8 x 8		<b>8UD1841-2AE01</b>		1	1 unit	1CL
	For size 4, 3KC0...-Q	140	10 x 10		<b>8UD1851-3AE01</b>		1	1 unit	1CL
	For size 5, 3KC0...-R	200	12 x 12		<b>8UD1861-4AE01</b>		1	1 unit	1CL
<b>Red/yellow</b>									
	For sizes 1/2; 3KC0...-M/N	55	8 x 8		<b>8UD1731-2AE05</b>		1	1 unit	1CL
	For size 3, 3KC0...-P	100	8 x 8		<b>8UD1841-2AE05</b>		1	1 unit	1CL
	For size 4, 3KC0...-Q	140	10 x 10		<b>8UD1851-3AE05</b>		1	1 unit	1CL
	For size 5, 3KC0...-R	200	12 x 12		<b>8UD1861-4AE05</b>		1	1 unit	1CL

# Transfer Switching Equipment and Load Transfer Switches

## 3KC Transfer Switching Equipment up to 3200 A

### 3KC0 Manual Transfer Switching Equipment (MTSE) from 16 to 1600 A

#### Accessories and spare parts

	Version	Handle length	Shaft size	SD	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/product?ArticleNo.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
		mm	mm x mm	d					
<b>Other accessories for door-coupling rotary operating mechanisms, 8UD1 series</b>									
 8UC6032	<b>Extension shafts</b>								
	<b>300 mm long</b>								
	• For sizes 1/2/3, 3KC0...-M/N/P	--	8 x 8		<b>8UC6032</b>		1	1 unit	1CL
	• For size 4, 3KC0...-Q	--	10 x 10		<b>8UC6033</b>		1	1 unit	1CL
	• For size 5, 3KC0...-R	--	12 x 12		<b>8UC6034</b>		1	1 unit	1CL
 8UC6082	<b>600 mm long</b>								
	A shaft jack is required for the 8UD1 handle when the 600 mm long shaft is used and for sizes 1/2.								
	• For sizes 1/2/3, 3KC0...-M/N/P	--	8 x 8		<b>8UC6082</b>		1	1 unit	1CL
	• For size 4, 3KC0...-Q	--	10 x 10		<b>8UC6083</b>		1	1 unit	1CL
	• For size 5, 3KC0...-R	--	12 x 12		<b>8UC6084</b>		1	1 unit	1CL
 8UD1900-0FA00	<b>Shaft jack for 8UD1 handle for shaft, 600 mm</b>								
	• For sizes 1/2; 3KC0...-M/N	--	8 x 8		<b>8UD1900-0FA00</b>		1	1 unit	1CL
 8UD1900-2GA00	<b>Coupling drivers with tolerance compensation</b>								
	• For sizes 1/2; 3KC0...-M/N	--	8 x 8		<b>8UD1900-2GA00</b>		1	1 unit	1CB
	• For size 3, 3KC0...-P	--	8 x 8		<b>8UD1900-6GA00</b>		1	1 unit	1CL
	• For size 4, 3KC0...-Q	--	10 x 10		<b>8UD1900-3GA00</b>		1	1 unit	1CL
	• For size 5, 3KC0...-R	--	12 x 12		<b>8UD1900-4GA00</b>		1	1 unit	1CL
 8UD1900-6GA00	<b>Coupling drivers without tolerance compensation</b>								
	• For sizes 1/2; 3KC0...-M/N	--	8 x 8		<b>8UD1900-2HA00</b>		1	1 unit	1CB
	• For size 3, 3KC0...-P	--	8 x 8		<b>8UD1900-6HA00</b>		1	1 unit	1CL
	• For size 4, 3KC0...-Q	--	10 x 10		<b>8UD1900-3HA00</b>		1	1 unit	1CL
	• For size 5, 3KC0...-R	--	12 x 12		<b>8UD1900-4HA00</b>		1	1 unit	1CL
 8UD1900-6HA00	<b>Shaft couplings</b>								
	• For sizes 1/2; 3KC0...-M/N	--	8 x 8		<b>8UC6022</b>		1	1 unit	1CL
	• For size 3, 3KC0...-P	--	8 x 8		<b>8UC6022</b>		1	1 unit	1CL
	• For size 4, 3KC0...-Q	--	10 x 10		<b>8UC6023</b>		1	1 unit	1CL
	• For size 5, 3KC0...-R	--	12 x 12		<b>8UC6024</b>		1	1 unit	1CL
 8UC6022 to 8UC6024									
	1) Non-interchangeability features								




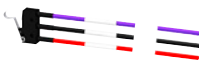


# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

3KC0 Manual Transfer Switching Equipment (MTSE) from 16 to 1600 A

## Accessories and spare parts

### Auxiliary switches

	Version	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
		d					
 3KD9103-5	<b>Auxiliary switch modules</b> Unit is supplied without auxiliary switches; a maximum of 2 auxiliary switches can be installed per auxiliary module. The auxiliary switches indicate the switch position of the respective switching equipment (I or II) to which the auxiliary switch module is connected. • For sizes 1/2; 3KC0...-M/N		<b>3KD9103-5</b>		1	1 unit	1CL
	<b>Auxiliary switches for sizes 1 and 2</b> With soldered-on 50 cm connecting cables • 1 CO contact • 1 CO contact, solid-state compatible		<b>3KD9103-1</b> <b>3KD9103-3</b>		1 1	1 unit 1 unit	1CL 1CL
	Without soldered-on connecting cables • 1 CO contact • 1 CO contact, solid-state compatible		<b>3KD9103-2</b> <b>3KD9103-4</b>		1 1	1 unit 1 unit	1CL 1CL
 3KD9103-3							
 3KD9103-2							
	<b>Auxiliary switches for sizes 3 to 5</b> <b>NEW</b> Auxiliary switches with screw terminal for installation on operating mechanism module. Auxiliary switches with spring-type terminal from the 3SU1 program can also be used. All auxiliary switches for sizes 3 to 5 can be used as leading auxiliary switches, depending on the mounting position of the auxiliary switch.						
	• 1 NO	▶	<b>3SU1400-1AA10-1BA0</b>		1	1 unit	41J
	• 1 NO with gold-plated contacts		<b>3SU1400-1AA10-1LA0</b>		1	1 unit	41J
	• 1 NC	▶	<b>3SU1400-1AA10-1CA0</b>		1	1 unit	41J
	• 1 NC with gold-plated contacts		<b>3SU1400-1AA10-1MA0</b>		1	1 unit	41J
	• 1 NO + 1 NC	▶	<b>3SU1400-1AA10-1FA0</b>		1	1 unit	41J
	• 1 NO + 1 NC with gold-plated contacts		<b>3SU1400-1AA10-1QA0</b>		1	1 unit	41J
	• 2 NO	▶	<b>3SU1400-1AA10-1DA0</b>		1	1 unit	41J
	• 2 NO with gold-plated contacts		<b>3SU1400-1AA10-1NA0</b>		1	1 unit	41J
	• 2 NC	▶	<b>3SU1400-1AA10-1EA0</b>		1	1 unit	41J
	• 2 NC with gold-plated contacts		<b>3SU1400-1AA10-1PA0</b>		1	1 unit	41J


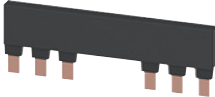


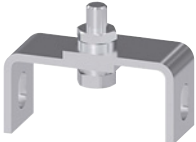
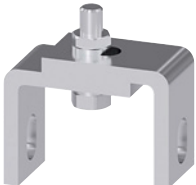
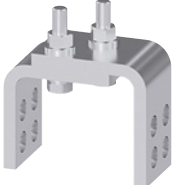
# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

3KC0 Manual Transfer Switching Equipment (MTSE) from 16 to 1600 A

## Accessories and spare parts

### Bridging bars




Version	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
<b>Bridging bars for sizes 1 and 2</b>						
For load-side connection <b>3-pole</b> For size 1, 3KC0...-M		<b>3KC9118-1</b>		1	1 unit	1CL
						
For size 2, 3KC0...-N		<b>3KC9218-1</b>		1	1 unit	1CL
						
<b>4-pole</b> For size 1, 3KC0...-M		<b>3KC9118-2</b>		1	1 unit	1CL
						
For size 2, 3KC0...-N		<b>3KC9218-2</b>		1	1 unit	1CL
						
<b>Bridging bars for sizes 3 ... 5</b>						
<ul style="list-style-type: none"> <li>For load-side connection</li> <li>Single-pole</li> <li>Contains 1 unit</li> <li>For 3-pole transfer switches 3 units, for 4-pole transfer switches 4 units are required</li> </ul> <b>Flat terminals</b> For size 3, 3KC0...-P		<b>3KC9318-0</b>		1	1 unit	1CL
						
For size 4, 3KC0...-Q		<b>3KC9418-0</b>		1	1 unit	1CL
						
For size 5, 3KC0...-R		<b>3KC9518-0</b>		1	1 unit	1CL
						



# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A  
3KC0 Manual Transfer Switching Equipment (MTSE) from 16 to 1600 A

## Accessories and spare parts

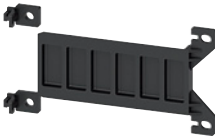
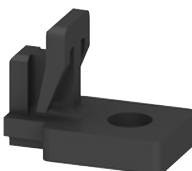

Version		For size	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
<b>Spare part for terminal cover (1 unit)</b>								
	<b>Standard length</b>	5; 3KC0...-R		<b>3KD9504-1</b>		1	1 unit	1CL
	<b>Short version</b>	3; 3KC0...-P		<b>3KD9304-1</b>		1	1 unit	1CL
		4; 3KC0...-Q		<b>3KD9404-1</b>		1	1 unit	1CL
<b>Terminal covers, side plates</b>								
<ul style="list-style-type: none"><li>For lateral touch protection on the terminal side, where bridging bars are used (normally the load side)</li><li>Suitable for terminal covers in standard length</li><li>Contains 2 units</li></ul>								
		3; 3KC0...-P		<b>3KC9304-0</b>		1	1 unit	1CL
		4; 3KC0...-Q		<b>3KC9404-0</b>		1	1 unit	1CL
		5; 3KC0...-R		<b>3KC9504-0</b>		1	1 unit	1CL

## Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

3KC0 Manual Transfer Switching Equipment (MTSE) from 16 to 1600 A

### Accessories and spare parts

Version	For size	SD	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
d							
<b>Mounting accessories</b>							
<b>Mounting, assembly kit for floor mounting</b>							
<ul style="list-style-type: none"> <li>For floor mounting for sizes 1 and 2</li> <li>Contains 4 mounting brackets and two mounting plates</li> <li>For 3-pole and 4-pole devices</li> </ul>							
1/2; 3KC0...-M/N			<b>3KC9120-1</b>		1	1 unit	1CL
 <p>3KC9120-1</p>							
<b>Mounting bracket</b>							
Spare part, included in the scope of supply of the assembly kit for floor mounting for sizes 1 to 2 <ul style="list-style-type: none"> <li>Contains 4 units</li> <li>For 3-pole and 4-pole devices</li> </ul>							
1/2; 3KC0...-M/N			<b>3KD9120-1</b>		1	1 unit	1CL
 <p>3KD9120-1</p>							
<b>Slide for mounting on a DIN rail</b>							
<ul style="list-style-type: none"> <li>Spare part, included in the scope of supply of the 3KC0</li> <li>Contains 5 units</li> </ul>							
1/2; 3KC0...-M/N			<b>3KF9112-0BA00</b>		1	1 unit	1DL
							

Transfer Switching Equipment and Load Transfer Switches  
3KC Transfer Switching Equipment up to 3200 A  
3KC3 Remote Transfer Switching Equipment (RTSE) from 40 to 160 A

Basic units

Selection and ordering data

Rated uninterrupted current $I_u$	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
A	d					

RTSE with motorized operating mechanism,  
with additional handle, operating mechanism on the right

- The transfer switches are suitable for floor and DIN rail mounting.
- One 3KC9603-1 auxiliary switch is already included with the RTSE 3KC3.
- A bridging bar is additionally required for the terminal side.

4-pole

Box terminals



3KC3424-2AA22-0AA3

3KC3426-2AA22-0AA3

3KC3428-2AA22-0AA3

3KC3430-2AA22-0AA3

3KC3432-2AA22-0AA3

3KC3434-2AA22-0AA3

1	1 unit	1CL
1	1 unit	1CL
1	1 unit	1CL
1	1 unit	1CL
1	1 unit	1CL
1	1 unit	1CL

# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

3KC4 Remote Transfer Switching Equipment (RTSE) from 250 to 3200 A

## Basic units

### Selection and ordering data

Rated uninterrupted current $I_u$	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
A	d					

**RTSE with motorized operating mechanism,  
with additional handle, operating mechanism on the right**

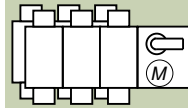
- The transfer switches are suitable for floor mounting.
- Bridging bars are additionally required for the terminal side.

#### 3-pole

#### Flat terminals

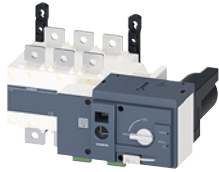


250



**3KC4338-0CA21-0AA3**

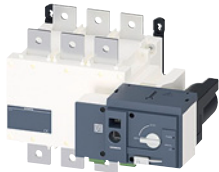
1 1 unit 1CL



400

**3KC4342-0DA21-0AA3**

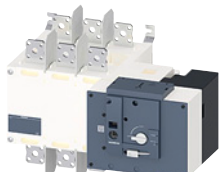
1 1 unit 1CL



630

**3KC4346-0EA21-0AA3**

1 1 unit 1CL



800

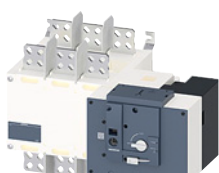
**3KC4348-0FA21-0AA3**

1 1 unit 1CL

1000

**3KC4350-0FA21-0AA3**

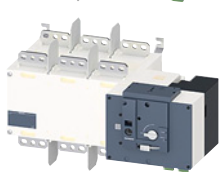
1 1 unit 1CL



1250

**3KC4352-0GA21-0AA3**

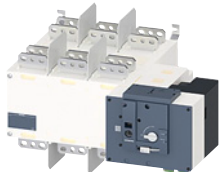
1 1 unit 1CL



1600

**3KC4354-0HA21-0AA3**

1 1 unit 1CL



2000

**3KC4356-0JA21-0AA3**

1 1 unit 1CL

2500

**3KC4358-0JA21-0AA3**

1 1 unit 1CL

3200

**3KC4360-0JA21-0AA3**

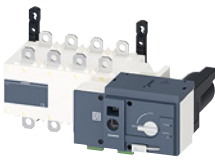
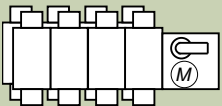
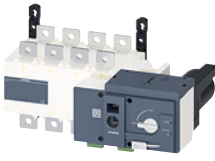
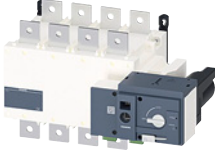
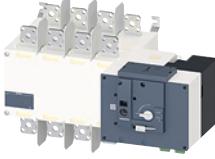
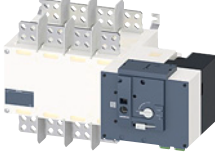
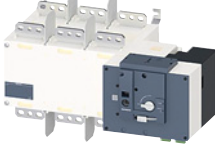
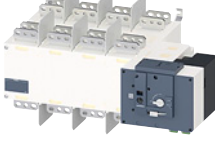

1 1 unit 1CL



# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A  
3KC4 Remote Transfer Switching Equipment (RTSE) from 250 to 3200 A

## Basic units

Rated uninterrupted current $I_u$	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
A	d					
<b>4-pole</b>						
<b>Flat terminals</b>						
	250	 <b>3KC4438-0CA21-0AA3</b>		1	1 unit	1CL
	400	<b>3KC4442-0DA21-0AA3</b>		1	1 unit	1CL
	630	<b>3KC4446-0EA21-0AA3</b>		1	1 unit	1CL
	800	<b>3KC4448-0FA21-0AA3</b>		1	1 unit	1CL
	1000	<b>3KC4450-0FA21-0AA3</b>		1	1 unit	1CL
	1250	<b>3KC4452-0GA21-0AA3</b>		1	1 unit	1CL
	1600	<b>3KC4454-0HA21-0AA3</b>		1	1 unit	1CL
	2000	<b>3KC4456-0JA21-0AA3</b>		1	1 unit	1CL
	2500	<b>3KC4458-0JA21-0AA3</b>		1	1 unit	1CL
	3200	<b>3KC4460-0JA21-0AA3</b>		1	1 unit	1CL

Transfer Switching Equipment and Load Transfer Switches  
3KC Transfer Switching Equipment up to 3200 A  
3KC6 Automatic Transfer Switching Equipment (ATSE) from 40 to 160 A

Basic units

Selection and ordering data

	Rated uninterrupted current $I_u$	SD	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
	A	d					

ATSE with motorized operating mechanism and integrated controller, with additional handle, operating mechanism on the right

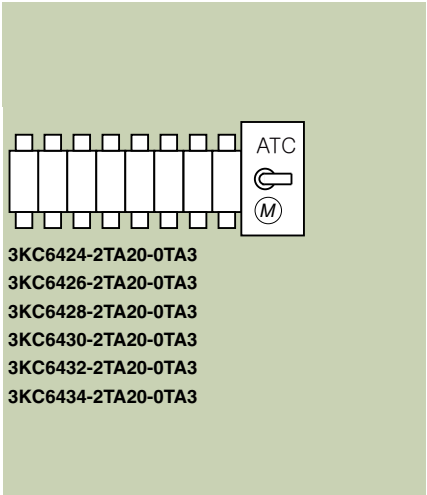
- The transfer switches are suitable for floor and DIN rail mounting.
- The 3KC6 (ATSE) is already wired ready for operation (including power supply).
- A bridging bar is additionally required for the terminal side.

4-pole

Box terminals



40  
63  
80  
100  
125  
160



3KC6424-2TA20-0TA3  
3KC6426-2TA20-0TA3  
3KC6428-2TA20-0TA3  
3KC6430-2TA20-0TA3  
3KC6432-2TA20-0TA3  
3KC6434-2TA20-0TA3

1 1 unit 1CL  
1 1 unit 1CL  
1 1 unit 1CL  
1 1 unit 1CL  
1 1 unit 1CL  
1 1 unit 1CL

# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A  
3KC8 Automatic Transfer Switching Equipment (ATSE) from 250 to 3200 A

## Basic units

### Selection and ordering data

Rated uninterrupted current $I_U$	SD	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
A	d					

#### ATSE with motorized operating mechanism and integrated controller, with additional handle, operating mechanism on the right

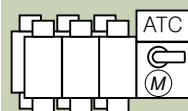
- The transfer switches are suitable for floor mounting.
- Bridging bars are additionally required for the terminal side as well as a power supply kit and voltage sensing cable for ATSE.

#### 3-pole

#### Flat terminals



250

**3KC8338-0CA22-0GA3**

1 1 unit 1CL



400

**3KC8342-0DA22-0GA3**

1 1 unit 1CL



630

**3KC8346-0EA22-0GA3**

1 1 unit 1CL

800  
1000**3KC8348-0FA22-0GA3**  
**3KC8350-0FA22-0GA3**1 1 unit 1CL  
1 1 unit 1CL

1250

**3KC8352-0GA22-0GA3**

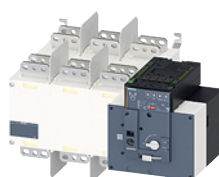
1 1 unit 1CL



1600

**3KC8354-0HA22-0GA3**

1 1 unit 1CL

2000  
2500  
3200**3KC8356-0JA22-0GA3**  
**3KC8358-0JA22-0GA3**  
**3KC8360-0JA22-0GA3**1 1 unit 1CL  
1 1 unit 1CL  
1 1 unit 1CL

## Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

3KC8 Automatic Transfer Switching Equipment (ATSE) from 250 to 3200 A

### Basic units

	Rated uninterrupted current $I_u$	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
	A	d					
<b>4-pole</b>							
<b>Flat terminals</b>							
	250		 <b>3KC8438-0CA22-0GA3</b>		1	1 unit	1CL
	400		<b>3KC8442-0DA22-0GA3</b>		1	1 unit	1CL
	630		<b>3KC8446-0EA22-0GA3</b>		1	1 unit	1CL
	800		<b>3KC8448-0FA22-0GA3</b>		1	1 unit	1CL
	1000		<b>3KC8450-0FA22-0GA3</b>		1	1 unit	1CL
	1250		<b>3KC8452-0GA22-0GA3</b>		1	1 unit	1CL
	1600		<b>3KC8454-0HA22-0GA3</b>		1	1 unit	1CL
	2000		<b>3KC8456-0JA22-0GA3</b>		1	1 unit	1CL
	2500		<b>3KC8458-0JA22-0GA3</b>		1	1 unit	1CL
	3200		<b>3KC8460-0JA22-0GA3</b>		1	1 unit	1CL

# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A  
3KC3 Transfer Switching Equipment (RTSE) and 3KC6 (ATSE) from 40 to 160 A

## Accessories and spare parts

### Selection and ordering data

Version		SD	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
		d					
<b>Bridging bars</b>							
 <p>For load-side connection</p> <ul style="list-style-type: none"> <li>For 40 ... 125 A</li> <li>For 160 A</li> </ul>			<b>3KC9618-2</b>		1	1 unit	1CL
			<b>3KC9618-3</b>		1	1 unit	1CL
<b>Terminal covers</b>							
 <ul style="list-style-type: none"> <li>For 40 ... 160 A, contains 2 units, 1 unit covers 4 poles</li> </ul>			<b>3KC9604-2</b>		1	1 unit	1CL
<b>Auxiliary conductor terminals</b>							
 <ul style="list-style-type: none"> <li>For 40 ... 160 A, contains 2 units</li> </ul>			<b>3KC9622-2</b>		1	1 unit	1CL
<b>Auxiliary switches</b>							
 <p>Auxiliary switches for 40 ... 160 A, for 250 V AC / 5 A or for 24 V DC / 2 A, 1 changeover contact for each position 0, I, II Max. 2 auxiliary switches can be mounted per transfer switching equipment unit</p> <ul style="list-style-type: none"> <li>with separate contacts</li> <li>with linked common contacts</li> </ul>			<b>3KC9603-1</b>		1	1 unit	1CL
			<b>3KC9603-2</b>		1	1 unit	1CL
3KC9603-1, 3KC9603-2							
<b>Sealing units</b>							
 <p><b>Sealable cover</b></p> <ul style="list-style-type: none"> <li>For 3KC6 (ATSE) 40 ... 160 A (incl. bolt set and sealing ribbons)</li> </ul> <p><b>Sealing ribbon</b></p> <ul style="list-style-type: none"> <li>Also as spare part for sealable cover</li> <li>For 40 ... 3200 A, 10 units</li> </ul>			<b>3KC9721-1</b>		1	1 unit	1CL
			<b>3KC9621-2</b>		1	1 unit	1CL
3KC9721-1							
<b>Autotransformers</b>							
 <ul style="list-style-type: none"> <li>For 40 ... 160 A</li> <li>400 V/230 V AC; 400 VA</li> </ul>			<b>3KC9624-1</b>		1	1 unit	1CL
<b>Dual power supply</b>							
 <ul style="list-style-type: none"> <li>For 3KC3 and 3KC4 (RTSE) 40 ... 3200 A</li> <li>240 V AC, 3 A</li> </ul>			<b>3KC9625-1</b>		1	1 unit	1CL


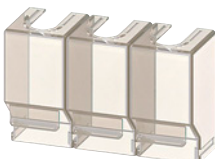
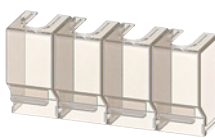
## Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

3KC4 Transfer Switching Equipment (RTSE) and 3KC8 (ATSE) from 250 A to 3200 A

### Accessories and spare parts


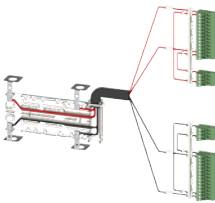
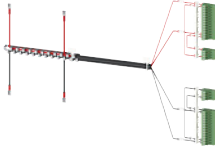
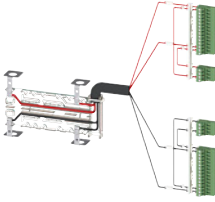
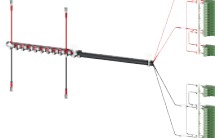
#### Selection and ordering data

Version		SD	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
		d					
<b>Bridging bars</b>							
	For load-side connection						
	<ul style="list-style-type: none"> <li>• Single-pole</li> <li>• Contains 1 unit</li> <li>• For 3-pole transfer switches 3 units, for 4-pole transfer switches 4 units are required.</li> <li>• For 250 A</li> </ul>		<b>3KC9818-2</b>		1	1 unit	1CL
	<ul style="list-style-type: none"> <li>• For 400 A</li> </ul>		<b>3KC9818-3</b>		1	1 unit	1CL
	<ul style="list-style-type: none"> <li>• For 630 A</li> </ul>		<b>3KC9818-4</b>		1	1 unit	1CL
	<ul style="list-style-type: none"> <li>• For 800 ... 1000 A</li> </ul>		<b>3KC9818-5</b>		1	1 unit	1CL
	<ul style="list-style-type: none"> <li>• For 1250 A</li> </ul>		<b>3KC9818-6</b>		1	1 unit	1CL
	<ul style="list-style-type: none"> <li>• For 1600 A</li> </ul>		<b>3KC9818-7</b>		1	1 unit	1CL
<b>Terminal covers</b>							
	<ul style="list-style-type: none"> <li>• For 250 ... 400 A, 3 units, 1 unit covers one pole</li> <li>• For 630 A, 3 units, 1 unit covers one pole</li> </ul>		<b>3KC9804-1</b>		1	1 unit	1CL
			<b>3KC9804-3</b>		1	1 unit	1CL
	<ul style="list-style-type: none"> <li>• For 250 ... 400 A, 4 units, 1 unit covers one pole</li> <li>• For 630 A, 4 units, 1 unit covers one pole</li> </ul>		<b>3KC9804-2</b>		1	1 unit	1CL
			<b>3KC9804-4</b>		1	1 unit	1CL

# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A  
3KC4 Transfer Switching Equipment (RTSE) and 3KC8 (ATSE) from 250 A to 3200 A

## Accessories and spare parts

Version	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
<b>Copper bar connection kit</b>						
Suitable quantities, <a href="#">see page 8/57</a>						
 <ul style="list-style-type: none"> <li>• For 2000 ... 2500 A, C-bracket, part A</li> <li>• For 2000 ... 3200 A, bolt set, part B, 45 mm</li> <li>• For 2000 ... 3200 A, bolt set, part B, 35 mm, short length</li> <li>• For 2000 ... 3200 A, T-bracket, part C</li> <li>• For 2000 ... 3200 A, L-bracket, part D, contains 2 units</li> <li>• For 2000 ... 3200 A, bridging bar, part E</li> </ul>		<b>3KC9811-0</b>		1	1 unit	1CL
		<b>3KC9811-1</b>		1	1 unit	1CL
		<b>3KC9811-2</b>		1	1 unit	1CL
		<b>3KC9811-3</b>		1	1 unit	1CL
		<b>3KC9811-4</b>		1	1 unit	1CL
		<b>3KC9818-8</b>		1	1 unit	1CL
<b>Power supply kits and voltage sensing cables for ATSE</b>						
 <ul style="list-style-type: none"> <li>• For 250 A, 3-pole switch</li> <li>• For 400 A, 3-pole switch</li> <li>• For 630 A, 3-pole switch</li> </ul>		<b>3KC9833-1</b>		1	1 unit	1CL
		<b>3KC9833-2</b>		1	1 unit	1CL
		<b>3KC9833-3</b>		1	1 unit	1CL
		<b>3KC9833-4</b>		1	1 unit	1CL
 <ul style="list-style-type: none"> <li>• For 800 ... 1000 A, 3-pole switch</li> <li>• For 1250 A, 3-pole switch</li> <li>• For 1600 A, 3-pole switch</li> <li>• For 2000 ... 3200 A, 3-pole switch</li> </ul>		<b>3KC9833-5</b>		1	1 unit	1CL
		<b>3KC9833-6</b>		1	1 unit	1CL
		<b>3KC9833-7</b>		1	1 unit	1CL
		<b>3KC9834-1</b>		1	1 unit	1CL
 <ul style="list-style-type: none"> <li>• For 250 A, 3-pole switch</li> <li>• For 400 A, 3-pole switch</li> <li>• For 630 A, 3-pole switch</li> </ul>		<b>3KC9834-2</b>		1	1 unit	1CL
		<b>3KC9834-3</b>		1	1 unit	1CL
		<b>3KC9834-4</b>		1	1 unit	1CL
		<b>3KC9834-5</b>		1	1 unit	1CL
 <ul style="list-style-type: none"> <li>• For 800 ... 1000 A, 3-pole switch</li> <li>• For 1250 A, 3-pole switch</li> <li>• For 1600 A, 3-pole switch</li> <li>• For 2000 ... 3200 A, 3-pole switch</li> </ul>		<b>3KC9834-6</b>		1	1 unit	1CL
		<b>3KC9834-7</b>		1	1 unit	1CL

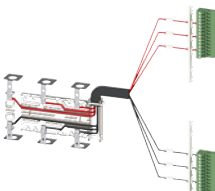
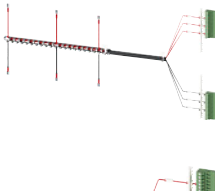
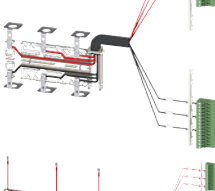
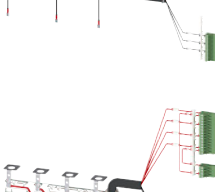
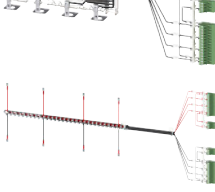


# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

3KC4 Transfer Switching Equipment (RTSE) and 3KC8 (ATSE) from 250 A to 3200 A

## Accessories and spare parts






Version	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
d						
	<b>For 3-pole applications, infeed from below<sup>1)</sup></b>					
	• For 250 A, 3-pole switch	<b>3KC9822-1</b>		1	1 unit	1CL
	• For 400 A, 3-pole switch	<b>3KC9822-2</b>		1	1 unit	1CL
	• For 630 A, 3-pole switch	<b>3KC9822-3</b>		1	1 unit	1CL
	• For 800 ... 1000 A, 3-pole switch	<b>3KC9822-4</b>		1	1 unit	1CL
	• For 1250 A, 3-pole switch	<b>3KC9822-5</b>		1	1 unit	1CL
	• For 1600 A, 3-pole switch	<b>3KC9822-6</b>		1	1 unit	1CL
	• For 2000 ... 3200 A, 3-pole switch	<b>3KC9822-7</b>		1	1 unit	1CL
	<b>For 3-pole applications, infeed from above<sup>1)</sup></b>					
	• For 250 A, 3-pole switch	<b>3KC9832-1</b>		1	1 unit	1CL
	• For 400 A, 3-pole switch	<b>3KC9832-2</b>		1	1 unit	1CL
	• For 630 A, 3-pole switch	<b>3KC9832-3</b>		1	1 unit	1CL
	• For 800 ... 1000 A, 3-pole switch	<b>3KC9832-4</b>		1	1 unit	1CL
	• For 1250 A, 3-pole switch	<b>3KC9832-5</b>		1	1 unit	1CL
	• For 1600 A, 3-pole switch	<b>3KC9832-6</b>		1	1 unit	1CL
	• For 2000 ... 3200 A, 3-pole switch	<b>3KC9832-7</b>		1	1 unit	1CL
	<b>For 4-pole applications, infeed from below, with power supply</b>					
	• For 250 A, 4-pole switch	<b>3KC9830-1</b>		1	1 unit	1CL
	• For 400 A, 4-pole switch	<b>3KC9830-2</b>		1	1 unit	1CL
	• For 630 A, 4-pole switch	<b>3KC9830-3</b>		1	1 unit	1CL
	• For 800 ... 1000 A, 4-pole switch	<b>3KC9830-4</b>		1	1 unit	1CL
	• For 1250 A, 4-pole switch	<b>3KC9830-5</b>		1	1 unit	1CL
	• For 1600 A, 4-pole switch	<b>3KC9830-6</b>		1	1 unit	1CL
	• For 2000 ... 3200 A, 4-pole switch	<b>3KC9830-7</b>		1	1 unit	1CL
	<b>For 4-pole applications, infeed from above, with power supply</b>					
	• For 250 A, 4-pole switch	<b>3KC9831-1</b>		1	1 unit	1CL
	• For 400 A, 4-pole switch	<b>3KC9831-2</b>		1	1 unit	1CL
	• For 630 A, 4-pole switch	<b>3KC9831-3</b>		1	1 unit	1CL
	• For 800 ... 1000 A, 4-pole switch	<b>3KC9831-4</b>		1	1 unit	1CL
	• For 1250 A, 4-pole switch	<b>3KC9831-5</b>		1	1 unit	1CL
	• For 1600 A, 4-pole switch	<b>3KC9831-6</b>		1	1 unit	1CL
	• For 2000 ... 3200 A, 4-pole switch	<b>3KC9831-7</b>		1	1 unit	1CL

<sup>1)</sup> Power supply not available for 3-pole cables; see manual for installation with transformer and/or with DPS in Siemens Industry Online Support at [www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals)

# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A  
3KC4 Transfer Switching Equipment (RTSE) and 3KC8 (ATSE) from 250 A to 3200 A

## Accessories and spare parts

Version		SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
		d					
<b>Auxiliary switches</b>							
	One auxiliary switch contains 2 leading changeover contacts, one changeover contact for position I and one changeover contact for position II (incl. bolt set) Max. two auxiliary switches can be installed per transfer switching equipment unit. 250 V AC/12 A (AC-13) or for 24 V DC/14 A (DC-13) • For 250 ... 630 A		<b>3KC9803-1</b>		1	1 unit	1CL
	• For 800 ... 1600 A		<b>3KC9803-2</b>		1	1 unit	1CL
	• For 2000 ... 3200 A: included in the basic unit		--				
<b>Phase barriers</b>							
	• For 250 ... 400 A, contains 2 units (for 3P)		<b>3KC9808-1</b>		1	1 unit	1CL
	• For 250 ... 400 A, contains 3 units (for 4P)		<b>3KC9808-6</b>		1	1 unit	1CL
	• For 630 A, contains 2 units (for 3P)		<b>3KC9808-2</b>		1	1 unit	1CL
	• For 630 A, contains 3 units (for 4P)		<b>3KC9808-7</b>		1	1 unit	1CL
	• For 800 ... 3200 A: included in the scope of supply of the basic unit						
<b>Mounting accessories</b>							
	<b>Cover frame</b> The cover frame helps to implement a clean and safe door cut-out to enable access to the front of the 3KC8 transfer switching equipment (electronic module and operation of the motorized operating mechanism) • For ATSE 250 ... 630 A		<b>3KC9820-4</b>		1	1 unit	1CL
	• For ATSE 800 ... 3200 A		<b>3KC9820-5</b>		1	1 unit	1CL
	<b>Spacers</b> Increase the space between the mounting rail and the cabinet rear panel or the mounting frame • For 250 ... 630 A, contains 2 units		<b>3KC9820-3</b>		1	1 unit	1CL
<b>Sealing units</b>							
	<b>Sealable cover</b> • For controller (electronic module) ATSE 250 ... 3200 A, (incl. bolt set and sealing ribbons)		<b>3KC9821-0</b>		1	1 unit	1CL
	<b>Sealing ribbon</b> • Also as spare part for sealable cover • For 40 ... 3200 A, 10 units		<b>3KC9621-2</b>		1	1 unit	1CL

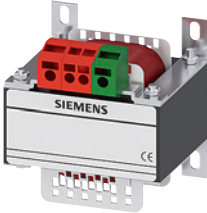
3KC9821-0

## Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

3KC4 Transfer Switching Equipment (RTSE) and 3KC8 (ATSE) from 250 A to 3200 A





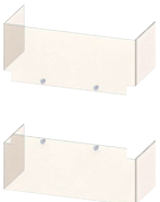
### Accessories and spare parts

Version		SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
<b>Autotransformers</b>		d					
 <ul style="list-style-type: none"> <li>For 250 ... 3200 A, 3-pole</li> <li>400 V/230 V AC, 200 VA</li> </ul>			<b>3KC9824-1</b>		1	1 unit	1CL
<b>Dual power supply</b>							
 <ul style="list-style-type: none"> <li>For 3KC3 and 3KC4 (RTSE) 40 ... 3200 A</li> <li>240 V AC, 3 A</li> </ul>			<b>3KC9625-1</b>		1	1 unit	1CL
<b>External display</b>							
	<b>Display</b>						
	For installing in the control cabinet door						
	<ul style="list-style-type: none"> <li>For 3KC8 (ATSE) 250 ... 3200 A</li> </ul>		<b>3KC9823-0</b>		1	1 unit	1CL
	<b>Connection cable</b>						
	<ul style="list-style-type: none"> <li>for external display, 250 ... 3200 A, RJ45 cable, 3 m</li> </ul>		<b>3KC9823-2</b>		1	1 unit	1CL

# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A  
3KC4 Transfer Switching Equipment (RTSE) and 3KC8 (ATSE) from 250 A to 3200 A

## Accessories and spare parts

Version		SD	Article No. <a href="http://www.siemens.com/product?ArticleNo.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
<b>Terminal plates</b>		d					
	For protecting the front side at the upper and lower connecting terminals						
	<ul style="list-style-type: none"> <li>• For 250 ... 400 A, 3-pole</li> <li>• For 250 ... 400 A, 4-pole</li> </ul>		<b>3KC9827-1</b> <b>3KC9828-1</b>		1 1	1 unit 1 unit	1CL 1CL
							
	<ul style="list-style-type: none"> <li>• For 630 A, 3-pole</li> <li>• For 630 A, 4-pole</li> </ul>		<b>3KC9827-2</b> <b>3KC9828-2</b>		1 1	1 unit 1 unit	1CL 1CL
							
	<ul style="list-style-type: none"> <li>• For 800 ... 1250 A, 3-pole</li> <li>• For 800 ... 1250 A, 4-pole</li> </ul>		<b>3KC9827-3</b> <b>3KC9828-3</b>		1 1	1 unit 1 unit	1CL 1CL
							
	<ul style="list-style-type: none"> <li>• For 1600 A, 3-pole</li> <li>• For 1600 A, 4-pole</li> </ul>		<b>3KC9827-4</b> <b>3KC9828-4</b>		1 1	1 unit 1 unit	1CL 1CL
							
	<ul style="list-style-type: none"> <li>• For 2000 ... 3200 A, 3-pole</li> <li>• For 2000 ... 3200 A, 4-pole</li> </ul>		<b>3KC9827-5</b> <b>3KC9828-5</b>		1 1	1 unit 1 unit	1CL 1CL

## Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A

3KC4 Transfer Switching Equipment (RTSE) and 3KC8 (ATSE) from 250 A to 3200 A

### Accessories and spare parts

Version		SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
		d					
<b>Spare parts</b>							
<b>Motorized operating mechanisms</b>							
	• For 250 ... 400 A		<b>3KC9826-1</b>		1	1 unit	1CL
	• For 630 A		<b>3KC9826-2</b>		1	1 unit	1CL
	• For 800 ... 1250 A		<b>3KC9826-3</b>		1	1 unit	1CL
	• For 1600 A		<b>3KC9826-4</b>		1	1 unit	1CL
	• For 2000 ... 3200 A		<b>3KC9826-5</b>		1	1 unit	1CL
<b>Controller (electronic module)</b>							
	• For ATSE 250 ... 3200 A		<b>3KC9826-0</b>		1	1 unit	1CL

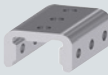

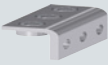

# Transfer Switching Equipment and Load Transfer Switches

3KC Transfer Switching Equipment up to 3200 A  
3KC4 Transfer Switching Equipment (RTSE) and 3KC8 (ATSE) from 250 A to 3200 A

## Accessories and spare parts

### More information

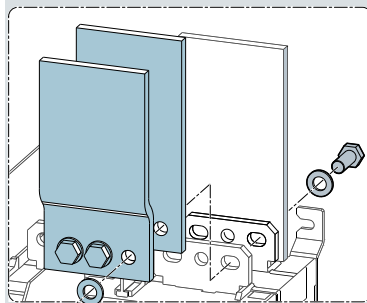
#### Direct connections

			C-bracket 	Bolt set, 45 mm	Bolt set, 35 mm	T-piece 	L-bracket 	Bridging bars 
	Copper bar connection kit for transfer switching equipment from 2000 to 3200 A	Number of poles	3KC9811-0	3KC9811-1	3KC9811-2	3KC9811-3	3KC9811-4	3KC9818-8
Line side	Direct connection 2 x 100 x 10 mm; 4 x 100 x 5 mm	3	-	-	6 x	-	-	-
		4	-	-	8 x	-	-	-
	Direct connection, rotated 90° 2 x 100 x 10 mm; 4 x 100 x 5 mm	3	6 x	-	-	6 x	6 x	-
		4	8 x	-	-	8 x	8 x	-
	Direct connection 3 x 100 x 10 mm (necessary for 3200 A)	3	Included <sup>1)</sup>	3 x	3 x	-	-	-
		4	Included <sup>1)</sup>	4 x	4 x	-	-	-
	Direct connection, rotated 90° 3 x 100 x 10 mm (necessary for 3200 A) <sup>2)</sup>	3	Included <sup>1)</sup>	-	-	6 x	6 x	-
		4	Included <sup>1)</sup>	-	-	8 x	8 x	-
Load side	Direct connection, rotated 90° 2 x 100 x 10 mm; 4 x 100 x 5 mm	3	6 x	-	-	6 x	6 x	-
		4	8 x	-	-	8 x	8 x	-
	Direct connection, rotated 90° with bridging bar 2 x 100 x 10 mm; 4 x 100 x 5 mm	3	6 x	6 x	-	-	-	3 x
		4	8 x	8 x	-	-	-	4 x
	Direct connection, rotated 90° 3 x 100 x 10 mm (necessary for 3200 A)	3	Included <sup>1)</sup>	-	-	6 x	6 x	-
		4	Included <sup>1)</sup>	-	-	8 x	8 x	-
	Direct connection, rotated 90° with bridging bar 3 x 100 x 10 mm (necessary for 3200 A)	3	Included <sup>1)</sup>	6 x	-	-	-	3 x
		4	Included <sup>1)</sup>	8 x	-	-	-	4 x

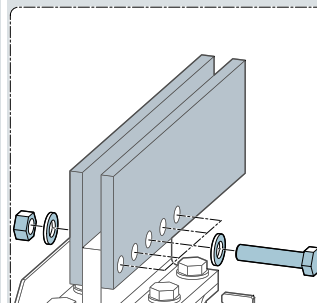
<sup>1)</sup> 3KC9811-0 is included for all 3KC transfer switches for 3200 A. For connection of 3KC transfer switches for 2000 ... 2500 A to 3 x 100 x 10 mm busbars, the following must be ordered:  
- 3KC9811-0, 6 units for 3-pole switches  
- 3KC9811-0, 8 units for 4-pole switches

<sup>2)</sup> Vertical connection is approved up to 2900 A; horizontal connection is approved up to 3200 A.

#### Line side

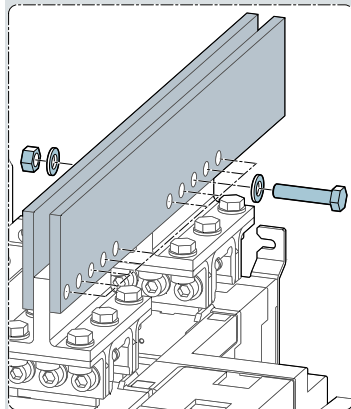


Infeed side, direct connection (2000 to 2500 A)

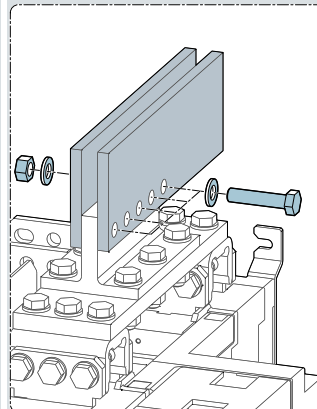


Infeed side, direct connection, rotated 90° (2000 to 2500 A)

#### Load side



Load side, direct connection, rotated 90° (2000 to 2500 A)






Load side, direct connection, rotated 90°, with bridging bar (2000 to 2500 A)

# Transfer Switching Equipment and Load Transfer Switches

## Transfer Control Devices

### Introduction

### Overview

Devices	Page	Application	Used in			
			Non-residential buildings	Residential buildings	Industry	
Transfer control devices						
	3KC ATC6300 transfer control device <b>NEW</b>	8/63	The 3KC ATC6300 transfer control device, equipped with two circuit breakers with motorized operating mechanism or with remote transfer switching equipment (RTSE), serves as a transfer system that automatically or manually switches between two power supply systems in low-voltage power distribution applications.  The 3KC ATC6300 transfer control device offers <ul style="list-style-type: none"><li>• Several programmable inputs and outputs</li><li>• Optional communication link</li><li>• LCD</li></ul> Settings are defined via user-friendly software.	✓	✓	✓
	3KC ATC6500 transfer control device <b>NEW</b>	8/64	The 3KC ATC6500 transfer control device can do everything the 3KC ATC6300 can.  The 3KC ATC6500 also offers the option of controlling an additional tie breaker. It can be used to implement a wide range of applications with critical load management. Load shedding of non-critical loads can therefore be implemented.  The ATC6500 also features a permanently integrated RS 485 interface.	✓	✓	✓
	3KC ATC3100 transfer control devices	8/66	The 3KC ATC3100 transfer control device constitutes the transfer control system together with two circuit breakers with motorized operating mechanism.  It is a simplified version of the 3KC ATC6300 and enables fast parameterization without software.	✓	✓	✓



# Transfer Switching Equipment and Load Transfer Switches

## Transfer Control Devices

General data

### Overview



3KC ATC transfer control devices:  
Top: 3KC ATC6300, middle: 3KC ATC6500, bottom: 3KC ATC3100

### Automatic transfer control with the 3KC ATC transfer control device

Equipped with two motorized circuit breakers or with remote transfer switching equipment, 3KC ATC transfer control devices constitute an open transfer control system.

The 3KC ATC transfer control devices control the transfer automatically, while incorporating set limit values and delay times. They immediately detect fluctuations in the priority power supply and transfer to the standby power supply if the standby power supply can provide the required power supply quality. When the required power supply quality is restored in the priority power supply, the control device automatically initiates a return transfer.

If a generator is feeding the standby and/or the priority power supply, the control device also offers suitable setting options, such as the generator lead time.

As well as the ability to control two circuit breakers, the ATC6500 offers the additional option of controlling a third breaker, the tie breaker. Load shedding of non-priority loads can therefore be implemented.

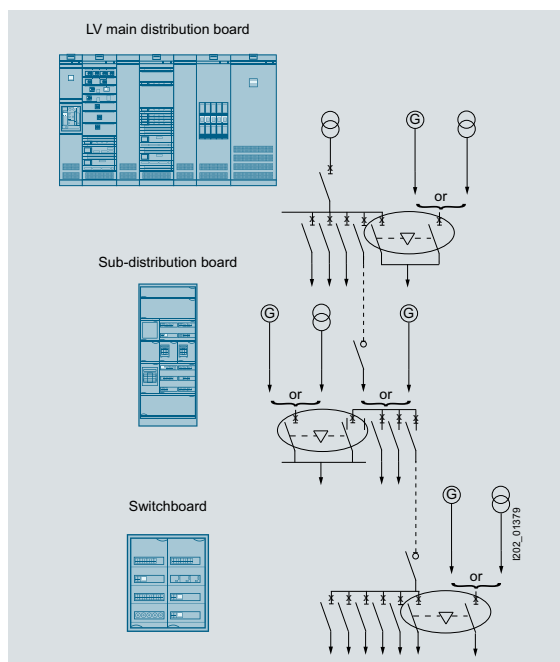
### Src1 and Src2, configured with Siemens switching devices

The following switching devices have been tested in conjunction with 3KC ATC6300/6500/3100 transfer control devices:

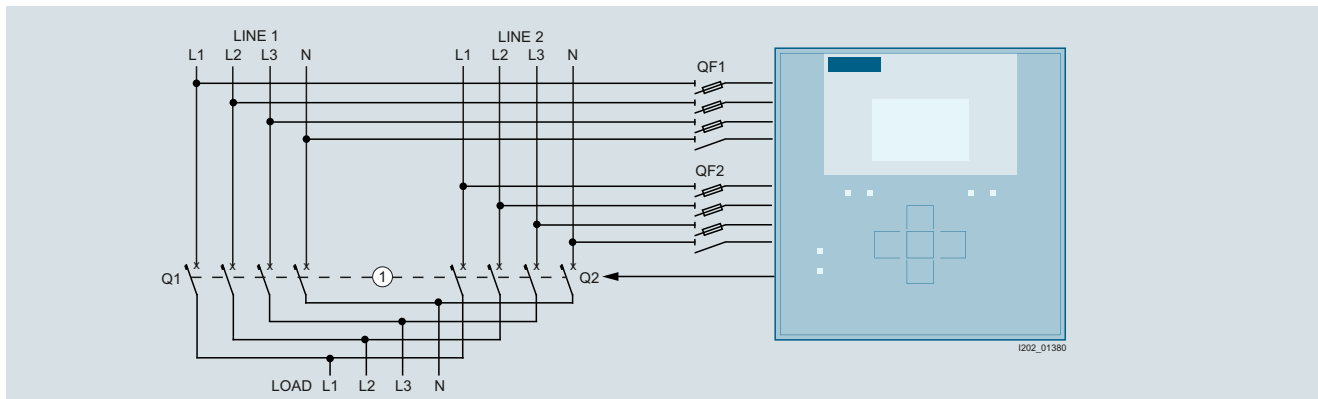
- 3VA molded case circuit breakers
- 3VL molded case circuit breakers (3KC ATC6300/3100 only)
- 3VT molded case circuit breakers (3KC ATC3100 only)
- 3WL10 air circuit breakers (3KC ATC6500 only)
- 3WL air circuit breakers FSI-III
- 3WT air circuit breakers
- 3KC3/4 remote transfer switching equipment (3KC ATC6300 only)

The circuit breakers must be equipped with the following accessories (please see the corresponding manual at [www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals) for exact circuit diagrams)

- 3VL/3VA/3VT molded case circuit breakers:
  - One motorized operating mechanism
  - One alarm switch
  - Two auxiliary switches 1 NO / 1 NC
- 3WL/3WT air circuit breakers:
  - One motorized operating mechanism
  - One closing solenoid
  - One auxiliary release (shunt release)
  - One tripped signal switch
  - One auxiliary switch block 2 NO / 2 NC (standard equipment)



Applications in low-voltage power distribution



Implementation of an automatic transfer; ⊙ interlocking

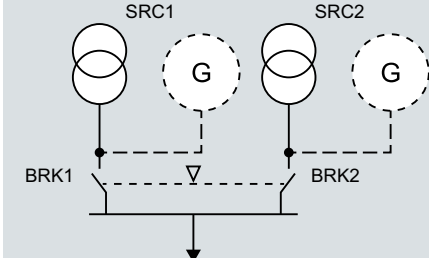
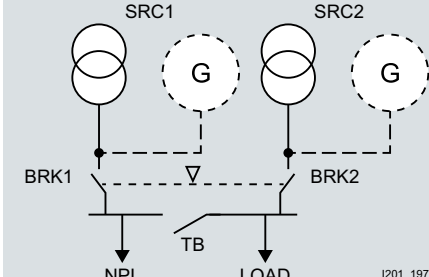
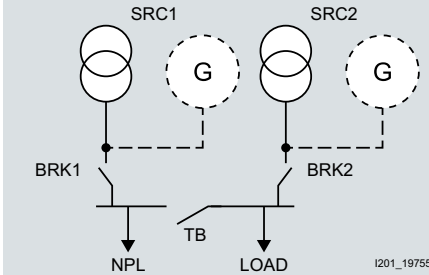
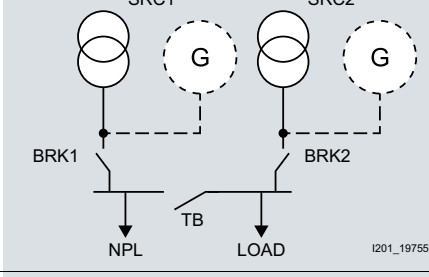
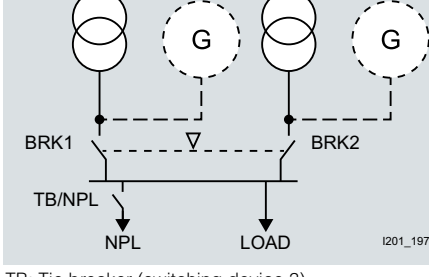
Minimum order quantity (PS) or a multiple thereof can be ordered.

# Transfer Switching Equipment and Load Transfer Switches

## Transfer Control Devices

### General data

### Configuration

Scenario	Description	Circuit diagram	Source1 (SRC1)	Source2 (SRC2)	Breaker1 (BRK1)	Breaker2 (BRK2)	Breaker3 (TB, TB/NPL)
Automatic transfer control with 1 or 2 switching devices (3KC ATC 3100, 6300, 6500)							
Connection of one of the two sources according to setting	In this application, 2 motorized circuit breakers or one RTSE (remote transfer switching equipment) can be used. The 3KC ATC connects one of the two sources according to the setting.  Note: The 3KC ATC3100 is only suitable for one network/network or network/generator application		Off	Off			--
			On	Off			--
			Off	On			--
			On	On			--
Automatic transfer control with 3 switching devices (only possible with 3KC ATC 6500)							
Source 1 (SRC1) supplies all loads, source 2 (SRC2) only the priority load (LOAD)	In this application, only the priority load is supplied by the secondary source (source 2 here) when the priority source fails (source 1 here). In the normal case (source 1 available), both sources are supplied by the priority network.		Off	Off			
			On	Off			
			Off	On			
			On	On			
The source which is still available supplies all loads (NPL and LOAD)	In this application, the two loads are supplied by one source each in the normal case (both sources available). If one source fails, the priority load (LOAD) and the non-priority load (NPL) are supplied by the source that is still available.		Off	Off			
			On	Off			
			Off	On			
			On	On			
Source 1 (SRC1) supplies all loads, source 2 (SRC2) only the priority load (LOAD)	In this application, the two loads are supplied by one source each in the normal case (both sources available). If source 2 fails, both the priority load and the non-priority load are supplied by source 1. Source 2 only supplies the priority load however.		Off	Off			
			On	Off			
			Off	On			
			On	On			
Source 1 (SRC1) supplies all loads, source 2 (SRC2) only the priority load; the TB/NPL switches off the non-priority load	In this application, only the priority load is supplied by the secondary source (source 2 here) when the priority source fails (source 1 here). In the normal case (source 1 available), both sources are supplied by the priority network.		Off	Off			
			On	Off			
			Off	On			
			On	On			
Explanations	SRC 1/2: Source 1/2 BRK 1/2: Switching device 1/2 LOAD: Priority load in this case NPL: Non-priority load	TB: Tie breaker (switching device 3) TB/NPL: Tie breaker/Non-priority load = Breaker for non-priority load (switching device 3)	On: Source is fully functional Off: Source has failed completely or is not providing the required power supply quality    Breaker closed				

# Transfer Switching Equipment and Load Transfer Switches

## Transfer Control Devices

### General data

### Technical specifications

		ATC6300	ATC6500	ATC3100
<b>Measuring inputs</b>				
Max. rated voltage $U_n$	V AC			
• Phase-phase	V AC	480	600	400
• Phase-neutral conductor	V AC	277	346	230
Phase-phase measuring range	V AC	50 ... 576	50 ... 720	--
Phase-neutral conductor measuring range	Hz	50 ... 333	30 ... 415	161 ... 264
Frequency range		45...65	45...65	50...60
Measuring method		RMS value (true RMS)		
Measuring input impedance				
• Phase-phase	MΩ	> 1.0	> 1.1	> 1.1
• Phase-neutral conductor	MΩ	> 0.5	> 0.55	> 1.1
Connection method				
Relative error of measurement method	%	± 0.25	± 0.25	± 5
<b>Power supply</b>				
Auxiliary power supply				
• Rated voltage $U_n$				
- AC	V AC	100 ... 240	100 ... 240	220 ... 240
- DC	V DC	110 ... 250	110 ... 250	--
• Operating range				
- AC	V AC	90 ... 264	90 ... 264	161 ... 264.5
- DC	V DC	93.5 ... 300	93.5 ... 300	--
Frequency	Hz	45 ... 66	45 ... 66	50 ... 60
Battery power supply				
• Rated voltage $U_n$				
- DC	V DC	12/24	12/24/48	24
• Operating range				
- DC	V DC	7.5 ... 33	7.5 ... 57.6	18 ... 36
Max. power consumption at $U_n = 240$ V AC	VA	9.5	12.5	6
Max. power loss				
• At 240 V AC	W	3.8	5.5	4.5
• At 250 V DC	W	3.6	4.7	--
• At 24 V DC	W	2.9	4.5	4
• At 48 V DC	W	--	4.2	--
Max. power consumption				
• At 12 V DC	mA	230	400	--
• At 24 V DC	mA	120	220	120
• At 48 V DC	mA	--	100	--
<b>Digital inputs</b>				
Number of inputs		6, programmable	8, programmable	5
Design of the switching input		Negative	Negative	--
Input current	mA	≤ 8	≤ 8	≤ 8
<b>Input signal</b>				
• Logic state "0"	V DC	≤ 2	≤ 2	--
• Logic state "1"	V DC	≥ 3.4	≥ 3.4	--
Input signal delay	ms	≤ 50	≤ 50	≤ 40
<b>Relay outputs</b>				
Number of outputs		7, programmable	7, programmable	9
Contact configuration		6 x 1 NO: 8 A, 250 V AC (AC-1) 1 x 1 CO: 8 A, 250 V AC (AC-1)	2 x 1 NO: 12 A, 250 V AC (AC-1) 2 x 1 NO: 8 A, 250 V AC (AC-1) 3 x 1 CO: 8 A, 250 V AC (AC-1)	6 x 1 NO, 8 A, 250 V AC 3 x 1 NO, 16 A, 250 V AC
<b>Expandability</b>				
Can be expanded using expansion modules		Yes, max. 2	Yes, max. 3	--
Can be expanded with		4DI 4DO, SSR 2DI/2DO, SSR 2DI/2DO, relay 2DO, relay RS 485 Ethernet	4DI 4DO, SSR 2DI/2DO, SSR 2DI/2DO, relay 2DO, relay RS 485 Ethernet	--

# Transfer Switching Equipment and Load Transfer Switches

## Transfer Control Devices

### General data **NEW**

		ATC6300	ATC6500	ATC3100
<b>Application</b>				
Transfer possible between		Network/network, network/generator, generator/generator	Network/network, network/generator, generator/generator	Network/network, network/generator
Controllable switching devices with motorized operating mechanism		2	3	2
In-phase transition		--	✓	--
Implementation of a transfer in combination with:		3WL FSI-III, 3WT, 3KC3, 3KC4, 3VA, 3VL	3WL FSI-III, 3WL10, 3WT, 3VA	3VA, 3VL, 3VT, 3WL, 3WT
<b>Communication</b>				
Integrated RS 485 interface		--	✓	--
Optional RS 485 interface		✓	✓	--
• - Settable transmission rate	bit/s	1200 ... 11500	1200 ... 11500	--
Optional Ethernet interface		✓	✓	--
• - Settable transmission rate		1200 ... 11500	1200 ... 11500	--
<b>Real-time clock</b>				
ATC component		✓	✓	--
Operating time without voltage		300 s	14 days	
<b>Insulation voltage</b>				
	V AC	480 (at the measuring inputs) 250 (at the auxiliary power supply and relay outputs)	600 (at the measuring inputs) 250 (at the auxiliary power supply and relay outputs)	400
<b>Ambient conditions</b>				
Operating temperature	°C	-30 ... 70	-30 ... 70	-25 ... 70
Storage temperature	°C	-30 ... 80	-30 ... 80	-40 ... 80
Relative humidity	%	80	80	95
Max. pollution degree		2	2	3
Overvoltage category		3	3	4
<b>Connections</b>				
Terminal type		Removable/plug-in	Removable/plug-in	Removable/plug-in
Cable cross-section	mm <sup>2</sup>	0.2 ... 2.5 (24 ... 12 AWG)	0.2 ... 2.5 (24 ... 12 AWG)	0.5 ... 2.5 (20 ... 12 AWG)
Cable cross-section acc. to UL 508	mm <sup>2</sup>	0.75 ... 2.5 (18 ... 12 AWG)	0.75 ... 2.5 (18 ... 12 AWG)	--
Max. tightening torque	Nm	0.56	0.56	0.4
<b>Enclosure</b>				
Enclosure material		Polycarbonate	Polycarbonate	Thermoplastic Bayblend FR3010
Version		Door installation	Door installation	Door installation, DIN rail mounting, floor mounting
Degree of protection		IP40 front, IP20 rear	IP40 front, IP20 rear	IP41 front, IP20 rear
Weight	g	600	680	1050
Dimensions (H x W x D)	mm	144 x 144 x 43.3	180 x 240 x 32.6	171.2 x 131.2 x 99

✓ Available

-- Not available

### More information

#### Manual

For the manuals for the transfer control devices, see

<https://support.industry.siemens.com/cs/ww/en/view/109755149>

#### Internet

More information on the Internet at:

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

# Transfer Switching Equipment and Load Transfer Switches

## Transfer Control Devices

**NEW** 3KC ATC6300 transfer control device

### Overview



3KC ATC6300 transfer control device

### Expandability thanks to communication interfaces

The 3KC ATC6300 can be integrated into a communication environment using expansion modules. For communication, the 3KC ATC6300 supports the optional interfaces Ethernet with Modbus TCP, RS 485 with Modbus RTU and USB. The 3KC ATC6300 provides all available transfer control system and supply data via these interfaces. The 3KC ATC6300 can also be controlled via these interfaces. These functions make it possible to integrate the ATC6300 into an additional monitoring software (e.g. SCADA) or other intelligent devices that support Modbus (e.g. Siemens PLCs) and to control it.

### Compatibility with 3VA

The 3KC ATC6300 enables transfers between two energy sources in combination with two motorized 3VA molded case circuit breakers.

### Simple parameterization using powerconfig or the front LCD

In addition to operation and parameterization via the front LCD, you can also monitor and set the parameters of the controller using powerconfig. Thanks to the optionally available USB front interface, the device can also be parameterized without opening the control cabinet door. The 3KC ATC6300 thus offers a high level of convenience and quick access to all device settings, such as complex settings that arise when connecting generators.

### Metering functions

The 3KC ATC6300 offers the following metering functions:

- Phase sequence
- Phase failure
- Minimum / maximum voltage
- Minimum / maximum frequency
- Voltage unbalance

### Benefits

- Backlit graphic LCD, 128 x 80 pixels, for displaying measurements, events and alarms in five languages (English, German, French, Italian, Spanish)
- Easy parameterization via the user interface of the device or via powerconfig (from powerconfig version 3.10)
- Control of functions with microprocessor with virtual real-time clock
- Auxiliary voltage supply is possible by means of taps from the supply sources (110-240 V AC, 50/60 Hz) or by means of a separate DC source (12-24 V DC)
- Measurement of three-phase networks with or without neutral conductor, of two-phase networks, and of single-phase networks
- Control of circuit breakers with motorized operating mechanism, remote transfer switching equipment or contactors
- Suitable for network to network, network to generator or generator to generator applications
- 6 freely programmable digital inputs and 7 programmable relay outputs fitted to the device
- Expandable using up to 2 expansion modules with digital inputs and outputs, and by means of communications interfaces (RS 485, Ethernet)

### Integration



#### Implementation of an automatic transfer

The 3KC ATC6300 transfer control device is used to automatically and manually switch from a main power supply to a standby power supply and vice versa. In the event that system faults occur, the 3KC ATC6300 transfer control device controls the switching operations fully automatically. This ensures a very high level of operational continuity.

The following devices are ideally matched to the 3KC ATC6300 transfer control device:

- 3WL, 3WT air circuit breakers
- 3VA, 3VL molded case circuit breakers
- 3KC3, 3KC4 remote transfer switching equipment

### Selection and ordering data

Version	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
	d					
 <b>3KC ATC6300 transfer control device</b> Control panel instrument 144 x 144 x 43.3 mm with the following features: <ul style="list-style-type: none"> <li>• Screw terminal connection</li> <li>• AC/DC power supply unit:               <ul style="list-style-type: none"> <li>- 100 ... 240 V AC, 45 ... 65 Hz</li> <li>- 7.5 ... 33 V DC</li> <li>- Rated setting range: 100 ... 480 V AC</li> </ul> </li> </ul>		<b>Screw connection</b>				
		<b>3KC9000-8TL40</b>		1	1 unit	1CL

For accessories, see page 8/65.

# Transfer Switching Equipment and Load Transfer Switches

## Transfer Control Devices

### 3KC ATC6500 transfer control device **NEW**

#### Overview



3KC ATC6500 transfer control device

#### Load management with the ATC6500

As well as transferring between 2 sources and 2 switching devices, the 3KC ATC6500 can control an additional tie breaker. It can therefore be used to implement a wide range of applications that distinguish between priority and non-priority loads. The ATC automatically assumes control of the tie breaker according to the configured application.

#### In-phase transition

The ATC6500 is capable of in-phase transition. In this application, the ATC measures the deviation between the voltage, the frequency and the phase displacement angle  $\cos \phi$  of both sources. If the requirements for synchronism are attained on a return to the priority source, transfer is initiated. During the transfer, one breaker is opened before the other can be closed. In other words, parallel network operation is not present. In-phase transition offers the advantage that transfer times can be reduced to a minimum during the return, as transfer only takes place when synchronism is present. A stable load transfer is also achieved.

If the state of synchronism is not attained within a defined time, transfer takes place with standard conditions.

#### Compatibility with 3VA

The 3KC ATC6500 enables transfer between two energy sources in combination with two motorized 3VA molded case circuit breakers.

#### Simple parameterization using powerconfig or via the front LCD

The transfer control device offers the same convenience as the 3KC ATC6300 in this respect.

#### Integrated RS 485 interface and expandability

The 3KC ATC6500 features an integrated RS 485 interface. It can also be expanded with the optional communication interfaces Ethernet with Modbus TCP and USB.

The 3KC ATC6500 provides all available transfer control system and line data via these interfaces. The 3KC ATC6500 can also be controlled via these interfaces. The ATC6500 can therefore be integrated into additional monitoring software (e.g. SCADA) or other intelligent devices that support Modbus (e.g. Siemens PLCs) for control purposes.

#### Metering functions

In addition to the metering functions of the 3KC ATC6300, the 3KC ATC6500 offers the following:

- Difference in phase displacement angle  $\cos \phi$
- Voltage difference of the two sources
- Frequency difference of the two sources

#### Benefits

The 3KC ATC6500 transfer control device offers all the advantages and functions of the 3KC ATC6300. In addition, it offers

- 8 freely programmable digital inputs and 7 programmable relay outputs fitted to the device
- Integrated RS 485 interface
- Expandable with additional expansion modules (max. 3) with digital inputs and outputs, and with communications interfaces (Ethernet with Modbus TCP) and USB interface

#### Integration



##### Implementation of an automatic transfer

The 3KC ATC6500 transfer control device is used to automatically or manually transfer from a priority power supply to a standby power supply and vice versa. In the event that system faults occur, the 3KC ATC6300 transfer control device controls the switching operations fully automatically. This ensures a very high level of operational continuity.

The following devices are ideally matched to the 3KC ATC6500 transfer control device:

- 3WL10, 3WL FSI-III, 3WT air circuit breakers
- 3VA, 3VA27 molded case circuit breakers

#### Selection and ordering data

Version	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
	d					
 <b>3KC ATC6500 transfer control device</b> Control panel instrument 180 x 240 x 32.6 mm with the following features: <ul style="list-style-type: none"> <li>• Screw terminal connection</li> <li>• AC/DC power supply unit:               <ul style="list-style-type: none"> <li>- 100 ... 240 V AC, 45 ... 65 Hz</li> <li>- 7.5 ... 57.6 V DC</li> <li>- Rated setting range: 100 ... 600 V AC</li> </ul> </li> </ul>		<b>Screw connection</b>				
		<b>3KC9000-8TL50</b>		1	1 unit	1CL





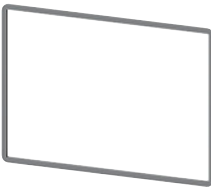


# Transfer Switching Equipment and Load Transfer Switches

## Transfer Control Devices

### Accessories for 3KC ATC6300 and ATC6500 transfer control devices

#### Selection and ordering data

Version	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
d						
Expansion modules with digital inputs and outputs						
 3KC9000-8TL61		<b>ATC6 expansion module 4DI</b> Features 4 digital inputs: <ul style="list-style-type: none"><li>Including insulated 24 V DC/1 W power supply for digital inputs and sensors</li></ul>	3KC9000-8TL60	1	1 unit	1CL
		<b>ATC6 expansion module 4DO, SSR</b> Features 4 solid-state-compatible digital outputs: <ul style="list-style-type: none"><li>4 NO contacts</li><li>Max. 55 mA at 30 V AC or 40 V DC</li></ul>		1	1 unit	1CL
		<b>ATC6 expansion module 2DI/2DO, SSR</b> Features 2 digital inputs and 2 solid-state-compatible digital outputs: <ul style="list-style-type: none"><li>Including insulated 24 V DC/1 W power supply for digital inputs and sensors</li><li>2 NO contacts</li><li>At solid-state-compatible output max. 55 mA at 30 V AC or 40 V DC</li></ul>		1	1 unit	1CL
		<b>ATC6 expansion module 2DO, relay</b> Features 2 relay outputs: <ul style="list-style-type: none"><li>2 CO contacts, 5 A, 250 V AC (AC-1)</li></ul>		1	1 unit	1CL
		<b>ATC6 expansion module 2DI/2DO, relay</b> Features 2 digital inputs and 2 relay outputs: <ul style="list-style-type: none"><li>2 NO contacts, 5 A, 250 V AC (AC-1)</li></ul>		1	1 unit	1CL
Expansion modules with communication interfaces						
 3KC9000-8TL74		<b>ATC6 RS 485 expansion module</b> Features RS 485 interface	3KC9000-8TL74	1	1 unit	1CL
		<b>ATC6 Ethernet expansion module</b> Features Ethernet interface		1	1 unit	1CL
USB front interface						
 3KC9000-8TL73		<b>ATC6 USB front interface</b> For parameterization on the front using software: <ul style="list-style-type: none"><li>Including mini-USB cable, 1.8 m</li></ul>	3KC9000-8TL73	1	1 unit	1CL
Protective seal						
 3KC9000-8TL67		<b>ATC6300 protective seal, 144 x 144 mm</b> for IP65 protection on the front for 3KC ATC6300	3KC9000-8TL67	1	1 unit	1CL
 3KC9000-8TL68		<b>ATC6500 protective seal, 171.1 x 131.1 mm</b> for IP65 protection on the front for 3KC ATC6500	3KC9000-8TL68	1	1 unit	1CL

# Transfer Switching Equipment and Load Transfer Switches

## Transfer Control Devices

### 3KC ATC3100 transfer control device

#### Overview



3KC ATC3100 transfer control device

#### Convenient handling

The 3KC ATC3100 transfer control device offers customers flexible and fast commissioning for implementing simple applications. The 3KC ATC3100 can be mounted in a control cabinet door, on a DIN rail or on a rear panel without additional accessories. By default, the transfer control device is supplied with a lockable safety cover (IP41). The connecting cable is pre-assembled to assist fast cabling.

The 3KC ATC3100 can be configured without software. Thanks to the well-thought-out concept, automatic changeover applications can be implemented with ease.

#### 3KC ATC3100 connecting cable for MCCB/ACB

You need the pre-assembled connecting cable (3KC9000-8EL62) to connect 3VL or 3WL molded case circuit breakers.

With this cable, connection of the molded case circuit breakers is fast and easy.

#### Benefits

- Costs of installing the transformer are dispensed with
- Integrated DPS (double power supply) powers the motorized operating mechanisms of the connected circuit breakers for reliable switching
- Good readability of the system status by means of 10 LEDs
- 3 mounting options without additional accessories: door installation, DIN rail mounting and floor mounting
- Pre-assembled cable set for fast wiring to 3VL and 3WL molded case circuit breakers
- Terminal available for external 24 V DC power supply unit

#### Integration

##### Implementation of an automatic transfer



The 3KC ATC3100 transfer control device is used to automatically and manually switch from a main power supply to a standby power supply and vice versa. In the event that system faults occur, the 3KC ATC3100 transfer control device controls the switching operations fully automatically. This ensures a very high level of operational continuity.

The 3KC ATC3100 transfer control device allows implementation of an automatic transfer in conjunction with molded case circuit breakers, air circuit breakers and switch disconnectors.

The following devices are ideally matched to the 3KC ATC3100 transfer control device:

- 3VA, 3VL, 3VT molded case circuit breakers
- 3WL, 3WT air circuit breakers

#### Selection and ordering data

Version	SD	Article No. <a href="http://www.siemens.com/product?Article No.">www.siemens.com/ product?Article No.</a>	Price per PU	PU (UNIT, SET, M)	PS	PG
	d					
 <b>3KC ATC3100 transfer control device <sup>1)</sup></b> Control panel instrument 171 x 131 x 99 mm with the following features: <ul style="list-style-type: none"> <li>• Screw terminal connection</li> <li>• Rated setting range: 280 – 460 V AC</li> <li>• Aux. 24 V DC voltage</li> <li>• English labeling (Chinese labeling on request)</li> </ul>		<b>Screw terminals</b>				
		<b>3KC9000-8EL10</b>		1	1 unit	1CL
<b>3KC ATC3100 connecting cable</b> Necessary measurement and control cable for connection of 3KC ATC3100 to 3VL or 3WL		<b>3KC9000-8EL62</b>		1	1 unit	1CL

<sup>1)</sup> For the 3KC ATC3100 transfer control device you additionally need the 3KC ATC3100 connecting cable (3KC9000-8EL62).



## 1. General standards

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

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

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

- for installation, the "Standard Terms and Conditions for Installation –Germany" and
- for Plant Analytics Services the "Standard Terms and Conditions for Plant Analytics Services – for Customers in Germany"<sup>1)</sup> and
- for standalone software products and software products that are part of another product or project, the "General License Conditions for Software Products for Automation and Drives for Customers with a Seat or Registered Office in Germany"<sup>1)</sup> and
- for other supplies and services, the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"<sup>1)</sup>.  
In the event that such other supplies and services include open-source software, the conditions of which override the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"<sup>1)</sup>, the product will be supplied with a notice detailing the special conditions that apply for the relevant open-source software. This applies accordingly in the case of a reference to other third-party software components.

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

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

- for Plant Analytics Services the "Standard Terms and Conditions for Plant Analytics Services"<sup>1)</sup> (only available in English) and
- for services, the "International Terms & Conditions for Services"<sup>1)</sup> supplemented by the "Software Licensing Conditions"<sup>1)</sup> and
- for the supply of other hardware and software the "International Terms & Conditions for Products"<sup>1)</sup> supplemented by the "Software Licensing Conditions"<sup>1)</sup>.

### 1.3 For customers with framework agreements

To the extent that our products and services are covered by an existing framework agreement, the conditions there apply instead of this CSD.

## 2. Prices

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

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

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

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

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

An exact explanation of the metal factor can be found at: [www.siemens.com/automation/salesmaterial-as/catalog/en/terms\\_of\\_trade\\_en.pdf](http://www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf)

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

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

## 3. Additional terms and conditions

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

Illustrations are not binding.

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

<sup>1)</sup> You can download the text of the Siemens AG terms and conditions of trade at [www.siemens.com/automation/salesmaterial-as/catalog/en/terms\\_of\\_trade\\_en.pdf](http://www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf)

## Appendix

### Conditions of sale and delivery

#### 4. Export regulations

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

Exporting may be subject to authorization. In delivery information, we label authorization obligations according to German, European and US export lists.

Our products are controlled by the U.S. authorities (goods labeled with "ECCN" not equal to "N") and may only be supplied to the stated country of the end user for sole use by the end user. Without U.S. government approval or other approval under U.S. law, the products may not be sold, transferred or otherwise forwarded to other countries or to other persons other than the specified end user, either in their original form or after further processing into other goods. Goods labeled with an "AL" not equal to "N" are subject European/national export authorization requirements.

Please note that you can also preview the export designations in the respective product description via our "Industry Mall" online catalog system. The deciding factors, however, are the AL or ECCN export designations indicated on order confirmations, delivery notes and invoices.

Unmarked items or items marked "AL:N" / "ECCN:N" or "AL:9X9999" / "ECCN: 9X9999" may require authorization based on their intended use or ultimate destination.

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

If required to conduct export control checks, you, at our request, shall promptly provide us with all information pertaining to particular end customers, destination and intended use of goods, works and services provided by us, as well as any relevant export control restrictions.

The products listed in this catalog may be subject to European/German and/or US export regulations. Therefore, any export requiring a license is subject to approval by the competent authorities.

Errors excepted and subject to change without prior notice.

Further information can be obtained from our branch offices listed at [www.siemens.com/lowvoltage/contact](http://www.siemens.com/lowvoltage/contact)

<b>Interactive Catalog</b>		<i>Catalog</i>
Products for Automation and Drives	<b>CA 01</b>	
<b>Building Control</b>		
GAMMA Building Control	ET G1	
<b>Drive Systems</b>		
SINAMICS G130 Drive Converter Chassis Units	D 11	
SINAMICS G150 Drive Converter Cabinet Units		
<i>Digital: SINAMICS PERFECT HARMONY GH180</i>	<i>D 15.1</i>	
<i>Medium-Voltage Air-Cooled Drives</i>		
<i>(Germany Edition)</i>		
SINAMICS G180 Converters – Compact Units, Cabinet Systems, Cabinet Units Air-Cooled and Liquid-Cooled	D 18.1	
SINAMICS S120 Chassis Format Converter Units	D 21.3	
SINAMICS S120 Cabinet Modules		
SINAMICS S150 Converter Cabinet Units		
SINAMICS S120 and SIMOTICS	D 21.4	
SINAMICS DCM DC Converter, Control Module	D 23.1	
SINAMICS Inverters for Single-Axis Drives · Built-In Units	D 31.1	
SINAMICS Inverters for Single-Axis Drives · Distributed Inverters	D 31.2	
<i>Digital: SINAMICS Converters for Single-Axis Drives · SINAMICS G120X</i>	<i>D 31.5</i>	
<i>Digital: SINAMICS S210 Servo Drive System</i>	<i>D 32</i>	
<i>Digital: SINAMICS V90 Basic Servo Drive System</i>	<i>D 33</i>	
<i>Digital: SINAMICS G120P and SINAMICS G120P Cabinet pump, fan, compressor converters</i>	<i>D 35</i>	
LOHER VARIO High Voltage Motors	D 83.2	
Flameproof, Type Series 1PS4, 1PS5, 1MV4 and 1MV5		
Frame Size 355 to 1000, Power Range 80 to 7100 kW		
<i>Digital: Three-Phase Induction Motors</i>	<i>D 84.1</i>	
<i>SIMOTICS HV, SIMOTICS TN</i>		
<i>Digital: Three-Phase Induction Motors SIMOTICS HV</i>	<i>D 84.3</i>	
High Voltage Three-phase Induction Motors	D 84.9	
SIMOTICS HV Series A-compact PLUS		
<i>Digital: Modular Industrial Generators SIGENTICS M</i>	<i>D 85.1</i>	
Synchronous Motors with Permanent-Magnet Technology, HT-direct	D 86.2	
DC Motors	DA 12	
SIMOVERT PM Modular Converter Systems	DA 45	
MICROMASTER 420/430/440 Inverters	DA 51.2	
MICROMASTER 411/COMBIMASTER 411	DA 51.3	
<u>Low-Voltage Three-Phase-Motors</u>		
SIMOTOCS S-1FG1 Servo geared motors	D 41	
SIMOTICS Low-Voltage Motors	D 81.1	
SIMOTICS FD Low-Voltage Motors	D 81.8	
LOHER Low-Voltage Motors	D 83.1	
<i>Digital: MOTOX Geared Motors</i>	<i>D 87.1</i>	
SIMOGEAR Geared Motors	MD 50.1	
SIMOGEAR Electric-monorail geared motors	MD 50.8	
Light-load and heavy-load applications		
SIMOGEAR Gearboxes with adapter	MD 50.11	
<u>Mechanical Driving Machines</u>		
FLENDER Standard Couplings	MD 10.1	
FLENDER High Performance Couplings	MD 10.2	
FLENDER Backlash-free Couplings	MD 10.3	
FLENDER SIP Standard industrial planetary gear units	MD 31.1	
<b>Motion Control</b>		
SINUMERIK 840 Equipment for Machine Tools	NC 62	
SINUMERIK 808 Equipment for Machine Tools	NC 81.1	
SINUMERIK 828 Equipment for Machine Tools	NC 82	
SIMOTION Equipment for Production Machines	PM 21	
<i>Digital: Drive and Control Components for Cranes</i>	<i>CR 1</i>	
<b>Process Instrumentation and Analytics</b>		<i>Catalog</i>
<i>Digital: Field Instruments for Process Automation</i>	<i>FI 01</i>	
<i>Digital: Display Recorders SIREC D</i>	<i>MP 20</i>	
<i>Digital: SIPART Controllers and Software</i>	<i>MP 31</i>	
Products for Weighing Technology	WT 10	
<i>Digital: Process Analytical Instruments</i>	<i>AP 01</i>	
<i>Digital: Process Analytics, Components for Continuous Emission Monitoring</i>	<i>AP 11</i>	
<b>Low-Voltage Power Distribution and Electrical Installation Technology</b>		
SENTRON · SIVACON · ALPHA	LV 10	
Protection, Switching, Measuring and Monitoring Devices, Switchboards and Distribution Systems		
Electrical Components for the Railway Industry	LV 12	
Power Monitoring Made Simple	LV 14	
Components for Industrial Control Panels according to UL Standards	LV 16	
<i>Digital: Air circuit breakers and molded case circuit breakers with UL certification</i>	<i>LV 18</i>	
3WT Air Circuit Breakers up to 4000 A	LV 35	
3VT Molded Case Circuit Breakers up to 1600 A	LV 36	
<i>Digital: SIVACON System Cubicles, System Lighting and System Air-Conditioning</i>	<i>LV 50</i>	
<i>Digital: ALPHA Distribution Systems</i>	<i>LV 51</i>	
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>	<i>ET D1</i>	
Vacuum Switching Technology and Components for Medium Voltage	HG 11.01	
<b>Power Supply</b>		
SITOP Power supply	KT 10.1	
<b>Safety Integrated</b>		
Safety Technology for Factory Automation	SI 10	
<b>SIMATIC HMI / PC-based Automation</b>		
Human Machine Interface Systems/PC-based Automation	ST 80/ ST PC	
<b>SIMATIC Ident</b>		
Industrial Identification Systems	ID 10	
<b>SIMATIC Industrial Automation Systems</b>		
Products for Totally Integrated Automation	ST 70	
SIMATIC PCS 7 Process Control System	ST PCS 7	
System components		
SIMATIC PCS 7 Process Control System	ST PCS 7 T	
Technology components		
Add-ons for the SIMATIC PCS 7	ST PCS 7 AO	
Process Control System		
SIMATIC S7-400 advanced controller	ST 400	
<b>SIMATIC NET</b>		
Industrial Communication	IK PI	
<b>SIRIUS Industrial Controls</b>		
<i>Digital: SIRIUS Industrial Controls</i>	<i>IC 10</i>	

*Digital: These catalogs are only available as a PDF.***Siemens Industry Online Support**Digital versions of the catalogs are available on the Internet at:  
[www.siemens.com/lowvoltage/catalogs](http://www.siemens.com/lowvoltage/catalogs)

## Get more information

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

Siemens AG  
Energy Management  
Low Voltage & Products  
Postfach 10 09 53  
93009 Regensburg  
Germany

© Siemens AG 2019  
Subject to change without prior notice  
PDF (Extract from E86060-K8280-A101-A9-7600)  
KG 0619 1802 En  
Produced in Germany

The information provided in this catalog contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. Availability and technical specifications are subject to change without notice.

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

## Security information

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

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

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

For additional information on industrial security measures that may be implemented, please visit

**<http://www.siemens.com/industrialsecurity>**.

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

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