

Transfer Switching Equipment and Load Transfer Switches

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

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For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

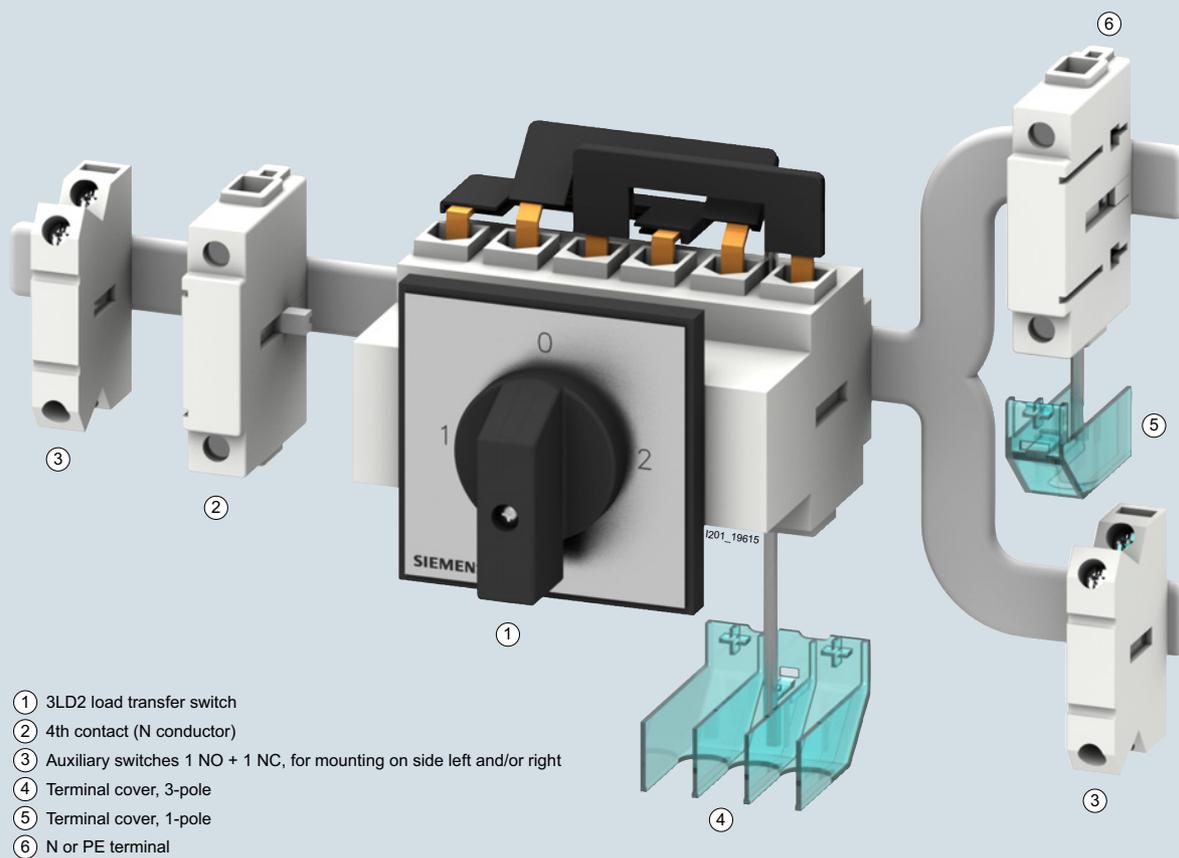
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Transfer Switching Equipment and Load Transfer Switches

3LD2 Load Transfer Switches up to 250 A

Introduction

Overview



- ① 3LD2 load transfer switch
- ② 4th contact (N conductor)
- ③ Auxiliary switches 1 NO + 1 NC, for mounting on side left and/or right
- ④ Terminal cover, 3-pole
- ⑤ Terminal cover, 1-pole
- ⑥ N or PE terminal

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.

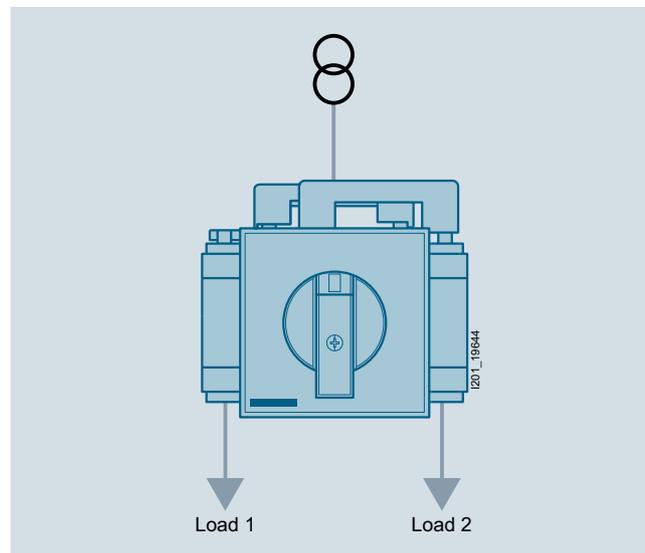
The load transfer switches from 25 to 250 A are approved according to UL 508 and can be used as "manual motor controllers" and "motor disconnects".

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 ² 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	250
AC-3 motor load switch	Rating						
In-service switching of individual motors	At 220 ... 240 V	kW	4.0	5.5	11.0	18.5	55.0
	At 380 ... 440 V	kW	7.5	9.5	18.5	30.0	110.0
	At 660/690 V	kW	7.5	9.5	15.0	22.0	45.0
AC-23A main control switch	Rating						
Repair switch	At 220 ... 240 V	kW	5.0	6.0	11.0	18.5	75.0
Frequent, but not in-service switching of individual motors	At 380 ... 440 V	kW	9.5	11.5	22.0	37.0	132.0
	At 660/690 V	kW	9.5	11.5	18.5	30.0	55.0
Power loss per conducting 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 ¹⁾							
Solid or stranded	mm ²	1.5 ... 16	1.5 ... 16	2.5 ... 35	4 ... 50	16 ... 185	16 ... 185
Finely stranded with end sleeve (max.)	mm ²	10	10	16	35	150	150
Conductor cross-sections	Copper 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 ²	2 × (0.75 ... 2.5), 1 × 4					
Finely stranded with end sleeve	mm ²	2 × (0.75 ... 1.5), 1 × 2.5					
Torque for terminal	Nm	0.8					

¹⁾ 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" ¹⁾

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

¹⁾ 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.

²⁾ 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. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Main contact elements	Aux. cont. elements	P/AC-3 kW	P/AC-23A kW	I_U A	d					
Transfer switches with direct operating mechanism (knob-operated mechanism) <ul style="list-style-type: none"> • Black actuator • Knob-operated mechanism: <ul style="list-style-type: none"> - on 3LD23, 3LD24 lockable with up to 3 padlocks, shackle diameter from 4 to 6 mm - on all other versions non-lockable • Degree of protection at front side IP65 • Bridging bars already pre-mounted 										
Four-hole mounting										
	3	--	7.5	9.5	25	3LD2123-7UK01		1	1 unit	1CL
			9.5	11.5	32	3LD2223-7UK01		1	1 unit	1CL
			18.5	22.0	63	3LD2524-7UK01		1	1 unit	1CL
			30.0	37.0	100	3LD2724-7UK01		1	1 unit	1CL
			50	75	160	3LD2305-7UK01		1	1 unit	1CL
			110	132	250	3LD2405-7UK01		1	1 unit	1CL
	3 + N	--	50	75	160	3LD2305-7UL01		1	1 unit	1CL
			110	132	250	3LD2405-7UL01		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. www.siemens.com/product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Main contact elements	Aux. cont. elements	P/AC-3 kW	P/AC-23A kW	I_u A	d					

Transfer switches with door-coupling rotary operating mechanism

- Lockable in 0 position with up to 3 padlocks, shackle diameter from 4 to 6 mm
- Handle and cover black
- Door-coupling rotary operating mechanism as selector switch
- Degree of protection at front side IP65
- Bridging bars already pre-mounted

Four-hole mounting



3LD2318-7UK01

3		50	75	160		3LD2318-7UK01		1	1 unit	1CL
		110	132	250		3LD2418-7UK01		1	1 unit	1CL
3 + N		50	75	160		3LD2318-7UL01		1	1 unit	1CL
		110	132	250		3LD2418-7UL01		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. www.siemens.com/ product?Article No.	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						
Transfer switches with direct operating mechanism (knob-operated mechanism) <ul style="list-style-type: none"> • With N and PE base terminal • Black actuator • Lockable in 0 position with up to 3 padlocks, shackle diameter from 4 to 6 mm (for 25 A and 32 A) • Metric screw connection • Degree of protection IP65 • Bridging bars already pre-mounted 											
	3	--	PE + N	7.5	9.5	25	3LD2165-7UB01		1	1 unit	1CL
			PE + N	9.5	11.5	32	3LD2265-7UB01		1	1 unit	1CL
			PE + N	18.5	22.0	63	3LD2566-7UB01		1	1 unit	1CL
			PE + N	30.0	37.0	100	3LD2766-7UB01		1	1 unit	1CL

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. www.siemens.com/ product?Article No.	Price per PU		
For front mounting					
		4th contact (N conductor) • Leading switch-on, lagging switch-off • Bridging bars for the switchable N pole are not included in the scope of supply	3LD9220-0B	1	1 unit 1CL
		N or PE terminals Through-type	3LD9220-2B	1	1 unit 1CL
		Auxiliary switches For mounting on the left and/or right, lagging switch-on, leading switch-off • 1 NO + 1 NC	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 • 1 NO + 1 NC	3LD9200-5BF	1	1 unit 1CL
		Terminal covers as additional touch protection Can be snapped on at top and bottom • 1-pole • 3-pole	3LD9221-2A 3LD9221-0A	100 1	4 units 1CL 4 units 1CL
For molded-plastic enclosures					
		4th contact (N conductor) • Leading switch-on, lagging switch-off • Bridging bars for the switchable N pole are not included in the scope of supply	3LD9220-0C	1	1 unit 1CL
		N or PE terminals Through-type	3LD9220-2C	1	1 unit 1CL
		Auxiliary switches For mounting on the left and/or right, lagging switch-on, leading switch-off • 1 NO + 1 NC • 2 NO	3LD9200-5C 3LD9200-6C	1 1	1 unit 1CL 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	3LD9200-5CF	1	1 unit 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. www.siemens.com/ product?ArticleNo.	Price per PU			
For front mounting						
	4th contact (N conductor) Leading switch-on, lagging switch-off	3LD9240-0B	1	1 unit	1CL	
3LD9240-0B (left) 3LD9240-2B (right)	N or PE terminals Through-type	3LD9240-2B	1	1 unit	1CL	
	Auxiliary switches For mounting on the left and/or right, lagging switch-on, leading switch-off • 1 NO + 1 NC 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	3LD9200-5B 3LD9200-5BF	1 1	1 unit 1 unit	1CL 1CL	
3LD9200-5B or 3LD9200-5BF	For front and floor mounting					
	Terminal covers as additional touch protection Can be snapped on at top and bottom • 1-pole	3LD9241-2A	1	4 units	1CL	
3LD9241-2A	For floor mounting					
	Shaft coupling No ON-lock	3LD9242-4F	1	5 units	1CL	
3LD9242-4F	4th contact (N conductor) Leading switch-on, lagging switch-off	3LD9240-0C	1	1 unit	1CL	
	N or PE terminals Through-type	3LD9240-2C	1	1 unit	1CL	
3LD9240-0C (left) 3LD9240-2C (right)	Auxiliary switches For mounting on the left and/or right, lagging switch-on, leading switch-off • 1 NO + 1 NC • 2 NO 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	3LD9200-5C 3LD9200-6C 3LD9200-5CF	1 1	1 unit 1 unit	1CL 1CL	
3LD9200-5C or 3LD9200-5CF (left) 3LD9200-6C (right)			1	1 unit	1CL	

Transfer Switching Equipment and Load Transfer Switches

NEW 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)			
Number of poles							
• 3-pole	✓	✓	✓	✓	✓	✓	✓
• 4-pole	✓	✓	✓	✓	✓	✓	✓
Connection							
• Flat terminals	--	--	--	--	--	--	--
• Box terminals	✓	✓	✓	✓	✓	✓	✓

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

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

Remote transfer switching equipment (RTSE)

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



Automatic transfer switching equipment (ATSE)

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

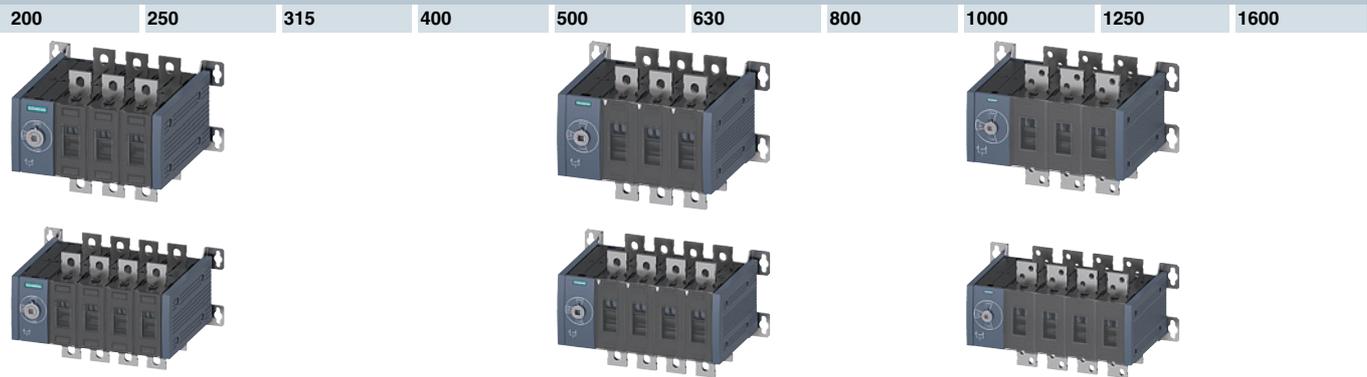
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Transfer Switching Equipment and Load Transfer Switches

NEW 3KC Transfer Switching Equipment up to 3200 A

Introduction

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

3 (3KC0...-P)

4 (3KC0...-Q)

5 (3KC0...-R)

✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
--	--	--	--	--	--	--	--	--	--

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

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

✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
✓	✓	✓	✓	✓	✓	✓
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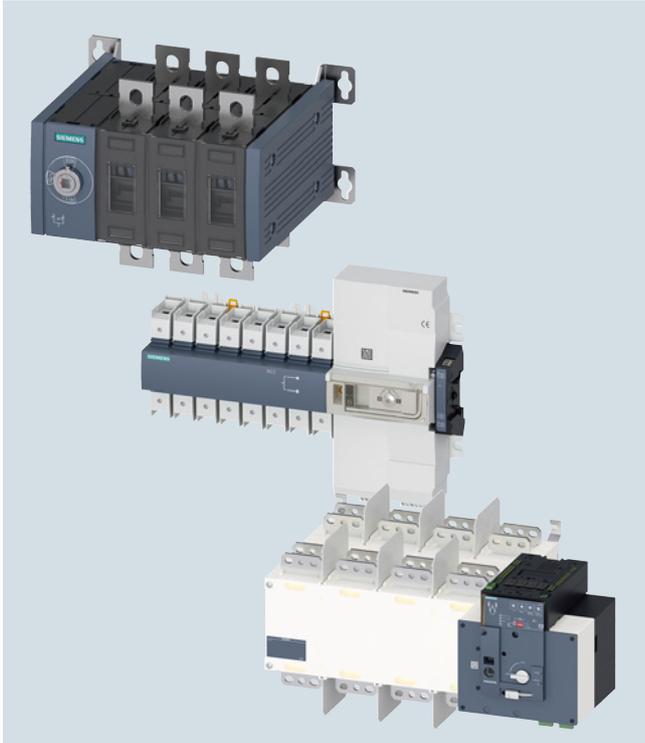
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Transfer Switching Equipment and Load Transfer Switches

NEW 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 standard mounting 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

Transfer Switching Equipment and Load Transfer Switches

NEW 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

NEW 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

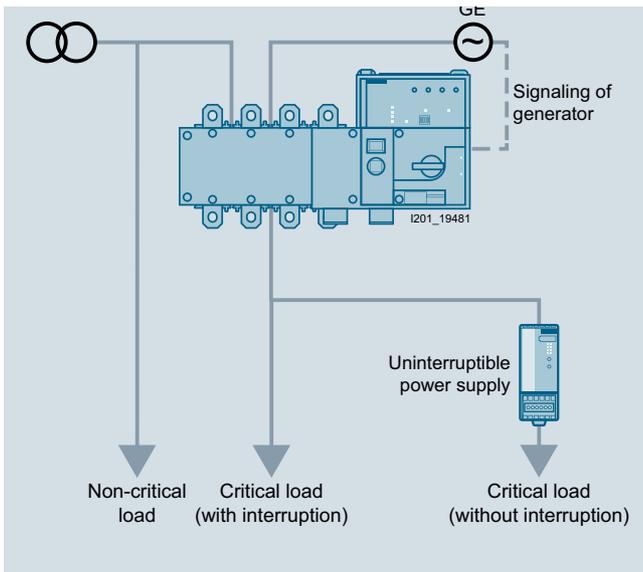
Transfer Switching Equipment and Load Transfer Switches

NEW 3KC Transfer Switching Equipment up to 3200 A

General data

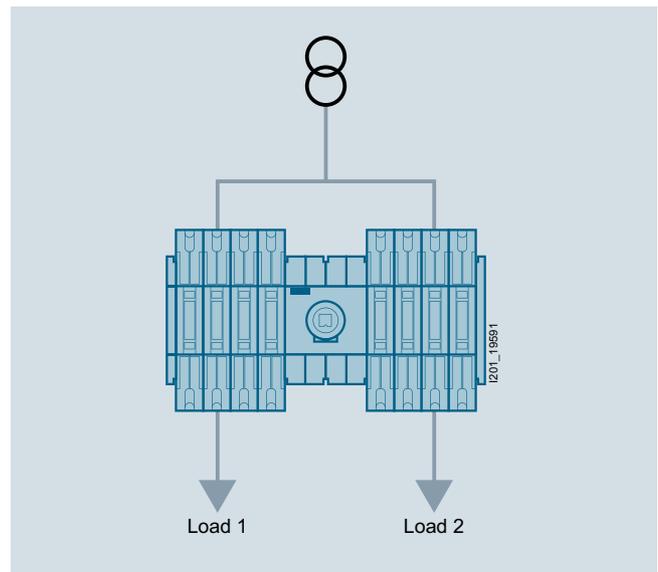
Applications

Network/generator transfer



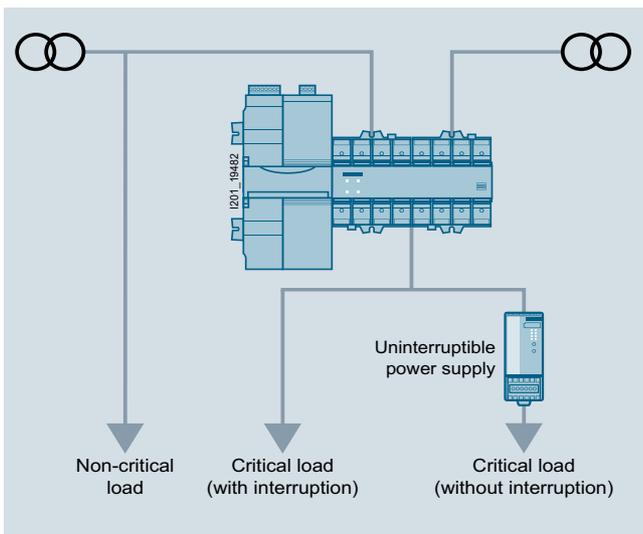
Network/generator operation (IEC 60947-6-1)

Load transfer



Load transfer switches (IEC 60947-3)

Network/network transfer



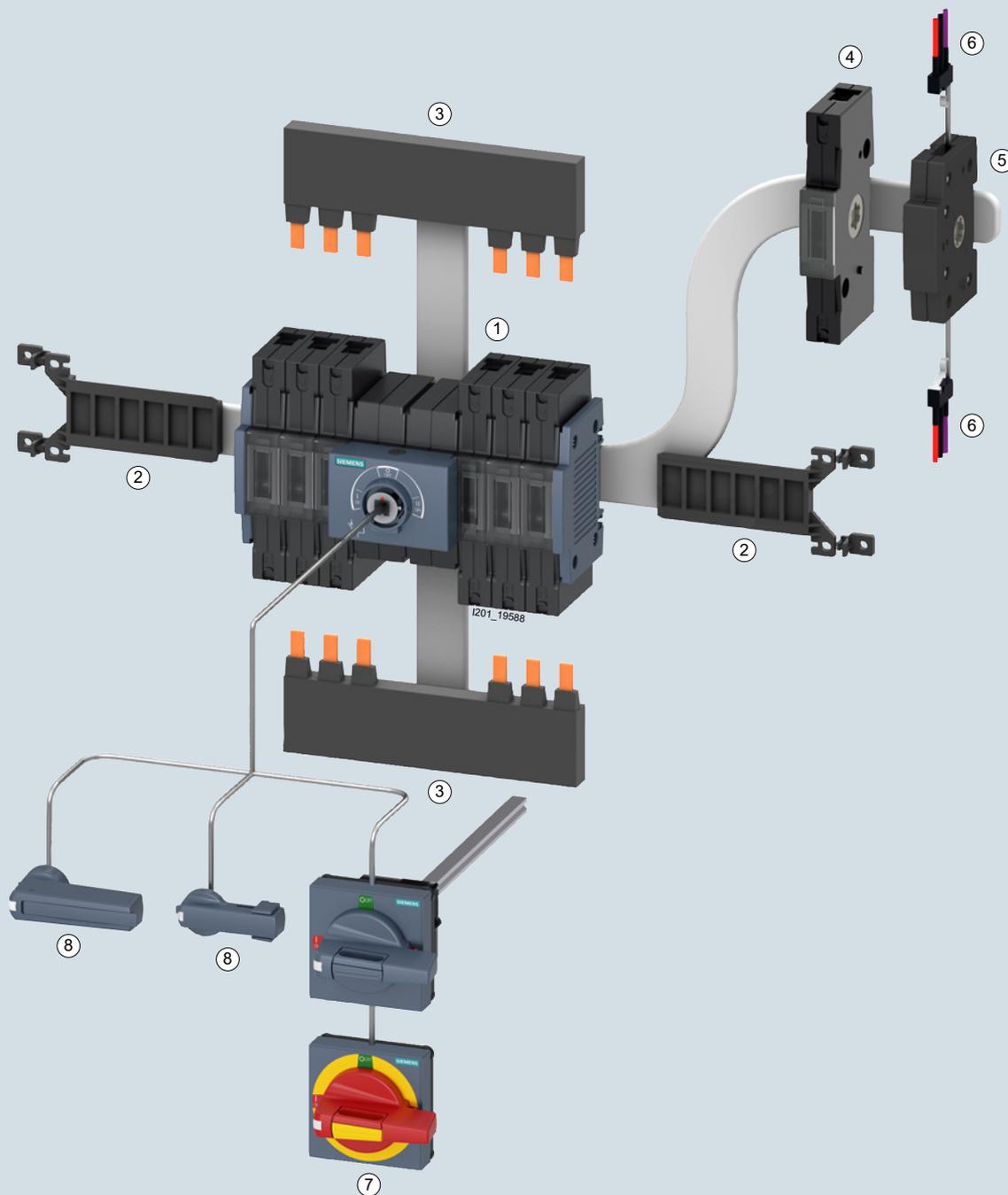
Network/network operation (IEC 60947-6-1)

Transfer Switching Equipment and Load Transfer Switches

NEW 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
- ② Mounting kit for floor mounting
- ③ Bridging bars
- ④ 4th pole

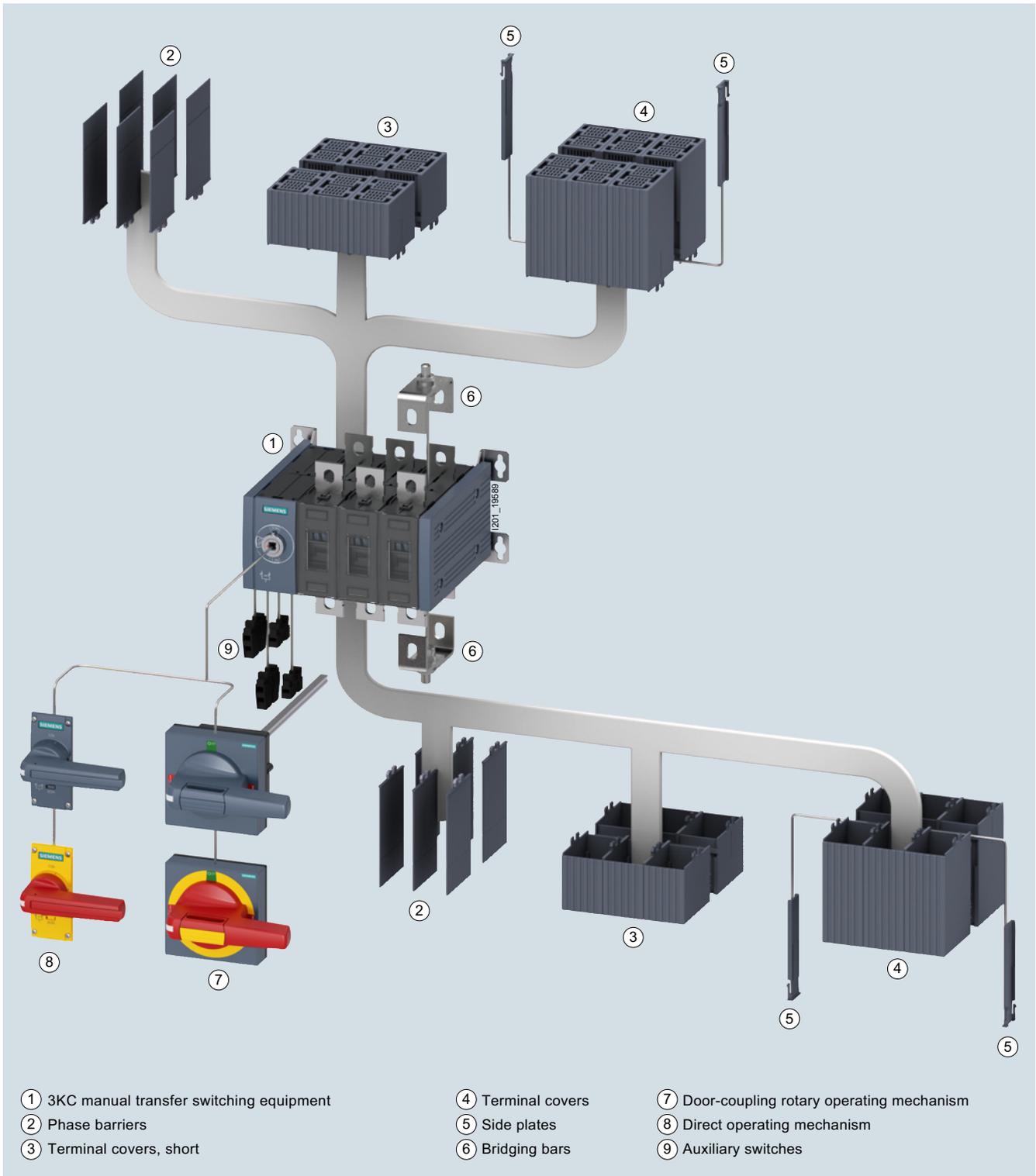
- ⑤ Auxiliary switch module
- ⑥ Auxiliary switches
- ⑦ Door-coupling rotary operating mechanism
- ⑧ Direct operating mechanism

Transfer Switching Equipment and Load Transfer Switches

NEW 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

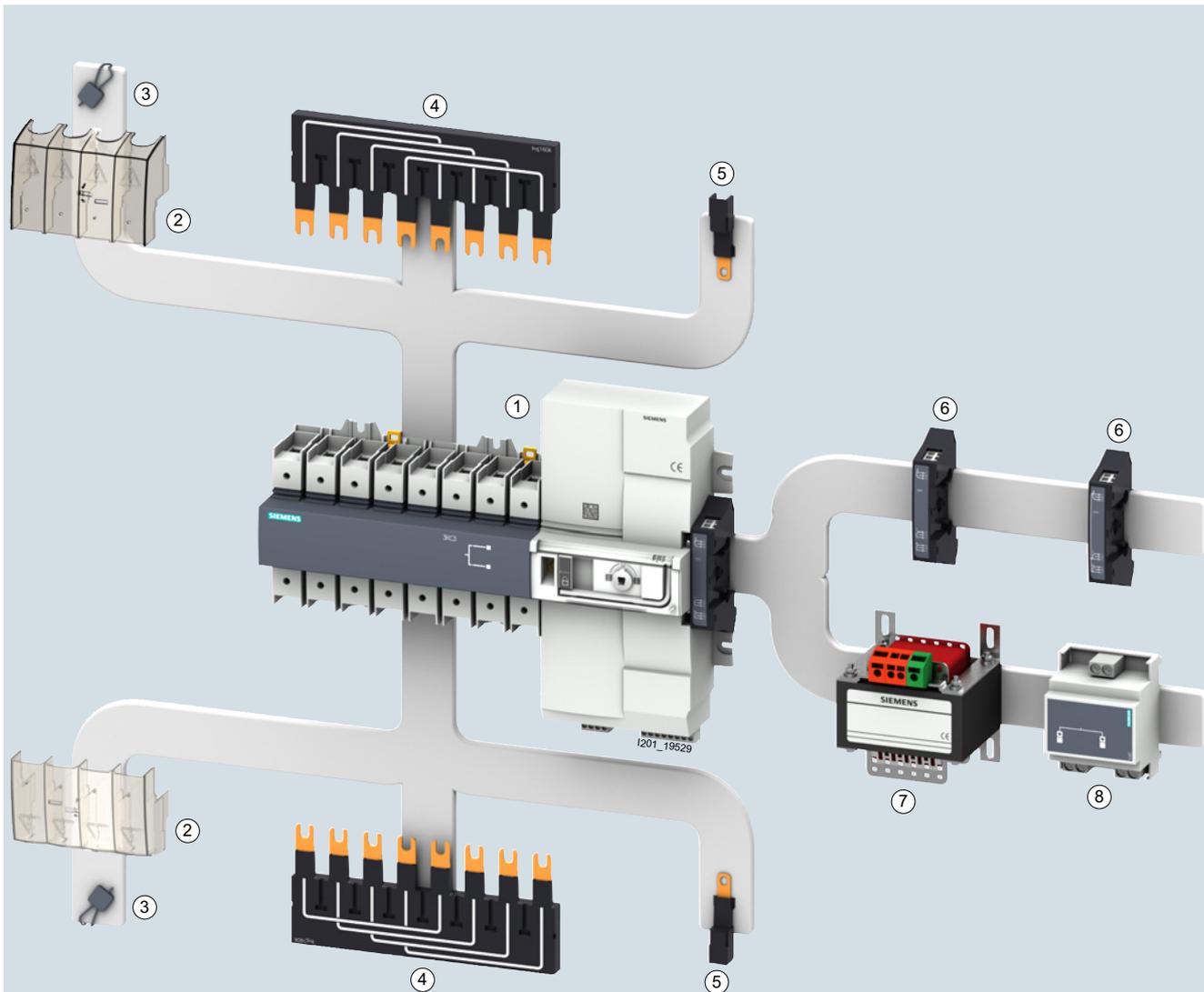


Transfer Switching Equipment and Load Transfer Switches

NEW 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



- ① 3KC remote transfer switching equipment
- ② Terminal covers
- ③ Sealing ribbon
- ④ Bridging bar

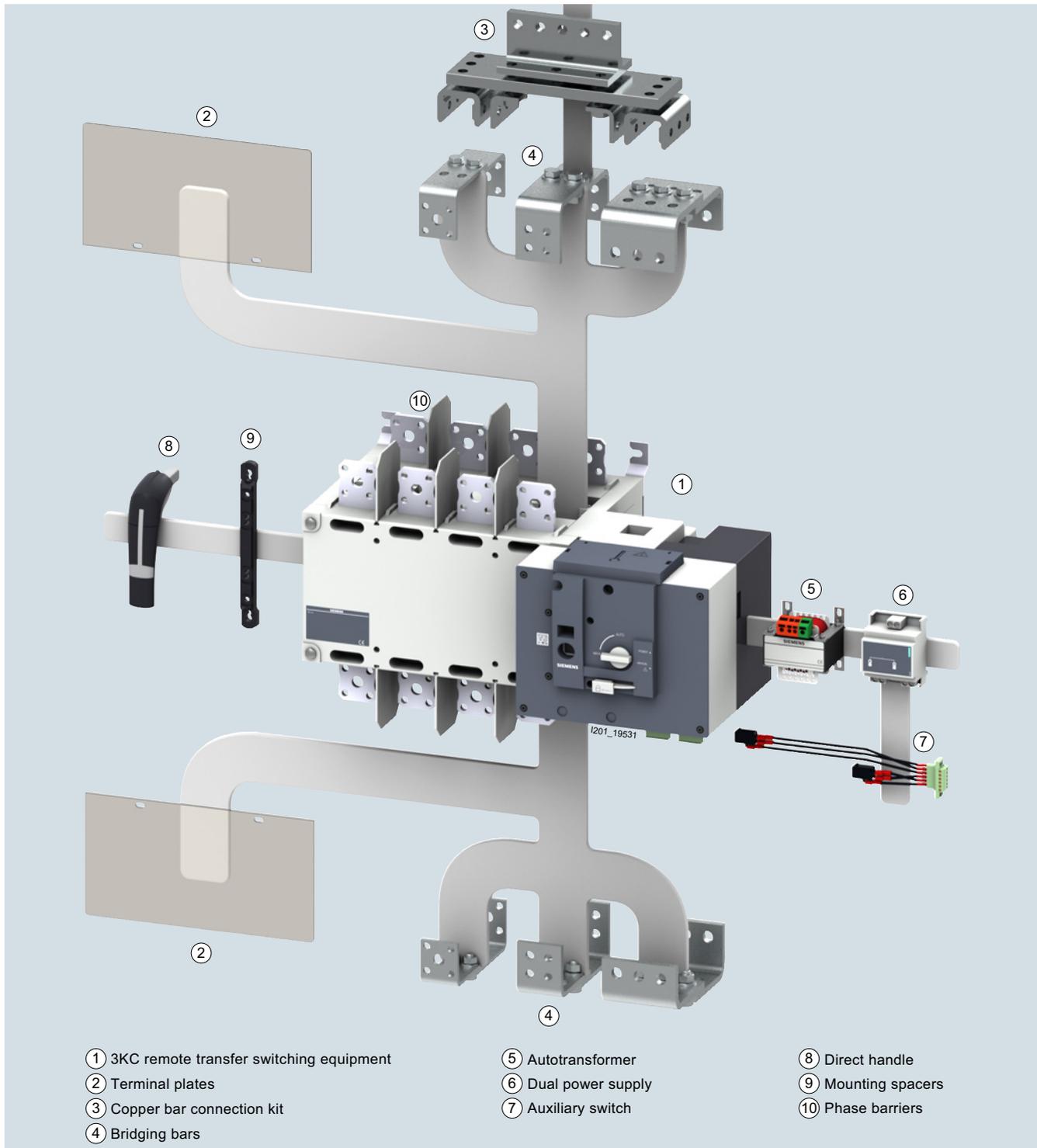
- ⑤ Auxiliary conductor terminal
- ⑥ Auxiliary switches
- ⑦ Autotransformer
- ⑧ Dual power supply

Transfer Switching Equipment and Load Transfer Switches

NEW 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

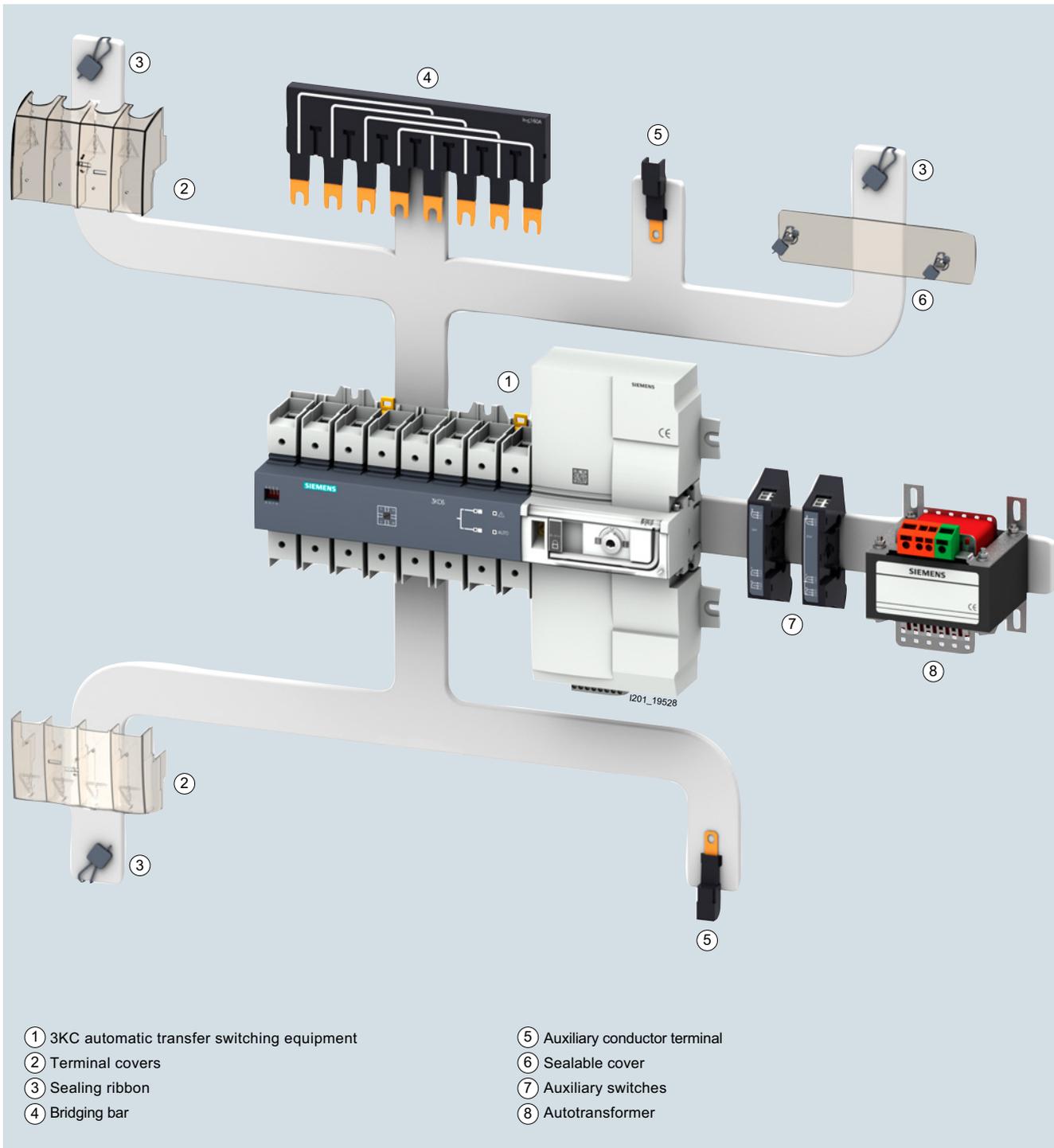


Transfer Switching Equipment and Load Transfer Switches

NEW 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

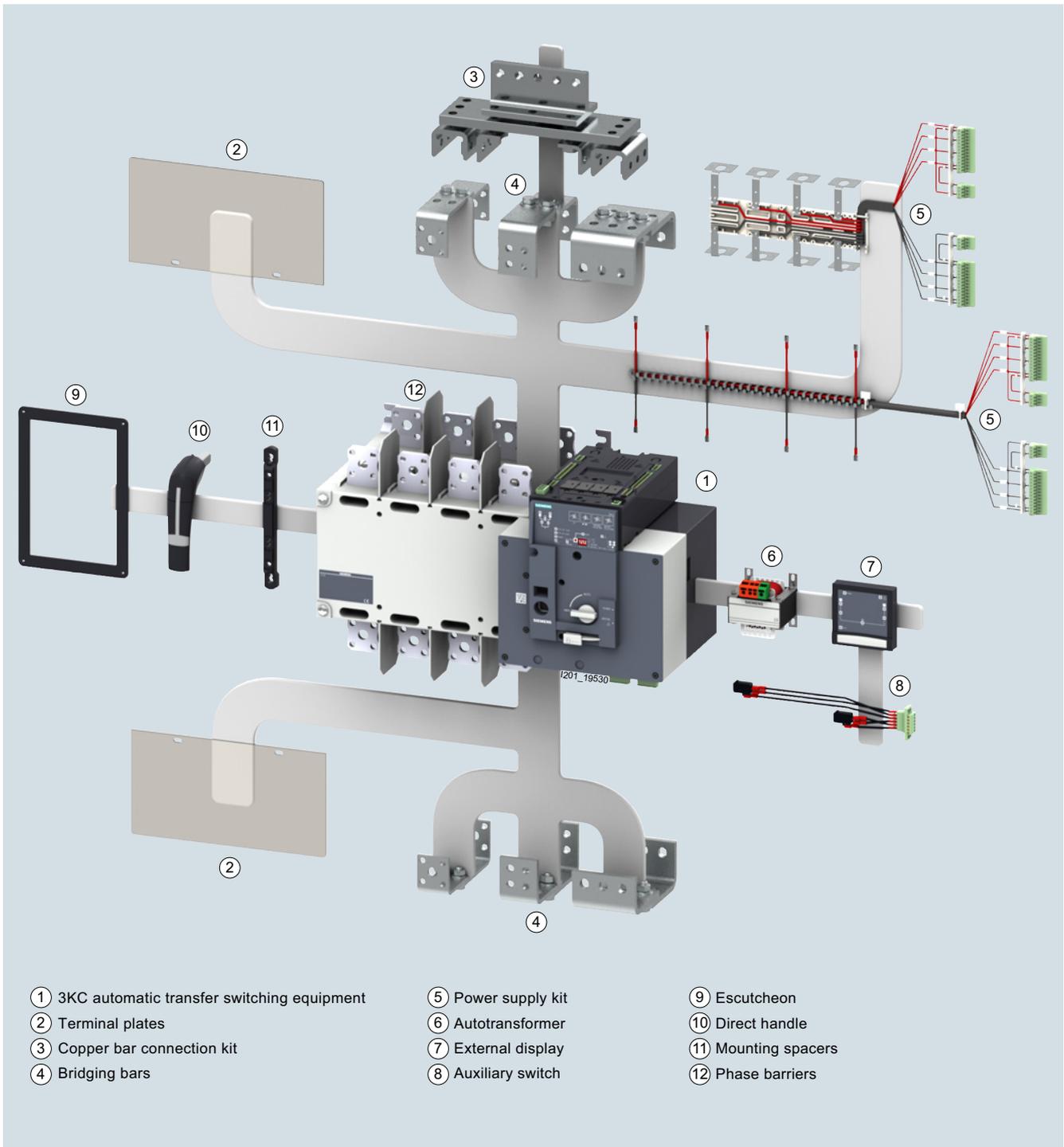


Transfer Switching Equipment and Load Transfer Switches

NEW 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

NEW 3KC Transfer Switching Equipment up to 3200 A
Technical Features

Manual transfer switching equipment (MTSE)

Technical specifications

Manual transfer switching equipment (MTSE) from 16 to 160 A, 3KC0....		16-.M	22-...M	...26-.M	28-.N	30-...N	32-..N	34-.N
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} , 1s, 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 ² s	13.3			135.6			
• I^2t value of gG fuse 690 V; max. permissible	kA ² s	13.7			178.3			
Main conductor connections¹⁾								
Cu conductor, solid	mm ²	1 x (1 ... 16)			1 x (2.5 ... 16)			
Cu conductor, stranded	mm ²	1 x (6 ... 35)			1 x (10 ... 70)			
With cable lug (DIN 46234)	mm ²	--			--			
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-23A 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			

¹⁾ 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

Transfer Switching Equipment and Load Transfer Switches

NEW 3KC Transfer Switching Equipment up to 3200 A

Technical Features

Manual transfer switching equipment (MTSE)

Manual transfer switching equipment (MTSE) from 200 to 500 A, 3KC0....	Size	36-.P	38-.P	40-.P	42-.P	44-.Q
		3				4
Continuous current A		200	250	315	400	500
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	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
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	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 ² s	426.5	426.5	1165	1165	3687.5
• I^2t value of gG fuse 690 V; max. permissible	kA ² s	348	348	1157.5	1157.5	4450
Main conductor connections¹⁾						
Cu conductor, solid	mm ²	-				-
Cu conductor, stranded	mm ²	-				-
With cable lug (DIN 46234)	mm ²	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
Other properties						
Power loss per pole with thermal current I_{th}	W	4	6	10	14	12
Mechanical endurance		10000				8000
Electrical endurance (AC-23A 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

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

Transfer Switching Equipment and Load Transfer Switches

NEW 3KC Transfer Switching Equipment up to 3200 A

Technical Features

Manual transfer switching equipment (MTSE)

Manual transfer switching equipment (MTSE) from 630 to 1600 A, 3KC0....		46-Q	48-Q	50-R	52-R	54-R
Size		4		5		
Continuous current A		630	800	1000	1250	1600
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	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
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	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 ² s	3687.5	7471.7	15400	25960	30900
• I^2t value of gG fuse 690 V; max. permissible	kA ² s	4450	103000	-	-	-
Main conductor connections¹⁾						
Cu conductor, solid	mm ²	--		--		
Cu conductor, stranded	mm ²	--		--		
With cable lug (DIN 46234)	mm ²	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		
Other properties						
Power loss per pole with thermal current I_{Th}	W	17	25	20	32	57
Mechanical endurance		8000		6000		
Electrical endurance (AC-23A 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		

¹⁾ 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

NEW 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 ² 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 connections¹⁾							
• Cu conductor, solid	mm ²	1 x (10 ... 70)					
• Cu conductor, stranded	mm ²	1 x (10 ... 70)					
• with cable lug (DIN 46234)	mm ²	--					
• Cu busbar	mm	--					
Tightening torque for main contacts	Nm	5					
Other properties							
Real power loss per pole	W	0.5	1.2	2.2	4	5.2	8.7
Mechanical endurance		8500			7000		
Electrical endurance (AC-23A 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					

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

Transfer Switching Equipment and Load Transfer Switches

NEW 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
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	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
Short-circuit behavior						
Short-circuit current ratings acc. to 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 ² s	200	600	3000	6000	6300
Transfer switching properties						
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
Main conductor connections						
• Cu conductor, solid	mm ²	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 ²	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 ²	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
Other properties						
Real 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-23B 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

NEW 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	3KC4.52	3KC4.54	3KC4.56	3KC4.58	3KC4.60	
3KC8 transfer switching equipment (ATSE) from 1250 to 3200 A	3KC8.52	3KC8.54	3KC8.56	3KC8.58	3KC8.60	
Continuous current	A	1250	1600	2000	2500	3200
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	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	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	--	--	--
Short-circuit behavior						
Short-circuit current ratings acc. to 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 ² s	--	--	--	--	--
Transfer switching properties						
Switching time I-0 & II-0 RTSE / ATSE	s	1.4	1.4	1.6	1.6	1.6
Switch-off time I-0-II & II-0-I, IEC 60947-6-1	s	1.4	1.5	1.2	1.2	1.2
Transfer time I-0-II & II-0-I, IEC 60947-6-1	s	2.8	2.9	2.8	2.8	2.8
Transfer time I-0-II & II-0-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
Main conductor connections						
• Cu conductor, solid	mm ²	4 x 185	6 x 185	--	--	--
• Cu conductor, stranded	mm ²	4 x 185	6 x 185	--	--	--
• with cable lug (DIN 46234)	mm ²	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
Other properties						
Real power loss per pole	W	93.3	122	178	255	330
Mechanical endurance		2500	2500	1500	1500	1500
Electrical endurance (AC-23B 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

NEW 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)
ATS settings		
• 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
Metering inputs		
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
Auxiliary supply		
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
Real power loss (230V AC) ¹⁾	W 2	2.5
Impulse withstand voltage (U_{imp}) of the control circuit kV	kV 2.5	4
Overvoltage category of the control circuit	III	III
Digital inputs		
Number of inputs	3	Motorized operating mechanism: 5 Electronic module: 6
Digital input ²⁾	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 ²⁾	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
Connections		
Terminals	Removable/insertable	Removable/insertable
Connectable conductor cross-section / stranded, solid	mm ² 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

¹⁾ In addition to power loss of motorized operating mechanism

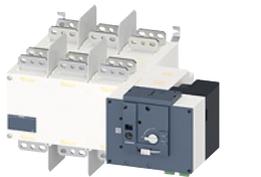
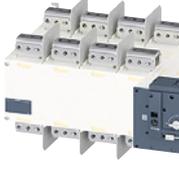
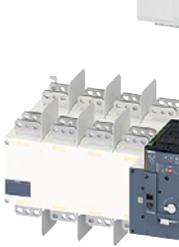
²⁾ For more information, see 3KC manual at www.siemens.com/lowvoltage/manuals

Transfer Switching Equipment and Load Transfer Switches

NEW 3KC Transfer Switching Equipment up to 3200 A

Introduction (order part)

Overview

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

Transfer Switching Equipment and Load Transfer Switches

NEW 3KC Transfer Switching Equipment up to 3200 A

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

Basic units

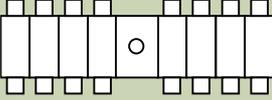
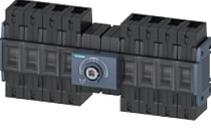
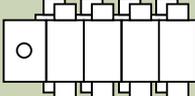
Selection and ordering data

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

Transfer Switching Equipment and Load Transfer Switches

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

Transfer Switching Equipment and Load Transfer Switches

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



Door-coupling rotary operating mechanisms

Version	Handle length	Shaft size	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	mm	mm x mm	d					

Door-coupling rotary operating mechanisms, complete, 8UD1 series

Door-coupling rotary operating mechanisms, complete, labeling I - 0 - II

- Handle with masking plate
- Coupling driver with tolerance compensation
- Shaft 300 mm
- Can be locked with up to max. 3 padlocks
- Labeling I - 0 - II

Gray

for sizes 1/2, 3KC0...-M/N	55	8 x 8		8UD1131-2AE21		1	1 unit	1CL
for size 3, 3KC0...-P	100	8 x 8		8UD1141-2AE21		1	1 unit	1CL
for size 4, 3KC0...-Q	140	10 x 10		8UD1151-3AE21		1	1 unit	1CL
for size 5, 3KC0...-R	200	12 x 12		8UD1161-4AE21		1	1 unit	1CL



Transfer Switching Equipment and Load Transfer Switches

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

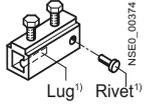
Accessories and spare parts

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

Transfer Switching Equipment and Load Transfer Switches

NEW 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. www.siemens.com/ product?Article.No.	Price per PU	PU (UNIT, SET, M)	PS	PG
	mm	mm x mm	d					
Other accessories for door-coupling rotary operating mechanisms, 8UD1 series								
Extension shafts								
300 mm long								
	• for sizes 1/2/3, 3KC0...-M/N	--	8 x 8	8UC6032		1	1 unit	1CL
	• for size 4, 3KC0...-Q	--	10 x 10	8UC6033		1	1 unit	1CL
	• for size 5, 3KC0...-R	--	12 x 12	8UC6034		1	1 unit	1CL
600 mm long								
A shaft jack is required for the 8UD handle when the 600 mm long shaft is used and for sizes 1/2.								
	• for sizes 1/2	8 x 8	8 x 8	8UC6082		1	1 unit	1CL
	• for size 3, 3KD...-P	10 x 10	8 x 8	3KD9302-1		1	1 unit	1CL
	• for size 4, 3KD...-Q	10 x 10	10 x 10	8UC6083		1	1 unit	1CL
	• for size 5, 3KD...-R	12 x 12	12 x 12	8UC6084		1	1 unit	1CL
Shaft jack for 8UD handle for 600 mm shaft NEW								
	• for size 1/2, 3KD...-M/N	--	8 x 8	8UD1900-0FA00		1	1 unit	1CL
Coupling drivers with tolerance compensation								
	• for sizes 1/2, 3KC0...-M/N	--	8 x 8	8UD1900-2GA00		1	1 unit	1CB
	• for size 3, 3KC0...-P	--	8 x 8	8UD1900-6GA00		1	1 unit	1CL
	• for size 4, 3KC0...-Q	--	10 x 10	8UD1900-3GA00		1	1 unit	1CL
	• for size 5, 3KC0...-R	--	12 x 12	8UD1900-4GA00		1	1 unit	1CL
Coupling drivers without tolerance compensation								
	• for sizes 1/2, 3KC0...-M/N	--	8 x 8	8UD1900-2HA00		1	1 unit	1CB
	• for size 3, 3KC0...-P	--	8 x 8	8UD1900-6HA00		1	1 unit	1CL
	• for size 4, 3KC0...-Q	--	10 x 10	8UD1900-3HA00		1	1 unit	1CL
	• for size 5, 3KC0...-R	--	12 x 12	8UD1900-4HA00		1	1 unit	1CL
Shaft couplings								
	• for sizes 1/2, 3KC0...-M/N	--	8 x 8	8UC6022		1	1 unit	1CL
	• for size 3, 3KC0...-P	--	8 x 8	8UC6022		1	1 unit	1CL
	• for size 4, 3KC0...-Q	--	10 x 10	8UC6023		1	1 unit	1CL
	• for size 5, 3KC0...-R	--	12 x 12	8UC6024		1	1 unit	1CL
8UC6022 to 8UC6024 1) Non-interchangeability features								

Transfer Switching Equipment and Load Transfer Switches

NEW 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. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Auxiliary switch modules						
						
3KD9103-5	d			1	1 unit	1CL
Unit is supplied without auxiliary switches; a maximum of 2 auxiliary switches can be installed						
• for sizes 1/2, 3KC0...-M/N						
Auxiliary switches for sizes 1 and 2						
With soldered-on 50 cm connecting cables						
						
3KD9103-3		3KD9103-1		1	1 unit	1CL
		3KD9103-3		1	1 unit	1CL
Without soldered-on connecting cables						
						
3KD9103-2		3KD9103-2		1	1 unit	1CL
		3KD9103-4		1	1 unit	1CL
Auxiliary switches for sizes 3 to 5						
• Auxiliary switches with screw terminal						
• Installation on operating mechanism module						
• Auxiliary switches with spring-type terminal 3SB3403-... from the 3SB3 program can also be used						
						
3SB3400-0B auxiliary switch		▶ 3SB3400-0B		1	1 unit	41J
		▶ 3SB3400-0BA		1	1 unit	41J
		▶ 3SB3400-0C		1	1 unit	41J
		▶ 3SB3400-0CA		1	1 unit	41J
		▶ 3SB3400-0A		1	1 unit	41J
		3SB3400-0AA		1	1 unit	41J
		3SB3400-0D		1	1 unit	41J
		3SB3400-0DA		1	1 unit	41J
		3SB3400-0E		1	1 unit	41J
		3SB3400-0EA		1	1 unit	41J
						
3SB3400-0A auxiliary switch						
• 1 NO						
• 1 NO with gold-plated contacts						
• 1 NC						
• 1 NC with gold-plated contacts						
• 1 NO + 1 NC						
• 1 NO + 1 NC with gold-plated contacts						
• 2 NO						
• 2 NO with gold-plated contacts						
• 2 NC						
• 2 NC with gold-plated contacts						

Transfer Switching Equipment and Load Transfer Switches

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

Transfer Switching Equipment and Load Transfer Switches

NEW 3KC Transfer Switching Equipment up to 3200 A

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

Accessories and spare parts

Other accessories

Version	For size	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Phase barriers							
<ul style="list-style-type: none"> for 3KC MTSE with flat terminals for the line side one pack (6 or 8 units) is required for the load side one pack (6 or 8 units) is required 							
For 3-pole devices (6 units)							
	3; 3KC0...-P		3KD9308-6		1	1 unit	1CL
	4; 3KC0...-Q		3KD9408-6		1	1 unit	1CL
	5; 3KC0...-R		3KD9508-6		1	1 unit	1CL
For 4-pole devices (8 units)							
	3; 3KC0...-P		3KD9308-8		1	1 unit	1CL
	4; 3KC0...-Q		3KD9408-8		1	1 unit	1CL
	5; 3KC0...-R		3KD9508-8		1	1 unit	1CL
Terminal covers							
<ul style="list-style-type: none"> for 3KC MTSE with flat terminals for the line side one pack (6 or 8 units) is required for the load side one pack (6 or 8 units) is required additional side plates for terminal covers are required for the terminal side, where bridging bars are used (normally the load side) 							
For 3-pole devices (6 units)							
Standard length							
	3; 3KC0...-P		3KD9304-6		1	1 unit	1CL
	4; 3KC0...-Q		3KD9404-6		1	1 unit	1CL
	5; 3KC0...-R		3KD9504-6		1	1 unit	1CL
Short version							
	3; 3KC0...-P		3KD9304-7		1	1 unit	1CL
	4; 3KC0...-Q		3KD9404-7		1	1 unit	1CL
For 4-pole devices (8 units)							
Standard length							
	3; 3KC0...-P		3KD9304-8		1	1 unit	1CL
	4; 3KC0...-Q		3KD9404-8		1	1 unit	1CL
	5; 3KC0...-R		3KD9504-8		1	1 unit	1CL
Short version							
	3; 3KC0...-P		3KD9304-5		1	1 unit	1CL
	4; 3KC0...-Q		3KD9404-5		1	1 unit	1CL

3KD9308-6

3KD9304-6

3KD9304-7

3KD9304-8

3KD9304-5

Transfer Switching Equipment and Load Transfer Switches

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

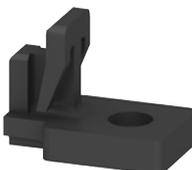
Accessories and spare parts

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

Transfer Switching Equipment and Load Transfer Switches

NEW 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. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Mounting accessories							
Mounting, assembly kit for base mounting							
<ul style="list-style-type: none"> For base mounting for sizes 1 and 2 Contains 4 mounting brackets and two mounting plates For 3-pole and 4-pole devices 			1/2, 3KC0...-M/N	3KC9120-1	1	1 unit	1CL
	3KC9120-1						
Mounting bracket							
Spare part, included in the scope of supply of the assembly kit for base mounting for sizes 1 to 2							
<ul style="list-style-type: none"> Contains 4 units For 3-pole and 4-pole devices 			1/2, 3KC0...-M/N	3KD9120-1	1	1 unit	1CL
	3KD9120-1						
Slide for mounting on a standard mounting rail							
<ul style="list-style-type: none"> Spare part, included in the scope of supply of 1 and 2 the 3KC Contains 5 parts 							
	3KF9112-0BA00						

Transfer Switching Equipment and Load Transfer Switches

NEW 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

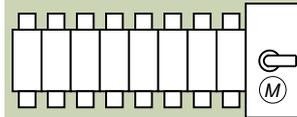
Rated uninterrupted current I_u	SD	Article No. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
A	d					

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

- The transfer switches are suitable for screw and standard 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**

40
63
80
100
125
160



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

Transfer Switching Equipment and Load Transfer Switches

NEW 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. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
A	d					

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

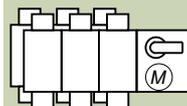
- The transfer switches are suitable for screw mounting.
- Bridging bars are additionally required for the terminal side.

3-pole

Flat terminals



250



3KC4338-0CA21-0AA3

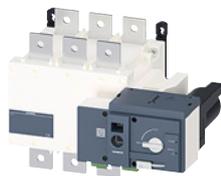
1 1 unit 1CL



400

3KC4342-0DA21-0AA3

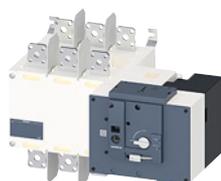
1 1 unit 1CL



630

3KC4346-0EA21-0AA3

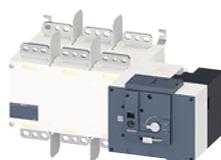
1 1 unit 1CL

800
10003KC4348-0FA21-0AA3
3KC4350-0FA21-0AA31 1 unit 1CL
1 1 unit 1CL

1250

3KC4352-0GA21-0AA3

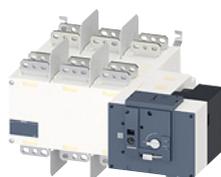
1 1 unit 1CL



1600

3KC4354-0HA21-0AA3

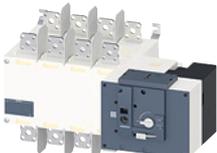
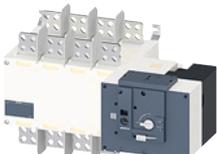
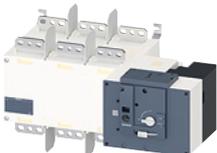
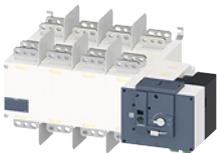
1 1 unit 1CL

2000
2500
32003KC4356-0JA21-0AA3
3KC4358-0JA21-0AA3
3KC4360-0JA21-0AA31 1 unit 1CL
1 1 unit 1CL
1 1 unit 1CL

Transfer Switching Equipment and Load Transfer Switches

NEW 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. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
A	d					
4-pole						
Flat terminals						
	250	3KC4438-0CA21-0AA3		1	1 unit	1CL
	400	3KC4442-0DA21-0AA3		1	1 unit	1CL
	630	3KC4446-0EA21-0AA3		1	1 unit	1CL
	800	3KC4448-0FA21-0AA3		1	1 unit	1CL
	1000	3KC4450-0FA21-0AA3		1	1 unit	1CL
	1250	3KC4452-0GA21-0AA3		1	1 unit	1CL
	1600	3KC4454-0HA21-0AA3		1	1 unit	1CL
	2000	3KC4456-0JA21-0AA3		1	1 unit	1CL
	2500	3KC4458-0JA21-0AA3		1	1 unit	1CL
	3200	3KC4460-0JA21-0AA3		1	1 unit	1CL

Transfer Switching Equipment and Load Transfer Switches

NEW 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. www.siemens.com/ product?Article No.	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

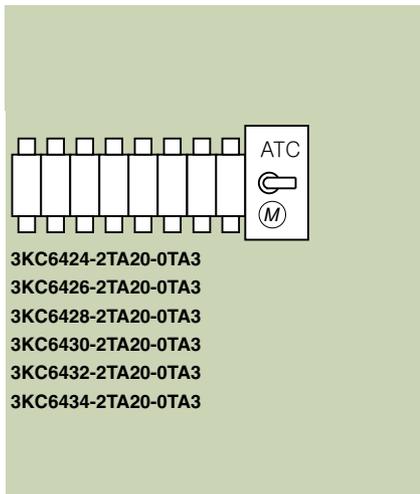
- The transfer switches are suitable for screw and standard rail mounting.
- The 3KC6 (ATSE) is already wired ready for operation (including power supply)
- A bridging bar is additionally required for the terminal side.

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

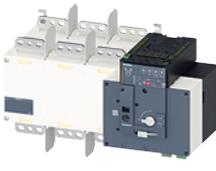
1 1 unit 1CL
1 1 unit 1CL

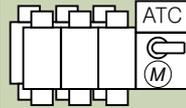
Transfer Switching Equipment and Load Transfer Switches

NEW 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. www.siemens.com/ product?Article No.	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						
<ul style="list-style-type: none"> The transfer switches are suitable for screw mounting. Bridging bars are additionally required for the terminal side as well as a power supply 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	3KC8348-0FA22-0GA3		1	1 unit	1CL
	1000	3KC8350-0FA22-0GA3		1	1 unit	1CL
	1250	3KC8352-0GA22-0GA3		1	1 unit	1CL
	1600	3KC8354-0HA22-0GA3		1	1 unit	1CL
	2000	3KC8356-0JA22-0GA3		1	1 unit	1CL
	2500	3KC8358-0JA22-0GA3		1	1 unit	1CL
	3200	3KC8360-0JA22-0GA3		1	1 unit	1CL



3KC8338-0CA22-0GA3

1 1 unit 1CL

3KC8342-0DA22-0GA3

1 1 unit 1CL

3KC8346-0EA22-0GA3

1 1 unit 1CL

3KC8348-0FA22-0GA3

1 1 unit 1CL

3KC8350-0FA22-0GA3

1 1 unit 1CL

3KC8352-0GA22-0GA3

1 1 unit 1CL

3KC8354-0HA22-0GA3

1 1 unit 1CL

3KC8356-0JA22-0GA3

1 1 unit 1CL

3KC8358-0JA22-0GA3

1 1 unit 1CL

3KC8360-0JA22-0GA3

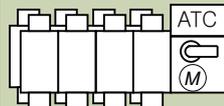
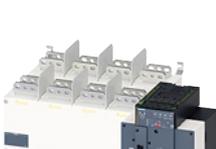
1 1 unit 1CL

Transfer Switching Equipment and Load Transfer Switches

NEW 3KC Transfer Switching Equipment up to 3200 A

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

Basic units

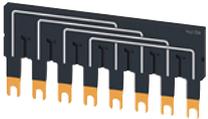
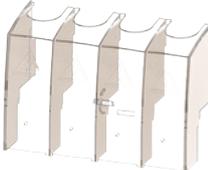
Rated uninterrupted current I_u	SD	Article No. www.siemens.com/ product?Article.No.	Price per PU	PU (UNIT, SET, M)	PS	PG
A	d					
4-pole						
Flat terminals						
	250	 3KC8438-0CA22-0GA3		1	1 unit	1CL
	400	3KC8442-0DA22-0GA3		1	1 unit	1CL
	630	3KC8446-0EA22-0GA3		1	1 unit	1CL
	800	3KC8448-0FA22-0GA3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

Transfer Switching Equipment and Load Transfer Switches

NEW 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. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Bridging bars						
 <ul style="list-style-type: none"> For load-side connection for 40 ... 125 A for 160 A 		3KC9618-2 3KC9618-3		1 1 unit 1 1 unit		1CL 1CL
Terminal covers						
 <ul style="list-style-type: none"> for 40 ... 160 A, contains 2 units, 1 unit covers 4 poles 		3KC9604-2		1 1 unit		1CL
Auxiliary conductor terminals						
 <ul style="list-style-type: none"> for 40 ... 160 A, contains 2 units 		3KC9622-2		1 1 unit		1CL
Auxiliary switches						
 <ul style="list-style-type: none"> 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 unit with separate contacts with linked common contacts 		3KC9603-1 3KC9603-2		1 1 unit 1 1 unit		1CL 1CL
Sealing units						
 <ul style="list-style-type: none"> Sealable cover for 3KC6 (ATSE) 40 ... 160 A (incl. bolt set and sealing ribbons) 		3KC9721-1		1 1 unit		1CL
 <ul style="list-style-type: none"> Sealing ribbon also as spare part for sealable cover for 40 ... 3200 A, 10 units 		3KC9621-2		1 1 unit		1CL
Autotransformers						
 <ul style="list-style-type: none"> for 40 ... 160 A 400 V/230 V AC; 400 VA 		3KC9624-1		1 1 unit		1CL
Dual power supply						
 <ul style="list-style-type: none"> for 3KC3 and 3KC4 (RTSE) 40 ... 3200 A 240 V AC, 3 A 		3KC9625-1		1 1 unit		1CL

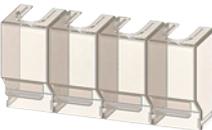
Transfer Switching Equipment and Load Transfer Switches

NEW 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

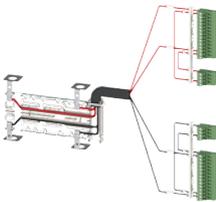
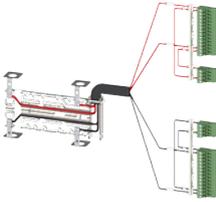
Selection and ordering data

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

Transfer Switching Equipment and Load Transfer Switches

NEW 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

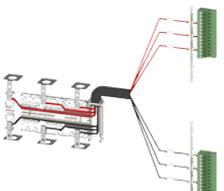
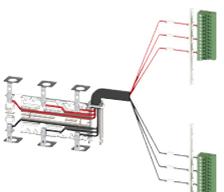
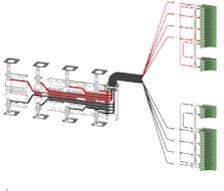
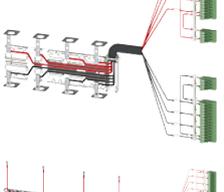
Version	SD	Article No. www.siemens.com/ product?Article.No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Copper bar connection kit						
Suitable quantities see page 8/57						
		• for 2000 ... 2500 A, C-bracket, part A	3KC9811-0	1	1 unit	1CL
		• for 2000 ... 3200 A, bolt set, part B, 45 mm	3KC9811-1	1	1 unit	1CL
		• for 2000 ... 3200 A, bolt set, part B, 35 mm, short length	3KC9811-2	1	1 unit	1CL
		• for 2000 ... 3200 A, T-bracket, part C	3KC9811-3	1	1 unit	1CL
		• for 2000 ... 3200 A, L-bracket, part D, contains 2 units	3KC9811-4	1	1 unit	1CL
		• for 2000 ... 3200 A, bridging bar, part E	3KC9818-8	1	1 unit	1CL
Power supply and voltage sensing cables for ATSE						
For 2-pole applications, infeed from below, with power supply						
		• for 250 A, 3-pole switch	3KC9833-1	1	1 unit	1CL
		• for 400 A, 3-pole switch	3KC9833-2	1	1 unit	1CL
		• for 630 A, 3-pole switch	3KC9833-3	1	1 unit	1CL
		• for 800 ... 1000 A, 3-pole switch	3KC9833-4	1	1 unit	1CL
		• for 1250 A, 3-pole switch	3KC9833-5	1	1 unit	1CL
		• for 1600 A, 3-pole switch	3KC9833-6	1	1 unit	1CL
		• for 2000 ... 3200 A, 3-pole switch	3KC9833-7	1	1 unit	1CL
For 2-pole applications, infeed from above, with power supply						
		• for 250 A, 3-pole switch	3KC9834-1	1	1 unit	1CL
		• for 400 A, 3-pole switch	3KC9834-2	1	1 unit	1CL
		• for 630 A, 3-pole switch	3KC9834-3	1	1 unit	1CL
		• for 800 ... 1000 A, 3-pole switch	3KC9834-4	1	1 unit	1CL
		• for 1250 A, 3-pole switch	3KC9834-5	1	1 unit	1CL
		• for 1600 A, 3-pole switch	3KC9834-6	1	1 unit	1CL
		• for 2000 ... 3200 A, 3-pole switch	3KC9834-7	1	1 unit	1CL

Transfer Switching Equipment and Load Transfer Switches

NEW 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. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
For 3-pole applications, infeed from below¹⁾						
 <ul style="list-style-type: none"> • for 250 A, 3-pole switch 		3KC9822-1		1	1 unit	1CL
		3KC9822-2		1	1 unit	1CL
		3KC9822-3		1	1 unit	1CL
 <ul style="list-style-type: none"> • for 800 ... 1000 A, 3-pole switch • for 1250 A, 3-pole switch • for 1600 A, 3-pole switch • for 2000 ... 3200 A, 3-pole switch 		3KC9822-4		1	1 unit	1CL
		3KC9822-5		1	1 unit	1CL
		3KC9822-6		1	1 unit	1CL
		3KC9822-7		1	1 unit	1CL
For 3-pole applications, infeed from above¹⁾						
 <ul style="list-style-type: none"> • for 250 A, 3-pole switch • for 400 A, 3-pole switch • for 630 A, 3-pole switch 		3KC9832-1		1	1 unit	1CL
		3KC9832-2		1	1 unit	1CL
		3KC9832-3		1	1 unit	1CL
 <ul style="list-style-type: none"> • for 800 ... 1000 A, 3-pole switch • for 1250 A, 3-pole switch • for 1600 A, 3-pole switch • for 2000 ... 3200 A, 3-pole switch 		3KC9832-4		1	1 unit	1CL
		3KC9832-5		1	1 unit	1CL
		3KC9832-6		1	1 unit	1CL
		3KC9832-7		1	1 unit	1CL
For 4-pole applications, infeed from below, with power supply						
 <ul style="list-style-type: none"> • for 250 A, 4-pole switch • for 400 A, 4-pole switch • for 630 A, 4-pole switch 		3KC9830-1		1	1 unit	1CL
		3KC9830-2		1	1 unit	1CL
		3KC9830-3		1	1 unit	1CL
 <ul style="list-style-type: none"> • for 800 ... 1000 A, 4-pole switch • for 1250 A, 4-pole switch • for 1600 A, 4-pole switch • for 2000 ... 3200 A, 4-pole switch 		3KC9830-4		1	1 unit	1CL
		3KC9830-5		1	1 unit	1CL
		3KC9830-6		1	1 unit	1CL
		3KC9830-7		1	1 unit	1CL
For 4-pole applications, infeed from above, with power supply						
 <ul style="list-style-type: none"> • for 250 A, 4-pole switch • for 400 A, 4-pole switch • for 630 A, 4-pole switch 		3KC9831-1		1	1 unit	1CL
		3KC9831-2		1	1 unit	1CL
		3KC9831-3		1	1 unit	1CL
 <ul style="list-style-type: none"> • for 800 ... 1000 A, 4-pole switch • for 1250 A, 4-pole switch • for 1600 A, 4-pole switch • for 2000 ... 3200 A, 4-pole switch 		3KC9831-4		1	1 unit	1CL
		3KC9831-5		1	1 unit	1CL
		3KC9831-6		1	1 unit	1CL
		3KC9831-7		1	1 unit	1CL

¹⁾ 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

Transfer Switching Equipment and Load Transfer Switches

NEW 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

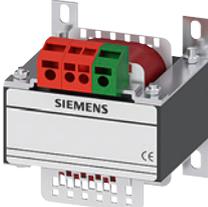
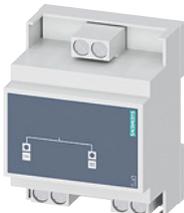
Version	SD	Article No. www.siemens.com/ product?Article.No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Auxiliary switches						
<p>One auxiliary switch contains 2 leading changeover contacts, one changeover contact for position I and one changeover contact for position II (incl. bolt set)</p> <p>Max. two auxiliary switches can be installed per transfer switching unit</p> <p>250 V AC/12 A (AC-13) or for 24 V DC/14 A (DC-13)</p> <ul style="list-style-type: none"> for 250 ... 630 A 		3KC9803-1		1	1 unit	1CL
 <ul style="list-style-type: none"> for 800 ... 1600 A 		3KC9803-2		1	1 unit	1CL
<ul style="list-style-type: none"> for 2000 ... 3200 A: included in the basic unit 		--				
Phase barriers						
 <ul style="list-style-type: none"> for 250 ... 400 A, contains 2 units (for 3P) for 250 ... 400 A, contains 3 units (for 4P) for 630 A, contains 2 units (for 3P) for 630 A, contains 3 units (for 4P) for 800 ... 3200 A: included in the scope of supply of the basic unit 		3KC9808-1		1	1 unit	1CL
		3KC9808-6		1	1 unit	1CL
		3KC9808-2		1	1 unit	1CL
		3KC9808-7		1	1 unit	1CL
Mounting accessories						
Cover frame						
<p>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)</p> <ul style="list-style-type: none"> for ATSE 250 ... 630 A 		3KC9820-4		1	1 unit	1CL
 <ul style="list-style-type: none"> for ATSE 800 ... 3200 A 		3KC9820-5		1	1 unit	1CL
						
Spacers						
<p>Increase the space between the mounting rail and the cabinet rear panel or the mounting frame</p> <ul style="list-style-type: none"> for 250 ... 630 A, contains 2 units 		3KC9820-3		1	1 unit	1CL
						
Sealing units						
Sealable cover						
<ul style="list-style-type: none"> for controller (electronic module) ATSE 250 ... 3200 A, (incl. bolt set and sealing ribbons) 		3KC9821-0		1	1 unit	1CL
						
Sealing ribbon						
<ul style="list-style-type: none"> also as spare part for sealable cover for 40 ... 3200 A, 10 units 		3KC9621-2		1	1 unit	1CL
						

Transfer Switching Equipment and Load Transfer Switches

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

Transfer Switching Equipment and Load Transfer Switches

NEW 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. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Terminal plates						
 <ul style="list-style-type: none"> • for 250 ... 400 A, 3-pole • for 250 ... 400 A, 4-pole 		3KC9827-1		1	1 unit	1CL
		3KC9828-1		1	1 unit	1CL
 <ul style="list-style-type: none"> • for 630 A, 3-pole • for 630 A, 4-pole 		3KC9827-2		1	1 unit	1CL
		3KC9828-2		1	1 unit	1CL
 <ul style="list-style-type: none"> • for 800 ... 1250 A, 3-pole • for 800 ... 1250 A, 4-pole 		3KC9827-3		1	1 unit	1CL
		3KC9828-3		1	1 unit	1CL
 <ul style="list-style-type: none"> • for 1600 A, 3-pole • for 1600 A, 4-pole 		3KC9827-4		1	1 unit	1CL
		3KC9828-4		1	1 unit	1CL
 <ul style="list-style-type: none"> • for 2000 ... 3200 A, 3-pole • for 2000 ... 3200 A, 4-pole 		3KC9827-5		1	1 unit	1CL
		3KC9828-5		1	1 unit	1CL

Transfer Switching Equipment and Load Transfer Switches

NEW 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. www.siemens.com/ product?Article No.	Price per PU	PU (UNIT, SET, M)	PS	PG
Spare parts						
Motorized operating mechanisms						
						
• for 250 ... 400 A		3KC9826-1		1	1 unit	1CL
						
• for 630 A		3KC9826-2		1	1 unit	1CL
						
• for 800 ... 1250 A		3KC9826-3		1	1 unit	1CL
						
• for 1600 A		3KC9826-4		1	1 unit	1CL
						
• for 2000 ... 3200 A		3KC9826-5		1	1 unit	1CL
Controller (electronic module)						
						
• for ATSE 250 ... 3200 A		3KC9826-0		1	1 unit	1CL

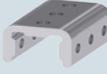
Transfer Switching Equipment and Load Transfer Switches

NEW 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

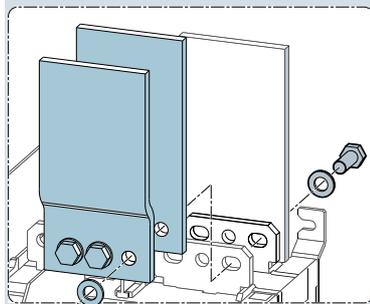
Direct connections

			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 ¹⁾	3 x	3 x	-	-	-
		4	Included ¹⁾	4 x	4 x	-	-	-
	Direct connection, rotated 90° 3 x 100 x 10 mm (necessary for 3200 A) ²⁾	3	Included ¹⁾	-	-	6 x	6 x	-
		4	Included ¹⁾	-	-	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 ¹⁾	-	-	6 x	6 x	-
		4	Included ¹⁾	-	-	8 x	8 x	-
	Direct connection, rotated 90° with bridging bar 3 x 100 x 10 mm (necessary for 3200 A)	3	Included ¹⁾	6 x	-	-	-	3 x
		4	Included ¹⁾	8 x	-	-	-	4 x

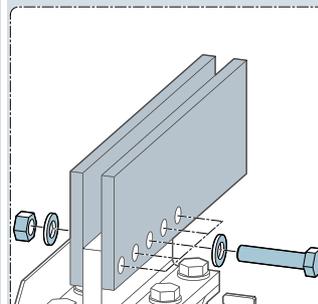
¹⁾ 3KC9811-0 is included for all 3KC transfer switches for 3200 A. For connection of 3KC transfer switches for 2000 ... 2500 A to 3 x 100 x 10 mm busbars, the following must be ordered:
- 3KC9811-0, 6 units for 3-pole switches
- 3KC9811-0, 8 units for 4-pole switches

²⁾ Vertical connection is approved up to 2900 A; horizontal connection is approved up to 3200 A.

Line side

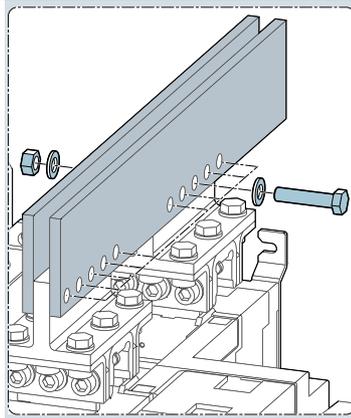


Infeed side, direct connection (2000 to 2500 A)

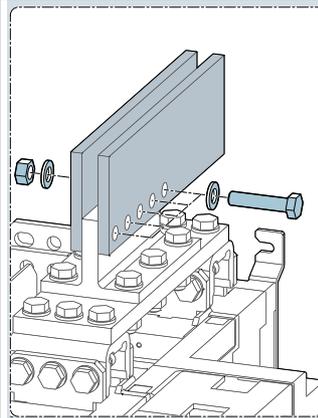


Infeed side, direct connection, rotated 90° (2000 to 2500 A)

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	Standards	Used in		
				Non-residential buildings	Residential buildings	Industry
Transfer control devices						
 <p>3KC ATC5300 transfer control devices</p>	8/61	<p>The 3KC ATC5300 transfer control device equipped with two circuit breakers with motorized operating mechanism serves as a transfer system that automatically or manually switches between two power supply systems in low-voltage power distribution applications.</p> <p>The 3KC ATC5300 transfer control device offers several programmable inputs and outputs, communication interfacing and displays. Settings are defined via user-friendly software.</p>	IEC 60947-6-1; DIN VDE 0660-114; UL 508; CSA 22.2 No. 14	✓	✓	✓
 <p>3KC ATC3100 transfer control devices</p>	8/62	<p>The 3KC ATC3100 transfer control device constitutes the transfer control system together with two circuit breakers with motorized operating mechanism.</p> <p>It is a simplified version of the 3KC ATC5300 and enables fast parameterization without software.</p>	IEC 60947-6-1; GB 14048.11	✓	✓	✓

Overview



3KC ATC5300 and 3KC ATC3100 transfer control devices

Automatic transfer with the 3KC ATC5300 or 3KC ATC3100 transfer control device

The 3KC ATC5300 and ATC3100 transfer control devices, equipped with two circuit breakers with motorized operating mechanism, serve as an open transfer system that automatically or manually switches between two power supply systems in low-voltage power distribution applications.

In particular, the 3KC ATC5300 or 3KC ATC3100 transfer control device is deployed wherever a power failure is especially critical, e.g. distributed power supply systems with UPS supply (e.g. air-conditioning of control cabinets), in industrial processes and the emergency power supply of public buildings, such as hotels.

Mode of operation

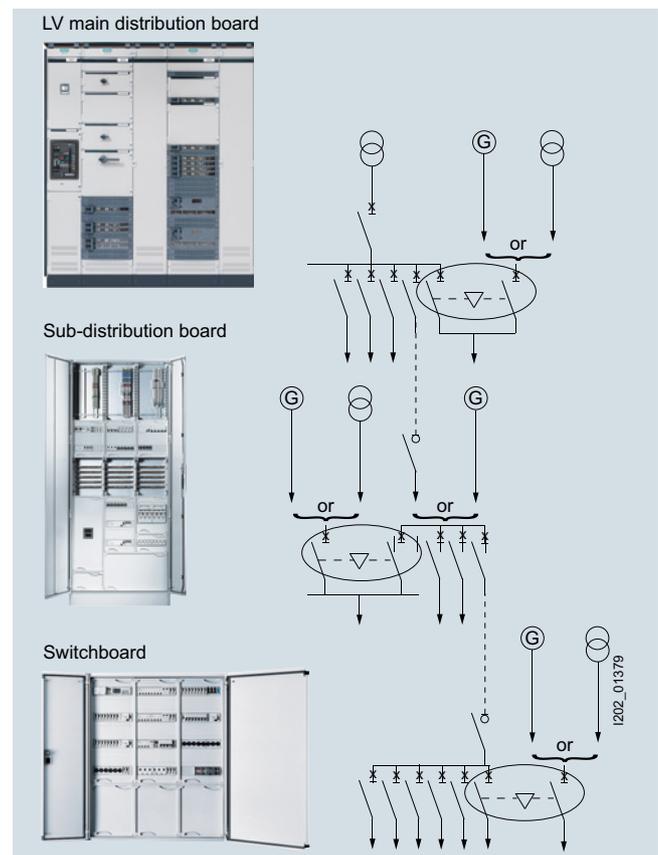
The 3KC ATC5300 and ATC3100 transfer control devices control the transfer between the main and standby power supplies fully automatically, while incorporating set limit values and delay times. They detect fluctuations occurring in the main power supply quickly and switch to the standby power supply. The control devices only switch to the standby power supply after they have ensured that the standby supply is delivering the required power supply quality. The devices switch back to the main power supply taking into consideration the set parameters once the required power supply quality is available again. If the standby power supply and/or the main power supply is fed by a generator, the control devices also offer a wide range of settings, such as a generator lead time, generator delay time, and generator start test at specified times.

The 3KC ATC transfer control devices can control air circuit breakers, molded case circuit breakers, switch disconnectors and contactors. The circuit breakers are controlled via the related motorized operating mechanisms.

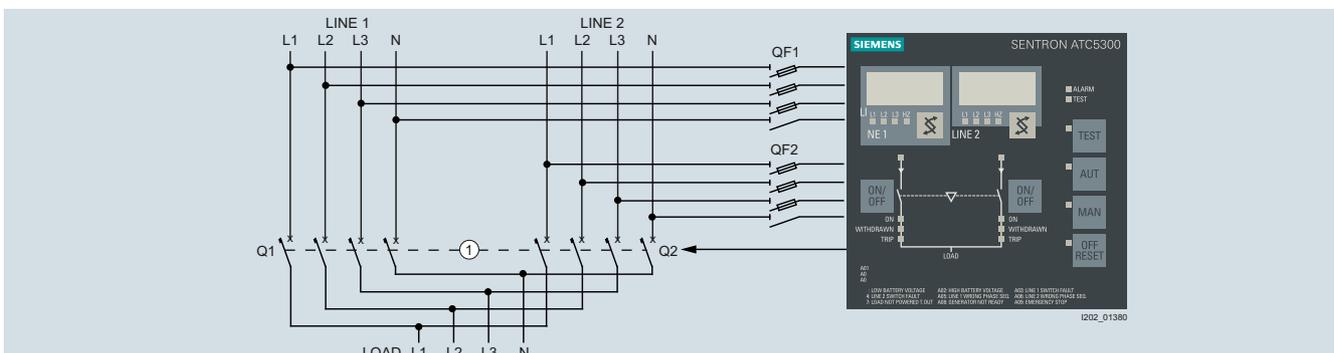
Q1 and Q2, configured with circuit breakers

All circuit breakers connected to the 3KC ATC5300 or ATC3100 transfer control device must be equipped with the following accessories:

- 3VL/3VA molded case circuit breakers
 - The following is also required for each molded case circuit breaker:
 - One motorized operating mechanism
 - One alarm switch
 - Two auxiliary switches 1 NO/1 NC
- 3WL air circuit breakers
 - The following is also required for each air circuit breaker:
 - 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 fittings)



Applications in low-voltage power distribution



Implementation of an automatic transfer (according to IEC 60947-6-1); ① interlocking

Transfer Switching Equipment and Load Transfer Switches

Transfer Control Devices

Introduction

Technical specifications

	ATC5300	ATC3100
Metering inputs		
Max. rated voltage U_n		
• Phase-phase	V AC 690	400
• Phase-neutral	V AC 400	230
Phase-phase measuring range	V AC 80 ... 800	161 ... 264
Frequency range	Hz 45 ... 65	50 ... 60
Measuring method	RMS value (true RMS)	
Measuring input impedance		
• Phase-phase	MΩ > 1.1	
• Phase-neutral	MΩ > 0.5	> 1.1
Connection method	1, 2 or 3-phase system	4-phase system
Measuring errors	± 0.25%, value range ± 5%	
Auxiliary supply		
Operating range		
• AC	V AC 187 ... 264	161 ... 264
• DC	V DC 9 ... 70	18 ... 36
Rated voltage U_n		
• AC	V AC 220 ... 240	
• DC	V DC 12/24/48	24
Frequency	Hz 45 ... 65	50 ... 60
Max. power consumption at $U_n = 240$ V AC	VA 9	18 ... 36
Max. power loss		
• At 240 V AC	W 6.3	4
• At 48 V DC	W 4.1	4
Max. power consumption		
• At 12 V DC	mA 300	--
• At 24 V DC	mA 180	120
• At 48 V DC	mA 90	--
Safety in the event of short interruptions	ms 50	--
Digital inputs		
Number of inputs	8, 6 of which are programmable	5
Type of input	Negative	--
Input current	mA ≤ 10	--
Input signal		
• Logic state "0"	V ≤ 1.5 (typical 2.9)	--
• Logic state "1"	V ≥ 5.3 (typical 4.3)	--
Input signal delay	ms ≥ 50	--
Relay outputs		
Number of outputs	7, 5 of which are programmable	7
Contact configuration		
• 2 relays	1 NO, 12 A, 250 V AC (AC1)	
• 3 relays	1 NO, 8 A, 250 V AC (AC1)	
• 2 relays	1 CO, 8 A, 250 V AC (AC1)	
• 1 relay	1 NO, 12 A, 250 V AC	
• 4 relays	1 NO, 8 A, 250 V AC	
• 2 relays	2 CO, 8 A, 250 V AC	
Reversing time of control device s		
	1	0.5
Communication cables		
RS 232 serial interface	bit/s 1200 ... 38400	--
• With programmable transmission rate		
• Connection through RJ6/6 connector		
RS 485 serial interface	bit/s 1200 ... 38400	--
• Optically insulated		
• With programmable transmission rate		
• Connection through plug-in terminals		
Real-time clock		
Energy storage	Stored-energy capacitors	--
Operating time without supply voltage	days Approx. 12 ... 15	--

	ATC5300	ATC3100
Insulation voltage		
Rated insulation voltage U_i	V 690	400
Ambient conditions		
Operating temperature	°C -20 ... +60	-25 ... +70
Storage temperature	°C -30 ... +80	-40 ... +80
Relative humidity	% < 90	95
Max. pollution degree	3	
Overvoltage category	3	
Measuring category	CAT III	CAT IV
Connections		
Terminal type	Removable/pluggable	
Cable cross-section	mm ² 0.2 ... 2.5 (24 ... 12 AWG)	
Max. tightening torque	Nm 0.5 (4.5 lbf-in)	0.4
Enclosure		
Enclosure material	Thermoplast LEXAN 3412R	Thermoplast Bayblend FR3010
Version	Door installation	Door installation, standard rail mounting, floor mounting
Degree of protection	IP41 front, IP20 rear	
Weight	g 950	1050
Certificates and conformity		
Tested ATS/ATSE standards:	IEC60947-6-1	
	GB14048.11	
	UL 508	--
	CSA 22.2 No. 14	--
ATS/ATSE standard fulfilled in combination with:	3WL, 3VL, 3VA	3WL, 3VL
EMC	Acc. to IEC 60947-6-1	

For more information, see manual at:
www.siemens.com/lowvoltage/manuals.

Transfer Switching Equipment and Load Transfer Switches

Transfer Control Devices

3KC ATC5300 transfer control devices

Overview



3KC ATC5300 transfer control device

Communication with Modbus protocol

For communication, the 3KC ATC5300 supports the Modbus RTU and Modbus ASCII protocol through the RS 232 and RS 485 interfaces. The 3KC ATC5300 provides all available data of the transfer control system and the networks through these interfaces. Additionally, the ATC5300 can be controlled through these interfaces. These functions make it possible to integrate the ATC5300 into 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 ATC5300 fulfils the IEC 60947-6-1 (ATS/ATSE) standard in combination with the 3VA molded case circuit breakers.

You will find further information on the 3VA molded case circuit breakers in the manual:

www.siemens.com/lowvoltage/manuals.

Parameterizing and monitoring using 3KC ATC5300 software or Siemens powerconfig

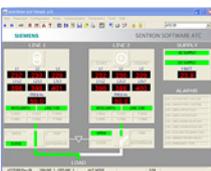
In addition to operation and parameterization on-site, you can also monitor and set the parameters of the controllers using the 3KC ATC5300 and Siemens powerconfig software. Both offer a high level of convenience and quick access to all device settings, e.g. complex settings that arise when connecting generators.

Benefits

The advantages of the 3KC ATC5300 transfer control device at a glance:

- Two measuring inputs for single-phase and multi-phase power supply systems
- Costs of installing the transformer are dispensed with
- Has two voltage supply units to cover all standard AC/DC voltage supplies, alternative supply via main and standby system possible
- Two displays for monitoring the normal/standby system and displaying the phase and interlinked cable voltages
- Calendar clock
- 8 digital inputs, 6 of which are programmable, and 7 relay outputs, 5 of which are programmable
- Data, parameters and logged events (e.g. power failure, faults) remain accessible and unaltered even after a power failure or restarting a device
- Logging and statistical processing of occurring events possible
- The illuminated LED display makes reading measured values and parameters easy, even in unfavorable lighting conditions
- The 3KC ATC5300 programming or powerconfig software saves considerable time when setting parameters and setting up the 3KC ATC5300 transfer control device
- Generator test run function for mandatory testing intervals

Selection and ordering data

Version	SD	Article No. www.siemens.com/product?Article No.	Price pro PU	PU (UNIT, SET, M)	PS	PG
	d					
		3KC ATC5300 transfer control device Control panel instrument 144 x 144 x 94 mm with the following features:				
		<ul style="list-style-type: none"> • Screw terminal connection • AC/DC power supply unit • 220 ... 240 V AC, 45 ... 65 Hz • 9 ... 70 V DC • Rated setting range: 100 ... 690 V AC 				
		3KC ATC5300 software Software for setting parameters and remote control operations, incl. connection cable from control device to PC, cable length 1.8 m				
		<ul style="list-style-type: none"> • CD incl. software and manuals • Minimum hardware and software requirements: <ul style="list-style-type: none"> - Pentium, 64 MB RAM - COM interface (serial RS 232) - CD drive - Windows 95/98/2000/XP/Vista 				
		Screw connection 				
		3KC9000-8TL30		1	1 unit	
		3KC9000-8TL70		1	1 unit	

Transfer Switching Equipment and Load Transfer Switches

Transfer Control Devices

3KC ATC3100 transfer control devices

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 standard 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

The advantages of the 3KC ATC3100 transfer control device at a glance:

- 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, standard 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 molded case circuit breakers
- 3VL molded case circuit breakers
- 3WL air circuit breakers

Selection and ordering data

Version	SD	Article No. www.siemens.com/ product?Article No.	Price pro PU	PU (UNIT, SET, M)	PS	PG
 <p>3KC ATC3100 transfer control device ¹⁾ Control panel instrument 171 x 131 x 99 mm with the following features:</p> <ul style="list-style-type: none"> • Screw terminal connection • Rated setting range: 280 – 460 V AC • Aux. 24 V DC voltage • English labeling (Chinese labeling on request) 		Screw connection				
		3KC9000-8EL10		1	1 unit	
		3KC9000-8EL62		1	1 unit	

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