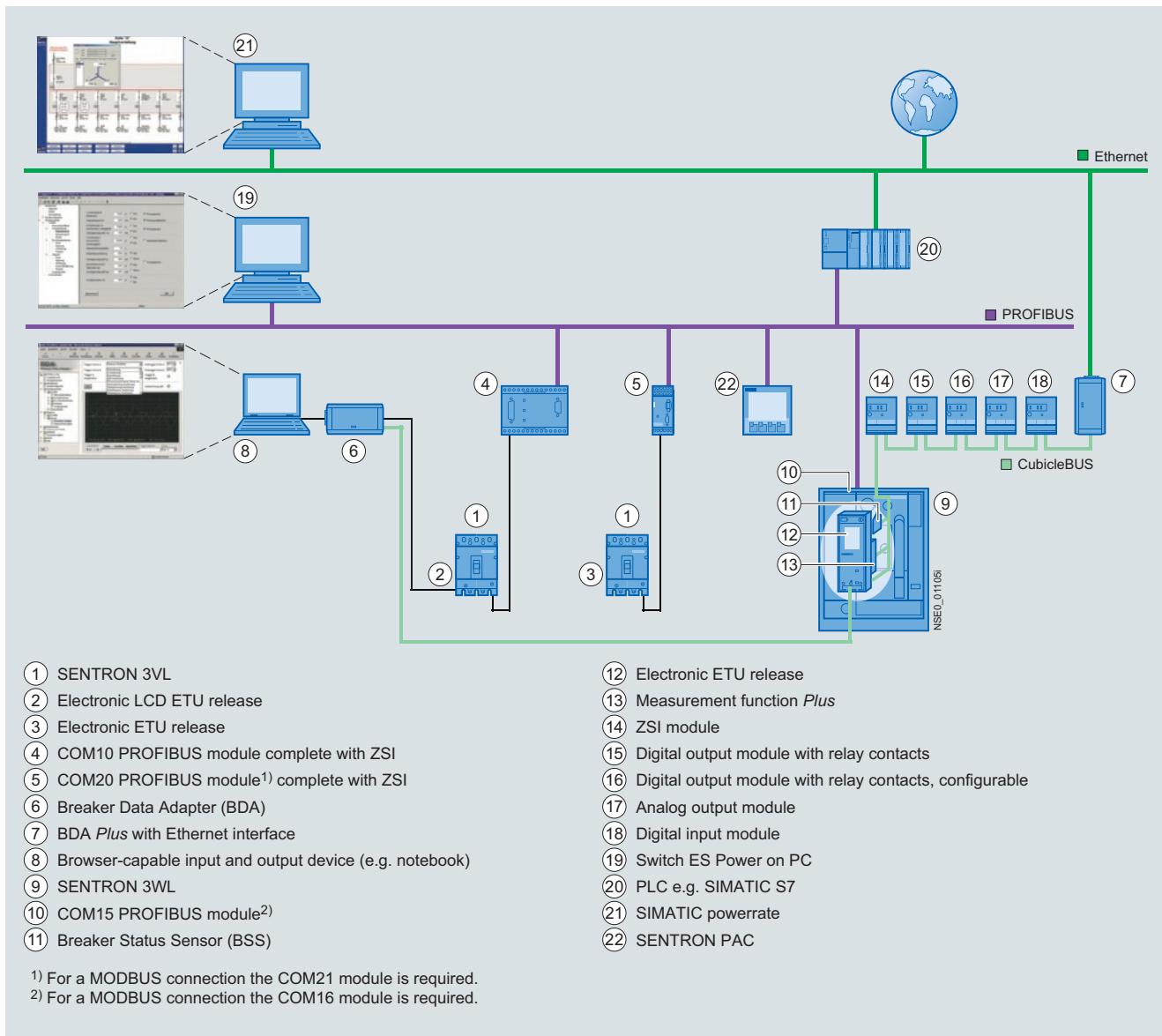


Introduction

Communication-capable circuit breakers (with ETU45B or ETU76B electronic release)



Features

- Coordinated communication concept using the PROFIBUS DP or MODBUS, ranging from 16 A to 6300 A with SENTRON 3VL and SENTRON 3WL
- The high level of modularity of circuit breakers and accessories allows easy retrofitting of all communication components
- Significant additional benefits for the switchboard due to the possibility of linking up external input and output modules to the circuit breaker-internal **CubicleBUS** of the SENTRON 3WL
- Innovative software products for parameterization, operation, monitoring, and diagnostics of SENTRON circuit breakers, both locally or via PROFIBUS DP, MODBUS or Ethernet/Intranet/Internet
- Complete integration of the SENTRON circuit breakers into the Totally Integrated Power and Totally Integrated Automation solutions

Communication:

- For air circuit breakers with optional communication function (ETU45B or ETU76B electronic release) see pages 1/7 to 1/22.
- For accessories see pages 1/43 and 1/44.
- For more information see also chapters "Measuring Instruments and E-Counters" and "Software".

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Introduction

Benefits

Low space requirements

The SENTRON 3WL devices require very little space. Size I devices (up to 1600 A) fit into a 400 mm wide switchgear panel. Size III devices (up to 6300 A) are the smallest of their kind and with their construction width of 704 mm fit into a 800 mm wide switchgear panel.

Modular design

Components like auxiliary releases, motorized operating mechanisms, electronic releases, current sensors, auxiliary circuit signaling switches, automatic reset devices, interlocks and engagement operating mechanisms can all be exchanged or retrofitted at a later stage, thus allowing the circuit breaker to be adapted to new, changing requirements.

The main contact elements can all be replaced in order to increase the endurance of the circuit breaker.

Retrofittable modules for electronic releases

Modularity is one of the main features of the new SENTRON 3WL circuit breakers.

Special LCDs, ground-fault modules, rated current modules and communication modules for the electronic releases are available for fast and easy retrofitting and adaptation to changing requirements.

Communication

The use of modern communication-capable circuit breakers opens up completely new possibilities in terms of start-up, parameterization, diagnostics, maintenance and operation. This allows many different ways of reducing costs and improving productivity in industrial plants, buildings and infrastructure projects to be achieved.

- Fast and reliable parameterization
- Timely information and response can prevent plant stoppages
- Effective diagnostics management
- Measured values are the basis for efficient load management, for drawing up power demand profiles and for assigning energy to cost centers
- Preventive maintenance reduces the risk of expansive plant down-times

Applications

- As incoming-feeder, distribution, tie, and outgoing-feeder circuit breakers in electrical installations.
- For switching and protecting motors, capacitors, generators, transformers, busbars and cables.

Due to the reinforced use of electronic control systems, the demands made on air circuit breakers in terms of operator control and monitoring of network processes have increased.

The extensive, coordinated SENTRON range of devices covers all applications between 16 A and 6300 A with compact and open circuit breakers.

The AC devices are available as circuit breakers and non-automatic air circuit breakers. DC devices are only available as non-automatic air circuit breakers.

Standards

SENTRON 3WL circuit breakers comply with:

- IEC 60947-2
- EN 60947-2
- Climate-proof according to IEC 60068-2-30.

Versions with UL 489 also available, see Catalog LV 16.

For further standards, see Appendix.

Conductor cross-sections

Size	I	II	III							
Type	Up to 3WL11 10	3WL11 12	3WL11 16	3WL12 08	3WL12 10	3WL12 12	3WL12 16	3WL12 20		
Permissible load										
At rear horizontal main connections	<ul style="list-style-type: none"> • Up to 55 °C (Cu bare) • Up to 60 °C (Cu bare)¹⁾ • Up to 70 °C (Cu black painted)¹⁾ 	A A A	1000 1000 1000	1250 1250 1210	1600 800 1490	800 1000 800	1000 1250 1000	1250 1600 1250	1600 1600 1600	2000 2000 2000
Main conductor minimum cross-sections	<ul style="list-style-type: none"> • Copper bars, bare • Copper bars, painted black 	Unit(s) mm ²	1 x 60 x 10	2 x 40 x 10	2 x 50 x 10	1 x 50 x 10	1 x 60 x 10	2 x 40 x 10	2 x 50 x 10	3 x 50 x 10
		Unit(s) mm ²	1 x 60 x 10	2 x 40 x 10	2 x 50 x 10	1 x 50 x 10	2 x 60 x 10	2 x 40 x 10	2 x 50 x 10	3 x 50 x 10

Size	II	III						
Type	3WL12 25	3WL12 32	3WL12 40	3WL13 40	3WL13 50	3WL13 63		
Permissible load								
	<ul style="list-style-type: none"> • Up to 55 °C (Cu bare) • Up to 60 °C (Cu bare)¹⁾ • Up to 70 °C (Cu black painted)¹⁾ 	A A A	2500 2500 2280	3200 3020 2870	3950 3810 3600	4000 4000 4000	5000 5000 5000	5920 5810 5500
Main conductor minimum cross-sections	<ul style="list-style-type: none"> • Copper bars, bare • Copper bars, painted black 	Unit(s) mm ²	2 x 100 x 10	3 x 100 x 10	4 x 120 x 10	4 x 100 x 10	6 x 100 x 10	6 x 120 x 10
		Unit(s) mm ²	2 x 100 x 10	3 x 100 x 10	4 x 100 x 10 ²⁾	4 x 100 x 10	6 x 100 x 10	6 x 120 x 10

¹⁾ ETU76B with graphics display can be used up to max. 55 °C.

²⁾ Minimum main conductor cross-sections for 4-pole withdrawable circuit breakers: 4 x 120 x 10 mm.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

3-pole, fixed-mounted versions

Size	Max. rated circuit breaker current $I_{n\ max.}$	Rated current ¹⁾ I_n	I_{cu} up to 150 kA at 500 V, very high switching capacity C		(C)	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.			
A	A	kA	DT	Order No. Order No. supplements, see page 1/23	Basic price per PU				kg			
Horizontal main circuit connection												
III	4000	4000	150	B	3WL13 40-5□□32-....	1	1 unit	103	82.000			
III	5000	5000	150	B	3WL13 50-5□□32-....	1	1 unit	103	82.000			
Vertical main circuit connection												
III	4000	4000	150	B	3WL13 40-5□□31-....	1	1 unit	103	82.000			
III	5000	5000	150	B	3WL13 50-5□□31-....	1	1 unit	103	82.000			
III	6300	6300	150	B	3WL13 63-5□□31-....	1	1 unit	103	90.000			
Non-automatic air circuit breakers²⁾												
Without electronic release					Order No. supplements AA	Add. price	None					
Electronic releases												
Versions without ground-fault protection												
ETU25B: Protection functions LSI ³⁾												
ETU45B: Protection functions LSIN3 ⁴⁾												
ETU45B: Protection functions LSIN3 ³⁾ with 4-line display												
ETU76B: Protection functions LSIN3 ³⁾ with pixel graphics display												
Versions with ground-fault protection												
ETU27B: Protection functions LSING ⁴⁾												
ETU45B: Protection functions LSING ³⁾ ⁵⁾												
ETU45B: Protection functions LSING ³⁾ ⁵⁾ with 4-line display												
ETU76B: Protection functions LSING ³⁾ ⁵⁾ with pixel graphics display												

Standard Order No. supplements (for further Order No. supplements, see page 1/23)

Manual operating mechanism with mechanical closing
Without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO

✓ Additional price

Footnotes for pages 1/7 to 1/10:

- 1) The rated current is determined by the rated current module. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code on page 1/24.
- 2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers see page 1/3.

3) Current transformers for protection of the N conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/34.

4) Current transformers for protection of the N conductor are to be ordered separately, see page 1/34.

5) ETU45B and ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/34.

6) ETU15B cannot be used with 3WL circuit breakers, size III.

1AA2

None

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

3-pole, withdrawable versions

Size	Max. rated circuit breaker current $I_{n\ max.}$	Rated current ¹⁾ I_n	I_{cu} up to 150 kA at 500 V, very high switching capacity C		(C)	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A	A	kA	DT	Order No. Order No. supplements, see page 1/23	Basic price per PU				kg
Without guide frames (for guide frames, see page 1/30 to 1/33)									
III	4000	4000	150 B	3WL13 40-5□□35-....	1	1 unit	103	88.000	
III	5000	5000	150 B	3WL13 50-5□□35-....	1	1 unit	103	88.000	
III	6300	6300	150 B	3WL13 63-5□□35-....	1	1 unit	103	96.000	
With guide frames, horizontal main circuit connection									
III	4000	4000	150 B	3WL13 40-5□□36-....	1	1 unit	103	148.000	
III	5000	5000	150 B	3WL13 50-5□□36-....	1	1 unit	103	148.000	
With guide frames, vertical main circuit connection									
III	4000	4000	150 B	3WL13 40-5□□37-....	1	1 unit	103	148.000	
III	5000	5000	150 B	3WL13 50-5□□37-....	1	1 unit	103	148.000	
III	6300	6300	150 B	3WL13 63-5□□37-....	1	1 unit	103	166.000	
Non-automatic air circuit breakers²⁾									
Without electronic release				AA	Order No. supplements	Add. price			
Electronic releases									
Versions without ground-fault protection									
ETU25B: Protection functions LSI				CB		✓			
ETU45B: Protection functions LSIN3)				EB		✓			
ETU45B: Protection functions LSIN3) ³⁾ with 4-line display				FB		✓			
ETU76B: Protection functions LSIN3) with pixel graphics display				NB		✓			
Versions with ground-fault protection									
ETU27B: Protection functions LSING ⁴⁾				DG		✓			
ETU45B: Protection functions LSING ³⁾⁵⁾				EG		✓			
ETU45B: Protection functions LSING ³⁾⁵⁾ with 4-line display				FG		✓			
ETU76B: Protection functions LSING ³⁾⁵⁾ with pixel graphics display				NG		✓			

Standard Order No. supplements (for further Order No. supplements for circuit breakers and guide frames, see page 1/23)

Manual operating mechanism with mechanical closing
Without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO

1AA2

None

✓ Additional price

Footnotes for pages 1/11 to 1/14:

- 1) The rated current is determined by the rated current module. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code on page 1/24.
- 2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers see page 1/3.

³⁾ Current transformers for protection of the N conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/34.

⁴⁾ Current transformers for protection of the N conductor are to be ordered separately, see page 1/34.

⁵⁾ ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/34.

⁶⁾ ETU15B cannot be used with 3WL circuit breakers, size III.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

4-pole, fixed-mounted versions

Size	Max. rated circuit breaker current $I_{n\ max.}$	Rated current ¹⁾ I_n	I_{cu} up to 130 kA at 500 V, very high switching capacity C		C	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.		
A	A	kA	DT	Order No. Order No. supplements, see page 1/23	Basic price per PU				kg		
Horizontal main circuit connection											
III	4000	4000	130	B	3WL13 40-5□□42-....	1	1 unit	103	99.000		
III	5000	5000	130	B	3WL13 50-5□□42-....	1	1 unit	103	99.000		
Vertical main circuit connection											
III	4000	4000	130	B	3WL13 40-5□□41-....	1	1 unit	103	99.000		
III	5000	5000	130	B	3WL13 50-5□□41-....	1	1 unit	103	99.000		
III	6300	6300	130	B	3WL13 63-5□□41-....	1	1 unit	103	108.000		
Non-automatic air circuit breakers²⁾											
Without electronic release					AA	Order No. supplements	Add. price				
							None				
Electronic releases											
Versions without ground-fault protection											
ETU25B: Protection functions LSI											
ETU45B: Protection functions LSIN ³⁾											
ETU45B: Protection functions LSIN ³⁾ with 4-line display											
ETU76B: Protection functions LSIN ³⁾ with pixel graphics display											
Versions with ground-fault protection											
ETU27B: Protection functions LSING ⁴⁾											
ETU45B: Protection functions LSING ³⁾ ⁵⁾											
ETU45B: Protection functions LSING ³⁾ ⁵⁾ with 4-line display											
ETU76B: Protection functions LSING ³⁾ ⁵⁾ with pixel graphics display											

Standard Order No. supplements (for further Order No. supplements, see page 1/23)

Manual operating mechanism with mechanical closing
Without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO

1AA2

None

✓ Additional price

Footnotes for pages 1/15 to 1/18:

- 1) The rated current is determined by the rated current module. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code on page 1/24.
- 2) For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers see page 1/3.

3) Current transformers for protection of the N conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/34. The internal current transformers for N conductors can be ordered by adding the supplement "-Z" and the order code "F23", see page 1/26.

4) Current transformers for protection of the N conductor are to be ordered separately, see page 1/34.

5) ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/34.

6) ETU15B cannot be used with 3WL circuit breakers, size III.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

4-pole, withdrawable versions

Size	Max. rated circuit breaker current $I_{n\ max.}$	Rated current ¹⁾ I_n	I_{cu} up to 130 kA at 500 V, very high switching capacity C		(C)	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.					
A	A	kA	DT	Order No. Order No. supplements, see page 1/23	Basic price per PU									
Without guide frames (for guide frames, see page 1/30 to 1/33)														
III	4000	4000	130 B	3WL13 40-5□□45-....	1	1 unit	103	115.000						
III	5000	5000	130 B	3WL13 50-5□□45-....	1	1 unit	103	106.000						
III	6300	6300	130 B	3WL13 63-5□□45-....	1	1 unit	103	108.000						
With guide frames, horizontal main circuit connection														
III	4000	4000	130 B	3WL13 40-5□□46-....	1	1 unit	103	190.000						
III	5000	5000	130 B	3WL13 50-5□□46-....	1	1 unit	103	190.000						
With guide frames, vertical main circuit connection														
III	4000	4000	130 B	3WL13 40-5□□47-....	1	1 unit	103	190.000						
III	5000	5000	130 B	3WL13 50-5□□47-....	1	1 unit	103	190.000						
III	6300	6300	130 B	3WL13 63-5□□47-....	1	1 unit	103	227.000						
Non-automatic air circuit breakers²⁾														
Without electronic release				Order No. supplements AA	Add. price None									
Electronic releases														
Versions without ground-fault protection														
ETU25B: Protection functions LSI				CB	✓									
ETU45B: Protection functions LSIN ³⁾				EB	✓									
ETU45B: Protection functions LSIN ³⁾ with 4-line display				FB	✓									
ETU76B: Protection functions LSIN ³⁾ with pixel graphics display				NB	✓									
Versions with ground-fault protection														
ETU27B: Protection functions LSING ⁴⁾				DG	✓									
ETU45B: Protection functions LSING ³⁾⁵⁾				EG	✓									
ETU45B: Protection functions LSING ³⁾⁵⁾ with 4-line display				FG	✓									
ETU76B: Protection functions LSING ³⁾⁵⁾ with pixel graphics display				NG	✓									

Standard Order No. supplements (for further Order No. supplements for circuit breakers and guide frames, see page 1/23)

Manual operating mechanism with mechanical closing
Without 1st and 2nd auxiliary releases; auxiliary switch 2 NC + 2 NO

1AA2

None

✓ Additional price

Footnotes for pages 1/19 to 1/22:

- ¹⁾ The rated current is determined by the rated current module. For the standard version, the supplied module is equal to the maximum rated current. If a lower rated current is required, adaptation by order code on page 1/24.
- ²⁾ For permissible rated short-time current I_{cc} and rated short-circuit making capacity I_{cm} for non-automatic air circuit breakers see page 1/3.

³⁾ Current transformers for protection of the N conductor and current transformers for detection of the ground-fault current in the grounded neutral point of the transformer are to be ordered separately, see page 1/34. The internal current transformers for N conductors can be ordered by adding the supplement "-Z" and the order code "F23", see page 1/26.

⁴⁾ Current transformers for protection of the N conductor are to be ordered separately, see page 1/34.

⁵⁾ ETU45B to ETU76B with ground-fault protection module GFM AT (alarm and tripping), see page 1/34.

⁶⁾ ETU15B cannot be used with 3WL circuit breakers, size III.

Air Circuit Breakers**3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)****Options****Selection and ordering data**

	Order No. supplement	Additional price
	3WL1...-.....-.....	
Operating mechanism		
Manual operating mechanism with mechanical closing	1	None
Manual operating mechanism with mechanical and electrical closing, closing solenoid suitable for uninterrupted duty, 100 % duty ratio	2 3	✓ ✓
Closing solenoid		
50/60 Hz V AC V DC		
110 110 ... 125		
230 220		
Manual/motorized operating mechanism with mechanical and electrical closing, closing solenoid suitable for uninterrupted duty, 100 % duty ratio	4 5 6	✓ ✓ ✓
Motor		
50/60 Hz V AC V DC		
208 ... 240 220 ... 250	230	✓
110 ... 127 110 ... 125	110	✓
-- 24	24	✓
To order different voltages for motorized operating mechanism and closing solenoid or closing solenoid for synchronization purposes: "1" at the 13th digit of the Order No. and order codes, see page 1/25 .		
1. Auxiliary releases		
Without 1st auxiliary release	A	None
Shunt release suitable for uninterrupted duty, 100 % duty ratio		
Operating range 0.85 ... 1.1 × U_s		
U_s 50/60 Hz V AC U_s V DC		
-- 24	B	✓
-- 30	C	✓
-- 48	D	✓
-- 60	E	✓
110 110 ... 125	F	✓
230 220	G	✓
2. Auxiliary releases		
Without 2nd auxiliary release	A	None
Shunt release suitable for uninterrupted duty, 100 % duty ratio		
Operating range 0.85 ... 1.1 × U_s		
U_s 50/60 Hz V AC U_s V DC		
-- 24	B	✓
-- 30	C	✓
-- 48	D	✓
-- 60	E	✓
110 110 ... 125	F	✓
230 220	G	✓
Undervoltage release, instantaneous (≤ 80 ms), short-delay (≤ 200 ms)		
Operating range 0.85 ... 1.1 × U_s		
U_s 50/60 Hz V AC U_s V DC		
-- 24	J	✓
-- 30	K	✓
-- 48	L	✓
-- 60	M	✓
110 ... 127 110 ... 125	N	✓
208 ... 240 220 ... 250	O	✓
380 ... 415 --	P	✓
Undervoltage release, can be delayed between 0.2 s and 3.2 s		
Operating range 0.85 ... 1.1 × U_s		
U_s 50/60 Hz V AC U_s V DC		
-- 48	Q	✓
110 ... 127 110 ... 125	R	✓
208 ... 240 220 ... 250	S	✓
380 ... 415 --	T	✓
Auxiliary switches		
1. auxiliary switch block		
2 NO + 2 NC	2	None
1. + 2. auxiliary switch block		
4 NO + 4 NC	4	✓
6 NO + 2 NC	7	✓
5 NO + 3 NC	8	✓

✓ Additional price

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Options

Add "-Z" to the complete Order No. and indicate the appropriate order code(s).

Order No. with "-Z"	Additional price
1234 5 6 7 8 9 10 11 12 13 14 15 16	
3WL - . . . - Z	
and additional order code(s)	
□ □ □ + . . . + . . .	
Code for "Further versions" -Z	

Operating manuals

Printed version

French/Italian

A 1 1

✓

Spanish/Portuguese

A 1 2

✓

Rated voltage 1000 V AC/DC

Only for circuit breakers with high switching capacity H
(8th digit of the Order No. is a "4")

Cannot be combined with "Rated voltage 1150 V AC order code "A15".

Size II¹⁾

Up to 2000 A A 0 5
2500 A A 0 5
3200 A A 0 5

Add. price 3-pole Add. price 4-pole

✓ ✓
✓ ✓
✓ ✓

Size III¹⁾²⁾

4000 A A 0 5
5000 A A 0 5
6300 A A 0 5

✓ ✓
✓ ✓
✓ ✓

Rated voltage 1150 V AC

Only for circuit breakers with high switching capacity H
(8th digit of the Order No. is a "4")

Cannot be combined with "Rated voltage 1000 V AC order code "A05".

Size II

Up to 2000 A A 1 5
2500 A A 1 5
3200 A A 1 5
4000 A A 1 5

✓ ✓
✓ ✓
✓ ✓
✓ ✓

For size III select a circuit breaker with very high switching capacity C,
which can be used as standard up to 1150 V AC.

Tinned version of the customer's connections on the guide frame³⁾⁴⁾

Only for circuit breakers in withdrawable version with horizontal connection or
flange connection. The normal delivery time increases to 15 work days.

Size I

A 0 8

✓ ✓

Size II

A 0 8

✓ ✓

Size III

A 0 8

✓ ✓

Special packaging (moisture protection)

Special packaging for extended technical requirements

Cardboard packaging with water-repellent coating on corrugated cardboard
(moisture protection)

A 6 1

Additional price

✓

Rated current modules / Rating plugs

Rated current I_n
A

Additional price

Only one module is possible per circuit breaker (not in conjunction with electronic release ETU15B).

As standard the overcurrent releases are equipped with a rated current module which is equal to the maximum rated circuit breaker current ($I_{n \max}$). The rated current of the selected rated current module must be smaller than $I_{n \max}$.

For size I, II

250 B 0 2
315 B 0 3
400 B 0 4
500 B 0 5
630 B 0 6
800 B 0 8
1000 B 1 0

None
None

For size I, II, III

1250 B 1 2
1600 B 1 6

None
None

For size II, III

2000 B 2 0
2500 B 2 5
3200 B 3 2

None
None
None

For size III

4000 B 4 0
5000 B 5 0
6300 B 6 3

None
None
None

✓ Additional price

¹⁾ If ordering withdrawable circuit breaker and guide frame separately,
specify order code "A05" for withdrawable circuit breaker and guide frame.

²⁾ Not necessary for circuit breakers with very high switching capacity C as
these circuit breakers can be used as standard up to 1150 V AC.

³⁾ Front connections are tinned as standard.

⁴⁾ The permissible temperature-rise limits according to IEC 60947-2 are 5 K
lower for a tin surface than for a silver surface.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Options

Add "-Z" to the complete Order No. and indicate the appropriate order code(s).

Order No. with "-Z"	Additional price
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 3WL -Z and additional order code(s) □ □ □ + . . + . .	

Indication/operator control elements, door sealing frames	Code for "Further versions" -Z	Additional price
5-digit mechanical operating cycles counter¹⁾	C 0 1	✓
Electrical ON button in the operator panel²⁾ Possible only for circuit breakers with closing solenoid.	C 1 1 C 1 2	✓ ✓
Storage status signaling switch²⁾ (S21)	C 2 0	✓
Ready-to-close signaling switch (S20)	C 2 2	✓
Signaling switches²⁾ For the first auxiliary release (S22) For the second auxiliary release (S23)	C 2 6 C 2 7	✓ ✓
Motor shutdown switch in the operator panel³⁾	S 2 5	✓
EMERGENCY-STOP pushbuttons	S 2 4	✓
Door sealing frames	T 4 0	✓
Reclosing lockout and remote resets		
Automatic reset of the reclosing lockout	K 0 1	✓
Tripped signaling switch²⁾ (S24)	K 0 7	✓
Remote reset solenoid for displays and reset buttons including automatic reset of the reclosing lockout		
50/60 Hz V AC V DC		
-- 24	K 1 0	✓
-- 48	K 1 1	✓
120 125	K 1 2	✓
208 ... 250 208 ... 250	K 1 3	✓
Motorized operating mechanisms and closing/opening solenoids		
Motorized operating mechanisms Only possible if the 13th digit of the Order No. = "1"		
Motor		
50/60 Hz V AC V DC		
-- 24 ... 30	M 0 1	✓
-- 48 ... 60	M 0 3	✓
110 ... 127 110 ... 125	M 0 5	✓
208 ... 240 220 ... 250	M 0 6	✓
Closing solenoid suitable for uninterrupted duty, 100 % duty ratio Only possible if the 13th digit of the Order No. = "1"		
Activation solenoids		
50/60 Hz V AC V DC		
-- 24	M 2 1	✓
-- 30	M 2 2	✓
-- 48	M 2 3	✓
-- 60	M 2 4	✓
110 110	M 2 5	✓
230 220	M 2 6	✓
Closing solenoids⁵⁾ unsuitable for uninterrupted duty, 5 % duty ratio, synchronizable Only possible if the 13th digit of the Order No. = "1"		
Activation solenoids		
50/60 Hz V AC V DC		
-- 24	M 3 1	✓
-- 48	M 3 3	✓
110 ... 127 110 ... 125	M 3 5	✓
208 ... 240 220 ... 250	M 3 6	✓
Opening solenoids (shunt release)⁶⁾⁷⁾ Not suitable for uninterrupted duty, 5% duty ratio, synchronizable		
Activation solenoids		
50/60 Hz V AC V DC		
-- 24	M 4 1	✓
-- 48	M 4 3	✓
110 ... 127 110 ... 125	M 4 5	✓
208 ... 240 220 ... 250	M 4 6	✓

✓ Additional price

¹⁾ Only possible with motorized operating mechanism.

²⁾ Not possible with communications interface option, order code "F02" or "F12".

³⁾ Only for circuit breakers with motorized operating mechanism, not possible with order codes "C11", "C12".

⁴⁾ Not available for non-automatic air circuit breakers.

⁵⁾ Overexcited, i.e. opening time 50 ms (standard > 80 ms).

⁶⁾ Only possible if the 14th position of the Order No. for the circuit breaker is "A", i.e. "without 1st auxiliary release".

⁷⁾ Overexcited, i.e. opening time 50 ms (standard > 80 ms).

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Options

Add "-Z" to the complete Order No. and indicate the appropriate order code(s).

Order No. mit "-Z"
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
3WL -Z
and additional order code(s)

Additional price

		Code for "Further versions"	-Z	
		Order code for fixed-mounted version		Order code for withdrawable version
Interlocks, covers, position signaling switches				
Mutual mechanical interlockings (interlocking module with Bowden wire 2 m)	Fixed-mounted circuit breakers	S 5 5		
	For withdrawable circuit breakers with guide frame	--		R 5 5
	For guide frames	--		R 5 6
	For withdrawable circuit breakers	--		R 5 7
Arc chute covers	3-pole			
Not available for	Size I	--		R 1 0
- 1000 V version (order code "A05")	Size II	--		R 1 0
- DC version	Size III	--		R 1 0
- 4000 A size II	4-pole			R 1 0
- 1150 V version (order code "A15")	Size I	--		R 1 0
- 150-kA version, size III	Size II	--		R 1 0
	Size III	--		R 1 0
Shutters 2-part lockable with padlocks ¹⁾	3-pole			
	Size I	--		R 2 1
	Size II	--		R 2 1
	Size III	--		R 2 1
	4-pole			
	Size I	--		R 2 1
	Size II	--		R 2 1
	Size III	--		R 2 1
Position signaling switches for guide frames	Connected position	Test position	Disconnected position	
	1 CO	1 CO	1 CO	R 1 5
	3 CO	2 CO	1 CO	R 1 6

Add "-Z" to the complete Order No. and indicate the appropriate order code(s).

Order No. with "-Z"
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
3WL -Z
and additional order code(s)

Additional price

		Code for "Further versions"	-Z	
Communication and measurement functions				
Breaker status sensor (BSS)	F 0 1			✓
PROFIBUS communications interface²⁾	F 0 2			✓
MODBUS communications interface²⁾	F 1 2			✓
Measurement function Plus (without PROFIBUS/MODBUS communications interface)³⁾	F 0 5			✓
Overload and short-circuit protection for neutral conductors				
Internal current transformers for N conductors	Size I	F 2 3		✓
Only possible with 4-pole circuit breakers with ETU27B to ETU76B	Size II	F 2 3		✓
	Size III	F 2 3		✓
EMC filters				
EMC filters	Common-mode interference suppressor filters (e.g. in IT networks, caused by frequency converters)			
	Insertion loss (asymmetric) in the range 40 kHz to 10 MHz >40 dB.			

✓ Additional price

¹⁾ Padlocks not included in scope of supply.

²⁾ If ordering withdrawable circuit breaker and guide frame separately, specify order code "F02" or "F12" for withdrawable circuit breaker only.

³⁾ Additional voltage transformers are required for connection of the measurement function Plus, see page 1/43.

Air Circuit Breakers**3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)****Options**

Add "-Z" to the complete Order No.
and indicate the appropriate order code(s).

Order No. mit "-Z"

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

3WL -Z

and additional order code(s)

□ □ □ + . . . + . . .

Code for
"Further versions"

-Z

		Order code for fixed- mounted version	Add. price for fixed- mounted version		Order code for with- drawable version	Add. price for withdraw- able version
Locking devices		□ □ □			□ □ □	
Locking devices against unauthorized closing, in the operator panels	Made by CES Made by IKON Assembly kit FORTRESS or Castell ¹⁾ Assembly kit for padlocks ²⁾ Made by Ronis Made by Profalux	S 0 1 S 0 3 S 0 5 S 0 7 S 0 8 S 0 9	✓ ✓ ✓ ✓ ✓ ✓		S 0 1 S 0 3 S 0 5 S 0 7 S 0 8 S 0 9	✓ ✓ ✓ ✓ ✓ ✓
EMERGENCY-STOP pushbuttons	Mushroom pushbutton instead of the mechanical OFF pushbutton	S 2 4	✓		S 2 4	✓
Locking devices against unauthorized closing, for withdrawable circuit breakers	Made by CES Made by Ronis Made by Profalux	-- -- --			R 6 1 R 6 8 R 6 0	✓ ✓ ✓
Locking devices for operating mechanism handles with padlock²⁾		S 3 3	✓		S 3 3	✓
Locking devices to prevent movement of the withdrawable circuit breakers	Made by CES Made by Profalux Safety lock for mounting on the circuit breaker	-- -- --			S 7 1 S 7 5 S 7 6	✓ ✓ ✓
Locking mechanisms						
Locking mechanisms to prevent movement of the withdrawable circuit breaker in disconnected positions,	Made by CES Made by Profalux Made by Ronis	-- -- --			R 8 1 R 8 5 R 8 6	✓ ✓ ✓
consisting of Bowden wire and lock in the cabinet door						
Not possible in combination with order code "R30" or "R50".						
Locking devices	To prevent opening of the cabinet door in: ON position (fixed-mounted version)/ in connected position (withdrawable version)	S 3 0	✓		R 3 0	✓
Not possible in combination with order code "R81", "R85" or "R86".		--			R 5 0	✓
	To prevent movement with the cabinet door open	--				
Connection methods for auxiliary conductors						
Connections for screwless terminals (tension spring)		N 6 1	✓		P 6 1	✓

✓ Additional price

¹⁾ Locks must be ordered from the manufacturer.²⁾ Padlock not included in the scope of supply.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Options

Add "-Z" to the complete Order No. and indicate the appropriate order code(s).

Order No. mit "-Z"
 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
3WL -Z
 and additional order code(s)

 + . . . + . . .
 Code for "Further versions" -Z

For withdrawable circuit breakers with guide frames or for guide frames ¹⁾			Additional price 3-pole	Additional price 4-pole
To select this connection method the 12th digit of the Order No. for the circuit breaker must be a "6"				
Connection methods for main connections				
Top and bottom: accessible from front, single hole	Size I, up to 1600 A P 0 0 Size II, up to 2000 A P 0 0 Size II, up to 2500 A P 0 0 Size II, up to 3200 A P 0 0 Size III, up to 4000 A P 0 0	✓ ✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓
Top and bottom: accessible from front, double hole	Size I, up to 1600 A P 0 1 Size II, up to 2000 A P 0 1 Size II, up to 2500 A P 0 1 Size II, up to 3200 A P 0 1 Size III, up to 4000 A P 0 1	✓ ✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓
Top: horizontal, double hole Bottom: accessible from front, single hole	Size I, up to 1600 A P 0 7 Size II, up to 2000 A P 0 7 Size II, up to 2500 A P 0 7 Size II, up to 3200 A P 0 7 Size III, up to 4000 A P 0 7	✓ ✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓
Top: vertical Bottom: horizontal	Size I, up to 1600 A P 1 8 Size II, up to 2000 A P 1 8 Size II, up to 2500 A P 1 8 Size II, up to 3200 A P 1 8 Size III, up to 4000 A P 1 8	✓ ✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓
Top: connecting flange Bottom: horizontal	Size I, up to 1600 A P 1 9 Size II, up to 2000 A P 1 9 Size II, up to 2500 A P 1 9 Size II, up to 3200 A P 1 9 Size III, up to 4000 A P 1 9	✓ ✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓
Top: horizontal Bottom: vertical	Size I, up to 1600 A P 2 3 Size II, up to 2000 A P 2 3 Size II, up to 2500 A P 2 3 Size II, up to 3200 A P 2 3 Size III, up to 4000 A P 2 3 Size III, up to 5000 A P 2 3	✓ ✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓
For fixed-mounted circuit breakers			Additional price 3-pole	Additional price 4-pole
To select this connection method the 12th digit of the Order No. for the circuit breaker must be a "2"				
Connection methods for main connections				
Top: horizontal Bottom: accessible from front, single hole	Size I, up to 1600 A N 1 1 Size II, up to 2000 A N 1 1 Size II, up to 2500 A N 1 1 Size II, up to 3200 A N 1 1 Size III, up to 4000 A N 1 1	✓ ✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓
Top: vertical Bottom: horizontal	Size I, up to 1600 A N 2 0 Size II, up to 2000 A N 2 0 Size II, up to 2500 A N 2 0 Size II, up to 3200 A N 2 0 Size III, up to 4000 A N 2 0 Size III, up to 5000 A N 2 0	✓ ✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓
Top: horizontal Bottom: vertical	Size I, up to 1600 A N 2 4 Size II, up to 2000 A N 2 4 Size II, up to 2500 A N 2 4 Size II, up to 3200 A N 2 4 Size III, up to 4000 A N 2 4 Size III, up to 5000 A N 2 4	✓ ✓ ✓ ✓ ✓		✓ ✓ ✓ ✓ ✓

✓ Additional price

¹⁾ Only horizontal connection and vertical connection are available for circuit breakers with very high switching capacity C.

Air Circuit Breakers

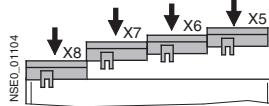
3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Accessories and Spare Parts

Overview

Determination of the number of auxiliary supply connectors required

This selection is only required if the guide frame is ordered under a separate Order No.



The required number of auxiliary supply connectors depends on:

- Operating mechanism type
- Electronic release with/without current transformer
- Type and number of auxiliary releases
- Number of auxiliary switches
- COM15/COM16 communication interface

		Number of auxiliary supply connectors	Terminal
a	First auxiliary supply connector X6 always required.	1	X6
b	Operating mechanisms		
b1	Manual operating mechanism with stored-energy feature with mechanical closing	0	
b2	Manual operating mechanism with stored-energy feature with mechanical and electrical closing	0	X6
b3	Manual/motorized operating mechanism with stored-energy feature with mechanical and electrical closing	+1	X5
c	Electronic releases		
c1	Electronic releases ETU15B, ETU25B, ETU27B	0	
c2	Electronic releases ETU45B, ETU76B (internal CubicleBUS)	+1	X8
c3	Connections for external current transformers for overload protection in the N conductor and ground-fault protection		
c4	Current transformer installed in the N conductor (required with 3-pole circuit breakers if c2 is not selected)	+1	X8
c4	Current transformer in the neutral point of the transformer (required if c2 or c3 is not selected)	+1	X8
d	Auxiliary releases		
d1	With/without 1st auxiliary release (shunt release F1)	0	X6
d2	2nd auxiliary release (shunt release F2, undervoltage release F3, delayable undervoltage release F4)	+1	X5
e	Auxiliary switch blocks		
e1	1st auxiliary switch block 2 NO + 2 NC	0	X6
e2	1st and 2nd auxiliary switch block 4 NO + 4 NC or 6 NO + 2 NC or 5 NO + 3 NC (required if b3 or d2 is not selected)	+1	X5
f	Communication modules		
f1	Without communication module COM15/COM16	0	
f2	With communication module COM15/COM16 – occupies the entire terminal strip X7, making the following options no longer possible: • Tripped signal switch S24 • Stored-energy status indication S21 • Electrical ON button S10 • Signaling switch on first and second auxiliary release S22 + S23	+1	X7
g	Optional signals/accessories		
g1	Tripped signaling switch S24 (only when f2 not selected)	+1	X7
g2	Stored energy status signaling switch S21 (only when f2 not selected, required if g1 not selected)	+1	X7
g3	Electric ON button S10 (only when f2 not selected, required if g1 or g2 not selected)	+1	X7
g4	Signaling switch at first auxiliary release S22 (only when f2 not selected, required if g1, g2 or g3 not selected)	+1	X7
g5	Signaling switch at second auxiliary release S23 (only when f2 not selected, required if g1, g2, g3 or g4 not selected)	+1	X7
g6	Switch on readiness signal switch S20	0	X6
g7	Motor shutdown switch S12 (only if motorized operating mechanism selected)	0	X5
g8	Remote reset solenoid F7 (required if c2 not selected)	+1	X8
h	Total number of auxiliary supply connectors	(max. 4)	

For ordering the auxiliary supply connectors see under "Accessories and Spare Parts, Guide Frames for AC Circuit Breakers/Non-Automatic Air Circuit Breakers", pages 1/30 to 1/33 and under "Accessories and Spare Parts, Auxiliary Conductor Connections, Auxiliary Supply Connectors", page 1/39.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Accessories and Spare Parts

Size	Max. rated circuit breaker current $I_{n\ max.}$	Switching capacity I_{cu}	DT	Guide frames for 3-pole circuit breakers/ non-automatic air circuit breakers	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A		kA		Order No. (Order No. supplements required acc. to table below)	Basic price per PU			kg
Vertical main circuit connection								
I	1000	... 66	B	3WL9 211-1AD□□-□□A1	1	1 unit	103	25.000
I	1600	... 66	B	3WL9 211-2AD□□-□□A1	1	1 unit	103	25.000
II	2000	... 100	B	3WL9 212-3AD□□-□□A1	1	1 unit	103	31.000
II	2500	... 100	B	3WL9 212-4AD□□-□□A1	1	1 unit	103	39.000
II	3200	... 100	B	3WL9 212-5AD□□-□□A1	1	1 unit	103	45.000
II	4000	... 100	B	3WL9 212-6AD□□-□□A1	1	1 unit	103	52.000
III	4000	... 100	B	3WL9 213-6AD□□-□□A1	1	1 unit	103	60.000
III	5000	... 100	B	3WL9 213-7AD□□-□□A1	1	1 unit	103	60.000
III	6300	... 100	B	3WL9 213-8AD□□-□□A1	1	1 unit	103	70.000
III	4000	... 150	B	3WL9 213-6AD□□-□□C1	1	1 unit	103	63.000
III	5000	... 150	B	3WL9 213-7AD□□-□□C1	1	1 unit	103	63.000
III	6300	... 150	B	3WL9 213-8AD□□-□□C1	1	1 unit	103	74.000
Main circuit connection connecting flanges								
I	1000	... 66	B	3WL9 211-1AE□□-□□A1	1	1 unit	103	25.000
I	1600	... 66	B	3WL9 211-2AE□□-□□A1	1	1 unit	103	25.000
II	2000	... 100	B	3WL9 212-3AE□□-□□A1	1	1 unit	103	31.000
II	2500	... 100	B	3WL9 212-4AE□□-□□A1	1	1 unit	103	39.000
II	3200	... 100	B	3WL9 212-5AE□□-□□A1	1	1 unit	103	45.000
III	4000	... 100	B	3WL9 213-6AE□□-□□A1	1	1 unit	103	60.000
Number of auxiliary supply connectors								
Without				Order No. supplements	Add. price			
1 connector				0	None			
2 connectors				1	✓			
3 connectors				2	✓			
4 connectors				3	✓			
For required number of auxiliary supply connectors, see table on page 1/29				4	✓			
Type of auxiliary circuit connections								
Without				0	None			
With screw connection (SIGUT, standard)				1	✓			
With screwless connection method (tension spring)				2	✓			
Position signaling switches								
Without				0	None			
Option 1	Connected position 1 CO, test position 1 CO, disconnected position 1 CO			1	✓			
Option 2	Connected position 3 CO, test position 2 CO, disconnected position 1 CO			2	✓			
Shutters								
Without				A	None			
With shutter,	Size I			B	✓			
2-part,	Size II				✓			
lockable	Size III				✓			
Add "–Z" to the complete Order No. and indicate the appropriate order code(s).				Order No. with "–Z" and additional order code	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 □□□ □□ □□ □□ □□ □□ □□ □□ □□ □□ □□ □□ □□ □□ □□ □□ –Z		Additional price	
Rated voltage 1000 V AC								
Size II, except 4000 A (switching capacity H)				A 05			✓	
Size III, not necessary with circuit breakers with very high switching capacity				A 05			✓	
Rated voltage 1150 V AC				A 15			✓	
Size II, except 4000 A (switching capacity H)								
Tinned version of the customer's connections on the guide frame ^{1/2)}								
Only for guide frames with horizontal connection or flange connection								
Size I				A 08			✓	
Size II				A 08			✓	
Size III				A 08			✓	

For main circuit connection front, single hole, main circuit connection front, double hole, and main circuit connection horizontal see the previous page.

All other accessory parts must be ordered by specifying "–Z" and the corresponding order code, see pages 1/24 to 1/28.

✓ Additional price

¹⁾ Front connections are tinned as standard.

²⁾ The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Accessories and Spare Parts

Size	Max. rated circuit breaker current $I_{n \max}$	Switching capacity I_{cu}	DT	Guide frames for 4-pole circuit breakers/ non-automatic air circuit breakers	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
A	kA			Order No. (Order No. supplements required acc. to table below)	Basic price per PU			kg
Front main circuit connection, single hole								
I	1000	... 66	B	3WL9 211-1BA□□-□□A1	1	1 unit	103	30.000
I	1600	... 66	B	3WL9 211-2BA□□-□□A1	1	1 unit	103	30.000
II	2000	... 100	B	3WL9 212-3BA□□-□□A1	1	1 unit	103	37.000
II	2500	... 100	B	3WL9 212-4BA□□-□□A1	1	1 unit	103	47.000
II	3200	... 100	B	3WL9 212-5BA□□-□□A1	1	1 unit	103	54.000
III	4000	... 100	B	3WL9 213-6BA□□-□□A1	1	1 unit	103	84.000
Front main circuit connection, double hole								
I	1000	... 66	B	3WL9 211-1BB□□-□□A1	1	1 unit	103	30.000
I	1600	... 66	B	3WL9 211-2BB□□-□□A1	1	1 unit	103	30.000
II	2000	... 100	B	3WL9 212-3BB□□-□□A1	1	1 unit	103	37.000
II	2500	... 100	B	3WL9 212-4BB□□-□□A1	1	1 unit	103	47.000
II	3200	... 100	B	3WL9 212-5BB□□-□□A1	1	1 unit	103	54.000
III	4000	... 100	B	3WL9 213-6BB□□-□□A1	1	1 unit	103	84.000
Horizontal main circuit connection								
I	1000	... 66	B	3WL9 211-1BC□□-□□A1	1	1 unit	103	30.000
I	1600	... 66	B	3WL9 211-2BC□□-□□A1	1	1 unit	103	30.000
II	2000	... 100	B	3WL9 212-3BC□□-□□A1	1	1 unit	103	37.000
II	2500	... 100	B	3WL9 212-4BC□□-□□A1	1	1 unit	103	47.000
II	3200	... 100	B	3WL9 212-5BC□□-□□A1	1	1 unit	103	54.000
III	4000	... 100	B	3WL9 213-6BC□□-□□A1	1	1 unit	103	84.000
III	5000	... 100	B	3WL9 213-7BC□□-□□A1	1	1 unit	103	84.000
III	4000	... 130	B	3WL9 213-6BC□□-□□C1	1	1 unit	103	87.000
III	5000	... 130	B	3WL9 213-7BC□□-□□C1	1	1 unit	103	87.000
Number of auxiliary supply connectors								
Without				Order No. supplements	Add. price			
1 connector				0	None			
2 connectors				1	✓			
3 connectors				2	✓			
4 connectors				3	✓			
For required number of auxiliary supply connectors, see table on page 1/29				4	✓			
Type of auxiliary circuit connections								
Without				0	None			
With screw connection (SIGUT, standard)				1	✓			
With screwless connection method (tension spring)				2	✓			
Position signaling switches								
Without				0	None			
Option 1	Connected position 1 CO, test position 1 CO, disconnected position 1 CO			1	✓			
Option 2	Connected position 3 CO, test position 2 CO, disconnected position 1 CO			2	✓			
Shutters								
Without				A	None			
With shutter, 2-part, lockable	Size I Size II Size III			B	✓ ✓ ✓			
Add "-Z" to the complete Order No. and indicate the appropriate order code(s).				Order No. with "-Z" and additional order code	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 -Z		Additional price	
Rated voltage 1000 V AC	Size II, except 4000 A (switching capacity H) Size III, not necessary with circuit breakers with very high switching capacity			A 0 5	A 0 5		✓ ✓	
Rated voltage 1150 V AC	Size II, except 4000 A (switching capacity H)			A 1 5			✓	
Tinned version of the customer's connections on the guide frame ^{1/2)} Only for guide frames with horizontal connection or flange connection	Size I Size II Size III			A 0 8	A 0 8 A 0 8		✓ ✓ ✓	

For main circuit connection vertical and main circuit connecting flange see the following page.

All other accessory parts must be ordered by specifying "-Z" and the corresponding order code, see pages 1/24 to 1/28.

✓ Additional price

¹⁾ Front connections are tinned as standard.

²⁾ The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Accessories and Spare Parts

Size	Max. rated circuit breaker current $I_{n\ max.}$	Switching capacity I_{cu}	DT	Guide frames for 4-pole circuit breakers/ non-automatic air circuit breakers	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A	kA		Order No. (Order No. supplements required acc. to table below)	Basic price per PU			kg
Vertical main circuit connection								
I	1000	... 66	B	3WL9 211-1BD□□-□□A1	1	1 unit	103	30.000
I	1600	... 66	B	3WL9 211-2BD□□-□□A1	1	1 unit	103	30.000
II	2000	... 100	B	3WL9 212-3BD□□-□□A1	1	1 unit	103	37.000
II	2500	... 100	B	3WL9 212-4BD□□-□□A1	1	1 unit	103	47.000
II	3200	... 100	B	3WL9 212-5BD□□-□□A1	1	1 unit	103	54.000
II	4000	... 100	B	3WL9 212-6BD□□-□□A1	1	1 unit	103	62.000
III	4000	... 100	B	3WL9 213-6BD□□-□□A1	1	1 unit	103	84.000
III	5000	... 100	B	3WL9 213-7BD□□-□□A1	1	1 unit	103	84.000
III	6300	... 100	B	3WL9 213-8BD□□-□□A1	1	1 unit	103	119.000
III	4000	... 130	B	3WL9 213-6BD□□-□□C1	1	1 unit	103	88.000
III	5000	... 130	B	3WL9 213-7BD□□-□□C1	1	1 unit	103	88.000
III	6300	... 130	B	3WL9 213-8BD□□-□□C1	1	1 unit	103	124.000
Main circuit connection connecting flanges								
I	1000	... 66	B	3WL9 211-1BE□□-□□A1	1	1 unit	103	30.000
I	1600	... 66	B	3WL9 211-2BE□□-□□A1	1	1 unit	103	30.000
II	2000	... 100	B	3WL9 212-3BE□□-□□A1	1	1 unit	103	37.000
II	2500	... 100	B	3WL9 212-4BE□□-□□A1	1	1 unit	103	47.000
II	3200	... 100	B	3WL9 212-5BE□□-□□A1	1	1 unit	103	54.000
III	4000	... 100	B	3WL9 213-6BE□□-□□A1	1	1 unit	103	84.000
Number of auxiliary supply connectors								
Without				Order No. supplements	Add. price			
1 connector				0	None			
2 connectors				1	✓			
3 connectors				2	✓			
4 connectors				3	✓			
For required number of auxiliary supply connectors, see table on page 1/29				4	✓			
Type of auxiliary circuit connections								
Without				0	None			
With screw connection (SIGUT, standard)				1	✓			
With screwless connection method (tension spring)				2	✓			
Position signaling switches								
Without				0	None			
Option 1	Connected position 1 CO, test position 1 CO, disconnected position 1 CO			1	✓			
Option 2	Connected position 3 CO, test position 2 CO, disconnected position 1 CO			2	✓			
Shutters								
Without				A	None			
With shutter, 2-part, lockable	Size I Size II Size III			B	✓			
Add "Z" to the complete Order No. and indicate the appropriate order code(s).				1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 3WL9 2 1 . - . . . - . . . -Z	Additional price			
Rated voltage 1000 V AC	Size II, except 4000 A (switching capacity H) Size III, not necessary with circuit breakers with very high switching capacity			A 0 5 A 0 5	✓ ✓			
Rated voltage 1150 V AC	Size II, except 4000 A (switching capacity H)			A 1 5	✓			
Tinned version of the customer's connections on the guide frame ^{1/2)} Only for guide frames with horizontal connection or flange connection	Size I Size II Size III			A 0 8 A 0 8 A 0 8	✓ ✓ ✓			

For main circuit connection front, single hole, main circuit connection front, double hole, and main circuit connection horizontal see the previous page.

All other accessory parts must be ordered by specifying "-Z" and the corresponding order code, see pages 1/24 to 1/28.

✓ Additional price

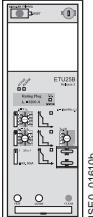
¹⁾ Front connections are tinned as standard.

²⁾ The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Accessories and Spare Parts

Designation	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
Protective devices with device holder and optional measurement function¹⁾							
 NSE0_01616b	Type	With protection function	Measurement function				
ETU15B	LI	Without	C	3WL9 311-5AA00-0AA2	1	1 unit	103 0.720
ETU25B	LSI	Without	C	3WL9 312-5AA00-0AA2	1	1 unit	103 0.720
ETU27B	LSING	Without	C	3WL9 312-7AA00-0AA2	1	1 unit	103 0.720
ETU45B (without display)	LSIN(G)	Without With measurement function Plus	C B	3WL9 314-5AA00-0AA2 3WL9 314-5AA20-0AA2	1 1	1 unit 103	0.720 0.720
ETU76B	LSIN(G)	Without With measurement function Plus	C B	3WL9 317-6AA00-0AA2 3WL9 317-6AA20-0AA2	1 1	1 unit 103	0.720 0.720
3WL9 311-AA0-0AA1							
Rated current modules / Rating plugs²⁾							
 NSE0_00992b	For size	Rated current I_n (A)					
3WL9 111-0AA64-0AA0	I, II	250	B	3WL9 111-0AA51-0AA0	1	1 unit	103 0.010
		315	B	3WL9 111-0AA52-0AA0	1	1 unit	103 0.010
		400	B	3WL9 111-0AA53-0AA0	1	1 unit	103 0.010
		500	B	3WL9 111-0AA54-0AA0	1	1 unit	103 0.010
		630	B	3WL9 111-0AA55-0AA0	1	1 unit	103 0.010
		800	B	3WL9 111-0AA56-0AA0	1	1 unit	103 0.010
		1000	B	3WL9 111-0AA57-0AA0	1	1 unit	103 0.010
	I, II, III	1250	B	3WL9 111-0AA58-0AA0	1	1 unit	103 0.010
		1600	B	3WL9 111-0AA61-0AA0	1	1 unit	103 0.010
	II, III	2000	B	3WL9 111-0AA62-0AA0	1	1 unit	103 0.010
		2500	B	3WL9 111-0AA63-0AA0	1	1 unit	103 0.010
		3200	B	3WL9 111-0AA64-0AA0	1	1 unit	103 0.010
		4000	B	3WL9 111-0AA65-0AA0	1	1 unit	103 0.010
	III	5000	B	3WL9 111-0AA66-0AA0	1	1 unit	103 0.010
		6300	B	3WL9 111-0AA67-0AA0	1	1 unit	103 0.010
3WL9 111-0AT53-0AA0							
Ground-fault modules³⁾							
 NSE0_01027a	GFM AT 45B (only for ETU45B) alarm and tripping	B	3WL9 111-0AT53-0AA0	1	1 unit	103	0.030
	GFM AT 55B-76B (only for ETU76B) alarm and tripping	B	3WL9 111-0AT56-0AA0	1	1 unit	103	0.030
3WL9 111-0AT81-0AA0							
Displays							
 NSE0_01609	4-line displays for ETU45B	B	3WL9 111-0AT81-0AA0	1	1 unit	103	0.060
3WL9 111-0AT81-0AA0							
Current transformers for N conductor protection							
 NSE0_00990a	Internal transformers for N conductors (not for ETU Release 2) Including wiring kit	Size I Size II Size III	B	3WL9 111-0AA11-0AA0 3WL9 111-0AA12-0AA0 3WL9 111-0AA13-0AA0	1 1 1	1 unit 103	0.200 0.280 0.500
3WL9 111-0AA2.-0AA0	Internal transformers for N conductors Only for ETU Release 2 Including wiring kit	Size I Size II Size III	B	3WL9 111-0AA14-0AA0 3WL9 111-0AA15-0AA0 3WL9 111-0AA16-0AA0	1 1 1	1 unit 103	0.200 0.280 0.500
 NSE0_00991a	External transformers for N conductors (for T5, "Measurement Method" function see Technical Information at www.siemens.com/lowvoltage/support .	Size I Size II Size III	B	3WL9 111-0AA21-0AA0 3WL9 111-0AA22-0AA0 3WL9 111-0AA23-0AA0	1 1 1	1 unit 103	0.300 0.380 0.680
3WL9 111-0AA3.-0AA0	External transformers for N conductors with copper connection pieces (for T5, "Measurement Method" function see Technical Information at www.siemens.com/lowvoltage/support .	Size I Size II Size III	B	3WL9 111-0AA31-0AA0 3WL9 111-0AA32-0AA0 3WL9 111-0AA33-0AA0	1 1 1	1 unit 103	1.600 4.260 8.500
EMC filters							
	EMC filters Common-mode interference suppressor filters (e.g. in IT networks, caused by frequency converters) Insertion loss (asymmetric) in the range 40 kHz to 10 MHz >40 dB.	Not for ETU Release 2 Only for ETU Release 2	B	3WL9 111-0AK32-0AA0 3WL9 111-0AK34-0AA0	1 1	1 unit 103	0.280 0.280

¹⁾ For replacement in existing circuit breakers please specify the circuit breaker ID No. when ordering.

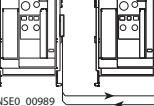
²⁾ With the rated current module selected, the maximum rated current $I_{n\max}$ of the circuit breaker must not be exceeded.
The following applies $I_n \leq I_{n\max}$.

³⁾ For direct measurement of the ground-fault current, e.g. in the neutral point of the transformer, a 1200 A/1 A current transformer, class 1, is required. The internal load of the SENTRON 3WL is 0.11 Ω . If the ground-fault current is to be determined using the vectorial sum of the phases, a current transformer must be installed in the neutral conductor.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Accessories and Spare Parts

	Designation	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg		
Locking mechanisms										
	 NSE0_00987	Made by CES Made by IKON Made by Profalux Made by Ronis	B B B B	3WL9 111-0BA81-0AA0 3WL9 111-0BA83-0AA0 3WL9 111-0BA85-0AA0 3WL9 111-0BA86-0AA0	1 1 1 1	1 unit 1 unit 1 unit 1 unit	103 103 103 103	0.800 0.800 0.800 0.800		
3WL9 111-0BA83-0AA0	Spare part for option R81 , R85 , R86 , see "-Z" + order code, page 1/27 .									
	 NSE0_00988	Not possible in combination with "Locking device to prevent opening of the cabinet door" (order code "R30") or "Locking device to prevent movement with the cabinet door open" (order code "R50").								
3WL9 111-0BB12-0AA0	To prevent opening of the cabinet door in ON position (can be defeated) Spare part for option S30 , see "-Z" + order code, page 1/27 .	Fixed mounting	B	3WL9 111-0BB12-0AA0	1	1 unit	103	0.600		
	To prevent opening of the cabinet door (can be defeated) Spare part for option R30 , see "-Z" + order code, page 1/27 . Not possible in combination with "Locking device to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").	Guide frames	B	3WL9 111-0BB13-0AA0	1	1 unit	103	0.150		
	To prevent movement with the cabinet door open Spare part for option R50 , see "-Z" + order code, page 1/27 . Not possible in combination with "Locking device to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").	Guide frames	B	3WL9 111-0BB15-0AA0	1	1 unit	103	0.150		
Interlocks										
	 NSE0_00989	Mutual mechanical interlocking , with 2000 mm Bowden wire (one required for each circuit breaker)	Fixed-mounted circuit breakers Spare part for option S55 , see "-Z" + order code, page 1/26 .	B B	3WL9 111-0BB21-0AA0 3WL9 111-0BB24-0AA0	1 1	1 unit 1 unit	103 103	2.700 1.130	
3WL9 111-0BB21-0AA0			Module for withdrawable circuit breaker with guide frame Spare part for option R55 , see "-Z" + order code, page 1/26 .	B	3WL9 111-0BB22-0AA0	1	1 unit	103	1.100	
			Module for withdrawable circuit breaker Spare part for option R56 , see "-Z" + order code, page 1/26 .	B	3WL9 111-0BB23-0AA0	1	1 unit	103	0.150	
			Adapter for size III Withdrawable circuit breaker Spare part for option R57 , see "-Z" + order code, page 1/26 .	B	3WL9 111-0BB30-0AA0	1	1 unit	103	0.100	
	 NSE0_01886	Couplings on the circuit breaker (with ring) for mutual interlocking Can be used in all circuit breakers		B	3WL9 112-8AH47-0AA0	1	1 unit	103	0.160	
3WL9 112-8HA47-0AA0			Bowden wires	2000 mm 3000 mm 4500 mm	B B B	3WL9 111-0BB45-0AA0 3WL9 111-0BB46-0AA0 3WL9 111-0BB47-0AA0	1 1 1	1 unit 1 unit 1 unit	103 103 103	0.150 0.220 0.360

* You can order this quantity or a multiple thereof.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

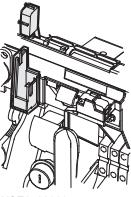
Accessories and Spare Parts

	Designation	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
Test devices								
	Manual tester Release 2 for electronic releases ETU15B to ETU76B	B	3WL9 111-0AT32-0AA0			1	1 unit	103 1.100
	For testing the electronic release functions							
Function testers								
	For testing the tripping characteristics for electronic releases ETU15B to ETU76B	D	3WL9 111-0AT44-0AA0			1	1 unit	103 8.210
Capacitor storage devices								
	Capacitor storage devices		Rated control supply voltage/rated operational voltage					
	<u>For shunt release</u>							
	Storage time 5 min							
	Rated control supply voltage must match the rated control supply voltage of the shunt release	50/60 Hz V AC 220 ... 240	V DC 220 ... 250	B	3WL9 111-0BA14-0AA0		1	1 unit 103 0.520
	Suitable also for 3VL and 3WN circuit breakers							

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Accessories and Spare Parts

	Designation	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
Indicators, control elements								
	Ready-to-close signaling switches 1 NO contact Spare part for option C22 , see "-Z" + order code, page 1/25 .	B	3WL9 111-0AH01-0AA0			1	1 unit	103 0.020
 NSEO_00993a	Signaling switches¹⁾ ²⁾ 1st or 2nd auxiliary release Spare part for option C26 and C27 , see "-Z" + order code, page 1/25 .	B	3WL9 111-0AH02-0AA0			1	1 unit	103 0.020
3WL9 111-0AH01-0AA0	Tripped signaling switches¹⁾ ²⁾ 1 CO Spare part for option K07 , see "-Z" + order code, page 1/25 .	B	3WL9 111-0AH14-0AA0			1	1 unit	103 0.080
	Operating cycles counters, mechanical³⁾ Spare part for option C01 , see "-Z" + order code, page 1/25 .	B	3WL9 111-0AH07-0AA0			1	1 unit	103 0.100
	Stored energy status signaling switches¹⁾ ²⁾ 1 NO contact Spare part for option C20 , see "-Z" + order code, page 1/25 .	B	3WL9 111-0AH08-0AA0			1	1 unit	103 0.030
3WL9 111-0AH02-0AA0	Position signaling switches for guide frames 1st block (3 CO contacts) 2nd block (6 CO contacts) Spare part for option R15 and R16 , see "-Z" + order code, page 1/26 .	B	3WL9 111-0AH11-0AA0			1	1 unit	103 0.200
	Electrical ON buttons¹⁾ ⁴⁾ (button+wiring) ²⁾ , for operator panel. Possible only for circuit breakers with closing solenoid. Spare part for option C11 and C12 , see "-Z" + order code, page 1/25 .	B	3WL9 111-0AJ02-0AA0			1	1 unit	103 0.150
3WL9 111-0AH07-0AA0		B	3WL9 111-0AJ03-0AA0			1	1 unit	103 0.140
		B	3WL9 111-0AJ05-0AA0			1	1 unit	103 0.140
3WL9 111-0AH12-0AA0	Motor shutdown switches⁵⁾ (mounting on operator panel) Spare part for option S25 , see "-Z" + order code, page 1/25 .	B	3WL9 111-0AJ06-0AA0			1	1 unit	103 0.100
	EMERGENCY-STOP pushbuttons Mushroom pushbutton instead of the mechanical OFF pushbutton Spare part for option S24 , see "-Z" + order code, page 1/25 .	B	3WL9 111-0BA72-0AA0			1	1 unit	103 0.080
3WL9 111-0AJ0-0AA0								
3WL9 111-0BA72-0AA0								

¹⁾ Not possible with communications interface option, order code "F02" or "F12".

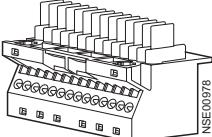
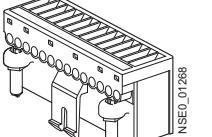
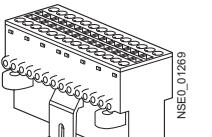
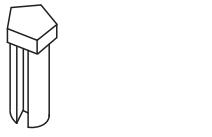
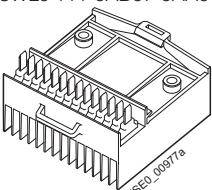
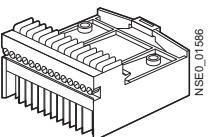
²⁾ X7 manual connector required for circuit breakers or guide frames. If this is not already available, please order additionally (see pages 1/29 and 1/39).

³⁾ Only in conjunction with motorized operating mechanism.

⁴⁾ Not possible with motor shutdown switch.

⁵⁾ Not possible with electrical ON button.

Air Circuit Breakers**3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)****Accessories and Spare Parts**

	Designation	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Auxiliary conductor connections								
 NSE00978	Male connectors for circuit breakers ①	B	3WL9 111-0AB01-0AA0		1	1 unit	103	0.100
3WL9 111-0AB01-0AA0	Extension for the 1000 V male connector versions (male connector must be ordered separately)	B	3WL9 111-0AB02-0AA0		1	1 unit	103	0.150
 NSE0_01268	Male connectors and extension for 1000 V	B	3WL9 111-0AB10-0AA0		1	1 unit	103	1.000
3WL9 111-0AB03-0AA0	Auxiliary supply connectors for circuit breakers or guide frames ②	Screw connection (SIGUT) Screwless connection method (tension spring)	3WL9 111-0AB03-0AA0		1	1 unit	103	0.070
 NSE0_01269			3WL9 111-0AB04-0AA0		1	1 unit	103	0.070
3WL9 111-0AB04-0AA0	Coding kits for fixed-mounted version (X5 to X8) ③	B	3WL9 111-0AB07-0AA0		1	1 unit	103	0.020
 NSE0_00974								
3WL9 111-0AB07-0AA0	Sliding contact modules for guide frames ④	B	3WL9 111-0AB08-0AA0		1	1 unit	103	0.100
 NSE0_00977a								
3WL9 111-0AB08-0AA0	One-part sliding contact modules for guide frames ⑤ Screw connection (SIGUT)	B	3WL9 111-0AB18-0AA0		1	1 unit	103	0.120
 NSE0_01686								
3WL9 111-0AB18-0AA0	Blanking blocks for circuit breakers	B	3WL9 111-0AB12-0AA0		1	1 unit	103	0.030

For a complete auxiliary current connection you must order:

Fixed-mounted version: ① + ② + ③

Drawable version: ① + ④ + ②

or

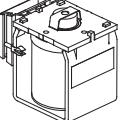
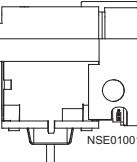
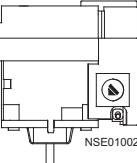
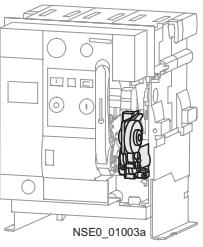
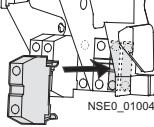
① + ⑤

* You can order this quantity or a multiple thereof.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Accessories and Spare Parts

	Designation	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
Auxiliary releases								
		Closing solenoids/shunt releases						
 NSE01000	24 V DC 100 % duty ratio	B	3WL9 111-0AD01-0AA0		1	1 unit	103	0.700
3WL9 111-0AD06-0AA0	30 V DC	B	3WL9 111-0AD02-0AA0		1	1 unit	103	0.700
	48 V DC	B	3WL9 111-0AD03-0AA0		1	1 unit	103	0.700
	60 V DC	B	3WL9 111-0AD04-0AA0		1	1 unit	103	0.700
	110 ... 125 V DC /110 V AC	B	3WL9 111-0AD05-0AA0		1	1 unit	103	0.700
	220 V DC/230 V AC	B	3WL9 111-0AD06-0AA0		1	1 unit	103	0.700
 NSE01001	24 V DC 5 % duty ratio ¹⁾	B	3WL9 111-0AD11-0AA0		1	1 unit	103	0.700
3WL9 111-0AE0...-0AA0	48 V DC	B	3WL9 111-0AD12-0AA0		1	1 unit	103	0.700
	110 ... 125 V DC/110 ... 127 V AC	B	3WL9 111-0AD13-0AA0		1	1 unit	103	0.700
	220 ... 250 V DC/208 ... 240 V AC	B	3WL9 111-0AD14-0AA0		1	1 unit	103	1.800
		Undervoltage release						
Instantaneous								
 NSE01002	24 V DC	B	3WL9 111-0AE01-0AA0		1	1 unit	103	0.730
3WL9 111-0AE1...-0AA0	30 V DC	B	3WL9 111-0AE02-0AA0		1	1 unit	103	0.730
	48 V DC	B	3WL9 111-0AE03-0AA0		1	1 unit	103	0.730
	60 V DC	B	3WL9 111-0AE07-0AA0		1	1 unit	103	0.730
	110 ... 125 V DC/110 ... 127 V AC	B	3WL9 111-0AE04-0AA0		1	1 unit	103	0.730
	220 ... 250 V DC/208 ... 240 V AC	B	3WL9 111-0AE05-0AA0		1	1 unit	103	0.730
	380 ... 415 V AC	B	3WL9 111-0AE06-0AA0		1	1 unit	103	0.730
Delayed								
	48 V DC	B	3WL9 111-0AE11-0AA0		1	1 unit	103	0.740
	110 ... 125 V DC/110 ... 127 V AC	B	3WL9 111-0AE12-0AA0		1	1 unit	103	0.740
	220 ... 250 V DC/208 ... 240 V AC	B	3WL9 111-0AE13-0AA0		1	1 unit	103	0.740
	380 ... 415 V AC	B	3WL9 111-0AE14-0AA0		1	1 unit	103	0.740
Operating mechanisms								
		MotORIZED operating mechanisms²⁾						
 NSE0_01003a	24 ... 30 V DC	B	3WL9 111-0AF01-0AA0		1	1 unit	103	1.510
3WL9 111-0AF0...-0AA0	48 ... 60 V DC	B	3WL9 111-0AF02-0AA0		1	1 unit	103	1.510
	110 ... 125 V DC/110 ... 127 V AC	B	3WL9 111-0AF03-0AA0		1	1 unit	103	1.510
	220 ... 250 V DC/208 ... 240 V AC	B	3WL9 111-0AF04-0AA0		1	1 unit	103	1.510
Auxiliary contacts								
		Auxiliary switch blocks						
 NSE0_01004	2 NO + 2 NC	B	3WL9 111-0AG01-0AA0		1	1 unit	103	0.180
3WL9 111-0AG03...-0AA0	2 NO	B	3WL9 111-0AG02-0AA0		1	1 unit	103	0.080
	1 NO + 1 NC	B	3WL9 111-0AG03-0AA0		1	1 unit	103	0.070

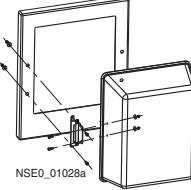
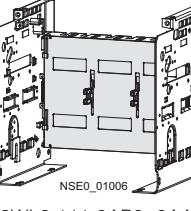
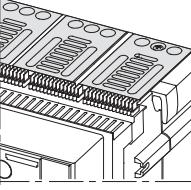
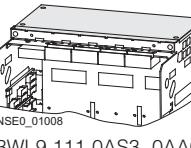
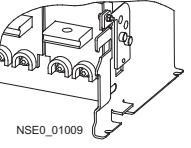
¹⁾ Overexcited, i.e. opening time 50 ms (standard > 80 ms).

²⁾ X7 manual connector required for circuit breakers or guide frames. If this is not already available, please order additionally ([see pages 1/29 and 1/39](#)).

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Accessories and Spare Parts

	Designation	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
Door sealing frames, hoods, shutters								
	Door sealing frames Spare part for option T40 , see "-Z" + order code, page 1/25 .	B	3WL9 111-0AP01-0AA0		1	1 unit	103	0.360
	Protective covers, IP55 Cannot be used in conjunction with door sealing frames, hood removable and can be opened on both sides	B	3WL9 111-0AP02-0AA0		1	1 unit	103	1.600
	Shutters Spare part for option R21 , see "-Z" + order code, page 1/26 .							
3WL9 111-0AP02-0AA0	3-pole	Size I	3WL9 111-0AP04-0AA0		1	1 unit	103	0.500
		Size II	3WL9 111-0AP06-0AA0		1	1 unit	103	0.630
		Size III	3WL9 111-0AP07-0AA0		1	1 unit	103	0.860
3WL9 111-0AP0.-0AA0	4-pole	Size I	3WL9 111-0AP08-0AA0		1	1 unit	103	0.600
		Size II	3WL9 111-0AP11-0AA0		1	1 unit	103	0.770
		Size III	3WL9 111-0AP12-0AA0		1	1 unit	103	1.070
Arc chute								
	Arc chute 690 V	Size I	3WL9 111-0AS01-0AA0		1	1 unit	103	1.110
3WL9 111-0AS0.-0AA0		Size II	3WL9 111-0AS02-0AA0		1	1 unit	103	1.680
		Size III	3WL9 111-0AS03-0AA0		1	1 unit	103	2.980
	1000 V / 1150 V	Size II	3WL9 111-0AS05-0AA0		1	1 unit	103	3.140
		Size III	3WL9 111-0AS06-0AA0		1	1 unit	103	5.620
	Arc chute covers¹⁾ Parts kit for guide frame Spare part for option R10 , see "-Z" + order code, page 1/26 .							
3WL9 111-0AS3.-0AA0	3-pole	Size I	3WL9 111-0AS32-0AA0		1	1 unit	103	1.850
		Size II	3WL9 111-0AS36-0AA0		1	1 unit	103	2.600
		Size III	3WL9 111-0AS38-0AA0		1	1 unit	103	4.050
	4-pole	Size I	3WL9 111-0AS42-0AA0		1	1 unit	103	2.340
		Size II	3WL9 111-0AS44-0AA0		1	1 unit	103	3.300
		Size III	3WL9 111-0AS46-0AA0		1	1 unit	103	5.210
Coding for withdrawable version								
	Coding for withdrawable version By customer, for 36 coding variants	B	3WL9 111-0AR12-0AA0		1	1 unit	103	0.400
3WL9 111-0AR12-0AA0								

¹⁾ Not available for
 - 1000-V version (order code "A05"),
 - 1150-V version (order code "A15"),
 - DC version,
 - 4000 A size II,
 - circuit breaker with very high switching capacity C.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

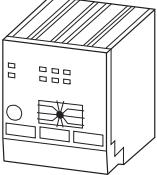
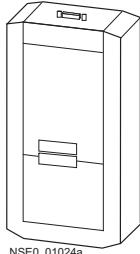
Accessories and Spare Parts

	Designation	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg	
Grounding connection									
	Grounding connection between the guide frame and the withdrawable circuit breaker For 30 kA ground short-circuit current ¹⁾ Contacting module for guide frame	Size I, II ²⁾ Size III	B B	3WL9 111-0BA01-0AA0 3WL9 111-0BA02-0AA0		1 1	1 unit 1 unit	103 103	0.330 0.350
3WL9 111-0BA02-0AA0									
Contacting modules for withdrawable circuit breakers									
	3-pole	Size I Size II ²⁾ Size III	B B B	3WL9 111-0BA05-0AA0 3WL9 111-0BA06-0AA0 3WL9 111-0BA07-0AA0		1 1 1	1 unit 1 unit 1 unit	103 103 103	1.250 1.530 2.270
3WL9 111-0BA07-0AA0									
	4-pole	Size I Size II ²⁾ Size III	B B B	3WL9 111-0BA08-0AA0 3WL9 111-0BA04-0AA0 3WL9 111-0BA10-0AA0		1 1 1	1 unit 1 unit 1 unit	103 103 103	1.500 1.850 2.950
Support brackets									
	Support brackets For mounting fixed-mounted circuit breakers on vertical plane, only for sizes I and II (1 set = 2 units)	B		3WL9 111-0BB50-0AA0		1	1 unit	103	7.000
3WL9 111-0BB50-0AA0									

¹⁾ For 60 kA ground short-circuit current, order 2.

²⁾ Can also be used for size II, 4000 A.

Air Circuit Breakers**3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)****Accessories and Spare Parts**

	Designation	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
CubicleBUS modules¹⁾								
 NSE0_01023a	Digital output modules with rotary coding switch, relay outputs	B	3WL9 111-0AT26-0AA0		1	1 unit	103	0.240
	Digital output modules, configurable, relay outputs	B	3WL9 111-0AT20-0AA0		1	1 unit	103	0.310
	Digital input module	B	3WL9 111-0AT27-0AA0		1	1 unit	103	0.240
	Analog output modules	B	3WL9 111-0AT23-0AA0		1	1 unit	103	0.240
	Zone Selective Interlocking modules	B	3WL9 111-0AT21-0AA0		1	1 unit	103	0.240
Parameterization systems								
 NSE0_01024a	Breaker Data Adapters (BDA)²⁾	B	3WL9 111-0AT28-0AA0		1	1 unit	103	0.900
	BDA Plus³⁾	B	3WL9 111-0AT33-0AA0		1	1 unit	103	1.200
	Connection cables for BDA Plus	B	3WL9 111-0BC21-0AA0		1	1 unit	103	0.350
	Switch ES Power parameterization software	A	3ZS2 311-0CC10-0YA0		1	1 unit	133	0.200
Accessories for communications								
	Preassembled cables for CubicleBUS modules	0.2 m long, for connection to SENTRON 3WL with COM15/COM16	B	3WL9 111-0BC04-0AA0	1	1 unit	103	0.020
		1 m long, for connection to SENTRON 3WL with COM15/COM16	B	3WL9 111-0BC02-0AA0	1	1 unit	103	0.050
		2 m long, for connection to SENTRON 3WL with COM15/COM16	B	3WL9 111-0BC03-0AA0	1	1 unit	103	0.060
		2 m long, for connection to SENTRON 3WL without COM15/COM16	B	3WL9 111-0BC05-0AA0	1	1 unit	103	0.070
	SENTRON manuals for communication solutions	Detailed description of the communication functions for SENTRON circuit breakers. Installation, connection, commissioning, data transmission to the PLC, including description of Switch ES Power and BDA. PROFIBUS, German, token fee PROFIBUS, English, token fee MODBUS, German, token fee MODBUS, English, token fee Free download from: www.siemens.com/lowvoltage/manuals		A5E0151347 A5E0151353 3ZX10 12-0WL10-1AB1 3ZX10 12-0WL10-1AC1				
	Voltage transformers , 3-pole, for SENTRON 3WL with measurement function <i>Plus⁴⁾</i>	380 ... 690 V/100 V, class 0.5	B	3WL9 111-0BB68-0AA0	1	1 unit	103	2.600

All communication components, **CubicleBUS** modules and measurement functions are available for the ETU45B and ETU76B releases.

¹⁾ Each **CubicleBUS** module is supplied with a 0.2 m factory-fitted cable to connect the modules with each other. A longer factory-fitted cable is required for connection to the circuit breaker.

²⁾ A 24 V DC power supply unit is required.

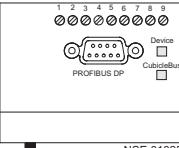
³⁾ Operation under Windows Vista and Windows 7 on request.

⁴⁾ Is required for operation of the measurement function *Plus*.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

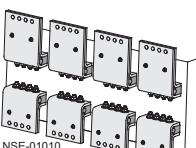
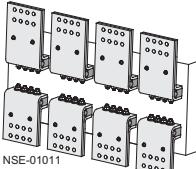
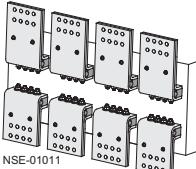
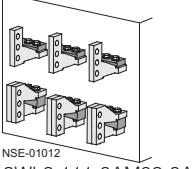
Accessories and Spare Parts

	Designation	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg	
Retrofitting and spare parts									
	PROFIBUS retrofit kits	B	3WL9 111-0AT12-0AA0			1	1 unit	103	0.260
3WL9 111-0AT15-0AA0	COM15 PROFIBUS module	B	3WL9 111-0AT15-0AA0			1	1 unit	103	0.140
	COM16 MODBUS modules	B	3WL9 111-0AT17-0AA0			1	1 unit	103	0.140
	MODBUS IEC retrofit kits	B	3WL9 111-0AT18-0AA0			1	1 unit	103	0.260
	Breaker status sensor (BSS)	B	3WL9 111-0AT16-0AA0			1	1 unit	103	0.120
	Measurement function Plus¹	B	3WL9 111-0AT04-0AA0			1	1 unit	103	0.250

All communication components, **CubicleBUS** modules and measurement functions are available for the ETU45B and ETU76B releases.

¹⁾ A measuring accuracy of 3 % is reached if retrofitted.

Air Circuit Breakers**3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)****Accessories and Spare Parts**

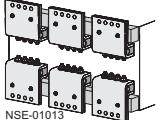
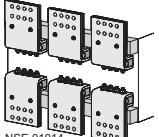
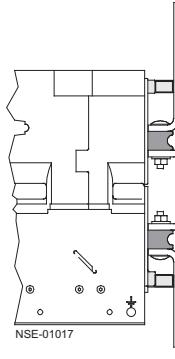
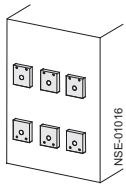
	Designation	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
Main conductor connections, fixed mounting (essential accessory)								
3WL9 111-0AL06-0AA0  NSE-01010	Specified for each connection							
	Front-accessible main connections, single hole at top							
	Size I, up to 1000 A	B	3WL9 111-0AL01-0AA0	1	1 unit	103	1.100	
	Size I, 1250 to 1600 A	B	3WL9 111-0AL02-0AA0	1	1 unit	103	1.600	
	Size II, up to 2000 A	B	3WL9 111-0AL03-0AA0	1	1 unit	103	2.000	
	Size II, up to 2500 A	B	3WL9 111-0AL04-0AA0	1	1 unit	103	3.600	
	Size II, up to 3200 A	B	3WL9 111-0AL05-0AA0	1	1 unit	103	3.500	
	Size III, up to 4000 A	B	3WL9 111-0AL06-0AA0	1	1 unit	103	6.100	
3WL9 111-0AL56-0AA0  NSE-01011	Front-accessible main connections, single hole at bottom							
	Size I, up to 1000 A	B	3WL9 111-0AL51-0AA0	1	1 unit	103	1.000	
	Size I, 1250 to 1600 A	B	3WL9 111-0AL52-0AA0	1	1 unit	103	1.300	
3WL9 111-0AL14-0AA0  NSE-01011	Front-accessible main connections, acc. to DIN 43673, double hole at top							
	Size I, up to 1000 A	B	3WL9 111-0AL07-0AA0	1	1 unit	103	1.400	
	Size I, 1250 to 1600 A	B	3WL9 111-0AL08-0AA0	1	1 unit	103	2.000	
	Size II, up to 2000 A	B	3WL9 111-0AL11-0AA0	1	1 unit	103	2.400	
	Size II, up to 2500 A	B	3WL9 111-0AL12-0AA0	1	1 unit	103	4.500	
	Size II, up to 3200 A	B	3WL9 111-0AL13-0AA0	1	1 unit	103	4.400	
	Size III, up to 4000 A	B	3WL9 111-0AL14-0AA0	1	1 unit	103	7.800	
3WL9 111-0AL64-0AA0  NSE-01012	Front-accessible main connections, acc. to DIN 43673, double hole at bottom							
	Size I, up to 1000 A	B	3WL9 111-0AL57-0AA0	1	1 unit	103	1.300	
	Size I, 1250 to 1600 A	B	3WL9 111-0AL58-0AA0	1	1 unit	103	1.700	
	Size II, up to 2000 A	B	3WL9 111-0AL61-0AA0	1	1 unit	103	2.000	
	Size II, up to 2500 A	B	3WL9 111-0AL62-0AA0	1	1 unit	103	3.700	
	Size II, up to 3200 A	B	3WL9 111-0AL63-0AA0	1	1 unit	103	3.600	
	Size III, up to 4000 A	B	3WL9 111-0AL64-0AA0	1	1 unit	103	6.400	
3WL9 111-0AM03-0AA0	Rear vertical main connections							
	Size I ¹⁾ , up to 1600 A	B	3WL9 111-0AM01-0AA0	1	1 unit	103	0.500	
	Size II ²⁾ , up to 3200 A	B	3WL9 111-0AM02-0AA0	1	1 unit	103	2.200	
	Size III, up to 6300 A	B	3WL9 111-0AM03-0AA0	1	1 unit	103	5.000	

- ¹⁾ In the case of vertical connection size I, up to 1000 A one 3WL9 111-0AM01-0AA0 vertical connection is required, up to 1600 A two 3WL9 111-0AM01-0AA0 vertical connections are required.
- ²⁾ In the case of vertical connection size II, up to 2500 A one 3WL9 111-0AM02-0AA0 vertical connection is required, up to 3200 A two 3WL9 111-0AM02-0AA0 vertical connections are required.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Accessories and Spare Parts

	Designation	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
Main conductor connections, withdrawable versions (essential accessory)								
Specified for each connection								
 NSE-01013 3WL9 111-0AN06-0AA0		Front-accessible main connections, single hole at top or at bottom¹⁾						
 NSE-01014 3WL9 111-0AN14-0AA0		Front-accessible main connections, acc. to DIN 43673, double hole at top or at bottom¹⁾						
 NSE-01017 3WL9 111-0AN41-0AA0		Supports for front and DIN connecting bars						
 NSE-01015 3WL9 111-0AN23-0AA0		Rear vertical main connections						
 NSE-01016 3WL9 111-0AN24-0AA0		Rear horizontal main connections						
		Connecting flanges						

¹⁾ When using front-accessible main connections (withdrawable circuit breakers) supports are required.

Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

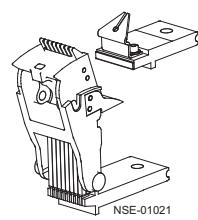
Accessories and Spare Parts

Designation	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
							kg
Conversion sets							
For converting fixed-mounted circuit breakers into withdrawable circuit breakers Guide frames and sliding contact modules must be ordered separately.							
Number of poles	Size						
3-pole	I	B 3WL9 111-0BC11-0AA0			1 1 unit	103	5.100
	II	B 3WL9 111-0BC12-0AA0			1 1 unit	103	5.900
	III	B 3WL9 111-0BC13-0AA0			1 1 unit	103	8.100
4-pole	I	B 3WL9 111-0BC14-0AA0			1 1 unit	103	6.400
	II	B 3WL9 111-0BC15-0AA0			1 1 unit	103	6.450
	III	B 3WL9 111-0BC16-0AA0			1 1 unit	103	10.700

Main contact elements

You must specify the circuit breaker ID No. when ordering!

Specified for each connection (depending on the number of poles on the circuit breaker, order 3 or 4 units)



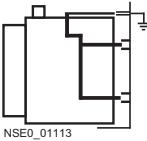
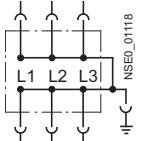
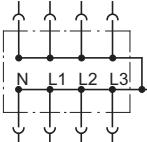
Sizes	I_n max	Order No. is automatically adapted to the circuit breaker ID number				
I	Up to 1600 A	B 3WL9 111-0AM90 L1Y ¹⁾	1	1 unit	103	2.800
II	Up to 2500 A	B 3WL9 111-0AM91 L1Y ¹⁾	1	1 unit	103	5.870
II	Up to 4000 A	B 3WL9 111-0AM92 L1Y ¹⁾	1	1 unit	103	7.700
III	Up to 6300 A	B 3WL9 111-0AM93 L1Y ¹⁾	1	1 unit	103	13.740

¹⁾ Please specify the circuit breaker ID No. in plain text when ordering.

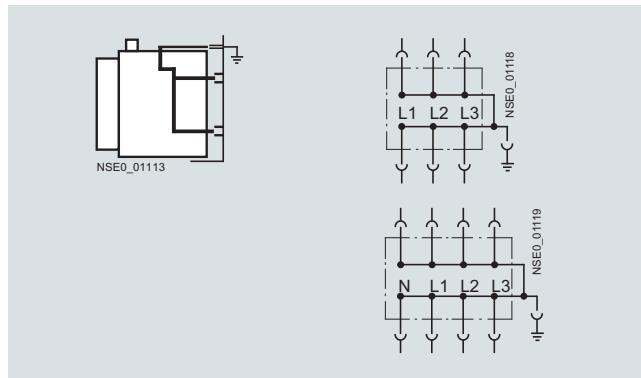
Air Circuit Breakers

3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

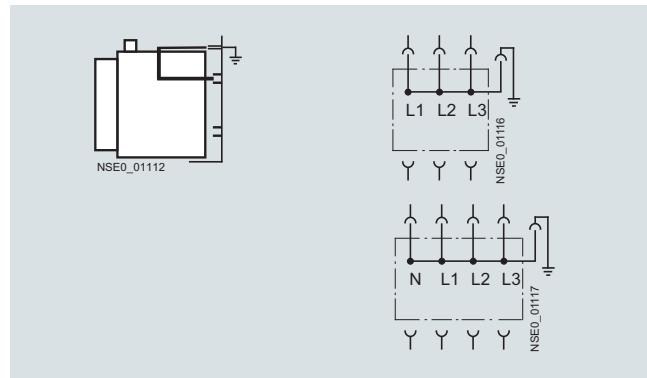
Accessories and Spare Parts

Schematics in as-supplied state	Version	Size	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.	
									kg	
Withdrawable short-circuiting, grounding and bridging units										
		Top and bottom parts of system are short-circuited and grounded	3-pole	Up to 1600 A I Up to 3200 A II Up to 6300 A III	C	3WL9 111-0BD01-0AA0 3WL9 111-0BD03-0AA0 3WL9 111-0BD05-0AA0	1 1 1	1 unit 1 unit 1 unit	103 103 103	30.000 40.500 65.000
(as-supplied state) 			4-pole	Up to 1600 A I Up to 3200 A II Up to 6300 A III	C	3WL9 111-0BD02-0AA0 3WL9 111-0BD04-0AA0 3WL9 111-0BD06-0AA0	1 1 1	1 unit 1 unit 1 unit	103 103 103	35.000 46.000 70.000

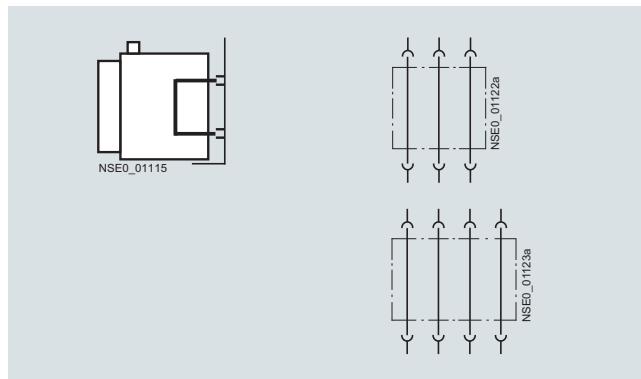
Conversion for the following applications is possible



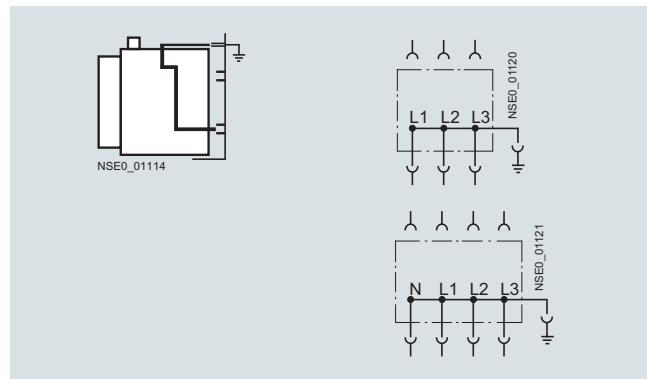
Top and bottom parts of system are short-circuited and grounded
(as-supplied state)



Top part of system is short-circuited and grounded,
infeed from bottom



Withdrawable bridging unit, infeed and outgoing terminals are permanently connected to each other



Bottom part of system is short-circuited and grounded,
infeed from top

Air Circuit Breakers

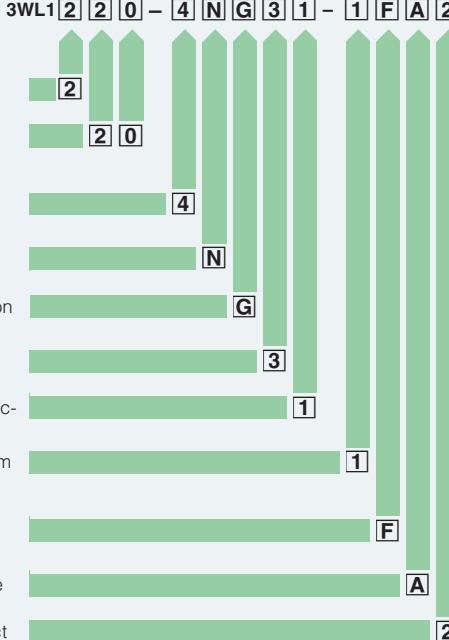
3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)

Accessories and Spare Parts

Options

Structure of the Order No.

Example	3WL1 [] [] [] - [] [] [] - [] [] [] - [] [] []	
5. position:	Size	Size II
6. and 7th positions:	Max. rated circuit breaker current $I_{n \max}$	$I_{n \max} = 2000 \text{ A}$
8. position:	Switching capacity class	High breaking capacity "H": 100 kA
9. position:	Electronic release	ETU76B with pixel graphics display ...
10. position:	Electronic release supplement	... with ground-fault protection
11. position:	Number of poles	Three-pole
12. position:	Installation type	Fixed mounting, main connections on rear, vertical
13. position:	Operating mechanism	Manual operating mechanism with mechanical closing
14. position:	1. Auxiliary release	Shunt release 50/60 Hz 110 V AC
15. position:	2. Auxiliary release	Without 2nd auxiliary release
16. position:	Auxiliary switches	2 NO contact + 2 NC contact



An important prerequisite for computer-based order processing is that order numbers must be structured according to standardized criteria.

They are used as an unambiguous means of communication for various purposes:

- Offer processing
- Selection and configuration
- Order processing
- Orders
- Order confirmation
- Processing of products for storage
- Order processing in supply locations
- Supply and dispatch
- Reporting and planning
- Service and warranty

The standardized structure ensures that only one Order No. has to be administered for one device.

This saves time and effort during planning, configuring, ordering and stock keeping, and consequently above all it saves costs.

The example opposite explains the various positions within an Order No.

Accessories: with first order (components are already mounted)

Example	3WL1 [] [] [] - [] [] [] - [] [] [] - Z F 0 2	
"-Z" with order code	Communications interface "Standard" + Breaker Status Sensor (BSS) + communication module COM15 for connection to PROFIBUS DP	Z F 0 2

Additional accessory components can be ordered ready-mounted.

These supplements are identified by "-Z".

Even with additional components, one Order No. is sufficient.

Accessories: for retrofitting (components for subsequent fitting)

Example	3WL9 [] [] [] - 0 B A 2 1 - 0 A A 0	
Interlocking set for mechanical ON/OFF without lock		

Additional accessories which are not intended to be ready-mounted in the factory, such as spare parts for storage, can also be ordered separately from the circuit breaker.

Accessories for retrofitting are identified by the Order No. stem 3WL9.

Documentation

Operating manual Complete set	German/English French/Italian Spanish/Portuguese	Order No. Order No. Order No.	3ZX18 12-0WL00-0AN1 3ZX18 12-0WL00-0AJ1 3ZX18 12-0WL00-0AL1	
Manuals Communication	German English	Order No. Order No.	A5E0151347 A5E0151353	

Delivery time class C
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Air Circuit Breakers

3WL Non-Automatic Air Circuit Breakers up to 4000 A (DC)

3- and 4-pole, fixed-mounted versions

Selection and ordering data

For general data see page 1/6.

Size	Max. rated circuit breaker current $I_{n \max}$	DT	3-pole non-automatic air circuit breakers	DC	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A		Order No. For Order No. supplements, see page 1/23	Price per PU				kg
Horizontal main circuit connection								
II	1000	B	3WL12 10-8□□32-....		1	1 unit	103	56.000
II	2000	B	3WL12 20-8□□32-....		1	1 unit	103	56.000
II	4000 ¹⁾	B	3WL12 40-8□□32-....		1	1 unit	103	64.000
Vertical main circuit connection								
II	1000	B	3WL12 10-8□□31-....		1	1 unit	103	56.000
II	2000	B	3WL12 20-8□□31-....		1	1 unit	103	56.000
II	4000 ¹⁾	B	3WL12 40-8□□31-....		1	1 unit	103	85.000
Front main circuit connection, single hole								
II	1000	B	3WL12 10-8□□33-....		1	1 unit	103	56.000
II	2000	B	3WL12 20-8□□33-....		1	1 unit	103	56.000
Front main circuit connection, double hole								
II	1000	B	3WL12 10-8□□34-....		1	1 unit	103	56.000
II	2000	B	3WL12 20-8□□34-....		1	1 unit	103	56.000
Non-automatic air circuit breakers²⁾								
Without electronic release			Order No. supplements	Add. price				
			AA	None				
Standard Order No. supplements (for further Order No. supplements, see page 1/23)								
Manual operating mechanism with mechanical closing			1AA2	None				

Size	Max. rated circuit breaker current $I_{n \max}$	DT	4-pole non-automatic air circuit breakers	DC	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
	A		Order No. For Order No. supplements, see page 1/23	Price per PU				kg
Horizontal main circuit connection								
II	1000	B	3WL12 10-8□□42-....		1	1 unit	103	67.000
II	2000	B	3WL12 20-8□□42-....		1	1 unit	103	67.000
II	4000 ¹⁾	B	3WL12 40-8□□42-....		1	1 unit	103	77.000
Vertical main circuit connection								
II	1000	B	3WL12 10-8□□41-....		1	1 unit	103	75.000
II	2000	B	3WL12 20-8□□41-....		1	1 unit	103	75.000
II	4000 ¹⁾	B	3WL12 40-8□□41-....		1	1 unit	103	103.000
Front main circuit connection, single hole								
II	1000	B	3WL12 10-8□□43-....		1	1 unit	103	67.000
II	2000	B	3WL12 20-8□□43-....		1	1 unit	103	67.000
Front main circuit connection, double hole								
II	1000	B	3WL12 10-8□□44-....		1	1 unit	103	67.000
II	2000	B	3WL12 20-8□□44-....		1	1 unit	103	67.000
Non-automatic air circuit breakers²⁾								
Without electronic release			Order No. supplements	Add. price				
			AA	None				
Standard Order No. supplements (for further Order No. supplements, see page 1/23)								
Manual operating mechanism with mechanical closing			1AA2	None				

Add "-Z" to the complete Order No. and indicate the appropriate order code(s).	Order No. with "-Z" and additional order code	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 3WL12 2 0 - 8 . . . - . . . -Z □□□	Additional price
Rated voltage 1000 V DC		A 0 5	3-pole 4-pole

Size II Up to 2000 A

Size II Up to 4000 A

✓ Additional price	
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¹⁾ Provisions to dissipate heat must be made on the line side.

²⁾ For permissible rated short-time current I_{cw} and short-circuit switching capacity I_{cc} for non-automatic air circuit breakers see page 1/3.

An external overload and short-circuit protection device is available from the company "mat" for the SENTRON 3WL non-automatic air circuit breakers.
Available only directly from the company mat – Maschinen- und Anlagentechnik (for address see page 1/52).

Air Circuit Breakers

3WL Non-Automatic Air Circuit Breakers up to 4000 A (DC)

3-pole, withdrawable versions

Selection and ordering data

Size	Max. rated circuit breaker current $I_{n \max}$	DT	3-pole non-automatic air circuit breakers Order No. For Order No. supplements, see page 1/23	DC Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
A								
Without guide frames (for guide frames, see page 1/53)								
II	1000	B	3WL12 10-8□□35-....		1	1 unit	103	60.000
II	2000	B	3WL12 20-8□□35-....		1	1 unit	103	60.000
II	4000 ¹⁾	B	3WL12 40-8□□35-....		1	1 unit	103	68.000
With guide frames, horizontal main circuit connection								
II	1000	B	3WL12 10-8□□36-....		1	1 unit	103	91.000
II	2000	B	3WL12 20-8□□36-....		1	1 unit	103	91.000
II	4000 ¹⁾	B	3WL12 40-8□□36-....		1	1 unit	103	113.000
With guide frames, vertical main circuit connection								
II	1000	B	3WL12 10-8□□37-....		1	1 unit	103	91.000
II	2000	B	3WL12 20-8□□37-....		1	1 unit	103	91.000
II	4000 ¹⁾	B	3WL12 40-8□□37-....		1	1 unit	103	121.000
With guide frames, connecting flanges								
II	1000	B	3WL12 10-8□□38-....		1	1 unit	103	91.000
II	2000	B	3WL12 20-8□□38-....		1	1 unit	103	91.000
II	4000 ¹⁾	B	3WL12 40-8□□38-....		1	1 unit	103	113.000
Non-automatic air circuit breakers²⁾								
Without electronic release			Order No. supplements AA	Add. price None				

Standard Order No. supplements (for further Order No. supplements for circuit breakers and guide frames, see page 1/23)

Manual operating mechanism with mechanical closing

1AA2

None

Add "-Z" to the complete Order No. and indicate the appropriate order code(s).	Order No. with "-Z" and additional order code	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 3WL1 2 . 0 - 8 . 3 . - . . . -Z □□□	Additional price 3-pole
Rated voltage 1000 V DC			
Size II ⁴⁾ Up to 2000 A		A 0 5	✓
Size II ⁴⁾ Up to 4000 A		A 0 5	✓
Tinned version of the customer's connections on the guide frame ³⁾ Only for circuit breakers in withdrawable version with horizontal connection or flange connection. The normal delivery time increases to 15 work days.		A 0 8	✓

Note:

For voltages over 600 V use the version for 1000 V DC rated voltage; order with "-Z" and order code "A05".

All other accessory parts must be ordered by specifying "-Z" and the corresponding order code, see "3WL Air circuit breakers/non-automatic air circuit breakers up to 6300 A (AC)", "Options", page 1/24 onwards.

An external overload and short-circuit protection device is available from the company "mat" for the SENTRON 3WL non-automatic air circuit breakers.

Available only directly from the company mat – Maschinen- und Anlagentechnik (for address see page 1/52).

✓ Additional price

¹⁾ Provisions to dissipate heat must be made on the line side.

²⁾ For permissible rated short-time current I_{cw} and short-circuit switching capacity I_{cc} for non-automatic air circuit breakers see page 1/3.

³⁾ The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

⁴⁾ If ordering withdrawable circuit breaker and guide frame separately, specify order code "A05" for withdrawable circuit breaker and guide frame.

Air Circuit Breakers

3WL Non-Automatic Air Circuit Breakers up to 4000 A (DC)

4-pole, withdrawable versions

Selection and ordering data

Size	Max. rated circuit breaker current $I_{n \text{ max.}}$ DT A	4-pole non-automatic air circuit breakers		DC	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		
Without guide frames (for guide frames, see page 1/53)		Order No. For Order No. supplements, see page 1/23		Price per PU						
II	1000	B	3WL12 10-8□□45-....		1	1 unit	103	75.000		
II	2000	B	3WL12 20-8□□45-....		1	1 unit	103	75.000		
II	4000 ¹⁾	B	3WL12 40-8□□45-....		1	1 unit	103	82.000		
With guide frames, horizontal main circuit connection										
II	1000	B	3WL12 10-8□□46-....		1	1 unit	103	109.000		
II	2000	B	3WL12 20-8□□46-....		1	1 unit	103	109.000		
II	4000 ¹⁾	B	3WL12 40-8□□46-....		1	1 unit	103	136.000		
With guide frames, vertical main circuit connection										
II	1000	B	3WL12 10-8□□47-....		1	1 unit	103	109.000		
II	2000	B	3WL12 20-8□□47-....		1	1 unit	103	109.000		
II	4000 ¹⁾	B	3WL12 40-8□□47-....		1	1 unit	103	146.000		
With guide frames, connecting flanges										
II	1000	B	3WL12 10-8□□48-....		1	1 unit	103	109.000		
II	2000	B	3WL12 20-8□□48-....		1	1 unit	103	109.000		
II	4000 ¹⁾	B	3WL12 40-8□□48-....		1	1 unit	103	136.000		
Non-automatic air circuit breakers²⁾		Order No. supplements AA		Add. price						
Without electronic release		None		None						
Standard Order No. supplements (for further Order No. supplements for circuit breakers and guide frames, see page 1/23)										
Manual operating mechanism with mechanical closing				1AA2	None					
Add "-Z" to the complete Order No. and indicate the appropriate order code(s).				Order No. with "-Z" and additional order code	1 2 3 4 5 6 7	8 9 10 11 12	13 14 15 16	Additional price 4-pole		
					3WL12 .0 - 8 .4 . - . . . -Z					
Rated voltage 1000 V DC										
Size II ⁴⁾	Up to 2000 A			A 0 5						
Size II ⁴⁾	Up to 4000 A			A 0 5						
Tinned version of the customer's connections on the guide frame ³⁾ Only for circuit breakers in withdrawable version with horizontal connection or flange connection. The normal delivery time increases to 15 work days.										
Size II				A 0 8						

Note:

For voltages over 600 V use the version for 1000 V DC rated voltage; order with "-Z" and order code "A05".

All other accessory parts must be ordered by specifying "-Z" and the corresponding order code, see "3WL Air circuit breakers/non-automatic air circuit breakers up to 6300 A (AC)", "Options", page 1/24 onwards.

- ✓ Additional price

¹⁾ Provisions to dissipate heat must be made on the line side.

²⁾ For permissible rated short-time current I_{ow} and short-circuit switching capacity I_{cc} for non-automatic air circuit breakers see page 1/3.

³⁾ The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

⁴⁾ If ordering withdrawable circuit breaker and guide frame separately, specify order code "A05" for withdrawable circuit breaker and guide frame.

An external overload and short-circuit protection device is available from the company "mat" for the SENTRON 3WL non-automatic air circuit breakers.

Available only directly from the company mat – Maschinen- und Anlagentechnik⁵⁾.

⁵⁾ **mat – Maschinen- und Anlagentechnik**

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Air Circuit Breakers

3WL Non-Automatic Air Circuit Breakers up to 4000 A (DC)

Accessories and Spare Parts

Selection and ordering data

Guide frames for DC non-automatic air circuit breakers

Size	Max. rated circuit breaker current $I_{n \max}$	DT	For 3-pole non-automatic air circuit breakers Order No. (Order No. supplements required acc. to table below)	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
A								
Front main circuit connection, single hole								
II	2000	B	3WL9 212-3DA□□-□□A1		1	1 unit	103	31.000
Front main circuit connection, double hole								
II	2000	B	3WL9 212-3DB□□-□□A1		1	1 unit	103	31.000
Horizontal main circuit connection								
II	2000	B	3WL9 212-3DC□□-□□A1		1	1 unit	103	31.000
II	4000	B	3WL9 212-6DC□□-□□A1		1	1 unit	103	60.000
Vertical main circuit connection								
II	2000	B	3WL9 212-3DD□□-□□A1		1	1 unit	103	31.000
II	4000	B	3WL9 212-6DD□□-□□A1		1	1 unit	103	60.000
Main circuit connection connecting flanges								
II	2000	B	3WL9 212-3DE□□-□□A1		1	1 unit	103	31.000
II	4000	B	3WL9 212-6DE□□-□□A1		1	1 unit	103	60.000

Number of auxiliary supply connectors

Without

1 connector

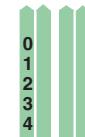
2 connectors

3 connectors

4 connectors

For required number of auxiliary supply connectors,
see table on page 1/29

Order No. supplements



Add. price

3-pole
None
✓
✓
✓
✓None
✓
✓None
✓None
✓

Type of auxiliary circuit connections

Without

With screw connection (SIGUT, standard)

With screwless connection method (tension spring)

None
✓
✓

Position signaling switches

Without

Option 1

Connected 1 CO contact,
test 1 CO contacts,
disconnected 1 CO contactNone
✓

Option 2

Connected 3 CO contacts,
test 2 CO contacts,
disconnected 1 CO contact

✓

Shutters

Without

With shutter, 2 parts, lockable

None
✓Add "-Z" to the complete Order No.
and indicate the appropriate order code(s).Order No. with "-Z"
and additional order code1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
3WL9 2 1 2 - - . . A1 - Z
□□□Add.
price

Rated voltage 1000 V DC

Size II



✓

Tinned version of the customer's connections on the guide frame¹⁾

Only for guide frames with horizontal connection or flange connection

Size II



✓

Guide frames for 4-pole DC non-automatic air circuit breakers

All other accessory parts must be ordered by specifying "-Z" and the corresponding order code, see "3WL Air circuit breakers/
Non-Automatic Air circuit breakers up to 6300 A (AC)", "Options", page 1/24 onwards.

✓ Additional price

¹⁾ The permissible temperature-rise limits according to IEC 60947-2 are 5 K
lower for a tin surface than for a silver surface.

Air Circuit Breakers

3WL Non-Automatic Air Circuit Breakers up to 4000 A (DC)

Accessories and Spare Parts

Size	Max. rated circuit breaker current $I_{n\ max}$	DT	For 4-pole non-automatic air circuit breakers Order No. (Order No. supplements required acc. to table below)	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
A								
Front main circuit connection, single hole								
II	2000	B	3WL9 212-3EA□□-□□A1		1	1 unit	103	37.000
Front main circuit connection, double hole								
II	2000	B	3WL9 212-3EB□□-□□A1		1	1 unit	103	37.000
Horizontal main circuit connection								
II	2000	B	3WL9 212-3EC□□-□□A1		1	1 unit	103	37.000
II	4000	B	3WL9 212-6EC□□-□□A1		1	1 unit	103	84.000
Vertical main circuit connection								
II	2000	B	3WL9 212-3ED□□-□□A1		1	1 unit	103	37.000
II	4000	B	3WL9 212-6ED□□-□□A1		1	1 unit	103	84.000
Main circuit connection connecting flanges								
II	2000	B	3WL9 212-3EE□□-□□A1		1	1 unit	103	37.000
II	4000	B	3WL9 212-6EE□□-□□A1		1	1 unit	103	84.000
Number of auxiliary supply connectors								
Without			Order No. supplements		Add. price			
1 connector			0		4-pole			
2 connectors			1		None			
3 connectors			2		✓			
4 connectors			3		✓			
For required number of auxiliary supply connectors, see table on page 1/29			4		✓			
Type of auxiliary circuit connections								
Without			0		None			
With screw connection (SIGUT, standard)			1		✓			
With screwless connection method (tension spring)			2		✓			
Position signaling switches								
Without			0		None			
Option 1	Connected 1 CO contact, test 1 CO contacts, disconnected 1 CO contact		1		✓			
Option 2	Connected 3 CO contacts, test 2 CO contacts, disconnected 1 CO contact		2		✓			
Shutters								
Without			A		None			
With shutter, 2 parts, lockable			B		✓			
Add "-Z" to the complete Order No. and indicate the appropriate order code(s).			Order No. with "-Z" and additional order code		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	A1-Z		Add. price
Rated voltage 1000 V DC			Order No. with "-Z" and additional order code		3WL9 2 1 2 - - . . . A1-Z			
Size II			Order No. with "-Z" and additional order code		□□□			
Tinned version of the customer's connections on the guide frame ¹⁾			Order No. with "-Z" and additional order code		A 0 5			✓
Only for guide frames with horizontal connection or flange connection			Order No. with "-Z" and additional order code		A 0 8			✓

For guide frames for 3-pole DC non-automatic air circuit breakers see previous page

All other accessory parts must be ordered by specifying "-Z" and the corresponding order code, see "3WL Air circuit breakers/
Non-Automatic Air circuit breakers up to 6300 A (AC)", "Options", page 1/24 onwards.

✓ Additional price

¹⁾ The permissible temperature-rise limits according to IEC 60947-2 are 5 K
lower for a tin surface than for a silver surface.