

SENTRON 3WL 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 15/6.

| Size | Max. rated circuit breaker current $I_{n \max}$. | DT | 3-pole non-automatic circuit breakers | DC | PU (UNIT, SET, M) | PS* | PG | Weight per PU approx. |
|---|---|----|--|--------------|-------------------|--------|-----|-----------------------|
| | | | Order No. For Order No. supplements, see page 15/23 | 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 circuit breakers²⁾ | | | Order No. supplements | Add. price | | | | |
| Without electronic release | | | AA | None | | | | |
| Standard Order No. supplements (for further Order No. supplements, see page 15/23) | | | | | | | | |
| Manual operating mechanism with mechanical closing | | | 1AA2 | None | | | | |

| Size | Max. rated circuit breaker current $I_{n \max}$. | DT | 4-pole non-automatic circuit breakers | DC | PU (UNIT, SET, M) | PS* | PG | Weight per PU approx. |
|---|---|----|--|--------------|-------------------|--------|-----|-----------------------|
| | | | Order No. For Order No. supplements, see page 15/23 | 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 circuit breakers²⁾ | | | Order No. supplements | Add. price | | | | |
| Without electronic release | | | AA | None | | | | |
| Standard Order No. supplements (for further Order No. supplements, see page 15/23) | | | | | | | | |
| 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 | Add. price |
|--|---|--|---------------|
| | | 3WL1 2 . 0 - 8 -Z | |
| | | □□□ | |
| | | | 3-pole 4-pole |
| Rated voltage 1000 V DC | | | |
| Size II | Up to 2000 A | A 05 | x x |
| Size II | Up to 4000 A | A 05 | x x |

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 15/24 onwards.

x = Additional price

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 "Appendix, External Partners").

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 circuit breakers see page 15/3.

SENTRON 3WL 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 $I_{n \text{ max.}}$ | DT | 3-pole non-automatic circuit breakers | DC | PU (UNIT, SET, M) | PS* | PG | Weight per PU approx. |
|--|---|----|---------------------------------------|----|-------------------|--------|-----|-----------------------|
| A | | | | | | | | |
| Without guide frames (for guide frames, see page 15/53) | | | | | | | | |
| 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 circuit breakers²⁾

Without electronic release **AA** Add. price None

Standard Order No. supplements (for further Order No. supplements for circuit breakers and guide frames, see page 15/23)

Manual operating mechanism with mechanical closing **1AA2** Add. price 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 | Add. price |
|--|---|--|------------|
| | | 3WL1 2 . 0 - 8 . . 3 -Z □□□ | 3-pole |
| Rated voltage 1000 V DC | | | |
| Size II ⁴⁾ Up to 2000 A | | A 05 | x |
| Size II ⁴⁾ Up to 4000 A | | A 05 | x |
| 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 08 | x |

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 15/24 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 "Appendix⇒, External Partners").

x = 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 circuit breakers see page 15/3.
- 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.

SENTRON 3WL 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 $I_{n \max}$ | DT | 4-pole non-automatic circuit breakers | DC | PU (UNIT, SET, M) | PS* | PG | Weight per PU approx. |
|--|---|----|---|--|-------------------|--------|-----|-----------------------|
| | | | Order No. For Order No. supplements, see page 15/23 | Price per PU | | | | kg |
| Without guide frames (for guide frames, see page 15/53) | | | | | | | | |
| 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 circuit breakers²⁾ | | | Order No. supplements | Add. price | | | | |
| Without electronic release | | | AA | None | | | | |
| Standard Order No. supplements (for further Order No. supplements for circuit breakers and guide frames, see page 15/23) | | | | | | | | |
| 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 | | | | Add. price |
| | | | | 3WL1 2 . 0 - 8 . . 4 . - -Z | | | | 4-pole |
| Rated voltage 1000 V DC | | | | | | | | |
| Size II ⁴⁾ | Up to 2000 A | | | A 05 | | | | x |
| Size II ⁴⁾ | Up to 4000 A | | | A 05 | | | | x |
| 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 08 | | | | x |

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 15/24 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 "Appendix", External Partners").

x = 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 circuit breakers see page 15/3.

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.

SENTRON 3WL 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 circuit breakers

| Size | Max. rated circuit breaker current $I_{n\ max}$ | DT | For 3-pole non-automatic circuit breakers Order No. (Order No. supplements required according to table below) | Price per PU | PU (UNIT, SET, M) | PS* | PG | Weight per PU approx. |
|---|--|----|---|-----------------|----------------------------|--------|-----|-----------------------------|
| kg | | | | | | | | |
| 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 15/29

Type of auxiliary circuit connections

Without

- With screw connections (SIGUT)
- With screwless connection method (tension spring)

Position signaling switches

Without

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

Shutters

Without

- With shutter, 2 parts, lockable

Order No. supplements

Add. price

| | |
|---|--------|
| 0 | 3-pole |
| 1 | None |
| 2 | x |
| 3 | x |
| 4 | x |
| 0 | None |
| 1 | x |
| 2 | x |
| 0 | None |
| 1 | x |
| 2 | x |
| A | None |
| B | x |

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
3WL9 2 1 2 - A1 -Z
 □□□

Add. price

Rated voltage 1000 V DC

Size II

A 0 5

x

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

Only for guide frames with horizontal connection or flange connection

Size II

A 0 8

x

Guide frames for 4-pole DC non-automatic 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 15/24 onwards.

x = 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.

SENTRON 3WL 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 circuit breakers Order No. (Order No. supplements required according to table below) | Price per PU | PU (UNIT, SET, M) | PS* | PG | Weight per PU approx. |
|---|---|----|---|--|----------------------------|--------|-----|-----------------------------|
| | | | | | | | | kg |
| 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 |
| | | | | Order No. supplements | Add. price | | | |
| Number of auxiliary supply connectors | | | | | | 4-pole | | |
| Without | | | | 0 | | None | | |
| 1 connector | | | | 1 | | x | | |
| 2 connectors | | | | 2 | | x | | |
| 3 connectors | | | | 3 | | x | | |
| 4 connectors | | | | 4 | | x | | |
| For required number of auxiliary supply connectors, see table on page 15/29 | | | | | | | | |
| Type of auxiliary circuit connections | | | | | | | | |
| Without | | | | 0 | | None | | |
| With screw connections (SIGUT) | | | | 1 | | x | | |
| With screwless connection method (tension spring) | | | | 2 | | x | | |
| Position signaling switches | | | | | | | | |
| Without | | | | 0 | | None | | |
| Option 1 | | | | 1 | | x | | |
| Option 2 | | | | 2 | | x | | |
| Connected 1 CO contact, test 1 CO contacts, disconnected 1 CO contact | | | | | | | | |
| Connected 3 CO contacts, test 2 CO contacts, disconnected 1 CO contact | | | | | | | | |
| Shutters | | | | | | | | |
| Without | | | | A | | None | | |
| With shutter, 2 parts, lockable | | | | B | | x | | |
| 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 | | | | Add. price |
| Rated voltage 1000 V DC | | | | 3WL9 2 1 2 - A1 -Z | | | | |
| Size II | | | | □□□ | | | | |
| Tinned version of the customer's connections on the guide frame ¹⁾ | | | | A 0 5 | | | | x |
| Only for guide frames with horizontal connection or flange connection | | | | A 0 8 | | | | x |
| Size II | | | | □□□ | | | | |

For guide frames for 3-pole DC non-automatic 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 15/24 onwards.

x = 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.