

SENTRON Switching and Protection Devices – Molded Case Circuit Breakers

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Introduction

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

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3VF2 Molded Case Circuit Breakers

3VF2 Molded Case Circuit Breakers up to 100 A

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3-pole, fixed-mounted versions

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4-pole, fixed-mounted versions

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Accessories and spare parts

Technical Information

can be found at

www.siemens.com/lowvoltage/support

under Product List:

- Technical specifications

under Entry List:

- Updates
- Downloads
- FAQ
- Manuals
- Characteristic curves
- Certificates

and at

www.siemens.com/lowvoltage/configurators

- Configurators

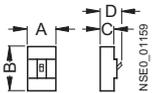
Introduction

Overview



Type	VL160X/3VL1	VL160/3VL2	VL250/3VL3	VL400/3VL4
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Molded case circuit breakers**3VL molded case circuit breakers up to 1600 A**

Rated current I_n at 50 °C ambient temperature ¹⁾	A	16 ... 160		50 ... 160		200 ... 250		200 ... 400	
Number of poles		3	4	3	4	3	4	3	4
Rated operational voltage U_e 50/60 Hz AC	V	690	690	690	690	690	690	690	690
DC ²⁾	V	500	500	600	600	600	600	600	600
Overcurrent releases									
Thermal-magnetic		✓	✓	✓	✓	✓	✓	✓	✓
Electronic LCD ETU/ETU		--	--	✓	✓	✓	✓	✓	✓
Replaceable		--	--	✓	✓	✓	✓	✓	✓
PROFIBUS module COM20		--	--	✓	✓	✓	✓	✓	✓
Dimensions									
	mm	105	139	105	139	105	139	139	183
A	mm	157	157	175	175	175	175	279	279
B	mm	81	81	81	81	81	81	102	102
C	mm	107	107	107	107	107	107	138	138
D	mm								

**Switching capacity I_{cu}/I_{cs}
RMS value according to IEC 60947-2**

Standard switching capacity N³⁾ N					
Up to 240 V AC	kA	65/65	65/65	65/65	65/65
Up to 415 V AC	kA	55/55	55/55	55/55	55/55
Up to 440 V AC	kA	25/20	25/20	25/20	35/26
Up to 500/525 V AC	kA	18/14	25/20	25/20	25/20
Up to 690 V AC	kA	8/4 ⁴⁾	12/6	12/6	15/8
Up to 250 V DC ⁵⁾	kA	30/30	32/32	32/32	32/32
Up to 500 V DC ⁵⁾	kA	--	--	--	--
Up to 600 V DC ⁵⁾	kA	--	--	--	--
NEMA breaking capacity⁶⁾					
Up to 480 V AC	kA	25	25	25	35
Up to 600 V AC	kA	8 ⁴⁾	12	12	20
High switching capacity H³⁾ H					
Up to 240 V AC	kA	100/75	100/75	100/75	100/75
Up to 415 V AC	kA	70/70	70/70	70/70	70/70
Up to 440 V AC	kA	42/32	50/38	50/38	50/38
Up to 500/525 V AC	kA	30/23	40/30	40/30	40/30
Up to 690 V AC	kA	12/6 ⁴⁾	12/6	12/6	15/8
Up to 250 V DC ⁵⁾	kA	30/30	32/32	32/32	32/32
Up to 500 V DC ⁵⁾	kA	30/30	32/32	32/32	32/32
Up to 600 V DC ⁵⁾	kA	--	--	--	--
NEMA breaking capacity⁶⁾					
Up to 480 V AC	kA	42	50	50	50
Up to 600 V AC	kA	12 ⁴⁾	12	12	20
Very high switching capacity L³⁾ L					
Up to 240 V AC	kA	--	200/150	200/150	200/150
Up to 415 V AC	kA	--	100/75	100/75	100/75
Up to 440 V AC	kA	--	75/50	75/50	75/50
Up to 500/525 V AC	kA	--	50/38	50/38	50/38
Up to 690 V AC	kA	--	12/6	12/6	15/8
Up to 250 V DC ⁵⁾	kA	--	32/32	32/32	32/32
Up to 500 V DC ⁵⁾	kA	--	32/32	32/32	32/32
Up to 600 V DC ⁵⁾	kA	--	32/32	32/32	32/32
NEMA breaking capacity⁶⁾					
Up to 480 V AC	kA	--	75	75	75
Up to 600 V AC	kA	--	12	12	20

- ✓ Available
-- Not available

¹⁾ 3VF2 at 40 °C ambient temperature.

²⁾ Rated DC voltage applies only for circuit breakers with thermal-magnetic release.

For 3VL molded case circuit breakers according to UL 489 see Catalog LV 16.

Introduction



VL630/3VL5 VL800/3VL6 VL1250/3VL7 VL1600/3VL8 3VF2

3VL molded case circuit breakers up to 1600 A **3VF2 molded case circuit breakers up to 100 A**

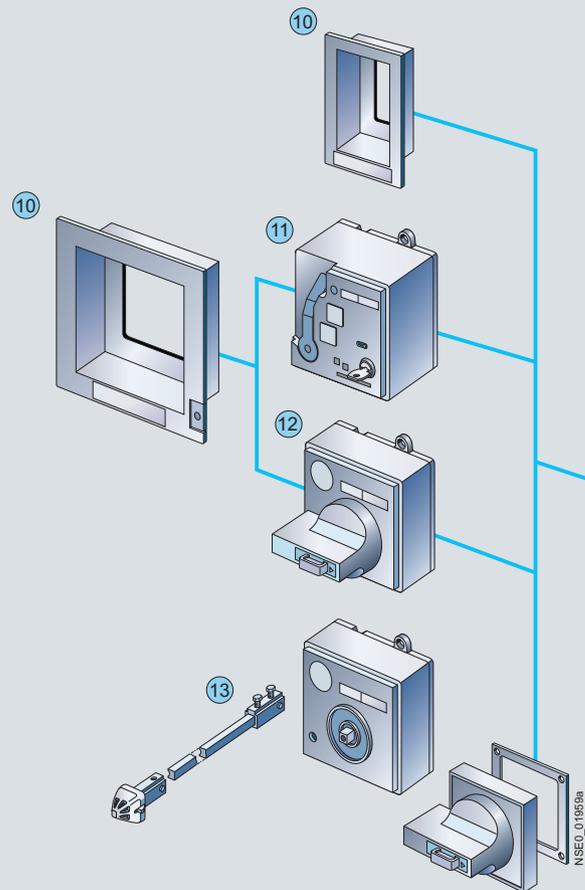
3VL molded case circuit breakers up to 1600 A								3VF2 molded case circuit breakers up to 100 A
315 ... 630		800		1000 ... 1250		1600		16 ... 100
3	4	3	4	3	4	3	4	3 and 4
690 600	690 600	690 --	690 --	690 --	690 --	690 --	690 --	Up to 415 --
✓ ✓ ✓	✓ ✓ ✓	-- ✓ ✓	-- ✓ ✓	-- ✓ ✓	-- ✓ ✓	-- ✓ ✓	-- ✓ ✓	✓ -- --
190 279 102 138	253 279 102 138	190 406 114 151	253 406 114 151	229 406 152 207	305 406 152 207	229 406 152 207	305 406 152 207	76/102 124 68 73

65/65 55/55 35/26 25/20 20/10 30/30 -- --	65/65 55/55 35/26 25/20 20/10	65/35 55/28 35/26 25/20 20/10	65/35 55/28 35/26 25/20 20/10	65/33 18/9 -- -- -- -- --
25 20	25 20	25 20	25 20	-- --
100/75 70/70 50/38 40/30 20/10 30/30 30/30 --	100/75 70/70 50/38 40/30 20/10	100/50 70/35 50/38 40/30 30/15	100/50 70/35 50/38 40/30 30/15	-- -- -- -- -- -- -- --
50 30	50 30	50 30	50 30	-- --
200/150 100/75 75/50 50/38 20/10 30/30 30/30 30/30	200/150 100/75 75/50 50/38 20/10	200/100 100/50 75/50 50/38 35/17	200/100 100/50 75/50 50/38 35/17	-- -- -- -- -- -- -- --
65 35	65 35	65 35	65 35	-- --

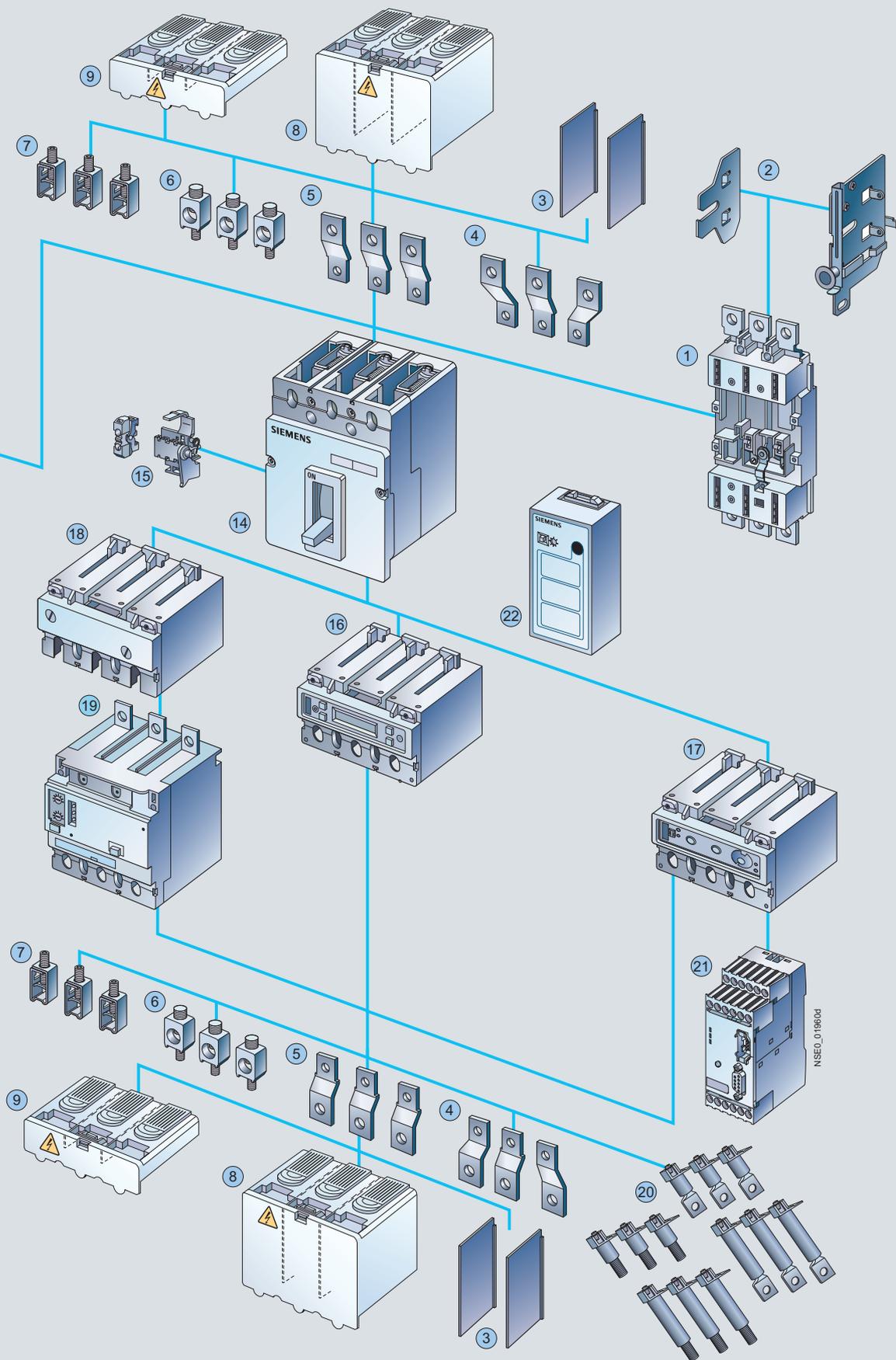
3) At 240 V AC, 415 V AC and 525 V AC max. 5 % overvoltage, at 440 V AC, 500 V AC and 690 V AC max. 10 % overvoltage, at 250/500/600 V DC max. 5 % overvoltage.
4) Rated current $I_n \geq 25$ A.

5) The maximum permitted DC voltage for each conducting path needs to be taken into account for DC switching applications; see [Technical Information at www.siemens.com/lowvoltage/support](http://www.siemens.com/lowvoltage/support); time constant $t = 15$ ms.
6) The NEMA breaking capacity can be found on the rating plate of each IEC circuit breaker.

Introduction



- ① Withdrawable/plug-in bases (pages 16/70 to 16/75)
- ② Side walls for withdrawable version (pages 16/70 to 16/75)
- ③ Phase barriers (pages 16/77 to 16/82)
- ④ Flared front busbar connecting bars (pages 16/77 to 16/82)
- ⑤ Straight connecting bars (pages 16/77 to 16/82)
- ⑥ Circular conductor terminals for Al/Cu (pages 16/80 to 16/82)
- ⑦ Box terminals for Cu (pages 16/77 to 16/82)
- ⑧ Extended terminal covers (pages 16/77 to 16/82)
- ⑨ Standard terminal covers (pages 16/77 to 16/82)
- ⑩ Masking frames/cover frames for door cutout (pages 16/94 to 16/97)
- ⑪ Motorized operating mechanisms with stored energy mechanism (pages 16/64 to 16/65)
- ⑫ Front-operated rotary operating mechanisms (pages 16/61 to 16/66)
- ⑬ Door-coupling rotary operating mechanisms (pages 16/61 to 16/66)
- ⑭ SENTRON 3VL circuit breakers (pages 16/10 to 16/55)
- ⑮ Internal accessories (pages 16/55, 16/58 to 16/59)
- ⑯ Electronic overcurrent releases LCD ETU (pages 16/20, 16/24, 16/28, 16/44, 16/46)
- ⑰ Electronic releases with communication function (pages 16/12 to 16/28 and 16/40 to 16/50)
- ⑱ Thermal/magnetic overcurrent releases (pages 16/10 to 16/12, 16/30, 16/34 to 16/38, 16/52)
- ⑲ RCD modules (page 16/76)
- ⑳ Rear terminals – flat and round (pages 16/77 to 16/82)
- ㉑ COM20 communication modules to the PROFIBUS DP (page 16/98)
- ㉒ Battery power supplies with test function for electronic releases (pages 16/84 to 16/88)



SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

General data

Benefits

- The compact design of the SENTRON 3VL circuit breakers coupled with excellent characteristics fulfills the high demands of today's electrical distribution systems.
- These circuit breakers offer a broad product range, improved technology, space savings and easy operation.
- They are available both in thermal-magnetic (16 A to 630 A) and in electronic versions (63 A to 1600 A).

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 power to cost centers.

Communication:

- For molded case circuit breakers with communication function see pages 16/12 to 16/28 and 16/40 to 16/50.
- For accessories, see page 16/98.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

Application

The different versions of SENTRON 3VL circuit breakers are suitable for the following applications:

- Incoming and outgoing circuit breakers in distribution systems
- Switching and protection devices for motors, transformers and capacitors
- Disconnecter units with features for stopping and switching off in an emergency (main control switches and EMERGENCY-STOP switches) in conjunction with lockable rotary operating mechanisms and terminal covers.

The SENTRON 3VL circuit breakers are available in the following versions:

1. For system protection (in 3- and 4-pole versions)
The overload and short-circuit releases are designed for the protection of cables, leads and non-motor loads.
2. For motor protection (in 3-pole version)
The overload and short-circuit releases are designed for optimized protection and direct-on-line starting of induction squirrel-cage motors. The circuit breakers for motor protection are susceptible to phase failure and feature an adjustable trip class. The electronic releases operate with a microprocessor.

3. For starter combinations (in 3-pole version)
These circuit breakers are used both for short-circuit protection as well as for isolating functions, which may be required in starter combinations consisting of circuit breakers, overload relays and motor contactors. These circuit breakers exclusively feature adjustable, instantaneous short-circuit releases.
4. As non-automatic circuit breakers (in 3- and 4-pole versions)
These circuit breakers can be used as feeder circuit breakers, main control switches or non-automatic circuit breakers without overload protection. They incorporate an integrated short-circuit self-protection system, eliminating the need for back-up fuses.

Switching capacity

- N** Circuit breakers with standard switching capacity N (I_{cu} up to 55 kA at 415 V)
- H** Circuit breakers with high switching capacity H (I_{cu} up to 70 kA at 415 V)
- L** Circuit breakers with very high switching capacity H (I_{cu} up to 100 kA at 415 V)

These circuit breakers are indicated in the selection and ordering data by orange backgrounds.

Standards and specifications

SENTRON 3VL circuit breakers comply with:

IEC 60947-1, EN 60947-1,
DIN VDE 0660, Part 100,
IEC 60947-2, EN 60947-2,
DIN VDE 0660, Part 101.

Isolating features according to IEC 60947-2, EN 60947-2.

Disconnecting features (main control switches) according to EN 60204 and DIN VDE 0113.

The SENTRON 3VL circuit breakers comply in addition with requirements for "disconnecter units with features for stopping and switching off in an emergency" (EMERGENCY-STOP switches) in conjunction with lockable rotary operating mechanisms (red-yellow) and terminal covers.

Please contact Siemens for details of other standards.

The electronic releases of the circuit breakers for motor protection also fulfill
IEC 60947-4-1, DIN VDE 0660, Part 102.

VL160X to VL400 circuit breakers can be equipped with a SENTRON 3VL RCD module. They then comply with IEC 60947-2 Appendix B.

The SENTRON 3VL RCD module complies with IEC 61000-4-2 to IEC 61000-4-6, IEC 61000-4-11 and EN 55011, Class B (equivalent to CISPR 11) with regard to electromagnetic compatibility.

Operating conditions

The SENTRON 3VL circuit breakers are designed for operation in enclosed areas.

Suitable enclosures must be provided for operation in areas with severe ambient conditions (such as dust, caustic vapors, hazardous gases).

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

General data

RCD modules

The RCD module is designed for retrofitting to the circuit breaker. It can also be retrofitted by the customer.

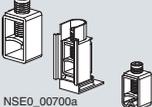
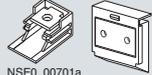
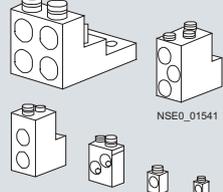
The combination of SENTRON 3VL circuit breaker and RCD module can be fed from the top or bottom.

All SENTRON 3VL circuit breakers with RCD modules are available with auxiliary switches, alarm switches, undervoltage and shunt releases.

Protection of plant and equipment against overload or damage by ground faults (ground-fault protection).

The RCD module trips the circuit breaker through vectorial summation current formation for all phase currents if the vectorial sum of the currents in the poles (= the ground fault current) overshoots the pre-set response and delay time values. AC currents and pulsating DC currents are measured (CBR, design A to EN 60947-2).

Main connections, basic equipment and options

 NSE0_00700a	 NSE0_00701a	 NSE0_00702a	 NSE0_01541
Box terminal (for copper cables or solid/ flexible busbars)	Connection with screw terminal (avail- able with direct cable lug connection on VL160X, VL160, VL250, VL400)	Connection to front busbar connecting bars (screw terminal required)	Circular conductor terminals/ multiple feed-in terminal (for Al/Cu terminal)

Main connections ([see below for conductor cross-sections](#))

Circuit breakers	Connection overview and further options				
	Box terminals	Screw terminals with metric thread for flat connectors	Circular conductor termi- nal/multiple feed-in termi- nals	Rear-mounting terminals	Front-accessible connecting bars
VL160X	☐	☐	x	x	x
VL160	☐	☐	x	x	x
VL250	☐	☐	x	x	x
VL400	x	○	x ²⁾³⁾	x	x
VL630	x ¹⁾	○	x ²⁾	x	x
VL800	--	○	x ²⁾	x	x
VL1250	--	○	x ²⁾	x	x
VL1600	--	x	--	x	○

- Scope of supply
 ☐ Optional scope of supply
 x Available
 -- Not available

- ¹⁾ Connecting terminal plate for flexible busbar; not for 690 V AC/600 V DC.
²⁾ Multiple feed-in terminal
³⁾ Circular conductor terminal also available.

Conductor cross-sections

Type		VL160X 3VL1	VL160 3VL2	VL250 3VL3	VL400 3VL4	VL630 3VL5	VL800 3VL6	VL1250 3VL7	VL1600 3VL8
Conductor cross-sections									
Box terminals ¹⁾									
<ul style="list-style-type: none"> • Solid or stranded cable • Finely stranded with end sleeve • Flexible busbar 	Copper only	mm ²	2.5 ... 95	2.5 ... 95	25 ... 185	50 ... 300	--	--	--
		mm ²	2.5 ... 50	2.5 ... 50	25 ... 120	50 ... 240	--	--	--
		mm	12 × 10	12 × 10	17 × 10	25 × 10	--	--	--
Connecting terminal plate for flexible busbar ²⁾		mm	--	--	--	2 units 10 × 32	--	--	--
Circular conductor terminal for cable ¹⁾									
<ul style="list-style-type: none"> • Solid or stranded cable • Finely stranded with end sleeve 	Cu or Al	mm ²	16 ... 70	16 ... 70	25 ... 185	50 ... 300	--	--	--
		mm ²	10 ... 50	10 ... 50	25 ... 120	50 ... 240	--	--	--
Multiple feed-in terminal ¹⁾									
<ul style="list-style-type: none"> • Solid or stranded cable • Finely stranded with end sleeve 	Cu or Al	mm ²	--	--	2 units 50 ... 120	2 units 50 ... 240	3 units 50 ... 240	4 units 50 ... 240	--
		mm ²	--	--	--	2 units 50 ... 95	2 units 50 ... 185	3 units 50 ... 185	4 units 50 ... 185
<ul style="list-style-type: none"> • Direct connection of busbars • Screw for connection with screw terminal 	Cu or Al	mm	17 × 7	22 × 7	24 × 7	32 × 10	40 × 10	2 × 40 × 10	2 × 50 × 10
			M6	M6	M8	M8	M6	M8	M8
Conductor cross-sections for control circuits with terminal connection									
Screw terminals									
<ul style="list-style-type: none"> • Solid • Finely stranded with end sleeve 		mm ²	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5
		mm ²	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0

¹⁾ Cross-sections according to IEC 60999.

²⁾ Not for 690 V AC/600 V DC.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

General data

VL160 to VL1600 electronic releases – Functional overview

Order No. supplement	Releases	System protection	System/generator protection	Motor/generator protection	Starter protection	Isolators	Function	Setting options					
								L	S ¹⁾		I ¹⁾	G	
								Overload protection $I_r = \times I_n$	Short-circuit protection (short-time delayed) $I_{sd} = \times I_r$	t_{sd} [s]	Short-circuit protection (instantaneous) $I_f = \times I_n$	Ground-fault protection $I_g = \times I_n$ t_g [s]	
DK	M	--	--	--	✓	--	I	--	--	--	7 ... 15	--	--
DE	M	--	--	--	--	✓	I	--	--	--	8 ... 18	--	--
EE	M	--	--	--	--	✓	I	--	--	--	8 ... 18	--	--
DA	TM ²⁾	✓	--	--	--	--	LI	1	--	--	9 ... 18 ⁴⁾	--	--
DD	TM ²⁾	✓	--	--	--	--	LI	0.8 ... 1	--	--	9 ... 18 ⁴⁾	--	--
DC	TM ²⁾	✓	--	--	--	--	LI	0.8 ... 1	--	--	5 ... 10	--	--
EH	TM ²⁾	✓	--	--	--	--	LI	1	--	--	9 ... 18 ⁴⁾	--	--
EJ	TM ²⁾	✓	--	--	--	--	LI	0.8 ... 1	--	--	5 ... 10	--	--
EA	TM ²⁾	✓	--	--	--	--	LIN	1	--	--	9 ... 18 ⁴⁾	--	--
EC	TM ²⁾	✓	--	--	--	--	LIN	0.8 ... 1	--	--	5 ... 10	--	--
EM	TM ²⁾	✓	--	--	--	--	LIN	0.8 ... 1	--	--	5 ... 10	--	--
SP	ETU10M ³⁾	--	--	✓	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
MP	ETU10M ³⁾	--	--	✓	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
SB	ETU10	✓	--	--	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
MB	ETU10	✓	--	--	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
TA	ETU10	✓	--	--	--	--	LIN	0.4 ... 1	--	--	1.25 ... 11	--	--
NA	ETU10	✓	--	--	--	--	LIN	0.4 ... 1	--	--	1.25 ... 11	--	--
TB	ETU10	✓	--	--	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
NB	ETU10	✓	--	--	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
SL	ETU12	✓	--	--	--	--	LIG	0.4 ... 1	--	--	1.25 ... 11	0.6 ... 1, OFF	0.1 ... 0.3
ML	ETU12	✓	--	--	--	--	LIG	0.4 ... 1	--	--	1.25 ... 11	0.6 ... 1, OFF	0.1 ... 0.3
SF	ETU12	✓	--	--	--	--	LIG	0.4 ... 1	--	--	1.25 ... 11	0.6 ... 1, OFF	0.1 ... 0.3
MF	ETU12	✓	--	--	--	--	LIG	0.4 ... 1	--	--	1.25 ... 11	0.6 ... 1, OFF	0.1 ... 0.3
TN	ETU12	✓	--	--	--	--	LING	0.4 ... 1	--	--	1.25 ... 11	0.6 ... 1, OFF	0.1 ... 0.3
NN	ETU12	✓	--	--	--	--	LING	0.4 ... 1	--	--	1.25 ... 11	0.6 ... 1, OFF	0.1 ... 0.3
SE	ETU20	--	✓	--	--	--	LSI	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	--	--
ME	ETU20	--	✓	--	--	--	LSI	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	--	--
TE	ETU20	--	✓	--	--	--	LSI	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	--	--
NE	ETU20	--	✓	--	--	--	LSI	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	--	--
TF	ETU20	--	✓	--	--	--	LSIN	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	--	--
NF	ETU20	--	✓	--	--	--	LSIN	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	--	--
SG	ETU22	--	✓	--	--	--	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	0.6 ... 1, OFF	0.1 ... 0.3
MG	ETU22	--	✓	--	--	--	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	0.6 ... 1, OFF	0.1 ... 0.3
SH	ETU22	--	✓	--	--	--	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	0.6 ... 1, OFF	0.1 ... 0.3
MH	ETU22	--	✓	--	--	--	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	0.6 ... 1, OFF	0.1 ... 0.3
TH	ETU22	--	✓	--	--	--	LSING	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	0.6 ... 1, OFF	0.1 ... 0.3
NH	ETU22	--	✓	--	--	--	LSING	0.4 ... 1	1.5 ... 10	0 ... 0.5	11	0.6 ... 1, OFF	0.1 ... 0.3
SS	ETU30M ³⁾	--	--	✓	--	--	LI	0.4 ... 1	--	--	6/8/11	--	--
MS	ETU30M ³⁾	--	--	✓	--	--	LI	0.4 ... 1	--	--	6/8/11	--	--
CP	LCD ETU40M ³⁾	--	--	✓	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
CH	LCD ETU40	--	✓	--	--	--	LI, LS, LSI	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	--	--
CJ	LCD ETU40	--	✓	--	--	--	LI, LSI, LIN, LSIN	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	--	--
CL	LCD ETU42	--	✓	--	--	--	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	0.4 ... 1	0.1 ... 0.5
CM	LCD ETU42	--	✓	--	--	--	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	0.4 ... 1	0.1 ... 0.5
CN	LCD ETU42	--	✓	--	--	--	LSIG, LSING	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	0.4 ... 1	0.1 ... 0.5

¹⁾ Size dependent.

²⁾ TM up to $I_n = 630$ A.

³⁾ Motor protection up to $I_n = 500$ A.

⁴⁾ Non-adjustable.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

General data

Order No. supplement	Releases	Thermal image	Phase failure	Communication-capable	Ground-fault protection	Number of poles	N pole protected ¹⁾	I^2t (ON/OFF)	Trip class (t_c)	Time-lag class (t_R)	Thermo-magnetic releases	Magnetic releases	Electronic releases	LCD display
DK	M	--	--	--	--	3	--	--	--	--	--	✓	--	--
DE	M	--	--	--	--	3	--	--	--	--	--	✓	--	--
EE	M	--	--	--	--	4	--	--	--	--	--	✓	--	--
DA	TM ²⁾	✓	--	--	--	3	--	--	--	--	✓	--	--	--
DD	TM ²⁾	✓	--	--	--	3	--	--	--	--	✓	--	--	--
DC	TM ²⁾	✓	--	--	--	3	--	--	--	--	✓	--	--	--
EH	TM ²⁾	✓	--	--	--	4	--	--	--	--	✓	--	--	--
EJ	TM ²⁾	✓	--	--	--	4	--	--	--	--	✓	--	--	--
EA	TM ²⁾	✓	--	--	--	4	100 %	--	--	--	✓	--	--	--
EC	TM ²⁾	✓	--	--	--	4	60 %	--	--	--	✓	--	--	--
EM	TM ²⁾	✓	--	--	--	4	100 %	--	--	--	✓	--	--	--
SP	ETU10M ³⁾	✓	40 % I_R	--	--	3	--	--	10	--	--	--	✓	--
MP	ETU10M ³⁾	✓	40 % I_R	✓ ⁴⁾	--	3	--	--	10	--	--	--	✓	--
SB	ETU10	✓	--	--	✓ ⁴⁾	3	--	--	--	2.5 ... 30	--	--	✓	--
MB	ETU10	✓	--	--	✓ ⁴⁾	3	--	--	--	2.5 ... 30	--	--	✓	--
TA	ETU10	✓	--	--	--	4	50/100 %	--	--	2.5 ... 30	--	--	✓	--
NA	ETU10	✓	--	--	✓ ⁴⁾	4	50/100 %	--	--	2.5 ... 30	--	--	✓	--
TB	ETU10	✓	--	--	--	4	--	--	--	2.5 ... 30	--	--	✓	--
NB	ETU10	✓	--	--	✓ ⁴⁾	4	--	--	--	2.5 ... 30	--	--	✓	--
SL	ETU12	✓	--	--	①	3	--	✓	--	2.5 ... 30	--	--	✓	--
ML	ETU12	✓	--	✓ ⁴⁾	①	3	--	✓	--	2.5 ... 30	--	--	✓	--
SF	ETU12	✓	--	--	②	3	--	✓	--	2.5 ... 30	--	--	✓	--
MF	ETU12	✓	--	--	②	3	--	✓	--	2.5 ... 30	--	--	✓	--
TN	ETU12	✓	--	--	②	4	50/100 %	✓	--	2.5 ... 30	--	--	✓	--
NN	ETU12	✓	--	--	②	4	50/100 %	✓	--	2.5 ... 30	--	--	✓	--
SE	ETU20	✓	--	--	--	3	--	✓	--	--	--	--	✓	--
ME	ETU20	✓	--	--	✓ ⁴⁾	3	--	✓	--	--	--	--	✓	--
TE	ETU20	✓	--	--	--	4	--	✓	--	--	--	--	✓	--
NE	ETU20	✓	--	--	✓ ⁴⁾	4	--	✓	--	--	--	--	✓	--
TF	ETU20	✓	--	--	--	4	50/100 %	✓	--	--	--	--	✓	--
NF	ETU20	✓	--	--	✓ ⁴⁾	4	50/100 %	✓	--	--	--	--	✓	--
SG	ETU22	✓	--	--	①	3	--	✓	--	--	--	--	✓	--
MG	ETU22	✓	--	--	✓ ⁴⁾	①	3	✓	--	--	--	--	✓	--
SH	ETU22	✓	--	--	--	②	3	✓	--	--	--	--	✓	--
MH	ETU22	✓	--	--	✓ ⁴⁾	②	3	✓	--	--	--	--	✓	--
TH	ETU22	✓	--	--	--	②	4	✓	--	--	--	--	✓	--
NH	ETU22	✓	--	--	✓ ⁴⁾	②	4	✓	--	--	--	--	✓	--
SS	ETU30M ³⁾	✓	40 % I_R	--	--	3	--	--	10, 20, 30	--	--	--	✓	--
MS	ETU30M ³⁾	✓	40 % I_R	✓ ⁴⁾	--	3	--	--	10, 20, 30	--	--	--	✓	--
CP	LCD ETU40M ³⁾	✓	5 ... 50 % I_R	✓	--	3	--	--	5, 10, 15, 20, 30	--	--	--	✓	✓
CH	LCD ETU40	✓	--	✓	--	3	--	✓	--	2.5 ... 30	--	--	✓	✓
CJ	LCD ETU40	✓	--	✓	--	4	50 ... 100 %, OFF	✓	--	2.5 ... 30	--	--	✓	✓
CL	LCD ETU42	✓	--	✓	①	3	--	✓	--	2.5 ... 30	--	--	✓	✓
CM	LCD ETU42	✓	--	✓	①/③	3	--	✓	--	2.5 ... 30	--	--	✓	✓
CN	LCD ETU42	✓	--	✓	②	4	50 ... 100 %, OFF	✓	--	2.5 ... 30	--	--	✓	✓

Ground-fault protection

- ① Vectorial summation current (3-conductor system)
- ② Vectorial summation current (4-conductor system)
- ③ Direct detection of ground-fault current in the neutral point of the transformer

¹⁾ Size dependent.

²⁾ TM up to $I_n = 630$ A.

³⁾ Motor protection up to $I_n = 500$ A.

⁴⁾ With COM20/COM21.

SENTRON 3VL Molded Case Circuit Breakers

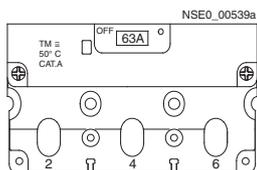
3VL Molded Case Circuit Breakers up to 1600 A

3-pole

Selection and ordering data

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases I_R	Operating current of the instantaneous short-circuit releases "I" I_f	DT **	I_{CU} up to 55 kA at 415 V, standard switching capacity N See "Overview".						
	A	A	A			Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
						Order No. supplement required, see page 16/56					

3-pole, fixed-mounted, for system protection, 16 A to 160 A, thermal-magnetic releases LI



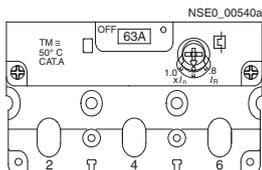
System protection, TM, LI function

With non-adjustable thermal overcurrent releases, non-adjustable short-circuit releases

Type	Rated current I_n	Current setting I_R	Operating current I_f	DT	Order No.	PU	PS*	PG	Weight per PU approx. kg
VL160X/ 3VL1	16	16	300	B	3VL17 96-1DA3□-....	1	1 unit	113	1.900
	20	20	300	B	3VL17 02-1DA3□-....	1	1 unit	113	1.900
	25	25	300	B	3VL17 25-1DA3□-....	1	1 unit	113	2.000
	32	32	300	B	3VL17 03-1DA3□-....	1	1 unit	113	2.000
	40	40	600	B	3VL17 04-1DA3□-....	1	1 unit	113	2.000
	50	50	600	B	3VL17 05-1DA3□-....	1	1 unit	113	2.000
	63	63	600	B	3VL17 06-1DA3□-....	1	1 unit	113	2.000
	80	80	1000	B	3VL17 08-1DA3□-....	1	1 unit	113	2.000
	100	100	1000	B	3VL17 10-1DA3□-....	1	1 unit	113	2.000
	125	125	1000	B	3VL17 12-1DA3□-....	1	1 unit	113	2.000
	160	160	1500	B	3VL17 16-1DA3□-....	1	1 unit	113	2.000

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal **3**
- Connection with screw terminal not in conjunction with RCD module **6**



System protection, TM, LI function

With adjustable thermal overcurrent releases, non-adjustable short-circuit releases

Type	Rated current I_n	Current setting I_R	Operating current I_f	DT	Order No.	PU	PS*	PG	Weight per PU approx. kg
VL160X/ 3VL1	20	16 ... 20	300	B	3VL17 02-1DD3□-....	1	1 unit	113	1.900
	32	25 ... 32	300	B	3VL17 03-1DD3□-....	1	1 unit	113	2.000
	40	32 ... 40	600	B	3VL17 04-1DD3□-....	1	1 unit	113	2.000
	50	40 ... 50	600	B	3VL17 05-1DD3□-....	1	1 unit	113	2.000
	63	50 ... 63	600	B	3VL17 06-1DD3□-....	1	1 unit	113	2.000
	80	63 ... 80	1000	B	3VL17 08-1DD3□-....	1	1 unit	113	2.000
	100	80 ... 100	1000	B	3VL17 10-1DD3□-....	1	1 unit	113	2.000
	125	100 ... 125	1000	B	3VL17 12-1DD3□-....	1	1 unit	113	2.000
	160	125 ... 160	1500	B	3VL17 16-1DD3□-....	1	1 unit	113	2.000

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal **3**
- Connection with screw terminal not in conjunction with RCD module **6**

** Delivery time class A for Order No. supplement "0AA0", see page 16/56.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

DT **	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT **	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		

B	3VL17 96-2DA3□-....		1	1 unit	113	1.900								
B	3VL17 02-2DA3□-....		1	1 unit	113	1.900								
B	3VL17 25-2DA3□-....		1	1 unit	113	2.000								
B	3VL17 03-2DA3□-....		1	1 unit	113	2.000								
B	3VL17 04-2DA3□-....		1	1 unit	113	2.000								
B	3VL17 05-2DA3□-....		1	1 unit	113	2.000								
B	3VL17 06-2DA3□-....		1	1 unit	113	2.000								
B	3VL17 08-2DA3□-....		1	1 unit	113	2.000								
B	3VL17 10-2DA3□-....		1	1 unit	113	2.000								
B	3VL17 12-2DA3□-....		1	1 unit	113	2.000								
B	3VL17 16-2DA3□-....		1	1 unit	113	2.000								

3
6

B	3VL17 02-2DD3□-....		1	1 unit	113	1.900								
B	3VL17 03-2DD3□-....		1	1 unit	113	2.000								
B	3VL17 04-2DD3□-....		1	1 unit	113	2.000								
B	3VL17 05-2DD3□-....		1	1 unit	113	2.000								
B	3VL17 06-2DD3□-....		1	1 unit	113	2.000								
B	3VL17 08-2DD3□-....		1	1 unit	113	2.000								
B	3VL17 10-2DD3□-....		1	1 unit	113	2.000								
B	3VL17 12-2DD3□-....		1	1 unit	113	2.000								
B	3VL17 16-2DD3□-....		1	1 unit	113	2.000								

3
6

** Delivery time class A for Order No. supplement "0AA0", see page 16/56.

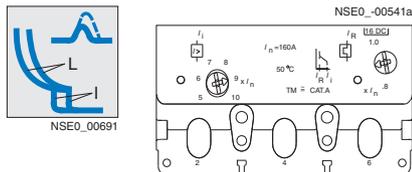
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases I_R ^a I_R	Operating current of the instantaneous short-circuit releases "I" I_I	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N See "Overview".	(N)				
	A	A	A		Order No. Order No. supplement required, see page 16/56	For basic price per PU/price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg

3-pole, fixed-mounted, for system protection, 50 A to 630 A, thermal-magnetic releases LI



System protection, TM, LI function

With adjustable thermal overcurrent releases, adjustable short-circuit releases

VL160/3VL2	50	40 ... 50	300 ... 600	B	3VL27 05-1DC3□-....	1	1 unit	113	2.200
	63	50 ... 63	300 ... 600	B	3VL27 06-1DC3□-....	1	1 unit	113	2.200
	80	63 ... 80	400 ... 800	B	3VL27 08-1DC3□-....	1	1 unit	113	2.200
	100	80 ... 100	500 ... 1000	B	3VL27 10-1DC3□-....	1	1 unit	113	2.200
	125	100 ... 125	625 ... 1250	B	3VL27 12-1DC3□-....	1	1 unit	113	2.200
	160	125 ... 160	800 ... 1600	B	3VL27 16-1DC3□-....	1	1 unit	113	2.200
VL250/3VL3	200	160 ... 200	1000 ... 2000	B	3VL37 20-1DC3□-....	1	1 unit	113	2.300
	250	200 ... 250	1250 ... 2500	B	3VL37 25-1DC3□-....	1	1 unit	113	2.300

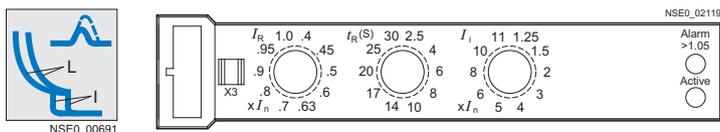
Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal not in conjunction with RCD module

3
6

VL400/3VL4	200	160 ... 200	1000 ... 2000	B	3VL47 20-1DC36-....	1	1 unit	113	5.700
	250	200 ... 250	1250 ... 2500	B	3VL47 25-1DC36-....	1	1 unit	113	5.700
	315	250 ... 315	1575 ... 3150	B	3VL47 31-1DC36-....	1	1 unit	113	5.700
	400	320 ... 400	2000 ... 4000	B	3VL47 40-1DC36-....	1	1 unit	113	5.700
VL630/3VL5	315	250 ... 315	1575 ... 3150	B	3VL57 31-1DC36-....	1	1 unit	113	9.000
	400	320 ... 400	2000 ... 4000	B	3VL57 40-1DC36-....	1	1 unit	113	9.000
	500	400 ... 500	2500 ... 5000	B	3VL57 50-1DC36-....	1	1 unit	113	9.000
	630	500 ... 630	3150 ... 6300	B	3VL57 63-1DC36-....	1	1 unit	113	9.000

3-pole, fixed-mounted, for system protection, 63 A to 1600 A, electronic releases LI



ETU10, LI function

With adjustable overcurrent releases, adjustable short-circuit releases

VL160/3VL2	63	25 ... 63	1.25 ... $11 \times I_n$	B	3VL27 06-1□□3□-....	1	1 unit	113	2.400
	100	40 ... 100	1.25 ... $11 \times I_n$	B	3VL27 10-1□□3□-....	1	1 unit	113	2.400
	160	64 ... 160	1.25 ... $11 \times I_n$	B	3VL27 16-1□□3□-....	1	1 unit	113	2.400
VL250/3VL3	200	80 ... 200	1.25 ... $11 \times I_n$	B	3VL37 20-1□□3□-....	1	1 unit	113	2.500
	250	100 ... 250	1.25 ... $11 \times I_n$	B	3VL37 25-1□□3□-....	1	1 unit	113	2.500

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal

3
6

VL400/3VL4	315	128 ... 315	1.25 ... $11 \times I_n$	B	3VL47 31-1□□36-....	1	1 unit	113	5.900
	400	160 ... 400	1.25 ... $11 \times I_n$	B	3VL47 40-1□□36-....	1	1 unit	113	5.900
VL630/3VL5	630	525 ... 630	1.25 ... $10 \times I_n$	B	3VL57 63-1□□36-....	1	1 unit	113	9.300
VL800/3VL6	800	320 ... 800	1.25 ... $8 \times I_n$	B	3VL67 80-1□□36-....	1	1 unit	113	16.000
VL1250/3VL7	1000	400 ... 1000	1.25 ... $11 \times I_n$	B	3VL77 10-1□□36-....	1	1 unit	113	25.000
	1250	500 ... 1250	1.25 ... $11 \times I_n$	B	3VL77 12-1□□36-....	1	1 unit	113	25.000
VL1600/3VL8 ¹⁾	1600	640 ... 1600	1.25 ... $9 \times I_n$	B	3VL87 16-1□□30-....	1	1 unit	113	31.300

- Without communication preparation
- With communication preparation

SB
MB

¹⁾ Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:

- For accessories see page 16/98.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

* You can order this quantity or a multiple thereof.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	For basic price per PU/price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		Order No.	For basic price per PU/price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		

B	3VL27 05-2DC3□-....		1	1 unit	113	2.200	B	3VL27 05-3DC3□-....		1	1 unit	113	2.200
B	3VL27 06-2DC3□-....		1	1 unit	113	2.200	B	3VL27 06-3DC3□-....		1	1 unit	113	2.200
B	3VL27 08-2DC3□-....		1	1 unit	113	2.200	B	3VL27 08-3DC3□-....		1	1 unit	113	2.200
B	3VL27 10-2DC3□-....		1	1 unit	113	2.200	B	3VL27 10-3DC3□-....		1	1 unit	113	2.200
B	3VL27 12-2DC3□-....		1	1 unit	113	2.200	B	3VL27 12-3DC3□-....		1	1 unit	113	2.200
B	3VL27 16-2DC3□-....		1	1 unit	113	2.200	B	3VL27 16-3DC3□-....		1	1 unit	113	2.200
B	3VL37 20-2DC3□-....		1	1 unit	113	2.300	B	3VL37 20-3DC3□-....		1	1 unit	113	2.300
B	3VL37 25-2DC3□-....		1	1 unit	113	2.300	B	3VL37 25-3DC3□-....		1	1 unit	113	2.300

3
63
6

B	3VL47 20-2DC36-....		1	1 unit	113	5.700	B	3VL47 20-3DC36-....		1	1 unit	113	5.700
B	3VL47 25-2DC36-....		1	1 unit	113	5.700	B	3VL47 25-3DC36-....		1	1 unit	113	5.700
B	3VL47 31-2DC36-....		1	1 unit	113	5.700	B	3VL47 31-3DC36-....		1	1 unit	113	5.700
B	3VL47 40-2DC36-....		1	1 unit	113	5.700	B	3VL47 40-3DC36-....		1	1 unit	113	5.700
B	3VL57 31-2DC36-....		1	1 unit	113	9.000	B	3VL57 31-3DC36-....		1	1 unit	113	9.000
B	3VL57 40-2DC36-....		1	1 unit	113	9.000	B	3VL57 40-3DC36-....		1	1 unit	113	9.000
B	3VL57 50-2DC36-....		1	1 unit	113	9.000	B	3VL57 50-3DC36-....		1	1 unit	113	9.000
B	3VL57 63-2DC36-....		1	1 unit	113	9.000	B	3VL57 63-3DC36-....		1	1 unit	113	9.000

B	3VL27 06-2□□3□-....		1	1 unit	113	2.400	B	3VL27 06-3□□3□-....		1	1 unit	113	2.400
B	3VL27 10-2□□3□-....		1	1 unit	113	2.400	B	3VL27 10-3□□3□-....		1	1 unit	113	2.400
B	3VL27 16-2□□3□-....		1	1 unit	113	2.400	B	3VL27 16-3□□3□-....		1	1 unit	113	2.400
B	3VL37 20-2□□3□-....		1	1 unit	113	2.500	B	3VL37 20-3□□3□-....		1	1 unit	113	2.500
B	3VL37 25-2□□3□-....		1	1 unit	113	2.500	B	3VL37 25-3□□3□-....		1	1 unit	113	2.500

3
63
6

B	3VL47 31-2□□36-....		1	1 unit	113	5.900	B	3VL47 31-3□□36-....		1	1 unit	113	5.900
B	3VL47 40-2□□36-....		1	1 unit	113	5.900	B	3VL47 40-3□□36-....		1	1 unit	113	5.900
B	3VL57 63-2□□36-....		1	1 unit	113	9.300	B	3VL57 63-3□□36-....		1	1 unit	113	9.300
B	3VL67 80-2□□36-....		1	1 unit	113	16.000	B	3VL67 80-3□□36-....		1	1 unit	113	16.000
B	3VL77 10-2□□36-....		1	1 unit	113	25.000	B	3VL77 10-3□□36-....		1	1 unit	113	25.000
B	3VL77 12-2□□36-....		1	1 unit	113	25.000	B	3VL77 12-3□□36-....		1	1 unit	113	25.000
B	3VL87 16-2□□30-....		1	1 unit	113	31.300	B	3VL87 16-3□□30-....		1	1 unit	113	31.300

SB
MBSB
MB

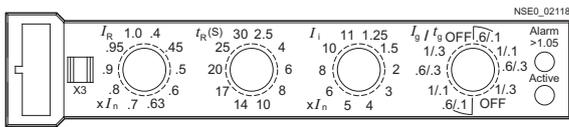
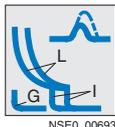
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases "L" I_R	Operating current of the instantaneous short-circuit releases "I" I_i	Ground-fault protection "G" I_g	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N See "Overview".					(N)
	A	A	A	A		Order No.	For price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
						Order No. supplement required, see page 16/56					kg

3-pole, fixed-mounted, for system protection, 63 A to 1600 A, electronic releases LIG



ETU12, LIG function for 3-wire three-phase systems

With adjustable overcurrent releases, adjustable short-circuit releases, vectorial summation current, ground fault delay $t_g = 0.1 \dots 0.3$ s, ground fault function (G) can be switched off.

VL160/3VL2	63	25 ... 63	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL27 06-1□□3□-....	1	1 unit	113	2.400
	100	40 ... 100	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL27 10-1□□3□-....	1	1 unit	113	2.400
	160	64 ... 160	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL27 16-1□□3□-....	1	1 unit	113	2.400
VL250/3VL3	200	80 ... 200	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL37 20-1□□3□-....	1	1 unit	113	2.500
	250	100 ... 250	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL37 25-1□□3□-....	1	1 unit	113	2.500

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal

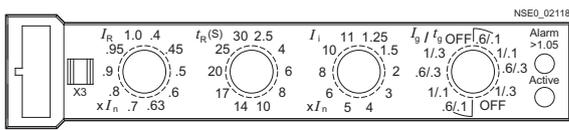
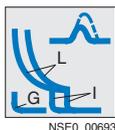
3
6

VL400/3VL4	315	128 ... 315	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL47 31-1□□36-....	1	1 unit	113	5.900
	400	160 ... 400	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL47 40-1□□36-....	1	1 unit	113	5.900
VL630/3VL5	630	252 ... 630	1.25 ... $10 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL57 63-1□□36-....	1	1 unit	113	9.300
VL800/3VL6	800	320 ... 800	1.25 ... $8 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL67 80-1□□36-....	1	1 unit	113	16.000
VL1250/3VL7	1000	400 ... 1000	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL77 10-1□□36-....	1	1 unit	113	25.000
	1250	500 ... 1250	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL77 12-1□□36-....	1	1 unit	113	25.000
VL1600/3VL8 ¹⁾	1600	640 ... 1600	1.25 ... $9 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL87 16-1□□30-....	1	1 unit	113	31.300

- Without communication preparation
- With communication preparation

SL
ML

3-pole, fixed-mounted, for system protection, 63 A to 1600 A, electronic releases LIG



ETU12, LIG function for 4-wire three-phase systems

With adjustable overcurrent releases, adjustable short-circuit releases, vectorial summation current, external current transformers required in addition, see page 16/90. Ground fault delay $t_g = 0.1 \dots 0.3$ s, ground fault function (G) can be switched off.

VL160/3VL2	63	25 ... 63	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL27 06-1□□3□-....	1	1 unit	113	2.400
	100	40 ... 100	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL27 10-1□□3□-....	1	1 unit	113	2.400
	160	64 ... 160	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL27 16-1□□3□-....	1	1 unit	113	2.400
VL250/3VL3	200	80 ... 200	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL37 20-1□□3□-....	1	1 unit	113	2.500
	250	100 ... 250	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL37 25-1□□3□-....	1	1 unit	113	2.500

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal

3
6

VL400/3VL4	315	128 ... 315	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL47 31-1□□36-....	1	1 unit	113	5.900
	400	160 ... 400	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL47 40-1□□36-....	1	1 unit	113	5.900
VL630/3VL5	630	252 ... 630	1.25 ... $10 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL57 63-1□□36-....	1	1 unit	113	9.300
VL800/3VL6	800	320 ... 800	1.25 ... $8 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL67 80-1□□36-....	1	1 unit	113	16.000
VL1250/3VL7	1000	400 ... 1000	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL77 10-1□□36-....	1	1 unit	113	25.000
	1250	500 ... 1250	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL77 12-1□□36-....	1	1 unit	113	25.000
VL1600/3VL8 ¹⁾	1600	640 ... 1600	1.25 ... $9 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL87 16-1□□30-....	1	1 unit	113	31.300

- Without communication preparation
- With communication preparation

SF
MF

¹⁾ Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

DT I_{cu} up to 70 kA at 415 V, high switching capacity H (H)							DT I_{cu} up to 100 kA at 415 V, very high switching capacity L (L)						
Order No.	For price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	Order No.	For price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		
B 3VL27 06-2□□3□-....		1	1 unit	113	2.400	B 3VL27 06-3□□3□-....		1	1 unit	113	2.400		
B 3VL27 10-2□□3□-....		1	1 unit	113	2.400	B 3VL27 10-3□□3□-....		1	1 unit	113	2.400		
B 3VL27 16-2□□3□-....		1	1 unit	113	2.400	B 3VL27 16-3□□3□-....		1	1 unit	113	2.400		
B 3VL37 20-2□□3□-....		1	1 unit	113	2.500	B 3VL37 20-3□□3□-....		1	1 unit	113	2.500		
B 3VL37 25-2□□3□-....		1	1 unit	113	2.500	B 3VL37 25-3□□3□-....		1	1 unit	113	2.500		
3 6						3 6							
B 3VL47 31-2□□36-....		1	1 unit	113	5.900	B 3VL47 31-3□□36-....		1	1 unit	113	5.900		
B 3VL47 40-2□□36-....		1	1 unit	113	5.900	B 3VL47 40-3□□36-....		1	1 unit	113	5.900		
B 3VL57 63-2□□36-....		1	1 unit	113	9.300	B 3VL57 63-3□□36-....		1	1 unit	113	9.300		
B 3VL67 80-2□□36-....		1	1 unit	113	16.000	B 3VL67 80-3□□36-....		1	1 unit	113	16.000		
B 3VL77 10-2□□36-....		1	1 unit	113	25.000	B 3VL77 10-3□□36-....		1	1 unit	113	25.000		
B 3VL77 12-2□□36-....		1	1 unit	113	25.000	B 3VL77 12-3□□36-....		1	1 unit	113	25.000		
B 3VL87 16-2□□30-....		1	1 unit	113	31.300	B 3VL87 16-3□□30-....		1	1 unit	113	31.300		
SL ML						SL ML							
B 3VL27 06-2□□3□-....		1	1 unit	113	2.400	B 3VL27 06-3□□3□-....		1	1 unit	113	2.400		
B 3VL27 10-2□□3□-....		1	1 unit	113	2.400	B 3VL27 10-3□□3□-....		1	1 unit	113	2.400		
B 3VL27 16-2□□3□-....		1	1 unit	113	2.400	B 3VL27 16-3□□3□-....		1	1 unit	113	2.400		
B 3VL37 20-2□□3□-....		1	1 unit	113	2.500	B 3VL37 20-3□□3□-....		1	1 unit	113	2.500		
B 3VL37 25-2□□3□-....		1	1 unit	113	2.500	B 3VL37 25-3□□3□-....		1	1 unit	113	2.500		
3 6						3 6							
B 3VL47 31-2□□36-....		1	1 unit	113	5.900	B 3VL47 31-3□□36-....		1	1 unit	113	5.900		
B 3VL47 40-2□□36-....		1	1 unit	113	5.900	B 3VL47 40-3□□36-....		1	1 unit	113	5.900		
B 3VL57 63-2□□36-....		1	1 unit	113	9.300	B 3VL57 63-3□□36-....		1	1 unit	113	9.300		
B 3VL67 80-2□□36-....		1	1 unit	113	16.000	B 3VL67 80-3□□36-....		1	1 unit	113	16.000		
B 3VL77 10-2□□36-....		1	1 unit	113	25.000	B 3VL77 10-3□□36-....		1	1 unit	113	25.000		
B 3VL77 12-2□□36-....		1	1 unit	113	25.000	B 3VL77 12-3□□36-....		1	1 unit	113	25.000		
B 3VL87 16-2□□30-....		1	1 unit	113	31.300	B 3VL87 16-3□□30-....		1	1 unit	113	31.300		
SF MF						SF MF							

Communication:
• For accessories see page 16/98.

• For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

* You can order this quantity or a multiple thereof.

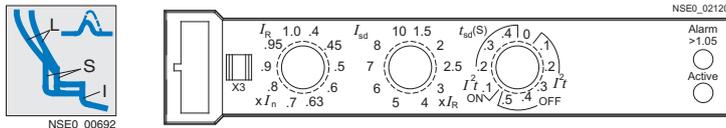
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases "L" I_R	Operating current of the instantaneous short-circuit releases "I" I_i	S function short-circuit protection (short-time delayed) S	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N see "Overview" (N)
	A	A	A	A		Order No. supplement required, see page 16/56
						For price see page 16/32
						PU (UNIT, SET, M)
						PS*
						PG
						Weight per PU approx. kg

3-pole, fixed-mounted, for system protection - generator protection, 63 A to 1600 A, electronic releases LSI



ETU20, LSI function for time-based discrimination

With adjustable overcurrent releases, non-adjustable short-circuit releases, short-circuit delay ($t_{sd} = 0$ to 0.5 s)

Model	Rated current I_n	Overcurrent release I_R	Instantaneous release I_i	Short-circuit delay t_{sd}	Short-circuit capacity I_{cu}	Order No.	PU	PS*	PG	Weight per PU approx. kg
VL160/3VL2	63	$0.4 \dots 1.0 \times I_n$	$11 \times I_n$	1.5 ... 10x I_R B	3VL27 06-1□□3□-....	1	1 unit	113	2,400	
	100	$0.4 \dots 1.0 \times I_n$	$11 \times I_n$	1.5 ... 10x I_R B	3VL27 10-1□□3□-....	1	1 unit	113	2,400	
	160	$0.4 \dots 1.0 \times I_n$	$11 \times I_n$	1.5 ... 10x I_R B	3VL27 16-1□□3□-....	1	1 unit	113	2,400	
VL250/3VL3	200	$0.4 \dots 1.0 \times I_n$	$11 \times I_n$	1.5 ... 10x I_R B	3VL37 20-1□□3□-....	1	1 unit	113	2,500	
	250	$0.4 \dots 1.0 \times I_n$	$11 \times I_n$	1.5 ... 10x I_R B	3VL37 25-1□□3□-....	1	1 unit	113	2,500	

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal 3
- Connection with screw terminal 6

Model	Rated current I_n	Overcurrent release I_R	Instantaneous release I_i	Short-circuit delay t_{sd}	Short-circuit capacity I_{cu}	Order No.	PU	PS*	PG	Weight per PU approx. kg
VL400/3VL4	315	$0.4 \dots 1.0 \times I_n$	$11 \times I_n$	1.5 ... 10x I_R B	3VL47 31-1□□36-....	1	1 unit	113	5,900	
	400	$0.4 \dots 1.0 \times I_n$	$11 \times I_n$	1.5 ... 10x I_R B	3VL47 40-1□□36-....	1	1 unit	113	5,900	
VL630/3VL5	630	$0.4 \dots 1.0 \times I_n$	$10 \times I_n$	1.5 ... 9x I_R B	3VL57 63-1□□36-....	1	1 unit	113	9,300	
VL800/3VL6	800	$0.4 \dots 1.0 \times I_n$	$8 \times I_n$	1.5 ... 7x I_R B	3VL67 80-1□□36-....	1	1 unit	113	16,000	
VL1250/3VL7	1000	$0.4 \dots 1.0 \times I_n$	$11 \times I_n$	1.5 ... 10x I_R B	3VL77 10-1□□36-....	1	1 unit	113	25,000	
	1250	$0.4 \dots 1.0 \times I_n$	$11 \times I_n$	1.5 ... 10x I_R B	3VL77 12-1□□36-....	1	1 unit	113	25,000	
VL1600/3VL8 ¹⁾	1600	$0.4 \dots 1.0 \times I_n$	$9 \times I_n$	1.5 ... 8x I_R B	3VL87 16-1□□30-....	1	1 unit	113	31,300	

- Without communication preparation SE
- With communication preparation ME

¹⁾ Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:

- For accessories see page 16/98.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	For price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		Order No.	For price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		
	Order No. supplement required, see page 16/56					kg		Order No. supplement required, see page 16/56					kg		

B	3VL27 06-2□□3□-....		1	1 unit	113	2.400	B	3VL27 06-3□□3□-....		1	1 unit	113	2.400
B	3VL27 10-2□□3□-....		1	1 unit	113	2.400	B	3VL27 10-3□□3□-....		1	1 unit	113	2.400
B	3VL27 16-2□□3□-....		1	1 unit	113	2.400	B	3VL27 16-3□□3□-....		1	1 unit	113	2.400
B	3VL37 20-2□□3□-....		1	1 unit	113	2.500	B	3VL37 20-3□□3□-....		1	1 unit	113	2.500
B	3VL37 25-2□□3□-....		1	1 unit	113	2.500	B	3VL37 25-3□□3□-....		1	1 unit	113	2.500

3
63
6

B	3VL47 31-2□□36-....		1	1 unit	113	5.900	B	3VL47 31-3□□36-....		1	1 unit	113	5.900
B	3VL47 40-2□□36-....		1	1 unit	113	5.900	B	3VL47 40-3□□36-....		1	1 unit	113	5.900
B	3VL57 63-2□□36-....		1	1 unit	113	9.300	B	3VL57 63-3□□36-....		1	1 unit	113	9.300
B	3VL67 80-2□□36-....		1	1 unit	113	16.000	B	3VL67 80-3□□36-....		1	1 unit	113	16.000
B	3VL77 10-2□□36-....		1	1 unit	113	25.000	B	3VL77 10-3□□36-....		1	1 unit	113	25.000
B	3VL77 12-2□□36-....		1	1 unit	113	25.000	B	3VL77 12-3□□36-....		1	1 unit	113	25.000
B	3VL87 16-2□□30-....		1	1 unit	113	31.300	B	3VL87 16-3□□30-....		1	1 unit	113	31.300

SE
MESE
ME

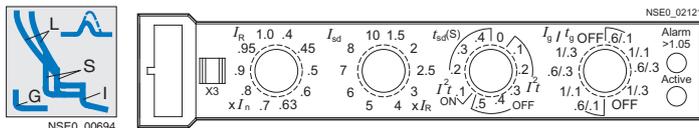
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases "L" I_R	Operating current of the instantaneous short-circuit releases "I" I_I	S function short-circuit protection (short-time delayed) S	Ground-fault protection "G" I_g	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N see "Overview" (N)					
	A	A	A	A	A		Order No.	For price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
							Order No. supplement required, see page 16/56					kg

3-pole, fixed-mounted, for system protection - generator protection, 63 A to 1600 A, electronic releases LSIG



ETU22, LSIG function for 3-wire three-phase systems and time-based discrimination

With adjustable overcurrent releases, non-adjustable short-circuit releases, ground fault delay $t_g = 0.1 \dots 0.3$ s, short-circuit delay $t_{sd} = 0 \dots 0.5$ s, ground fault protection (G) can be switched off

VL160/3VL2	63	25 ... 63	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL27 06-1□□3□-....	1	1 unit	113	2,400
	100	40 ... 100	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL27 10-1□□3□-....	1	1 unit	113	2,400
	160	64 ... 160	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL27 16-1□□3□-....	1	1 unit	113	2,400
VL250/3VL3	200	80 ... 200	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL37 20-1□□3□-....	1	1 unit	113	2,500
	250	100 ... 250	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL37 25-1□□3□-....	1	1 unit	113	2,500

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal

3
6

VL400/3VL4	315	128 ... 315	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL47 31-1□□36-....	1	1 unit	113	5,900
	400	160 ... 400	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL47 40-1□□36-....	1	1 unit	113	5,900
VL630/3VL5	630	252 ... 630	$10 \times I_n$	1.5 ...	$9 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL57 63-1□□36-....	1	1 unit	113	9,300
VL800/3VL6	800	320 ... 800	$8 \times I_n$	1.5 ...	$7 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL67 80-1□□36-....	1	1 unit	113	16,000
VL1250/3VL7	1000	400 ... 1000	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL77 10-1□□36-....	1	1 unit	113	25,000
	1250	500 ... 1250	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL77 12-1□□36-....	1	1 unit	113	25,000
VL1600/3VL8 ¹⁾	1600	640 ... 1600	$9 \times I_n$	1.5 ...	$8 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL87 16-1□□30-....	1	1 unit	113	31,300

- Without communication preparation
- With communication preparation

SG
MG

¹⁾ Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:

- For accessories see page 16/98.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No. Order No. supplement required, see page 16/56	For price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		Order No. Order No. supplement required, see page 16/56	For price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		
						kg							kg		

B	3VL27 06-2□□3□-....		1	1 unit	113	2.400	B	3VL27 06-3□□3□-....		1	1 unit	113	2.400	
B	3VL27 10-2□□3□-....		1	1 unit	113	2.400	B	3VL27 10-3□□3□-....		1	1 unit	113	2.400	
B	3VL27 16-2□□3□-....		1	1 unit	113	2.400	B	3VL27 16-3□□3□-....		1	1 unit	113	2.400	
B	3VL37 20-2□□3□-....		1	1 unit	113	2.500	B	3VL37 20-3□□3□-....		1	1 unit	113	2.500	
B	3VL37 25-2□□3□-....		1	1 unit	113	2.500	B	3VL37 25-3□□3□-....		1	1 unit	113	2.500	

3
63
6

B	3VL47 31-2□□36-....		1	1 unit	113	5.900	B	3VL47 31-3□□36-....		1	1 unit	113	5.900	
B	3VL47 40-2□□36-....		1	1 unit	113	5.900	B	3VL47 40-3□□36-....		1	1 unit	113	5.900	
B	3VL57 63-2□□36-....		1	1 unit	113	9.300	B	3VL57 63-3□□36-....		1	1 unit	113	9.300	
B	3VL67 80-2□□36-....		1	1 unit	113	16.000	B	3VL67 80-3□□36-....		1	1 unit	113	16.000	
B	3VL77 10-2□□36-....		1	1 unit	113	25.000	B	3VL77 10-3□□36-....		1	1 unit	113	25.000	
B	3VL77 12-2□□36-....		1	1 unit	113	25.000	B	3VL77 12-3□□36-....		1	1 unit	113	25.000	
B	3VL87 16-2□□30-....		1	1 unit	113	31.300	B	3VL87 16-3□□30-....		1	1 unit	113	31.300	

SG
MGSG
MG

16

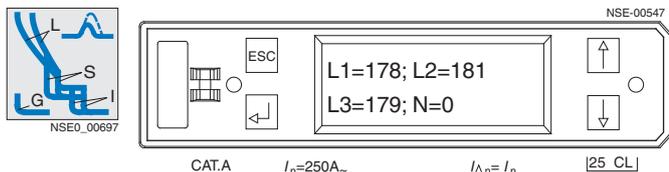
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases 'L' I_R	Operating current of the instantaneous short-circuit releases 'I' I_i	S function short-circuit protection (short-time delayed) S	Ground-fault protection 'G' I_g	I_{cu} up to 55 kA at 415 V, standard switching capacity N see "Overview" (N)					
	A	A	A	A	A	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
						Order No. supplement required, see page 16/56					kg

3-pole, fixed-mounted, for system protection - generator protection, 63 A to 1600 A, electronic releases LSIG



LCD-ETU42, LSIG function for 3-wire three-phase systems and time-based discrimination

With adjustable overcurrent releases, adjustable short-circuit releases, vectorial summation current, ground fault delay $t_g = 0.1 \dots 0.5$ s, short-circuit delay $t_{sd} = 0 \dots 0.5$ s

VL160/3VL2	63	25 ... 63	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL27 06-1CL3□-....	1	1 unit	113	2.400
	100	40 ... 100	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL27 10-1CL3□-....	1	1 unit	113	2.400
	160	64 ... 160	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL27 16-1CL3□-....	1	1 unit	113	2.400
VL250/3VL3	200	80 ... 200	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL37 20-1CL3□-....	1	1 unit	113	2.500
	250	100 ... 250	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL37 25-1CL3□-....	1	1 unit	113	2.500

Connection type can be selected by assignment of the 12th position of the Order No.

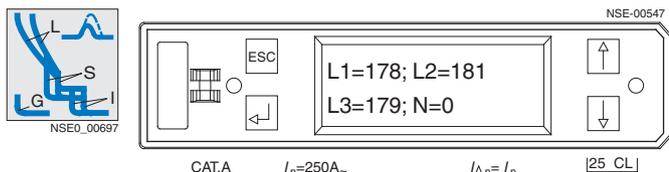
- Connection with box terminal
- Connection with screw terminal

3
6

VL400/3VL4	315	128 ... 315	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL47 31-1CL36-....	1	1 unit	113	5.900
	400	160 ... 400	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL47 40-1CL36-....	1	1 unit	113	5.900
VL630/3VL5	630	252 ... 630	$10 \times I_n$	$1.5 \dots 9 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL57 63-1CL36-....	1	1 unit	113	9.300
VL800/3VL6	800	320 ... 800	$8 \times I_n$	$1.5 \dots 7 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL67 80-1CL36-....	1	1 unit	113	16.000
VL1250/3VL7	1000	400 ... 1000	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL77 10-1CL36-....	1	1 unit	113	25.000
	1250	500 ... 1250	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL77 12-1CL36-....	1	1 unit	113	25.000
VL1600/3VL8 ¹⁾	1600	640 ... 1600	$9 \times I_n$	$1.5 \dots 8 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL87 16-1CL30-....	1	1 unit	113	31.300

• With communication preparation

CL



LCD-ETU42, LSIG function for 4-wire three-phase systems and time-based discrimination

With adjustable overcurrent releases, adjustable short-circuit releases. External current transformer required in addition, see pages 16/90. Vectorial summation current, ground fault delay $t_g = 0.1 \dots 0.5$ s, short-circuit delay $t_{sd} = 0 \dots 0.5$ s

VL160/3VL2	63	25 ... 63	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL27 06-1CM3□-....	1	1 unit	113	2.400
	100	40 ... 100	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL27 10-1CM3□-....	1	1 unit	113	2.400
	160	64 ... 160	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL27 16-1CM3□-....	1	1 unit	113	2.400
VL250/3VL3	200	80 ... 200	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL37 20-1CM3□-....	1	1 unit	113	2.500
	250	100 ... 250	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL37 25-1CM3□-....	1	1 unit	113	2.500

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal

3
6

VL400/3VL4	315	128 ... 315	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL47 31-1CM36-....	1	1 unit	113	5.900
	400	160 ... 400	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL47 40-1CM36-....	1	1 unit	113	5.900
VL630/3VL5	630	252 ... 630	$10 \times I_n$	$1.5 \dots 9 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL57 63-1CM36-....	1	1 unit	113	9.300
VL800/3VL6	800	320 ... 800	$8 \times I_n$	$1.5 \dots 7 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL67 80-1CM36-....	1	1 unit	113	16.000
VL1250/3VL7	1000	400 ... 1000	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL77 10-1CM36-....	1	1 unit	113	25.000
	1250	500 ... 1250	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL77 12-1CM36-....	1	1 unit	113	25.000
VL1600/3VL8 ¹⁾	1600	640 ... 1600	$9 \times I_n$	$1.5 \dots 8 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL87 16-1CM30-....	1	1 unit	113	31.300

• With communication preparation

CM

¹⁾ Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

* You can order this quantity or a multiple thereof.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

DT I_{cu} up to 70 kA at 415 V, high switching capacity H (H)						DT I_{cu} up to 100 kA at 415 V, very high switching capacity L (L)					
Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.

B	3VL27 06-2CL3□-....	1	1 unit	113	2.400	B	3VL27 06-3CL3□-....	1	1 unit	113	2.400
B	3VL27 10-2CL3□-....	1	1 unit	113	2.400	B	3VL27 10-3CL3□-....	1	1 unit	113	2.400
B	3VL27 16-2CL3□-....	1	1 unit	113	2.400	B	3VL27 16-3CL3□-....	1	1 unit	113	2.400
B	3VL37 20-2CL3□-....	1	1 unit	113	2.500	B	3VL37 20-3CL3□-....	1	1 unit	113	2.500
B	3VL37 25-2CL3□-....	1	1 unit	113	2.500	B	3VL37 25-3CL3□-....	1	1 unit	113	2.500

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6

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6

B	3VL47 31-2CL36-....	1	1 unit	113	5.900	B	3VL47 31-3CL36-....	1	1 unit	113	5.900
B	3VL47 40-2CL36-....	1	1 unit	113	5.900	B	3VL47 40-3CL36-....	1	1 unit	113	5.900
B	3VL57 63-2CL36-....	1	1 unit	113	9.300	B	3VL57 63-3CL36-....	1	1 unit	113	9.300
B	3VL67 80-2CL36-....	1	1 unit	113	16.000	B	3VL67 80-3CL36-....	1	1 unit	113	16.000
B	3VL77 10-2CL36-....	1	1 unit	113	25.000	B	3VL77 10-3CL36-....	1	1 unit	113	25.000
B	3VL77 12-2CL36-....	1	1 unit	113	25.000	B	3VL77 12-3CL36-....	1	1 unit	113	25.000
B	3VL87 16-2CL30-....	1	1 unit	113	31.300	B	3VL87 16-3CL30-....	1	1 unit	113	31.300

CL

CL

B	3VL27 06-2CM3□-....	1	1 unit	113	2.400	B	3VL27 06-3CM3□-....	1	1 unit	113	2.400
B	3VL27 10-2CM3□-....	1	1 unit	113	2.400	B	3VL27 10-3CM3□-....	1	1 unit	113	2.400
B	3VL27 16-2CM3□-....	1	1 unit	113	2.400	B	3VL27 16-3CM3□-....	1	1 unit	113	2.400
B	3VL37 20-2CM3□-....	1	1 unit	113	2.500	B	3VL37 20-3CM3□-....	1	1 unit	113	2.500
B	3VL37 25-2CM3□-....	1	1 unit	113	2.500	B	3VL37 25-3CM3□-....	1	1 unit	113	2.500

3
6

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6

B	3VL47 31-2CM36-....	1	1 unit	113	5.900	B	3VL47 31-3CM36-....	1	1 unit	113	5.900
B	3VL47 40-2CM36-....	1	1 unit	113	5.900	B	3VL47 40-3CM36-....	1	1 unit	113	5.900
B	3VL57 63-2CM36-....	1	1 unit	113	9.300	B	3VL57 63-3CM36-....	1	1 unit	113	9.300
B	3VL67 80-2CM36-....	1	1 unit	113	16.000	B	3VL67 80-3CM36-....	1	1 unit	113	16.000
B	3VL77 10-2CM36-....	1	1 unit	113	25.000	B	3VL77 10-3CM36-....	1	1 unit	113	25.000
B	3VL77 12-2CM36-....	1	1 unit	113	25.000	B	3VL77 12-3CM36-....	1	1 unit	113	25.000
B	3VL87 16-2CM30-....	1	1 unit	113	31.300	B	3VL87 16-3CM30-....	1	1 unit	113	31.300

CM

CM

Communication:

- For accessories see page 16/98.

- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

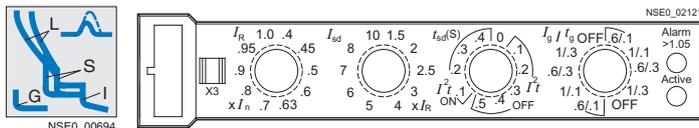
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases "L" I_R	Operating current of the instantaneous short-circuit releases "I" I_I	S function short-circuit protection (short-time delayed) S	Ground-fault protection "G" I_g	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N see "Overview" (N)					
	A	A	A	A	A		Order No.	For price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
							Order No. supplement required, see page 16/56					kg

3-pole, fixed-mounted, for system protection - generator protection, 63 A to 1600 A, electronic releases LSIG



ETU22, LSIG function for 4-wire three-phase systems and time-based discrimination

With adjustable overcurrent releases, non-adjustable short-circuit releases, external current transformers required in addition, see page 16/90. Ground fault delay $t_g = 0.1 \dots 0.3$ s, short-circuit delay $t_{sd} = 0 \dots 0.5$ s, ground fault protection (G) can be switched off

VL160/3VL2	63	25 ... 63	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL27 06-1□□3□-....	1	1 unit	113	2.400
	100	40 ... 100	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL27 10-1□□3□-....	1	1 unit	113	2.400
	160	64 ... 160	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL27 16-1□□3□-....	1	1 unit	113	2.400
VL250/3VL3	200	80 ... 200	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL37 20-1□□3□-....	1	1 unit	113	2.500
	250	100 ... 250	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL37 25-1□□3□-....	1	1 unit	113	2.500

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal

3
6

VL400/3VL4	315	128 ... 315	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL47 31-1□□36-....	1	1 unit	113	5.900
	400	160 ... 400	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL47 40-1□□36-....	1	1 unit	113	5.900
VL630/3VL5	630	252 ... 630	$10 \times I_n$	1.5 ...	$9 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL57 63-1□□36-....	1	1 unit	113	9.300
VL800/3VL6	800	320 ... 800	$8 \times I_n$	1.5 ...	$7 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL67 80-1□□36-....	1	1 unit	113	16.000
VL1250/3VL7	1000	400 ... 1000	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL77 10-1□□36-....	1	1 unit	113	25.000
	1250	500 ... 1250	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL77 12-1□□36-....	1	1 unit	113	25.000
VL1600/3VL8 ¹⁾	1600	640 ... 1600	$9 \times I_n$	1.5 ...	$8 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL87 16-1□□30-....	1	1 unit	113	31.300

- Without communication preparation
- With communication preparation

SH
MH

¹⁾ Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:

- For accessories see page 16/98.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No. Order No. supplement required, see page 16/56	For price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		Order No. Order No. supplement required, see page 16/56	For price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		
						kg							kg		

B	3VL27 06-2□□3□-....		1	1 unit	113	2.400	B	3VL27 06-3□□3□-....		1	1 unit	113	2.400
B	3VL27 10-2□□3□-....		1	1 unit	113	2.400	B	3VL27 10-3□□3□-....		1	1 unit	113	2.400
B	3VL27 16-2□□3□-....		1	1 unit	113	2.400	B	3VL27 16-3□□3□-....		1	1 unit	113	2.400
B	3VL37 20-2□□3□-....		1	1 unit	113	2.500	B	3VL37 20-3□□3□-....		1	1 unit	113	2.500
B	3VL37 25-2□□3□-....		1	1 unit	113	2.500	B	3VL37 25-3□□3□-....		1	1 unit	113	2.500

3
63
6

B	3VL47 31-2□□36-....		1	1 unit	113	5.900	B	3VL47 31-3□□36-....		1	1 unit	113	5.900
B	3VL47 40-2□□36-....		1	1 unit	113	5.900	B	3VL47 40-3□□36-....		1	1 unit	113	5.900
B	3VL57 63-2□□36-....		1	1 unit	113	9.300	B	3VL57 63-3□□36-....		1	1 unit	113	9.300
B	3VL67 80-2□□36-....		1	1 unit	113	16.000	B	3VL67 80-3□□36-....		1	1 unit	113	16.000
B	3VL77 10-2□□36-....		1	1 unit	113	25.000	B	3VL77 10-3□□36-....		1	1 unit	113	25.000
B	3VL77 12-2□□36-....		1	1 unit	113	25.000	B	3VL77 12-3□□36-....		1	1 unit	113	25.000
B	3VL87 16-2□□30-....		1	1 unit	113	31.300	B	3VL87 16-3□□30-....		1	1 unit	113	31.300

SH
MHSH
MH

16

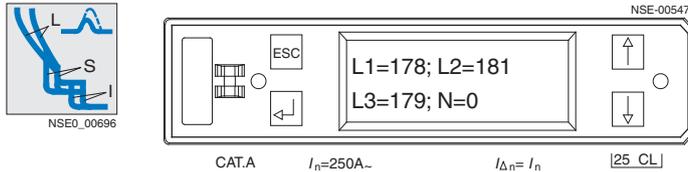
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases "L" I_R	Operating current of the instantaneous short-circuit releases "I" I_i	S function short-circuit protection (short-time delayed) S	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N see "Overview" (N)
	A	A	A	A		Order No. supplement required, see page 16/56
						Basic price per PU
						PU (UNIT, SET, M)
						PS*
						PG
						Weight per PU approx. kg

3-pole, fixed-mounted, for system protection - generator protection, 63 A to 1600 A, electronic releases LI, LS, LSI



LCD-ETU40, LI/LS/LSI function selectable

With adjustable overcurrent releases, adjustable short-circuit releases, short-circuit delay ($t_{sd} = 0$ to 0.5 s)

VL160/3VL2	63	25 ... 63	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$ B	3VL27 06-1CH3 □-....	1	1 unit	113	2,400
	100	40 ... 100	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$ B	3VL27 10-1CH3 □-....	1	1 unit	113	2,400
	160	64 ... 160	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$ B	3VL27 16-1CH3 □-....	1	1 unit	113	2,400
VL250/3VL3	200	80 ... 200	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$ B	3VL37 20-1CH3 □-....	1	1 unit	113	2,500
	250	100 ... 250	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$ B	3VL37 25-1CH3 □-....	1	1 unit	113	2,500

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal

3
6

VL400/3VL4	315	128 ... 315	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$ B	3VL47 31-1CH36 -....	1	1 unit	113	5,900
	400	160 ... 400	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$ B	3VL47 40-1CH36 -....	1	1 unit	113	5,900
VL630/3VL5	630	252 ... 630	1.25 ... $10 \times I_n$	1.5 ... $9 \times I_R$ B	3VL57 63-1CH36 -....	1	1 unit	113	9,300
VL800/3VL6	800	320 ... 800	1.25 ... $8 \times I_n$	1.5 ... $7 \times I_R$ B	3VL67 80-1CH36 -....	1	1 unit	113	16,000
VL1250/3VL7	1000	400 ... 1000	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$ B	3VL77 10-1CH36 -....	1	1 unit	113	25,000
	1250	500 ... 1250	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$ B	3VL77 12-1CH36 -....	1	1 unit	113	25,000
VL1600/3VL8 ¹⁾	1600	640 ... 1600	1.25 ... $9 \times I_n$	1.5 ... $8 \times I_R$ B	3VL87 16-1CH30 -....	1	1 unit	113	31,300

- With communication preparation

CH

¹⁾ Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:

- For accessories see page 16/98.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No. Order No. supplement required, see page 16/56	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		Order No. Order No. supplement required, see page 16/56	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		

B	3VL27 06-2CH3□-....		1	1 unit	113	2.400	B	3VL27 06-3CH3□-....		1	1 unit	113	2.400	
B	3VL27 10-2CH3□-....		1	1 unit	113	2.400	B	3VL27 10-3CH3□-....		1	1 unit	113	2.400	
B	3VL27 16-2CH3□-....		1	1 unit	113	2.400	B	3VL27 16-3CH3□-....		1	1 unit	113	2.400	
B	3VL37 20-2CH3□-....		1	1 unit	113	2.500	B	3VL37 20-3CH3□-....		1	1 unit	113	2.500	
B	3VL37 25-2CH3□-....		1	1 unit	113	2.500	B	3VL37 25-3CH3□-....		1	1 unit	113	2.500	

3
63
6

B	3VL47 31-2CH36-....		1	1 unit	113	5.900	B	3VL47 31-3CH36-....		1	1 unit	113	5.900	
B	3VL47 40-2CH36-....		1	1 unit	113	5.900	B	3VL47 40-3CH36-....		1	1 unit	113	5.900	
B	3VL57 63-2CH36-....		1	1 unit	113	9.300	B	3VL57 63-3CH36-....		1	1 unit	113	9.300	
B	3VL67 80-2CH36-....		1	1 unit	113	16.000	B	3VL67 80-3CH36-....		1	1 unit	113	16.000	
B	3VL77 10-2CH36-....		1	1 unit	113	25.000	B	3VL77 10-3CH36-....		1	1 unit	113	25.000	
B	3VL77 12-2CH36-....		1	1 unit	113	25.000	B	3VL77 12-3CH36-....		1	1 unit	113	25.000	
B	3VL87 16-2CH30-....		1	1 unit	113	31.300	B	3VL87 16-3CH30-....		1	1 unit	113	31.300	

CH

CH

16

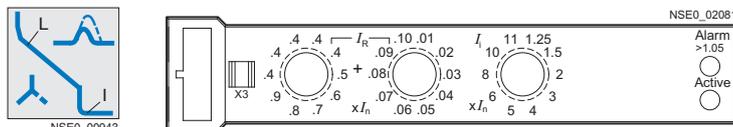
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases "L" I_R	Operating current of the instantaneous short-circuit releases "I" I_i	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)
	A	A	A		Order No. supplement required, see page 16/56	Weight per PU approx. kg

3-pole, fixed-mounted, for motor protection - generator protection, 63 A to 500 A, electronic releases LI



ETU10M, LI function

With thermal image, with non-adjustable trip class $t_C = 10$, with phase failure sensitivity 40 % I_R

VL160/3VL2	63	25 ... 63	1.25 ... $11 \times I_n$	B	3VL27 06-1□□3□-....	1	1 unit	113	2,400
	100	40 ... 100	1.25 ... $11 \times I_n$	B	3VL27 10-1□□3□-....	1	1 unit	113	2,400
	160	64 ... 160	1.25 ... $11 \times I_n$	B	3VL27 16-1□□3□-....	1	1 unit	113	2,400
VL250/3VL3	200	80 ... 200	1.25 ... $11 \times I_n$	B	3VL37 20-1□□3□-....	1	1 unit	113	2,500
	250	100 ... 250	1.25 ... $11 \times I_n$	B	3VL37 25-1□□3□-....	1	1 unit	113	2,500

Connection type can be selected by assignment of the 12th position of the Order No.

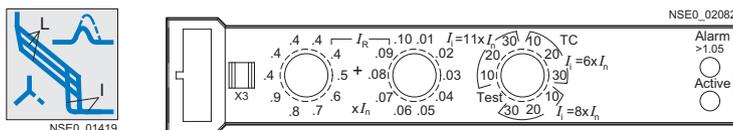
- Connection with box terminal
- Connection with screw terminal

3
6

VL400/3VL4	315	125 ... 315	1.25 ... $11 \times I_n$	B	3VL47 31-1□□36-....	1	1 unit	113	5,900
VL630/3VL5	500	200 ... 500	1.25 ... $12.5 \times I_n$	B	3VL57 50-1□□36-....	1	1 unit	113	9,300

- Without communication preparation
- With communication preparation

SP
MP



ETU30M, LI function

With thermal image, with adjustable trip class $t_C = 10, 20, 30$, with phase failure sensitivity 40 % I_R

VL160/3VL2	63	25 ... 63	6/8/11 $\times I_n$	B	3VL27 06-1□□3□-....	1	1 unit	113	2,400
	100	40 ... 100	6/8/11 $\times I_n$	B	3VL27 10-1□□3□-....	1	1 unit	113	2,400
	160	64 ... 160	6/8/11 $\times I_n$	B	3VL27 16-1□□3□-....	1	1 unit	113	2,400
VL250/3VL3	200	80 ... 200	6/8/11 $\times I_n$	B	3VL37 20-1□□3□-....	1	1 unit	113	2,500
	250	100 ... 250	6/8/11 $\times I_n$	B	3VL37 25-1□□3□-....	1	1 unit	113	2,500

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal

3
6

VL400/3VL4	315	125 ... 315	6/8/11 $\times I_n$	B	3VL47 31-1□□36-....	1	1 unit	113	5,900
VL630/3VL5	500	200 ... 500	6/8/12.5 $\times I_n$	B	3VL57 50-1□□36-....	1	1 unit	113	9,300

- Without communication preparation
- With communication preparation

SS
MS

Communication:

- For accessories see page 16/98.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No. Order No. supplement required, see page 16/56	For price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		Order No. Order No. supplement required, see page 16/56	For price see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		

B	3VL27 06-2□□3□-....		1	1 unit	113	2.400	B	3VL27 06-3□□3□-....		1	1 unit	113	2.400	
B	3VL27 10-2□□3□-....		1	1 unit	113	2.400	B	3VL27 10-3□□3□-....		1	1 unit	113	2.400	
B	3VL27 16-2□□3□-....		1	1 unit	113	2.400	B	3VL27 16-3□□3□-....		1	1 unit	113	2.400	
B	3VL37 20-2□□3□-....		1	1 unit	113	2.500	B	3VL37 20-3□□3□-....		1	1 unit	113	2.500	
B	3VL37 25-2□□3□-....		1	1 unit	113	2.500	B	3VL37 25-3□□3□-....		1	1 unit	113	2.500	

B	3VL47 31-2□□36-....		1	1 unit	113	5.900	B	3VL47 31-3□□36-....		1	1 unit	113	5.900	
B	3VL57 50-2□□36-....		1	1 unit	113	9.300	B	3VL57 50-3□□36-....		1	1 unit	113	9.300	

B	3VL27 06-2□□3□-....		1	1 unit	113	2.400	B	3VL27 06-3□□3□-....		1	1 unit	113	2.400	
B	3VL27 10-2□□3□-....		1	1 unit	113	2.400	B	3VL27 10-3□□3□-....		1	1 unit	113	2.400	
B	3VL27 16-2□□3□-....		1	1 unit	113	2.400	B	3VL27 16-3□□3□-....		1	1 unit	113	2.400	
B	3VL37 20-2□□3□-....		1	1 unit	113	2.500	B	3VL37 20-3□□3□-....		1	1 unit	113	2.500	
B	3VL37 25-2□□3□-....		1	1 unit	113	2.500	B	3VL37 25-3□□3□-....		1	1 unit	113	2.500	

B	3VL47 31-2□□36-....		1	1 unit	113	5.900	B	3VL47 31-3□□36-....		1	1 unit	113	5.900	
B	3VL57 50-2□□36-....		1	1 unit	113	9.300	B	3VL57 50-3□□36-....		1	1 unit	113	9.300	

* You can order this quantity or a multiple thereof.

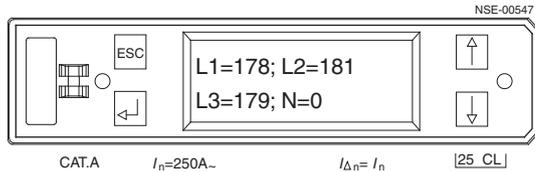
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases "L" I_R	Operating current of the instantaneous short-circuit releases "I" I_i	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)
	A	A	A		Order No. Order No. supplement required, see page 16/56	Basic price per PU PU (UNIT, SET, M) PS* PG Weight per PU approx. kg

3-pole, fixed-mounted, for motor protection - generator protection, 63 A to 500 A, electronic releases LI



LCD-ETU40M, LI function

With thermal image, with adjustable trip class $t_C = 5, 10, 15, 20, 30$, phase failure sensitivity adjustable in steps 5 ... 50 % I_R .

VL160/3VL2	63 100 160	25 ... 63 40 ... 100 64 ... 160	1.25 ... $11 \times I_n$ 1.25 ... $11 \times I_n$ 1.25 ... $11 \times I_n$	B B B	3VL27 06-1CP3 □-.... 3VL27 10-1CP3 □-.... 3VL27 16-1CP3 □-....	1 1 1	1 unit 1 unit 1 unit	113 113 113	2,400 2,400 2,400
VL250/3VL3	200 250	80 ... 200 100 ... 250	1.25 ... $11 \times I_n$ 1.25 ... $11 \times I_n$	B B	3VL37 20-1CP3 □-.... 3VL37 25-1CP3 □-....	1 1	1 unit 1 unit	113 113	2,500 2,500

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal

3
6

VL400/3VL4	315	128 ... 315	1.25 ... $11 \times I_n$	B	3VL47 31-1CP36 -....	1	1 unit	113	5,900
VL630/3VL5	500	250 ... 500	1.25 ... $11 \times I_n$	B	3VL57 50-1CP36 -....	1	1 unit	113	9,300

- With communication preparation

CP

Communication:

- For accessories see page 16/98.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No. Order No. supplement required, see page 16/56	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		Order No. Order No. supplement required, see page 16/56	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		

B	3VL27 06-2CP3□-....		1	1 unit	113	2.400	B	3VL27 06-3CP3□-....		1	1 unit	113	2.400	
B	3VL27 10-2CP3□-....		1	1 unit	113	2.400	B	3VL27 10-3CP3□-....		1	1 unit	113	2.400	
B	3VL27 16-2CP3□-....		1	1 unit	113	2.400	B	3VL27 16-3CP3□-....		1	1 unit	113	2.400	
B	3VL37 20-2CP3□-....		1	1 unit	113	2.500	B	3VL37 20-3CP3□-....		1	1 unit	113	2.500	
B	3VL37 25-2CP3□-....		1	1 unit	113	2.500	B	3VL37 25-3CP3□-....		1	1 unit	113	2.500	

3
63
6

B	3VL47 31-2CP36-....		1	1 unit	113	5.900	B	3VL47 31-3CP36-....		1	1 unit	113	5.900	
B	3VL57 50-2CP36-....		1	1 unit	113	9.300	B	3VL57 50-3CP36-....		1	1 unit	113	9.300	

CP

CP

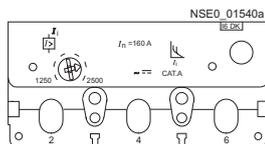
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

Type	Rated current I_n	Operating current of the instantaneous short-circuit releases I_i	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)				
A				Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
				Order No. supplement required, see page 16/56					kg

3-pole, fixed-mounted, for starter protection, 63 A to 500 A, magnetic releases I



Starter protection, M, I function

Without overcurrent release, with adjustable short-circuit release

VL160/3VL2	63	450 ... 900	B	3VL27 06-1DK3□-....	1	1 unit	113	2.200
	100	750 ... 1500	B	3VL27 10-1DK3□-....	1	1 unit	113	2.200
	160	1250 ... 2500	B	3VL27 16-1DK3□-....	1	1 unit	113	2.200
VL250/3VL3	250	1750 ... 3500	B	3VL37 25-1DK3□-....	1	1 unit	113	2.300

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal not in conjunction with RCD module

3
6

VL400/3VL4	200	1250 ... 2500	B	3VL47 20-1DK36-....	1	1 unit	113	5.700
	250	2000 ... 4000	B	3VL47 25-1DK36-....	1	1 unit	113	5.700
	315	2000 ... 4000	A	3VL47 31-1DK36-....	1	1 unit	113	5.700
VL630/3VL5	315	2000 ... 4000	B	3VL57 31-1DK36-....	1	1 unit	113	9.000
	500	3250 ... 6300	B	3VL57 50-1DK36-....	1	1 unit	113	9.000

3-pole, fixed-mounted, for safe disconnection, 100 A to 1600 A, magnetic releases I



NSE0_00708

Non-automatic molded case circuit breakers¹⁾, I function

Without overcurrent release, with non-adjustable short-circuit release (for intrinsic protection only)

VL160X/3VL1	100	1800	B	3VL17 10-1DE3□-....	1	1 unit	113	2.000
	160	1800	B	3VL17 16-1DE3□-....	1	1 unit	113	2.000
VL160/3VL2	100	2500	B	3VL27 10-1DE3□-....	1	1 unit	113	2.200
	160	2500	B	3VL27 16-1DE3□-....	1	1 unit	113	2.200
VL250/3VL3	250	3500	B	3VL37 25-1DE3□-....	1	1 unit	113	2.300

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal not in conjunction with RCD module

3
6

VL400/3VL4	400	4000	B	3VL47 40-1DE36-....	1	1 unit	113	5.700
VL630/3VL5	630	6300	B	3VL57 63-1DE36-....	1	1 unit	113	9.000
VL800/3VL6	800	6500	B	3VL67 80-1DE36-....	1	1 unit	113	15.700
VL1250/3VL7	1250	12000	B	3VL77 12-1DE36-....	1	1 unit	113	23.500
VL1600/3VL8 ²⁾	1600	14400	B	3VL87 16-1DE30-....	1	1 unit	113	29.800

For further versions, including for short-circuit and ground-fault protection, see pages 16/12 to 16/28.

¹⁾ See also the Chapter "3K, 3KE, 3LD Switch Disconnectors". 3K. switch disconnectors are also available with rear-mounting operating mechanism and leading contacts.

²⁾ Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		
	Order No. supplement required, see page 16/56					kg		Order No. supplement required, see page 16/56					kg		

B	3VL27 06-2DK3□-....		1	1 unit	113	2.200	B	3VL27 06-3DK3□-....		1	1 unit	113	2.200
B	3VL27 10-2DK3□-....		1	1 unit	113	2.200	B	3VL27 10-3DK3□-....		1	1 unit	113	2.200
B	3VL27 16-2DK3□-....		1	1 unit	113	2.200	B	3VL27 16-3DK3□-....		1	1 unit	113	2.200
B	3VL37 25-2DK3□-....		1	1 unit	113	2.300	B	3VL37 25-3DK3□-....		1	1 unit	113	2.300

3
63
6

B	3VL47 20-2DK36-....		1	1 unit	113	5.700	B	3VL47 20-3DK36-....		1	1 unit	113	5.700
B	3VL47 25-2DK36-....		1	1 unit	113	5.700	B	3VL47 25-3DK36-....		1	1 unit	113	5.700
A	3VL47 31-2DK36-....		1	1 unit	113	5.700	A	3VL47 31-3DK36-....		1	1 unit	113	5.700
B	3VL57 31-2DK36-....		1	1 unit	113	9.000	B	3VL57 31-3DK36-....		1	1 unit	113	9.000
B	3VL57 50-2DK36-....		1	1 unit	113	9.000	B	3VL57 50-3DK36-....		1	1 unit	113	9.000

B	3VL17 10-2DE3□-....		1	1 unit	113	2.000	--						
B	3VL17 16-2DE3□-....		1	1 unit	113	2.000	--						
B	3VL27 10-2DE3□-....		1	1 unit	113	2.200	B	3VL27 10-3DE3□-....		1	1 unit	113	2.200
B	3VL27 16-2DE3□-....		1	1 unit	113	2.200	B	3VL27 16-3DE3□-....		1	1 unit	113	2.200
B	3VL37 25-2DE3□-....		1	1 unit	113	2.300	B	3VL37 25-3DE3□-....		1	1 unit	113	2.300

3
63
6

B	3VL47 40-2DE36-....		1	1 unit	113	5.700	B	3VL47 40-3DE36-....		1	1 unit	113	5.700
B	3VL57 63-2DE36-....		1	1 unit	113	9.000	B	3VL57 63-3DE36-....		1	1 unit	113	9.000
B	3VL67 80-2DE36-....		1	1 unit	113	15.700	B	3VL67 80-3DE36-....		1	1 unit	113	15.700
B	3VL77 12-2DE36-....		1	1 unit	113	23.500	B	3VL77 12-3DE36-....		1	1 unit	113	23.500
B	3VL87 16-2DE30-....		1	1 unit	113	29.800	B	3VL87 16-3DE30-....		1	1 unit	113	29.800

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

Order No. supplement (for complete Order No., see pages 16/12 to 16/28) 3VL.7 ...□□3-.... Releases	Switching capacity	Type VL160 3VL2			Type VL250 3VL3		Type VL400 3VL4		Type VL630 3VL5		Type VL800 3VL6		Type VL1250 3VL7		Type VL1600 3VL8
		Rated current I_n													
		63 A	100 A	160 A	200 A	250 A	315 A	400 A	500 A	630 A	800 A	1000 A	1250 A	1600 A	
Price															
ETU10 S B	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
ETU10 M B	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
ETU12 S L	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
ETU12 M L	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
ETU12 S F	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
ETU12 M F	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
ETU20 S E	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
ETU20 M E	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
ETU22 S G	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
ETU22 M G	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
ETU42 C L	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
ETU42 C M	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
ETU22 S H	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
ETU22 M H	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
ETU40 C H	N H L	x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x
		x	x	x	x	x	x	x	x	--	x	x	x	x	x

x = Additional price
-- = Not available

16

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

3-pole

Order No. supplement (for complete Order No., see pages 16/12 to 16/28) 3VL.7 ..- □□3-.... Releases	Switching capacity	Type VL160 3VL2			Type VL250 3VL3		Type VL400 3VL4		Type VL630 3VL5		Type VL800 3VL6	Type VL1250 3VL7		Type VL1600 3VL8	
		Rated current I_n													
		63 A	100 A	160 A	200 A	250 A	315 A	400 A	500 A	630 A	800 A	1000 A	1250 A	1600 A	
Price															
ETU10M S P		x	x	x	x	x	x	x	--	x	--	--	--	--	
		x	x	x	x	x	x	x	--	x	--	--	--	--	
		x	x	x	x	x	x	x	--	x	--	--	--	--	
ETU10M M P		x	x	x	x	x	x	x	--	x	--	--	--	--	
		x	x	x	x	x	x	x	--	x	--	--	--	--	
		x	x	x	x	x	x	x	--	x	--	--	--	--	
ETU30M S S		x	x	x	x	x	x	x	--	x	--	--	--	--	
		x	x	x	x	x	x	x	--	x	--	--	--	--	
		x	x	x	x	x	x	x	--	x	--	--	--	--	
ETU30M M S		x	x	x	x	x	x	x	--	x	--	--	--	--	
		x	x	x	x	x	x	x	--	x	--	--	--	--	
		x	x	x	x	x	x	x	--	x	--	--	--	--	
ETU40M C P		x	x	x	x	x	x	x	--	x	--	--	--	--	
		x	x	x	x	x	x	x	--	x	--	--	--	--	
		x	x	x	x	x	x	x	--	x	--	--	--	--	

x = Additional price
-- = Not available

SENTRON 3VL Molded Case Circuit Breakers

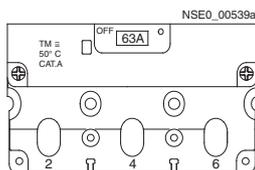
3VL Molded Case Circuit Breakers up to 1600 A

4-pole

Selection and ordering data

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases I_R	Operating current of the instantaneous short-circuit releases "I" I_I	DT **	I_{cu} up to 55 kA at 415 V, standard switching capacity N See "Overview".						
	A	A	A			Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
						Order No. supplement required, see page 16/56					

4-pole, fixed-mounted, for system protection, 16 A to 630 A, thermal-magnetic releases LI



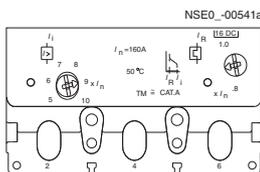
System protection, TM, LI function

With non-adjustable thermal overcurrent releases, non-adjustable short-circuit releases, without overcurrent and short-circuit release in 4th pole (N)

VL160X/3VL1	16	16	300	B	3VL17 96-1EH4□-....	1	1 unit	113	2.300
	20	20	300	B	3VL17 02-1EH4□-....	1	1 unit	113	2.300
	25	25	300	B	3VL17 25-1EH4□-....	1	1 unit	113	2.500
	32	32	300	B	3VL17 03-1EH4□-....	1	1 unit	113	2.500
	40	40	600	B	3VL17 04-1EH4□-....	1	1 unit	113	2.500
	50	50	600	B	3VL17 05-1EH4□-....	1	1 unit	113	2.500
	63	63	600	B	3VL17 06-1EH4□-....	1	1 unit	113	2.500
	80	80	1000	B	3VL17 08-1EH4□-....	1	1 unit	113	2.500
	100	100	1000	B	3VL17 10-1EH4□-....	1	1 unit	113	2.500
	125	125	1000	B	3VL17 12-1EH4□-....	1	1 unit	113	2.500
	160	160	1500	B	3VL17 16-1EH4□-....	1	1 unit	113	2.500

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal **3**
- Connection with screw terminal not in conjunction with RCD module **6**



System protection, TM, LI function

With adjustable thermal overcurrent releases, adjustable short-circuit releases, without overcurrent and short-circuit release in 4th pole (N)

VL160/3VL2	50	40 ... 50	300 ... 600	B	3VL27 05-1EJ4□-....	1	1 unit	113	3.000
	63	50 ... 63	300 ... 600	B	3VL27 06-1EJ4□-....	1	1 unit	113	3.000
	80	63 ... 80	400 ... 800	B	3VL27 08-1EJ4□-....	1	1 unit	113	3.000
	100	80 ... 100	500 ... 1000	B	3VL27 10-1EJ4□-....	1	1 unit	113	3.000
	125	100 ... 125	625 ... 1250	B	3VL27 12-1EJ4□-....	1	1 unit	113	3.000
	160	125 ... 160	800 ... 1600	B	3VL27 16-1EJ4□-....	1	1 unit	113	3.000
VL250/3VL3	200	160 ... 200	1000 ... 2000	B	3VL37 20-1EJ4□-....	1	1 unit	113	3.200
	250	200 ... 250	1250 ... 2500	B	3VL37 25-1EJ4□-....	1	1 unit	113	3.200

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal **3**
- Connection with screw terminal not in conjunction with RCD module **6**

VL400/3VL4	200	160 ... 200	1000 ... 2000	B	3VL47 20-1EJ46-....	1	1 unit	113	7.400
	250	200 ... 250	1250 ... 2500	B	3VL47 25-1EJ46-....	1	1 unit	113	7.400
	315	250 ... 315	1575 ... 3150	B	3VL47 31-1EJ46-....	1	1 unit	113	7.400
	400	320 ... 400	2000 ... 4000	B	3VL47 40-1EJ46-....	1	1 unit	113	7.400
VL630/3VL5	315	250 ... 315	1575 ... 3150	B	3VL57 31-1EJ46-....	1	1 unit	113	11.200
	400	320 ... 400	2000 ... 4000	B	3VL57 40-1EJ46-....	1	1 unit	113	11.200
	500	400 ... 500	2500 ... 5000	B	3VL57 50-1EJ46-....	1	1 unit	113	11.200
	630	500 ... 630	3150 ... 6300	B	3VL57 63-1EJ46-....	1	1 unit	113	11.200

** Delivery time class A for Order No. supplement "0AA0", see page 16/56.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

DT **	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT **	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		

B	3VL17 96-2EH4□-....		1	1 unit	113	2,300	--
B	3VL17 02-2EH4□-....		1	1 unit	113	2,300	--
B	3VL17 25-2EH4□-....		1	1 unit	113	2,500	--
B	3VL17 03-2EH4□-....		1	1 unit	113	2,500	--
B	3VL17 04-2EH4□-....		1	1 unit	113	2,500	--
B	3VL17 05-2EH4□-....		1	1 unit	113	2,500	--
B	3VL17 06-2EH4□-....		1	1 unit	113	2,500	--
B	3VL17 08-2EH4□-....		1	1 unit	113	2,500	--
B	3VL17 10-2EH4□-....		1	1 unit	113	2,500	--
B	3VL17 12-2EH4□-....		1	1 unit	113	2,500	--
B	3VL17 16-2EH4□-....		1	1 unit	113	2,500	--

3
6

B	3VL27 05-2EJ4□-....		1	1 unit	113	3,000	B	3VL27 05-3EJ4□-....		1	1 unit	113	3,000
B	3VL27 06-2EJ4□-....		1	1 unit	113	3,000	B	3VL27 06-3EJ4□-....		1	1 unit	113	3,000
B	3VL27 08-2EJ4□-....		1	1 unit	113	3,000	B	3VL27 08-3EJ4□-....		1	1 unit	113	3,000
B	3VL27 10-2EJ4□-....		1	1 unit	113	3,000	B	3VL27 10-3EJ4□-....		1	1 unit	113	3,000
B	3VL27 12-2EJ4□-....		1	1 unit	113	3,000	B	3VL27 12-3EJ4□-....		1	1 unit	113	3,000
B	3VL27 16-2EJ4□-....		1	1 unit	113	3,000	B	3VL27 16-3EJ4□-....		1	1 unit	113	3,000
B	3VL37 20-2EJ4□-....		1	1 unit	113	3,200	B	3VL37 20-3EJ4□-....		1	1 unit	113	3,200
B	3VL37 25-2EJ4□-....		1	1 unit	113	3,200	B	3VL37 25-3EJ4□-....		1	1 unit	113	3,200

3
63
6

B	3VL47 20-2EJ46-....		1	1 unit	113	7,400	B	3VL47 20-3EJ46-....		1	1 unit	113	7,400
B	3VL47 25-2EJ46-....		1	1 unit	113	7,400	B	3VL47 25-3EJ46-....		1	1 unit	113	7,400
B	3VL47 31-2EJ46-....		1	1 unit	113	7,400	B	3VL47 31-3EJ46-....		1	1 unit	113	7,400
B	3VL47 40-2EJ46-....		1	1 unit	113	7,400	B	3VL47 40-3EJ46-....		1	1 unit	113	7,400
B	3VL57 31-2EJ46-....		1	1 unit	113	11,200	B	3VL57 31-3EJ46-....		1	1 unit	113	11,200
B	3VL57 40-2EJ46-....		1	1 unit	113	11,200	B	3VL57 40-3EJ46-....		1	1 unit	113	11,200
B	3VL57 50-2EJ46-....		1	1 unit	113	11,200	B	3VL57 50-3EJ46-....		1	1 unit	113	11,200
B	3VL57 63-2EJ46-....		1	1 unit	113	11,200	B	3VL57 63-3EJ46-....		1	1 unit	113	11,200

** Delivery time class A for Order No. supplement "0AA0", see page 16/56.

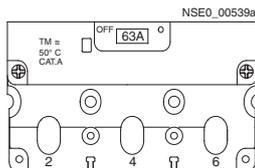
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases "L" I_R	Operating current of the instantaneous short-circuit releases "I" I_i	DT **	I_{cu} up to 55 kA at 415 V, standard switching capacity N See "Overview".						
	A	A	A			Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
						Order No. supplement required, see page 16/56					

4-pole, fixed-mounted, for system protection, 16 A to 160 A, thermal-magnetic releases LIN



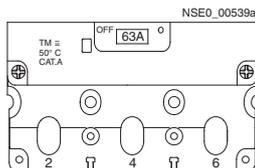
System protection, TM, LIN function

With non-adjustable thermal overcurrent releases, non-adjustable short-circuit releases, with "N" overcurrent and short-circuit release
N protection = 100 %

VL160X/3VL1	I_n	I_R	I_i	DT	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
	16	16	300	B	3VL17 96-1EA4□-....		1	1 unit	113	2.300
	20	20	300	B	3VL17 02-1EA4□-....		1	1 unit	113	2.300
	25	25	300	B	3VL17 25-1EA4□-....		1	1 unit	113	2.500
	32	32	300	B	3VL17 03-1EA4□-....		1	1 unit	113	2.500
	40	40	600	B	3VL17 04-1EA4□-....		1	1 unit	113	2.500
	50	50	600	B	3VL17 05-1EA4□-....		1	1 unit	113	2.500
	63	63	600	B	3VL17 06-1EA4□-....		1	1 unit	113	2.500
	80	80	1000	B	3VL17 08-1EA4□-....		1	1 unit	113	2.500
	100	100	1000	B	3VL17 10-1EA4□-....		1	1 unit	113	2.500
	125	125	1000	B	3VL17 12-1EL4□-....		1	1 unit	113	2.500
	160	160	1500	B	3VL17 16-1EL4□-....		1	1 unit	113	2.500

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal **3**
- Connection with screw terminal not in conjunction with RCD module **6**



System protection, TM, LIN function

With non-adjustable thermal overcurrent releases, non-adjustable short-circuit releases, with "N" overcurrent and short-circuit release
N protection = 60 %

VL160X/3VL1	I_n	I_R	I_i	DT	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
	125	125	1000	B	3VL17 12-1EA4□-....		1	1 unit	113	2.500
	160	160	1500	B	3VL17 16-1EA4□-....		1	1 unit	113	2.500

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal **3**
- Connection with screw terminal not in conjunction with RCD module **6**

** Delivery time class A for Order No. supplement "0AA0", see page 16/56.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

DT **	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT **	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		
	Order No. supplement required, see page 16/56					kg		Order No. supplement required, see page 16/56					kg		

B	3VL17 96-2EA4□-....		1	1 unit	113	2.300	--
B	3VL17 02-2EA4□-....		1	1 unit	113	2.300	--
B	3VL17 25-2EA4□-....		1	1 unit	113	2.500	--
B	3VL17 03-2EA4□-....		1	1 unit	113	2.500	--
B	3VL17 04-2EA4□-....		1	1 unit	113	2.500	--
B	3VL17 05-2EA4□-....		1	1 unit	113	2.500	--
B	3VL17 06-2EA4□-....		1	1 unit	113	2.500	--
B	3VL17 08-2EA4□-....		1	1 unit	113	2.500	--
B	3VL17 10-2EA4□-....		1	1 unit	113	2.500	--
B	3VL17 12-2EL4□-....		1	1 unit	113	2.500	--
B	3VL17 16-2EL4□-....		1	1 unit	113	2.500	--

3
6

B	3VL17 12-2EA4□-....		1	1 unit	113	2.500	--
B	3VL17 16-2EA4□-....		1	1 unit	113	2.500	--

3
6

** Delivery time class A for Order No. supplement "0AA0", see page 16/56.

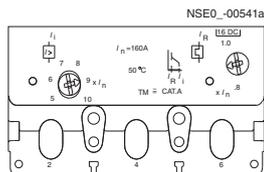
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases I_L^* I_R	Operating current of the instantaneous short-circuit releases I_i	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N See "Overview".					
	A	A	A		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
					Order No. supplement required, see page 16/56					kg

4-pole, fixed-mounted, for system protection, 16 A to 630 A, thermal-magnetic releases LIN



System protection, TM, LIN function

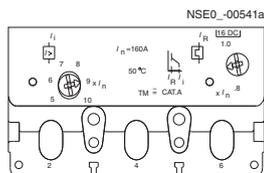
With adjustable thermal overcurrent releases, adjustable short-circuit releases, with "N" overcurrent and short-circuit release
N protection = 100 %

VL160/3VL2	50	40 ... 50	300 ... 600	B	3VL27 05-1EM4□-....	1	1 unit	113	3,000
	63	50 ... 63	300 ... 600	B	3VL27 06-1EM4□-....	1	1 unit	113	3,000
	80	63 ... 80	400 ... 800	B	3VL27 08-1EM4□-....	1	1 unit	113	3,000
	100	80 ... 100	500 ... 1000	B	3VL27 10-1EM4□-....	1	1 unit	113	3,000
	125	100 ... 125	625 ... 1250	B	3VL27 12-1EM4□-....	1	1 unit	113	3,000
VL250/3VL3	160	125 ... 160	800 ... 1600	B	3VL27 16-1EM4□-....	1	1 unit	113	3,000
	200	160 ... 200	1000 ... 2000	B	3VL37 20-1EM4□-....	1	1 unit	113	3,200
	250	200 ... 250	1250 ... 2500	B	3VL37 25-1EM4□-....	1	1 unit	113	3,200

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal **3**
- Connection with screw terminal not in conjunction with RCD module **6**

VL400/3VL4	200	160 ... 200	1000 ... 2000	B	3VL47 20-1EM46-....	1	1 unit	113	7,400
	250	200 ... 250	1250 ... 2500	B	3VL47 25-1EM46-....	1	1 unit	113	7,400
	315	250 ... 315	1575 ... 3150	B	3VL47 31-1EM46-....	1	1 unit	113	7,400
	400	320 ... 400	2000 ... 4000	B	3VL47 40-1EM46-....	1	1 unit	113	7,400
VL630/3VL5	315	250 ... 315	1575 ... 3150	B	3VL57 31-1EM46-....	1	1 unit	113	11,200
	400	320 ... 400	2000 ... 4000	B	3VL57 40-1EM46-....	1	1 unit	113	11,200
	500	400 ... 500	2500 ... 5000	B	3VL57 50-1EM46-....	1	1 unit	113	11,200
	630	500 ... 630	3150 ... 6300	B	3VL57 63-1EM46-....	1	1 unit	113	11,200



System protection, TM, LIN function

With adjustable thermal overcurrent releases, adjustable short-circuit releases, with "N" overcurrent and short-circuit release
N protection = 60 %

VL160/3VL2	125	100 ... 125	625 ... 1250	B	3VL27 12-1EC4□-....	1	1 unit	113	3,000
	160	125 ... 160	800 ... 1600	B	3VL27 16-1EC4□-....	1	1 unit	113	3,000
VL250/3VL3	200	160 ... 200	1000 ... 2000	B	3VL37 20-1EC4□-....	1	1 unit	113	3,200
	250	200 ... 250	1250 ... 2500	B	3VL37 25-1EC4□-....	1	1 unit	113	3,200

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal **3**
- Connection with screw terminal not in conjunction with RCD module **6**

VL400/3VL4	200	160 ... 200	1000 ... 2000	B	3VL47 20-1EC46-....	1	1 unit	113	7,400
	250	200 ... 250	1250 ... 2500	B	3VL47 25-1EC46-....	1	1 unit	113	7,400
	315	250 ... 315	1575 ... 3150	B	3VL47 31-1EC46-....	1	1 unit	113	7,400
	400	320 ... 400	2000 ... 4000	B	3VL47 40-1EC46-....	1	1 unit	113	7,400
VL630/3VL5	315	250 ... 315	1575 ... 3150	B	3VL57 31-1EC46-....	1	1 unit	113	11,200
	400	320 ... 400	2000 ... 4000	B	3VL57 40-1EC46-....	1	1 unit	113	11,200
	500	400 ... 500	2500 ... 5000	B	3VL57 50-1EC46-....	1	1 unit	113	11,200
	630	500 ... 630	3150 ... 6300	B	3VL57 63-1EC46-....	1	1 unit	113	11,200

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		

B	3VL27 05-2EM4□-....		1	1 unit	113	3,000	B	3VL27 05-3EM4□-....		1	1 unit	113	3,000
B	3VL27 06-2EM4□-....		1	1 unit	113	3,000	B	3VL27 06-3EM4□-....		1	1 unit	113	3,000
B	3VL27 08-2EM4□-....		1	1 unit	113	3,000	B	3VL27 08-3EM4□-....		1	1 unit	113	3,000
B	3VL27 10-2EM4□-....		1	1 unit	113	3,000	B	3VL27 10-3EM4□-....		1	1 unit	113	3,000
B	3VL27 12-2EM4□-....		1	1 unit	113	3,000	B	3VL27 12-3EM4□-....		1	1 unit	113	3,000
B	3VL27 16-2EM4□-....		1	1 unit	113	3,000	B	3VL27 16-3EM4□-....		1	1 unit	113	3,000
B	3VL37 20-2EM4□-....		1	1 unit	113	3,200	B	3VL37 20-3EM4□-....		1	1 unit	113	3,200
B	3VL37 25-2EM4□-....		1	1 unit	113	3,200	B	3VL37 25-3EM4□-....		1	1 unit	113	3,200

3
63
6

B	3VL47 20-2EM46-....		1	1 unit	113	7,400	B	3VL47 20-3EM46-....		1	1 unit	113	7,400
B	3VL47 25-2EM46-....		1	1 unit	113	7,400	B	3VL47 25-3EM46-....		1	1 unit	113	7,400
B	3VL47 31-2EM46-....		1	1 unit	113	7,400	B	3VL47 31-3EM46-....		1	1 unit	113	7,400
B	3VL47 40-2EM46-....		1	1 unit	113	7,400	B	3VL47 40-3EM46-....		1	1 unit	113	7,400
B	3VL57 31-2EM46-....		1	1 unit	113	11,200	B	3VL57 31-3EM46-....		1	1 unit	113	11,200
B	3VL57 40-2EM46-....		1	1 unit	113	11,200	B	3VL57 40-3EM46-....		1	1 unit	113	11,200
B	3VL57 50-2EM46-....		1	1 unit	113	11,200	B	3VL57 50-3EM46-....		1	1 unit	113	11,200
B	3VL57 63-2EM46-....		1	1 unit	113	11,200	B	3VL57 63-3EM46-....		1	1 unit	113	11,200

B	3VL27 12-2EC4□-....		1	1 unit	113	3,000	B	3VL27 12-3EC4□-....		1	1 unit	113	3,000
B	3VL27 16-2EC4□-....		1	1 unit	113	3,000	B	3VL27 16-3EC4□-....		1	1 unit	113	3,000
B	3VL37 20-2EC4□-....		1	1 unit	113	3,200	B	3VL37 20-3EC4□-....		1	1 unit	113	3,200
B	3VL37 25-2EC4□-....		1	1 unit	113	3,200	B	3VL37 25-3EC4□-....		1	1 unit	113	3,200

3
63
6

B	3VL47 20-2EC46-....		1	1 unit	113	7,400	B	3VL47 20-3EC46-....		1	1 unit	113	7,400
B	3VL47 25-2EC46-....		1	1 unit	113	7,400	B	3VL47 25-3EC46-....		1	1 unit	113	7,400
B	3VL47 31-2EC46-....		1	1 unit	113	7,400	B	3VL47 31-3EC46-....		1	1 unit	113	7,400
B	3VL47 40-2EC46-....		1	1 unit	113	7,400	B	3VL47 40-3EC46-....		1	1 unit	113	7,400
B	3VL57 31-2EC46-....		1	1 unit	113	11,200	B	3VL57 31-3EC46-....		1	1 unit	113	11,200
B	3VL57 40-2EC46-....		1	1 unit	113	11,200	B	3VL57 40-3EC46-....		1	1 unit	113	11,200
B	3VL57 50-2EC46-....		1	1 unit	113	11,200	B	3VL57 50-3EC46-....		1	1 unit	113	11,200
B	3VL57 63-2EC46-....		1	1 unit	113	11,200	B	3VL57 63-3EC46-....		1	1 unit	113	11,200

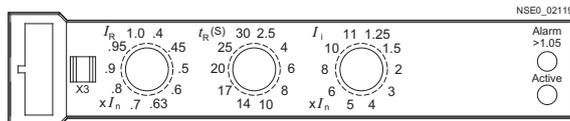
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent release "L" I_R	Operating current of the instantaneous short-circuit releases "I" I_i	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)
	A	A	A		Order No. supplement required, see page 16/56	Weight per PU approx. kg
					For price see page 16/54	PU (UNIT, SET, M)
						PS*
						PG

4-pole, fixed-mounted, for system protection, 63 A to 1600 A, electronic releases LI



ETU10, LI function

With adjustable overcurrent releases, adjustable short-circuit releases

Model	I_n	I_R	t_R (s)	I_i	DT	Order No.	PU	PS*	PG	Weight per PU approx. kg
VL160/3VL2	63	25 ... 63	1.25 ... 11 × I_n	B	3VL27 06-1□□4□-....	1	1 unit	113	3.100	
	100	40 ... 100	1.25 ... 11 × I_n	B	3VL27 10-1□□4□-....	1	1 unit	113	3.100	
	160	64 ... 160	1.25 ... 11 × I_n	B	3VL27 16-1□□4□-....	1	1 unit	113	3.100	
VL250/3VL3	200	80 ... 200	1.25 ... 11 × I_n	B	3VL37 20-1□□4□-....	1	1 unit	113	3.300	
	250	100 ... 250	1.25 ... 11 × I_n	B	3VL37 25-1□□4□-....	1	1 unit	113	3.300	

Connection type can be selected by assignment of the 12th position of the Order No.

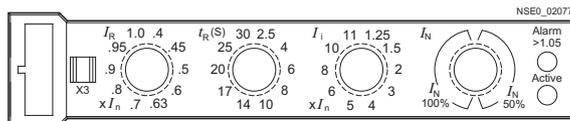
- Connection with box terminal **3**
- Connection with screw terminal **6**

VL400/3VL4	315	128 ... 315	1.25 ... 11 × I_n	B	3VL47 31-1□□46-....	1	1 unit	113	7.600
	400	160 ... 400	1.25 ... 11 × I_n	B	3VL47 40-1□□46-....	1	1 unit	113	7.600
VL630/3VL5	630	252 ... 630	1.25 ... 10 × I_n	B	3VL57 63-1□□46-....	1	1 unit	113	11.700
VL800/3VL6	800	320 ... 800	1.25 ... 8 × I_n	B	3VL67 80-1□□46-....	1	1 unit	113	20.500
VL1250/3VL7	1000	400 ... 1000	1.25 ... 11 × I_n	B	3VL77 10-1□□46-....	1	1 unit	113	33.500
	1250	500 ... 1250	1.25 ... 11 × I_n	B	3VL77 12-1□□46-....	1	1 unit	113	33.500
VL1600/3VL8 ¹⁾	1600	640 ... 1600	1.25 ... 9 × I_n	B	3VL87 16-1□□40-....	1	1 unit	113	40.800

- Without communication preparation
- With communication preparation

TB
NB

4-pole, fixed-mounted, for system protection, 63 A to 1600 A, electronic releases LIN



ETU10, LIN function

With adjustable overcurrent releases, adjustable short-circuit releases, with overcurrent and short-circuit release in 4th pole (N)
N protection = 50/100 %

Model	I_n	I_R	t_R (s)	I_i	DT	Order No.	PU	PS*	PG	Weight per PU approx. kg
VL160/3VL2	63	25 ... 63	1.25 ... 11 × I_n	B	3VL27 06-1□□4□-....	1	1 unit	113	3.100	
	100	40 ... 100	1.25 ... 11 × I_n	B	3VL27 10-1□□4□-....	1	1 unit	113	3.100	
	160	64 ... 160	1.25 ... 11 × I_n	B	3VL27 16-1□□4□-....	1	1 unit	113	3.100	
VL250/3VL3	200	80 ... 200	1.25 ... 11 × I_n	B	3VL37 20-1□□4□-....	1	1 unit	113	3.300	
	250	100 ... 250	1.25 ... 11 × I_n	B	3VL37 25-1□□4□-....	1	1 unit	113	3.300	

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal **3**
- Connection with screw terminal **6**

VL400/3VL4	315	128 ... 315	1.25 ... 11 × I_n	B	3VL47 31-1□□46-....	1	1 unit	113	7.600
	400	160 ... 400	1.25 ... 11 × I_n	B	3VL47 40-1□□46-....	1	1 unit	113	7.600
VL630/3VL5	630	252 ... 630	1.25 ... 10 × I_n	B	3VL57 63-1□□46-....	1	1 unit	113	11.700
VL800/3VL6	800	320 ... 800	1.25 ... 8 × I_n	B	3VL67 80-1□□46-....	1	1 unit	113	20.500
VL1250/3VL7	1000	400 ... 1000	1.25 ... 11 × I_n	B	3VL77 10-1□□46-....	1	1 unit	113	33.500
	1250	500 ... 1250	1.25 ... 11 × I_n	B	3VL77 12-1□□46-....	1	1 unit	113	33.500
VL1600/3VL8 ¹⁾	1600	640 ... 1600	1.25 ... 9 × I_n	B	3VL87 16-1□□40-....	1	1 unit	113	40.800

- Without communication preparation
- With communication preparation

TA
NA

¹⁾ Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H (H)						DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L (L)					
	Order No. Order No. supplement required, see page 16/56	For price see page 16/54	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		Order No. Order No. supplement required, see page 16/56	For price see page 16/54	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg

B	3VL27 06-2□□4□-....			1	1 unit	113	3.100	B	3VL27 06-3□□4□-....			1	1 unit	113	3.100
B	3VL27 10-2□□4□-....			1	1 unit	113	3.100	B	3VL27 10-3□□4□-....			1	1 unit	113	3.100
B	3VL27 16-2□□4□-....			1	1 unit	113	3.100	B	3VL27 16-3□□4□-....			1	1 unit	113	3.100
B	3VL37 20-2□□4□-....			1	1 unit	113	3.300	B	3VL37 20-3□□4□-....			1	1 unit	113	3.300
B	3VL37 25-2□□4□-....			1	1 unit	113	3.300	B	3VL37 25-3□□4□-....			1	1 unit	113	3.300

3
63
6

B	3VL47 31-2□□46-....			1	1 unit	113	7.600	B	3VL47 31-3□□46-....			1	1 unit	113	7.600
B	3VL47 40-2□□46-....			1	1 unit	113	7.600	B	3VL47 40-3□□46-....			1	1 unit	113	7.600
B	3VL57 63-2□□46-....			1	1 unit	113	11.700	B	3VL57 63-3□□46-....			1	1 unit	113	11.700
B	3VL67 80-2□□46-....			1	1 unit	113	20.500	B	3VL67 80-3□□46-....			1	1 unit	113	20.500
B	3VL77 10-2□□46-....			1	1 unit	113	33.500	B	3VL77 10-3□□46-....			1	1 unit	113	33.500
B	3VL77 12-2□□46-....			1	1 unit	113	33.500	B	3VL77 12-3□□46-....			1	1 unit	113	33.500
B	3VL87 16-2□□40-....			1	1 unit	113	40.800	B	3VL87 16-3□□40-....			1	1 unit	113	40.800

TB
NBTB
NB

B	3VL27 06-2□□4□-....			1	1 unit	113	3.100	B	3VL27 06-3□□4□-....			1	1 unit	113	3.100
B	3VL27 10-2□□4□-....			1	1 unit	113	3.100	B	3VL27 10-3□□4□-....			1	1 unit	113	3.100
B	3VL27 16-2□□4□-....			1	1 unit	113	3.100	B	3VL27 16-3□□4□-....			1	1 unit	113	3.100
B	3VL37 20-2□□4□-....			1	1 unit	113	3.300	B	3VL37 20-3□□4□-....			1	1 unit	113	3.300
B	3VL37 25-2□□4□-....			1	1 unit	113	3.300	B	3VL37 25-3□□4□-....			1	1 unit	113	3.300

3
63
6

B	3VL47 31-2□□46-....			1	1 unit	113	7.600	B	3VL47 31-3□□46-....			1	1 unit	113	7.600
B	3VL47 40-2□□46-....			1	1 unit	113	7.600	B	3VL47 40-3□□46-....			1	1 unit	113	7.600
B	3VL57 63-2□□46-....			1	1 unit	113	11.700	B	3VL57 63-3□□46-....			1	1 unit	113	11.700
B	3VL67 80-2□□46-....			1	1 unit	113	20.500	B	3VL67 80-3□□46-....			1	1 unit	113	20.500
B	3VL77 10-2□□46-....			1	1 unit	113	33.500	B	3VL77 10-3□□46-....			1	1 unit	113	33.500
B	3VL77 12-2□□46-....			1	1 unit	113	33.500	B	3VL77 12-3□□46-....			1	1 unit	113	33.500
B	3VL87 16-2□□40-....			1	1 unit	113	40.800	B	3VL87 16-3□□40-....			1	1 unit	113	40.800

TA
NATA
NA

Communication:

- For accessories see page 16/98.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution"

* You can order this quantity or a multiple thereof.

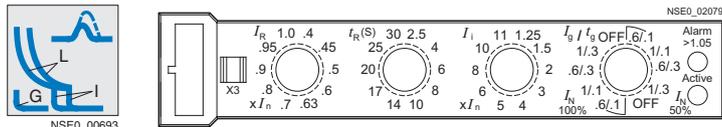
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases "L" I_R	Operating current of the instantaneous short-circuit releases "I" I_I	Ground-fault protection "G" I_g	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N See "Overview".	(N)				
	A	A	A	A		Order No. Order No. supplement required, see page 16/56	For price see page 16/54	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
											kg

4-pole, fixed-mounted, for system protection, 63 A to 1600 A, electronic releases LING



ETU12, LING function for 4-wire three-phase systems

With adjustable overcurrent releases, adjustable short-circuit releases, vectorial summation current, ground fault delay $t_g = 0.1 \dots 0.3$ s, ground fault protection (G) can be switched off with overcurrent and short-circuit release in 4th pole (N), N protection = 50/100 %

VL160/3VL2	63	25 ... 63	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL27 06-1□□4□-....	1	1 unit	113	3.100
	100	40 ... 100	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL27 10-1□□4□-....	1	1 unit	113	3.100
	160	64 ... 160	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL27 16-1□□4□-....	1	1 unit	113	3.100
VL250/3VL3	200	80 ... 200	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL37 20-1□□4□-....	1	1 unit	113	3.300
	250	100 ... 250	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL37 25-1□□4□-....	1	1 unit	113	3.300

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal

3
6

VL400/3VL4	315	128 ... 315	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL47 31-1□□46-....	1	1 unit	113	7.600
	400	160 ... 400	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL47 40-1□□46-....	1	1 unit	113	7.600
VL630/3VL5	630	252 ... 630	1.25 ... $10 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL57 63-1□□46-....	1	1 unit	113	11.700
VL800/3VL6	800	320 ... 800	1.25 ... $8 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL67 80-1□□46-....	1	1 unit	113	20.500
VL1250/3VL7	1000	400 ... 1000	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL77 10-1□□46-....	1	1 unit	113	33.500
	1250	500 ... 1250	1.25 ... $11 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL77 12-1□□46-....	1	1 unit	113	33.500
VL1600/3VL8 ¹⁾	1600	640 ... 1600	1.25 ... $9 \times I_n$	0.6 ... $1 \times I_n$, OFF	B	3VL87 16-1□□40-....	1	1 unit	113	40.800

- Without communication preparation
- With communication preparation

TN
NN

¹⁾ Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:

- For accessories see page 16/98.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	For price see page 16/54	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		Order No.	For price see page 16/54	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		
	Order No. supplement required, see page 16/56							Order No. supplement required, see page 16/56							

B	3VL27 06-2□□4□-....		1	1 unit	113	3.100	B	3VL27 06-3□□4□-....		1	1 unit	113	3.100	
B	3VL27 10-2□□4□-....		1	1 unit	113	3.100	B	3VL27 10-3□□4□-....		1	1 unit	113	3.100	
B	3VL27 16-2□□4□-....		1	1 unit	113	3.100	B	3VL27 16-3□□4□-....		1	1 unit	113	3.100	
B	3VL37 20-2□□4□-....		1	1 unit	113	3.300	B	3VL37 20-3□□4□-....		1	1 unit	113	3.300	
B	3VL37 25-2□□4□-....		1	1 unit	113	3.300	B	3VL37 25-3□□4□-....		1	1 unit	113	3.300	

3
63
6

B	3VL47 31-2□□46-....		1	1 unit	113	7.600	B	3VL47 31-3□□46-....		1	1 unit	113	7.600	
B	3VL47 40-2□□46-....		1	1 unit	113	7.600	B	3VL47 40-3□□46-....		1	1 unit	113	7.600	
B	3VL57 63-2□□46-....		1	1 unit	113	11.700	B	3VL57 63-3□□46-....		1	1 unit	113	11.700	
B	3VL67 80-2□□46-....		1	1 unit	113	20.500	B	3VL67 80-3□□46-....		1	1 unit	113	20.500	
B	3VL77 10-2□□46-....		1	1 unit	113	33.500	B	3VL77 10-3□□46-....		1	1 unit	113	33.500	
B	3VL77 12-2□□46-....		1	1 unit	113	33.500	B	3VL77 12-3□□46-....		1	1 unit	113	33.500	
B	3VL87 16-2□□40-....		1	1 unit	113	40.800	B	3VL87 16-3□□40-....		1	1 unit	113	40.800	

TN
NNTN
NN

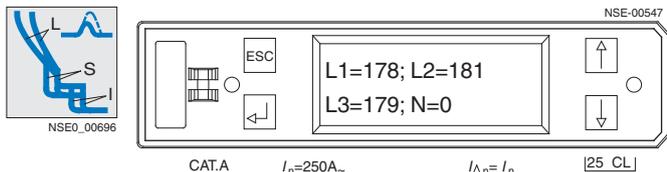
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

Type	Rated current I_n	Current setting of the inverse-time delayed over-current releases "L" I_R	Operating current of the instantaneous short-circuit releases "I" I_I	S function short-circuit protection (short-time delayed) S	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N see "Overview" (N)
	A	A	A	A		Order No. Basic price per PU (UNIT, SET, M) PS* PG Weight per PU approx. kg

4-pole, fixed-mounted, for system protection, 63 A to 1600 A, electronic releases LI, LSI, LIN, LSIN



LCD-ETU40, LI/LSI/LIN/LSIN function selectable

With adjustable overcurrent releases, adjustable short-circuit releases, short-circuit delay $t_{sd} = 0 \dots 0.5$ s with overcurrent and short-circuit release in 4th pole (N), N protection = 50 ... 100 %, OFF

VL160/3VL2	63 ²⁾	25 ... 63	1.25 ... 11 × I_n	1.5 ... 10 × I_R	B	3VL27 06-1CJ4□-....	1	1 unit	113	3.100
	100 ²⁾	40 ... 100	1.25 ... 11 × I_n	1.5 ... 10 × I_R	B	3VL27 10-1CJ4□-....	1	1 unit	113	3.100
	160	64 ... 160	1.25 ... 11 × I_n	1.5 ... 10 × I_R	B	3VL27 16-1CJ4□-....	1	1 unit	113	3.100
VL250/3VL3	200	80 ... 200	1.25 ... 11 × I_n	1.5 ... 10 × I_R	B	3VL37 20-1CJ4□-....	1	1 unit	113	3.300
	250	100 ... 250	1.25 ... 11 × I_n	1.5 ... 10 × I_R	B	3VL37 25-1CJ4□-....	1	1 unit	113	3.300

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal

3
6

VL400/3VL4	315	128 ... 315	1.25 ... 11 × I_n	1.5 ... 10 × I_R	B	3VL47 31-1CJ46-....	1	1 unit	113	7.600
	400	160 ... 400	1.25 ... 11 × I_n	1.5 ... 10 × I_R	B	3VL47 40-1CJ46-....	1	1 unit	113	7.600
VL630/3VL5	630	252 ... 630	1.25 ... 10 × I_n	1.5 ... 9 × I_R	B	3VL57 63-1CJ46-....	1	1 unit	113	11.700
VL800/3VL6	800	320 ... 800	1.25 ... 8 × I_n	1.5 ... 7 × I_R	B	3VL67 80-1CJ46-....	1	1 unit	113	20.500
VL1250/3VL7	1000	400 ... 1000	1.25 ... 11 × I_n	1.5 ... 10 × I_R	B	3VL77 10-1CJ46-....	1	1 unit	113	33.500
	1250	500 ... 1250	1.25 ... 11 × I_n	1.5 ... 10 × I_R	B	3VL77 12-1CJ46-....	1	1 unit	113	33.500
VL1600/3VL8 ¹⁾	1600	640 ... 1600	1.25 ... 9 × I_n	1.5 ... 8 × I_R	B	3VL87 16-1CJ40-....	1	1 unit	113	40.800

- With communication preparation

CJ

1) Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

2) N = 100 % protection for $I_n \leq 100$ A.

Communication:

- For accessories see page 16/98.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		
	Order No. supplement required, see page 16/56					kg		Order No. supplement required, see page 16/56					kg		

B	3VL27 06-2CJ4□-....		1	1 unit	113	3.100	B	3VL27 06-3CJ4□-....		1	1 unit	113	3.100	
B	3VL27 10-2CJ4□-....		1	1 unit	113	3.100	B	3VL27 10-3CJ4□-....		1	1 unit	113	3.100	
B	3VL27 16-2CJ4□-....		1	1 unit	113	3.100	B	3VL27 16-3CJ4□-....		1	1 unit	113	3.100	
B	3VL37 20-2CJ4□-....		1	1 unit	113	3.300	B	3VL37 20-3CJ4□-....		1	1 unit	113	3.300	
B	3VL37 25-2CJ4□-....		1	1 unit	113	3.300	B	3VL37 25-3CJ4□-....		1	1 unit	113	3.300	

3
63
6

B	3VL47 31-2CJ46-....		1	1 unit	113	7.600	B	3VL47 31-3CJ46-....		1	1 unit	113	7.600	
B	3VL47 40-2CJ46-....		1	1 unit	113	7.600	B	3VL47 40-3CJ46-....		1	1 unit	113	7.600	
B	3VL57 63-2CJ46-....		1	1 unit	113	11.700	B	3VL57 63-3CJ46-....		1	1 unit	113	11.700	
B	3VL67 80-2CJ46-....		1	1 unit	113	20.500	B	3VL67 80-3CJ46-....		1	1 unit	113	20.500	
B	3VL77 10-2CJ46-....		1	1 unit	113	33.500	B	3VL77 10-3CJ46-....		1	1 unit	113	33.500	
B	3VL77 12-2CJ46-....		1	1 unit	113	33.500	B	3VL77 12-3CJ46-....		1	1 unit	113	33.500	
B	3VL87 16-2CJ40-....		1	1 unit	113	40.800	B	3VL87 16-3CJ40-....		1	1 unit	113	40.800	

CJ

CJ

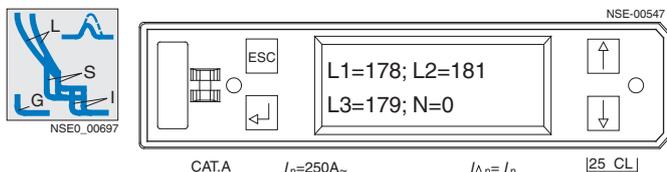
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases "L" I_R	Operating current of the instantaneous short-circuit releases "I" I_I	S function short-circuit protection (short-time delayed) S	Ground-fault protection "G" I_g	DT protection	I_{cu} up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)					
	A	A	A	A	A	A		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
								Order No. supplement required, see page 16/56					kg

4-pole, fixed-mounted, for system protection - generator protection, 63 A to 1600 A, electronic releases LSIG, LSING



LCD-ETU42, LSIG/LSING function for 4-wire three-phase systems and time-based discrimination

With adjustable overcurrent releases, adjustable short-circuit releases, ground fault delay $t_g = 0.1 \dots 0.5$ s, short-circuit delay $t_{sd} = 0 \dots 0.3$ s with overcurrent and short-circuit release in 4th pole (N), N protection = 50 ... 100 %, OFF

VL160/3VL2	63	25 ... 63	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	3VL27 06-1CN4□-....	1	1 unit	113	3.100
	100	40 ... 100	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	3VL27 10-1CN4□-....	1	1 unit	113	3.100
	160	64 ... 160	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	3VL27 16-1CN4□-....	1	1 unit	113	3.100
VL250/3VL3	200	80 ... 200	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	3VL37 20-1CN4□-....	1	1 unit	113	3.300
	250	100 ... 250	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	3VL37 25-1CN4□-....	1	1 unit	113	3.300

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal

3

6

VL400/3VL4	315	128 ... 315	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	3VL47 31-1CN46-....	1	1 unit	113	7.600
	400	160 ... 400	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	3VL47 40-1CN46-....	1	1 unit	113	7.600
VL630/3VL5	630	252 ... 630	1.25 ... $10 \times I_n$	1.5 ... $9 \times I_R$	0.4 ... $1 \times I_n$	B	3VL57 63-1CN46-....	1	1 unit	113	11.700
VL800/3VL6	800	320 ... 800	1.25 ... $8 \times I_n$	1.5 ... $7 \times I_R$	0.4 ... $1 \times I_n$	B	3VL67 80-1CN46-....	1	1 unit	113	20.500
VL1250/3VL7	1000	400 ... 1000	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	3VL77 10-1CN46-....	1	1 unit	113	33.500
	1250	500 ... 1250	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	3VL77 12-1CN46-....	1	1 unit	113	33.500
VL1600/3VL8 ¹⁾	1600	640 ... 1600	1.25 ... $9 \times I_n$	1.5 ... $8 \times I_R$	0.4 ... $1 \times I_n$	B	3VL87 16-1CN40-....	1	1 unit	113	40.800

- With communication preparation

CN

¹⁾ Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:

- For accessories see page 16/98.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

DT I_{cu} up to 70 kA at 415 V, high switching capacity H (H)						DT I_{cu} up to 100 kA at 415 V, very high switching capacity L (L)					
Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
Order No. supplement required, see page 16/56					kg	Order No. supplement required, see page 16/56					kg

B	3VL27 06-2CN4□-....	1	1 unit	113	3.100	B	3VL27 06-3CN4□-....	1	1 unit	113	3.100
B	3VL27 10-2CN4□-....	1	1 unit	113	3.100	B	3VL27 10-3CN4□-....	1	1 unit	113	3.100
B	3VL27 16-2CN4□-....	1	1 unit	113	3.100	B	3VL27 16-3CN4□-....	1	1 unit	113	3.100
B	3VL37 20-2CN4□-....	1	1 unit	113	3.300	B	3VL37 20-3CN4□-....	1	1 unit	113	3.300
B	3VL37 25-2CN4□-....	1	1 unit	113	3.300	B	3VL37 25-3CN4□-....	1	1 unit	113	3.300

3
6

3
6

B	3VL47 31-2CN46-....	1	1 unit	113	7.600	B	3VL47 31-3CN46-....	1	1 unit	113	7.600
B	3VL47 40-2CN46-....	1	1 unit	113	7.600	B	3VL47 40-3CN46-....	1	1 unit	113	7.600
B	3VL57 63-2CN46-....	1	1 unit	113	11.700	B	3VL57 63-3CN46-....	1	1 unit	113	11.700
B	3VL67 80-2CN46-....	1	1 unit	113	20.500	B	3VL67 80-3CN46-....	1	1 unit	113	20.500
B	3VL77 10-2CN46-....	1	1 unit	113	33.500	B	3VL77 10-3CN46-....	1	1 unit	113	33.500
B	3VL77 12-2CN46-....	1	1 unit	113	33.500	B	3VL77 12-3CN46-....	1	1 unit	113	33.500
B	3VL87 16-2CN40-....	1	1 unit	113	40.800	B	3VL87 16-3CN40-....	1	1 unit	113	40.800

CN

CN

* You can order this quantity or a multiple thereof.

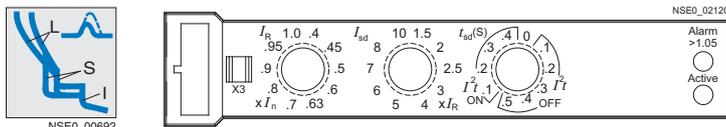
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

Type	Rated current I_n	Current setting of the inverse-time delayed over-current releases "L" I_R	Operating current of the instantaneous short-circuit releases "I" I_i	S function short-circuit protection (short-time delayed) S	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)				
	A	A	A	A		Order No. required, see page 16/56	For price see page 16/54	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg

4-pole, fixed-mounted, for system protection - generator protection, 63 A to 1600 A, electronic releases LSI



ETU20, LSI function for time-based discrimination

With adjustable overcurrent releases, non-adjustable short-circuit releases, short-circuit delay ($t_{sd} = 0$ to 0.5 s)

Model	Rated current	I_R	I_d	I_i	Short-circuit release	Order No.	PU	PS*	PG	Weight
VL160/3VL2	63	25 ... 63	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL27 06-1□□4□-....	1	1 unit	113	3.100
	100	40 ... 100	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL27 10-1□□4□-....	1	1 unit	113	3.100
	160	64 ... 160	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL27 16-1□□4□-....	1	1 unit	113	3.100
VL250/3VL3	200	80 ... 200	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL37 20-1□□4□-....	1	1 unit	113	3.300
	250	100 ... 250	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL37 25-1□□4□-....	1	1 unit	113	3.300

Connection type can be selected by assignment of the 12th position of the Order No.

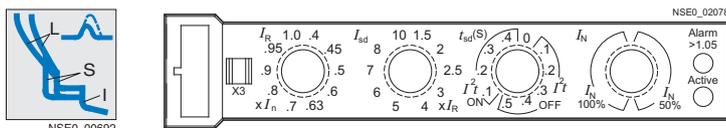
- Connection with box terminal **3**
- Connection with screw terminal **6**

VL400/3VL4	315	128 ... 315	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL47 31-1□□46-....	1	1 unit	113	7.600
	400	160 ... 400	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL47 40-1□□46-....	1	1 unit	113	7.600
VL630/3VL5	630	252 ... 630	$10 \times I_n$	$1.5 \dots 9xI_R$	B	3VL57 63-1□□46-....	1	1 unit	113	11.700
VL800/3VL6	800	320 ... 800	$8 \times I_n$	$1.5 \dots 7xI_R$	B	3VL67 80-1□□46-....	1	1 unit	113	20.500
VL1250/3VL7	1000	400 ... 1000	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL77 10-1□□46-....	1	1 unit	113	33.500
	1250	500 ... 1250	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL77 12-1□□46-....	1	1 unit	113	33.500
VL1600/3VL8 ¹⁾	1600	640 ... 1600	$9 \times I_n$	$1.5 \dots 8xI_R$	B	3VL87 16-1□□40-....	1	1 unit	113	40.800

- Without communication preparation
- With communication preparation

TE
NE

4-pole, fixed-mounted, for system protection - generator protection, 63 A to 1600 A, electronic releases LSIN



ETU20, LSIN function for time-based discrimination

With adjustable overcurrent releases, adjustable short-circuit releases, short-circuit delay ($t_{sd} = 0$ to 0.5 s) with overcurrent and short-circuit release in 4th pole (N), N = 50/100 % protection

Model	Rated current	I_R	I_d	I_i	Short-circuit release	Order No.	PU	PS*	PG	Weight
VL160/3VL2	63	0.4 ... 1.0 $\times I_n$	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL27 06-1□□4□-....	1	1 unit	113	3.100
	100	0.4 ... 1.0 $\times I_n$	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL27 10-1□□4□-....	1	1 unit	113	3.100
	160	0.4 ... 1.0 $\times I_n$	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL27 16-1□□4□-....	1	1 unit	113	3.100
VL250/3VL3	200	0.4 ... 1.0 $\times I_n$	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL37 20-1□□4□-....	1	1 unit	113	3.300
	250	0.4 ... 1.0 $\times I_n$	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL37 25-1□□4□-....	1	1 unit	113	3.300

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal **3**
- Connection with screw terminal **6**

VL400/3VL4	315	0.4 ... 1.0 $\times I_n$	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL47 31-1□□46-....	1	1 unit	113	7.600
	400	0.4 ... 1.0 $\times I_n$	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL47 40-1□□46-....	1	1 unit	113	7.600
VL630/3VL5	630	0.4 ... 1.0 $\times I_n$	$10 \times I_n$	$1.5 \dots 9xI_R$	B	3VL57 63-1□□46-....	1	1 unit	113	11.700
VL800/3VL6	800	0.4 ... 1.0 $\times I_n$	$8 \times I_n$	$1.5 \dots 7xI_R$	B	3VL67 80-1□□46-....	1	1 unit	113	20.500
VL1250/3VL7	1000	0.4 ... 1.0 $\times I_n$	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL77 10-1□□46-....	1	1 unit	113	33.500
	1250	0.4 ... 1.0 $\times I_n$	$11 \times I_n$	$1.5 \dots 10xI_R$	B	3VL77 12-1□□46-....	1	1 unit	113	33.500
VL1600/3VL8 ¹⁾	1600	0.4 ... 1.0 $\times I_n$	$9 \times I_n$	$1.5 \dots 8xI_R$	B	3VL87 16-1□□40-....	1	1 unit	113	40.800

- Without communication preparation
- With communication preparation

TF
NF

¹⁾ Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:

- For accessories see page 16/98.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

* You can order this quantity or a multiple thereof.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	For price see page 16/54	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		Order No.	For price see page 16/54	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		
	Order No. supplement required, see page 16/56					kg		Order No. supplement required, see page 16/56					kg		

B	3VL27 06-2□□4□-....		1	1 unit	113	3.100	B	3VL27 06-3□□4□-....		1	1 unit	113	3.100
B	3VL27 10-2□□4□-....		1	1 unit	113	3.100	B	3VL27 10-3□□4□-....		1	1 unit	113	3.100
B	3VL27 16-2□□4□-....		1	1 unit	113	3.100	B	3VL27 16-3□□4□-....		1	1 unit	113	3.100
B	3VL37 20-2□□4□-....		1	1 unit	113	3.300	B	3VL37 20-3□□4□-....		1	1 unit	113	3.300
B	3VL37 25-2□□4□-....		1	1 unit	113	3.300	B	3VL37 25-3□□4□-....		1	1 unit	113	3.300

3
6

3
6

B	3VL47 31-2□□46-....		1	1 unit	113	7.600	B	3VL47 31-3□□46-....		1	1 unit	113	7.600
B	3VL47 40-2□□46-....		1	1 unit	113	7.600	B	3VL47 40-3□□46-....		1	1 unit	113	7.600
B	3VL57 63-2□□46-....		1	1 unit	113	11.700	B	3VL57 63-3□□46-....		1	1 unit	113	11.700
B	3VL67 80-2□□46-....		1	1 unit	113	20.500	B	3VL67 80-3□□46-....		1	1 unit	113	20.500
B	3VL77 10-2□□46-....		1	1 unit	113	33.500	B	3VL77 10-3□□46-....		1	1 unit	113	33.500
B	3VL77 12-2□□46-....		1	1 unit	113	33.500	B	3VL77 12-3□□46-....		1	1 unit	113	33.500
B	3VL87 16-2□□40-....		1	1 unit	113	40.800	B	3VL87 16-3□□40-....		1	1 unit	113	40.800

TE
NE

TE
NE

B	3VL27 06-2□□4□-....		1	1 unit	113	3.100	B	3VL27 06-3□□4□-....		1	1 unit	113	3.100
B	3VL27 10-2□□4□-....		1	1 unit	113	3.100	B	3VL27 10-3□□4□-....		1	1 unit	113	3.100
B	3VL27 16-2□□4□-....		1	1 unit	113	3.100	B	3VL27 16-3□□4□-....		1	1 unit	113	3.100
B	3VL37 20-2□□4□-....		1	1 unit	113	3.300	B	3VL37 20-3□□4□-....		1	1 unit	113	3.300
B	3VL37 25-2□□4□-....		1	1 unit	113	3.300	B	3VL37 25-3□□4□-....		1	1 unit	113	3.300

3
6

3
6

B	3VL47 31-2□□46-....		1	1 unit	113	7.600	B	3VL47 31-3□□46-....		1	1 unit	113	7.600
B	3VL47 40-2□□46-....		1	1 unit	113	7.600	B	3VL47 40-3□□46-....		1	1 unit	113	7.600
B	3VL57 63-2□□46-....		1	1 unit	113	11.700	B	3VL57 63-3□□46-....		1	1 unit	113	11.700
B	3VL67 80-2□□46-....		1	1 unit	113	20.500	B	3VL67 80-3□□46-....		1	1 unit	113	20.500
B	3VL77 10-2□□46-....		1	1 unit	113	33.500	B	3VL77 10-3□□46-....		1	1 unit	113	33.500
B	3VL77 12-2□□46-....		1	1 unit	113	33.500	B	3VL77 12-3□□46-....		1	1 unit	113	33.500
B	3VL87 16-2□□40-....		1	1 unit	113	40.800	B	3VL87 16-3□□40-....		1	1 unit	113	40.800

TF
NF

TF
NF

* You can order this quantity or a multiple thereof.

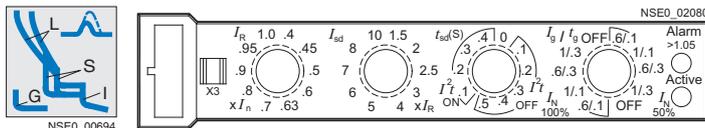
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

Type	Rated current I_n	Current setting of the inverse-time delayed overcurrent releases "L" I_R	Operating current of the instantaneous short-circuit releases "I" I_I	S function short-circuit protection (short-time delayed) S	Ground-fault protection "G" I_g	I_{cu} up to 55 kA at 415 V, standard switching capacity N see "Overview" (N)					
	A	A	A	A	A	Order No.	For price see page 16/54	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
						Order No. supplement required, see page 16/56					kg

4-pole, fixed-mounted, for system protection - generator protection, 63 A to 1600 A, electronic releases LSING



ETU22, LSING function for 4-wire three-phase systems and time-based discrimination

With adjustable overcurrent releases, adjustable short-circuit releases, ground fault delay $t_{g} = 0.1 \dots 0.3$ s, ground fault protection (G) can be switched off, short-circuit delay $t_{sd} = 0 \dots 0.5$ s with overcurrent and short-circuit release in 4th pole (N), N protection = 50/100 %

VL160/3VL2	63	25 ... 63	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL27 06-1□□4□-....	1	1 unit	113	3.100
	100	40 ... 100	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL27 10-1□□4□-....	1	1 unit	113	3.100
	160	64 ... 160	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL27 16-1□□4□-....	1	1 unit	113	3.100
VL250/3VL3	200	80 ... 200	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL37 20-1□□4□-....	1	1 unit	113	3.300
	250	100 ... 250	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL37 25-1□□4□-....	1	1 unit	113	3.300

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal

3
6

VL400/3VL4	315	128 ... 315	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL47 31-1□□46-....	1	1 unit	113	7.600
	400	160 ... 400	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL47 40-1□□46-....	1	1 unit	113	7.600
VL630/3VL5	630	252 ... 630	$10 \times I_n$	1.5 ...	$9 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL57 63-1□□46-....	1	1 unit	113	11.700
VL800/3VL6	800	320 ... 800	$8 \times I_n$	1.5 ...	$7 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL67 80-1□□46-....	1	1 unit	113	20.500
VL1250/3VL7	1000	400 ... 1000	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL77 10-1□□46-....	1	1 unit	113	33.500
	1250	500 ... 1250	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL77 12-1□□46-....	1	1 unit	113	33.500
VL1600/3VL8 ¹⁾	1600	640 ... 1600	$9 \times I_n$	1.5 ...	$8 \times I_R$	0.6 ...	$1 \times I_n$, OFF	B	3VL87 16-1□□40-....	1	1 unit	113	40.800

- Without communication preparation
- With communication preparation

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NH

¹⁾ Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

Communication:

- For accessories see page 16/98.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H					(H)	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L					(L)
	Order No. Order No. supplement required, see page 16/56	For price see page 16/54	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		Order No. Order No. supplement required, see page 16/56	For price see page 16/54	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg

B	3VL27 06-2□□4□-....		1	1 unit	113	3.100	B	3VL27 06-3□□4□-....		1	1 unit	113	3.100
B	3VL27 10-2□□4□-....		1	1 unit	113	3.100	B	3VL27 10-3□□4□-....		1	1 unit	113	3.100
B	3VL27 16-2□□4□-....		1	1 unit	113	3.100	B	3VL27 16-3□□4□-....		1	1 unit	113	3.100
B	3VL37 20-2□□4□-....		1	1 unit	113	3.300	B	3VL37 20-3□□4□-....		1	1 unit	113	3.300
B	3VL37 25-2□□4□-....		1	1 unit	113	3.300	B	3VL37 25-3□□4□-....		1	1 unit	113	3.300

3
63
6

B	3VL47 31-2□□46-....		1	1 unit	113	7.600	B	3VL47 31-3□□46-....		1	1 unit	113	7.600
B	3VL47 40-2□□46-....		1	1 unit	113	7.600	B	3VL47 40-3□□46-....		1	1 unit	113	7.600
B	3VL57 63-2□□46-....		1	1 unit	113	11.700	B	3VL57 63-3□□46-....		1	1 unit	113	11.700
B	3VL67 80-2□□46-....		1	1 unit	113	20.500	B	3VL67 80-3□□46-....		1	1 unit	113	20.500
B	3VL77 10-2□□46-....		1	1 unit	113	33.500	B	3VL77 10-3□□46-....		1	1 unit	113	33.500
B	3VL77 12-2□□46-....		1	1 unit	113	33.500	B	3VL77 12-3□□46-....		1	1 unit	113	33.500
B	3VL87 16-2□□40-....		1	1 unit	113	40.800	B	3VL87 16-3□□40-....		1	1 unit	113	40.800

TH
NHTH
NH

16

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

Type	Rated current I_n	Operating current of the instantaneous short-circuit releases "I" I_i	DT	I_{cu} up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)				
				Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
				Order No. supplement required, see page 16/56					kg

4-pole, fixed-mounted, for safe disconnection, 100 A to 1600 A, magnetic releases I



NSE0_00706

Non-automatic molded case circuit breakers¹⁾, I function

Without overcurrent releases, with non-adjustable short-circuit releases (for intrinsic protection only), without overcurrent and short-circuit release in 4th pole (N)

VL160X/3VL1	100	1800	B	3VL17 10-1EE4□-....	1	1 unit	113	2.500
	160	1800	B	3VL17 16-1EE4□-....	1	1 unit	113	2.500
VL160/3VL2	100	2500	B	3VL27 10-1EE4□-....	1	1 unit	113	3.000
	160	2500	B	3VL27 16-1EE4□-....	1	1 unit	113	3.000
VL250/3VL3	250	3500	B	3VL37 25-1EE4□-....	1	1 unit	113	3.200

Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal not in conjunction with RCD module

3

6

VL400/3VL4	400	4000	B	3VL47 40-1EE46-....	1	1 unit	113	7.400
VL630/3VL5	630	6300	B	3VL57 63-1EE46-....	1	1 unit	113	11.200
VL800/3VL6	800	6500	B	3VL67 80-1EE46-....	1	1 unit	113	19.900
VL1250/3VL7	1250	12000	B	3VL77 12-1EE46-....	1	1 unit	113	31.000
VL1600/3VL8 ²⁾	1600	14400	B	3VL87 16-1EE40-....	1	1 unit	113	38.300

¹⁾ See also the Chapter "3K, 3KE, 3LD Switch Disconnectors". 3K. switch disconnectors are also available with rear-mounting operating mechanism and leading contacts.

²⁾ Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

DT	I_{cu} up to 70 kA at 415 V, high switching capacity H						(H)	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		
	Order No. supplement required, see page 16/56					kg		Order No. supplement required, see page 16/56					kg		

B	3VL17 10-2EE4□-....		1	1 unit	113	2.500		--						
B	3VL17 16-2EE4□-....		1	1 unit	113	2.500		--						
B	3VL27 10-2EE4□-....		1	1 unit	113	3.000	B	3VL27 10-3EE4□-....		1	1 unit	113	3.000	
B	3VL27 16-2EE4□-....		1	1 unit	113	3.000	B	3VL27 16-3EE4□-....		1	1 unit	113	3.000	
B	3VL37 25-2EE4□-....		1	1 unit	113	3.200	B	3VL37 25-3EE4□-....		1	1 unit	113	3.200	
	3							3						
	6							6						
B	3VL47 40-2EE46-....		1	1 unit	113	7.400	B	3VL47 40-3EE46-....		1	1 unit	113	7.400	
B	3VL57 63-2EE46-....		1	1 unit	113	11.200	B	3VL57 63-3EE46-....		1	1 unit	113	11.200	
B	3VL67 80-2EE46-....		1	1 unit	113	19.900	B	3VL67 80-3EE46-....		1	1 unit	113	19.900	
B	3VL77 12-2EE46-....		1	1 unit	113	31.000	B	3VL77 12-3EE46-....		1	1 unit	113	31.000	
B	3VL87 16-2EE40-....		1	1 unit	113	38.300	B	3VL87 16-3EE40-....		1	1 unit	113	38.300	

* You can order this quantity or a multiple thereof.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

4-pole

Order No. supplement (for complete Order No., see pages 16/40 to 16/50) 3VL7 ... □□4-....	Switching capacity	Type	VL160		VL250		VL400		VL630	VL800	VL1250		VL1600	
			3VL2		3VL3		3VL4		3VL5	3VL6	3VL7		3VL8	
			Rated current I_n											
Releases			63 A	100 A	160 A	200 A	250 A	315 A	400 A	630 A	800 A	1000 A	1250 A	1600 A
Price														
ETU10	T B		x	x	x	x	x	x	x	x	x	x	x	x
ETU10	N B		x	x	x	x	x	x	x	x	x	x	x	x
ETU10	T A		x	x	x	x	x	x	x	x	x	x	x	x
ETU10	N A		x	x	x	x	x	x	x	x	x	x	x	x
ETU12	T N		x	x	x	x	x	x	x	x	x	x	x	x
ETU12	N N		x	x	x	x	x	x	x	x	x	x	x	x
ETU40	C J		x	x	x	x	x	x	x	x	x	x	x	x
ETU42	C N		x	x	x	x	x	x	x	x	x	x	x	x
ETU20	T E		x	x	x	x	x	x	x	x	x	x	x	x
ETU20	N E		x	x	x	x	x	x	x	x	x	x	x	x
ETU20	T F		x	x	x	x	x	x	x	x	x	x	x	x
ETU20	N F		x	x	x	x	x	x	x	x	x	x	x	x
ETU22	T H		x	x	x	x	x	x	x	x	x	x	x	x
ETU22	N H		x	x	x	x	x	x	x	x	x	x	x	x

x = Additional price
 -- = Not available

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Options

Selection and ordering data

When ordering, add "-Z" to the complete Order No. and add the relevant order code(s).	Order No. with "-Z" 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 3VL - Z and additional order code(s) <input type="checkbox"/> <input type="checkbox"/> + . . . + . . .	Add. price
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Code for further versions -Z

For fixed-mounted circuit breakers (wired in factory)				
Prewired internal accessories Connecting cables (3 m long) brought out at the rear This option "L02" can be selected only in combination with internal accessories (page 16/56).	For VL160X to VL1600 (3VL1 to 3VL8)	L 0 2		x
Prewired connecting cables for motorized operating mechanisms Connecting cables on the circuit breaker for motorized operating mechanisms (3 m long). On VL160X to VL400 brought out at the top. On VL630 to VL1600 brought out on the right. Motorized operating mechanism must be ordered separately, see pages 16/64 to 16/66. This option "L12" can be selected only in combination with motorized operating mechanisms (see pages 16/64 to 16/66).	For VL160X to VL1600 (3VL1 to 3VL8)	L 1 2		x
Factory-fitted motorized operating mechanisms (24 V DC) on circuit breaker Motorized operating mechanism not prewired; if prewiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must not be specified in addition.	Available for VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3) VL400 (3VL4) VL630, VL800 (3VL5, 3VL6) VL1250, VL1600 (3VL7, 3VL8)	M 2 4		x x x x
Factory-fitted motorized operating mechanisms (42 ... 48 V AC/DC) on circuit breaker Motorized operating mechanism not prewired; if prewiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must not be specified in addition.	Available for VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3) VL400 (3VL4) VL630, VL800 (3VL5, 3VL6) VL1250, VL1600 (3VL7, 3VL8)	M 4 2		x x x x
Factory-fitted motorized operating mechanisms (60 V AC/DC) on circuit breaker Motorized operating mechanism not prewired; if prewiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must not be specified in addition.	Available for VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3) VL400 (3VL4) VL630, VL800 (3VL5, 3VL6) VL1250, VL1600 (3VL7, 3VL8)	M 6 0		x x x x
Factory-fitted motorized operating mechanisms (110 ... 127 V AC/DC) on circuit breaker Motorized operating mechanism not prewired; if prewiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must not be specified in addition.	Available for VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3) VL400 (3VL4) VL630, VL800 (3VL5, 3VL6) VL1250, VL1600 (3VL7, 3VL8)	M 1 1		x x x x
Factory-fitted motorized operating mechanisms (220 ... 250 V AC/DC) on circuit breaker Motorized operating mechanism not prewired; if prewiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must not be specified in addition.	Available for VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3) VL400 (3VL4) VL630, VL800 (3VL5, 3VL6) VL1250, VL1600 (3VL7, 3VL8)	M 2 2		x x x x

x = Additional price

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Options

1. Order No. supplement: Undervoltage or shunt release, wiring directly to accessories

Rated control supply voltage U_s /frequency	Order No. supplement	Circuit breakers Type	Additional price	Additional price
50/60 Hz AC DC	3VL.....- □ □ ..	VL160X to VL400/ 3VL1 to 3VL4		VL630 to VL1600/ 3VL5 to 3VL8
Without auxiliary releases	0 A	None		None
With undervoltage releases Only right pole				
V AC	V DC			
--	12	2 N	x	x
--	24	2 P	x	x
--	48	2 U	x	x
--	60	2 V	x	x
--	110 ... 127	2 R	x	x
--	220 ... 250	2 S	x	x
24	--	2 D	x	x
110 ... 127	--	2 G	x	x
220 ... 250	--	2 H	x	x
208	--	2 M	x	x
277	--	2 Q	x	x
380 ... 415	--	2 J	x	x
440 ... 480	--	2 K	x	x
500 ... 525	--	2 L	x	x
With shunt releases Only right pole				
V AC	V DC			
24	24	8 C	x	x
--	48 ... 60	8 J	x	x
--	110 ... 127	8 K	x	x
--	220 ... 250	8 Q	x	x
48 ... 60	--	8 M	x	x
110 ... 127	--	8 R	x	x
208 ... 277	--	8 T	x	x
380 ... 600	--	8 V	x	x

2. Order No. supplement: Auxiliary switches (HS) and alarm switches (AS), left/right pole, wiring directly to accessories

Equipment	Order No. supplement	Circuit breakers Type	Additional price	Additional price
HS = 1 NO or 1 NC switching block AS = 1 NO switching block	3VL.....- .. □ □	VL160X to VL400 ¹⁾ / 3VL1 to 3VL4		VL630 to VL1600/ 3VL5 to 3VL8
Without auxiliary/alarm switches	A 0	None		None
2 HS (1 NO/1 NC) ²⁾	B 1	x ¹⁾⁴⁾		--
4 HS (2 NO/2 NC)	C 1	--		x
2 HS (1 NO/1 NC) + 1 AS (1 NO)	D 1	x ¹⁾⁴⁾		--
2 HS (1 NO/1 NC) + 1 AS (1 NO) ³⁾	E 1	--		x ⁵⁾

x = Additional price

-- = Not available

1) Except for installing in the left accessory compartment of the SENTRON VL160X circuit breakers with RCD module.

2) With mounting adapter up to 3 HS.

3) With mounting adapter up to 2 HS + 2 AS.

4) Not possible when using the LCD ETU with SENTRON VL160 and VL250 and when using shunt and undervoltage releases.
When using a communication-capable ETU, the accessory compartment X2 is fitted with an auxiliary switch and an alarm switch. The combination of 1st and 2nd Order No. supplement is only possible with restrictions. It is recommended to use the configurator in the Mall for selection purposes.

5) Not possible when using a communication-capable ETU.

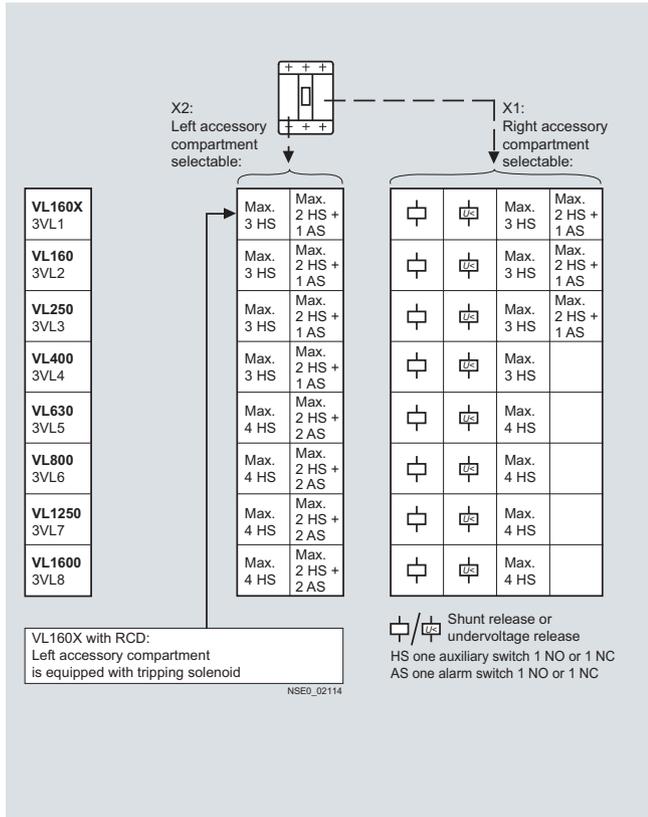
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

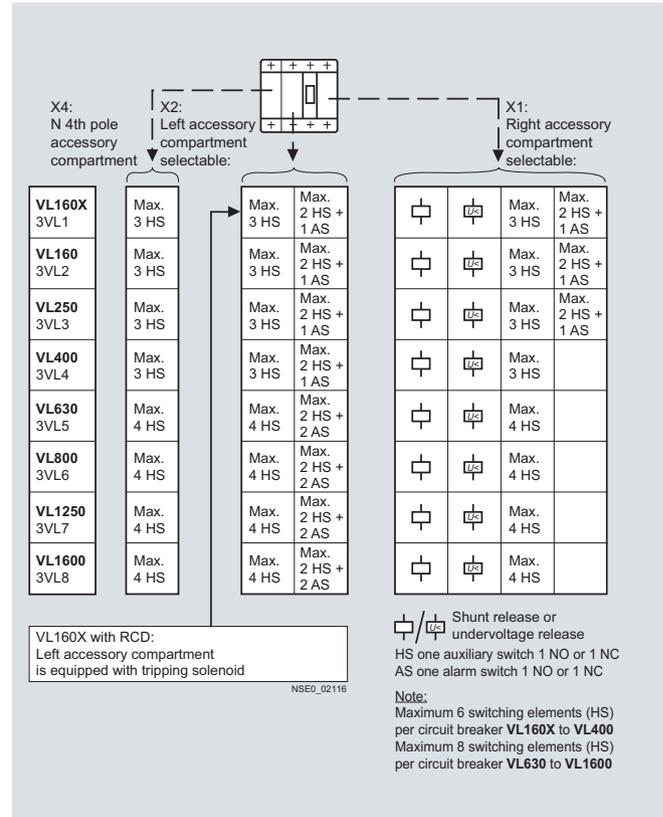
Options

Equipment options for the insulated accessory subsections in the SENTRON 3VL circuit breakers

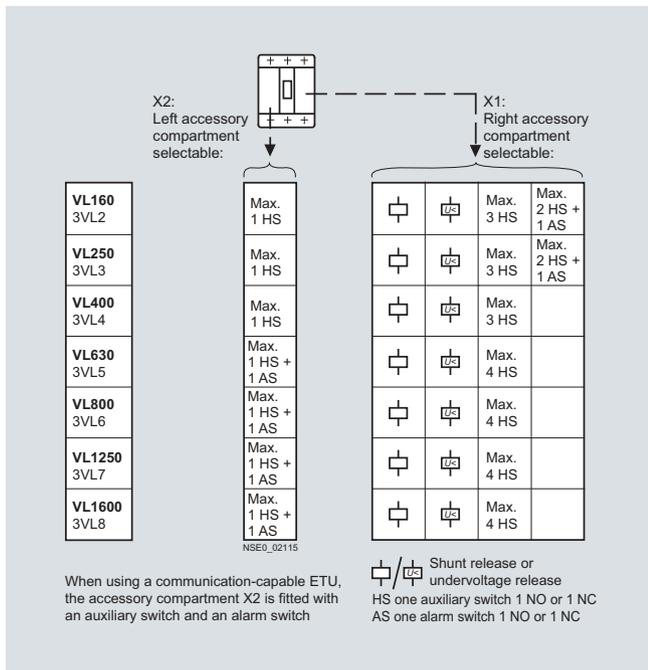
3-pole circuit breakers without communication preparation



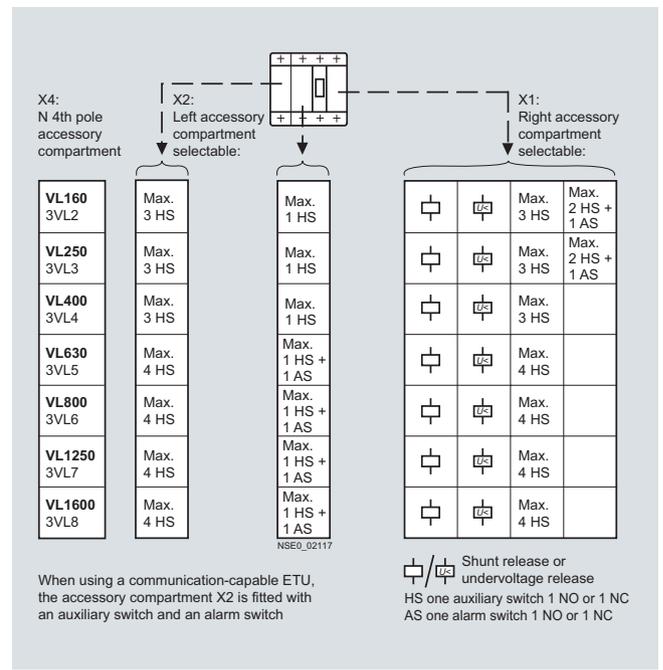
4-pole circuit breakers without communication preparation



3-pole circuit breakers with communication preparation



4-pole circuit breakers with communication preparation



Note:

Before ordering, use the tables above to check whether the required combination of shunt releases, undervoltage releases and auxiliary/alarm switches is feasible.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Selection and ordering data

Wiring directly at accessories	DT	For VL160X to VL400 (3VL1 to 3VL4)	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
		Order No.	Price per PU			kg

Auxiliary switches and auxiliary releases

3- or 4-pole

For retrofitting (for possible complements see Technical Information at www.siemens.com/lowvoltage/support.)

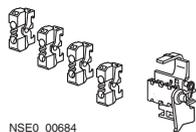
Auxiliary switches (HS) and alarm switches (AS)

For retrofitting

Assembly kits	Mounting side						
2 HS (1 NO + 1 NC)	N, left ¹⁾ , right	A	3VL9 400-2AB00	1	1 unit	113	0.027
4 HS (2 NO + 2 NC)	N, left ¹⁾ , right		--				
2 HS (1 NC + 1 NO) + 1 AS (1 NO) (kit)	left ¹⁾ , right ³⁾ left ¹⁾	A	3VL9 400-2AD00	1	1 unit	113	0.051

Additional auxiliary switch/alarm switch combinations

See page 16/60.



NSE0_00684

3VL9 400-2A.00

Shunt releases²⁾

For retrofitting

V AC	V DC	Mounting side						
24	24	Right pole only	A	3VL9 400-1SC00	1	1 unit	113	0.075
--	48 ... 60	Right pole only	A	3VL9 400-1SJ00	1	1 unit	113	0.075
--	110 ... 127	Right pole only	A	3VL9 400-1SK00	1	1 unit	113	0.075
--	220 ... 250	Right pole only	A	3VL9 400-1SQ00	1	1 unit	113	0.075
48 ... 60	--	Right pole only	A	3VL9 400-1SM00	1	1 unit	113	0.075
110 ... 127	--	Right pole only	A	3VL9 400-1SR00	1	1 unit	113	0.075
208 ... 277	--	Right pole only	A	3VL9 400-1ST00	1	1 unit	113	0.075
380 ... 600	--	Right pole only	A	3VL9 400-1SV00	1	1 unit	113	0.075

Undervoltage releases

For retrofitting

V AC	V DC	Mounting side						
--	12	Right pole only	A	3VL9 400-1UN00	1	1 unit	113	0.075
--	24	Right pole only	A	3VL9 400-1UP00	1	1 unit	113	0.075
--	48	Right pole only	A	3VL9 400-1UU00	1	1 unit	113	0.075
--	60	Right pole only	A	3VL9 400-1UV00	1	1 unit	113	0.075
24	--	Right pole only	A	3VL9 400-1UD00	1	1 unit	113	0.075
110 ... 127	--	Right pole only	A	3VL9 400-1UG00	1	1 unit	113	0.075
--	110 ... 127	Right pole only	A	3VL9 400-1UR00	1	1 unit	113	0.075
208	--	Right pole only	A	3VL9 400-1UM00	1	1 unit	113	0.075
220 ... 250	--	Right pole only	A	3VL9 400-1UH00	1	1 unit	113	0.075
--	220 ... 250	Right pole only	A	3VL9 400-1US00	1	1 unit	113	0.075
277	--	Right pole only	A	3VL9 400-1UQ00	1	1 unit	113	0.075
380 ... 415	--	Right pole only	A	3VL9 400-1UJ00	1	1 unit	113	0.075
440 ... 480	--	Right pole only	A	3VL9 400-1UK00	1	1 unit	113	0.075
500 ... 525	--	Right pole only	A	3VL9 400-1UL00	1	1 unit	113	0.075

Time-delay devices for undervoltage releases (220 ... 250 V DC)

Rated control supply voltage U_s

220 ... 250 V AC/DC

Delay time > 200 ms

	A	3TX4 701-0AN1	1	1 unit	101	0.170
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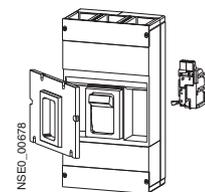
Storage devices for shunt releases (208 ... 277 V AC/220 ... 250 V DC)

Rated control supply voltage U_s

220 ... 240 V/220 ... 250 V AC

Storage time 5 min

	B	3WL9 111-0BA14-0AA0	1	1 unit	103	0.520
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NSE0_00678

3VL9 400-1S.00,
3VL9 400-1U.00

¹⁾ Except for installing in the left accessory compartment of the SENTRON VL160X (3VL1) circuit breakers with RCD module and SENTRON VL160/250 with LCD ETU.

²⁾ Shunt releases with disconnection contact (3SB3 for ON/OFF position) not floating (see Technical Information at www.siemens.com/lowvoltage/support).

³⁾ In the case of VL400 (3VL4):
Unsuitable for mounting in the right-hand accessory compartment.
The 3VL9 400-2AB00 assembly kit with auxiliary switches only is recommended.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Wiring directly at accessories	DT	For VL630 up to VL1600 (3VL5 to 3VL8)	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
		Order No.	Price per PU			kg

Auxiliary switches and auxiliary releases

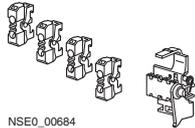
3- or 4-pole

For retrofitting (for possible complements see Technical Information at www.siemens.com/lowvoltage/support.)

Auxiliary switches (HS) and alarm switches (AS)

For retrofitting

Assembly kits	Mounting side						
2 HS (1 NO + 1 NC)	N, left, right	--					
4 HS (2 NO + 2 NC)	N, left, right	A	3VL9 800-2AC00	1	1 unit	113	0.058
2 HS (1 NC + 1 NO)	Left, right	--					
+ 1 AS (1 NO) (kit)	Left	A	3VL9 800-2AE00	1	1 unit	113	0.060



NSE0_00684
3VL9 800-2A.00

Additional auxiliary switch/alarm switch combinations

See page 16/60.

Shunt releases¹⁾

For retrofitting

V AC	V DC	Mounting side					
24	24	Right pole only	A	3VL9 800-1SC00	1	1 unit	113 0.120
--	48 ... 60	Right pole only	A	3VL9 800-1SJ00	1	1 unit	113 0.120
--	110 ... 127	Right pole only	A	3VL9 800-1SK00	1	1 unit	113 0.120
--	220 ... 250	Right pole only	A	3VL9 800-1SQ00	1	1 unit	113 0.120
48 ... 60	--	Right pole only	A	3VL9 800-1SM00	1	1 unit	113 0.120
110 ... 127	--	Right pole only	A	3VL9 800-1SR00	1	1 unit	113 0.120
208 ... 277	--	Right pole only	A	3VL9 800-1ST00	1	1 unit	113 0.120
380 ... 600	--	Right pole only	A	3VL9 800-1SV00	1	1 unit	113 0.120

Undervoltage releases

For retrofitting

V AC	V DC	Mounting side					
--	12	Right pole only	A	3VL9 800-1UN00	1	1 unit	113 0.088
--	24	Right pole only	A	3VL9 800-1UP00	1	1 unit	113 0.088
--	48	Right pole only	A	3VL9 800-1UU00	1	1 unit	113 0.088
--	60	Right pole only	A	3VL9 800-1UV00	1	1 unit	113 0.088
24	--	Right pole only	A	3VL9 800-1UD00	1	1 unit	113 0.088
110 ... 127	--	Right pole only	A	3VL9 800-1UG00	1	1 unit	113 0.088
--	110 ... 127	Right pole only	A	3VL9 800-1UR00	1	1 unit	113 0.088
208	--	Right pole only	A	3VL9 800-1UM00	1	1 unit	113 0.088
220 ... 250	--	Right pole only	A	3VL9 800-1UH00	1	1 unit	113 0.088
--	220 ... 250	Right pole only	A	3VL9 800-1US00	1	1 unit	113 0.088
277	--	Right pole only	A	3VL9 800-1UQ00	1	1 unit	113 0.088
380 ... 415	--	Right pole only	A	3VL9 800-1UJ00	1	1 unit	113 0.088
440 ... 480	--	Right pole only	A	3VL9 800-1UK00	1	1 unit	113 0.088
500 ... 525	--	Right pole only	A	3VL9 800-1UL00	1	1 unit	113 0.088

Time-delay devices for undervoltage releases (220 ... 250 V DC)

Rated control supply voltage U_s
220 ... 250 V AC/DC

Delay time > 200 ms

	A	3TX4 701-0AN1	1	1 unit	101	0.170
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Storage devices for shunt releases (208 ... 277 V AC/220 ... 250 V DC)

Rated control supply voltage U_s
220 ... 240 V AC/220 ... 250 V DC

Storage time 5 min

	B	3WL9 111-0BA14-0AA0	1	1 unit	103	0.520
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¹⁾ Shunt releases with disconnection contact (3SB3 for ON/OFF position) not floating (see Technical Information at www.siemens.com/lowvoltage/support).

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

For circuit breakers	Maximum combination of auxiliary switches (HS) and alarm switches (AS)	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
Type								kg

3SB adapters and 3SB contact blocks

Mounting adapters for auxiliary and alarm switch combinations

For installation in the N pole of the circuit breaker

VL160X, VL160, VL250, VL400 (3VL1 to 3VL4)	Up to 3 HS ¹⁾	A	3VL9 400-2AH00		1	1 unit	113	0.009
	2 HS + 1 AS ¹⁾²⁾		--					
VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8)	Up to 4 HS	A	3VL9 816-2AL00		1	1 unit	113	0.075
	2 HS + 2 AS		--					

For installation in the left pole of the circuit breaker

VL160X, VL160, VL250, VL400 (3VL1 to 3VL4)	Up to 3 HS ¹⁾	A	3VL9 400-2AH00		1	1 unit	113	0.009
	2 HS + 1 AS ¹⁾²⁾	A	3VL9 400-2AJ10		1	1 unit	113	0.001
VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8)	Up to 4 HS	A	3VL9 816-2AL00		1	1 unit	113	0.075
	2 HS + 2 AS	A	3VL9 816-2AN10		1	1 unit	113	0.072

For installation in the right pole of the circuit breaker

VL160X, VL160, VL250, VL400 (3VL1 to 3VL4) ²⁾	Up to 3 HS ¹⁾	A	3VL9 400-2AH00		1	1 unit	113	0.009
	2 HS + 1 AS ¹⁾²⁾	A	3VL9 400-2AJ20		1	1 unit	113	0.001
VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8)	Up to 4 HS	A	3VL9 816-2AL00		1	1 unit	113	0.075
	2 HS + 2 AS		--					

¹⁾ Except for installing in the left pole for SENTRON VL160X circuit breakers (3VL1) with RCD module.

²⁾ In the case of VL400: 3VL9 400-2AJ20 unsuitable for mounting in the right-hand accessory sub-section.

For auxiliary/alarm switches	DT	Circuit breakers Type	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
		Order No.	Price per PU			kg

Contact blocks for auxiliary and alarm switch combinations

1 NO	B	3SB34 00-0J		1	1 unit	102	0.010
1 NC	B	3SB34 00-0K		1	1 unit	102	0.010

For auxiliary switch or alarm switch combinations not included in the kits provided as standard, the mounting adapters specified can be ordered separately together with the required contact blocks:

- 1 HS or 1 AS with NO contact 3SB34 00-0J
- 1 HS or 1 AS with NC contact 3SB34 00-0K

Note:

A maximum of 6 contact blocks (HS) per circuit breaker (VL160X, VL160, VL250, VL400; 3VL1 to 3VL4) and a maximum of 8 contact blocks (HS) per circuit breaker (VL630, VL800, VL1250, VL1600; 3VL5 to 3VL8) are possible.

Four 3SB34 auxiliary contact blocks and one mounting adapter (right), suitable for VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8) circuit breakers.



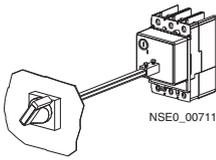
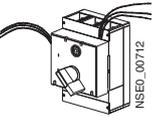
NSE0_00684

For retrofitting/possible complement see Technical Information at www.siemens.com/lowvoltage/support.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For VL160X to VL250 (3VL1 to 3VL3) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	
Operating mechanisms								
 NSE0_00679 3VL9 .00-3H.00	3- or 4-pole							
	Front-operated rotary operating mechanisms¹⁾ For direct mounting on the circuit breaker, without leading auxiliary switch, degree of protection IP30 ²⁾ , <u>black</u> , max. 3 padlocks		A	3VL9 300-3HA00	1	1 unit	113	0.362
		EMERGENCY-STOP version Red knob, yellow indicator plate	A	3VL9 300-3HC00	1	1 unit	113	0.362
<i>Safety locks for installation by the customer For installation see pages 16/84 to 16/88.</i>								
 NSE0_00711 3VL9 .00-3H.05	Door-coupling rotary operating mechanisms, complete¹⁾, installation in doors and covers Degree of protection IP65, including handle ti-grey, with masking plate, indicator plate, removable door coupling (die-cast with reduced tolerance compensation), 300 mm extension shaft (8 x 8 mm) and front-operated rotary operating mechanism for the respective circuit breaker, lockable with up to 3 padlocks, with door interlocking		A	3VL9 300-3HF05	1	1 unit	113	0.970
		EMERGENCY-STOP version, Red knob, yellow indicator plate, without leading auxiliary switch	A	3VL9 300-3HG05	1	1 unit	113	0.980
<i>Safety locks for installation by the customer For installation see pages 16/84 to 16/88.</i>								
 NSE0_00712 3VL9 .00-3A.10	Leading auxiliary switches for installation in a front-operated rotary operating mechanism, door-coupling rotary operating mechanism or side panel rotary operating mechanism Standard or EMERGENCY-STOP version							
		"OFF after ON" Leading auxiliary switches when switching on	A	3VL9 300-3AS10	1	1 unit	113	0.080
		1 changeover contact with 1.5 m long cables	A	3VL9 300-3AT10	1	1 unit	113	0.130
		2 changeover contacts with 1.5 m long cables	A	3VL9 300-3AU10	1	1 unit	113	0.080
	"ON after OFF" Leading auxiliary switches when switching off	A	3VL9 300-3AW10	1	1 unit	113	0.130	
	1 changeover contact with 1.5 m long cables	A	3VL9 300-3AW10	1	1 unit	113	0.130	
	2 changeover contacts with 1.5 m long cables	A	3VL9 300-3AW10	1	1 unit	113	0.130	
Side panel rotary operating mechanisms, complete								
Degree of protection IP65, including black knob with masking plate, indicator plate, Bowden wire, lockable with up to 3 padlocks								
	- With 600 mm Bowden wire	A	3VL9 300-3HR10	1	1 unit	113	1.400	
	- With 1000 mm Bowden wire	A	3VL9 300-3HR20	1	1 unit	113	1.400	
	- With 1500 mm Bowden wire	A	3VL9 300-3HR30	1	1 unit	113	1.400	
Side panel rotary operating mechanisms, complete								
EMERGENCY-STOP version								
Degree of protection IP65, including red knob with masking plate, yellow indicator plate, Bowden wire, lockable with up to 3 padlocks								
	- With 600 mm Bowden wire	A	3VL9 300-3HR11	1	1 unit	113	1.400	
	- With 1000 mm Bowden wire	A	3VL9 300-3HR21	1	1 unit	113	1.400	
	- With 1500 mm Bowden wire	A	3VL9 300-3HR31	1	1 unit	113	1.400	
	Retaining brackets	A	3VL9 300-3HP00	1	1 unit	113	0.253	
Retaining bracket is mounted on the operating mechanism, recommended for extension shafts >250 mm, with locking device for max. 3 padlocks								
	Rotary operating mechanisms with shaft stub, without knob¹⁾ Without leading auxiliary switch, for auxiliary switches see above	A	3VL9 300-3HE00	1	1 unit	113	0.267	

For more accessories and components for door-coupling rotary operating mechanisms, see pages 16/67 to 16/69.

¹⁾ Not possible on VL160X with RCD module.

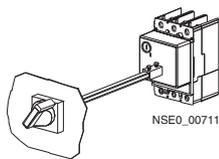
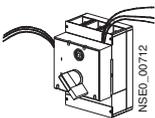
²⁾ IP40 with additional masking frame mounted on the door cutout.

* You can order this quantity or a multiple thereof.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For VL400 (3VL4) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Operating mechanisms							
3- or 4-pole							
Front-operated rotary operating mechanisms							
For direct mounting on the circuit breaker, without leading auxiliary switch, degree of protection IP30 ¹⁾ , <u>black</u> , max. 3 padlocks							
 NSE0_00679	A	3VL9 400-3HA00		1	1 unit	113	0.725
3VL9 .00-3H.00							
EMERGENCY-STOP version							
Red knob, yellow indicator plate							
	A	3VL9 400-3HC00		1	1 unit	113	0.725
Safety locks for installation by the customer For installation see pages 16/84 to 16/88.							
Door-coupling rotary operating mechanisms, complete, installation in doors and covers							
Degree of protection IP65, including handle ti-grey, with masking plate, indicator plate, removable door coupling (die-cast with reduced tolerance compensation), 300 mm extension shaft (8 x 8 mm) and front-operated rotary operating mechanism for the respective circuit breaker, lockable with up to 3 padlocks, with door interlocking							
 NSE0_00711	A	3VL9 400-3HF05		1	1 unit	113	0.970
3VL9 .00-3H.05							
EMERGENCY-STOP version,							
Red knob, yellow indicator plate, without leading auxiliary switch							
	A	3VL9 400-3HG05		1	1 unit	113	1.100
Safety locks for installation by the customer For installation see pages 16/84 to 16/88.							
Leading auxiliary switches for installation in a front-operated rotary operating mechanism, door-coupling rotary operating mechanism or side panel rotary operating mechanism							
Standard or EMERGENCY-STOP version							
"OFF after ON"							
Leading auxiliary switches when switching on							
	A	3VL9 400-3AS10		1	1 unit	113	0.080
	A	3VL9 400-3AT10		1	1 unit	113	0.130
"ON after OFF"							
Leading auxiliary switches when switching off							
	A	3VL9 400-3AU10		1	1 unit	113	0.080
	A	3VL9 400-3AW10		1	1 unit	113	0.130
 NSE0_00712							
3VL9 .00-3A.10							
Side panel rotary operating mechanisms, complete							
Degree of protection IP65, including black knob with masking plate, indicator plate, Bowden wire, lockable with up to 3 padlocks							
	A	3VL9 400-3HR10		1	1 unit	113	2.000
	A	3VL9 400-3HR20		1	1 unit	113	2.000
	A	3VL9 400-3HR30		1	1 unit	113	2.000
Side panel rotary operating mechanisms, complete							
EMERGENCY-STOP version							
Degree of protection IP65, including red knob with masking plate, yellow indicator plate, Bowden wire, lockable with up to 3 padlocks							
	A	3VL9 400-3HR11		1	1 unit	113	2.000
	A	3VL9 400-3HR21		1	1 unit	113	2.000
	A	3VL9 400-3HR31		1	1 unit	113	2.000
Retaining brackets							
	A	3VL9 400-3HP00		1	1 unit	113	0.379
Retaining bracket is mounted on the operating mechanism, recommended for extension shafts >250 mm, with locking device for max. 3 padlocks							
	A	3VL9 400-3HE00		1	1 unit	113	0.267
Rotary operating mechanisms with shaft stub, without knob							
Without leading auxiliary switch, for auxiliary switches see above							

For more accessories and components for door-coupling rotary operating mechanisms, see pages 16/67 to 16/69.

¹⁾ IP40 with additional masking frame mounted on the door cutout.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

DT	For VL630 (3VL5) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	DT	For VL800 (3VL6) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 600-3HA00		1	1 unit	113	0.834	A	3VL9 600-3HA00		1	1 unit	113	0.834
A	3VL9 600-3HC00		1	1 unit	113	0.834	A	3VL9 600-3HC00		1	1 unit	113	0.834
A	3VL9 600-3HF05		1	1 unit	113	2.465	A	3VL9 600-3HF05		1	1 unit	113	2.465
A	3VL9 600-3HG05		1	1 unit	113	2.460	A	3VL9 600-3HG05		1	1 unit	113	2.460
A	3VL9 600-3AS10		1	1 unit	113	0.080	A	3VL9 600-3AS10		1	1 unit	113	0.080
A	3VL9 600-3AT10		1	1 unit	113	0.130	A	3VL9 600-3AT10		1	1 unit	113	0.130
A	3VL9 600-3AU10		1	1 unit	113	0.080	A	3VL9 600-3AU10		1	1 unit	113	0.080
A	3VL9 600-3AW10		1	1 unit	113	0.130	A	3VL9 600-3AW10		1	1 unit	113	0.130
A	3VL9 500-3HR10		1	1 unit	113	2.400	--						
A	3VL9 500-3HR20		1	1 unit	113	2.400	--						
A	3VL9 500-3HR30		1	1 unit	113	2.400	--						
A	3VL9 500-3HR11		1	1 unit	113	2.400	--						
A	3VL9 500-3HR21		1	1 unit	113	2.400	--						
A	3VL9 500-3HR31		1	1 unit	113	2.400	--						
A	3VL9 600-3HP00		1	1 unit	113	0.437	A	3VL9 600-3HP00		1	1 unit	113	0.437
A	3VL9 600-3HE00		1	1 unit	113	0.755	A	3VL9 600-3HE00		1	1 unit	113	0.755

* You can order this quantity or a multiple thereof.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For VL160X to VL250 (3VL1 to 3VL3)	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
		Order No.	Price per PU			kg

Operating mechanisms

3- or 4-pole

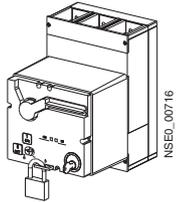
Motorized operating mechanisms with stored energy mechanism¹⁾²⁾

Degree of protection IP30, with locking device for 3 padlocks, suitable for synchronizing

50/60 Hz V AC	V DC					
--	24	C	3VL9 300-3MJ00	1	1 unit	113 2.140
42 ... 48	42 ... 48	C	3VL9 300-3ML00	1	1 unit	113 2.140
60	60	C	3VL9 300-3MS00	1	1 unit	113 2.140
110 ... 127	110 ... 127	C	3VL9 300-3MN00	1	1 unit	113 2.140
220 ... 250	220 ... 250	C	3VL9 300-3MQ00	1	1 unit	113 2.140

Toggle handle extensions

--



3VL9 .00-3M.00

Version	DT	For VL160X (3VL1)	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
		Order No.	Price per PU			kg

Operating mechanisms

3- or 4-pole

Motorized operating mechanisms

Degree of protection IP30, with locking device for 3 padlocks

50/60 Hz V AC	V DC					
--	24	B	3VL9 100-3MA10	1	1 unit	113 2.100
42 ... 60	42 ... 60	B	3VL9 100-3MC10	1	1 unit	113 2.100
110 ... 127	110 ... 127	B	3VL9 100-3MD10	1	1 unit	113 2.100
220 ... 250	220 ... 250	B	3VL9 100-3ME10	1	1 unit	113 2.100

Version	DT	For VL160 and VL250 (3VL2 and 3VL3)	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
		Order No.	Price per PU			kg

Operating mechanisms

3- or 4-pole

Motorized operating mechanisms

Degree of protection IP30, with locking device for 3 padlocks

50/60 Hz V AC	V DC					
--	24	B	3VL9 300-3MA10	1	1 unit	113 2.100
42 ... 60	42 ... 60	B	3VL9 300-3MC10	1	1 unit	113 2.100
110 ... 127	110 ... 127	B	3VL9 300-3MD10	1	1 unit	113 2.100
220 ... 250	220 ... 250	B	3VL9 300-3ME10	1	1 unit	113 2.100

¹⁾ Not possible on VL160X with RCD module.

²⁾ For safety lock as an assembly kit for retrofitting see pages 16/84 to 16/88.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

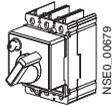
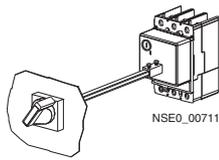
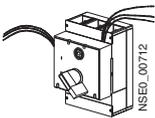
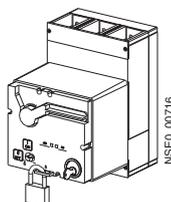
DT	For VL400 (3VL4)	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	DT	For VL630 to VL800 (3VL5 to 3VL6)	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	
	Order No.	Price per PU			kg		Order No.	Price per PU			kg	
C	3VL9 400-3MJ00		1	1 unit	113	3.910	C	3VL9 600-3MJ00	1	1 unit	113	4.800
C	3VL9 400-3ML00		1	1 unit	113	3.910	C	3VL9 600-3ML00	1	1 unit	113	4.800
C	3VL9 400-3MS00		1	1 unit	113	3.910	C	3VL9 600-3MS00	1	1 unit	113	4.800
C	3VL9 400-3MN00		1	1 unit	113	3.910	C	3VL9 600-3MN00	1	1 unit	113	4.800
C	3VL9 400-3MQ00		1	1 unit	113	3.910	C	3VL9 600-3MQ00	1	1 unit	113	4.800
A	3VL9 400-3HN00		1	1 unit	113	0.100	A	3VL9 600-3HN00	1	1 unit	113	0.140

DT	For VL400 (3VL4)	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	DT	For VL630 and VL800 (3VL5 and 3VL6)	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	
	Order No.	Price per PU			kg		Order No.	Price per PU			kg	
B	3VL9 400-3MA10		1	1 unit	113	4.800	B	3VL9 600-3MA10	1	1 unit	113	4.800
B	3VL9 400-3MC10		1	1 unit	113	4.800	B	3VL9 600-3MC10	1	1 unit	113	4.800
B	3VL9 400-3MD10		1	1 unit	113	4.800	B	3VL9 600-3MD10	1	1 unit	113	4.800
B	3VL9 400-3ME10		1	1 unit	113	4.800	B	3VL9 600-3ME10	1	1 unit	113	4.800

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For 1250 to VL1600 (3VL7 and 3VL8) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Operating mechanisms							
3- or 4-pole							
Front-operated rotary operating mechanisms							
For direct mounting on the circuit breaker, without leading auxiliary switch, degree of protection IP30 ¹⁾ , <u>black</u> , max. 3 padlocks							
	A	3VL9 800-3HA00		1	1 unit	113	2.831
3VL9 .00-3H.00	A	3VL9 800-3HC00		1	1 unit	113	2.831
EMERGENCY-STOP version Red knob, yellow indicator plate							
Safety locks for installation by the customer For installation see pages 16/84 to 16/88.							
Door-coupling rotary operating mechanisms, complete, installation in doors and covers							
Degree of protection IP65, including handle ti-grey, with masking plate, indicator plate, removable door coupling (die-cost), 300 mm extension shaft (12 × 12 mm) and front-operated rotary operating mechanism for the respective circuit breaker, lockable with up to 3 padlocks, with door interlocking							
	A	3VL9 800-3HF05		1	1 unit	113	4.102
3VL9 .00-3H.05	A	3VL9 800-3HG05		1	1 unit	113	4.100
EMERGENCY-STOP version, Red knob, yellow indicator plate, without leading auxiliary switch							
Safety locks for installation by the customer For installation see pages 16/84 to 16/88.							
Leading auxiliary switches for installation in a front-operated rotary operating mechanism or door-coupling rotary operating mechanism							
Standard or EMERGENCY-STOP version							
"OFF after ON"							
Leading auxiliary switches when switching on							
	A	3VL9 800-3AS10		1	1 unit	113	0.080
3VL9 .00-3A.10	A	3VL9 800-3AT10		1	1 unit	113	0.130
2 changeover contacts with 1.5 m long cables							
"ON after OFF"							
Leading auxiliary switches when switching off							
	A	3VL9 800-3AU10		1	1 unit	113	0.080
	A	3VL9 800-3AW10		1	1 unit	113	0.130
1 changeover contact with 1.5 m long cables							
2 changeover contacts with 1.5 m long cables							
Retaining brackets							
	A	3VL9 800-3HP00		1	1 unit	113	0.529
Retaining bracket is mounted on the operating mechanism, recommended for extension shafts >250 mm, with locking device for max. 3 padlocks							
Rotary operating mechanisms with shaft stub, without knob							
	A	3VL9 800-3HE00		1	1 unit	113	2.175
Without leading auxiliary switch, for auxiliary switches see above							
Motorized operating mechanisms²⁾							
Degree of protection IP30, with locking device for 3 padlocks, not suitable for synchronizing							
50/60 Hz V AC							
V DC							
	C	3VL9 800-3MJ00		1	1 unit	113	6.800
	C	3VL9 800-3ML00		1	1 unit	113	6.800
	C	3VL9 800-3MS00		1	1 unit	113	6.800
	C	3VL9 800-3MN00		1	1 unit	113	6.800
	C	3VL9 800-3MQ00		1	1 unit	113	6.800
							
3VL9 .00-3M.00							
Toggle handle extensions							
	A	3VL9 800-3HN00		1	1 unit	113	0.234

For more accessories and components for door-coupling rotary operating mechanisms, see pages 16/67 to 16/69.

1) IP40 with additional masking frame mounted on the door cutout.

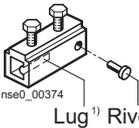
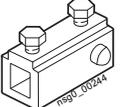
2) For safety lock as an assembly kit for retrofitting see pages 16/84 to 16/88.

* You can order this quantity or a multiple thereof.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Switching device	Rotary operating mechanisms	Size	Cross-section of the actuating shaft	Version ³⁾	DT	Individual parts for 8UC7 door-coupling rotary operating mechanisms	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	
Type	Type	mm × mm				Order No.	Price per PU			kg	
Individual parts for 8UC door-coupling rotary operating mechanisms											
Handles with masking plate (including flat gasket and fixing screws)											
	3VL1, 3VL2, 3VL3	8UC71	1	6 × 6 or 8 × 8	Standard EMERGENCY-STOP	C	8UC71 10-6BD	1	1 unit	103	0.200
						C	8UC71 20-8BD	1	1 unit	103	0.200
	3VL4, 3VL5, 3VL6	8UC72	2	8 × 8	Standard EMERGENCY-STOP	C	8UC72 10-6BD	1	1 unit	103	0.200
						C	8UC72 20-8BD	1	1 unit	103	0.200
	3VL7, 3VL8	8UC73	3	12 × 12	Standard EMERGENCY-STOP	C	8UC73 10-6BD	1	1 unit	103	0.200
						C	8UC73 20-8BD	1	1 unit	103	0.200
Individual parts for 8UC6 door-coupling rotary operating mechanisms											
Coupling drivers for 3VL											
	8UC71 (plastics)			6 × 6		C	8UC70 11-2AA	1	1 unit	103	0.200
	8UC71/8UC72 ²⁾ (die-cost)			8 × 8		A	8UC60 17-2AA	1	1 unit	103	0.047
	8UC73/74 (die-cost)			12 × 12		B	8UC60 14	1	1 unit	103	0.253
	Extension shafts 300 mm long										
	8UC71			6 × 6		B	8UC60 31	1	1 unit	103	0.068
	8UC71/8UC72			8 × 8		B	8UC60 32	1	1 unit	103	0.132
	8UC73			10 × 10		C	8UC60 33	1	1 unit	103	0.217
	8UC73/74			12 × 12		B	8UC60 34	1	1 unit	103	0.315
	Extension shafts 600 mm long										
	8UC71			6 × 6		B	8UC60 81	1	1 unit	103	0.136
	8UC71/8UC72			8 × 8		B	8UC60 82	1	1 unit	103	0.265
	8UC73			10 × 10		B	8UC60 83	1	1 unit	103	0.430
	8UC73/74			12 × 12		B	8UC60 84	1	1 unit	103	0.640
	Shaft couplings										
	8UC71			6 × 6		B	8UC60 21	1	1 unit	103	0.031
	8UC72			8 × 8		B	8UC60 22	1	1 unit	103	0.023
	8UC73			10 × 10		B	8UC60 23	1	1 unit	103	0.085
	8UC73/74			12 × 12		B	8UC60 24	1	1 unit	103	0.077
	Reducers										
	8UC71			8 × 8 to 6 × 6		C	8UC70 58	1	1 unit	103	0.200
	8UC72			12 × 12 to 8 × 8		C	8UC70 50	1	1 unit	103	0.200

¹⁾ Non-interchangeability features.

²⁾ Shortened coupling driver with reduced tolerance compensation.

³⁾ Standard: Ti-grey handle, light-gray masking plate; EMERGENCY-STOP: Red handle, yellow masking plate.

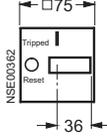
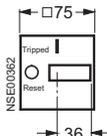
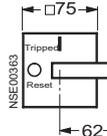
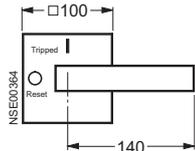
SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Switching devices ¹⁾	Rated current	Cross-section of the actuating shaft	Torque	Rotary operating mechanisms	Illustrated: Handle, masking plate
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Size

Type	A	mm	Nm			
8UC Door-Coupling Rotary Operating Mechanisms						
<i>8UC71 - 3VL circuit breakers</i>						
	3VL1	16 ... 160	6 × 6	4	1	
	3VL2	50 ... 160	6 × 6	4		
	3VL3	200... 250	6 × 6	4		
	3VL1	16 ... 160	8 × 8	4	1	
	3VL2	50 ... 160	8 × 8	4		
	3VL3	200... 250	8 × 8	4		
<i>8UC72 - 3VL circuit breakers</i>						
	3VL4	200 ... 400	8 × 8	9	2	
	3VL5	315 ... 600	8 × 8	9		
	3VL6	320 ... 800	8 × 8	9		
<i>8UC73 - 3VL circuit breakers</i>						
	3VL7	400 ... 1250	12 × 12	25	3	
	3VL8	640 ... 1600	12 × 12	25		

¹⁾ For 3RV circuit breakers/motor starter protectors, see Chapter 5 "Protection Equipment, Circuit Breakers/Motor Starter Protectors".

²⁾ Requires in addition a front-operated rotary operating mechanism with shaft stub for direct mounting to the circuit breaker. For ordering the complete operating mechanism see pages 16/61 to 16/66.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

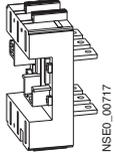
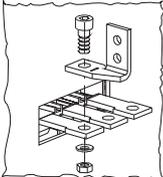
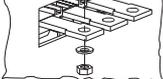
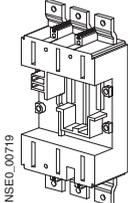
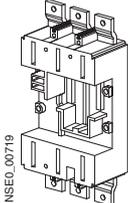
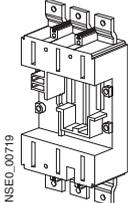
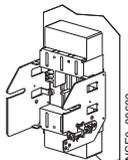
Version	DT	Rotary operating mechanisms, complete ²⁾		PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	Individual parts of the rotary operating mechanism			
		Order No.	Price per PU					Handle with masking plate	Coupling drivers	Extension shaft (length 300 mm)	Reducer/shaft coupling
Standard: TI-grey handle, light-gray masking plate; EMERGENCY-STOP: Red handle, yellow masking plate							kg	Order No.	Order No.	Order No.	Order No.
Standard EMERGENCY-STOP (plastics coupling driver)	C	8UC71 11-6BD15		1	1 unit	103	0.200	8UC71 10-6BD	8UC70 11-2AA	8UC60 31	8UC70 58
	C	8UC71 21-8BD15		1	1 unit	103	0.200	8UC71 20-8BD	8UC70 11-2AA	8UC60 31	8UC70 58
Standard EMERGENCY-STOP (die-cast coupling driver with reduced tolerance compensation)	C	8UC71 62-6BD22		1	1 unit	103	0.200	8UC71 10-6BD	8UC60 17-2AA	8UC60 32	8UC60 22
	C	8UC71 72-8BD22		1	1 unit	103	0.200	8UC71 20-8BD	8UC60 17-2AA	8UC60 32	8UC60 22
Standard EMERGENCY-STOP (die-cast coupling driver with reduced tolerance compensation)	C	8UC72 62-6BD26		1	1 unit	103	0.200	8UC72 10-6BD	8UC60 17-2AA	8UC60 32	8UC70 50
	C	8UC72 62-8BD26		1	1 unit	103	0.200	8UC72 20-8BD	8UC60 17-2AA	8UC60 32	8UC70 50
Standard EMERGENCY-STOP (die-cast coupling driver)	C	8UC73 14-6BD44		1	1 unit	103	0.200	8UC73 10-6BD	8UC60 14	8UC60 34	8UC60 24
	C	8UC73 24-8BD44		1	1 unit	103	0.200	8UC73 20-8BD	8UC60 14	8UC60 34	8UC60 24

* You can order this quantity or a multiple thereof.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For VL160X (3VL1) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	
Plug-in versions/withdrawable versions								
3- or 4-pole								
Plug-in base assembly kits								
Base, blade contacts for circuit breakers, terminal covers for degree of protection IP20, fixing screws, trip pin								
Rear terminals								
 NSE0_00717 3VL9 .00-4PA30		3-pole	A	3VL9 100-4PA30	1	1 unit	113	2.170
		3-pole with RCD module	A	3VL9 100-4PB30	1	1 unit	113	2.460
		4-pole	A	3VL9 100-4PA40	1	1 unit	113	2.850
		4-pole with RCD module	A	3VL9 100-4PB40	1	1 unit	113	3.200
90° angle connecting adapters								
 NSE00581 3VL9 .00-4PE30		For rear connection, 3-pole	A	3VL9 300-4PE30	1	1 unit	113	0.375
		For rear connection, 4-pole	A	3VL9 300-4PE40	1	1 unit	113	0.500
Front-accessible terminals								
 NSE00581 3VL9 .00-4PE30		3-pole	A	3VL9 100-4PC30	1	1 unit	113	1.980
		3-pole with RCD module	A	3VL9 100-4PD30	1	1 unit	113	2.260
		4-pole	A	3VL9 100-4PC40	1	1 unit	113	2.620
		4-pole with RCD module	A	3VL9 100-4PD40	1	1 unit	113	2.960
Withdrawable version assembly kits								
Upgrade of the plug-in base assembly kit to								
 NSE0_00719 3VL9 .00-4WF30		Withdrawable version 3-pole	--					
		including side panels 3-pole with RCD	--					
		and racking mechanism 4-pole	--					
		4-pole with RCD	--					
Withdrawable versions								
Same as plug-in base assembly kit, with additional side panels and racking mechanism								
Rear terminals								
 NSE0_00719 3VL9 .00-4WF30		3-pole	--					
		3-pole with RCD module	--					
		4-pole	--					
		4-pole with RCD module	--					
Front-accessible terminals								
 NSE0_00719 3VL9 .00-4WF30		3-pole	--					
		3-pole with RCD module	--					
		4-pole	--					
		4-pole with RCD module	--					
Blade contacts								
As replacement for converting fixed-mounted circuit breakers into plug-in/withdrawable circuit breakers, including trip pin								
 NSE0_00683 3VL9 .00-4WA30		1 set = 6 units 3-pole	A	3VL9 100-4PS30	1	1 unit	113	0.226
		1 set = 8 units 4-pole	A	3VL9 100-4PS40	1	1 unit	113	0.295
Trip pins and springs								
		As replacement for plug-in/withdrawable circuit breakers	A	3VL9 100-4PF00	1	1 unit	113	0.012
Auxiliary circuit plug connections for plug-in bases								
Accessory connections for plug-in circuit breakers (factory-wired connectors) and for plug-in bases or withdrawable version (coupling with screw terminal)								
		8 terminals	A	3VL9 300-4PJ00	1	1 unit	113	0.134
Position signaling switches (connected/disconnected position)								
		For plug-in/withdrawable base, 1 changeover contact, max. 2 signaling switches possible	A	3VL9 000-4WL00	1	1 unit	113	0.019

¹⁾ It is recommended to use a maximum of 2 auxiliary circuit plug-in systems per circuit breaker (16 terminals).

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

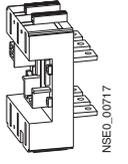
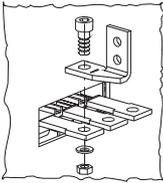
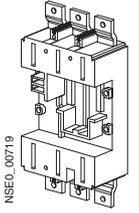
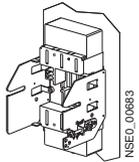
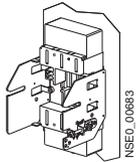
Accessories and spare parts

DT	For VL160 (3VL2)					DT	For VL250 (3VL3)						
	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG		Weight per PU approx. kg	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 200-4PA30		1	1 unit	113	2.170	A	3VL9 300-4PA30		1	1 unit	113	2.280
A	3VL9 200-4PB30		1	1 unit	113	2.460	A	3VL9 300-4PB30		1	1 unit	113	2.570
A	3VL9 200-4PA40		1	1 unit	113	2.850	A	3VL9 300-4PA40		1	1 unit	113	3.000
A	3VL9 200-4PB40		1	1 unit	113	3.200	A	3VL9 300-4PB40		1	1 unit	113	3.330
A	3VL9 300-4PE30		1	1 unit	113	0.375	A	3VL9 300-4PE30		1	1 unit	113	0.375
A	3VL9 300-4PE40		1	1 unit	113	0.500	A	3VL9 300-4PE40		1	1 unit	113	0.500
A	3VL9 200-4PC30		1	1 unit	113	1.980	A	3VL9 300-4PC30		1	1 unit	113	2.090
A	3VL9 200-4PD30		1	1 unit	113	2.260	A	3VL9 300-4PD30		1	1 unit	113	2.370
A	3VL9 200-4PC40		1	1 unit	113	2.620	A	3VL9 300-4PC40		1	1 unit	113	2.770
A	3VL9 200-4PD40		1	1 unit	113	2.960	A	3VL9 300-4PD40		1	1 unit	113	3.070
A	3VL9 300-4WF30		1	1 unit	113	1.260	A	3VL9 300-4WF30		1	1 unit	113	1.260
A	3VL9 300-4WG30		1	1 unit	113	2.031	A	3VL9 300-4WG30		1	1 unit	113	2.031
A	3VL9 300-4WF40		1	1 unit	113	1.280	A	3VL9 300-4WF40		1	1 unit	113	1.280
A	3VL9 300-4WG40		1	1 unit	113	2.050	A	3VL9 300-4WG40		1	1 unit	113	2.050
A	3VL9 200-4WA30		1	1 unit	113	3.430	A	3VL9 300-4WA30		1	1 unit	113	3.540
A	3VL9 200-4WB30		1	1 unit	113	4.000	A	3VL9 300-4WB30		1	1 unit	113	4.601
A	3VL9 200-4WA40		1	1 unit	113	4.130	A	3VL9 300-4WA40		1	1 unit	113	4.280
A	3VL9 200-4WB40		1	1 unit	113	4.940	A	3VL9 300-4WB40		1	1 unit	113	5.361
A	3VL9 200-4WC30		1	1 unit	113	3.240	A	3VL9 300-4WC30		1	1 unit	113	3.350
A	3VL9 200-4WD30		1	1 unit	113	3.810	A	3VL9 300-4WD30		1	1 unit	113	4.398
A	3VL9 200-4WC40		1	1 unit	113	3.940	A	3VL9 300-4WC40		1	1 unit	113	4.050
A	3VL9 200-4WD40		1	1 unit	113	4.710	A	3VL9 300-4WD40		1	1 unit	113	5.158
A	3VL9 200-4PS30		1	1 unit	113	0.248	A	3VL9 300-4PS30		1	1 unit	113	0.342
A	3VL9 200-4PS40		1	1 unit	113	0.330	A	3VL9 300-4PS40		1	1 unit	113	0.426
A	3VL9 300-4PF00		1	1 unit	113	0.013	A	3VL9 300-4PF00		1	1 unit	113	0.013
A	1) 3VL9 300-4PJ00		1	1 unit	113	0.134	A	1) 3VL9 300-4PJ00		1	1 unit	113	0.134
A	3VL9 000-4WL00		1	1 unit	113	0.019	A	3VL9 000-4WL00		1	1 unit	113	0.019

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For VL400 (3VL4) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	
Plug-in versions/withdrawable versions								
<i>3- or 4-pole</i>								
Plug-in base assembly kits								
Base, blade contacts for circuit breakers, terminal covers for degree of protection IP20, fixing screws, trip pin								
Rear terminals								
 NSE0_00717 3VL9 .00-4PA30		3-pole	A	3VL9 400-4PA30 -1)	1	1 unit	113	5.869
		3-pole with RCD module	A	3VL9 400-4PA40	1	1 unit	113	8.008
		4-pole	A	3VL9 400-4PB40	1	1 unit	113	10.100
		4-pole with RCD module	A	3VL9 400-4PB40	1	1 unit	113	10.100
90° angle connecting adapters								
For rear connection, 3-pole								
For rear connection, 4-pole								
Front-accessible terminals								
 NSE00581 3VL9 .00-4PE30		3-pole	A	3VL9 400-4PC30 -1)	1	1 unit	113	5.424
		3-pole with RCD module	A	3VL9 400-4PC40	1	1 unit	113	7.408
		4-pole	A	3VL9 400-4PD40	1	1 unit	113	9.500
		4-pole with RCD module	A	3VL9 400-4PD40	1	1 unit	113	9.500
Withdrawable version assembly kits								
Upgrade of the plug-in base assembly kit to								
 NSE0_00719 3VL9 .00-4WF30		Withdrawable version 3-pole	A	3VL9 400-4WF30 -1)	1	1 unit	113	3.400
		including side panels 3-pole with RCD	A	3VL9 400-4WF40	1	1 unit	113	3.600
		and racking mechanism. 4-pole	A	3VL9 400-4WF40	1	1 unit	113	3.800
		4-pole with RCD	A	3VL9 400-4WG40	1	1 unit	113	3.800
Withdrawable versions								
Same as plug-in base assembly kit, with additional side panels and racking mechanism								
Rear terminals³⁾								
 NSE0_00683 3VL9 .00-4WA30		3-pole	A	3VL9 400-4WA30 -1)	1	1 unit	113	8.769
		3-pole with RCD module	A	3VL9 400-4WA40	1	1 unit	113	11.549
		4-pole	A	3VL9 400-4WB40	1	1 unit	113	13.200
		4-pole with RCD module	A	3VL9 400-4WB40	1	1 unit	113	13.200
Front-accessible terminals								
 NSE0_00683 3VL9 .00-4WA30		3-pole	A	3VL9 400-4WC30 -1)	1	1 unit	113	8.324
		3-pole with RCD module	A	3VL9 400-4WC40	1	1 unit	113	10.949
		4-pole	A	3VL9 400-4WC40	1	1 unit	113	12.600
		4-pole with RCD module	A	3VL9 400-4WD40	1	1 unit	113	12.600
Blade contacts								
As replacement for converting fixed-mounted circuit breakers into plug-in/withdrawable circuit breakers, including trip pin								
1 set = 6 units 3-pole								
1 set = 8 units 4-pole								
Trip pins and springs								
As replacement for plug-in/withdrawable circuit breakers								
Auxiliary circuit plug connections for plug-in bases								
Accessory connections for plug-in circuit breakers (factory-wired connectors) and for plug-in bases or withdrawable version (coupling with screw terminal)								
2)								
8 terminals								
Position signaling switches								
(connected/disconnected position)								
For plug-in/withdrawable base, 1 changeover contact, max. 2 signaling switches possible								

1) For 3-pole applications please use 4-pole withdrawable version with 4-pole RCD module and 4-pole circuit breaker.

2) It is recommended to use a maximum of 3 auxiliary circuit plug-in systems per circuit breaker (24 terminals).

3) With VL800 (3VL6) to VL1600 (3VL8) as vertical connection.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

DT	For VL630 (3VL5) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	DT	For VL800 (3VL6) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 500-4PA30		1	1 unit	113	8.200	--						
A	3VL9 500-4PA40		1	1 unit	113	11.200	--						
	--						--						
	--						--						
A	3VL9 500-4PC30		1	1 unit	113	7.400	--						
A	3VL9 500-4PC40		1	1 unit	113	9.600	--						
	--						--						
A	3VL9 500-4WF30		1	1 unit	113	3.600	--						
A	3VL9 500-4WF40		1	1 unit	113	3.800	--						
	--						--						
A	3VL9 500-4WA30		1	1 unit	113	11.000	A	3VL9 600-4WA30		1	1 unit	113	40.104
A	3VL9 500-4WA40		1	1 unit	113	15.000	A	3VL9 600-4WA40		1	1 unit	113	48.060
	--						--						
A	3VL9 500-4WC30		1	1 unit	113	10.300	A	3VL9 600-4WC30		1	1 unit	113	40.716
A	3VL9 500-4WC40		1	1 unit	113	13.400	A	3VL9 600-4WC40		1	1 unit	113	48.876
	--						--						
A	3VL9 500-4PS30		1	1 unit	113	1.260	A	3VL9 600-4PS30		1	1 unit	113	1.500
A	3VL9 500-4PS40		1	1 unit	113	1.680	A	3VL9 600-4PS40		1	1 unit	113	2.000
	--						--						
A	3VL9 500-4PF00		1	1 unit	113	0.018	A	3VL9 600-4PF00		1	1 unit	113	0.025
	--						--						
	2)							2)					
A	3VL9 600-4PJ00		1	1 unit	113	0.144	A	3VL9 600-4PJ00		1	1 unit	113	0.144
	--						--						
A	3VL9 000-4WL00		1	1 unit	113	0.019	A	3VL9 000-4WL00		1	1 unit	113	0.019

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For VL1250 (3VL7) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Plug-in versions/withdrawable versions							
3- or 4-pole							
Plug-in base assembly kits							
Base, blade contacts for circuit breakers, terminal covers for degree of protection IP20, fixing screws, trip pin							
Rear terminals							
3-pole --							
3-pole with RCD module --							
4-pole --							
4-pole with RCD module --							
90° angle connecting adapters							
For rear connection, 3-pole --							
For rear connection, 4-pole --							
Front-accessible terminals							
3-pole --							
3-pole with RCD module --							
4-pole --							
4-pole with RCD module --							
Withdrawable version assembly kits							
Upgrade of the plug-in base assembly kit to							
Withdrawable version 3-pole --							
including side panels 3-pole with RCD --							
and racking mechanism 4-pole --							
4-pole with RCD --							
Withdrawable versions							
Same as plug-in base assembly kit, with additional side panels and racking mechanism							
Rear terminals¹⁾							
3-pole A 3VL9 800-4WA30 1 1 unit 113 39.996							
3-pole with RCD module --							
4-pole A 3VL9 800-4WA40 1 1 unit 113 47.148							
4-pole with RCD module --							
Front-accessible terminals							
3-pole A 3VL9 800-4WC30 1 1 unit 113 40.608							
3-pole with RCD module --							
4-pole A 3VL9 800-4WC40 1 1 unit 113 47.964							
4-pole with RCD module --							
Blade contacts							
As replacement for converting fixed-mounted circuit breakers into plug-in/withdrawable circuit breakers, including trip pin							
1 set = 6 units 3-pole A 3VL9 800-4PS30 1 1 unit 113 2.000							
1 set = 8 units 4-pole A 3VL9 800-4PS40 1 1 unit 113 2.660							
Trip pins and springs							
As replacement for plug-in/withdrawable circuit breakers A 3VL9 800-4PF00 1 1 unit 113 0.030							
Auxiliary circuit plug connections for plug-in bases							
Accessory connections for plug-in circuit breakers (factory-wired connectors) and for plug-in bases or withdrawable version (coupling with screw terminal) 2)							
8 terminals A 3VL9 800-4PJ00 1 1 unit 113 0.144							
Position signaling switches							
(connected/disconnected position)							
For plug-in/withdrawable base, 1 changeover contact, max. 2 signaling switches possible A 3VL9 000-4WL00 1 1 unit 113 0.019							

¹⁾ With VL800 (3VL6) to VL1600 (3VL8) as vertical connection.

²⁾ It is recommended to use a maximum of 3 auxiliary circuit plug-in systems per circuit breaker (24 terminals).

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

DT	For VL1600 (3VL8) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg

A	3VL9 800-4WA30		1	1 unit	113	39.996
A	3VL9 800-4WA40		1	1 unit	113	47.148
A	3VL9 800-4WC30		1	1 unit	113	40.608
A	3VL9 800-4WC40		1	1 unit	113	47.964
A	3VL9 800-4PS30		1	1 unit	113	2.000
A	3VL9 800-4PS40		1	1 unit	113	2.660
A	3VL9 800-4PF00		1	1 unit	113	0.030
A	2) 3VL9 800-4PJ00		1	1 unit	113	0.144
A	3VL9 000-4WL00		1	1 unit	113	0.019

* You can order this quantity or a multiple thereof.

SENTRON 3VL Molded Case Circuit Breakers

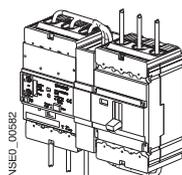
3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Circuit breakers for system protection, only for TM, starters, disconnectors	Rated current I_n	Residual currents I_{Δ} adjustable	Delay time t_d adjustable	Rated operational voltage U_e	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	A	A	s	V AC							kg

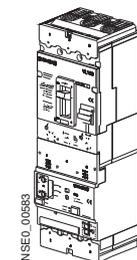
RCD modules

3-pole



VL160X (3VL1)		0.03	Instantaneous								
Bottom mounting ¹⁾³⁾	160	0.10	0.06	127 ... 480 C		3VL9 112-5GA30		1	1 unit	113	1.340
Mounting kit for left side, without RCD ¹⁾²⁾³⁾		0.30	0.10		A	3VL9 112-5GB30		1	1 unit	113	1.525
		0.50	0.25								
		1.00	0.50								
VL160 (3VL2)	160	3.00	1.00	127 ... 480 C		3VL9 216-5GC30		1	1 unit	113	1.320
				230 ... 690 C		3VL9 216-5GD30		1	1 unit	113	1.320
SENTRON VL160X with RCD module mounted laterally on the circuit breaker (on left side)	VL250 (3VL3)	250		127 ... 480 C		3VL9 325-5GE30		1	1 unit	113	1.400
	VL400 (3VL4)	400		230 ... 690 C		3VL9 325-5GF30		1	1 unit	113	1.400
				127 ... 480	--						
				230 ... 690	--						

4-pole



VL160X (3VL1)		0.03	Instantaneous								
Bottom mounting ¹⁾³⁾	160	0.10	0.06	127 ... 480 C		3VL9 112-5GA40		1	1 unit	113	1.590
Mounting kit for left side, without RCD ¹⁾²⁾³⁾		0.30	0.10		A	3VL9 112-5GB40		1	1 unit	113	1.824
		0.50	0.25								
		1.00	0.50								
VL160 (3VL2)	160	3.00	1.00	127 ... 480 C		3VL9 216-5GC40		1	1 unit	113	1.570
				230 ... 690 C		3VL9 216-5GD40		1	1 unit	113	1.570
SENTRON VL160X up to VL400 with RCD module mounted below the circuit breaker	VL250 (3VL3)	250		127 ... 480 C		3VL9 325-5GE40		1	1 unit	113	1.650
	VL400 (3VL4)	400		230 ... 690 C		3VL9 325-5GF40		1	1 unit	113	1.650
				127 ... 480 C		3VL9 440-5GG40		1	1 unit	113	2.980
				230 ... 690 C		3VL9 440-5GH40		1	1 unit	113	2.980

Circuit breakers for system protection, only for TM, starters, disconnectors	Rated current I_n	Residual currents I_{Δ} adjustable	Delay time t_d adjustable	Rated operational voltage U_e	3-pole circuit breakers	4-pole circuit breakers
	A	A	s	V AC	Order No. with "-Z" and additional order code	Order No. with "-Z" and additional order code
					<input type="checkbox"/> <input type="checkbox"/> Code for further versions -Z	<input type="checkbox"/> <input type="checkbox"/> Code for further versions -Z

Circuit breakers with RCD module

3-pole and 4-pole

VL160X (3VL1)		0.03	Instantaneous							
(Bottom mounting)	160	0.10	0.06	127 ... 480	A 0 1 ¹⁾³⁾	x A 0 1 ¹⁾³⁾				x
		0.30	0.10							
		0.50	0.25							
VL160 (3VL2)	160	1.00	0.50	127 ... 480	A 0 1	x A 0 1				x
		3.00	1.00	230 ... 690	A 0 2	x A 0 2				x
VL250 (3VL3)	250			127 ... 480	A 0 1	x A 0 1				x
				230 ... 690	A 0 2	x A 0 2				x
VL400 (3VL4)	400			127 ... 480	--	A 0 1				x
				230 ... 690	--	A 0 2				x

x = Additional price

¹⁾ Only the right-hand accessory compartment and the N conductor (4-pole) accessory compartment can be used for the installation of accessories, see [Technical Information at www.siemens.com/lowvoltage/support](http://www.siemens.com/lowvoltage/support).

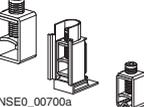
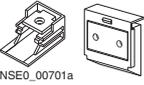
²⁾ The assembly kit consists of the mounting plate, wiring and covers for circuit breakers and RCD module (for 75 mm standard mounting rail). The RCD module (3VL9 112-5GA30/-5GA40) must be ordered separately.

³⁾ VL160X (3VL1) + RCD module cannot be combined with motorized operating mechanism, front operating mechanism, door-coupling rotary operating mechanism, locking device for toggle levers and screw terminal connections (3VL17-...-6-...).

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For VL160X (3VL1) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Connection methods for fixed-mounted circuit breakers							
3- or 4-pole							
		Front connecting bars¹⁾ Phase barriers included. Standard					
3VL9 .00-4EC40		1 set = 3 units	3-pole	A	3VL9 216-4EC30	1	1 unit 113 0.198
		1 set = 4 units	4-pole	A	3VL9 216-4EC40	1	1 unit 113 0.198
		For increased pole spacing					
3VL9 .00-4ED40		1 set = 3 units	3-pole	A	3VL9 216-4ED30	1	1 unit 113 0.189
		1 set = 4 units	4-pole	A	3VL9 216-4ED40	1	1 unit 113 0.252
Rear terminals							
		Short terminal (1 unit)		A	3VL9 100-4RA00	1	1 unit 113 0.126
		Long terminal (1 unit)		A	3VL9 100-4RB00	1	1 unit 113 0.229
3VL9 .00-4RA00, 3VL9 .00-4RB00		Terminal kit (2 short + 1 long) 3-pole		A	3VL9 100-4RC30	1	1 unit 113 0.481
		Terminal kit (2 short + 2 long) 4-pole		A	3VL9 100-4RF40	1	1 unit 113 0.711
		Short flat connector (1 unit)		A	3VL9 100-4RK00	1	1 unit 113 0.104
		Long flat connector (1 unit)		A	3VL9 100-4RL00	1	1 unit 113 0.200
3VL9 .00-4RK00, 3VL9 .00-4RL00		Flat connector kit 3-pole (2 short + 1 long)		A	3VL9 100-4RM30	1	1 unit 113 0.408
		Flat connector kit 4-pole (2 short + 2 long)		A	3VL9 100-4RN40	1	1 unit 113 0.608
		Flat connecting bar (1 unit)			--		
3VL9 .00-4RG00		Flat connecting bar Set = 3 units, 3-pole			--		
		Flat connecting bar Set = 4 units, 4-pole			--		
Box terminals							
		For connection for flexible flat copper busbar or cable, see Technical Information at www.siemens.com/lowvoltage/support .					
3VL9 .00-4TC.0		1 set = 3 units		A	3VL9 100-4TC30	1	1 unit 113 0.084
		1 set = 4 units		A	3VL9 100-4TC40	1	1 unit 113 0.112
Circular conductor terminals							
		Only for cables (Al or Cu) <u>Aluminum terminal (tinned)</u>					
3VL9 .00-4TD.0		1 set = 3 units		A	3VL9 100-4TD30	1	1 unit 113 0.041
		1 set = 4 units		A	3VL9 100-4TD40	1	1 unit 113 0.055
Auxiliary conductor terminals							
		For box terminals/circular conductor terminals 1 set = 10 units		A	3VL9 200-3TN00	1	1 unit 113 0.130
3VL9 .00-4TA.0		Terminals with screw connection - metric thread With insulator (for rear) for use with busbars and cable lugs, see Technical Information at www.siemens.com/lowvoltage/support .					
		1 set = 3 units		A	3VL9 116-4TA30	1	1 unit 113 0.055
		1 set = 4 units		A	3VL9 116-4TA40	1	1 unit 113 0.070
Terminal covers for circuit breakers							
		Degree of protection IP30 for main connections 1 set = 2 units					
3VL9 .00-3CB.0		Extended 3-pole		A	3VL9 300-8CA30	1	1 unit 113 0.204
		Standard 3-pole		A	3VL9 300-8CB30	1	1 unit 113 0.053
		Extended 4-pole		A	3VL9 300-8CA40	1	1 unit 113 0.264
3VL9 .00-8CE00		Standard 4-pole		A	3VL9 300-8CB40	1	1 unit 113 0.071
Phase barriers for circuit breakers, fixed-mounted, plug-in or withdrawable versions							
		1 set = 2 units		A	3VL9 300-8CE00	1	1 unit 113 0.023

¹⁾ Screw terminal connections are required for SENTRON VL160X and VL160 (3VL1 and 3VL2) circuit breakers,
[see Technical Information at www.siemens.com/lowvoltage/support](http://www.siemens.com/lowvoltage/support).

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For VL160 (3VL2) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Connection parts for fixed-mounted circuit breakers							
<i>3- or 4-pole</i>							
Front connecting bars¹⁾							
Phase barriers included.							
Standard							
 NSE0_00702a 3VL9 .00-4EC40							
		1 set = 3 units	3-pole	A			0.198
		1 set = 4 units	4-pole	A			0.198
For increased pole spacing							
 NSE0_00722 3VL9 .00-4ED40							
		1 set = 3 units	3-pole	A			0.189
		1 set = 4 units	4-pole	A			0.252
Rear terminals							
 NSE0_00723 3VL9 .00-4RA00, 3VL9 .00-4RB00							
		Short terminal (1 unit)		A			0.126
		Long terminal (1 unit)		A			0.229
		Terminal kit (2 short + 1 long) 3-pole		A			0.481
		Terminal kit (2 short + 2 long) 4-pole		A			0.711
 NSE0_00724 3VL9 .00-4RK00, 3VL9 .00-4RL00							
		Short flat connector (1 unit)		A			0.104
		Long flat connector (1 unit)		A			0.200
		Flat connector kit (2 short + 1 long) 3-pole		A			0.408
		Flat connector kit (2 short + 2 long) 4-pole		A			0.608
 NSE0_00725 3VL9 .00-4RG00							
		Flat connecting bar (1 unit)		--			--
		Flat connecting bar		--			--
		Set = 3 units, 3-pole		--			--
		Flat connecting bar		--			--
		Set = 4 units, 4-pole		--			--
Box terminals							
Connection for flexible flat copper busbar or cable, see Technical Information at www.siemens.com/lowvoltage/support .							
 NSE0_00700a 3VL9 .00-4TC.0							
		1 set = 3 units		A			0.084
		1 set = 4 units		A			0.112
Circular conductor terminals							
Only for cables (Al or Cu)							
Aluminum terminal (tinned)							
 NSE0_01529 3VL9 .00-4TD.0							
		1 set = 3 units		A			0.041
		1 set = 4 units		A			0.055
Multiple feed-in terminals							
		3 units		--			--
		4 units		--			--
 NSE0_01542 3VL9 .00-4TF.0							
				A			0.130
Auxiliary conductor terminals							
For box terminals/circular conductor terminals/multiple feed-in terminals							
1 set = 10 units							
Terminal plates¹⁾							
Connection for flexible flat copper busbar with auxiliary conductor connection 0.5 – 4 mm ² (extended terminal covers or phase barriers required)							
 NSE0_01530 3VL9 .00-4TT.0							
		1 set = 3 units		--			--
		1 set = 4 units		--			--
Terminals with screw connection - metric thread							
With insulator (for rear) for use with busbars and cable lugs, see Technical Information at www.siemens.com/lowvoltage/support .							
 NSE0_00701a 3VL9 .00-4TA.0							
		1 set = 3 units		A			0.055
		1 set = 4 units		A			0.070
Terminal covers for circuit breakers							
Degree of protection IP30 for main connections							
1 set = 2 units							
 NSE0_00730 3VL9 .00-3CB.0							
		Extended	3-pole	A			0.204
		Standard	3-pole	A			0.053
 NSE0_00731 3VL9 .00-8CE00							
		Extended	4-pole	A			0.264
		Standard	4-pole	A			0.071
Phase barriers for circuit breakers, fixed-mounted, plug-in or withdrawable versions							
		1 set = 2 units		A			0.023

¹⁾ Screw terminal connections are required for SENTRON VL160X and VL160 (3VL1 and 3VL2) circuit breakers, [see Technical Information at www.siemens.com/lowvoltage/support](http://www.siemens.com/lowvoltage/support).

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

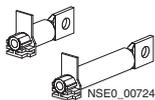
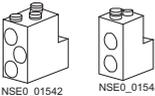
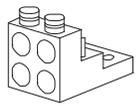
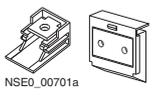
DT	For VL250 (3VL3)				DT	For VL400 (3VL4)							
	Order No.	Price per PU	PU (UNIT, SET, M)	PS*		PG	Weight per PU approx. kg	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 300-4EC30		1	1 unit	113	0.256	A	3VL9 400-4EC30		1	1 unit	113	0.889
A	3VL9 300-4EC40		1	1 unit	113	0.345	A	3VL9 400-4EC40		1	1 unit	113	1.193
A	3VL9 300-4ED30		1	1 unit	113	0.256	A	3VL9 400-4ED30		1	1 unit	113	0.916
A	3VL9 300-4ED40		1	1 unit	113	0.345	A	3VL9 400-4ED40		1	1 unit	113	1.229
A	3VL9 300-4RA00		1	1 unit	113	0.126	A	3VL9 400-4RA00		1	1 unit	113	0.219
A	3VL9 300-4RB00		1	1 unit	113	0.229	A	3VL9 400-4RB00		1	1 unit	113	0.377
A	3VL9 300-4RC30		1	1 unit	113	0.481	A	3VL9 400-4RC30		1	1 unit	113	0.816
A	3VL9 300-4RF40		1	1 unit	113	0.711	A	3VL9 400-4RF40		1	1 unit	113	1.192
A	3VL9 300-4RK00		1	1 unit	113	0.104	A	3VL9 400-4RK00		1	1 unit	113	0.343
A	3VL9 300-4RL00		1	1 unit	113	0.200	A	3VL9 400-4RL00		1	1 unit	113	0.502
A	3VL9 300-4RM30		1	1 unit	113	0.408	A	3VL9 400-4RM30		1	1 unit	113	1.190
A	3VL9 300-4RN40		1	1 unit	113	0.608	A	3VL9 400-4RN40		1	1 unit	113	1.690
--								--					
--								--					
--								--					
A	3VL9 300-4TC30		1	1 unit	113	0.192	A	3VL9 400-4TC30		1	1 unit	113	0.423
A	3VL9 300-4TC40		1	1 unit	113	0.256	A	3VL9 400-4TC40		1	1 unit	113	0.573
A	3VL9 300-4TD30		1	1 unit	113	0.159	A	3VL9 400-4TD30		1	1 unit	113	0.260
A	3VL9 300-4TD40		1	1 unit	113	0.212	A	3VL9 400-4TD40		1	1 unit	113	0.340
--							A	3VL9 400-4TF30		1	1 unit	113	0.420
--							A	3VL9 400-4TF40		1	1 unit	113	0.560
A	3VL9 300-3TN00		1	1 unit	113	0.150	A	3VL9 400-3TN00		1	1 unit	113	0.140
--								--					
--								--					
A	3VL9 300-4TA30		1	1 unit	113	0.090	A	3VL9 400-4TA30		1	1 unit	113	0.112
A	3VL9 300-4TA40		1	1 unit	113	0.120	A	3VL9 400-4TA40		1	1 unit	113	0.149
A	3VL9 300-8CA30		1	1 unit	113	0.204	A	3VL9 400-8CA30		1	1 unit	113	0.450
A	3VL9 300-8CB30		1	1 unit	113	0.053	A	3VL9 400-8CB30		1	1 unit	113	0.120
A	3VL9 300-8CA40		1	1 unit	113	0.264	A	3VL9 400-8CA40		1	1 unit	113	0.594
A	3VL9 300-8CB40		1	1 unit	113	0.071	A	3VL9 400-8CB40		1	1 unit	113	0.164
A	3VL9 300-8CE00		1	1 unit	113	0.023	A	3VL9 600-8CE00		1	1 unit	113	0.042

* You can order this quantity or a multiple thereof.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For VL630 (3VL5) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	
Connection parts for fixed-mounted circuit breakers								
<i>3- or 4-pole</i>								
Front connecting bars Phase barriers included.								
Standard								
 NSE0_00702a 3VL9 .00-4EC40								
		1 set = 3 units 3-pole	A	3VL9 500-4EC30	1	1 unit	113	1.028
		1 set = 4 units 4-pole	A	3VL9 500-4EC40	1	1 unit	113	1.371
For increased pole spacing								
 NSE0_00722 3VL9 .00-4ED40								
		1 set = 3 units 3-pole	A	3VL9 500-4ED30	1	1 unit	113	1.059
		1 set = 4 units 4-pole	A	3VL9 500-4ED40	1	1 unit	113	1.412
Rear terminals								
Short terminal (1 unit)								
Long terminal (1 unit)								
Terminal kit (2 short + 1 long) 3-pole								
Terminal kit (2 short + 2 long) 4-pole								
 NSE0_00723 3VL9 .00-4RA00, 3VL9 .00-4RB00								
		Short flat connector (1 unit)	--					
		Long flat connector (1 unit)	--					
Flat connector kit (2 short + 1 long) 3-pole								
Flat connector kit (2 short + 2 long) 4-pole								
 NSE0_00724 3VL9 .00-4RK00, 3VL9 .00-4RL00								
	A	Flat connecting bar (1 unit)		3VL9 500-4RG00	1	1 unit	113	0.358
	A	Flat connecting bar		3VL9 500-4RH30	1	1 unit	113	1.075
	A	Set = 3 units, 3-pole		3VL9 500-4RH40	1	1 unit	113	1.433
	A	Flat connecting bar						
	A	Set = 4 units, 4-pole						
Multiple feed-in terminals Only for cables (Al or Cu) Aluminum terminal (tinned)								
 NSE0_00725 3VL9 .00-4RG00								
	A	1 set = 3 units		3VL9 500-4TG30	1	1 unit	113	0.461
	A	1 set = 4 units		3VL9 500-4TG40	1	1 unit	113	0.614
Auxiliary conductor terminals For multiple feed-in terminals 1 set = 10 units								
 NSE0_01542 NSE0_01543 3VL9 .00-4TF.0								
	A			3VL9 400-3TN00	1	1 unit	113	0.140
Terminal plates¹⁾ Connection for flexible flat copper busbar with auxiliary conductor connection 0.5 – 4 mm ² (extended terminal covers or phase barriers required)								
 NSE0_01544 3VL9 .00-4TT.0								
	A	1 set = 3 units		3VL9 500-4TT30	1	1 unit	113	1.350
	A	1 set = 4 units		3VL9 500-4TT40	1	1 unit	113	1.800
Terminals with screw connection - metric thread With insulator (for rear) for use with busbars and cable lugs, see Technical Information at www.siemens.com/lowvoltage/support .								
 NSE0_01530 3VL9 .00-4TT.0								
	A	1 set = 3 units		3VL9 500-4TA30	1	1 unit	113	0.150
	A	1 set = 4 units		3VL9 500-4TA40	1	1 unit	113	0.200
Terminal covers for circuit breakers Degree of protection IP30 for main connections 1 set = 2 units								
 NSE0_00701a 3VL9 .00-4TA.0								
	A	Extended 3-pole		3VL9 600-8CA30	1	1 unit	113	0.696
	A	Standard 3-pole		3VL9 600-8CB30	1	1 unit	113	0.210
	A	Extended 4-pole		3VL9 600-8CA40	1	1 unit	113	0.960
	A	Standard 4-pole		3VL9 600-8CB40	1	1 unit	113	0.270
Phase barriers for circuit breakers, fixed-mounted, plug-in or withdrawable versions²⁾								
 NSE0_00730 3VL9 .00-3CB.0								
	A	1 set = 2 units		3VL9 600-8CE00	1	1 unit	113	0.042
 NSE0_00731 3VL9 .00-8CE00								

¹⁾ Front connecting bars included in scope of supply; not for 690 V AC/600 V DC.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

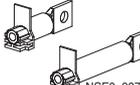
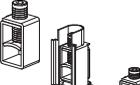
DT	For VL800 (3VL6)				DT	For VL1250 (3VL7)							
	Order No.	Price per PU	PU (UNIT, SET, M)	PS*		PG	Weight per PU approx. kg	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 600-4EC30		1	1 unit	113	1.602	A	3VL9 800-4EC30		1	1 unit	113	3.313
A	3VL9 600-4EC40		1	1 unit	113	2.136	A	3VL9 800-4EC40		1	1 unit	113	4.438
A	3VL9 600-4ED30		1	1 unit	113	1.613	--	--		--		--	--
A	3VL9 600-4ED40		1	1 unit	113	2.154	--	--		--		--	--
--	--		--		--	--	--	--		--		--	--
A	3VL9 600-4RG00		1	1 unit	113	1.604	A	3VL9 700-4RG00		1	1 unit	113	1.604
A	3VL9 600-4RH30		1	1 unit	113	4.812	A	3VL9 700-4RH30		1	1 unit	113	4.812
A	3VL9 600-4RH40		1	1 unit	113	6.416	A	3VL9 700-4RH40		1	1 unit	113	6.416
A	3VL9 600-4TG30		1	1 unit	113	0.918	A	3VL9 700-4TG30		1	1 unit	113	2.175
A	3VL9 600-4TG40		1	1 unit	113	1.224	A	3VL9 700-4TG40		1	1 unit	113	2.900
A	3VL9 400-3TN00		1	1 unit	113	0.140	A	3VL9 400-3TN00		1	1 unit	113	0.140
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A	3VL9 600-4TA30		1	1 unit	113	0.289	A	3VL9 800-4TA30		1	1 unit	113	0.319
A	3VL9 600-4TA40		1	1 unit	113	0.386	A	3VL9 800-4TA40		1	1 unit	113	0.426
A	3VL9 600-8CA30		1	1 unit	113	0.696	A	3VL9 800-8CA30		1	1 unit	113	1.060
A	3VL9 600-8CB30		1	1 unit	113	0.210	A	3VL9 800-8CB30		1	1 unit	113	0.360
A	3VL9 600-8CA40		1	1 unit	113	0.960	A	3VL9 800-8CA40		1	1 unit	113	1.326
A	3VL9 600-8CB40		1	1 unit	113	0.270	A	3VL9 800-8CB40		1	1 unit	113	0.470
A	3VL9 600-8CE00		1	1 unit	113	0.042	A	3VL9 800-8CE00		1	1 unit	113	0.130

²⁾ Plug-in version: Not for VL1250 (3VL7),
withdrawable version: Not for VL800 (3VL6) and VL1250 (3VL7).

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

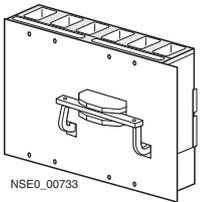
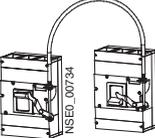
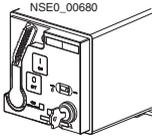
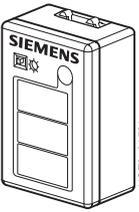
Version	DT	For VL1600 (3VL8) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Connection parts for fixed-mounted circuit breakers							
<i>3- or 4-pole</i>							
Front connecting bars							
Phase barriers included.							
Standard							
 NSE0_00702a 3VL9 .00-4EC40		1 set = 3 units	3-pole	A	3VL9 800-4EC30	1	1 unit 113 3.313 ¹⁾
		1 set = 4 units	4-pole	A	3VL9 800-4EC40	1	1 unit 113 4.438 ¹⁾
For increased pole spacing							
 NSE0_00722 3VL9 .00-4ED40		1 set = 3 units	3-pole	--	--		
		1 set = 4 units	4-pole	--	--		
Rear terminals							
Short terminal (1 unit)							
				--	--		
Long terminal (1 unit)							
				--	--		
Terminal kit (2 short + 1 long)							
 NSE0_00723 3VL9 .00-4RA00, 3VL9 .00-4RB00			3-pole	--	--		
			4-pole	--	--		
Terminal kit (2 short + 2 long)							
				--	--		
4-pole							
				--	--		
Short flat connector (1 unit)							
				--	--		
Long flat connector (1 unit)							
				--	--		
Flat connector kit							
 NSE0_00724 3VL9 .00-4RK00, 3VL9 .00-4RL00			(2 short + 1 long)	--	--		
			3-pole	--	--		
Flat connector kit							
			(2 short + 2 long)	--	--		
			4-pole	--	--		
Flat connecting bar (1 unit)							
 NSE0_00725 3VL9 .00-4RG00				A	3VL9 800-4RG00	1	1 unit 113 1.527
				A	3VL9 800-4RH30	1	1 unit 113 4.581
			Set = 3 units, 3-pole	A	3VL9 800-4RH40	1	1 unit 113 6.108
			Set = 4 units, 4-pole				
Box terminals							
For connection for flexible flat copper busbar or cable, see Technical Information at www.Siemens.com/lowvoltage/support .							
 NSE0_00700a 3VL9 .00-4TC.0			1 set = 3 units	--	--		
			1 set = 4 units	--	--		
Multiple feed-in terminals							
Only for cables (Al or Cu)							
Aluminum terminal (tinned)							
 NSE0_01544 3VL9 .00-4TG.0			1 set = 3 units	--	--		
			1 set = 4 units	--	--		
Auxiliary conductor terminals							
For box terminals/aluminum terminals							
Terminals with screw connection - metric thread							
With insulator (for rear) for use with busbars and cable lugs, see Technical Information at www.siemens.com/lowvoltage/support .							
 NSE0_00701a 3VL9 .00-4TA.0			1 set = 3 units	A	3VL9 800-4TA30	1	1 unit 113 0.319
			1 set = 4 units	A	3VL9 800-4TA40	1	1 unit 113 0.426
Terminal covers for circuit breakers							
Degree of protection IP30 for main connections							
1 set = 2 units							
 NSE0_00730 3VL9 .00-3CB.0			Extended	3-pole	A	3VL9 800-8CA30	1 1 unit 113 1.060
			Standard	3-pole	A	3VL9 800-8CB30	1 1 unit 113 0.360
			Extended	4-pole	A	3VL9 800-8CA40	1 1 unit 113 1.326
			Standard	4-pole	A	3VL9 800-8CB40	1 1 unit 113 0.470
 NSE0_00731 3VL9 .00-8CE00			Phase barriers for fixed-mounted circuit breakers				
			1 set = 2 units	A	3VL9 800-8CE00	1	1 unit 113 0.130

¹⁾ In scope of supply of circuit breaker.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

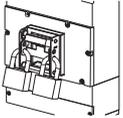
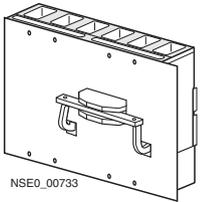
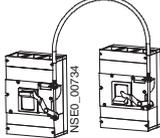
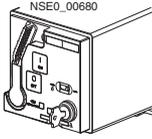
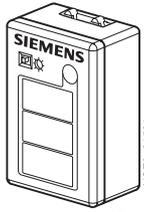
Version	DT	For VL160X (3VL1) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Interlocks							
3- or 4-pole							
Locking devices for toggle levers							
For locking the circuit breaker in the "OFF" position. Up to 3 padlocks with Ø 5–8 mm can be used. Removable (padlocks not included)							
 NSE0_00732 3VL9 .00-3HL00	A	3VL9 300-3HL00		1	1 unit	113	0.052
Rear interlocking modules							
For the mechanical interlocking of two adjacent circuit breakers. The circuit breakers must be of the same installation type and size. (Mounting plate not included in scope of supply)							
Fixed-mounted circuit breakers							
 NSE0_00733 3VL9 .00-8L.00	A	3VL9 300-8LC00		1	1 unit	113	0.215
Plug-in/withdrawable circuit breakers							
	A	3VL9 300-8LD00		1	1 unit	113	0.223
Interlocking modules for Bowden wire interlocking¹⁾							
For the mechanical interlocking of two circuit breakers. Interlocking module for one circuit breaker							
 NSE0_00734 3VL9 .00-8LA00	A	3VL9 300-8LA00		1	1 unit	113	0.174
Bowden wires for Bowden wire interlocking¹⁾							
Wire length 0.5 m							
	A	3VL9 000-8LH10		1	1 unit	113	0.206
Wire length 1.0 m							
	A	3VL9 000-8LH20		1	1 unit	113	0.298
Wire length 1.5 m							
	A	3VL9 000-8LH30		1	1 unit	113	0.412
Safety lock assembly kits							
Key can be removed with the circuit breaker in the "OFF" position							
<u>For front-operated rotary operating mechanisms</u>							
Lock types							
Ronis							
 NSE0_00680 3VL9 ...-8HA00	A	3VL9 715-8HA00		1	1 unit	113	0.309
<u>For motorized operating mechanism with stored energy mechanism</u>							
Lock types							
Ronis							
	A	3VL9 321-8HA00		1	1 unit	113	0.053
<u>Filli Giussani</u>							
	A	3VL9 321-8HA00		1	1 unit	113	0.053
Sets of fixing screws (metric thread)							
Including the screws, washers and nuts required to secure a 3- or 4-pole circuit breaker to a prepared surface							
Set with 4 screws							
	A	3VL9 300-8SA40		1	1 unit	113	0.030
Transparent covers for overcurrent releases, sealable							
To prevent access by unqualified personnel and unauthorized changes to settings (seal not included)							
Electronic releases							
	--						
Thermal-magnetic							
	A	3VL9 300-8BM00		1	1 unit	113	0.015
Battery power supply for activating/parameterizing the LCD ETU release, with test function for all IEC and UL ETUs.							
(two 9 V blocks are required in addition)							
 NSE0_01531a 3VL9 000-8AP01							

¹⁾ Two interlocking modules and one Bowden wire are required. Cannot be used in conjunction with motorized operating mechanism!

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For VL160 (3VL2) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Interlocks							
3- or 4-pole							
Locking devices for toggle levers For locking the circuit breaker in the "OFF" position. Up to 3 padlocks with Ø 5–8 mm can be used. Removable (padlocks not included)							
 NSE0_00732 3VL9 .00-3HL00	A	3VL9 300-3HL00		1	1 unit	113	0.052
Rear interlocking modules For the mechanical interlocking of two adjacent circuit breakers. The circuit breakers must be of the same installation type and size. (Mounting plate not included in scope of supply)							
 NSE0_00733 3VL9 .00-8L.00	A	3VL9 300-8LC00		1	1 unit	113	0.215
	A	3VL9 300-8LD00		1	1 unit	113	0.223
Interlocking modules for Bowden wire interlocking¹⁾ For the mechanical interlocking of two circuit breakers. Interlocking module for one circuit breaker							
 NSE0_00734 3VL9 .00-8LA00	A	3VL9 300-8LA00		1	1 unit	113	0.174
	Bowden wires for Bowden wire interlocking ¹⁾						
	A	3VL9 000-8LH10		1	1 unit	113	0.206
	A	3VL9 000-8LH20		1	1 unit	113	0.298
	A	3VL9 000-8LH30		1	1 unit	113	0.412
Safety lock assembly kits Key can be removed with the circuit breaker in the "OFF" position <u>For front-operated rotary operating mechanisms</u>							
Lock types							
 NSE0_00680 3VL9 ...-8HA00	A	3VL9 715-8HA00		1	1 unit	113	0.309
	<u>For motorized operating mechanism with stored energy mechanism</u>						
	Lock types						
	Ronis						
	A	3VL9 321-8HA00		1	1 unit	113	0.053
Sets of fixing screws (metric thread) Including the screws, washers and nuts required to secure a 3- or 4-pole circuit breaker to a prepared surface							
	A	3VL9 300-8SA40		1	1 unit	113	0.030
Transparent covers for overcurrent releases, sealable To prevent access by unqualified personnel and unauthorized changes to settings (seal not included)							
	A	3VL9 700-8BL00		1	1 unit	113	0.002
	A	3VL9 300-8BM00		1	1 unit	113	0.015
 NSE0_01531a 3VL9 000-8AP01	Battery power supply for activating/parameterizing the LCD ETU release, with test function for all IEC and UL ETUs (two 9 V blocks are required in addition)						
	B	3VL9 000-8AP01		1	1 unit	113	0.605

¹⁾ Two interlocking modules and one Bowden wire are required. Cannot be used in conjunction with motorized operating mechanism!

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

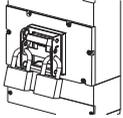
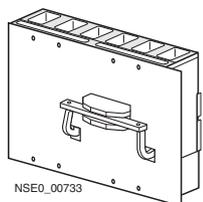
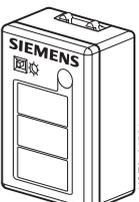
Accessories and spare parts

DT	For VL250 (3VL3) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	DT	For VL400 (3VL4) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 300-3HL00		1	1 unit	113	0.052	A	3VL9 400-3HL00		1	1 unit	113	0.122
A	3VL9 300-8LC00		1	1 unit	113	0.215	A	3VL9 400-8LC00		1	1 unit	113	0.386
A	3VL9 300-8LD00		1	1 unit	113	0.223	A	3VL9 400-8LD00		1	1 unit	113	0.436
A	3VL9 300-8LA00		1	1 unit	113	0.174	A	3VL9 400-8LA00		1	1 unit	113	0.196
A	3VL9 000-8LH10		1	1 unit	113	0.206	--						
A	3VL9 000-8LH20		1	1 unit	113	0.298	A	3VL9 000-8LH20		1	1 unit	113	0.298
A	3VL9 000-8LH30		1	1 unit	113	0.412	A	3VL9 000-8LH30		1	1 unit	113	0.412
A	3VL9 715-8HA00		1	1 unit	113	0.309	A	3VL9 715-8HA00		1	1 unit	113	0.309
	--						A	3VL9 715-8HA00		1	1 unit	113	0.309
A	3VL9 321-8HA00		1	1 unit	113	0.053	--						
A	3VL9 300-8SA40		1	1 unit	113	0.030	A	3VL9 500-8SA40		1	1 unit	113	0.090
A	3VL9 700-8BL00		1	1 unit	113	0.002	A	3VL9 700-8BL00		1	1 unit	113	0.002
A	3VL9 300-8BM00		1	1 unit	113	0.015	A	3VL9 400-8BM00		1	1 unit	113	0.017
B	3VL9 000-8AP01		1	1 unit	113	0.605	B	3VL9 000-8AP01		1	1 unit	113	0.605

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For VL630 (3VL5) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Interlocks							
<i>3- or 4-pole</i>							
Locking devices for toggle levers For locking the circuit breaker in the "OFF" position. Up to 3 padlocks with Ø 5–8 mm can be used. Removable (padlocks not included)							
 NSE0_00732 3VL9 .00-3HL00	A	3VL9 600-3HL00		1	1 unit	113	0.130
Rear interlocking modules For the mechanical interlocking of two adjacent circuit breakers. The circuit breakers must be of the same installation type and size. (Mounting plate not included in scope of supply)							
 NSE0_00733 3VL9 .00-8L.00	A	3VL9 600-8LC00		1	1 unit	113	1.499
	A	3VL9 600-8LD00		1	1 unit	113	5.076
Interlocking modules for Bowden wire interlocking¹⁾ For the mechanical interlocking of two circuit breakers. Interlocking module for one circuit breaker							
	A	3VL9 600-8LA00		1	1 unit	113	0.244
Bowden wires for Bowden wire interlocking ¹⁾							
		--					
	A	3VL9 000-8LH20		1	1 unit	113	0.298
	A	3VL9 000-8LH30		1	1 unit	113	0.412
Safety lock assembly kits Key can be removed with the circuit breaker in the "OFF" position For front-operated rotary operating mechanisms							
<u>Lock types</u>							
	A	3VL9 715-8HA00		1	1 unit	113	0.309
<u>For motorized operating mechanism with stored energy mechanism</u>							
<u>Lock types</u>							
	A	3VL9 715-8HA00		1	1 unit	113	0.309
		--					
Sets of fixing screws (metric thread) Including the screws, washers and nuts required to secure a 3- or 4-pole circuit breaker to a prepared surface							
	A	3VL9 500-8SA40		1	1 unit	113	0.090
Transparent covers for overcurrent releases, sealable To prevent access by unqualified personnel and unauthorized changes to settings (seal not included)							
	A	3VL9 700-8BL00		1	1 unit	113	0.002
	A	3VL9 600-8BM00		1	1 unit	113	0.019
Battery power supply for activating/parameterizing the LCD ETU release, with test function for all IEC and UL ETUs (two 9 V blocks are required in addition)							
 NSE0_01531a 3VL9 000-8AP01	B	3VL9 000-8AP01		1	1 unit	113	0.605

¹⁾ Two interlocking modules and one Bowden wire are required.
Cannot be used in conjunction with motorized operating mechanism.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

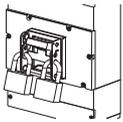
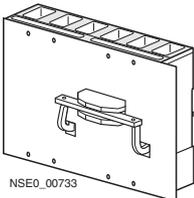
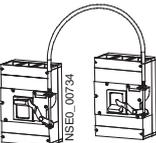
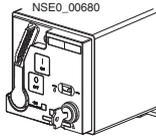
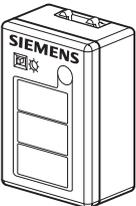
Accessories and spare parts

DT	For VL800 (3VL6) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	DT	For VL1250 (3VL7) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 600-3HL00		1	1 unit	113	0.130	A	3VL9 800-3HL00		1	1 unit	113	0.238
A	3VL9 600-8LC00		1	1 unit	113	1.499	A	3VL9 800-8LC00		1	1 unit	113	2.935
A	3VL9 600-8LD00		1	1 unit	113	5.076	A	3VL9 800-8LD00		1	1 unit	113	3.825
A	3VL9 600-8LA00		1	1 unit	113	0.244	A	3VL9 800-8LA00		1	1 unit	113	0.283
A	-- 3VL9 000-8LH20		1	1 unit	113	0.298	A	-- 3VL9 000-8LH30		1	1 unit	113	0.412
A	3VL9 715-8HA00		1	1 unit	113	0.309	A	3VL9 715-8HA00		1	1 unit	113	0.309
A	3VL9 715-8HA00		1	1 unit	113	0.309	A	3VL9 715-8HA00		1	1 unit	113	0.309
A	3VL9 600-8SA40		1	1 unit	113	0.090	A	3VL9 800-8SA40		1	1 unit	113	0.090
A	3VL9 700-8BL00		1	1 unit	113	0.002	A	3VL9 700-8BL00		1	1 unit	113	0.002
B	3VL9 000-8AP01		1	1 unit	113	0.605	B	3VL9 000-8AP01		1	1 unit	113	0.605

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For VL1600 (3VL8) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Interlocks							
<i>3- or 4-pole</i>							
Locking devices for toggle levers							
For locking the circuit breaker in the "OFF" position. Up to 3 padlocks with Ø 5–8 mm can be used. Removable (padlocks not included)							
 NSE0_00732 3VL9 .00-3HL00	A	3VL9 800-3HL00		1	1 unit	113	0.238
Rear interlocking modules							
For the mechanical interlocking of two adjacent circuit breakers. The circuit breakers must be of the same installation type and size.							
Circuit breakers, fixed-mounted ¹⁾							
 NSE0_00733 3VL9 .00-8L.00	A	3VL9 800-8LC00		1	1 unit	113	2.935
Plug-in/withdrawable circuit breakers							
	A	3VL9 800-8LD00		1	1 unit	113	3.825
Interlocking modules for Bowden wire interlocking²⁾							
For the mechanical interlocking of two circuit breakers.							
Interlocking module for one circuit breaker							
 NSE0_00734 3VL9 .00-8LA00	A	3VL9 800-8LA00		1	1 unit	113	0.283
Bowden wires for Bowden wire interlocking²⁾							
Wire length 0.5 m							
		--					
Wire length 1.0 m							
		--					
Wire length 1.5 m							
	A	3VL9 000-8LH30		1	1 unit	113	0.412
Safety lock assembly kits							
Key can be removed with the circuit breaker in the "OFF" position							
For front-operated rotary operating mechanisms							
Lock types							
Ronis							
 NSE0_00680 3VL9 ...-8HA00	A	3VL9 715-8HA00		1	1 unit	113	0.309
For motorized operating mechanisms							
Lock types							
Ronis							
	A	3VL9 715-8HA00		1	1 unit	113	0.309
Filli Giussani							
		--					
Sets of fixing screws (metric thread)							
Including the screws, washers and nuts required to secure a 3- or 4-pole circuit breaker to a prepared surface							
Set with 4 screws							
	A	3VL9 800-8SA40		1	1 unit	113	0.090
Transparent covers for overcurrent releases, sealable							
To prevent access by unqualified personnel and unauthorized changes to settings (seal not included)							
Electronic releases							
	A	3VL9 700-8BL00		1	1 unit	113	0.002
Thermal-magnetic							
		--					
Battery power supply for activating/parameterizing the LCD ETU release, with test function for all IEC and UL ETUs (two 9 V blocks are required in addition)							
 NSE0_015318 3VL9 000-8AP01	B	3VL9 000-8AP01		1	1 unit	113	0.605

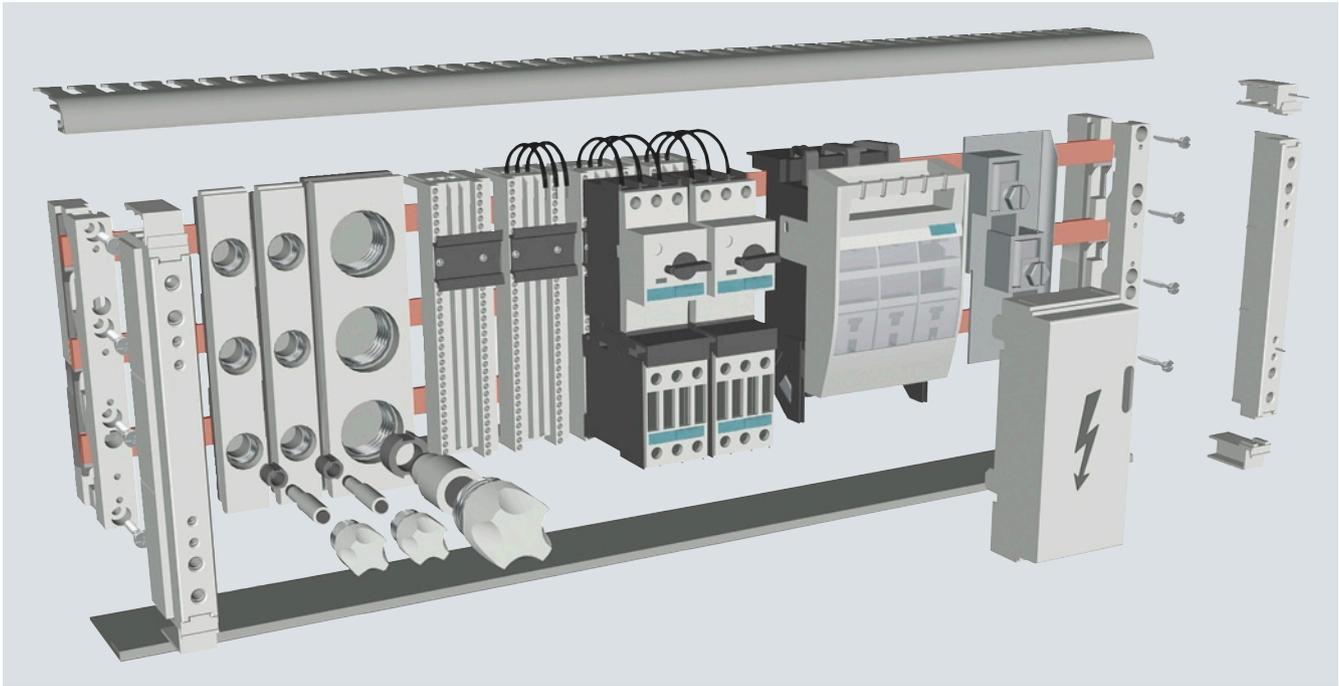
¹⁾ Mounting plate not included in scope of supply.

²⁾ Two interlocking modules and one Bowden wire are required. Cannot be used in conjunction with motorized operating mechanism.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts



Busbar adapter systems with 40 mm or 60 mm busbar center-to-center spacing with components for busbar runs, adapters and switching device holders for individual equipment possibilities, devices with an integrated adapter, as well as accessories and flat copper profiles. Observe the short-circuit strength of the busbar system. Short-circuit strength greater than 50 kA on request.

See also Chapter 17 "SENTRON Switching and Protection Devices for Power Distribution", "SENTRON 8US Busbar Systems".

Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
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40 mm busbar adapter systems

According to DIN 43870 Part 2 for copper busbars with sharp (DIN 1759) and with rounded (DIN 46433) edges, width 12 mm and 15 mm, thickness 5 mm and 10 mm.

Up to 160 A

Busbar adapters, length 175 mm
 With plug connection tags at top, 3-pole
 With terminal cover (degree of protection IP10)¹⁾
 For one VL160X (3VL1) circuit breaker²⁾
 108 mm wide

A	8US10 11-4SL01	1	1 unit	143	0.585
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¹⁾ For degree of protection IP30, the terminal covers on pages 16/77 to 16/82 should be ordered.

²⁾ Usable only for 3VL circuit breakers with line-side box terminals.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
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kg

60 mm busbar adapter systems

For copper busbars with sharp (DIN 1759) and with rounded (DIN 46433) edges, width 12 mm to 30 mm, thickness 5 mm and 10 mm, also for T and double-T special profiles

	<p>Up to 160 A Busbar adapters, length 175 mm With plug connection tags at top, 3-pole With terminal cover (degree of protection IP10)¹⁾ For one VL160X/VL160 (3VL1, 3VL2) 108 mm wide A circuit breaker²⁾</p>	<p>8US12 11-4SL01</p>		1	1 unit	143	0.597
	<p>Up to 250 A Busbar adapters, length 175 mm With plug connection tags at top, 3-pole With terminal cover (degree of protection IP10)¹⁾ For one VL250 (3VL3) circuit breaker 108 mm wide A</p>	<p>8US12 11-4SL00</p>		1	1 unit	143	0.662
	<p>Up to 400 A Busbar adapters, length 320 mm With threaded inserts M4, M6 and M8 For various types of switching devices, 3-pole Without connecting cables, with M10 terminal screws at top and bottom¹⁾ Adapters 185 mm wide A Mounting plates for 8US12 10-4AF00</p>	<p>8US12 10-4AF00</p>		1	1 unit	143	2.769
	<p>For VL400 (3VL4) circuit breakers (also for VL160X+RCD, VL160, VL250 (3VL1 + RCD, 3VL2, 3VL3) circuit breakers)</p>	<p>8US19 27-4AF01</p>	A	1	1 unit	143	0.575
	<p>For VL630 (3VL5) circuit breakers ($I_{n \max} = 580 \text{ V}$) The connecting cable between adapter and switching device should be manufactured in accordance with the rated current as a round cable, e. g. H07V-R, with a cable lug or as a flat conductor for bolt-type connection M10 (adapter).</p>	<p>8US12 13-4AF00</p>	A	1	1 unit	143	2.880

¹⁾ For degree of protection IP30, the terminal covers on pages 16/77 to 16/82 should be ordered.

²⁾ Usable only for 3VL circuit breakers with line-side box terminals.

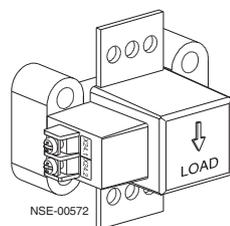
Type	Rated current I_n	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
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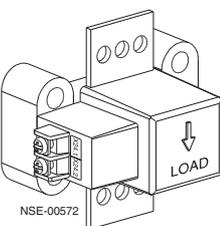
A

kg

Further accessories

Current transformers (-T6) for N conductor/grounded neutral point of the transformer for ground-fault protection in 4-wire three-phase systems¹⁾



	VL160/3VL2	63, 80	A	3VL9 280-8TC00		1	1 unit	113	0.500
		100	A	3VL9 210-8TC00		1	1 unit	113	0.450
		160	A	3VL9 216-8TC00		1	1 unit	113	0.485
	VL250/3VL3	200	A	3VL9 320-8TC00		1	1 unit	113	0.445
		250	A	3VL9 325-8TC00		1	1 unit	113	0.493
	VL400/3VL4	315	A	3VL9 440-8TC00		1	1 unit	113	0.493
		400	A	3VL9 440-8TC00		1	1 unit	113	0.493
	VL630/3VL5	630	A	3VL9 563-8TC00		1	1 unit	113	0.760
	VL800/3VL6	800	A	3VL9 680-8TC00		1	1 unit	113	0.778
	VL1250/3VL7	1000	A	3VL9 712-8TC00		1	1 unit	113	2.080
		1250	A	3VL9 712-8TC00		1	1 unit	113	2.080
	VL1600/3VL8	1600	A	3VL9 816-8TC00		1	1 unit	113	2.110

¹⁾ Please note the rated current of the circuit breaker.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

General criteria for the selection of current transformers for measurement purposes



4NC53 current transformers

Standards	IEC 60185, DIN VDE 0414 Parts 1 and 2
Window-type current transformers	The conductor to be measured (busbar or cable) is passed through the window opening and constitutes the primary circuit of the window-type current transformer. Pin-wound transformers: An economical solution especially for small primary currents of 5 ... 75 A is achieved when the conductor to be measured is pin-wound several times.
Rated primary current I_{pn}	Current transformers can be continuously loaded with 1.3 times the rated primary current (I_{pn}).
Rated secondary current I_{sn} 1 A 5 A	Particularly suitable for longer measuring leads. Cable losses of only 4 % in contrast to 5 A current transformers. 5 A current transformers generate 25 times the power losses on measuring leads as compared with 1 A current transformers. These stray losses result in higher power in the case of long cables. Only recommended for use with short measuring leads.
Accuracy class Class 1 Class 3	Operation measurement, internal metering Current error $\pm 1\%$ at $1 \times I_{pn}$ and $1.2 \times I_{pn}$ Coarse measurement Current error $\pm 3\%$ at $0.5 \times I_{pn}$ and $1.2 \times I_{pn}$
Rated power P_n	The rated power of transformers is specified in VA. The actual load rating should be similar to the rated power; a lower actual load rating (underburden) increases the overcurrent factor and measuring devices may be damaged in case of a short-circuit, a higher actual load rating (overburden) has a negative effect on the accuracy. With a frequency of 60 Hz the rated power increases to 1.2 times. With $16^{2/3}$ Hz the output power decreases to $1/3$ of the rated power.
Maximum voltage for equipment U_m	This is the rms value of the maximum voltage between the conductors of a system. For this voltage the insulation must be rated at normal operating conditions. 4NC5 current transformers are suitable for 720 V.
Overcurrent limiting factor FS	The overcurrent limiting factor is expressed using the characters FS and a factor, e. g. FS5 or FS10. When a short-circuit current flows through the primary winding of a current transformer, the load on the measuring devices connected to the current transformer is the lower the smaller the overcurrent limiting factor is.
Rated short-time thermal current I_{th}	The rated short-time thermal current I_{th} is the rms value of the primary current with a duration of one second, whose heat effect the current transformer can resist without being damaged in the event of a short-circuited secondary winding.
Rated impulse current I_{dyn}	The rated impulse current I_{dyn} is the highest instantaneous value of the current after a short-circuit whose force the current transformer can resist without being damaged. The rated impulse current is specified as peak value.

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3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

4NC current transformers for measuring purposes

Rated primary current I_{pn}	Rating P_n	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
A	VA							kg
Classes 1 and 3, from 50 to 1500 A								
Rated secondary current 1A								
Class 3								
<ul style="list-style-type: none"> For circular conductors with max. diameter 17.5 mm For busbars up to max. 12 mm × 10 mm 								
50	2.5	A	4NC51 12-0BC20		1	1 unit	103	0.428
60	2.5	A	4NC51 13-0BC20		1	1 unit	103	0.432
75	2.5	A	4NC51 15-0BC20		1	1 unit	103	0.425
Class 1								
<ul style="list-style-type: none"> For circular conductors with max. diameter 17.5 mm For 1 busbar up to max. 12 mm × 10 mm 								
100	2.5	A	4NC51 17-0CC20		1	1 unit	103	0.335
150	2.5	A	4NC51 21-0CC20		1	1 unit	103	0.327
200	5	A	4NC51 22-0CE20		1	1 unit	103	0.356
250	5	A	4NC51 23-0CE20		1	1 unit	103	0.352
<ul style="list-style-type: none"> For circular conductors with max. diameter 28 mm For 1 busbar up to max. 30 mm × 10 mm For 2 busbars up to max. 25 mm × 5 mm 								
200	5	A	4NC52 22-0CE20		1	1 unit	103	0.464
250	5	A	4NC52 23-0CE20		1	1 unit	103	0.477
300	5	A	4NC52 24-0CE20		1	1 unit	103	0.363
400	5	A	4NC52 25-0CE20		1	1 unit	103	0.373
<ul style="list-style-type: none"> For circular conductors with max. diameter 36 mm For 1 busbar up to max. 50 mm × 10 mm For 2 busbars up to max. 40 mm × 5 mm 								
400	5	A	4NC53 25-0CE20		1	1 unit	103	0.469
500	5	A	4NC53 26-0CE20		1	1 unit	103	0.410
600	5	A	4NC53 27-0CE20		1	1 unit	103	0.424
750	5	A	4NC53 28-0CE20		1	1 unit	103	0.391
<ul style="list-style-type: none"> For circular conductors with max. diameter 45 mm For 1 busbar up to max. 60 mm × 10 mm For 2 busbars up to max. 60 mm × 10 mm For 3 busbars up to max. 60 mm × 5 mm 								
1000	10	A	4NC54 31-0CH20		1	1 unit	103	0.644
1250	10	A	4NC54 33-0CH20		1	1 unit	103	0.667
1500	10	A	4NC54 34-0CH20		1	1 unit	103	0.713



4NC51 12-0BC20



4NC51 17-0CC20



4NC52 22-0CE20



4NC53 25-0CE20



4NC54 31-0CH20

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

	Rated primary current I_{pn}	Rating P_n	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	A	VA							kg
 4NC51 12-2BC20	Rated secondary current 5 A								
	Class 3								
	<ul style="list-style-type: none"> For circular conductors with max. diameter 17.5 mm For 1 busbar up to max. 12 mm × 10 mm 								
	50	2.5	A	4NC51 12-2BC20		1	1 unit	103	0.426
60	2.5	A	4NC51 13-2BC20		1	1 unit	103	0.430	
75	2.5	A	4NC51 15-2BC20		1	1 unit	103	0.431	
 4NC51 17-2CC20	Class 1								
	<ul style="list-style-type: none"> For circular conductors with max. diameter 17.5 mm For 1 busbar up to max. 12 mm × 10 mm 								
	100	2.5	A	4NC51 17-2CC20		1	1 unit	103	0.340
	150	2.5	A	4NC51 21-2CC20		1	1 unit	103	0.327
	200	5	A	4NC51 22-2CE20		1	1 unit	103	0.339
250	5	A	4NC51 23-2CE20		1	1 unit	103	0.345	
 4NC52 22-2CE20	<ul style="list-style-type: none"> For circular conductors with max. diameter 28 mm For 1 busbar up to max. 30 mm × 10 mm For 2 busbars up to max. 25 mm × 5 mm 								
	200	5	A	4NC52 22-2CE20		1	1 unit	103	0.467
	250	5	A	4NC52 23-2CE20		1	1 unit	103	0.474
	300	5	A	4NC52 24-2CE20		1	1 unit	103	0.356
	400	5	A	4NC52 25-2CE20		1	1 unit	103	0.379
 4NC53 25-2CE20	<ul style="list-style-type: none"> For circular conductors with max. diameter 36 mm For 1 busbars up to max. 50 mm × 10 mm For 2 busbars up to max. 40 mm × 5 mm 								
	400	5	A	4NC53 25-2CE20		1	1 unit	103	0.452
	500	5	A	4NC53 26-2CE20		1	1 unit	103	0.406
	600	5	A	4NC53 27-2CE20		1	1 unit	103	0.425
	750	5	A	4NC53 28-2CE20		1	1 unit	103	0.379
 4NC54 31-2CH20	<ul style="list-style-type: none"> For circular conductors with max. diameter 45 mm For 1 busbar up to max. 60 mm × 10 mm For 2 busbars up to max. 60 mm × 10 mm For 3 busbars up to max. 60 mm × 5 mm 								
	1000	10	A	4NC54 31-2CH20		1	1 unit	103	0.660
	1250	10	A	4NC54 33-2CH20		1	1 unit	103	0.631
	1500	10	A	4NC54 34-2CH20		1	1 unit	103	0.669

4NC51 window-type current transformers, used as pin-wound transformers, Classes 1 and 3, from 5 A to 75 A

Pin-winding increases the primary current of the current transformer. Consequently, window-type current transformers can also be used for low primary currents.

Basic type		4NC51 12	4NC51 13	4NC51 15	4NC51 17	4NC51 21	4NC51 22	4NC51 23
Rated primary current	A	50	60	75	100	150	200	250
Rating	VA	2.5	2.5	2.5	2.5	2.5	5	5
Primary current to be measured		Number of required pin windings						
	A	Class 3			Class 1			
	5	10	--	--	--	--	--	--
	10	5	6	--	10	--	--	--
	15	--	4	5	--	10	--	--
	20	--	3	--	5	--	10	--
	25	2	--	3	4	6	8	8
	30	--	2	--	--	5	--	--
	40	--	--	--	--	--	5	--
	50	--	--	--	2	3	4	5
75	--	--	--	--	2	--	--	



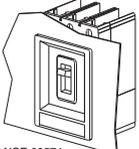
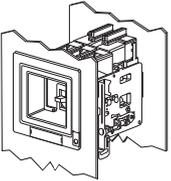
4NC51 used as pin-wound transformer

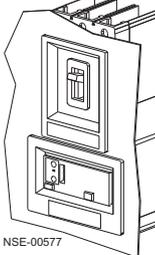
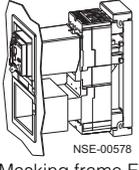
* You can order this quantity or a multiple thereof.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For VL160X (3VL1) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Further accessories							
<i>3- or 4-pole</i>							
Masking frames (cover frames) For door cutouts							
 NSE-00574 Masking frame A	A IP40	Fixed-mounted or plug-in circuit breaker	A	3VL9 300-8BC00	1	1 unit	113 0.038
	B¹⁾ IP40	Fixed-mounted, plug-in or withdrawable circuit breaker with front-operated rotary operating mechanism or motorized operating mechanism	A	3VL9 300-8BG00	1	1 unit	113 0.099
	C IP20	Withdrawable circuit breaker with toggle lever actuation. Assembly kit contains masking frame and extended escutcheon (cannot be used together with a motorized operating mechanism/rotary operating mechanism)	--				
 NSE-00575 Masking frame B	D IP40	Fixed-mounted circuit breaker or plug-in circuit breaker RCD circuit breaker masking frame	A	3VL9 300-8BD00	1	1 unit	113 0.034
		RCD masking frame	A	3VL9 300-8BD00	1	1 unit	113 0.034
	E¹⁾ IP40	circuit breaker with RCD module and front-operated rotary operating mechanism. Assembly kit contains masking frame and extended escutcheon	--				
 NSE0_000624 Masking frame C		circuit breaker with RCD module and motorized operating mechanism. Assembly kit contains masking frame and extended escutcheon	--				

Version	DT	For VL400 (3VL4) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Further accessories							
<i>3- or 4-pole</i>							
Masking frames (cover frames) For door cutouts							
 NSE-00577 Masking frame D	A IP40	Fixed-mounted or plug-in circuit breaker	A	3VL9 400-8BC00	1	1 unit	113 0.027
	B¹⁾ IP40	Fixed-mounted, plug-in or withdrawable circuit breaker with front-operated rotary operating mechanism or motorized operating mechanism	A	3VL9 400-8BG00	1	1 unit	113 0.149
	C IP20	Withdrawable circuit breaker with toggle lever actuation. Assembly kit contains masking frame and extended escutcheon (cannot be used together with a motorized operating mechanism/rotary operating mechanism)	A	3VL9 400-8BH00	1	1 unit	113 0.426
	D IP40	Fixed-mounted circuit breaker or plug-in circuit breaker RCD circuit breaker masking frame	A	3VL9 400-8BC00	1	1 unit	113 0.027
		RCD masking frame	A	3VL9 400-8BD00	1	1 unit	113 0.047
 NSE-00578 Masking frame E	E¹⁾ IP40	circuit breaker with RCD module and front-operated rotary operating mechanism. Assembly kit contains masking frame and extended escutcheon	A	3VL9 400-8BH00	1	1 unit	113 0.426
		circuit breaker with RCD module and motorized operating mechanism. Assembly kit contains masking frame and extended escutcheon	A	3VL9 400-8BJ00	1	1 unit	113 0.395

¹⁾ For withdrawable version IP20.

* You can order this quantity or a multiple thereof.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

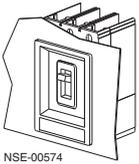
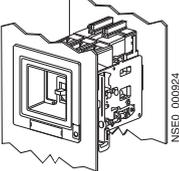
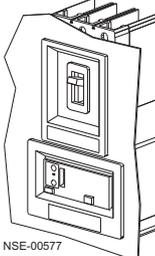
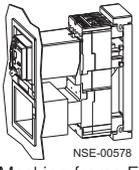
Accessories and spare parts

DT	For VL160 (3VL2)	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	DT	For VL250 (3VL3)	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	Order No.					kg		Order No.					kg
A	3VL9 300-8BC00		1	1 unit	113	0.038	A	3VL9 300-8BC00		1	1 unit	113	0.038
A	3VL9 300-8BG00		1	1 unit	113	0.099	A	3VL9 300-8BG00		1	1 unit	113	0.099
A	3VL9 300-8BH00		1	1 unit	113	0.267	A	3VL9 300-8BH00		1	1 unit	113	0.267
A	3VL9 300-8BD00		1	1 unit	113	0.034	A	3VL9 300-8BD00		1	1 unit	113	0.034
A	3VL9 300-8BD00		1	1 unit	113	0.034	A	3VL9 300-8BD00		1	1 unit	113	0.034
A	3VL9 300-8BH00		1	1 unit	113	0.267	A	3VL9 300-8BH00		1	1 unit	113	0.267
A	3VL9 300-8BJ00		1	1 unit	113	0.230	A	3VL9 300-8BJ00		1	1 unit	113	0.230
DT	For VL630 (3VL5)	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	DT	For VL800 (3VL6)	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	Order No.					kg		Order No.					kg
A	3VL9 600-8BC00		1	1 unit	113	0.055	A	3VL9 600-8BC00		1	1 unit	113	0.055
A	3VL9 600-8BG00		1	1 unit	113	0.177	A	3VL9 600-8BG00		1	1 unit	113	0.177
A	3VL9 600-8BH00		1	1 unit	113	0.575	A	3VL9 600-8BH00		1	1 unit	113	0.575
--							--						
--							--						
--							--						
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SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

Version	DT	For VL1250 (3VL7) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	
Further accessories								
<i>3- or 4-pole</i>								
Masking frames (cover frames) For door cutouts								
 <small>NSE-00574</small> Masking frame A	A	Fixed-mounted or plug-in circuit breaker	A	3VL9 800-8BC00	1	1 unit	113	0.043
	B¹⁾	Fixed-mounted, plug-in or withdrawable circuit breaker with front-operated rotary operating mechanism or motorized operating mechanism	A	3VL9 800-8BG00	1	1 unit	113	0.192
	C	Withdrawable circuit breaker with toggle lever actuation. Assembly kit contains masking frame and extended escutcheon (cannot be used together with a motorized operating mechanism/rotary operating mechanism)	A	3VL9 800-8BH00	1	1 unit	113	0.531
	D	Fixed-mounted circuit breaker or plug-in circuit breaker RCD circuit breaker masking frame RCD masking frame	-- --	-- --	-- --	-- --	-- --	-- --
	E¹⁾	circuit breaker with RCD module and front-operated rotary operating mechanism. Assembly kit contains masking frame and extended escutcheon circuit breaker with RCD module and motorized operating mechanism. Assembly kit contains masking frame and extended escutcheon	-- --	-- --	-- --	-- --	-- --	-- --
 <small>NSE-00575</small> Masking frame B								
 <small>NSE0_000824</small> Masking frame C								
 <small>NSE-00577</small> Masking frame D								
 <small>NSE-00578</small> Masking frame E								

¹⁾ For withdrawable version IP20.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

DT	For VL1600 (3VL8) Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 800-8BC00		1	1 unit	113	0.043
A	3VL9 800-8BG00		1	1 unit	113	0.192
A	3VL9 800-8BH00		1	1 unit	113	0.531
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* You can order this quantity or a multiple thereof.

SENTRON 3VL Molded Case Circuit Breakers

3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

For type	Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Accessories for communication								
<i>3- or 4-pole</i>								
<i>Data transmission through COM20, COM21</i>								
VL160 (3VL2) to VL1600 (3VL8)								
COM20 (PROFIBUS module for SENTRON 3VL) for ETU release with communication function								
Module for connecting the SENTRON 3VL to the PROFIBUS DP, including switching function and Zone Selective Interlocking functionality, connection cable to ETU included in delivery of the ETU, length 1.5 m.			A	3VL9 000-8AU00	1	1 unit	113	1.038
COM21 (MODBUS module for SENTRON 3VL) for ETU release with communication function								
Module for connecting the SENTRON 3VL to the MODBUS, including switching function and Zone Selective Interlocking functionality, connection cable to ETU included in delivery of the ETU, length 1.5 m.			B	3VL9 000-8AV00	1	1 unit	113	1.038
Connection cable ETU – COM20/COM21								
For VL400, length 3 m			A	3VL9 000-8AQ61	1	1 unit	113	0.210
For VL630 ... VL1600, length 3 m			A	3VL9 000-8AQ71	1	1 unit	113	0.210
For VL160 ... VL250, length 3 m			A	3VL9 000-8AQ81	1	1 unit	113	0.210
Addressing plugs								
For assigning the PROFIBUS addresses without using a PC or programming device			A	3UF7 910-0AA00-0	1	1 unit	131	0.030
On COM20/COM21 through the system interface								
Breaker Data Adapter (BDA)¹⁾								
Parameterization, operation, monitoring and diagnostics of SENTRON circuit breakers using the local interface; Breaker Data Adapter, connection cable to the SENTRON 3WL circuit breaker and to the programming device (e. g. notebook); can be run with Internet Explorer with JAVA2 VM 1.4.0-01 and higher			B	3WL9 111-0AT28-0AA0	1	1 unit	103	0.900
BDA Plus¹⁾								
Same as BDA, but with additional Ethernet interface for connection to Ethernet/Intranet/Internet			B	3WL9 111-0AT33-0AA0	1	1 unit	103	1.200
Connection cables for BDA and BDA Plus								
Connection cables for connection of BDA and BDA Plus to LCD ETU release of the SENTRON 3VL circuit breaker; length 1 m			C	3WL9 111-0BC20-0AA0	1	1 unit	103	0.200
Switch ES Power parameterization software								
Calibration, operation, monitoring, and diagnostics of SENTRON circuit breakers via PROFIBUS DP; runs under Windows 95, Windows 98, Windows NT, Windows 2000 and Windows XP Professional, requires additional PROFIBUS card e. g. CP5613			A	3ZS2 311-0CC10-0YA0	1	1 unit	133	0.200

¹⁾ A 24 V DC power supply unit is required.

Communication:

- For molded case circuit breakers with communication function see pages 16/12 to 16/28 and 16/40 to 16/50.
- For more information see also Chapter 13 "Power Management System" and Chapter 18 "Software for Power Distribution".

More information

Manual for the SENTRON 3VL circuit breakers

This manual contains additional technical information, covering a product description, mode of operation, electrical wiring system and retrofitting.

The manual and operating instructions are available in PDF format at:

www.siemens.com/lowvoltage/manuals

SENTRON manual for communication solutions

Free download from www.siemens.com/lowvoltage/manuals

See also Chapter 15 "SENTRON Switching and Protection Devices - Air Circuit Breakers", "3WL Air Circuit Breakers", "3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A(AC)", "Accessories and Spare Parts".

3VF2 Molded Case Circuit Breakers

3VF2 Molded Case Circuit Breakers up to 100 A

3-pole, fixed-mounted versions

Selection and ordering data



Making/breaking capacity class A

Rated ultimate short-circuit breaking capacity I_{cu}	Up to 240 V	kA	65
	Up to 415 V	kA	18
Rated service short-circuit breaking capacity I_{cs}	Up to 240 V	kA	33
	Up to 415 V	kA	9
Rated short-circuit making capacity I_{cm}	Up to 240 V	kA	143
	Up to 415 V	kA	36

Rated current I_n	Current setting of the inverse-time delayed overload release "L" I_r	Operating current of instantaneous short-circuit release "I" I_i	DT	VF100 circuit breakers Making/breaking capacity class A	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
A	A	A		Order No.	Price per PU			kg

3VF2 circuit breakers, up to 18 kA

System protection, TM

With non-adjustable thermal overload releases



16	16	350	A	3VF22 13-0FC41-0AA0	1	1 unit	113	0.948
20	20	450	A	3VF22 13-0FD41-0AA0	1	1 unit	113	0.953
25	25	500	A	3VF22 13-0FE41-0AA0	1	1 unit	113	0.961
32	32	600	A	3VF22 13-0FG41-0AA0	1	1 unit	113	0.949
40	40	750	A	3VF22 13-0FJ41-0AA0	1	1 unit	113	0.973
45	45	750	A	3VF22 13-0FK41-0AA0	1	1 unit	113	0.960
50	50	800	A	3VF22 13-0FL41-0AA0	1	1 unit	113	0.963
63	63	800	A	3VF22 13-0FN41-0AA0	1	1 unit	113	0.967
70	70	900	A	3VF22 13-0FP41-0AA0	1	1 unit	113	0.980
80	80	900	A	3VF22 13-0FQ41-0AA0	1	1 unit	113	0.976
90	90	1000	A	3VF22 13-0FR41-0AA0	1	1 unit	113	0.968
100	100	1000	A	3VF22 13-0FS41-0AA0	1	1 unit	113	0.977

4-pole, fixed-mounted versions

Selection and ordering data



Making/breaking capacity class A

Rated ultimate short-circuit breaking capacity I_{cu}	Up to 240 V	kA	65
	Up to 415 V	kA	18
Rated service short-circuit breaking capacity I_{cs}	Up to 240 V	kA	33
	Up to 415 V	kA	9
Rated short-circuit making capacity I_{cm}	Up to 240 V	kA	143
	Up to 415 V	kA	36

Rated current I_n	Current setting of the inverse-time delayed overload release "L" I_r	Operating current of instantaneous short-circuit release "I" I_i	DT	VF100 circuit breakers Making/breaking capacity class A	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
A	A	A		Order No.	Price per PU			kg

3VF2 circuit breakers, up to 18 kA

System protection, TM

With non-adjustable thermal overload releases, with overload and short-circuit release in the 4th pole (N = 100 %).



16	16	350	A	3VF22 14-0JC41-0AA0	1	1 unit	113	1.299
20	20	450	A	3VF22 14-0JD41-0AA0	1	1 unit	113	1.271
25	25	500	A	3VF22 14-0JE41-0AA0	1	1 unit	113	1.252
32	32	600	A	3VF22 14-0JG41-0AA0	1	1 unit	113	1.257
40	40	750	A	3VF22 14-0JJ41-0AA0	1	1 unit	113	1.300
45	45	750	A	3VF22 14-0JK41-0AA0	1	1 unit	113	1.299
50	50	800	A	3VF22 14-0JL41-0AA0	1	1 unit	113	1.272
63	63	800	A	3VF22 14-0JN41-0AA0	1	1 unit	113	1.277
70	70	900	A	3VF22 14-0JP41-0AA0	1	1 unit	113	1.299
80	80	900	A	3VF22 14-0JQ41-0AA0	1	1 unit	113	1.288
90	90	1000	A	3VF22 14-0JR41-0AA0	1	1 unit	113	1.295
100	100	1000	A	3VF22 14-0JS41-0AA0	1	1 unit	113	1.299

* You can order this quantity or a multiple thereof.

3VF2 Molded Case Circuit Breakers

3VF2 Molded Case Circuit Breakers up to 100 A

Accessories and spare parts

Selection and ordering data

For 3VF2 circuit breakers

Operating mechanisms	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Operating mechanisms							
Front-operated rotary operating mechanisms For direct mounting on circuit breakers Degree of protection IP30, black knob Max. 3 padlocks	A	3VF9 223-1AA00		1	1 unit	113	0.232
EMERGENCY-STOP version Red knob, yellow indicator plate	A	3VF9 223-1BA00		1	1 unit	113	0.232
Version with shaft stub, without knob (8UC61 operating mechanism required, see below)	A	3VF9 223-1JA00		1	1 unit	113	0.204
Door-coupling rotary operating mechanisms Standard version, black	B	8UC71 12-1BD22		1	1 unit	103	0.417
EMERGENCY-STOP version, red/yellow	B	8UC71 22-3BD22		1	1 unit	103	0.402
To be ordered separately; front-operated rotary operating mechanism with shaft stub	A	3VF9 223-1JA00		1	1 unit	113	0.204
Connection components, covers							
3VF22 rear terminals For 45 to 100 A (for cover, see below)							
For 3-pole circuit breakers 1 set = 6 units	A	3VF9 224-1LD10		1	1 unit	113	0.252
For 4-pole circuit breakers 1 set = 8 units	A	3VF9 224-1LD20		1	1 unit	113	0.333
Terminal covers For main circuit connection, cable connection							
For 3-pole circuit breakers 1 set = 2 units	A	3VF9 224-1NB10		1	1 unit	113	0.063
For 4-pole circuit breakers 1 set = 2 units	A	3VF9 224-1NB20		1	1 unit	113	0.079
Covers with cap dimension 45 mm For distribution boards							
For 3-pole circuit breakers	A	3VF9 220-1CA10		1	1 unit	113	0.019
For 4-pole circuit breakers	A	3VF9 220-1CA20		1	1 unit	113	0.021
Cover frames for door cutout For circuit breakers							
1 set = 1 unit	A	3VF9 220-1AA00		1	1 unit	113	0.048
Shunt releases¹⁾							
<i>Version with terminal blocks</i>							
Shunt releases							
50/60 Hz AC	DC						
--	24 V	A	3VF9 221-1JD10	1	1 unit	113	0.297
110-127 V	--	A	3VF9 221-1JP10	1	1 unit	113	0.292
220-240 V	--	A	3VF9 221-1JM10	1	1 unit	113	0.311
380-415 V	--	A	3VF9 221-1JV10	1	1 unit	113	0.282
Shunt releases with auxiliary switch 1 CO							
50/60 Hz AC	DC						
--	24 V	A	3VF9 221-1KD10	1	1 unit	113	0.302
110-127 V	--	A	3VF9 221-1KP10	1	1 unit	113	0.300
220-240 V	--	A	3VF9 221-1KM10	1	1 unit	113	0.288
380-415 V	--	A	3VF9 221-1KV10	1	1 unit	113	0.297
Auxiliary switches and alarm switches¹⁾							
<i>Version with terminal blocks</i>							
Tripped signaling/alarm switches							
1 CO		A	3VF9 222-1AC10	1	1 unit	113	0.240
Alarm switches (AS) and auxiliary switches (HS)							
1 CO (AS) + 1 CO (HS)		A	3VF9 222-1DC10	1	1 unit	113	0.243
Auxiliary switch							
1 CO		A	3VF9 222-1BC10	1	1 unit	113	0.275
2 CO		A	3VF9 222-1CC10	1	1 unit	113	0.235

¹⁾ Only one accessory part possible per 3VF2 circuit breaker; mounting on left side of circuit breaker.