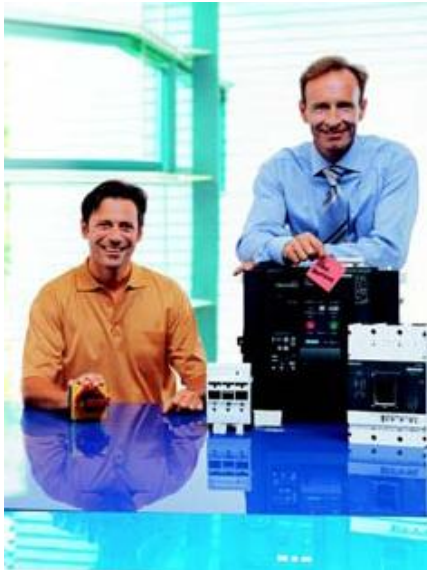


SENTRON Switching and Protection Devices – Molded Case Circuit-Breakers

16



16/2	Introduction
	3VL Molded Case Circuit-Breakers <u>3VL Molded Case Circuit-Breakers up to 1600 A</u>
16/4	General data
16/6	3-pole
16/20	4-pole
16/36	Options
16/38	Accessories/spare parts
	3VF2 Molded Case Circuit-Breakers <u>3VF2 Molded Case Circuit-Breakers up to 100 A</u>
16/71	3-pole, fixed-mounted versions
16/71	4-pole, fixed-mounted versions
16/72	Accessories/spare parts

SENTRON Switching and Protection Devices

Introduction

Overview



Type		VL160X/3VL1	VL160/3VL2	VL250/3VL3	VL400/3VL4					
3VL molded case circuit-breakers up to 1600 A										
Rated current I_n at 50 °C ambient temperature ¹⁾	A	16 to 160	26 to 160	80 to 250	125 to 400					
Number of poles		3	4	3	4					
Rated operational voltage U_e	AC 50/60 Hz	690	690	690	690					
	DC ²⁾	250	250	600	600					
Electronic trip units										
Thermal-magnetic		✓	✓	✓	✓					
Electronic ETU LCD		--	--	✓	✓					
Replaceable		--	--	✓	✓					
PROFIBUS module COM10		--	--	✓	✓					
Dimensions										
	A	mm	105	139	105	139	105	139	139	183
	B	mm	157	157	175	175	175	175	279	279
	C	mm	81	81	81	81	81	81	102	102
	D	mm	107	107	107	107	107	107	138	138
Switching capacity I_{cu}/I_{cs} RMS value according to IEC 60947-2										
Standard switching capacity N³⁾										
Up to 240 V AC	kA	65/65	65/65	65/65	65/65					
Up to 415 V AC	kA	40/40	40/40	40/40	45/45					
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 ⁵⁾	12/6	12/6	15/8					
Up to 250 V DC ⁴⁾	kA	30/30	32/32	32/32	32/32					
Up to 500 V DC ⁴⁾	kA	--	--	--	--					
Up to 600 V DC ⁴⁾	kA	--	--	--	--					
NEMA breaking capacity⁶⁾										
Up to 480 V AC	kA	25	25	25	35					
Up to 600 V AC	kA	8 ⁵⁾	12	12	20					
High switching capacity H³⁾										
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 ⁵⁾	12/6	12/6	15/8					
Up to 250 V DC ⁴⁾	kA	30/30	32/32	32/32	32/32					
Up to 500 V DC ⁴⁾	kA	--	32/32	32/32	32/32					
Up to 600 V DC ⁴⁾	kA	--	--	--	--					
NEMA breaking capacity⁶⁾										
Up to 480 V AC	kA	42	50	50	50					
Up to 600 V AC	kA	12 ⁵⁾	12	12	20					
Very high switching capacity L³⁾										
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 ⁴⁾	kA	--	32/32	32/32	32/32					
Up to 500 V DC ⁴⁾	kA	--	32/32	32/32	32/32					
Up to 600 V DC ⁴⁾	kA	--	30/30	30/30	30/30					
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 trip unit.

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.

SENTRON Switching and Protection Devices

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

252 to 630

320 to 800

400 to 1250

640 to 1600

16 to 100

3

4

3

4

3

4

3

4

3 and 4

690
600

600

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
45/45
35/26
25/20
20/10
32/32
--
--

25
20

65/65
50/50
35/26
25/20
20/10
--
--
--

25
20

65/35
50/25
35/26
25/20
20/10
--
--
--

25
20

65/35
50/25
35/26
25/20
20/10
--
--
--

25
20

65/33
18/9
--
--
--
--
--
--

100/75
70/70
50/38
40/30
30/15
32/32
32/32
--

50
30

100/75
70/70
50/38
40/30
30/15
--
--
--

50
30

100/75
70/35
50/38
40/30
30/15
--
--
--

50
30

100/50
70/35
50/38
40/30
30/15
--
--
--

50
30

--
--
--
--
--
--
--
--

200/150
100/75
75/50
50/38
35/17
32/32
32/32
30/30

65
35

200/150
100/75
75/50
50/38
35/17
--
--
--

65
35

200/100
100/50
75/50
50/38
35/17
--
--
--

65
35

200/100
100/50
75/50
50/38
35/17
--
--
--

65
35

--
--
--
--
--
--
--
--

4) The maximum permitted DC voltage for each current path needs to be taken into account for DC switching applications, see Catalog LV 1T, "Configuring", "Switching of DC Currents".

5) Rated current $I_n \geq 25$ A.

6) The NEMA breaking capacity can be found on the rating plate of each IEC circuit-breaker.

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 configuration
- 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.

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 starting of three-phase squirrel-cage motors. The circuit-breakers for motor protection are susceptible to phase failure and feature an adjustable trip class. The overcurrent trip units 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.

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 and terminal covers.

Please contact Siemens for details of other standards.

The overcurrent trip units of the circuit-breakers for motor protection also comply with 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 Annex B.

The SENTRON 3VL RCD module complies with IEC 61000-4-2 to 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 use in areas with severe ambient conditions (such as dust, caustic vapors, hazardous gases).

RCD modules

The RCD module is designed for retrofitting to the switch. 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) exceeds the pre-set response and delay time values. AC currents and pulsating DC currents are measured (CBR, design A according to EN 60947-2).

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

General data

VL160 to VL1600 overcurrent trip units – Overview of functions

Order No. supplement	Trip units	System protection	Motor protection	Starter protection	Generator protection	Function	Setting options				
							L Overload protection $I_r = \times I_n$	S ¹⁾ Short-circuit protection (short-time delayed) $I_{sd} = \times I_r$ t_{sd} [s]	I ¹⁾ Short-circuit protection (instantaneous) $I_i = \times I_n$	G Ground-fault protection $I_g = \times I_n$	
DK	M			✓		I				7-15	
DC	TM ²⁾	✓				LI	0.8-1			5-10	
EJ	TM ²⁾	✓				LI	0.8-1			5-10	
EC	TM ²⁾	✓				LIN	0.8-1			5-10	
EM	TM ²⁾	✓				LIN	0.8-1			5-10	
AP	ETU 10 M ³⁾		✓		✓	LI	0.4-1			1.25-11	
AB	ETU 10	✓				LI	0.4-1			1.25-11	
BA	ETU 10	✓				LIN	0.4-1			1.25-11	
AC	ETU 12	✓				LIG	0.4-1			1.25-11	1
BD	ETU 12	✓				LING	0.4-1			1.25-11	1
AE	ETU 20	✓			✓	LSI	0.4-1	1.5-10	0-0.5	11	
BF	ETU 20	✓			✓	LSIN	0.4-1	1.5-10	0-0.5	11	
AG	ETU 22	✓			✓	LSIG	0.4-1	1.5-10	0-0.5	11	1
BH	ETU 22	✓			✓	LSING	0.4-1	1.5-10	0-0.5	11	1
AS	ETU 30 M ³⁾		✓		✓	LI	0.4-1			6/8/11	
CP	LCD ETU 40 M ³⁾		✓		✓	LI	0.4-1			1.25-11	
CH	LCD ETU 40	✓				LI, LSI	0.4-1	1.5-10	0-0.5	1.25-11	
CJ	LCD ETU 40	✓				LI, LSIN	0.4-1	1.5-10	0-0.5	1.25-11	
CL	LCD ETU 42	✓				LSIG	0.4-1	1.5-10	0-0.5	1.25-11	0.4-1 ⁴⁾
CM	LCD ETU 42	✓				LSIG	0.4-1	1.5-10	0-0.5	1.25-11	0.4-1 ⁴⁾
CN	LCD ETU 42	✓				LSIG, LSING	0.4-1	1.5-10	0-0.5	1.25-11	0.4-1 ⁴⁾

Order No. supplement	Trip units	Thermal image	Phase failure	Communication-capable	Ground-fault protection	Number of poles	N pole protected ¹⁾	\hat{I}_t (ON/OFF)	Trip class (t_C)	Time-lag class (t_H)	Thermo-magnetic trip unit	Magnetic trip unit	Solid-state trip unit	LCD display
DK	M					3						✓		
DC	TM ²⁾	✓				3					✓			
EJ	TM ²⁾	✓				4					✓			
EC	TM ²⁾	✓				4	60%				✓			
EM	TM ²⁾	✓				4	100%				✓			
AP	ETU 10 M ³⁾	✓	40% I_R			3			10				✓	
AB	ETU 10	✓				3				2.5-30			✓	
BA	ETU 10	✓				4	50/100%			2.5-30			✓	
AC	ETU 12	✓			a	3		✓		2.5-30			✓	
BD	ETU 12	✓			b	4	50/100%	✓		2.5-30			✓	
AE	ETU 20	✓				3		✓					✓	
BF	ETU 20	✓				4	50/100%	✓					✓	
AG	ETU 22	✓			a	3		✓					✓	
BH	ETU 22	✓			b	4	50/100%	✓					✓	
AS	ETU 30 M ³⁾	✓	40% I_R			3			10, 20, 30				✓	
CP	LCD ETU 40 M ³⁾	✓	5-50% I_R	✓		3			5, 10, 15, 20, 30				✓	✓
CH	LCD ETU 40	✓		✓		3		✓		2.5-30			✓	✓
CJ	LCD ETU 40	✓		✓		4	50-100% OFF	✓		2.5-30			✓	✓
CL	LCD ETU 42	✓		✓	a	3		✓		2.5-30			✓	✓
CM	LCD ETU 42	✓		✓	a/c	3		✓		2.5-30			✓	✓
CN	LCD ETU 42	✓		✓	b	4	50-100% OFF	✓		2.5-30			✓	✓

Ground-fault protection

- a Vectorial summation current formation (3-conductor system)
- b Vectorial summation current formation (4-conductor system)
- c 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) t_H 0.1-0.5s

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

3-pole

Selection and ordering data

Fixed-mounted circuit-breakers, VL160X to VL630, up to 630 A Thermal-magnetic overcurrent trip units

Type	Rated current I_n	Set current of the inverse-time delayed overload trip unit "L" I_R	Operating current of the instantaneous short-circuit trip units "I" I_i	DT **	I_{cu} up to 40/50 kA at 415 V, standard switching capacity N See "Overview".	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	A	A	A			Order No. supplement required, see page 16/36					kg



NSE0_00695

System protection, TM, LI function
with permanently set thermal overload trip units, permanently set short-circuit trip units

VL160X/ 3VL1	16	16	300	B	3VL17 96-1DA33-....			1	1 unit	113	1.900
	20	20	300	B	3VL17 02-1DA33-....			1	1 unit	113	1.900
	25	25	300	B	3VL17 25-1DA33-....			1	1 unit	113	2.000
	32	32	300	B	3VL17 03-1DA33-....			1	1 unit	113	2.000
	40	40	600	B	3VL17 04-1DA33-....			1	1 unit	113	2.000
	50	50	600	B	3VL17 05-1DA33-....			1	1 unit	113	2.000
	63	63	600	B	3VL17 06-1DA33-....			1	1 unit	113	2.000
	80	80	1000	B	3VL17 08-1DA33-....			1	1 unit	113	2.000
	100	100	1000	B	3VL17 10-1DA33-....			1	1 unit	113	2.000
	125	125	1000	B	3VL17 12-1DA33-....			1	1 unit	113	2.000
	160	160	1500	B	3VL17 16-1DA33-....			1	1 unit	113	2.000

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

- Connection with box terminal
- Connection with screw-type terminal

3
6



NSE0_00703

System protection, TM, LI function
with adjustable thermal overload trip units, permanently set short-circuit trip units

VL160X/ 3VL1	20	16- 20	300	B	3VL17 02-1DD33-....			1	1 unit	113	1.900
	32	25- 32	300	B	3VL17 03-1DD33-....			1	1 unit	113	2.000
	40	32- 40	600	B	3VL17 04-1DD33-....			1	1 unit	113	2.000
	50	40- 50	600	B	3VL17 05-1DD33-....			1	1 unit	113	2.000
	63	50- 63	600	B	3VL17 06-1DD33-....			1	1 unit	113	2.000
	80	63- 80	1000	B	3VL17 08-1DD33-....			1	1 unit	113	2.000
	100	80-100	1000	B	3VL17 10-1DD33-....			1	1 unit	113	2.000
	125	100-125	1000	B	3VL17 12-1DD33-....			1	1 unit	113	2.000
	160	125-160	1500	B	3VL17 16-1DD33-....			1	1 unit	113	2.000

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

- Connection with box terminal
- Connection with screw-type terminal

3
6



NSE0_00704

System protection, TM, LI function
with adjustable thermal overload trip units, adjustable short-circuit trip units

VL160/ 3VL2	50	40- 50	300- 600	B	3VL27 05-1DC33-....			1	1 unit	113	2.200
	63	50- 63	300- 600	B	3VL27 06-1DC33-....			1	1 unit	113	2.200
	80	63- 80	400- 800	B	3VL27 08-1DC33-....			1	1 unit	113	2.200
	100	80-100	500-1000	B	3VL27 10-1DC33-....			1	1 unit	113	2.200
	125	100-125	625-1250	B	3VL27 12-1DC33-....			1	1 unit	113	2.200
	160	125-160	800-1600	B	3VL27 16-1DC33-....			1	1 unit	113	2.200

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

- Connection with box terminal
- Connection with screw-type terminal

3
6

VL250/ 3VL3	200	160-200	1000-2000	B	3VL37 20-1DC36-....			1	1 unit	113	2.300
	250	200-250	1250-2500	B	3VL37 25-1DC36-....			1	1 unit	113	2.300
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

** Delivery time A for Order No. supplement "0AA0", see page 16/36

16/6

Siemens LV 1 · 2006

* You can order this quantity or a multiple thereof.

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							DT ** I_{cu} up to 100 kA at 415 V, very high switching capacity 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 16/36						kg	Order No. supplement required, see page 16/36						kg
B	3VL17 96-2DA33-....		1	1 unit	113	1.900	--						
B	3VL17 02-2DA33-....		1	1 unit	113	1.900							
B	3VL17 25-2DA33-....		1	1 unit	113	2.000							
B	3VL17 03-2DA33-....		1	1 unit	113	2.000							
B	3VL17 04-2DA33-....		1	1 unit	113	2.000							
B	3VL17 05-2DA33-....		1	1 unit	113	2.000							
B	3VL17 06-2DA33-....		1	1 unit	113	2.000							
B	3VL17 08-2DA33-....		1	1 unit	113	2.000							
B	3VL17 10-2DA33-....		1	1 unit	113	2.000							
B	3VL17 12-2DA33-....		1	1 unit	113	2.000							
B	3VL17 16-2DA33-....		1	1 unit	113	2.000							
						3							
						6							
B	3VL17 02-2DD33-....		1	1 unit	113	1.900	--						
B	3VL17 03-2DD33-....		1	1 unit	113	2.000							
B	3VL17 04-2DD33-....		1	1 unit	113	2.000							
B	3VL17 05-2DD33-....		1	1 unit	113	2.000							
B	3VL17 06-2DD33-....		1	1 unit	113	2.000							
B	3VL17 08-2DD33-....		1	1 unit	113	2.000							
B	3VL17 10-2DD33-....		1	1 unit	113	2.000							
B	3VL17 12-2DD33-....		1	1 unit	113	2.000							
B	3VL17 16-2DD33-....		1	1 unit	113	2.000							
						3							
						6							
B	3VL27 05-2DC33-....		1	1 unit	113	2.200	B	3VL27 05-3DC33-....		1	1 unit	113	2.200
B	3VL27 06-2DC33-....		1	1 unit	113	2.200	B	3VL27 06-3DC33-....		1	1 unit	113	2.200
B	3VL27 08-2DC33-....		1	1 unit	113	2.200	B	3VL27 08-3DC33-....		1	1 unit	113	2.200
B	3VL27 10-2DC33-....		1	1 unit	113	2.200	B	3VL27 10-3DC33-....		1	1 unit	113	2.200
B	3VL27 12-2DC33-....		1	1 unit	113	2.200	B	3VL27 12-3DC33-....		1	1 unit	113	2.200
B	3VL27 16-2DC33-....		1	1 unit	113	2.200	B	3VL27 16-3DC33-....		1	1 unit	113	2.200
						3							
						6							
B	3VL37 20-2DC36-....		1	1 unit	113	2.300	B	3VL37 20-3DC36-....		1	1 unit	113	2.300
B	3VL37 25-2DC36-....		1	1 unit	113	2.300	B	3VL37 25-3DC36-....		1	1 unit	113	2.300
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

** Delivery time A for Order No. supplement "0AA0", see page 16/36

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

3-pole

Fixed-mounted circuit-breakers, VL160 to VL1600, up to 1600 A Magnetic and solid-state overcurrent trip units

Type	Rated current I_n	Set current of the inverse-time delayed overload trip unit "L" I_R	Operating current of the instantaneous short-circuit trip units "I" I_i	DT	I_{cu} up to 40/50 kA at 415 V, standard switching capacity N See "Overview".	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	A	A	A								kg



System protection and generator protection, ETU20, LSI function for time-based discrimination
(S function: $I_{sd} = 1.5$ to $10 \times I_R$, $t_{sd} = 0$ to 0.5 s)

VL160/3VL2	63	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL27 06-1AE33-....			1	1 unit	113	2.400
	100	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL27 10-1AE33-....			1	1 unit	113	2.400
	160	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL27 16-1AE33-....			1	1 unit	113	2.400

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

- Connection with box terminal
- Connection with screw-type terminal

3
6

VL250/3VL3	200	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL37 20-1AE36-....			1	1 unit	113	2.500
	250	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL37 25-1AE36-....			1	1 unit	113	2.500
VL400/3VL4	315	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL47 31-1AE36-....			1	1 unit	113	5.900
	400	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL47 40-1AE36-....			1	1 unit	113	5.900
VL630/3VL5	630	$0.4-1.0 \times I_n$	$10 \times I_n$	B	3VL57 63-1AE36-....			1	1 unit	113	9.300
VL800/3VL6	800	$0.4-1.0 \times I_n$	$8 \times I_n$	B	3VL67 80-1AE36-....			1	1 unit	113	16.000
VL1250/3VL7	1000	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL77 10-1AE36-....			1	1 unit	113	25.000
	1250	$0.4-1.0 \times I_n$	$10 \times I_n$	B	3VL77 12-1AE36-....			1	1 unit	113	25.000
VL1600/3VL8 ¹⁾	1600	$0.4-1.0 \times I_n$	$9 \times I_n$	B	3VL87 16-1AE30-....			1	1 unit	113	31.300



Motor and generator protection, ETU10M, LI function
with permanently set trip class $I_C = 10$,
with phase failure sensitivity

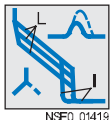
VL160/3VL2	63	25- 63	$1.25-11 \times I_n$	B	3VL27 06-1AP33-....			1	1 unit	113	2.400
	100	40-100	$1.25-11 \times I_n$	B	3VL27 10-1AP33-....			1	1 unit	113	2.400
	160	64-160	$1.25-11 \times I_n$	B	3VL27 16-1AP33-....			1	1 unit	113	2.400

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

- Connection with box terminal
- Connection with screw-type terminal

3
6

VL250/3VL3	200	80-200	$1.25-11 \times I_n$	B	3VL37 20-1AP36-....			1	1 unit	113	2.500
	250	100-250	$1.25-11 \times I_n$	B	3VL37 25-1AP36-....			1	1 unit	113	2.500
VL400/3VL4	315	125-315	$1.25-11 \times I_n$	B	3VL47 31-1AP36-....			1	1 unit	113	5.900
VL630/3VL5	500	200-500	$1.25-12.5 \times I_n$	B	3VL57 50-1AP36-....			1	1 unit	113	9.300



Motor protection, ETU30M, LI function
with adjustable trip class I_C (10, 20, 30),
with phase failure sensitivity

VL160/3VL2	63	25- 63	$6/8/11 \times I_n$	B	3VL27 06-1AS33-....			1	1 unit	113	2.400
	100	40-100	$6/8/11 \times I_n$	B	3VL27 10-1AS33-....			1	1 unit	113	2.400
	160	63-160	$6/8/11 \times I_n$	B	3VL27 16-1AS33-....			1	1 unit	113	2.400

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

- Connection with box terminal
- Connection with screw-type terminal

3
6

VL250/3VL3	200	80-200	$6/8/11 \times I_n$	B	3VL37 20-1AS36-....			1	1 unit	113	2.500
	250	100-250	$6/8/11 \times I_n$	B	3VL37 25-1AS36-....			1	1 unit	113	2.500
VL400/3VL4	315	125-315	$6/8/11 \times I_n$	B	3VL47 31-1AS36-....			1	1 unit	113	5.900
VL630/3VL5	500	200-500	$6/8/12.5 \times I_n$	B	3VL57 50-1AS36-....			1	1 unit	113	9.300

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

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							DT I_{cu} up to 100 kA at 415 V, very high switching capacity 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 06-2AE33-....			1	1 unit	113	2.400	B 3VL27 06-3AE33-....			1	1 unit	113	2.400
B 3VL27 10-2AE33-....			1	1 unit	113	2.400	B 3VL27 10-3AE33-....			1	1 unit	113	2.400
B 3VL27 16-2AE33-....			1	1 unit	113	2.400	B 3VL27 16-3AE33-....			1	1 unit	113	2.400
3 6							3 6						
B 3VL37 20-2AE36-....			1	1 unit	113	2.500	B 3VL37 20-3AE36-....			1	1 unit	113	2.500
B 3VL37 25-2AE36-....			1	1 unit	113	2.500	B 3VL37 25-3AE36-....			1	1 unit	113	2.500
B 3VL47 31-2AE36-....			1	1 unit	113	5.900	B 3VL47 31-3AE36-....			1	1 unit	113	5.900
B 3VL47 40-2AE36-....			1	1 unit	113	5.900	B 3VL47 40-3AE36-....			1	1 unit	113	5.900
B 3VL57 63-2AE36-....			1	1 unit	113	9.300	B 3VL57 63-3AE36-....			1	1 unit	113	9.300
B 3VL67 80-2AE36-....			1	1 unit	113	16.000	B 3VL67 80-3AE36-....			1	1 unit	113	16.000
B 3VL77 10-2AE36-....			1	1 unit	113	25.000	B 3VL77 10-3AE36-....			1	1 unit	113	25.000
B 3VL77 12-2AE36-....			1	1 unit	113	25.000	B 3VL77 12-3AE36-....			1	1 unit	113	25.000
B 3VL87 16-2AE30-....			1	1 unit	113	31.300	B 3VL87 16-3AE30-....			1	1 unit	113	31.300
3 6							3 6						
B 3VL27 06-2AP33-....			1	1 unit	113	2.400	B 3VL27 06-3AP33-....			1	1 unit	113	2.400
B 3VL27 10-2AP33-....			1	1 unit	113	2.400	B 3VL27 10-3AP33-....			1	1 unit	113	2.400
B 3VL27 16-2AP33-....			1	1 unit	113	2.400	B 3VL27 16-3AP33-....			1	1 unit	113	2.400
3 6							3 6						
B 3VL37 20-2AP36-....			1	1 unit	113	2.500	B 3VL37 20-3AP36-....			1	1 unit	113	2.500
B 3VL37 25-2AP36-....			1	1 unit	113	2.500	B 3VL37 25-3AP36-....			1	1 unit	113	2.500
B 3VL47 31-2AP36-....			1	1 unit	113	5.900	B 3VL47 31-3AP36-....			1	1 unit	113	5.900
B 3VL57 50-2AP36-....			1	1 unit	113	9.300	B 3VL57 50-3AP36-....			1	1 unit	113	9.300
3 6							3 6						
B 3VL27 06-2AS33-....			1	1 unit	113	2.400	B 3VL27 06-3AS33-....			1	1 unit	113	2.400
B 3VL27 10-2AS33-....			1	1 unit	113	2.400	B 3VL27 10-3AS33-....			1	1 unit	113	2.400
B 3VL27 16-2AS33-....			1	1 unit	113	2.400	B 3VL27 16-3AS33-....			1	1 unit	113	2.400
3 6							3 6						
B 3VL37 20-2AS36-....			1	1 unit	113	2.500	B 3VL37 20-3AS36-....			1	1 unit	113	2.500
B 3VL37 25-2AS36-....			1	1 unit	113	2.500	B 3VL37 25-3AS36-....			1	1 unit	113	2.500
B 3VL47 31-2AS36-....			1	1 unit	113	5.900	B 3VL47 31-3AS36-....			1	1 unit	113	5.900
B 3VL57 50-2AS36-....			1	1 unit	113	9.300	B 3VL57 50-3AS36-....			1	1 unit	113	9.300

* You can order this quantity or a multiple thereof.

Siemens LV 1 · 2006

16/9

16

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

3-pole

Fixed-mounted circuit-breakers, VL160X to VL1600, up to 1600 A Magnetic and solid-state overcurrent trip units

Type	Rated current I_n	Set current of the inverse-time delayed overload trip unit "L" I_R	Operating current of the instantaneous short-circuit trip units "I" I_i	DT	I_{cu} up to 40/50 kA at 415 V, standard switching capacity N See "Overview".	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	A	A	A								kg



Starter combinations, I function
without overload trip unit, with adjustable short-circuit trip unit

VL160/3VL2	63	--	450- 900	B	3VL27 06-1DK33-....			1	1 unit	113	2.200
	100	--	750-1500	B	3VL27 10-1DK33-....			1	1 unit	113	2.200
	160	--	1250-2500	B	3VL27 16-1DK33-....			1	1 unit	113	2.200

Connection type can be selected by assignm. of the 12th position of the Order No.
 • Connection with box terminal
 • Connection with screw-type terminal

3
6

VL250/3VL3	250	--	1750-3500	B	3VL37 25-1DK36-....			1	1 unit	113	2.300
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	X	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



Non-automatic molded case circuit-breakers¹⁾
without overload trip unit, with permanently set short-circuit trip units (for intrinsic protection only)

VL160X/3VL1	100	--	1800	B	3VL17 10-1DE33-....			1	1 unit	113	2.000
	160	--	1800	B	3VL17 16-1DE33-....			1	1 unit	113	2.000
VL160/3VL2	100	--	2500	B	3VL27 10-1DE33-....			1	1 unit	113	2.200
	160	--	2500	B	3VL27 16-1DE33-....			1	1 unit	113	2.200

Connection type can be selected by assignm. of the 12th position of the Order No.
 • Connection with box terminal
 • Connection with screw-type terminal

3
6

VL250/3VL3	250	--	3500	B	3VL37 25-1DE36-....			1	1 unit	113	2.300
VL400/3VL4	400	--	4000	B	3VL47 40-1DE36-....			1	1 unit	113	5.700
VL630/3VL5	630	--	6500	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 16/15.

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.

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							DT I_{cu} up to 100 kA at 415 V, very high switching capacity L						
Order No.	Order No. supplement required, see page 16/36	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	Order No.	Order No. supplement required, see page 16/36	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
B	3VL27 06-2DK33-....		1	1 unit	113	2.200	B	3VL27 06-3DK33-....		1	1 unit	113	2.200
B	3VL27 10-2DK33-....		1	1 unit	113	2.200	B	3VL27 10-3DK33-....		1	1 unit	113	2.200
B	3VL27 16-2DK33-....		1	1 unit	113	2.200	B	3VL27 16-3DK33-....		1	1 unit	113	2.200
3 6							3 6						
B	3VL37 25-2DK36-....		1	1 unit	113	2.300	B	3VL37 25-3DK36-....		1	1 unit	113	2.300
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
X	3VL47 31-2DK36-....		1	1 unit	113	5.700	X	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 10-2DE33-....		1	1 unit	113	2.000	--						
B	3VL17 16-2DE33-....		1	1 unit	113	2.000							
B	3VL27 10-2DE33-....		1	1 unit	113	2.200	B	3VL27 10-3DE33-....		1	1 unit	113	2.200
B	3VL27 16-2DE33-....		1	1 unit	113	2.200	B	3VL27 16-3DE33-....		1	1 unit	113	2.200
3 6							3 6						
B	3VL37 25-2DE36-....		1	1 unit	113	2.300	B	3VL37 25-3DE36-....		1	1 unit	113	2.300
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

* You can order this quantity or a multiple thereof.

Siemens LV 1 · 2006

16/11

3VL Molded Case Circuit-Breakers

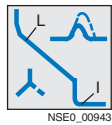
3VL Molded Case Circuit-Breakers up to 1600 A

3-pole

Fixed-mounted circuit-breakers, VL160 to VL1600, up to 1600 A Solid-state overcurrent trip units

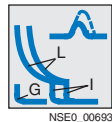
Type	Rated current I_n	Set current of the inverse-time delayed overload trip unit "L" I_R	DT	I_{cu} up to 40/50 kA at 415 V, standard switching capacity N See "Overview".	Order No.	Price, see page 16/16	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Circuit-breakers with solid-state overcurrent trip unit ETU										
VL160/3VL2	63	25- 63	B	3VL27 06-1□□33-....			1	1 unit	113	2.400
Box terminal connection	100	40- 100	B	3VL27 10-1□□33-....			1	1 unit	113	2.400
	160	64- 160	B	3VL27 16-1□□33-....			1	1 unit	113	2.400
VL160/3VL2	63	25- 63	B	3VL27 06-1□□36-....			1	1 unit	113	2.400
Screw-type terminal connection	100	40- 100	B	3VL27 10-1□□36-....			1	1 unit	113	2.400
	160	64- 160	B	3VL27 16-1□□36-....			1	1 unit	113	2.400
VL250/3VL3	200	80- 200	B	3VL37 20-1□□36-....			1	1 unit	113	2.500
	250	100- 250	B	3VL37 25-1□□36-....			1	1 unit	113	2.500
VL400/3VL4	315	128- 315	B	3VL47 31-1□□36-....			1	1 unit	113	5.900
	400 ¹⁾	160- 400	B	3VL47 40-1□□36-....			1	1 unit	113	5.900 ¹⁾
VL630/3VL5	500 ²⁾	200- 500	B	3VL57 50-1□□36-....			1	1 unit	113	9.300 ²⁾
	630 ¹⁾	252- 630	B	3VL57 63-1□□36-....			1	1 unit	113	9.300 ¹⁾
VL800/3VL6	800	320- 800	B	3VL67 80-1□□36-....			1	1 unit	113	16.000
VL1250/3VL7	1000	400-1000	B	3VL77 10-1□□36-....			1	1 unit	113	25.000
	1250	500-1250	B	3VL77 12-1□□36-....			1	1 unit	113	25.000
VL1600/3VL8 ³⁾	1600	640-1600	B	3VL87 16-1□□30-....			1	1 unit	113	31.300

ETU trip unit, 3-pole version



**Motor protection with
LI function, ETU10M**
up to 500 A (VL160 to VL630)
System protection with LI function, ETU10

AP ⁴⁾
AB



System protection with LIG function, ETU12
for 3-wire three-phase systems⁵⁾

AC



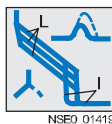
**System and generator protection
with LSI function, ETU20**

AE



**System and generator protection
with LSG function, ETU22**
for 3-wire three-phase systems⁵⁾

AG



**Motor protection with LI function,
ETU30M**
up to 500 A (VL160 to VL630)

AS ⁴⁾

L = overload
S = short-circuit protection, short-time delayed
I = short-circuit protection, instantaneous
G = ground-fault protection

- 1) Not for motor protection.
- 2) Only for motor protection.
- 3) Front busbar connection pieces are included in the scope of supply and are to be fitted by the customer.
- 4) Not for VL400 with $I_n = 400$ A, VL800, VL1250, VL1600.
- 5) Vectorial summation current formation of the currents.

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							DT I_{cu} up to 100 kA at 415 V, very high switching capacity L						
	Order No.	Price, see page 16/16.	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		Order No.	Price, see page 16/16.	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
B	3VL27 06-2□□33-....		1	1 unit	113	2.400	B	3VL27 06-3□□33-....		1	1 unit	113	2.400
B	3VL27 10-2□□33-....		1	1 unit	113	2.400	B	3VL27 10-3□□33-....		1	1 unit	113	2.400
B	3VL27 16-2□□33-....		1	1 unit	113	2.400	B	3VL27 16-3□□33-....		1	1 unit	113	2.400
B	3VL27 06-2□□36-....		1	1 unit	113	2.400	B	3VL27 06-3□□36-....		1	1 unit	113	2.400
B	3VL27 10-2□□36-....		1	1 unit	113	2.400	B	3VL27 10-3□□36-....		1	1 unit	113	2.400
B	3VL27 16-2□□36-....		1	1 unit	113	2.400	B	3VL27 16-3□□36-....		1	1 unit	113	2.400
B	3VL37 20-2□□36-....		1	1 unit	113	2.500	B	3VL37 20-3□□36-....		1	1 unit	113	2.500
B	3VL37 25-2□□36-....		1	1 unit	113	2.500	B	3VL37 25-3□□36-....		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	3VL47 40-2□□36-....		1	1 unit	113	5.900 ¹⁾	B	3VL47 40-3□□36-....		1	1 unit	113	5.900 ¹⁾
B	3VL57 50-2□□36-....		1	1 unit	113	9.300 ²⁾	B	3VL57 50-3□□36-....		1	1 unit	113	9.300 ²⁾
B	3VL57 63-2□□36-....		1	1 unit	113	9.300 ¹⁾	B	3VL57 63-3□□36-....		1	1 unit	113	9.300 ¹⁾
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

<p>Order No. supplements</p> <p>AP ⁴⁾</p> <p>AB</p> <p>AC</p> <p>AE</p> <p>AG</p> <p>AS ⁴⁾</p>	<p>Order No. supplements</p> <p>AP ⁴⁾</p> <p>AB</p> <p>AC</p> <p>AE</p> <p>AG</p> <p>AS ⁴⁾</p>
--	--

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

3-pole

Fixed-mounted circuit-breakers, VL160 to VL1600, up to 1600 A Solid-state overcurrent trip units

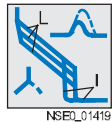
Type	Rated current I_n	Set current of the inverse-time delayed overload trip unit "L" I_R	DT	I_{CU} up to 40/50 kA at 415 V, standard switching capacity N See "Overview".	Order No.	Price, see page 16/16.	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
	A	A			Order No. supplement required, see page 16/36					

Circuit-breakers with solid-state overcurrent trip unit ETU

VL160/3VL2	63	25- 63	B	3VL27 06-1□□33-....	1	1 unit	113	2.400
Box terminal connection	100	40- 100	B	3VL27 10-1□□33-....	1	1 unit	113	2.400
	160	64- 160	B	3VL27 16-1□□33-....	1	1 unit	113	2.400
VL160/3VL2	63	25- 63	B	3VL27 06-1□□36-....	1	1 unit	113	2.400
Screw-type terminal connection	100	40- 100	B	3VL27 10-1□□36-....	1	1 unit	113	2.400
	160	64- 160	B	3VL27 16-1□□36-....	1	1 unit	113	2.400
VL250/3VL3	200	80- 200	B	3VL37 20-1□□36-....	1	1 unit	113	2.500
	250	100- 250	B	3VL37 25-1□□36-....	1	1 unit	113	2.500
VL400/3VL4	315	128- 315	B	3VL47 31-1□□36-....	1	1 unit	113	5.900
	400 ⁵⁾	160- 400	B	3VL47 40-1□□36-....	1	1 unit	113	5.900 ⁵⁾
VL630/3VL5	500 ³⁾	250- 500	B	3VL57 50-1□□36-....	1	1 unit	113	9.300 ³⁾
	630 ⁵⁾	252- 630	B	3VL57 63-1□□36-....	1	1 unit	113	9.300 ⁵⁾
VL800/3VL6	800	320- 800	B	3VL67 80-1□□36-....	1	1 unit	113	16.000
VL1250/3VL7	1000	400-1000	B	3VL77 10-1□□36-....	1	1 unit	113	25.000
	1250	500-1250	B	3VL77 12-1□□36-....	1	1 unit	113	25.000
VL1600/3VL8 ⁶⁾	1600	640-1600	B	3VL87 16-1□□30-....	1	1 unit	113	31.300

Order No. supplements

LCD ETU trip unit, 3-pole version



Motor protection with LI function, ETU40M,
up to 500 A (VL160 to VL630)



System protection with LI/LS/LSI function, ETU40



System protection with LSIG function, ETU42

for 3-wire three-phase systems²⁾
for 4-wire three-phase systems¹⁾²⁾

L = overload

S = short-circuit protection, short-time delayed

I = short-circuit protection, instantaneous

G = ground-fault protection

1) External current transformer required in addition, see page 16/65 and Catalog LV 1T "Function", "Ground-Fault Protection".

2) Vectorial summation current formation of the currents.

3) Only for motor protection.

4) Not for VL400 with $I_n = 400$ A, VL800, VL1250, VL1600.

5) Not for motor protection.

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

CP⁴⁾

CH

CL

CM

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							DT I_{cu} up to 100 kA at 415 V, very high switching capacity L						
Order No.	Price, see page 16/16.	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		Order No.	Price, see page 16/16.	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	
Order No. supplement required, see page 16/36					kg		Order No. supplement required, see page 16/36					kg	
B 3VL27 06-2□□33-....		1	1 unit	113	2.400		B 3VL27 06-3□□33-....		1	1 unit	113	2.400	
B 3VL27 10-2□□33-....		1	1 unit	113	2.400		B 3VL27 10-3□□33-....		1	1 unit	113	2.400	
B 3VL27 16-2□□33-....		1	1 unit	113	2.400		B 3VL27 16-3□□33-....		1	1 unit	113	2.400	
B 3VL27 06-2□□36-....		1	1 unit	113	2.400		B 3VL27 06-3□□36-....		1	1 unit	113	2.400	
B 3VL27 10-2□□36-....		1	1 unit	113	2.400		B 3VL27 10-3□□36-....		1	1 unit	113	2.400	
B 3VL27 16-2□□36-....		1	1 unit	113	2.400		B 3VL27 16-3□□36-....		1	1 unit	113	2.400	
B 3VL37 20-2□□36-....		1	1 unit	113	2.500		B 3VL37 20-3□□36-....		1	1 unit	113	2.500	
B 3VL37 25-2□□36-....		1	1 unit	113	2.500		B 3VL37 25-3□□36-....		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 3VL47 40-2□□36-....		1	1 unit	113	5.900 ⁵⁾		B 3VL47 40-3□□36-....		1	1 unit	113	5.900 ⁵⁾	
B 3VL57 50-2□□36-....		1	1 unit	113	9.300 ³⁾		B 3VL57 50-3□□36-....		1	1 unit	113	9.300 ³⁾	
B 3VL57 63-2□□36-....		1	1 unit	113	9.300 ⁵⁾		B 3VL57 63-3□□36-....		1	1 unit	113	9.300 ⁵⁾	
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	

Order No. supplements

CP⁴⁾
CH
CL
CM

Order No. supplements

CP⁴⁾
CH
CL
CM

16

* You can order this quantity or a multiple thereof.

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 16/15) 3VL.7 ...- □□3-....	Type	VL160 3VL2			VL250 3VL3		VL400 3VL4		VL630 3VL5	VL800 3VL6	VL1250 3VL7		VL1600 3VL8
	Trip unit	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											
ETU10M	A P						--		2)	--	--	--	--
							--		2)	--	--	--	--
							--		2)	--	--	--	--
ETU10	A B												
ETU12	A C¹⁾												
ETU20	A E												
ETU22	A G¹⁾												
ETU30M	A S						--		2)	--	--	--	--
							--		2)	--	--	--	--
							--		2)	--	--	--	--
ETU40M	C P						--		2)	--	--	--	--
							--		2)	--	--	--	--
							--		2)	--	--	--	--
ETU40	C H												
ETU42	C L												
ETU42	C M												

- Standard switching capacity N
- High switching capacity H
- Very high switching capacity L

1) $I_g = I_n$, for adjustable ground-fault protection use LCD ETU42.
 2) Rated current $I_n = 500$ A

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

3-pole

Contact units (only in combination with overcurrent trip unit ! See pages 16/18 and 16/19)
VL160 to VL1600, up to 1600 A²⁾



Type	Rated current I_n A	DT	I_{cu} up to 40/50 kA at 415 V, standard switching capacity N See "Overview".	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
------	-----------------------------	----	---	-----------	-----------------------	-------------------------	-----	----	-----------------------------------

With box terminals for contact units and overcurrent trip units

VL160/3VL2	160	A		3VL27 16-1AA33-0AA0		1	1 unit	113	1.500
------------	-----	---	--	----------------------------	--	---	--------	-----	-------

With screw-type terminal connections for contact units and overcurrent trip units

VL160/3VL2	160	A		3VL27 16-1AA36-0AA0		1	1 unit	113	1.500
VL250/3VL3	250	A		3VL37 25-1AA36-0AA0		1	1 unit	113	1.600
VL400/3VL4	400	A		3VL47 40-1AA36-0AA0		1	1 unit	113	4.200
VL630/3VL5	630	A		3VL57 63-1AA36-0AA0		1	1 unit	113	7.800
VL800/3VL6	800	A		3VL67 80-1AA36-0AA0		1	1 unit	113	14.200
VL1250/3VL7	1250	A		3VL77 12-1AA36-0AA0		1	1 unit	113	21.000
VL1600/3VL8 ¹⁾	1600	A		3VL87 16-1AA30-0AA0		1	1 unit	113	27.300

Type	Rated current I_n A	DT	I_{cu} up to 70 kA at 415 V, high switching capacity H See "Overview".	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
------	-----------------------------	----	--	-----------	-----------------------	-------------------------	-----	----	-----------------------------------

With box terminals for contact units and overcurrent trip units

VL160/3VL2	160	A		3VL27 16-2AA33-0AA0		1	1 unit	113	1.500
------------	-----	---	--	----------------------------	--	---	--------	-----	-------

With screw-type terminal connections for contact units and overcurrent trip units

VL160/3VL2	160	A		3VL27 16-2AA36-0AA0		1	1 unit	113	1.500
VL250/3VL3	250	A		3VL37 25-2AA36-0AA0		1	1 unit	113	1.600
VL400/3VL4	400	A		3VL47 40-2AA36-0AA0		1	1 unit	113	4.200
VL630/3VL5	630	A		3VL57 63-2AA36-0AA0		1	1 unit	113	7.800
VL800/3VL6	800	A		3VL67 80-2AA36-0AA0		1	1 unit	113	14.200
VL1250/3VL7	1250	A		3VL77 12-2AA36-0AA0		1	1 unit	113	21.000
VL1600/3VL8 ¹⁾	1600	A		3VL87 16-2AA30-0AA0		1	1 unit	113	27.300

Type	Rated current I_n A	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L See "Overview".	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
------	-----------------------------	----	--	-----------	-----------------------	-------------------------	-----	----	-----------------------------------

With box terminals for contact units and overcurrent trip units

VL160/3VL2	160	A		3VL27 16-3AA33-0AA0		1	1 unit	113	1.500
------------	-----	---	--	----------------------------	--	---	--------	-----	-------

With screw-type terminal connections for contact units and overcurrent trip units

VL160/3VL2	160	A		3VL27 16-3AA36-0AA0		1	1 unit	113	1.500
VL250/3VL3	250	A		3VL37 25-3AA36-0AA0		1	1 unit	113	1.600
VL400/3VL4	400	A		3VL47 40-3AA36-0AA0		1	1 unit	113	4.200
VL630/3VL5	630	A		3VL57 63-3AA36-0AA0		1	1 unit	113	7.800
VL800/3VL6	800	A		3VL67 80-3AA36-0AA0		1	1 unit	113	14.200
VL1250/3VL7	1250	A		3VL77 12-3AA36-0AA0		1	1 unit	113	21.000
VL1600/3VL8 ¹⁾	1600	A		3VL87 16-3AA30-0AA0		1	1 unit	113	27.300

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

2) Non-automatic molded case circuit-breakers are available only as complete units from the factory (for selection and ordering data, see page 16/10).

* You can order this quantity or a multiple thereof.

Siemens LV 1 · 2006

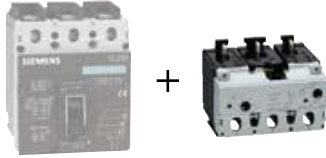
16/17

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

3-pole

Overcurrent trip units (only in combination with contact unit – see page 16/17)



TM trip units

System protection with LI function

For circuit-breakers	Rated current I_n	Set current of the inverse-time delayed overload trip unit "L" I_r	Operating current of the instantaneous short-circuit trip units "I" I_i	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
Type	A	A	A							kg
Box terminals/screw-type terminal connections in the scope of supply of the contact units										
VL160/3VL2	50	40- 50	300- 600	A	3VL9 205-7DC30		1	1 unit	113	0.700
	63	50- 63	300- 600	A	3VL9 206-7DC30		1	1 unit	113	0.700
	80	63- 80	400- 800	A	3VL9 208-7DC30		1	1 unit	113	0.700
	100	80-100	500-1000	A	3VL9 210-7DC30		1	1 unit	113	0.700
	125	100-125	625-1250	A	3VL9 212-7DC30		1	1 unit	113	0.700
VL250/3VL3	160	125-160	800-1600	A	3VL9 216-7DC30		1	1 unit	113	0.700
	200	160-200	1000-2000	A	3VL9 320-7DC30		1	1 unit	113	0.700
VL250/3VL3	250	200-250	1250-2500	A	3VL9 325-7DC30		1	1 unit	113	0.700
	200	160-200	1000-2000	A	3VL9 420-7DC30		1	1 unit	113	1.500
VL400/3VL4	250	200-250	1250-2500	A	3VL9 425-7DC30		1	1 unit	113	1.500
	315	250-315	1575-3150	A	3VL9 431-7DC30		1	1 unit	113	1.500
	400	320-400	2000-4000	A	3VL9 440-7DC30		1	1 unit	113	1.500
VL630/3VL5	315	250-315	1575-3150	A	3VL9 531-7DC30		1	1 unit	113	1.200
	400	320-400	2000-4000	A	3VL9 540-7DC30		1	1 unit	113	1.200
	500	400-500	2500-5000	A	3VL9 550-7DC30		1	1 unit	113	1.200
	630	500-630	3150-6300	A	3VL9 563-7DC30		1	1 unit	113	1.200

Magnetic trip units

Starter protection with I function

For circuit-breakers	Rated current I_n	Operating current of the instantaneous short-circuit trip units "I" I_i	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	
Type	A	A							kg	
Box terminals/screw-type terminal connections in the scope of supply of the contact units										
VL160/3VL2	63	450- 900	A	3VL9 206-7DK30		1	1 unit	113	0.700	
	100	750-1500	A	3VL9 210-7DK30		1	1 unit	113	0.700	
	160	1250-2500	A	3VL9 216-7DK30		1	1 unit	113	0.700	
VL250/3VL3	250	1750-3500	A	3VL9 325-7DK30		1	1 unit	113	0.700	
VL400/3VL4	200	1250-2500	A	3VL9 420-7DK30		1	1 unit	113	1.500	
	250	2000-4000	A	3VL9 425-7DK30		1	1 unit	113	1.500	
	315	2000-4000	A	3VL9 431-7DK30		1	1 unit	113	1.500	
VL630/3VL5	315	2000-4000	A	3VL9 531-7DK30		1	1 unit	113	1.200	
	500	3250-6300	A	3VL9 550-7DK30		1	1 unit	113	1.200	

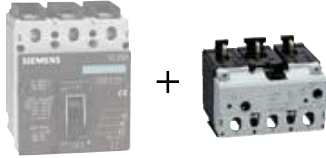
16

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

3-pole

Overcurrent trip units (only in combination with contact unit – see page 16/17)



ETU trip units

For trip functions see 10th position of the circuit-breaker Order No. on the previous pages.

For circuit-breakers	Set current of the inverse-time delayed overload trip unit "L" I_R	DT	Order No. PU = 1 (UNIT, SET, M) PG = 113	Price
Type	A			
Box terminals/screw-type terminal connections in the scope of supply of the contact units				
VL160/ 3VL2	25- 63 40- 100 64- 160	A A A	3VL9 206-6□□30 3VL9 210-6□□30 3VL9 216-6□□30	
VL250/ 3VL3	80- 200 100- 250	A A	3VL9 320-6□□30 3VL9 325-6□□30	
VL400/ 3VL4	126- 315 160- 400	A A	3VL9 431-6□□30 3VL9 440-6□□30	--
VL630/ 3VL5	200- 500 252- 630	A A	3VL9 550-6□□30 3VL9 563-6□□30	-- -- -- -- --
VL800/ 3VL6	320- 800	A	3VL9 680-6□□30	--
VL1250/ 3VL7	400-1000 500-1250	A A	3VL9 710-6□□30 3VL9 712-6□□30	-- --
VL1600/ 3VL8	640-1600	A	3VL9 816-6□□30	--
			AP¹⁾ AB¹⁾ AC¹⁾ AE¹⁾ AG¹⁾ AS¹⁾	
Trip units			ETU10M ETU10 ETU12	ETU20 ETU22 ETU30M

LCD ETU trip units

For trip functions see 10th position of the circuit-breaker Order No. on the previous pages.

For circuit-breakers	Set current of the inverse-time delayed overload trip unit "L" I_R	DT	Order No. PU = 1 (UNIT, SET, M) PG = 113	Price	When the solid-state overcurrent trip unit has been installed in the circuit-breaker, it is recommended that it is tested using the 3VL9 000-8AK00 function tester. When ordering trip units, insert the function specification in the Order No.
Type	A				
Box terminals/screw-type terminal connections in the scope of supply of the contact units					
VL160/ 3VL2	25- 63 40- 100 64- 160	A A A	3VL9 206-6□□30 3VL9 210-6□□30 3VL9 216-6□□30		
VL250/ 3VL3	80- 200 100- 250	A A	3VL9 320-6□□30 3VL9 325-6□□30		
VL400/ 3VL4	126- 315 160- 400	A A	3VL9 431-6□□30 3VL9 440-6□□30	--	
VL630/ 3VL5	200- 500 252- 630	A A	3VL9 550-6□□30 3VL9 563-6□□30	-- -- --	
VL800/ 3VL6	320- 800	A	3VL9 680-6□□30	--	
VL1250/ 3VL7	400-1000 500-1250	A A	3VL9 710-6□□30 3VL9 712-6□□30	-- --	
VL1600/ 3VL8	640-1600	A	3VL9 816-6□□30	--	
			CP¹⁾ CH¹⁾ CL¹⁾ CM¹⁾		
Trip units			ETU40M ETU40 ETU42	ETU42	

-- not available

Package size = 1 unit, i.e. 1 unit or a multiple thereof can be ordered.
Weight on request

1) For description, see Catalog LV 1T "Function", "TM Thermal-Magnetic Overcurrent Trip Units", "ETU Solid-State Overcurrent Trip Units" and "LCD ETU Solid-State Overcurrent Trip Units".

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

4-pole

Fixed-mounted circuit-breakers, VL160X to VL630, up to 630 A Thermal-magnetic overcurrent trip units

Type	Rated current I_n	Set current of the inverse-time delayed overload trip unit "L" I_R	Operating current of the instantaneous short-circuit trip units "I" I_i	DT **	I_{cu} up to 40/50 kA at 415 V, standard switching capacity N See "Overview".	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	A	A	A								kg



NSE0_00695

System protection, TM, LI function
with permanently set thermal overload trip units, permanently set short-circuit trip units,
without overload and short-circuit trip unit in 4th pole (N)

VL160X/3VL1	16	16	300	B	3VL17 96-1EH43-....			1	1 unit	113	2.300
	20	20	300	B	3VL17 02-1EH43-....			1	1 unit	113	2.300
	25	25	300	B	3VL17 25-1EH43-....			1	1 unit	113	2.500
	32	32	300	B	3VL17 03-1EH43-....			1	1 unit	113	2.500
	40	40	600	B	3VL17 04-1EH43-....			1	1 unit	113	2.500
	50	50	600	B	3VL17 05-1EH43-....			1	1 unit	113	2.500
	63	63	600	B	3VL17 06-1EH43-....			1	1 unit	113	2.500
	80	80	1000	B	3VL17 08-1EH43-....			1	1 unit	113	2.500
	100	100	1000	B	3VL17 10-1EH43-....			1	1 unit	113	2.500
	125	125	1000	B	3VL17 12-1EH43-....			1	1 unit	113	2.500
	160	160	1500	B	3VL17 16-1EH43-....			1	1 unit	113	2.500

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

- Connection with box terminal
- Connection with screw-type terminal

3
6



NSE0_00704

System protection, TM, LI function
with adjustable thermal overload trip units, adjustable short-circuit trip units,
without overload and short-circuit trip unit in 4th pole (N)

VL160/3VL2	50	40- 50	300- 600	B	3VL27 05-1EJ43-....			1	1 unit	113	3.000
	63	50- 63	300- 600	B	3VL27 06-1EJ43-....			1	1 unit	113	3.000
	80	63- 80	400- 800	B	3VL27 08-1EJ43-....			1	1 unit	113	3.000
	100	80-100	500-1000	B	3VL27 10-1EJ43-....			1	1 unit	113	3.000
	125	100-125	625-1250	B	3VL27 12-1EJ43-....			1	1 unit	113	3.000
	160	125-160	800-1600	B	3VL27 16-1EJ43-....			1	1 unit	113	3.000

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

- Connection with box terminal
- Connection with screw-type terminal

3
6

VL250/3VL3	200	160-200	1000-2000	B	3VL37 20-1EJ46-....			1	1 unit	113	3.200
	250	200-250	1250-2500	B	3VL37 25-1EJ46-....			1	1 unit	113	3.200
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 A for Order No. supplement "0AA0", see page 16/36.

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						DT ** I_{cu} up to 100 kA at 415 V, very high switching capacity 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 16/36					kg	Order No. supplement required, see page 16/36					kg

B	3VL17 96-2EH43-....	1	1 unit	113	2,300
B	3VL17 02-2EH43-....	1	1 unit	113	2,300
B	3VL17 25-2EH43-....	1	1 unit	113	2,500
B	3VL17 03-2EH43-....	1	1 unit	113	2,500
B	3VL17 04-2EH43-....	1	1 unit	113	2,500
B	3VL17 05-2EH43-....	1	1 unit	113	2,500
B	3VL17 06-2EH43-....	1	1 unit	113	2,500
B	3VL17 08-2EH43-....	1	1 unit	113	2,500
B	3VL17 10-2EH43-....	1	1 unit	113	2,500
B	3VL17 12-2EH43-....	1	1 unit	113	2,500
B	3VL17 16-2EH43-....	1	1 unit	113	2,500

3
6

B	3VL27 05-2EJ43-....	1	1 unit	113	3,000
B	3VL27 06-2EJ43-....	1	1 unit	113	3,000
B	3VL27 08-2EJ43-....	1	1 unit	113	3,000
B	3VL27 10-2EJ43-....	1	1 unit	113	3,000
B	3VL27 12-2EJ43-....	1	1 unit	113	3,000
B	3VL27 16-2EJ43-....	1	1 unit	113	3,000

3
6

3
6

B	3VL37 20-2EJ46-....	1	1 unit	113	3,200
B	3VL37 25-2EJ46-....	1	1 unit	113	3,200
B	3VL47 20-2EJ46-....	1	1 unit	113	7,400
B	3VL47 25-2EJ46-....	1	1 unit	113	7,400
B	3VL47 31-2EJ46-....	1	1 unit	113	7,400
B	3VL47 40-2EJ46-....	1	1 unit	113	7,400
B	3VL57 31-2EJ46-....	1	1 unit	113	11,200
B	3VL57 40-2EJ46-....	1	1 unit	113	11,200
B	3VL57 50-2EJ46-....	1	1 unit	113	11,200
B	3VL57 63-2EJ46-....	1	1 unit	113	11,200

** Delivery time A for Order No. supplement "0AA0", see page 16/36.

* You can order this quantity or a multiple thereof.

Siemens LV 1 · 2006

16/21

16

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

4-pole

Fixed-mounted circuit-breakers, VL160X to VL630, up to 630 A Thermal-magnetic overcurrent trip units

Type	Rated current I_n	Set current of the inverse-time delayed overload trip unit "L" I_R	Operating current of the instantaneous short-circuit trip units "I" I_i	DT **	I_{cu} up to 40/50 kA at 415 V, standard switching capacity N See "Overview".	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	A	A	A			Order No. supplement required, see page 16/36					kg



System protection, TM, LIN function
with permanently set thermal overload trip units, permanently set short-circuit trip units,
with "N" overload and short-circuit trip units
N = 100% protection for overload and short-circuit trip units

VL160X/3VL1	16	16	300	B	3VL17 96-1EA43-....			1	1 unit	113	2.300
	20	20	300	B	3VL17 02-1EA43-....			1	1 unit	113	2.300
	25	25	300	B	3VL17 25-1EA43-....			1	1 unit	113	2.500
	32	32	300	B	3VL17 03-1EA43-....			1	1 unit	113	2.500
	40	40	600	B	3VL17 04-1EA43-....			1	1 unit	113	2.500
	50	50	600	B	3VL17 05-1EA43-....			1	1 unit	113	2.500
	63	63	600	B	3VL17 06-1EA43-....			1	1 unit	113	2.500
	80	80	1000	B	3VL17 08-1EA43-....			1	1 unit	113	2.500
	100	100	1000	B	3VL17 10-1EA43-....			1	1 unit	113	2.500
	125	125	1000	B	3VL17 12-1EL43-....			1	1 unit	113	2.500
	160	160	1500	B	3VL17 16-1EL43-....			1	1 unit	113	2.500

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

- Connection with box terminal
- Connection with screw-type terminal

3
6



System protection, TM, LIN function
with permanently set thermal overload trip units, permanently set short-circuit trip units,
with "N" overload and short-circuit trip units
N = 60% protection for overload and short-circuit trip units

VL160X/3VL1	125	125	1000	B	3VL17 12-1EA43-....			1	1 unit	113	2.500
	160	160	1500	B	3VL17 16-1EA43-....			1	1 unit	113	2.500

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

- Connection with box terminal
- Connection with screw-type terminal

3
6

** Delivery time A for Order No. supplement "0AA0",
see page 16/36.

16

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							DT ** I_{cu} up to 100 kA at 415 V, very high switching capacity 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 16/36							Order No. supplement required, see page 16/36						
						kg							kg

B	3VL17 96-2EA43-....	1	1 unit	113	2,300
B	3VL17 02-2EA43-....	1	1 unit	113	2,300
B	3VL17 25-2EA43-....	1	1 unit	113	2,500
B	3VL17 03-2EA43-....	1	1 unit	113	2,500
B	3VL17 04-2EA43-....	1	1 unit	113	2,500
B	3VL17 05-2EA43-....	1	1 unit	113	2,500
B	3VL17 06-2EA43-....	1	1 unit	113	2,500
B	3VL17 08-2EA43-....	1	1 unit	113	2,500
B	3VL17 10-2EA43-....	1	1 unit	113	2,500
B	3VL17 12-2EL43-....	1	1 unit	113	2,500
B	3VL17 16-2EL43-....	1	1 unit	113	2,500

3
6

B	3VL17 12-2EA43-....	1	1 unit	113	2,500
B	3VL17 16-2EA43-....	1	1 unit	113	2,500

3
6

** Delivery time A for Order No. supplement "0AA0", see page 16/36.

* You can order this quantity or a multiple thereof.

Siemens LV 1 · 2006

16/23

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

4-pole

Fixed-mounted circuit-breakers, VL160X to VL630, up to 630 A Thermal-magnetic overcurrent trip units

Type	Rated current I_n	Set current of the inverse-time delayed overload trip unit "L" I_R	Operating current of the instantaneous short-circuit trip units "I" I_i	DT	I_{cu} up to 40/50 kA at 415 V, standard switching capacity N See "Overview".	Order No. Order No. supplement required, see page 16/36	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
------	------------------------	---	--	----	---	--	-----------------------	-------------------------	-----	----	-----------------------------------



System protection, TM, LIN function
with adjustable thermal overload trip units, adjustable short-circuit trip units,
with "N" overload and short-circuit trip units
N = 100% protection for overload and short-circuit trip units

VL160/3VL2	50	40- 50	300- 600	B	3VL27 05-1EM43-....			1	1 unit	113	3.000
	63	50- 63	300- 600	B	3VL27 06-1EM43-....			1	1 unit	113	3.000
	80	63- 80	400- 800	B	3VL27 08-1EM43-....			1	1 unit	113	3.000
	100	80-100	500-1000	B	3VL27 10-1EM43-....			1	1 unit	113	3.000
	125	100-125	625-1250	B	3VL27 12-1EM43-....			1	1 unit	113	3.000
	160	125-160	800-1600	B	3VL27 16-1EM43-....			1	1 unit	113	3.000

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

- Connection with box terminal
- Connection with screw-type terminal

3
6

VL250/3VL3	200	160-200	1000-2000	B	3VL37 20-1EM46-....			1	1 unit	113	3.200
	250	200-250	1250-2500	B	3VL37 25-1EM46-....			1	1 unit	113	3.200
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 overload trip units, adjustable short-circuit trip units,
with "N" overload and short-circuit trip units
N = 60% protection for overload and short-circuit trip units

VL160/3VL2	125	100-125	625-1250	B	3VL27 12-1EC43-....			1	1 unit	113	3.000
	160	125-160	800-1600	B	3VL27 16-1EC43-....			1	1 unit	113	3.000

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

- Connection with box terminal
- Connection with screw-type terminal

3
6

VL250/3VL3	200	160-200	1000-2000	B	3VL37 20-1EC46-....			1	1 unit	113	3.200
	250	200-250	1250-2500	B	3VL37 25-1EC46-....			1	1 unit	113	3.200
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

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							DT I_{cu} up to 100 kA at 415 V, very high switching capacity 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 16/36					kg		Order No. supplement required, see page 16/36					kg	

B	3VL27 05-2EM43-....		1	1 unit	113	3.000	B	3VL27 05-3EM43-....		1	1 unit	113	3.000
B	3VL27 06-2EM43-....		1	1 unit	113	3.000	B	3VL27 06-3EM43-....		1	1 unit	113	3.000
B	3VL27 08-2EM43-....		1	1 unit	113	3.000	B	3VL27 08-3EM43-....		1	1 unit	113	3.000
B	3VL27 10-2EM43-....		1	1 unit	113	3.000	B	3VL27 10-3EM43-....		1	1 unit	113	3.000
B	3VL27 12-2EM43-....		1	1 unit	113	3.000	B	3VL27 12-3EM43-....		1	1 unit	113	3.000
B	3VL27 16-2EM43-....		1	1 unit	113	3.000	B	3VL27 16-3EM43-....		1	1 unit	113	3.000

3
6

3
6

B	3VL37 20-2EM46-....		1	1 unit	113	3.200	B	3VL37 20-3EM46-....		1	1 unit	113	3.200
B	3VL37 25-2EM46-....		1	1 unit	113	3.200	B	3VL37 25-3EM46-....		1	1 unit	113	3.200
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 12-2EC43-....		1	1 unit	113	3.000	B	3VL27 12-3EC43-....		1	1 unit	113	3.000
B	3VL27 16-2EC43-....		1	1 unit	113	3.000	B	3VL27 16-3EC43-....		1	1 unit	113	3.000

3
6

3
6

B	3VL37 20-2EC46-....		1	1 unit	113	3.200	B	3VL37 20-3EC46-....		1	1 unit	113	3.200
B	3VL37 25-2EC46-....		1	1 unit	113	3.200	B	3VL37 25-3EC46-....		1	1 unit	113	3.200
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

* You can order this quantity or a multiple thereof.

Siemens LV 1 · 2006

16/25

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

4-pole

Fixed-mounted circuit-breakers, VL160X to VL1600, up to 1600 A Magnetic and solid-state overcurrent trip units

Type	Rated current I_n	Set current of the inverse-time delayed overload trip unit "L" I_R	Operating current of the instantaneous short-circuit trip units "I" I_i	DT	I_{cu} up to 40/50 kA at 415 V, standard switching capacity N See "Overview".	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	A	A	A								kg



NSE0_00922

System protection and generator protection, ETU20, LSIN function for time-based discrimination (S function: $I_{sd} = 1.5$ to $10 \times I_n$, $t_{sd} = 0$ to 0.5 s), with overload and short-circuit trip units in 4th pole (N)

VL160/3VL2	63	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL27 06-1BF43-....			1	1 unit	113	3.100
	100	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL27 10-1BF43-....			1	1 unit	113	3.100
	160	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL27 16-1BF43-....			1	1 unit	113	3.100

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

- Connection with box terminal
- Connection with screw-type terminal

3
6

VL250/3VL3	200	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL37 20-1BF46-....			1	1 unit	113	3.300
	250	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL37 25-1BF46-....			1	1 unit	113	3.300
VL400/3VL4	315	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL47 31-1BF46-....			1	1 unit	113	7.600
	400	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL47 40-1BF46-....			1	1 unit	113	7.600
VL630/3VL5	630	$0.4-1.0 \times I_n$	$10 \times I_n$	B	3VL57 63-1BF46-....			1	1 unit	113	11.700
VL800/3VL6	800	$0.4-1.0 \times I_n$	$8 \times I_n$	B	3VL67 80-1BF46-....			1	1 unit	113	20.500
VL1250/3VL7	1000	$0.4-1.0 \times I_n$	$11 \times I_n$	B	3VL77 10-1BF46-....			1	1 unit	113	33.500
	1250	$0.4-1.0 \times I_n$	$10 \times I_n$	B	3VL77 12-1BF46-....			1	1 unit	113	33.500
VL1600/3VL8 ²⁾	1600	$0.4-1.0 \times I_n$	$9 \times I_n$	B	3VL87 16-1BF40-....			1	1 unit	113	40.800



NSE0_00708

Non-automatic molded case circuit-breakers¹⁾ without overload trip unit, with permanently set short-circuit trip unit (for intrinsic protection only), without overload and short-circuit trip unit in 4th pole (N)

VL160X/3VL1	100	--	1800	B	3VL17 10-1EE43-....			1	1 unit	113	2.500
	160	--	1800	B	3VL17 16-1EE43-....			1	1 unit	113	2.500
VL160/3VL2	100	--	2500	B	3VL27 10-1EE43-....			1	1 unit	113	3.000
	160	--	2500	B	3VL27 16-1EE43-....			1	1 unit	113	3.000

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

- Connection with box terminal
- Connection with screw-type terminal

3
6

VL250/3VL3	250	--	3500	B	3VL37 25-1EE46-....			1	1 unit	113	3.200
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	--	6300	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.

N = 100% protection for $I_n \leq 100$ A

N = 50% protection for $I_n \geq 110$ A

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							DT I_{cu} up to 100 kA at 415 V, very high switching capacity 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 16/36						kg	Order No. supplement required, see page 16/36						kg

B	3VL27 06-2BF43-....		1	1 unit	113	3.100	B	3VL27 06-3BF43-....		1	1 unit	113	3.100
B	3VL27 10-2BF43-....		1	1 unit	113	3.100	B	3VL27 10-3BF43-....		1	1 unit	113	3.100
B	3VL27 16-2BF43-....		1	1 unit	113	3.100	B	3VL27 16-3BF43-....		1	1 unit	113	3.100

3
6

3
6

B	3VL37 20-2BF46-....		1	1 unit	113	3.300	B	3VL37 20-3BF46-....		1	1 unit	113	3.300
B	3VL37 25-2BF46-....		1	1 unit	113	3.300	B	3VL37 25-3BF46-....		1	1 unit	113	3.300
B	3VL47 31-2BF46-....		1	1 unit	113	7.600	B	3VL47 31-3BF46-....		1	1 unit	113	7.600
B	3VL47 40-2BF46-....		1	1 unit	113	7.600	B	3VL47 40-3BF46-....		1	1 unit	113	7.600
B	3VL57 63-2BF46-....		1	1 unit	113	11.700	B	3VL57 63-3BF46-....		1	1 unit	113	11.700
B	3VL67 80-2BF46-....		1	1 unit	113	20.500	B	3VL67 80-3BF46-....		1	1 unit	113	20.500
B	3VL77 10-2BF46-....		1	1 unit	113	33.500	B	3VL77 10-3BF46-....		1	1 unit	113	33.500
B	3VL77 12-2BF46-....		1	1 unit	113	33.500	B	3VL77 12-3BF46-....		1	1 unit	113	33.500
B	3VL87 16-2BF40-....		1	1 unit	113	40.800	B	3VL87 16-3BF40-....		1	1 unit	113	40.800

B	3VL17 10-2EE43-....		1	1 unit	113	2.500	--						
B	3VL17 16-2EE43-....		1	1 unit	113	2.500	--						
B	3VL27 10-2EE43-....		1	1 unit	113	3.000	B	3VL27 10-3EE43-....		1	1 unit	113	3.000
B	3VL27 16-2EE43-....		1	1 unit	113	3.000	B	3VL27 16-3EE43-....		1	1 unit	113	3.000

3
6

3
6

B	3VL37 25-2EE46-....		1	1 unit	113	3.200	B	3VL37 25-3EE46-....		1	1 unit	113	3.200
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.

Siemens LV 1 · 2006

16/27

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

4-pole

Fixed-mounted circuit-breakers, VL160 to VL1600, VL1600 A Solid-state overcurrent trip units

Type	Rated current I_n	Set current of the inverse-time delayed overload trip unit "L" I_R	DT	I_{cu} up to 40/50 kA at 415 V, standard switching capacity N See "Overview".	Order No.	Price, see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	A	A			Order No. supplement required, see page 16/36					kg

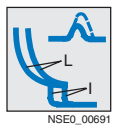
Circuit-breakers

with solid-state overcurrent trip unit ETU

VL160/3VL2 Box terminal connection	63	25- 63	B	3VL27 06-1□□43-....	1	1 unit	113	3.100
	100	40- 100	B	3VL27 10-1□□43-....	1	1 unit	113	3.100
	160	64- 160	B	3VL27 16-1□□43-....	1	1 unit	113	3.100
VL160/3VL2 Screw-type terminal connection	63	25- 63	B	3VL27 06-1□□46-....	1	1 unit	113	3.100
	100	40- 100	B	3VL27 10-1□□46-....	1	1 unit	113	3.100
	160	64- 160	B	3VL27 16-1□□46-....	1	1 unit	113	3.100
VL250/3VL3	200	80- 200	B	3VL37 20-1□□46-....	1	1 unit	113	3.300
	250	100- 250	B	3VL37 25-1□□46-....	1	1 unit	113	3.300
VL400/3VL4	315	128- 315	B	3VL47 31-1□□46-....	1	1 unit	113	7.600
	400	160- 400	B	3VL47 40-1□□46-....	1	1 unit	113	7.600
VL630/3VL5	630	252- 630	B	3VL57 63-1□□46-....	1	1 unit	113	11.700
	800	320- 800	B	3VL67 80-1□□46-....	1	1 unit	113	20.500
VL1250/3VL7	1000	400-1000	B	3VL77 10-1□□46-....	1	1 unit	113	33.500
	1250	500-1250	B	3VL77 12-1□□46-....	1	1 unit	113	33.500
VL1600/3VL8 ¹⁾	1600	640-1600	B	3VL87 16-1□□40-....	1	1 unit	113	40.800

Order No. supplements

ETU trip units, 4-pole versions



Systems protection with LIN function, ETU10

with overload and short-circuit trip units in 4th pole (N)

BA



Systems protection with LING function, ETU12

Residual current for 4-wire three-phase systems
with overload and short-circuit trip units in 4th pole (N)

BD



Systems protection with LSIN function, ETU20

with overload and short-circuit trip units in 4th pole (N)

BF



Systems protection with LSING function, ETU22

Residual current for 4-wire three-phase systems
with overload and short-circuit trip units in 4th pole (N)

BH

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

N = 100 % protection for $I_n \leq 100$ A

N = 50 % protection for $I_n \geq 110$ A

L = overload

S = short-circuit protection, short-time delayed

I = short-circuit protection, instantaneous

G = ground-fault protection

N = neutral conductor protection

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

B	3VL27 06-2□□43-....		1	1 unit	113	3.100	B	3VL27 06-3□□43-....		1	1 unit	113	3.100
B	3VL27 10-2□□43-....		1	1 unit	113	3.100	B	3VL27 10-3□□43-....		1	1 unit	113	3.100
B	3VL27 16-2□□43-....		1	1 unit	113	3.100	B	3VL27 16-3□□43-....		1	1 unit	113	3.100
B	3VL27 06-2□□46-....		1	1 unit	113	3.100	B	3VL27 06-3□□46-....		1	1 unit	113	3.100
B	3VL27 10-2□□46-....		1	1 unit	113	3.100	B	3VL27 10-3□□46-....		1	1 unit	113	3.100
B	3VL27 16-2□□46-....		1	1 unit	113	3.100	B	3VL27 16-3□□46-....		1	1 unit	113	3.100
B	3VL37 20-2□□46-....		1	1 unit	113	3.300	B	3VL37 20-3□□46-....		1	1 unit	113	3.300
B	3VL37 25-2□□46-....		1	1 unit	113	3.300	B	3VL37 25-3□□46-....		1	1 unit	113	3.300
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

Order No. supplements

BA
BD
BF
BH

Order No. supplements

BA
BD
BF
BH

16

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

4-pole

Fixed-mounted circuit-breakers, VL160 to VL1600, up to 1600 A Solid-state overcurrent trip units

Type	Rated current I_n	Set current of the inverse-time delayed overload trip unit "L" I_R	DT	I_{cu} up to 40/50 kA at 415 V, standard switching capacity N See "Overview".	Order No. Order No. supplement required, see page 16/36	Price, see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
------	------------------------	--	----	---	--	-----------------------------	-------------------------	-----	----	-----------------------------------

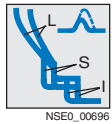
Circuit-breakers

with solid-state overcurrent trip unit ETU

VL160/3VL2 Box terminal connection	63 100 160	25- 63 40- 100 64- 160	B B B	3VL27 06-1□□43-.... 3VL27 10-1□□43-.... 3VL27 16-1□□43-....	1 1 1	1 unit 1 unit 1 unit	113 113 113	3.100 3.100 3.100
VL160/3VL2 Screw-type terminal connection	63 100 160	25- 63 40- 100 64- 160	B B B	3VL27 06-1□□46-.... 3VL27 10-1□□46-.... 3VL27 16-1□□46-....	1 1 1	1 unit 1 unit 1 unit	113 113 113	3.100 3.100 3.100
VL250/3VL3	200 250	80- 200 100- 250	B B	3VL37 20-1□□46-.... 3VL37 25-1□□46-....	1 1	1 unit 1 unit	113 113	3.300 3.300
VL400/3VL4	315 400	128- 315 160- 400	B B	3VL47 31-1□□46-.... 3VL47 40-1□□46-....	1 1	1 unit 1 unit	113 113	7.600 7.600
VL630/3VL5	630	252- 630	B	3VL57 63-1□□46-....	1	1 unit	113	11.700
VL800/3VL6	800	320- 800	B	3VL67 80-1□□46-....	1	1 unit	113	20.500
VL1250/3VL7	1000 1250	400-1000 500-1250	B B	3VL77 10-1□□46-.... 3VL77 12-1□□46-....	1 1	1 unit 1 unit	113 113	33.500 33.500
VL1600/3VL8 ¹⁾	1600	640-1600	B	3VL87 16-1□□40-....	1	1 unit	113	40.800

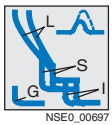
Order No.
supple-
ments

LCD ETU trip units, 4-pole versions



Systems protection with LI/LSI/LIN/LSIN function, ETU40
with overload and short-circuit trip units in 4th pole (N):
50–100% or can be switched off
Factory preset at 50 %

CJ



Systems protection with LSIG/LSING function, ETU42
for 4-wire three-phase systems
with overload and short-circuit trip units in 4th pole (N):
50–100% or can be switched off
Factory preset at 50 %

CN

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

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							DT I_{cu} up to 100 kA at 415 V, very high switching capacity L						
Order No.	Price, see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		Order No.	Price, see page 16/32	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.	
Order No. supplement required, see page 16/36					kg		Order No. supplement required, see page 16/36					kg	

B	3VL27 06-2□□43-....		1	1 unit	113	3.100	B	3VL27 06-3□□43-....		1	1 unit	113	3.100
B	3VL27 10-2□□43-....		1	1 unit	113	3.100	B	3VL27 10-3□□43-....		1	1 unit	113	3.100
B	3VL27 16-2□□43-....		1	1 unit	113	3.100	B	3VL27 16-3□□43-....		1	1 unit	113	3.100
B	3VL27 06-2□□46-....		1	1 unit	113	3.100	B	3VL27 06-3□□46-....		1	1 unit	113	3.100
B	3VL27 10-2□□46-....		1	1 unit	113	3.100	B	3VL27 10-3□□46-....		1	1 unit	113	3.100
B	3VL27 16-2□□46-....		1	1 unit	113	3.100	B	3VL27 16-3□□46-....		1	1 unit	113	3.100
B	3VL37 20-2□□46-....		1	1 unit	113	3.300	B	3VL37 20-3□□46-....		1	1 unit	113	3.300
B	3VL37 25-2□□46-....		1	1 unit	113	3.300	B	3VL37 25-3□□46-....		1	1 unit	113	3.300
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

Order No. supplements

CJ

CN

Order No. supplements

CJ

CN

16

* You can order this quantity or a multiple thereof.

Siemens LV 1 · 2006

16/31

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 16/28 to 16/31)	Type	VL160			VL250		VL400		VL630	VL800	VL1250		VL1600
		3VL2			3VL3		3VL4		3VL5	3VL6	3VL7		3VL8
3VL.7 ..-.	□□4-....	Rated current I_n											
Trip units		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	B A												
ETU12	B D												
ETU20	B F												
ETU22	B H												
ETU40	C J												
ETU42	C N												

■ Standard switching capacity N
■ High switching capacity H
■ Very high switching capacity L

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

4-pole

Contact units (only in combination with overcurrent trip unit ! See pages 16/34 and 16/35)
VL160 to VL1600, up to 1600 A²⁾



Diagram shows 3-pole combination

Type	Rated current I_n	DT	I_{cu} up to 40/50 kA at 415 V, standard switching capacity N See "Overview".	Switching all poles Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
With box terminals for contact units and overcurrent trip units									
VL160/3VL2	160	A	3VL27 16-1AA43-0AA0			1	1 unit	113	2.000
With screw-type terminal connections for contact units and overcurrent trip units									
VL160/3VL2	160	A	3VL27 16-1AA46-0AA0			1	1 unit	113	2.000
VL250/3VL3	250	A	3VL37 25-1AA46-0AA0			1	1 unit	113	2.200
VL400/3VL4	400	A	3VL47 40-1AA46-0AA0			1	1 unit	113	5.500
VL630/3VL5	630	A	3VL57 63-1AA46-0AA0			1	1 unit	113	9.700
VL800/3VL6	800	A	3VL67 80-1AA46-0AA0			1	1 unit	113	18.200
VL1250/3VL7	1250	A	3VL77 12-1AA46-0AA0			1	1 unit	113	27.500
VL1600/3VL8 ¹⁾	1600	A	3VL87 16-1AA40-0AA0			1	1 unit	113	34.800

Type	Rated current I_n	DT	I_{cu} up to 70 kA at 415 V, high switching capacity H See "Overview".	Switching all poles Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
With box terminals for contact units and overcurrent trip units									
VL160/3VL2	160	A	3VL27 16-2AA43-0AA0			1	1 unit	113	2.000
With screw-type terminal connections for contact units and overcurrent trip units									
VL160/3VL2	160	A	3VL27 16-2AA46-0AA0			1	1 unit	113	2.000
VL250/3VL3	250	A	3VL37 25-2AA46-0AA0			1	1 unit	113	2.200
VL400/3VL4	400	A	3VL47 40-2AA46-0AA0			1	1 unit	113	5.500
VL630/3VL5	630	A	3VL57 63-2AA46-0AA0			1	1 unit	113	9.700
VL800/3VL6	800	A	3VL67 80-2AA46-0AA0			1	1 unit	113	18.200
VL1250/3VL7	1250	A	3VL77 12-2AA46-0AA0			1	1 unit	113	27.500
VL1600/3VL8 ¹⁾	1600	A	3VL87 16-2AA40-0AA0			1	1 unit	113	34.800

Type	Rated current I_n	DT	I_{cu} up to 100 kA at 415 V, very high switching capacity L See "Overview".	Switching all poles Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
With box terminals for contact unit and overcurrent trip unit									
VL160/3VL2	160	A	3VL27 16-3AA43-0AA0			1	1 unit	113	2.000
With screw-type terminal connections for contact unit and overcurrent trip unit									
VL160/3VL2	160	A	3VL27 16-3AA46-0AA0			1	1 unit	113	2.000
VL250/3VL3	250	A	3VL37 25-3AA46-0AA0			1	1 unit	113	2.200
VL400/3VL4	400	A	3VL47 40-3AA46-0AA0			1	1 unit	113	5.500
VL630/3VL5	630	A	3VL57 63-3AA46-0AA0			1	1 unit	113	9.700
VL800/3VL6	800	A	3VL67 80-3AA46-0AA0			1	1 unit	113	18.200
VL1250/3VL7	1250	A	3VL77 12-3AA46-0AA0			1	1 unit	113	27.500
VL1600/3VL8 ¹⁾	1600	A	3VL87 16-3AA40-0AA0			1	1 unit	113	34.800

- 1) Front busbar connections are included in the scope of supply and are to be fitted by the customer.
- 2) Non-automatic molded case circuit-breakers are available only as complete units from the factory (for selection and ordering data, see page 16/26).

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

4-pole

Overcurrent trip units
(only in combination with contact unit – see page 16/33)

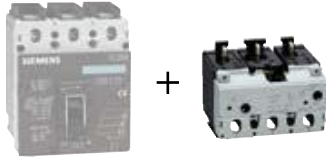


Diagram shows 3-pole combination

TM trip units

System protection with LI/LIN function.

For circuit-breaker	Rated current	Set current of the inverse-time delayed overload trip unit "L" I_r	Operating current of the instantaneous short-circuit trip units "I" I_i	DT	Order No.	Price
Type		A	A			
Box terminals/screw-type terminal connections in the scope of supply of the contact unit						
VL160/3VL2	50	40- 50	300- 600	A	3VL9 205-7□□40	--
	63	50- 63	300- 600	A	3VL9 206-7□□40	--
	80	63- 80	400- 800	A	3VL9 208-7□□40	--
	100	80-100	500-1000	A	3VL9 210-7□□40	--
	125	100-125	625-1250	A	3VL9 212-7□□40	
	160	125-160	800-1600	A	3VL9 216-7□□40	
VL250/3VL3	200	160-200	1000-2000	A	3VL9 320-7□□40	
	250	200-250	1250-2500	A	3VL9 325-7□□40	
VL400/3VL4	200	160-200	1000-2000	A	3VL9 420-7□□40	
	250	200-250	1250-2500	A	3VL9 425-7□□40	
	315	250-315	1575-3150	A	3VL9 431-7□□40	
	400	320-400	2000-4000	A	3VL9 440-7□□40	
VL630/3VL5	315	250-315	1575-3150	A	3VL9 531-7□□40	
	400	320-400	2000-4000	A	3VL9 540-7□□40	
	500	400-500	2500-5000	A	3VL9 550-7□□40	
	630	500-630	3150-6300	A	3VL9 563-7□□40	

	EC	EM	EJ
Overload and short-circuit trip units	<u>With</u> overload and short-circuit trip unit in 4th pole (N) <u>N = 60%</u> protection	<u>With</u> overload and short-circuit trip unit in 4th pole (N) <u>N = 100%</u> protection	<u>Without</u> overload and short-circuit trip unit in 4th pole (N)

When ordering trip units, insert the function specification in the Order No.

-- not available

Package size = 1 unit,
i.e. 1 unit or a multiple thereof can be ordered.
Weight on request

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

4-pole

Overcurrent trip units
(only in combination with contact unit – see page 16/33)

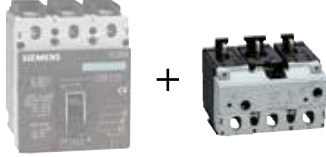


Diagram shows 3-pole combination

ETU trip units

For trip functions see 10th position of the circuit-breaker Order No. on the previous pages.

For circuit-breakers	Setting current of the inverse-time delayed overload release "L" I_R	DT	Order No.	Price
Type	A left pole = N		PU = 1 (UNIT, SET, M) PG = 113	
Box terminals/screw-type terminal connections in the scope of supply of the contact unit				
VL160/3VL2	25- 63	A	3VL9 206-6□□40	
	40- 100	A	3VL9 210-6□□40	
	64- 160	A	3VL9 216-6□□40	
VL250/3VL3	80- 200	A	3VL9 320-6□□40	
	100- 250	A	3VL9 325-6□□40	
VL400/3VL4	126- 315	A	3VL9 431-6□□40	
	160- 400	A	3VL9 440-6□□40	
VL630/3VL5	252- 630	A	3VL9 563-6□□40	
VL800/3VL6	320- 800	A	3VL9 680-6□□40	
VL1250/3VL7	400-1000	A	3VL9 710-6□□40	
	500-1250	A	3VL9 712-6□□40	
VL1600/3VL8	640-1600	A	3VL9 816-6□□40	

Trip units **BA¹⁾** **BD¹⁾** **BF¹⁾** **BH¹⁾**
ETU10 ETU12 ETU20 ETU22

LCD ETU trip units

For trip functions see 10th position of the circuit-breaker Order No. on the previous pages.

For circuit-breakers	Setting current of the inverse-time delayed overload release "L" I_R	DT	Order No.	Price	
Type	A left pole = N		PU = 1 (UNIT, SET, M) PG = 113		
Box terminals/screw-type terminal connections in the scope of supply of the contact unit					
VL160/3VL2	25- 63	A	3VL9 206-6□□40		When the solid-state overcurrent trip unit has been installed in the circuit-breaker, it is recommended that it is tested using the 3VL9 000-8AK00 function tester. When ordering trip units, insert the function specification in the Order No. ETU – overload and short-circuit trip unit in the N-Pole set to 100% $I_R = 26$ A to 100 A and 50% 110 A to 1600 A LCD trip unit – N protection selectable ON/OFF – Factory setting: 50%
	40- 100	A	3VL9 210-6□□40		
	64- 160	A	3VL9 216-6□□40		
VL250/3VL3	80- 200	A	3VL9 320-6□□40		
	100- 250	A	3VL9 325-6□□40		
VL400/3VL4	126- 315	A	3VL9 431-6□□40		
	160- 400	A	3VL9 440-6□□40		
VL630/3VL5	252- 630	A	3VL9 563-6□□40		
VL800/3VL6	320- 800	A	3VL9 680-6□□40		
VL1250/3VL7	400-1000	A	3VL9 710-6□□40		
	500-1250	A	3VL9 712-6□□40		
VL1600/3VL8	640-1600	A	3VL9 816-6□□40		

Trip units **CJ¹⁾** **CN¹⁾**
ETU40 ETU42

Package size = 1 unit, i.e. 1 unit or a multiple thereof can be ordered.
Weight on request

1) For description, see Catalog LV 1T "Function", "TM Thermal-Magnetic Overcurrent Trip Units", "ETU Solid-State Overcurrent Trip Units" and "LCD ETU Solid-State Overcurrent Trip Units".

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Options

Selection and ordering data

1st Order No. supplement:
Undervoltage or shunt trip units,
wiring directly to accessories

Rated control supply voltage U_c /frequency	Order No. supplement	Circuit-breakers Type	
AC 50/60 Hz DC	3VL.....-□□..	VL160X to VL400 ¹⁾ / 3VL1 to 3VL4	VL630 to VL1600/ 3VL5 to 3VL8
	↑↑ 0 A		
Without auxiliary trip units			
With undervoltage trip units Only right pole			
V AC	V DC		
--	12	2 N	1)
--	24	2 P	1)
--	48	2 U	1)
--	60	2 V	1)
--	110-127	2 R	1)
--	220-250	2 S	1)
24	--	2 D	1)
110-127	--	2 G	1)
220-250	--	2 H	1)
208	--	2 M	1)
277	--	2 Q	1)
380-415	--	2 J	1)
440-480	--	2 K	1)
500-525	--	2 L	1)
600	--	2 T	1)
With shunt trip units Only right pole			
V AC	V DC		
24	24	8 C	1)
--	48-60	8 J	1)
--	110-127	8 K	1)
--	220-250	8 Q	1)
48-60	--	8 M	1)
110-127	--	8 R	1)
208-277	--	8 T	1)
380-600	--	8 V	1)

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

Equipment	Order No. supplement	Circuit-breaker Type	
HS = 1 NO or 1 NC switch block AS = 1 NO switch block	3VL.....-□□	VL160X to VL400 ²⁾ / 3VL1 to 3VL4	VL630 to VL1600/ 3VL5 to 3VL8
	↑↑		
Without auxiliary/alarm switches			
2 HS (1 NO/1 NC) ³⁾	B 1	2)	--
4 HS (2 NO/2 NC)	C 1	--	--
1 AS (1 NO) ⁴⁾	G 1	2)	--
2 HS (1 NO/1 NC) + 1 AS (1 NO)	D 1	2)	--
2 HS (1 NO/1 NC) + 1 AS (1 NO) ⁵⁾	E 1	--	--

-- not available

1) For VL160/VL250 circuit-breakers with solid-state overcurrent trip units, the only option is one undervoltage trip unit or shunt trip units, or one auxiliary/alarm switch combination.

2) Except for mounting in the left accessory sub-section of the SENTRON VL160X circuit-breakers with RCD module and the SENTRON VL160, VL250 circuit-breakers with solid-state overcurrent trip units, since this sub-section is occupied by the tripping solenoid. On the right-hand side it is only possible to install an auxiliary trip unit or an auxiliary/alarm switch combination (see also Catalog LV 1T "Design", "Auxiliary Trip Units and Auxiliary Switches"). For this application only, a 3SB adapter can be installed in the N pole (for 4-pole circuit-breakers only).

3) With mounting adapter up to 3 HS.

4) With mounting adapter up to 2 HS + 1 AS.

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

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Options

When ordering, add "-Z" to the complete Order No. and add the relevant order code(s).

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

For fixed-mounted circuit-breakers (wired in factory)

Wiring for internal accessories (auxiliary switches, alarm switches, auxiliary trip units not included in scope of supply) with connecting leads (2 m long) brought out at the rear	VL160X to VL1600 (3VL1 to 3VL8)		
Wiring for motorized operating mechanisms¹⁾ (motorized operating mechanism not included in scope of supply, to order see pages 16/42 to 16/44) with connecting leads (2 m long), brought out at the top on VL160X to VL400, or brought out at the right on VL630 to VL1600	VL160X to VL1600 (3VL1 to 3VL8)		
Motorized operating mechanisms¹⁾ (220-250 V AC/DC) mounted on the circuit-breaker (motorized operating mechanism included in scope of supply) with wiring for internal accessories of the circuit-breaker with connecting leads (2 m long) brought out at the rear, (auxiliary switches, alarm switches, auxiliary trip units not included in scope of supply)	VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3) VL400 (3VL4) VL630, VL800 (3VL5, 3VL6) VL1250, VL1600 (3VL7, 3VL8)		

1) Version not for VL160X/3VL1 to VL250/3VL3 with motorized operating mechanism 3VL9 300-3MA00 to 3VL9 300-3ME00.

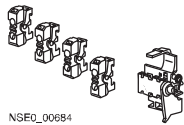
3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

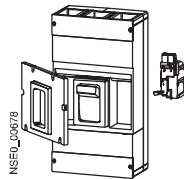
Accessories/spare parts

Selection and ordering data

Wiring directly at accessories		DT	For VL160X to VL400 (3VL1 to 3VL4)				
Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.		
						kg	
3- or 4-pole							
Auxiliary switches and auxiliary trip units							
For retrofitting (for possible complements, see figure in Catalog LV 1T "Design", "Auxiliary Trip Units and Auxiliary Switches")							
Auxiliary switches (HS) and alarm switches (AS) For retrofitting							
Kits		Mounting sides					
2 HS (1 NO + 1 NC)	N, left ¹⁾ , right	B	3VL9 400-2AB00	1	1 unit	113 0.027	
4 HS (2 NO + 2 NC)	N, left, right		--				
2 HS (1 NC + 1 NO)	Left, right ³⁾	B	3VL9 400-2AD00	1	1 unit	113 0.051	
+ 1 AS (1 NO) (kit)	Left		--				
Additional auxiliary switch/alarm switch combinations		see page 16/40.					
Shunt trip units²⁾ For retrofitting							
V AC	V DC						
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 trip units For retrofitting							
V AC	V DC						
--	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	
600	--	Right pole only	A	3VL9 400-1UT00	1	1 unit 113 0.075	
Time-delay devices for undervoltage trip units (220-250 V DC) Rated control supply voltage U_s 220 V–250 V AC/DC Delay time > 200 ms							
		A	3TX4 701-0AN1	1	1 unit	101 0.169	
Storage devices for shunt releases (208–277 V AC/220–250 V DC) Rated control supply voltage U_s 220 V–240 V AC/220 V–250 V DC Storage time 5 min							
		B	3WL9 111-0BA14-0AA0	1	1 unit	103 0.500	



NSE0_00684



NSE0_00678

1) Except for mounting in the left accessory sub-section of the SENTRON VL160X circuit-breakers (3VL1) with RCD module and the SENTRON VL160, VL250 circuit-breakers (3VL2, 3VL3) with solid-state overcurrent trip units, since this sub-section is occupied by the tripping solenoid.

For this application only, a 3SB adapter can be installed in the N pole (for 4-pole circuit-breakers only).

2) Shunt trip units with disconnection contact (3SB3 for ON/OFF position) not isolated (see Catalog LV 1T, "Schematics").

3) In the case of VL400 (3VL4):

Unsuitable for mounting in the right-hand accessory sub-section. The 3VL9 400-2AB00 installation kit with auxiliary switches only is recommended.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

Wiring directly at accessories

DT

For VL630 up to VL1600 (3VL5 to 3VL8)

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

kg

3- or 4-pole

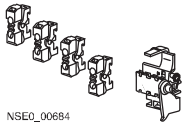
Auxiliary switches and auxiliary trip units

For retrofitting (for possible complements, see figure in Catalog LV 1T "Design", "Auxiliary Trip Units and Auxiliary Switches")

Auxiliary switches (HS) and alarm switches (AS)

For retrofitting

Kits	Mounting sides						
2 HS (1 NO + 1 NC)	N, left, right	--					
4 HS (2 NO + 2 NC)	N, left, right	B	3VL9 800-2AC00	1	1 unit	113	0.058
2 HS (1 NC + 1 NO)	Left, right	--					
+ 1 AS (1 NO) (kit)	Left	B	3VL9 800-2AE00	1	1 unit	113	0.060



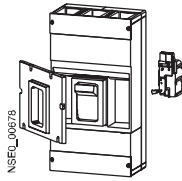
NSE0_00684

Additional auxiliary switch/alarm switch combinations see page 16/40.

Shunt trip units¹⁾

For retrofitting

V AC	V DC							
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



NSE0_00676

Undervoltage trip units

For retrofitting

V AC	V DC							
--	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		--				
600	--	Right pole only		--				

Time-delay devices for undervoltage trip units (220-250 V DC)

Rated control supply voltage U_s

220 V-250 V AC/DC

Delay time > 200 ms

	A	3TX4 701-0AN1	1	1 unit	101	0.169
--	---	----------------------	---	--------	-----	-------

Storage devices for shunt releases (208-277 V AC/220-250 V DC)

Rated control supply voltage U_s

220 V-240 V AC/220 V-250 V DC

Storage time 5 min

	B	3WL9 111-0BA14-0AA0	1	1 unit	103	0.500
--	---	----------------------------	---	--------	-----	-------

1) Shunt trip units with disconnection contact (3SB3 for ON/OFF position) not isolated (see Catalog LV 1T, "Schematics").

* You can order this quantity or a multiple thereof.

Siemens LV 1 · 2006

16/39

16

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

3SB adapters and 3SB switching elements

For circuit-breakers	Maximum combination of auxiliary switches (HS) and alarm switches (AS)	DT	For installation in the N-pole of the circuit-breaker	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
Type			Order No.	Price per PU			kg
Mounting adapters for auxiliary and alarm switch combinations							
VL160X, VL160, VL250, VL400 (3VL1 to 3VL4)	Up to 3 HS ¹⁾ 2 HS + 1 AS ¹⁾²⁾	A	3VL9 400-2AH00	1	1 unit	113	0.009
			--				
VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8)	Up to 4 HS 2 HS + 2 AS	A	3VL9 816-2AL00	1	1 unit	113	0.022
			--				
Mounting adapters for auxiliary and alarm switch combinations							
VL160X, VL160, VL250, VL400 (3VL1 to 3VL4)	Up to 3 HS ¹⁾ 2 HS + 1 AS ¹⁾²⁾	A	3VL9 400-2AH00	1	1 unit	113	0.009
		A	3VL9 400-2AJ10	1	1 unit	113	0.001
VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8)	Up to 4 HS 2 HS + 2 AS	A	3VL9 816-2AL00	1	1 unit	113	0.022
		A	3VL9 816-2AN10	1	1 unit	113	0.024
Mounting adapters for auxiliary and alarm switch combinations							
VL160X, VL160, VL250, VL400 (3VL1 to 3VL4) ²⁾	Up to 3 HS ¹⁾ 2 HS + 1 AS ¹⁾²⁾	A	3VL9 400-2AH00	1	1 unit	113	0.009
		A	3VL9 400-2AJ20	1	1 unit	113	0.001
VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8)	Up to 4 HS 2 HS + 2 AS	A	3VL9 816-2AL00	1	1 unit	113	0.022
			--				

1) Except for mounting in the left accessory sub-section of the SENTRON VL160X (3VL1) circuit-breakers with RCD module and SENTRON VL160, VL250 (3VL2 and 3VL3) circuit-breakers with solid-state overcurrent trip unit.
On the right-hand side it is only possible to install an auxiliary trip unit or an auxiliary/alarm switch combination (see also Catalog LV 1T "Design", "Auxiliary Trip Units and Auxiliary Switches").
For this application only, a 3SB adapter can be installed in the N pole (for 4-pole circuit-breakers only).

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

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

For auxiliary/alarm switches	DT	Circuit-breaker Type VL160X to VL1600 (3VL1 to 3VL8)	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
		Order No.				
		Price per PU				

Switch blocks for auxiliary and alarm switch combinations

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

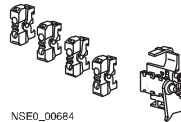
For auxiliary switch or alarm switch combinations not included in the kits provided as standard, the mounting adapters specified can be ordered separately together with the required switching elements:

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

Four 3SB3 auxiliary switching elements and one mounting adapter (right), suitable for VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8) circuit-breakers .



NSE0_00664

For retrofitting/for possible complements, see Catalog LV 1 T "Design", "Auxiliary Trip Units and Auxiliary Switches"

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts


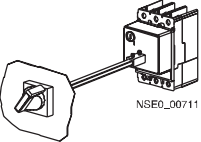
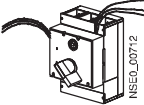
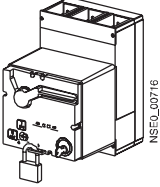
For VL400 (3VL4)							For VL630 to VL800 (3VL5 to 3VL6)						
DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 400-3HA00		1	1 unit	113	0.725	A	3VL9 600-3HA00		1	1 unit	113	0.834
A	3VL9 400-3HC00		1	1 unit	113	0.725	A	3VL9 600-3HC00		1	1 unit	113	0.834
B	3VL9 400-3HF04		1	1 unit	113	0.630	B	3VL9 600-3HF04		1	1 unit	113	1.837
B	3VL9 400-3HG04		1	1 unit	113	0.630	B	3VL9 600-3HG04		1	1 unit	113	1.837
A	3VL9 400-3AS10		1	1 unit	113	0.080	A	3VL9 600-3AS10		1	1 unit	113	0.080
A	3VL9 400-3AT10		1	1 unit	113	0.130	A	3VL9 600-3AT10		1	1 unit	113	0.130
A	3VL9 400-3AU10		1	1 unit	113	0.080	A	3VL9 600-3AU10		1	1 unit	113	0.080
A	3VL9 400-3AW10		1	1 unit	113	0.130	A	3VL9 600-3AW10		1	1 unit	113	0.130
A	3VL9 400-3HP00		1	1 unit	113	0.379	A	3VL9 600-3HP00		1	1 unit	113	0.437
A	3VL9 400-3HE00		1	1 unit	113	0.267	A	3VL9 600-3HE00		1	1 unit	113	0.755
A	3VL9 400-3MJ00		1	1 unit	113	3.910	A	3VL9 600-3MJ00		1	1 unit	113	4.800
A	3VL9 400-3ML00		1	1 unit	113	3.910	A	3VL9 600-3ML00		1	1 unit	113	4.800
A	3VL9 400-3MS00		1	1 unit	113	3.910	A	3VL9 600-3MS00		1	1 unit	113	4.800
A	3VL9 400-3MN00		1	1 unit	113	3.910	A	3VL9 600-3MN00		1	1 unit	113	4.800
A	3VL9 400-3MQ00		1	1 unit	113	3.910	A	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

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

		For VL1250 to VL1600 (3VL7 to 3VL8)						
DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		
3- or 4-pole								
Operating mechanisms								
	Front-operated rotary operating mechanisms for direct mounting on the circuit-breaker, without early-make auxiliary switch, degree of protection IP30 ¹⁾ , black, max. 3 padlocks							
	A	3VL9 800-3HA00		1	1 unit	113	2.831	
	EMERGENCY-STOP versions Red knob, yellow indicator plate							
A	3VL9 800-3HC00		1	1 unit	113	2.831		
Safety locks for installation by the customer, see pages 16/58 to 16/63.								
	Door-coupling rotary operating mechanisms, complete, installation in doors and covers Degree of protection IP65, including black knob with masking frame, indicator plate, removable door coupling, 300 mm extension shaft and front-operated rotary operating mechanism for the respective circuit-breaker, lockable with up to 3 padlocks, with door interlocking							
	B	3VL9 800-3HF04		1	1 unit	113	3.257	
	EMERGENCY-STOP versions Red knob, yellow indicator plate, without leading auxiliary switch							
B	3VL9 800-3HG04		1	1 unit	113	3.257		
Safety locks for installation by the customer, see pages 16/58 to 16/63.								
	Leading auxiliary switches for installation in a front-operated rotary 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	
	A	3VL9 800-3AT10		1	1 unit	113	0.130	
"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		
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 end, without selector switch								
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						
	--	24	A	3VL9 800-3MJ00	1	1 unit	113	6.800
	42-48	42-48	A	3VL9 800-3ML00	1	1 unit	113	6.800
	60	60	A	3VL9 800-3MS00	1	1 unit	113	6.800
	110-127	110-127	A	3VL9 800-3MN00	1	1 unit	113	6.800
220-250	220-250	A	3VL9 800-3MQ00	1	1 unit	113	6.800	
Toggle lever extensions								
A	3VL9 800-3HN00		1	1 unit	113	0.234		

For more accessories and components for door-coupling rotary operating mechanisms, see Chapter "Distribution with SIVACON", "Components for 8UC Distribution Systems".

- 1) IP40 with additional masking frame mounted on the door cut-out.
- 2) For safety lock as an installation kit for retrofitting, see pages 16/58 to 16/63.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

		For VL160X (3VL1)						
DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		
3- or 4-pole								
Plug-in versions/withdrawable versions								
Plug-in base installation kits								
Complete with base plate, base, blade contacts for circuit-breakers, terminal covers for degree of protection IP20, fixing screws, trip pin								
Rear-accessible terminals								
	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								
	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								
	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 installation kits								
Upgrade of the plug-in base installation kit to								
	Withdrawable version including side walls and racking mechanism.	3-pole	--	--	--	--	--	
		3-pole with RCD	--	--	--	--	--	
		4-pole	--	--	--	--	--	
		4-pole with RCD	--	--	--	--	--	
Withdrawable versions								
Same as plug-in base installation kit, with additional side walls and racking mechanism								
Rear-accessible terminals								
	3-pole	--	--	--	--	--	--	
	3-pole with RCD module	--	--	--	--	--	--	
	4-pole	--	--	--	--	--	--	
	4-pole with RCD module	--	--	--	--	--	--	
Front-accessible terminals								
	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								
	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-breaker	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 connection)								
	8 connections	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	

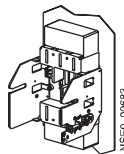
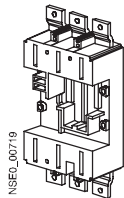
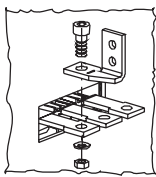
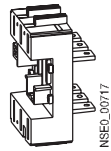
1) It is recommended to use a maximum of 2 auxiliary circuit plug-in systems per circuit-breaker (16 positions).

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts



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

3- or 4-pole

Plug-in versions/withdrawable versions

Plug-in base installation kits

Complete with base plate, base, blade contacts for circuit-breakers, terminal covers for degree of protection IP20, fixing screws, trip pin

Rear-accessible terminals

3-pole	A	3VL9 200-4PA30	1	1 unit	113	2.170
3-pole with RCD module	A	3VL9 200-4PB30	1	1 unit	113	2.460
4-pole	A	3VL9 200-4PA40	1	1 unit	113	2.850
4-pole with RCD module	A	3VL9 200-4PB40	1	1 unit	113	3.200

90° angle connecting adapters

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

3-pole	A	3VL9 200-4PC30	1	1 unit	113	1.900
3-pole with RCD module	A	3VL9 200-4PD30	1	1 unit	113	2.260
4-pole	A	3VL9 200-4PC40	1	1 unit	113	2.620
4-pole with RCD module	A	3VL9 200-4PD40	1	1 unit	113	2.960

Withdrawable version installation kits

Upgrade of the plug-in base installation kit to

Withdrawable version including side walls and racking mechanism.	3-pole	A	3VL9 300-4WF30	1	1 unit	113	1.260
	3-pole with RCD	A	3VL9 300-4WG30	1	1 unit	113	2.031
	4-pole	A	3VL9 300-4WF40	1	1 unit	113	1.280
	4-pole with RCD	A	3VL9 300-4WG40	1	1 unit	113	2.050

Withdrawable versions

Same as plug-in base installation kit, with additional side walls and racking mechanism

Rear-accessible terminals

3-pole	A	3VL9 200-4WA30	1	1 unit	113	3.430
3-pole with RCD module	A	3VL9 200-4WB30	1	1 unit	113	4.000
4-pole	A	3VL9 200-4WA40	1	1 unit	113	4.130
4-pole with RCD module	A	3VL9 200-4WB40	1	1 unit	113	4.940

Front-accessible terminals

3-pole	A	3VL9 200-4WC30	1	1 unit	113	3.240
3-pole with RCD module	A	3VL9 200-4WD30	1	1 unit	113	3.810
4-pole	A	3VL9 200-4WC40	1	1 unit	113	3.940
4-pole with RCD module	A	3VL9 200-4WD40	1	1 unit	113	4.710

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 200-4PS30	1	1 unit	113	0.248
1 set = 8 units	4-pole	A	3VL9 200-4PS40	1	1 unit	113	0.330

Trip pins and springs

As replacement for plug-in/withdrawable circuit-breaker	A	3VL9 300-4PF00	1	1 unit	113	0.013
---	---	-----------------------	---	--------	-----	-------

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 connection)

8 connections	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 positions).
- 2) For 3-pole applications please use 4-pole withdrawable version with 4-pole RCD module.
- 3) It is recommended to use a maximum of 3 auxiliary circuit plug-in systems per circuit-breaker (24 positions).

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

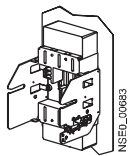
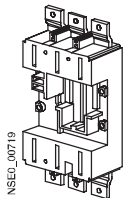
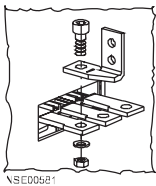
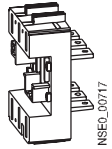
For VL250 (3VL3)							For VL400 (3VL4)						
DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 300-4PA30		1	1 unit	113	2.280	A	3VL9 400-4PA30		1	1 unit	113	5.869
A	3VL9 300-4PB30		1	1 unit	113	2.570	A	3VL9 400-4PB30		1	1 unit	113	8.008
A	3VL9 300-4PA40		1	1 unit	113	3.000	A	3VL9 400-4PA40		1	1 unit	113	10.100
A	3VL9 300-4PB40		1	1 unit	113	3.330	A	3VL9 400-4PB40		1	1 unit	113	10.100
A	3VL9 300-4PE30		1	1 unit	113	0.375		--					
A	3VL9 300-4PE40		1	1 unit	113	0.500		--					
A	3VL9 300-4PC30		1	1 unit	113	2.090	A	3VL9 400-4PC30		1	1 unit	113	5.424
A	3VL9 300-4PD30		1	1 unit	113	2.370	A	3VL9 400-4PD30		1	1 unit	113	7.408
A	3VL9 300-4PC40		1	1 unit	113	2.770	A	3VL9 400-4PC40		1	1 unit	113	9.500
A	3VL9 300-4PD40		1	1 unit	113	3.070	A	3VL9 400-4PD40		1	1 unit	113	9.500
A	3VL9 300-4WF30		1	1 unit	113	1.260	A	3VL9 400-4WF30		1	1 unit	113	3.400
A	3VL9 300-4WG30		1	1 unit	113	2.031	A	3VL9 400-4WG30		1	1 unit	113	3.600
A	3VL9 300-4WF40		1	1 unit	113	1.280	A	3VL9 400-4WF40		1	1 unit	113	3.800
A	3VL9 300-4WG40		1	1 unit	113	2.050	A	3VL9 400-4WG40		1	1 unit	113	3.800
A	3VL9 300-4WA30		1	1 unit	113	3.540	A	3VL9 400-4WA30		1	1 unit	113	8.769
A	3VL9 300-4WB30		1	1 unit	113	4.601	A	3VL9 400-4WB30		1	1 unit	113	11.549
A	3VL9 300-4WA40		1	1 unit	113	4.280	A	3VL9 400-4WA40		1	1 unit	113	13.200
A	3VL9 300-4WB40		1	1 unit	113	5.361	A	3VL9 400-4WB40		1	1 unit	113	13.200
A	3VL9 300-4WC30		1	1 unit	113	3.350	A	3VL9 400-4WC30		1	1 unit	113	8.324
A	3VL9 300-4WD30		1	1 unit	113	4.398	A	3VL9 400-4WD30		1	1 unit	113	10.949
A	3VL9 300-4WC40		1	1 unit	113	4.050	A	3VL9 400-4WC40		1	1 unit	113	12.600
A	3VL9 300-4WD40		1	1 unit	113	5.158	A	3VL9 400-4WD40		1	1 unit	113	12.600
A	3VL9 300-4PS30		1	1 unit	113	0.342	A	3VL9 400-4PS30		1	1 unit	113	0.720
A	3VL9 300-4PS40		1	1 unit	113	0.436	A	3VL9 400-4PS40		1	1 unit	113	0.960
A	3VL9 300-4PF00		1	1 unit	113	0.013	A	3VL9 400-4PF00		1	1 unit	113	0.015
A	¹⁾ 3VL9 300-4PJ00		1	1 unit	113	0.134	A	³⁾ 3VL9 400-4PJ00		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

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts



		For VL630 (3VL5)				
DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
3- or 4-pole						
Plug-in versions/withdrawable versions						
Plug-in base installation kits Complete with base plate, base, blade contacts for circuit-breakers, terminal covers for degree of protection IP20, fixing screws, trip pin						
Rear-accessible terminals						
	3-pole	A	3VL9 500-4PA30	1	1 unit	113 8.200
	3-pole with RCD module		--			
	4-pole	A	3VL9 500-4PA40	1	1 unit	113 11.200
	4-pole with RCD module		--			
90° angle connecting adapters						
	For rear connection, 3-pole		--			
	For rear connection, 4-pole		--			
Front-accessible terminals						
	3-pole	A	3VL9 500-4PC30	1	1 unit	113 7.400
	3-pole with RCD module		--			
	4-pole	A	3VL9 500-4PC40	1	1 unit	113 9.600
	4-pole with RCD module		--			
Withdrawable version installation kits Upgrade of the plug-in base installation kit to						
	Withdrawable version including side walls and racking mechanism.	A	3VL9 500-4WF30	1	1 unit	113 3.600
	3-pole		--			
	3-pole with RCD	A	3VL9 500-4WF40	1	1 unit	113 3.800
	4-pole		--			
	4-pole with RCD		--			
Withdrawable versions Same as plug-in base installation kit, with additional side walls and racking mechanism						
Rear-accessible terminals¹⁾						
	3-pole	A	3VL9 500-4WA30	1	1 unit	113 11.000
	3-pole with RCD module		--			
	4-pole	A	3VL9 500-4WA40	1	1 unit	113 15.000
	4-pole with RCD module		--			
Front-accessible terminals						
	3-pole	A	3VL9 500-4WC30	1	1 unit	113 10.300
	3-pole with RCD module		--			
	4-pole	A	3VL9 500-4WC40	1	1 unit	113 13.400
	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 500-4PS30	1	1 unit	113 1.260
	1 set = 8 units 4-pole	A	3VL9 500-4PS40	1	1 unit	113 1.680
Trip pin and springs As replacement for plug-in/withdrawable circuit-breaker						
		A	3VL9 500-4PF00	1	1 unit	113 0.018
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 connection)						
	8 connecting positions	A	3VL9 600-4PJ00	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 positions).

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

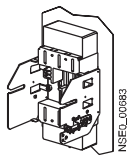
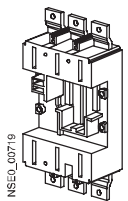
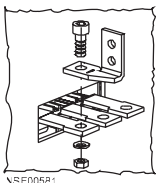
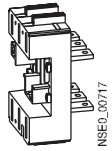
DT	For VL800 (3VL6)						DT	For VL1250 (3VL7)						
	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg		Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	
	--													
	--													
	--													
	--													
	--													
	--													
	--													
A	3VL9 600-4WA30		1	1 unit	113	40.104	A	3VL9 800-4WA30		1	1 unit	113	39.996	
A	3VL9 600-4WA40		1	1 unit	113	48.060	A	3VL9 800-4WA40		1	1 unit	113	47.148	
A	3VL9 600-4WC30		1	1 unit	113	40.716	A	3VL9 800-4WC30		1	1 unit	113	40.608	
A	3VL9 600-4WC40		1	1 unit	113	48.876	A	3VL9 800-4WC40		1	1 unit	113	47.964	
A	3VL9 600-4PS30		1	1 unit	113	1.500	A	3VL9 800-4PS30		1	1 unit	113	2.000	
A	3VL9 600-4PS40		1	1 unit	113	2.000	A	3VL9 800-4PS40		1	1 unit	113	2.660	
A	3VL9 600-4PF00		1	1 unit	113	0.025	A	3VL9 800-4PF00		1	1 unit	113	0.030	
A	²⁾ 3VL9 600-4PJ00		1	1 unit	113	0.144	A	²⁾ 3VL9 800-4PJ00		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	

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts



		For VL1600 (3VL8)				
DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
3- or 4-pole						
Plug-in versions/withdrawable versions						
Plug-in base installation kits						
Complete with base plate, base, blade contacts for circuit-breakers, terminal covers for degree of protection IP20, fixing screws, trip pin						
Rear-accessible 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 installation kits						
Upgrade of the plug-in base installation kit to						
	Withdrawable version including side walls and racking mechanism.					
	3-pole	--				
	3-pole with RCD	--				
	4-pole	--				
	4-pole with RCD	--				
Withdrawable versions						
Same as plug-in base installation kit, with additional side walls and racking mechanism						
Rear-accessible 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-breaker	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 connection)						
	8 connecting positions	A	3VL9 800-4PJ00	1	1 unit	113 0.289
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 positions).

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

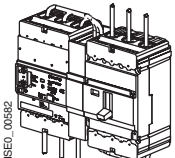
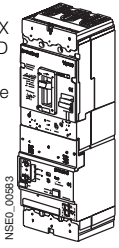
Accessories/spare parts

RCD module

Circuit-breakers for system protection, only for TM, starters, disconnectors	Rated current I_n	Residual currents I adjustable	Delay t_d adjustable	Rated operational voltage U_e	DT	3-pole circuit-breaker	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
3-pole	A	A	s	V AC		Order No.	Price per PU			kg
VL160X (3VL1)		0.03	Instantaneous							
Bottom mounting ¹⁾³⁾	160	0.10	0.06	127-480	A	3VL9 112-5GA30		1	1 unit	113
Mounting kit for left side, without RCD ¹⁾²⁾³⁾		0.30	0.10		A	3VL9 112-5GB30		1	1 unit	113
		0.50	0.25							
VL160 (3VL2)	160	1.00	0.50	127-480	A	3VL9 216-5GC30		1	1 unit	113
		3.00	1.00	230-690	A	3VL9 216-5GD30		1	1 unit	113
VL250 (3VL3)	250			127-480	A	3VL9 325-5GE30		1	1 unit	113
				230-690	A	3VL9 325-5GF30		1	1 unit	113
VL400 (3VL4)	400			127-480	--	--				
				230-690	--	--				

Circuit-breakers for system protection, only for TM, starters, disconnectors	Rated current I_n	Residual currents I adjustable	Delay t_d adjustable	Rated operational voltage U_e	DT	4-pole circuit-breaker	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
4-pole	A	A	s	V AC		Order No.	Price per PU			kg
VL160X (3VL1)		0.03	Instantaneous							
Bottom mounting ¹⁾³⁾	160	0.10	0.06	127-480	A	3VL9 112-5GA40		1	1 unit	113
Mounting kit for left side, without RCD ¹⁾²⁾³⁾		0.30	0.10		A	3VL9 112-5GB40		1	1 unit	113
		0.50	0.25							
VL160 (3VL2)	160	1.00	0.50	127-480	A	3VL9 216-5GC40		1	1 unit	113
		3.00	1.00	230-690	A	3VL9 216-5GD40		1	1 unit	113
VL250 (3VL3)	250			127-480	A	3VL9 325-5GE40		1	1 unit	113
				230-690	A	3VL9 325-5GF40		1	1 unit	113
VL400 (3VL4)	400			127-480	A	3VL9 440-5GG40		1	1 unit	113
				230-690	A	3VL9 440-5GH40		1	1 unit	113

Circuit-breakers with RCD module

Circuit-breakers for system protection, only for TM, starters, disconnectors	Rated current I_n	Residual currents I adjustable	Delay t_d adjustable	Rated operational voltage U_e	3-pole circuit-breaker	4-pole circuit-breaker
	A	A	s	V AC	Order No. with "-Z" Additional price 3VL.....D..... and additional order code □□□	Order No. with "-Z" Additional price 3VL.....E..... and additional order code □□□
SENTRON VL160X with RCD module mounted laterally on the circuit-breaker (on left side)						
						
SENTRON VL160X to VL400 with RCD module mounted below the circuit-breaker						
						
3- and 4-pole	A	A	s	V AC		
VL160X (3VL1)		0.03	Instantaneous			
(Bottom mounting)	160	0.10	0.06	127-480	A 0 1 ¹⁾³⁾	A 0 1 ¹⁾³⁾
		0.30	0.10			
		0.50	0.25			
VL160 (3VL2)	160	1.00	0.50	127-480	A 0 1	A 0 1
		3.00	1.00	230-690	A 0 2	A 0 2
VL250 (3VL3)	250			127-480	A 0 1	A 0 1
				230-690	A 0 2	A 0 2
VL400 (3VL4)	400			127-480	--	A 0 1
				230-690	--	A 0 2

1) Only the right-hand accessory sub-section and the neutral conductor (4-pole) accessory sub-section can be used for the installation of accessories, see Catalog LV 1T "Design", "Auxiliary Trip Units and Auxiliary Switches".



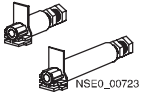
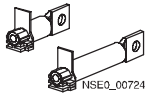

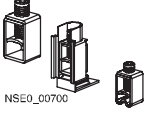

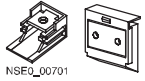



2) The installation kit consists of the mounting plate, wiring and covers for circuit-breakers and RCD module (for 75 mm standard mounting rail). The RCD module (3VL9 112-5GA30/-5GA40) must be ordered separately.
3) VL160X (3VL1) + RCD module cannot be combined with motorized operating mechanism, front operating mechanism, door-coupling rotary operating mechanism and locking device for toggle levers.

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

		For VL160X (3VL1)						
		DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
3- or 4-pole								
Connection parts for fixed-mounted circuit-breakers								
Front connecting bars¹⁾								
Phase barriers included.								
Standard								
	1 set = 3 units	3-pole	A	3VL9 200-4EC30		1	1 unit	113 0.198
	1 set = 4 units	4-pole	A	3VL9 200-4EC40		1	1 unit	113 0.264
For increased pole spacing								
	1 set = 3 units	3-pole	A	3VL9 200-4ED30		1	1 unit	113 0.189
	1 set = 4 units	4-pole	A	3VL9 200-4ED40		1	1 unit	113 0.252
Rear-mounting 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
	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-type connector (1 unit)		A	3VL9 100-4RK00		1	1 unit	113 0.104
	Long flat-type connector (1 unit)		A	3VL9 100-4RL00		1	1 unit	113 0.200
	Flat connector kit (2 short + 1 long)	3-pole	A	3VL9 100-4RM30		1	1 unit	113 0.408
	Flat connector kit (2 short + 2 long)	4-pole	A	3VL9 100-4RN40		1	1 unit	113 0.608
	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 Catalog LV 1T "Design", "Main Connections, Basic Equipment and Options".								
	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
Round cable terminals								
Only for cables (Al or Cu)								
Aluminum terminal (tinned)								
	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
Terminals with screw connections – metric thread								
With insulator (for rear) for use with busbars and cable lugs, see Catalog LV 1T, "Design", "Main Connections, Basic Equipment and Options".								
	1 set = 3 units		A	3VL9 100-4TA30		1	1 unit	113 0.055
	1 set = 4 units		A	3VL9 100-4TA40		1	1 unit	113 0.070
Connection covers (terminal covers) for circuit-breakers								
Degree of protection IP30 for main terminals								
1 set = 2 units								
	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
	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 Catalog LV 1T, "Design", "Main Connections, Basic Equipment and Options".

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

For VL160 (3VL2)							For VL250 (3VL3)						
DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 200-4EC30		1	1 unit	113	0.198	A	3VL9 300-4EC30		1	1 unit	113	0.256
A	3VL9 200-4EC40		1	1 unit	113	0.264	A	3VL9 300-4EC40		1	1 unit	113	0.345
A	3VL9 200-4ED30		1	1 unit	113	0.189	A	3VL9 300-4ED30		1	1 unit	113	0.256
A	3VL9 200-4ED40		1	1 unit	113	0.252	A	3VL9 300-4ED40		1	1 unit	113	0.345
A	3VL9 200-4RA00		1	1 unit	113	0.126	A	3VL9 300-4RA00		1	1 unit	113	0.126
A	3VL9 200-4RB00		1	1 unit	113	0.229	A	3VL9 300-4RB00		1	1 unit	113	0.229
A	3VL9 200-4RC30		1	1 unit	113	0.481	A	3VL9 300-4RC30		1	1 unit	113	0.481
A	3VL9 200-4RF40		1	1 unit	113	0.711	A	3VL9 300-4RF40		1	1 unit	113	0.711
A	3VL9 200-4RK00		1	1 unit	113	0.104	A	3VL9 300-4RK00		1	1 unit	113	0.104
A	3VL9 200-4RL00		1	1 unit	113	0.200	A	3VL9 300-4RL00		1	1 unit	113	0.200
A	3VL9 200-4RM30		1	1 unit	113	0.408	A	3VL9 300-4RM30		1	1 unit	113	0.408
A	3VL9 200-4RN40		1	1 unit	113	0.608	A	3VL9 300-4RN40		1	1 unit	113	0.608
	--							--					
	--							--					
	--							--					
A	3VL9 200-4TC30		1	1 unit	113	0.084	A	3VL9 300-4TC30		1	1 unit	113	0.192
A	3VL9 200-4TC40		1	1 unit	113	0.112	A	3VL9 300-4TC40		1	1 unit	113	0.256
A	3VL9 200-4TD30		1	1 unit	113	0.040	A	3VL9 300-4TD30		1	1 unit	113	0.159
A	3VL9 200-4TD40		1	1 unit	113	0.055	A	3VL9 300-4TD40		1	1 unit	113	0.212
A	3VL9 200-4TA30		1	1 unit	113	0.055	A	3VL9 300-4TA30		1	1 unit	113	0.090
A	3VL9 200-4TA40		1	1 unit	113	0.070	A	3VL9 300-4TA40		1	1 unit	113	0.120
A	3VL9 300-8CA30		1	1 unit	113	0.204	A	3VL9 300-8CA30		1	1 unit	113	0.204
A	3VL9 300-8CB30		1	1 unit	113	0.053	A	3VL9 300-8CB30		1	1 unit	113	0.053
A	3VL9 300-8CA40		1	1 unit	113	0.264	A	3VL9 300-8CA40		1	1 unit	113	0.264
A	3VL9 300-8CB40		1	1 unit	113	0.071	A	3VL9 300-8CB40		1	1 unit	113	0.071
A	3VL9 300-8CE00		1	1 unit	113	0.023	A	3VL9 300-8CE00		1	1 unit	113	0.023

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

		For VL400 (3VL4)						
		DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
3- or 4-pole								
Connection parts for fixed-mounted circuit-breakers								
Front connecting bars								
Phase barriers included.								
Standard								
1 set = 3 units		3-pole	A	3VL9 400-4EC30	1	1 unit	113	0.889
1 set = 4 units		4-pole	A	3VL9 400-4EC40	1	1 unit	113	1.193
For increased pole spacing								
1 set = 3 units		3-pole	A	3VL9 400-4ED30	1	1 unit	113	0.916
1 set = 4 units		4-pole	A	3VL9 400-4ED40	1	1 unit	113	1.229
Rear-mounting terminals								
Short terminal (1 unit)			A	3VL9 400-4RA00	1	1 unit	113	0.219
Long terminal (1 unit)			A	3VL9 400-4RB00	1	1 unit	113	0.377
Terminal kit (2 short + 1 long) 3-pole			A	3VL9 400-4RC30	1	1 unit	113	0.816
Terminal kit (2 short + 2 long) 4-pole			A	3VL9 400-4RF40	1	1 unit	113	1.190
Short flat-type connector (1 unit)			A	3VL9 400-4RK00	1	1 unit	113	0.340
Long flat-type connector (1 unit)			A	3VL9 400-4RL00	1	1 unit	113	0.502
Flat connector kit (2 short + 1 long) 3-pole			A	3VL9 400-4RM30	1	1 unit	113	1.190
Flat connector kit (2 short + 2 long) 4-pole			A	3VL9 400-4RN40	1	1 unit	113	1.690
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 Catalog LV 1T "Design", "Main Connections, Basic Equipment and Options".								
1 set = 3 units			A	3VL9 400-4TC30	1	1 unit	113	0.423
1 set = 4 units			A	3VL9 400-4TC40	1	1 unit	113	0.573
Round cable terminals								
Only for cables (Al or Cu)								
Aluminum terminal (tinned)								
1 set = 3 units			A	3VL9 400-4TD30	1	1 unit	113	0.260
1 set = 4 units			A	3VL9 400-4TD40	1	1 unit	113	0.340
Multiple feed-in terminals								
3 units			A	3VL9 400-4TF30	1	1 unit	113	0.420
4 units			A	3VL9 400-4TF40	1	1 unit	113	0.560
Connecting terminal plates¹⁾								
Connection for flexible flat copper busbar with auxiliary conductor connection 0.5 - 4mm ² (extended terminal covers or phase barriers required)								
1 set = 3 units				--				
1 set = 4 units				--				
Terminals with screw connections – metric thread								
With insulator (for rear) for use with busbars and cable lugs, see Catalog LV 1T, "Design", "Main Connections, Basic Equipment and Options".								
1 set = 3 units			A	3VL9 400-4TA30	1	1 unit	113	0.112
1 set = 4 units			A	3VL9 400-4TA40	1	1 unit	113	0.149
Connection covers (terminal covers) for circuit-breakers								
Degree of protection IP30 for main terminals								
1 set = 2 units								
Extended		3-pole	A	3VL9 400-8CA30	1	1 unit	113	0.450
Standard		3-pole	A	3VL9 400-8CB30	1	1 unit	113	0.100
Extended		4-pole	A	3VL9 400-8CA40	1	1 unit	113	0.594
Standard		4-pole	A	3VL9 400-8CB40	1	1 unit	113	0.164
Phase barriers for circuit-breakers, fixed-mounted, plug-in or withdrawable versions								
1 set = 2 units			A	3VL9 600-8CE00	1	1 unit	113	0.042

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

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts



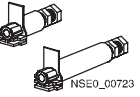
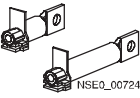

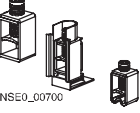
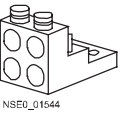
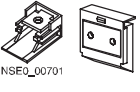



For VL630 (3VL5)							For VL800 (3VL6)						
DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 500-4EC30		1	1 unit	113	1.028	A	3VL9 600-4EC30		1	1 unit	113	1.602
A	3VL9 500-4EC40		1	1 unit	113	1.371	A	3VL9 600-4EC40		1	1 unit	113	2.136
A	3VL9 500-4ED30		1	1 unit	113	1.059	A	3VL9 600-4ED30		1	1 unit	113	1.613
A	3VL9 500-4ED40		1	1 unit	113	1.412	A	3VL9 600-4ED40		1	1 unit	113	2.154
	--							--					
	--							--					
	--							--					
	--							--					
	--							--					
	--							--					
A	3VL9 500-4RG00		1	1 unit	113	0.358	A	3VL9 600-4RG00		1	1 unit	113	1.604
A	3VL9 500-4RH30		1	1 unit	113	1.075	A	3VL9 600-4RH30		1	1 unit	113	4.812
A	3VL9 500-4RH40		1	1 unit	113	1.433	A	3VL9 600-4RH40		1	1 unit	113	6.416
	--							--					
	--							--					
	--							--					
	--							--					
A	3VL9 500-4TG30		1	1 unit	113	0.461	A	3VL9 600-4TG30		1	1 unit	113	0.918
A	3VL9 500-4TG40		1	1 unit	113	0.614	A	3VL9 600-4TG40		1	1 unit	113	1.224
	--							--					
A	3VL9 500-4TT30		1	1 unit	113	1.350		--					
A	3VL9 500-4TT40		1	1 unit	113	1.800		--					
	--							--					
	--							--					
A	3VL9 500-4TA30		1	1 unit	113	0.150	A	3VL9 600-4TA30		1	1 unit	113	0.289
A	3VL9 500-4TA40		1	1 unit	113	0.200	A	3VL9 600-4TA40		1	1 unit	113	0.386
	--							--					
	--							--					
A	3VL9 600-8CA30		1	1 unit	113	0.696	A	3VL9 600-8CA30		1	1 unit	113	0.696
A	3VL9 600-8CB30		1	1 unit	113	0.210	A	3VL9 600-8CB30		1	1 unit	113	0.210
A	3VL9 600-8CA40		1	1 unit	113	0.960	A	3VL9 600-8CA40		1	1 unit	113	0.960
A	3VL9 600-8CB40		1	1 unit	113	0.270	A	3VL9 600-8CB40		1	1 unit	113	0.270
	--							--					
A	3VL9 600-8CE00		1	1 unit	113	0.042	A	3VL9 600-8CE00		1	1 unit	113	0.042

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

		For VL1250 (3VL7)							
		DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	
3- or 4-pole									
Connection parts for fixed-mounted circuit-breakers									
Front connecting bars									
Phase barriers included.									
Standard									
	1 set = 3 units		3-pole	A	3VL9 800-4EC30	1	1 unit	113	3.313
	1 set = 4 units		4-pole	A	3VL9 800-4EC40	1	1 unit	113	4.438
For increased pole spacing									
	1 set = 3 units		3-pole	--					
	1 set = 4 units		4-pole	--					
Rear-mounting 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									
									
Short flat-type connector (1 unit)									
Long flat-type connector (1 unit)									
									
Flat connector kit (2 short + 1 long)									
3-pole									
Flat connector kit (2 short + 2 long)									
4-pole									
									
Flat connecting bar (1 unit)									
		A			3VL9 700-4RG00	1	1 unit	113	1.604
Flat connecting bar									
Set = 3 units, 3-pole									
		A			3VL9 700-4RH30	1	1 unit	113	4.812
Flat connecting bar									
Set = 4 units, 4-pole									
		A			3VL9 700-4RH40	1	1 unit	113	6.416
Box terminals									
Connection for flexible flat copper busbar or cable, see Catalog LV 1T "Design", "Main Connections, Basic Equipment and Options".									
1 set = 3 units									
1 set = 4 units									
									
Multiple feed-in terminals									
Only for cables (Al or Cu)									
Aluminum terminal (tinned)									
1 set = 3 units									
		A			3VL9 700-4TG30	1	1 unit	113	2.175
1 set = 4 units									
		A			3VL9 700-4TG40	1	1 unit	113	2.900
									
Terminals with screw connections – metric thread									
With insulator (for rear) for use with busbars and cable lugs, see Catalog LV 1T, "Design", "Main Connections, Basic Equipment and Options".									
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
									
Connection covers (terminal covers) for circuit-breakers									
Degree of protection IP30 for main terminals									
1 set = 2 units									
Extended									
		A	3-pole		3VL9 800-8CA30	1	1 unit	113	1.060
Standard									
		A	3-pole		3VL9 800-8CB30	1	1 unit	113	0.360
Extended									
		A	4-pole		3VL9 800-8CA40	1	1 unit	113	1.326
Standard									
		A	4-pole		3VL9 800-8CB40	1	1 unit	113	0.470
									
									
Phase barriers for circuit-breakers, fixed-mounted, plug-in or withdrawable versions									
1 set = 2 units									
		A			3VL9 800-8CE00	1	1 unit	113	0.130
									

1) In scope of supply of circuit-breaker.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

		For VL160X (3VL1)					
DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	
3- or 4-pole Interlocks							
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)							
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							
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 interlockings¹⁾ for the mechanical interlocking of two circuit-breakers. Interlocking module for one circuit-breaker							
Combinations of next size up/down possible (see Order No.)							
A	3VL9 300-8LA00		1	1 unit	113	0.174	
Bowden wires for Bowden wire interlockings ¹⁾							
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 installation kits Key can be removed with the circuit-breaker in the "OFF" position <u>For front-operated rotary operating mechanisms</u>							
Lock types							
Ronis							
A	3VL9 715-8HA00		1	1 unit	113	0.309	
CES							
A	3VL9 711-8HA00		1	1 unit	113	0.210	
<u>For motorized operating mechanism with spring energy store</u>							
Lock types							
Ronis							
Filli Giussani							
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 trip units, sealable to prevent access by unqualified personnel and unauthorized changes to settings (seal not included)							
Electronic trip unit							
Thermal-magnetic							
A	3VL9 300-8BM00		1	1 unit	113	0.015	
Function testers for electronic trip units for ETU/LCD ETU trip unit							
--							
Universal power supplies for function testers (50/60 Hz 120–240 V AC) Adapter unit required if the battery power for the function tester is not used							
--							
Battery power supplies for activating/configuring the LCD ETU trip unit (two 9 V blocks are required in addition)							
--							

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

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/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 300-3HL00		1	1 unit	113	0.052	A	3VL9 300-3HL00		1	1 unit	113	0.052
A	3VL9 300-8LC00		1	1 unit	113	0.215	A	3VL9 300-8LC00		1	1 unit	113	0.215
A	3VL9 300-8LD00		1	1 unit	113	0.223	A	3VL9 300-8LD00		1	1 unit	113	0.223
Combinations of next size up/down possible (see Order No.)													
A	3VL9 300-8LA00		1	1 unit	113	0.174	A	3VL9 300-8LA00		1	1 unit	113	0.174
A	3VL9 000-8LH10		1	1 unit	113	0.206	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 711-8HA00		1	1 unit	113	0.210	A	3VL9 711-8HA00		1	1 unit	113	0.210
A	3VL9 321-8HA00		1	1 unit	113	0.053	A	3VL9 321-8HA00		1	1 unit	113	0.053
A	3VL9 300-8SA40		1	1 unit	113	0.030	A	3VL9 300-8SA40		1	1 unit	113	0.030
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 300-8BM00		1	1 unit	113	0.015
A	3VL9 000-8AK00		1	1 unit	113	0.419	A	3VL9 000-8AK00		1	1 unit	113	0.419
A	3VL9 000-8AL00		1	1 unit	113	0.368	A	3VL9 000-8AL00		1	1 unit	113	0.368
A	3VL9 000-8AP00		1	1 unit	113	0.400	A	3VL9 000-8AP00		1	1 unit	113	0.400

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

		For VL400 (3VL4)					
DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	
3- or 4-pole							
Interlocks							
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)							
A	3VL9 400-3HL00		1	1 unit	113	0.122	
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)							
A	3VL9 400-8LC00		1	1 unit	113	0.386	
A	3VL9 400-8LD00		1	1 unit	113	0.436	
Interlocking modules for Bowden wire interlockings¹⁾ for the mechanical interlocking of 2 circuit-breakers. Interlocking module for one circuit-breaker							
A	3VL9 400-8LA00		1	1 unit	113	0.196	
Bowden wires for Bowden wire interlockings ¹⁾							
	Wire length 0.5 m	--					
A	3VL9 000-8LH20		1	1 unit	113	0.298	
A	3VL9 000-8LH30		1	1 unit	113	0.412	
Safety lock installation kits Key can be removed with the circuit-breaker in the "OFF" position <u>For front-operated rotary operating mechanisms</u>							
Lock types							
A	3VL9 715-8HA00		1	1 unit	113	0.309	
A	3VL9 711-8HA00		1	1 unit	113	0.210	
<u>For motorized operating mechanism with spring energy store</u>							
Lock types							
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							
A	3VL9 500-8SA40		1	1 unit	113	0.090	
Transparent covers for trip units, 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 400-8BM00		1	1 unit	113	0.015	
Function testers for electronic trip units for ETU/LCD ETU trip units							
A	3VL9 000-8AK00		1	1 unit	113	0.412	
Universal power supplies for function testers (50/60 Hz 120–240 V AC) Adapter unit required if the battery power for the function tester is not used							
A	3VL9 000-8AL00		1	1 unit	113	0.360	
Battery power supplies for activating/configuring the LCD ETU trip units (two 9 V blocks are required in addition)							
A	3VL9 000-8AP00		1	1 unit	113	0.400	

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

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts


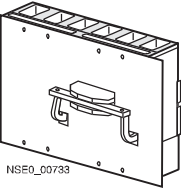
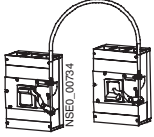
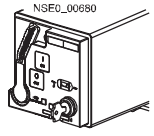
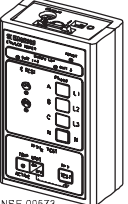

For VL630 (3VL5)							For VL800 (3VL6)						
DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 600-3HL00		1	1 unit	113	0.130	A	3VL9 600-3HL00		1	1 unit	113	0.130
A	3VL9 600-8LC00		1	1 unit	113	1.499	A	3VL9 600-8LC00		1	1 unit	113	1.499
A	3VL9 600-8LD00		1	1 unit	113	5.076	A	3VL9 600-8LD00		1	1 unit	113	5.076
Combinations of next size up/down possible (see Order No.)													
A	3VL9 600-8LA00		1	1 unit	113	0.244	A	3VL9 600-8LA00		1	1 unit	113	0.244
A	--		1	1 unit	113	0.298	A	--		1	1 unit	113	0.298
A	3VL9 000-8LH20		1	1 unit	113	0.412	A	3VL9 000-8LH20		1	1 unit	113	0.412
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 711-8HA00		1	1 unit	113	0.210	A	3VL9 711-8HA00		1	1 unit	113	0.210
A	3VL9 715-8HA00		1	1 unit	113	0.309	A	3VL9 715-8HA00		1	1 unit	113	0.309
A	--						A	--					
A	3VL9 500-8SA40		1	1 unit	113	0.090	A	3VL9 600-8SA40		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 600-8BM00		1	1 unit	113	0.015	A	--					
A	3VL9 000-8AK00		1	1 unit	113	0.419	A	3VL9 000-8AK00		1	1 unit	113	0.419
A	3VL9 000-8AL00		1	1 unit	113	0.368	A	3VL9 000-8AL00		1	1 unit	113	0.368
A	3VL9 000-8AP00		1	1 unit	113	0.400	A	3VL9 000-8AP00		1	1 unit	113	0.400

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

		For VL1250 (3VL7)					
		Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
3- or 4-pole Interlocks							
 NSE0_00732	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)	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. Fixed-mounted circuit-breakers Plug-in/withdrawable circuit-breakers	A	3VL9 800-8LC00	1	1 unit	113	2.935
 NSE0_00733	Interlocking modules for Bowden wire interlockings¹⁾ for the mechanical interlocking of 2 circuit-breakers. Interlocking module for one circuit-breaker	A	3VL9 800-8LA00	1	1 unit	113	0.283
	Bowden wires for Bowden wire interlockings ¹⁾ 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
 NSE0_00734	Safety lock installation kits Key can be removed with the circuit-breaker in the "OFF" position For front-operated rotary operating mechanisms Lock types Ronis CES	A	3VL9 715-8HA00	1	1 unit	113	0.309
	For motorized operating mechanism with spring energy store Lock types Ronis Filli Giussani	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 Set with 4 screws	A	3VL9 800-8SA40	1	1 unit	113	0.090
 NSE0_00680	Transparent covers for trip units, sealable to prevent access by unqualified personnel and unauthorized changes to settings (seal not included) Electronic trip unit Thermal-magnetic	A	3VL9 700-8BL00	1	1 unit	113	0.002
	Function testers for electronic trip units for ETU/LCD ETU trip unit	A	3VL9 000-8AK00	1	1 unit	113	0.419
 NSE-00573	Universal power supplies for function testers (50/60 Hz 120–240 V AC) Adapter unit required if the battery power for the function tester is not used	A	3VL9 000-8AL00	1	1 unit	113	0.368
	Battery power supplies for activating/configuring the LCD ETU trip units (two 9 V blocks are required in addition)	A	3VL9 000-8AP00	1	1 unit	113	0.400
 NSE0_01431a							

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

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

For VL1600 (3VL8)						
DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 800-3HL00		1	1 unit	113	0.238
A	3VL9 800-8LC00		1	1 unit	113	2.935
A	3VL9 800-8LD00		1	1 unit	113	3.825
A	3VL9 800-8LA00		1	1 unit	113	0.283
A	-- -- 3VL9 000-8LH30		1	1 unit	113	0.412
A	3VL9 715-8HA00		1	1 unit	113	0.309
A	3VL9 711-8HA00		1	1 unit	113	0.210
A	3VL9 715-8HA00 --		1	1 unit	113	0.309
A	3VL9 800-8SA40		1	1 unit	113	0.090
A	3VL9 700-8BL00 --		1	1 unit	113	0.002
A	3VL9 000-8AK00		1	1 unit	113	0.419
A	3VL9 000-8AL00		1	1 unit	113	0.368
A	3VL9 000-8AP00		1	1 unit	113	0.400

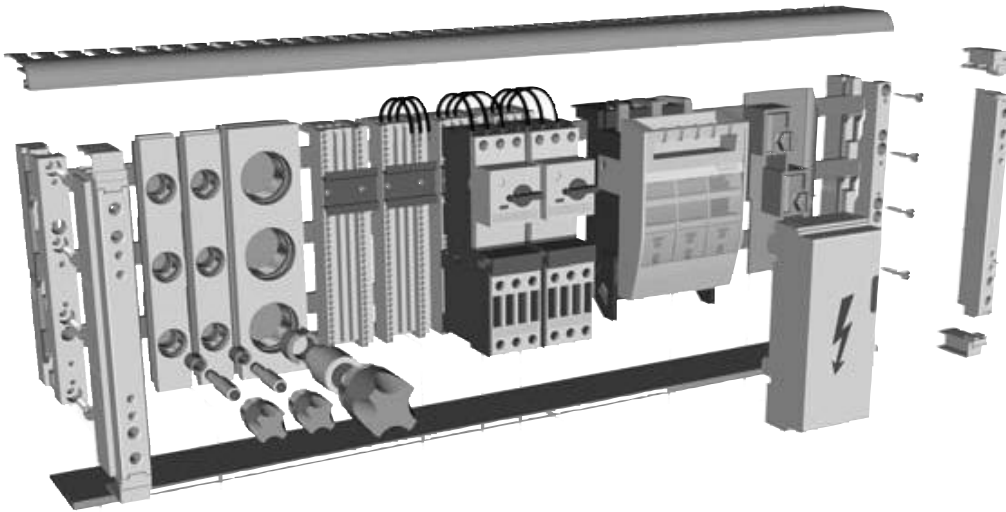
16

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts



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

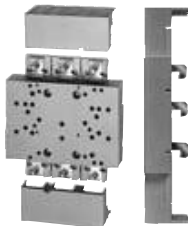
For more information, see "SIVACON Power Distribution Boards, Busway and Cubicle Systems", "Components for 8US Distribution Systems".

Busbar adapter systems

Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
40 mm system							
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-breaker	108 mm wide A		8US10 11-4SL01	1	1 unit	103 0.585
60 mm system							
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 I special profiles	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) circuit-breaker	108 mm wide A		8US12 11-4SL01	1	1 unit	103 0.597
	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		8US12 11-4SL00	1	1 unit	103 0.662
	Up to 400 A Busbar adapters , length 320 mm with threaded inserts M4, M6 and M8 for various types of controls, 3-pole without connecting leads, with M10 terminal screws at top and bottom ¹⁾	185 mm wide A		8US12 10-4AF00	1	1 unit	103 2.769
	Adapters			8US19 27-4AF01	1	1 unit	103 0.575
	Mounting plates for 8US12 10-4AF00 For VL400 (3VL4) circuit-breaker (also for VL160X+RCD, VL160, VL250 (3VL1 + RCD, 3VL2, 3VL3) circuit-breakers)						



8US12 11-4SL00



8US12 10-4AF00

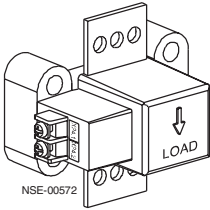
1) For degree of protection IP30, the terminal covers on pages 16/52 to 16/54 should be ordered.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

Further accessories

Type	Rated current I_n A	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	
Current transformers for neutral conductor/grounded neutral point of the transformer for ground-fault protection in 4-conductor three-phase systems¹⁾									
	VL160/3VL2	63	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.

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

Masking frame A



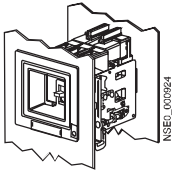
NSE-00574

Masking frame B



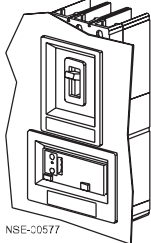
NSF-00576

Masking frame C



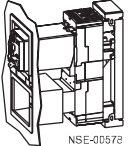
NSE0_00954

Masking frame D



NSE-00577

Masking frame E



NSE-00578

		For VL160X (3VL1)						
		DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
3- or 4-pole								
Further accessories								
Masking frames (cover frames) for door cut-outs								
A	Fixed-mounted or plug-in circuit-breaker	A	3VL9 300-8BC00		1	1 unit	113	0.038
B¹⁾	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	Withdrawable circuit-breaker with toggle lever actuation. Installation kit contains masking frame and extended escutcheon (cannot be used together with a motorized operating mechanism/rotary operating mechanism)		--					
D	Fixed-mounted circuit-breaker or plug-in circuit-breaker	A	3VL9 300-8BD00		1	1 unit	113	0.043
	RCD circuit-breaker masking frame	A	3VL9 300-8BD00		1	1 unit	113	0.043
E¹⁾	Circuit-breaker with RCD module and front-operated rotary mechanism. Installation kit contains masking frame and extended escutcheon		--					
	Circuit-breaker with RCD module and motorized operating mechanism. Installation kit contains masking frame and extended escutcheon		--					

		For VL400 (3VL4)						
		DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
3- or 4-pole								
Further accessories								
Masking frames (cover frames) for door cut-outs								
A	Fixed-mounted or plug-in circuit-breaker	A	3VL9 400-8BC00		1	1 unit	113	0.027
B¹⁾	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	Withdrawable circuit-breaker with toggle lever actuation. Installation 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	Fixed-mounted circuit-breaker or plug-in circuit-breaker	A	3VL9 400-8BC00		1	1 unit	113	0.027
	RCD circuit-breaker masking frame	A	3VL9 400-8BD00		1	1 unit	113	0.047
E¹⁾	Circuit-breaker with RCD module and front-operated rotary mechanism. Installation 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. Installation kit contains masking frame and extended escutcheon	A	3VL9 400-8BJ00		1	1 unit	113	0.395

1) For withdrawable version IP20.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

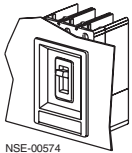

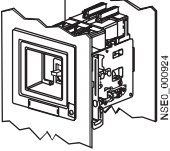
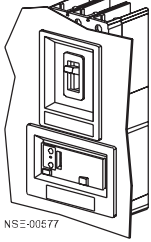
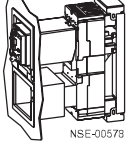
For VL160 (3VL2)							For VL250 (3VL3)						
DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	3VL9 300-8BC00		1	1 unit	113	0.038	A	3VL9 300-8BC00		1	1 unit	113	0.038
A	3VL9 300-8BG00		1	1 unit	113	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	0.043	A	3VL9 300-8BD00		1	1 unit	113	0.043
A	3VL9 300-8BD00		1	1 unit	113	0.043	A	3VL9 300-8BD00		1	1 unit	113	0.043
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
For VL630 (3VL5)							For VL800 (3VL6)						
DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. 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
--							--						
--							--						
--							--						
--							--						

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

		For VL1250 (3VL7)						
		DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
3- or 4-pole								
Further accessories								
Masking frames (cover frames) for door cut-outs								
 Masking frame A NSE-00574	A IP40	Fixed-mounted or plug-in circuit-breaker	A	3VL9 800-8BC00	1	1 unit	113	0.043
 Masking frame B NSE-00575	B¹⁾ IP40	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
 Masking frame C NSE-000924	C IP20	Withdrawable circuit-breaker with toggle lever actuation. Installation 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
 Masking frame D NSE-00577	D IP40	Fixed-mounted circuit-breaker or plug-in circuit-breaker RCD circuit-breaker masking frame RCD masking frame	-- --					
 Masking frame E NSE-00578	E¹⁾ IP40	Circuit-breaker with RCD module and front-operated rotary mechanism. Installation kit contains masking frame and extended escutcheon Circuit-breaker with RCD module and motorized operating mechanism. Installation kit contains masking frame and extended escutcheon	-- --					

1) For withdrawable version IP20.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

For VL1600 (3VL8)						
DT	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
	--					
	--					

* You can order this quantity or a multiple thereof.

3VL Molded Case Circuit-Breakers

3VL Molded Case Circuit-Breakers up to 1600 A

Accessories/spare parts

For type	Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
3- or 4-pole								
Accessories for communication								
Data transfer through COM10								
VL160 (3VL2) to VL1600 (3VL8)	COM10 (PROFIBUS module for SENTRON 3VL) Module for connecting the SENTRON 3VL to the PROFIBUS DP, including switching function and Zone Selective Interlocking functionality, including connecting cable to LCD ETU.	B	3VL9 000-8AR00		1	1 unit	113	1.038

Data transfer through SIMOCODE pro

For type	Version	DT	SIMOCODE pro basic unit required Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
VL160X (3VL1) to VL630 (3VL5)	24 V DC 110 ... 240 V AC/DC	A	3UF70 00-1AB00-0		1	1 unit	131	0.350
		A	3UF70 00-1AU00-0		1	1 unit	131	0.350

For type	DT	SIMOCODE pro current measurement module required Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
VL160 (3VL2)	A	3UF71 03-1BA00-0		1	1 unit	131	1.000
VL250 (3VL3)	A	3UF71 04-1BA00-0		1	1 unit	131	1.750
VL400 (3VL4)	A	3UF71 04-1BA00-0		1	1 unit	131	1.750
VL630 (3VL5)	A	3UF71 04-1BA00-0		1	1 unit	131	1.750

Essential accessories

Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
System manuals for SIMOCODE pro							
German	B	3UF79 70-0AA01-0		1	1 unit	131	0.760
English	B	3UF79 70-0AA00-0		1	1 unit	131	0.760
SIMOCODE ES Professional parameterization software For parameterizing over PROFIBUS or the system interface on the device, including STEP 7 Object Manager. Executes on PC/PG under Windows 2000/XP, without PC cable. Type of supply: CD ROM with single license	A	3ZS13 12-2CC10-0YAO		1	1 unit	131	0.230
PC cables For PC/PG communication with SIMOCODE pro over the interface on the device	B	3UF79 40-0AA00-0		1	1 unit	131	0.150
Connection cables In different lengths for connecting basic unit to its current measuring module							
0.1 m (flat) or	B	3UF79 31-0AA00-0		1	1 unit	131	0.010
0.5 m (flat) or	B	3UF79 32-0AA00-0		1	1 unit	131	0.020
2 m (round)	B	3UF79 33-0AA00-0		1	1 unit	131	0.100
PROFIBUS connectors For connecting the interface to PROFIBUS DP For PROFIBUS bus cables, see Catalog IK PI *Industrial Communication for Automation and Drives*	▶	6ES7 972-0BB41-0XA0		1	1 unit	250	0.052

More information

Manuals 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:

<http://www.siemens.com/lowvoltage/manuals>

SENTRON manuals for communication solutions

Free download from
<http://www.siemens.com/lowvoltage/manuals>

See also the Chapter "Air Circuit-Breakers" under "3WL Air Circuit-Breakers/Non-Automatic Air Circuit-Breakers up to 6300 A (AC)", "Accessories/Components".

3VF2 Molded Case Circuit-Breakers

3VF2 Molded Case Circuit-Breakers up to 100 A

3-pole, fixed-mounted versions


Selection and ordering data

System protection, TM

3VF2 circuit-breakers, up to 18 kA

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



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

System protection, TM

3VF2 circuit-breakers, up to 18 kA

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



Rated current I_n	Set current of the inverse-time delayed overload trip unit "L" I_r	Operating current of instantaneous short-circuit trip unit "I" I_i	DT	VF100 circuit-breakers Making/breaking capacity class A	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
A	A	A		Order No.	Price per PU			kg
With permanently set thermal overload trip units, with overload and short-circuit trip units 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.

Siemens LV 1 · 2006

16/71

16

3VF2 Molded Case Circuit-Breakers

3VF2 Molded Case Circuit-Breakers up to 100 A

Accessories/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 (required operating mechanism 8UC61, see below)	A	3VF9 223-1JA00		1	1 unit	113	0.204
Door-coupling rotary operating mechanisms							
Standard version, black	A	8UC61 12-1BD22		1	1 unit	103	0.417
EMERGENCY-STOP version, red/yellow	A	8UC61 22-3BD22		1	1 unit	103	0.402
To be ordered separately: Front rotary operating mechanism with shaft stub	A	3VF9 223-1JA00		1	1 unit	113	0.204
Connection parts, covers							
3VF22 rear terminals							
For 45 to 100 A (for cover, see below)				1	1 set	113	0.252
For 3-pole circuit-breakers 1 set = 6 units	A	3VF9 224-1LD10					
For 4-pole circuit-breakers 1 set = 8 units	A	3VF9 224-1LD20		1	1 set	113	0.333
Terminal covers							
For main terminal, cable connection				1	1 set	113	0.063
For 3-pole circuit-breakers 1 set = 2 units	A	3VF9 224-1NB10					
For 4-pole circuit-breakers 1 set = 2 units	A	3VF9 224-1NB20		1	1 set	113	0.079
Covers with cap dimension 45 mm							
For distributor structure				1	1 unit	113	0.019
For 3-pole circuit-breakers	A	3VF9 220-1CA10					
For 4-pole circuit-breakers	A	3VF9 220-1CA20		1	1 unit	113	0.021
Masking frames for door cut-outs							
For circuit-breakers 1 set = 1 units	A	3VF9 220-1AA00		1	1 set	113	0.048
Shunt releases¹⁾							
<i>Version with terminal blocks</i>							
Shunt releases							
AC 50/60 Hz	DC						
--	12 V	A	3VF9 221-1JC10	1	1 unit	113	0.282
--	24 V	A	3VF9 221-1JD10	1	1 unit	113	0.297
--	48 V	A	3VF9 221-1JH10	1	1 unit	113	0.289
--	110-125 V	A	3VF9 221-1JL10	1	1 unit	113	0.271
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							
AC 50/60 Hz	DC						
--	12 V	A	3VF9 221-1KC10	1	1 unit	113	0.298
--	24 V	A	3VF9 221-1KD10	1	1 unit	113	0.302
--	48 V	A	3VF9 221-1KH10	1	1 unit	113	0.303
--	110-125 V	A	3VF9 221-1KL10	1	1 unit	113	0.296
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 switches							
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.

* You can order this quantity or a multiple thereof.