

# Molded Case Circuit Breakers



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Ch.12

**SENTRON Transfer Control Devices for ATSE****Technical Information**

can be found at

[www.siemens.com/lowvoltage/support](http://www.siemens.com/lowvoltage/support)

under Product List:

- Technical specifications

under Entry List:

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

and at

[www.siemens.com/lowvoltage/configurators](http://www.siemens.com/lowvoltage/configurators)

- Configurators

# Molded Case Circuit Breakers

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## Introduction

### Overview



Type VL160X/3VL1 VL160/3VL2 VL250/3VL3 VL400/3VL4

#### Molded case circuit breakers

#### 3VL molded case circuit breakers up to 1600 A

Rated current $I_n$ at 50 °C ambient temperature	A	16 ... 160		50 ... 160		200 ... 250		200 ... 400		
Number of poles		3	4	3	4	3	4	3	4	
Rated operational voltage $U_e$ 50/60 Hz AC DC <sup>1)</sup>	V	690	690	690	690	690	690	690	690	
	V	500	500	600	600	600	600	600	600	
<b>Electronic releases</b>										
Thermal-magnetic		✓	✓	✓	✓	✓	✓	✓	✓	
Electronic LCD ETU/ETU		--	--	✓	✓	✓	✓	✓	✓	
Replaceable		--	--	✓	✓	✓	✓	✓	✓	
PROFIBUS module COM20		--	--	✓	✓	✓	✓	✓	✓	
<b>Dimensions</b>										
	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 acc. to IEC 60947-2

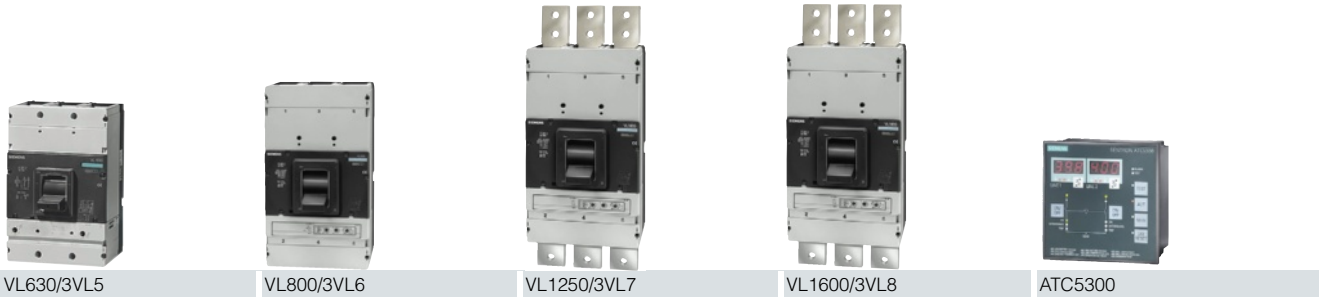
Standard switching capacity N <sup>2)</sup>	(N)				
Up to 240 V AC	kA	65/65	65/65	65/65	65/65
Up to 415 V AC	kA	55/55	55/55	55/55	55/55
Up to 440 V AC	kA	25/20	25/20	25/20	35/26
Up to 500/525 V AC	kA	18/14	25/20	25/20	25/20
Up to 690 V AC	kA	8/4 <sup>3)</sup>	12/6	12/6	15/8
Up to 250 V DC <sup>4)</sup>	kA	30/30	32/32	32/32	32/32
Up to 500 V DC <sup>4)</sup>	kA	--	--	--	--
Up to 600 V DC <sup>4)</sup>	kA	--	--	--	--
NEMA breaking capacity <sup>5)</sup>					
Up to 480 V AC	kA	25	25	25	35
Up to 600 V AC	kA	8 <sup>3)</sup>	12	12	20
High switching capacity H <sup>2)</sup>	(H)				
Up to 240 V AC	kA	100/75	100/75	100/75	100/75
Up to 415 V AC	kA	70/70	70/70	70/70	70/70
Up to 440 V AC	kA	42/32	50/38	50/38	50/38
Up to 500/525 V AC	kA	30/23	40/30	40/30	40/30
Up to 690 V AC	kA	12/6 <sup>3)</sup>	12/6	12/6	15/8
Up to 250 V DC <sup>4)</sup>	kA	30/30	32/32	32/32	32/32
Up to 500 V DC <sup>4)</sup>	kA	30/30	32/32	32/32	32/32
Up to 600 V DC <sup>4)</sup>	kA	--	--	--	--
NEMA breaking capacity <sup>5)</sup>					
Up to 480 V AC	kA	42	50	50	50
Up to 600 V AC	kA	12 <sup>3)</sup>	12	12	20
Very high switching capacity L <sup>2)</sup>	(L)				
Up to 240 V AC	kA	--	200/150	200/150	200/150
Up to 415 V AC	kA	--	100/75	100/75	100/75
Up to 440 V AC	kA	--	75/50	75/50	75/50
Up to 500/525 V AC	kA	--	50/38	50/38	50/38
Up to 690 V AC	kA	--	12/6	12/6	15/8
Up to 250 V DC <sup>4)</sup>	kA	--	32/32	32/32	32/32
Up to 500 V DC <sup>4)</sup>	kA	--	32/32	32/32	32/32
Up to 600 V DC <sup>4)</sup>	kA	--	32/32	32/32	32/32
NEMA breaking capacity <sup>5)</sup>					
Up to 480 V AC	kA	--	75	75	75
Up to 600 V AC	kA	--	12	12	20

✓ Available

-- Not available

<sup>1)</sup> Rated DC voltage applies only for circuit breakers with thermal-magnetic release.

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



VL630/3VL5

VL800/3VL6

VL1250/3VL7

VL1600/3VL8

ATC5300

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

**Transfer control devices**

**SENTRON transfer control devices for ATSE**

see "Monitoring Devices" chapter.

315 ... 630		800		1000 ... 1250		1600		
3	4	3	4	3	4	3	4	
690 600	690 600	--	690 --	690 --	690 --	690 --	690 --	
✓ ✓ ✓	✓ ✓ ✓	-- ✓ ✓	-- ✓ ✓	-- ✓ ✓	-- ✓ ✓	-- ✓ ✓	-- ✓ ✓	
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	

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

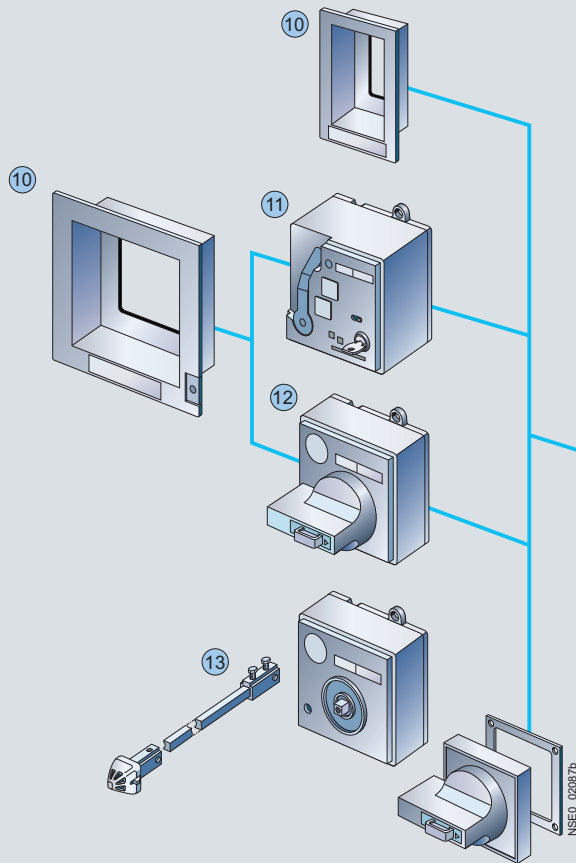
2) At 240 V AC, 415 V AC and 525 V AC max. 5 % overvoltage, at 440 V AC, 500 V AC and 690 V AC max. 10 % overvoltage, at 250/500/600 V DC max. 5 % overvoltage.  
3) Rated current  $I_n \geq 25$  A.

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

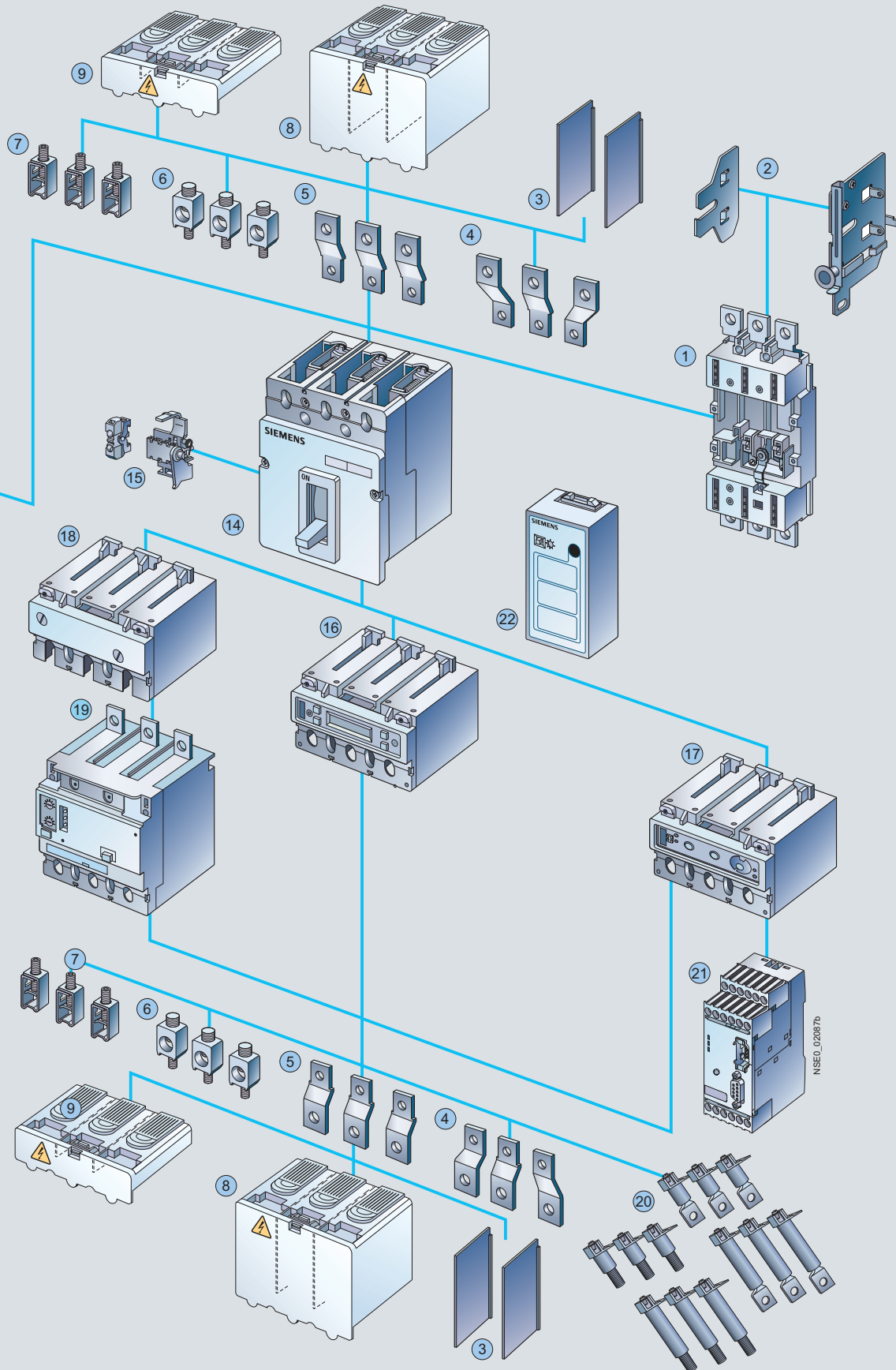
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## Introduction



- ① Withdrawable/plug-in bases (pages 2/70 to 2/75)
- ② Side panels for withdrawable version (pages 2/70 to 2/75)
- ③ Phase barriers (pages 2/77 to 2/82)
- ④ Flared front busbar connecting bars (pages 2/77 to 2/82)
- ⑤ Straight connecting bars (pages 2/77 to 2/82)
- ⑥ Circular conductor terminals for Al/Cu (pages 2/77 to 2/79)
- ⑦ Box terminals for Cu (pages 2/77 to 2/82)
- ⑧ Extended connection covers (terminal covers) (pages 2/77 to 2/82)
- ⑨ Standard connection covers (terminal covers) (pages 2/77 to 2/82)
- ⑩ Masking frames/cover frames for door cutout (pages 2/94 to 2/97)
- ⑪ Motorized operating mechanisms with stored energy mechanism (pages 2/66)
- ⑫ Front-operated rotary operating mechanisms (pages 2/62 to 2/65)
- ⑬ Door-coupling rotary operating mechanisms (pages 2/62 to 2/65)
- ⑭ SENTRON 3VL circuit breakers (pages 2/10 to 2/53)
- ⑮ Internal accessories (pages 2/55, 2/56, 2/59 to 2/61)
- ⑯ Electronic overcurrent releases LCD ETU (pages 2/20, 2/24, 2/28, 2/44 and 2/46)
- ⑰ Electronic releases with communication function (pages 2/12 to 2/28, 2/40 to 2/50)
- ⑱ Thermal/magnetic overcurrent releases (pages 2/10 to 2/12, 2/30, 2/34 to 2/38, 2/52)
- ⑲ RCD modules (page 2/76)
- ⑳ Rear terminals – flat and round (pages 2/77 to 2/82)
- ㉑ COM20 communication modules to the PROFIBUS DP (page 2/98)
- ㉒ Battery power supplies with test function for electronic releases (pages 2/84 to 2/88)



# Molded Case Circuit Breakers

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## Introduction

### Benefits

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

### Communication

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

- Fast and reliable parameterization
- Timely information and response can prevent plant stoppages
- Effective diagnostics management

Measured values are the basis for efficient load management, for drawing up power demand profiles and for assigning power to cost centers.

#### Communication:

- For molded case circuit breakers with communication function see pages 2/12 to 2/28 and 2/40 to 2/50.
- For accessories, see page 2/98.
- For more information see also chapters "Measuring Devices and E-Counters" and "Software".

### Applications

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

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

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

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

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

### Switching capacity

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

These switching capacities are indicated in the corresponding tables by the symbols shown on orange backgrounds.

### Standards and specifications

SENTRON 3VL circuit breakers comply with:

IEC 60947-1, EN 60947-1,  
IEC 60947-2, EN 60947-2.

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

Disconnecting features (main control switches) according to EN 60204.

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

Please contact Siemens for details of other standards.

The electronic releases of the circuit breakers for motor protection also fulfill IEC 60947-4-1, EN 60947-2.

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

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

### Operating conditions

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

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

### RCD modules

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

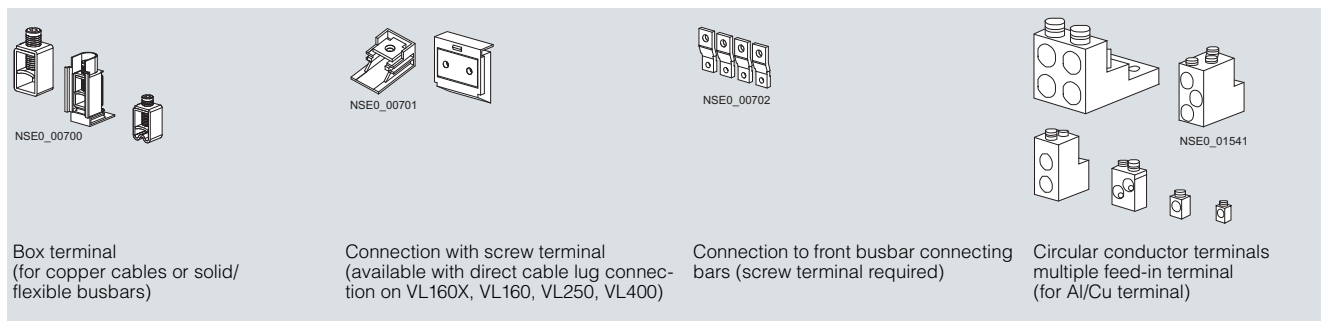
The combination of SENTRON 3VL circuit breaker and RCD module can be fed from the top or bottom.

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

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

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

### Main connections, basic equipment and options



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

Circuit breaker	Connection overview and further options				
	Box terminals	Screw terminals with metric thread for flat connectors	Circular conductor terminal/multiple feed-in terminals	Rear terminals	Front-accessible connecting bars
VL160X	<input type="checkbox"/>	<input type="checkbox"/>	x	x	x
VL160	<input type="checkbox"/>	<input type="checkbox"/>	x	x	x
VL250	<input type="checkbox"/>	<input type="checkbox"/>	x	x	x
VL400	x	○	x <sup>2)3)</sup>	x	x
VL630	x <sup>1)</sup>	○	x <sup>2)</sup>	x	x
VL800	--	○	x <sup>2)</sup>	x	x
VL1250	--	○	x <sup>2)</sup>	x	x
VL1600	--	x	--	x	○

○ Scope of supply

Optional scope of supply

x Available

-- Not available

<sup>1)</sup> Connecting terminal plate for flexible busbar; not for 690 V AC/600 V DC.

<sup>2)</sup> Multiple feed-in terminal

<sup>3)</sup> Circular conductor terminal also available.

### Conductor cross-sections

Type		VL160X 3VL1	VL160 3VL2	VL250 3VL3	VL400 3VL4	VL630 3VL5	VL800 3VL6	VL1250 3VL7	VL1600 3VL8
<b>Conductor cross-sections</b>									
Box terminals <sup>1)</sup>									
• Solid or stranded cable • Finely stranded with end sleeve • Flexible busbar	Copper only	mm <sup>2</sup>	2.5 ... 95	2.5 ... 95	25 ... 185	50 ... 300	--	--	--
		mm <sup>2</sup>	2.5 ... 50	2.5 ... 50	25 ... 120	50 ... 240	--	--	--
		mm	12 x 10	12 x 10	17 x 10	25 x 10	--	--	--
Connecting terminal plate for flexible busbar <sup>2)</sup>		mm	--	--	--	2 units 10 x 32	--	--	--
Circular conductor terminal for cable <sup>1)</sup>									
• Solid or stranded cable - With terminal cover • Finely stranded with end sleeve	Cu or Al	mm <sup>2</sup>	16 ... 70	16 ... 70	25 ... 185	50 ... 300	--	--	--
	Cu or Al	mm <sup>2</sup>	16 ... 150	16 ... 150	120 ... 240	--	--	--	--
		mm <sup>2</sup>	10 ... 50	10 ... 50	25 ... 120	50 ... 240	--	--	--
Multiple feed-in terminal <sup>1)</sup>									
• Solid or stranded cable - With terminal cover • Finely stranded with end sleeve	Cu or Al	mm <sup>2</sup>	--	--	--	2 units 50 ... 120	2 units 50 ... 240	3 units 50 ... 240	4 units 50 ... 240
	Cu or Al	mm <sup>2</sup>	--	--	--	2 units 70 ... 300	--	--	--
		mm <sup>2</sup>	--	--	--	2 units 50 ... 95	2 units 50 ... 185	3 units 50 ... 185	4 units 50 ... 185
• Direct connection of busbars • Screw for connection with screw terminal	Cu or Al	mm	17 x 7 M6	22 x 7 M6	24 x 7 M8	32 x 10 M8	40 x 10 M6	2 x 40 x 10 M8	2 x 50 x 10 M8
<b>Conductor cross-sections for control circuits with terminal connection</b>									
Screw terminals									
• Solid • Finely stranded with end sleeve		mm <sup>2</sup>	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5	0.75 ... 1.5
		mm <sup>2</sup>	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0	0.75 ... 1.0

<sup>1)</sup> Cross-sections according to IEC 60999.

<sup>2)</sup> Not for 690 V AC/600 V DC.

# Molded Case Circuit Breakers

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## Introduction

### VL160 to VL1600 electronic releases – Functional overview

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

✓ Function is available.

-- Function not available

1) Size dependent.

2) TM up to  $I_n = 630$  A.3) Motor protection up to  $I_n = 500$  A.

4) Non-adjustable.

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

**Ground-fault protection**

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

<sup>1)</sup> Size dependent.

<sup>2)</sup> TM up to  $I_n = 630$  A.

<sup>3)</sup> Motor protection up to  $I_n = 500$  A.

<sup>4)</sup> With COM20/COM21.

✓ Function is available.

-- Function not available

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

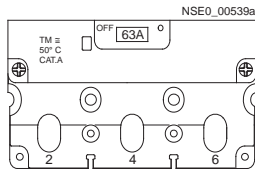
2

### 3-pole

#### Selection and ordering data

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_I$	DT **	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N See "Overview".					(N)	
	A	A	A		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.	kg
					Order No. supplement required, see page 2/57						

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



#### System protection, TM, LI function

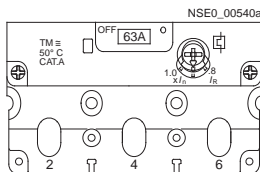
With non-adjustable thermal overcurrent releases, non-adjustable short-circuit releases

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_I$	DT **	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.	kg
VL160X/3VL1	16	16	300	B	3VL17 96-1DA3□-....		1	1 unit	113	1.900	
	20	20	300	B	3VL17 02-1DA3□-....		1	1 unit	113	1.900	
	25	25	300	B	3VL17 25-1DA3□-....		1	1 unit	113	2.000	
	32	32	300	B	3VL17 03-1DA3□-....		1	1 unit	113	2.000	
	40	40	600	B	3VL17 04-1DA3□-....		1	1 unit	113	2.000	
	50	50	600	B	3VL17 05-1DA3□-....		1	1 unit	113	2.000	
	63	63	600	B	3VL17 06-1DA3□-....		1	1 unit	113	2.000	
	80	80	1000	B	3VL17 08-1DA3□-....		1	1 unit	113	2.000	
	100	100	1000	B	3VL17 10-1DA3□-....		1	1 unit	113	2.000	
	125	125	1000	B	3VL17 12-1DA3□-....		1	1 unit	113	2.000	
	160	160	1500	B	3VL17 16-1DA3□-....		1	1 unit	113	2.000	

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

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

3  
6



#### System protection, TM, LI function

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

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_I$	DT **	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.	kg
VL160X/3VL1	20	16 ... 20	300	B	3VL17 02-1DD3□-....		1	1 unit	113	1.900	
	32	25 ... 32	300	B	3VL17 03-1DD3□-....		1	1 unit	113	2.000	
	40	32 ... 40	600	B	3VL17 04-1DD3□-....		1	1 unit	113	2.000	
	50	40 ... 50	600	B	3VL17 05-1DD3□-....		1	1 unit	113	2.000	
	63	50 ... 63	600	B	3VL17 06-1DD3□-....		1	1 unit	113	2.000	
	80	63 ... 80	1000	B	3VL17 08-1DD3□-....		1	1 unit	113	2.000	
	100	80 ... 100	1000	B	3VL17 10-1DD3□-....		1	1 unit	113	2.000	
	125	100 ... 125	1000	B	3VL17 12-1DD3□-....		1	1 unit	113	2.000	
	160	125 ... 160	1500	B	3VL17 16-1DD3□-....		1	1 unit	113	2.000	

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

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

3  
6

\*\* Delivery time class A for Order No. supplement "0AA0", see page 2/57.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

3-pole

2

DT **	$I_{cu}$ up to 70 kA at 415 V, high switching capacity H						(H)	DT **	$I_{cu}$ up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.		
	Order No. supplement required, see page 2/57					kg		Order No. supplement required, see page 2/57					kg		

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

3  
6

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

3  
6

\*\* Delivery time class A for Order No. supplement "0AA0", see page 2/57.

# Molded Case Circuit Breakers

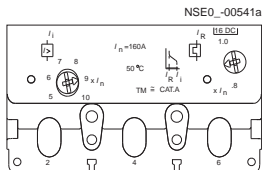
## 3VL Molded Case Circuit Breakers up to 1600 A

2

### 3-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases $I_R$	Operating current of the instantaneous short-circuit releases $I_i$	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N See "Overview".					(N)	
	A	A	A		Order No.	Basic price per PU See also page 2/32	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.	kg
					Order No. supplement required, see page 2/57						

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



#### System protection, TM, LI function

With adjustable thermal overcurrent releases, adjustable short-circuit releases

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

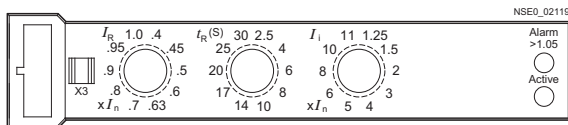
Connection type can be selected by assignment of the 12th position of the Order No.

- Connection with box terminal
- Connection with screw terminal

3  
6

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

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



#### ETU10, LI function

With adjustable overcurrent releases, adjustable short-circuit releases

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

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

- Without communication preparation
- With communication preparation
- Marine engineering-certified LRS, DNV and GL (not communication-ready)

SB  
MB  
LB

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

#### Communication:

- For accessories, see page 2/98.
- For more information see also chapters "Measuring Devices and E-Counters" and "Software".

\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

3-pole

DT $I_{cu}$ up to 70 kA at 415 V, high switching capacity H (H)						DT $I_{cu}$ up to 100 kA at 415 V, very high switching capacity L (L)					
Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
Order No. supplement required, see page 2/57						Order No. supplement required, see page 2/57					
See also page 2/32						See also page 2/32					
B	3VL27 05-2DC3□-....	1	1 unit	113	2.200	B	3VL27 05-3DC3□-....	1	1 unit	113	2.200
B	3VL27 06-2DC3□-....	1	1 unit	113	2.200	B	3VL27 06-3DC3□-....	1	1 unit	113	2.200
B	3VL27 08-2DC3□-....	1	1 unit	113	2.200	B	3VL27 08-3DC3□-....	1	1 unit	113	2.200
B	3VL27 10-2DC3□-....	1	1 unit	113	2.200	B	3VL27 10-3DC3□-....	1	1 unit	113	2.200
B	3VL27 12-2DC3□-....	1	1 unit	113	2.200	B	3VL27 12-3DC3□-....	1	1 unit	113	2.200
B	3VL27 16-2DC3□-....	1	1 unit	113	2.200	B	3VL27 16-3DC3□-....	1	1 unit	113	2.200
B	3VL37 20-2DC3□-....	1	1 unit	113	2.300	B	3VL37 20-3DC3□-....	1	1 unit	113	2.300
B	3VL37 25-2DC3□-....	1	1 unit	113	2.300	B	3VL37 25-3DC3□-....	1	1 unit	113	2.300
3 6						3 6					
B	3VL47 20-2DC36-....	1	1 unit	113	5.700	B	3VL47 20-3DC36-....	1	1 unit	113	5.700
B	3VL47 25-2DC36-....	1	1 unit	113	5.700	B	3VL47 25-3DC36-....	1	1 unit	113	5.700
B	3VL47 31-2DC36-....	1	1 unit	113	5.700	B	3VL47 31-3DC36-....	1	1 unit	113	5.700
B	3VL47 40-2DC36-....	1	1 unit	113	5.700	B	3VL47 40-3DC36-....	1	1 unit	113	5.700
B	3VL57 31-2DC36-....	1	1 unit	113	9.000	B	3VL57 31-3DC36-....	1	1 unit	113	9.000
B	3VL57 40-2DC36-....	1	1 unit	113	9.000	B	3VL57 40-3DC36-....	1	1 unit	113	9.000
B	3VL57 50-2DC36-....	1	1 unit	113	9.000	B	3VL57 50-3DC36-....	1	1 unit	113	9.000
B	3VL57 63-2DC36-....	1	1 unit	113	9.000	B	3VL57 63-3DC36-....	1	1 unit	113	9.000
3 6						3 6					
B	3VL27 06-2□□3□-....	1	1 unit	113	2.400	B	3VL27 06-3□□3□-....	1	1 unit	113	2.400
B	3VL27 10-2□□3□-....	1	1 unit	113	2.400	B	3VL27 10-3□□3□-....	1	1 unit	113	2.400
B	3VL27 16-2□□3□-....	1	1 unit	113	2.400	B	3VL27 16-3□□3□-....	1	1 unit	113	2.400
B	3VL37 20-2□□3□-....	1	1 unit	113	2.500	B	3VL37 20-3□□3□-....	1	1 unit	113	2.500
B	3VL37 25-2□□3□-....	1	1 unit	113	2.500	B	3VL37 25-3□□3□-....	1	1 unit	113	2.500
3 6						3 6					
B	3VL47 31-2□□36-....	1	1 unit	113	5.900	B	3VL47 31-3□□36-....	1	1 unit	113	5.900
B	3VL47 40-2□□36-....	1	1 unit	113	5.900	B	3VL47 40-3□□36-....	1	1 unit	113	5.900
B	3VL57 63-2□□36-....	1	1 unit	113	9.300	B	3VL57 63-3□□36-....	1	1 unit	113	9.300
B	3VL67 80-2□□36-....	1	1 unit	113	16.000	B	3VL67 80-3□□36-....	1	1 unit	113	16.000
B	3VL77 10-2□□36-....	1	1 unit	113	25.000	B	3VL77 10-3□□36-....	1	1 unit	113	25.000
B	3VL77 12-2□□36-....	1	1 unit	113	25.000	B	3VL77 12-3□□36-....	1	1 unit	113	25.000
B	3VL87 16-2□□30-....	1	1 unit	113	31.300	B	3VL87 16-3□□30-....	1	1 unit	113	31.300
SB MB LB						SB MB LB					

\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

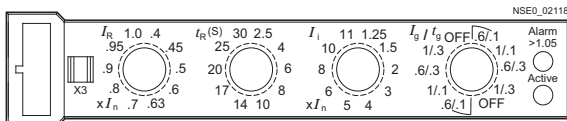
## 3VL Molded Case Circuit Breakers up to 1600 A

2

### 3-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases "L" $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_i$	Ground-fault protection "G" $I_g$	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N See "Overview".					(N)
	A	A	A	A		Order No.	For price see page 2/32	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.

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



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

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

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

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

- Connection with box terminal
- Connection with screw terminal

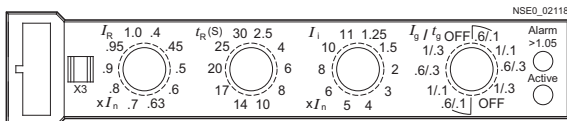
3  
6

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

- Without communication preparation
- With communication preparation

SL  
ML

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



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

With adjustable overcurrent releases, adjustable short-circuit releases, vectorial summation current, external current transformers required in addition, see page 2/90. Ground fault delay  $t_{fg} = 0.1 \dots 0.3$  s, ground fault function (G) can be switched off.

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

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

- Without communication preparation
- With communication preparation

SF  
MF

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

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

**3-pole**

DT $I_{cu}$ up to 70 kA at 415 V, high switching capacity H (H)						DT $I_{cu}$ up to 100 kA at 415 V, very high switching capacity L (L)					
Order No.	For price see page 2/32	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.	Order No.	For price see page 2/32	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.

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

3 6						3 6					
B	3VL47 31-2□□36-....	1	1 unit	113	5.900	B	3VL47 31-3□□36-....	1	1 unit	113	5.900
B	3VL47 40-2□□36-....	1	1 unit	113	5.900	B	3VL47 40-3□□36-....	1	1 unit	113	5.900
B	3VL57 63-2□□36-....	1	1 unit	113	9.300	B	3VL57 63-3□□36-....	1	1 unit	113	9.300
B	3VL67 80-2□□36-....	1	1 unit	113	16.000	B	3VL67 80-3□□36-....	1	1 unit	113	16.000
B	3VL77 10-2□□36-....	1	1 unit	113	25.000	B	3VL77 10-3□□36-....	1	1 unit	113	25.000
B	3VL77 12-2□□36-....	1	1 unit	113	25.000	B	3VL77 12-3□□36-....	1	1 unit	113	25.000
B	3VL87 16-2□□30-....	1	1 unit	113	31.300	B	3VL87 16-3□□30-....	1	1 unit	113	31.300

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

3 6						3 6					
B	3VL47 31-2□□36-....	1	1 unit	113	5.900	B	3VL47 31-3□□36-....	1	1 unit	113	5.900
B	3VL47 40-2□□36-....	1	1 unit	113	5.900	B	3VL47 40-3□□36-....	1	1 unit	113	5.900
B	3VL57 63-2□□36-....	1	1 unit	113	9.300	B	3VL57 63-3□□36-....	1	1 unit	113	9.300
B	3VL67 80-2□□36-....	1	1 unit	113	16.000	B	3VL67 80-3□□36-....	1	1 unit	113	16.000
B	3VL77 10-2□□36-....	1	1 unit	113	25.000	B	3VL77 10-3□□36-....	1	1 unit	113	25.000
B	3VL77 12-2□□36-....	1	1 unit	113	25.000	B	3VL77 12-3□□36-....	1	1 unit	113	25.000
B	3VL87 16-2□□30-....	1	1 unit	113	31.300	B	3VL87 16-3□□30-....	1	1 unit	113	31.300

SF MF						SF MF					
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Communication:

• For accessories, see page 2/98.

• For more information see also chapters "Measuring Devices and E-Counters" and "Software".

\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

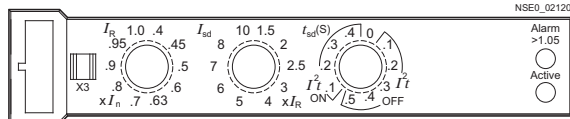
### 3-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases "L" $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_i$	S function short-circuit protection (short-time delayed) <b>S</b>	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N see "Overview"						
	A	A	A	A			Order No.	For price see page 2/32	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
							Order No. supplement required, see page 2/57					

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



NSE0\_00692



NSE0\_02120

#### ETU20, LSI function for time-based discrimination

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

VL160/3VL2	63	0.4 ... 1.0 × $I_n$	11 × $I_n$	1.5 ... 10 × $I_R$ B	<b>3VL27 06-1□□3□-....</b>	1	1 unit	113	2,400
	100	0.4 ... 1.0 × $I_n$	11 × $I_n$	1.5 ... 10 × $I_R$ B	<b>3VL27 10-1□□3□-....</b>	1	1 unit	113	2,400
	160	0.4 ... 1.0 × $I_n$	11 × $I_n$	1.5 ... 10 × $I_R$ B	<b>3VL27 16-1□□3□-....</b>	1	1 unit	113	2,400
VL250/3VL3	200	0.4 ... 1.0 × $I_n$	11 × $I_n$	1.5 ... 10 × $I_R$ B	<b>3VL37 20-1□□3□-....</b>	1	1 unit	113	2,500
	250	0.4 ... 1.0 × $I_n$	11 × $I_n$	1.5 ... 10 × $I_R$ B	<b>3VL37 25-1□□3□-....</b>	1	1 unit	113	2,500

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

- Connection with box terminal
- Connection with screw terminal

3  
6

VL400/3VL4	315	0.4 ... 1.0 × $I_n$	11 × $I_n$	1.5 ... 10 × $I_R$ B	<b>3VL47 31-1□□36-....</b>	1	1 unit	113	5,900
	400	0.4 ... 1.0 × $I_n$	11 × $I_n$	1.5 ... 10 × $I_R$ B	<b>3VL47 40-1□□36-....</b>	1	1 unit	113	5,900
VL630/3VL5	630	0.4 ... 1.0 × $I_n$	10 × $I_n$	1.5 ... 9 × $I_R$ B	<b>3VL57 63-1□□36-....</b>	1	1 unit	113	9,300
VL800/3VL6	800	0.4 ... 1.0 × $I_n$	8 × $I_n$	1.5 ... 7 × $I_R$ B	<b>3VL67 80-1□□36-....</b>	1	1 unit	113	16,000
VL1250/3VL7	1000	0.4 ... 1.0 × $I_n$	11 × $I_n$	1.5 ... 10 × $I_R$ B	<b>3VL77 10-1□□36-....</b>	1	1 unit	113	25,000
	1250	0.4 ... 1.0 × $I_n$	11 × $I_n$	1.5 ... 10 × $I_R$ B	<b>3VL77 12-1□□36-....</b>	1	1 unit	113	25,000
VL1600/3VL8 <sup>1)</sup>	1600	0.4 ... 1.0 × $I_n$	9 × $I_n$	1.5 ... 8 × $I_R$ B	<b>3VL87 16-1□□30-....</b>	1	1 unit	113	31,300

- Without communication preparation
- With communication preparation
- Marine engineering-certified LRS, DNV and GL (not communication-ready)

SE  
ME  
LE

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

#### Communication:

- For accessories, see page 2/98.
- For more information see also chapters "Measuring Devices and E-Counters" and "Software".

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

**3-pole**

DT	$I_{cu}$ up to 70 kA at 415 V, high switching capacity H						(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	For price see page 2/32	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.		Order No.	For price see page 2/32	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.		
	Order No. supplement required, see page 2/57					kg		Order No. supplement required, see page 2/57					kg		

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



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



\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

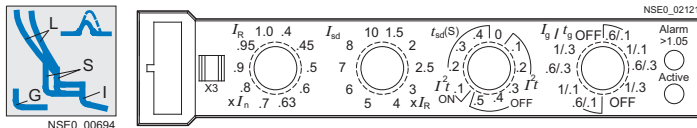
## 3VL Molded Case Circuit Breakers up to 1600 A

2

### 3-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases "L" $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_I$	S function short-circuit protection (short-time delayed) S	Ground-fault protection "G" $I_g$	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)				
	A	A	A	A	A		Order No.	For price see page 2/32	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
							Order No. supplement required, see page 2/57					kg

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



# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

3-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high switching capacity H						(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No. Order No. supplement required, see page 2/57	For price see page 2/32	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.  kg		Order No. Order No. supplement required, see page 2/57	For price see page 2/32	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.  kg		

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

3  
63  
6

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

SG  
MGSG  
MG

# Molded Case Circuit Breakers

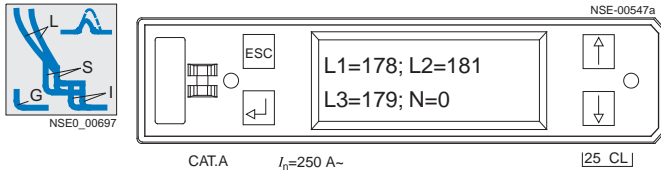
## 3VL Molded Case Circuit Breakers up to 1600 A

2

### 3-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases "L" $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_i$	S function short-circuit protection (short-time delayed) S	Ground-fault protection "G" $I_g$	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)				
	A	A	A	A	A		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
							Order No. supplement required, see page 2/57					kg

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



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

With adjustable overcurrent releases, adjustable short-circuit releases

Vectorial summation current, ground fault delay  $t_g = 0.1 \dots 0.5$  s, short-circuit delay  $t_{sd} = 0 \dots 0.5$  s

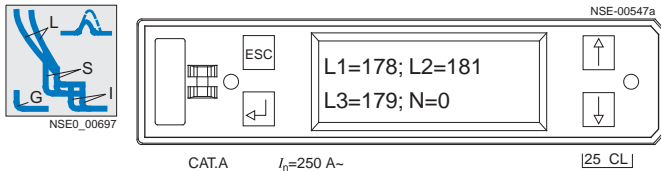
VL160/3VL2	63	25 ... 63	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL27 06-1CL3□-....	1	1 unit	113	2.400
	100	40 ... 100	$11 \times I_n$	$1.5 \dots 10 \times I_R$	$0.4 \dots 1 \times I_n$	B	3VL27 10-1CL3□-....	1	1 unit	113	2.400
	160	64 ... 160	$11 \times I_n$	$1.5 \dots 10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

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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



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

With adjustable overcurrent releases, adjustable short-circuit releases. External current transformer required in addition, see pages 2/90.

Vectorial summation current, ground fault delay  $t_g = 0.1 \dots 0.5$  s, short-circuit delay  $t_{sd} = 0 \dots 0.5$  s

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

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

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

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

3-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high switching capacity H						(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.		
	Order No. supplement required, see page 2/57					kg		Order No. supplement required, see page 2/57					kg		

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

3  
63  
6

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

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

3  
63  
6

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

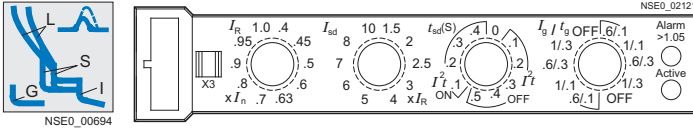
# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### 2 3-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases "L" $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_I$	S function short-circuit protection (short-time delayed) S	Ground-fault protection "G" $I_g$	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N see "Overview" <span style="float: right;">(N)</span>
	A	A	A	A	A		Order No. For price see page 2/32 Order No. supplement required, see page 2/57
							PU (UNIT, SET, M) PS*/P. unit PG Weight per PU approx. kg

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



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

With adjustable overcurrent releases, non-adjustable short-circuit releases, external current transformers required in addition, see page 2/90. Ground fault delay  $t_g = 0.1 \dots 0.3$  s, short-circuit delay  $t_{sd} = 0 \dots 0.5$  s, ground fault function (G) can be switched off.

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

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

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

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

- Without communication preparation **SH**
- With communication preparation **MH**

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

### Communication:

- For accessories, see page 2/98.
- For more information see also chapters "Measuring Devices and E-Counters" and "Software".

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

3-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high switching capacity H						(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	For price see page 2/32	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.		Order No.	For price see page 2/32	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.		
	Order No. supplement required, see page 2/57					kg		Order No. supplement required, see page 2/57					kg		

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

3  
63  
6

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

SH  
MHSH  
MH

# Molded Case Circuit Breakers

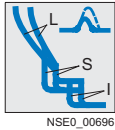
## 3VL Molded Case Circuit Breakers up to 1600 A

2

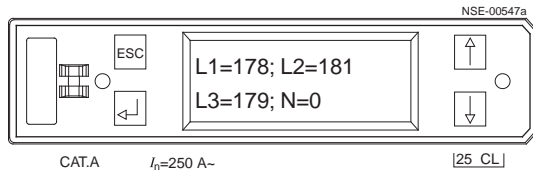
### 3-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases 'L' $I_R$	Operating current of the instantaneous short-circuit releases 'I' $I_i$	S function short-circuit protection (short-time delayed) <b>S</b>	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N see "Overview" <span style="float: right;">(N)</span>	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
	A	A	A	A			Order No. supplement required, see page 2/57					kg

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



NSE0\_00696



#### LCD-ETU40, LI/LS/LSI function selectable

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

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

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

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

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

3-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high switching capacity H						(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No. Order No. supplement required, see page 2/57	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.  kg		Order No. Order No. supplement required, see page 2/57	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.  kg		

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

3  
63  
6

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

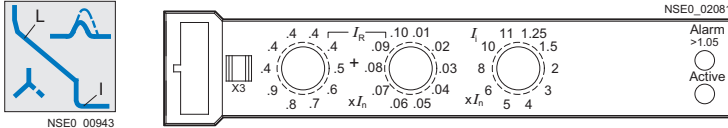
# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### 2 3-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases "L" $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_i$	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)
	A	A	A		Order No. For price see page 2/32	PU (UNIT, SET, M)
					Order No. supplement required, see page 2/57	PS*/P. unit
						PG
						Weight per PU approx. kg

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



#### ETU10M, LI function

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

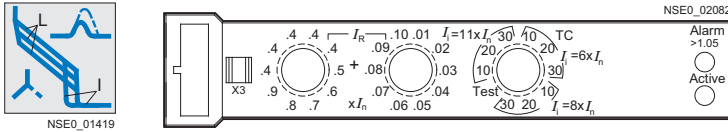
VL160/3VL2	63	25 ... 63	1.25 ... $11 \times I_n$	B	3VL27 06-1□□3□-....	1	1 unit	113	2.400
	100	40 ... 100	1.25 ... $11 \times I_n$	B	3VL27 10-1□□3□-....	1	1 unit	113	2.400
	160	64 ... 160	1.25 ... $11 \times I_n$	B	3VL27 16-1□□3□-....	1	1 unit	113	2.400
VL250/3VL3	200	80 ... 200	1.25 ... $11 \times I_n$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

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

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

VL400/3VL4	315	125 ... 315	1.25 ... $11 \times I_n$	B	3VL47 31-1□□36-....	1	1 unit	113	5.900
VL630/3VL5	500	200 ... 500	1.25 ... $12.5 \times I_n$	B	3VL57 50-1□□36-....	1	1 unit	113	9.300

- Without communication preparation **SP**
- With communication preparation **MP**



# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

3-pole

DT	$I_{cu}$ up to 70 kA at 415 V, high switching capacity H						(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	For price see page 2/32	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.		Order No.	For price see page 2/32	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.		
	Order No. supplement required, see page 2/57					kg		Order No. supplement required, see page 2/57					kg		

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

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

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

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

\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

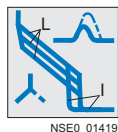
## 3VL Molded Case Circuit Breakers up to 1600 A

2

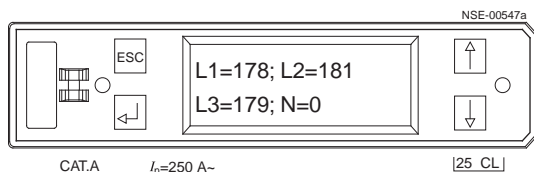
### 3-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases "L" $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_i$	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)
	A	A	A		Order No. Order No. supplement required, see page 2/57	Basic price per PU PU (UNIT, SET, M) PS*/P. unit PG Weight per PU approx. kg

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



NSE0\_01419



#### LCD-ETU40M, LI function

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

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

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

3-pole

2

DT $I_{cu}$ up to 70 kA at 415 V, high switching capacity H <span style="float: right;">(H)</span>							DT $I_{cu}$ up to 100 kA at 415 V, very high switching capacity L <span style="float: right;">(L)</span>						
Order No. Order No. supplement required, see page 2/57	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.  kg	Order No. Order No. supplement required, see page 2/57	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.  kg		
B 3VL27 06-2CP3□-....		1	1 unit	113	2.400	B 3VL27 06-3CP3□-....		1	1 unit	113	2.400		
B 3VL27 10-2CP3□-....		1	1 unit	113	2.400	B 3VL27 10-3CP3□-....		1	1 unit	113	2.400		
B 3VL27 16-2CP3□-....		1	1 unit	113	2.400	B 3VL27 16-3CP3□-....		1	1 unit	113	2.400		
B 3VL37 20-2CP3□-....		1	1 unit	113	2.500	B 3VL37 20-3CP3□-....		1	1 unit	113	2.500		
B 3VL37 25-2CP3□-....		1	1 unit	113	2.500	B 3VL37 25-3CP3□-....		1	1 unit	113	2.500		
3 6						3 6							
B 3VL47 31-2CP36-....		1	1 unit	113	5.900	B 3VL47 31-3CP36-....		1	1 unit	113	5.900		
B 3VL57 50-2CP36-....		1	1 unit	113	9.300	B 3VL57 50-3CP36-....		1	1 unit	113	9.300		

# Molded Case Circuit Breakers

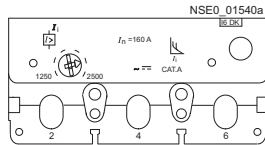
## 3VL Molded Case Circuit Breakers up to 1600 A

2

### 3-pole

Type	Rated current $I_n$	Operating current of the instantaneous short-circuit releases $I_i$	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS* / P. unit	PG	Weight per PU approx.
	A					Order No. supplement required, see page 2/57					kg

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



#### Starter protection, M, I function

Without overcurrent release, with adjustable short-circuit release

VL160/3VL2	63	450 ... 900	B	3VL27 06-1DK3□-....	1	1 unit	113	2,200
	100	750 ... 1500	B	3VL27 10-1DK3□-....	1	1 unit	113	2,200
	160	1250 ... 2500	B	3VL27 16-1DK3□-....	1	1 unit	113	2,200
VL250/3VL3	250	1750 ... 3500	B	3VL37 25-1DK3□-....	1	1 unit	113	2,300

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

- Connection with box terminal
- Connection with screw terminal

3  
6

VL400/3VL4	200	1250 ... 2500	B	3VL47 20-1DK36-....	1	1 unit	113	5,700
	250	2000 ... 4000	B	3VL47 25-1DK36-....	1	1 unit	113	5,700
	315	2000 ... 4000	B	3VL47 31-1DK36-....	1	1 unit	113	5,700
VL630/3VL5	315	2000 ... 4000	B	3VL57 31-1DK36-....	1	1 unit	113	9,000
	500	3250 ... 6300	B	3VL57 50-1DK36-....	1	1 unit	113	9,000

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



#### Non-automatic molded case circuit breakers<sup>1)</sup>, I function

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

VL160X/3VL1	100	1800	B	3VL17 10-1DE3□-....	1	1 unit	113	2,000
	160	1800	B	3VL17 16-1DE3□-....	1	1 unit	113	2,000
VL160/3VL2	100	2500	B	3VL27 10-1DE3□-....	1	1 unit	113	2,200
	160	2500	B	3VL27 16-1DE3□-....	1	1 unit	113	2,200
VL250/3VL3	250	3500	B	3VL37 25-1DE3□-....	1	1 unit	113	2,300

Connection type can be selected by assignment of the 12th position of the Order

- Connection with box terminal
- Connection with screw terminal not in conjunction with RCD module at 3VL1

3  
6

VL400/3VL4	400	4000	B	3VL47 40-1DE36-....	1	1 unit	113	5,700
VL630/3VL5	630	6300	B	3VL57 63-1DE36-....	1	1 unit	113	9,000
VL800/3VL6	800	6500	B	3VL67 80-1DE36-....	1	1 unit	113	15,700
VL1250/3VL7	1250	12000	B	3VL77 12-1DE36-....	1	1 unit	113	23,500
VL1600/3VL8 <sup>2)</sup>	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 2/12 to 2/28.

<sup>1)</sup> See also "Switch Disconnectors" chapter. 3K. switch disconnectors are also available with rear-mounting operating mechanism and leading contacts.

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

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

3-pole

2


















DT $I_{cu}$ up to 70 kA at 415 V, high switching capacity H (H)							DT $I_{cu}$ up to 100 kA at 415 V, very high switching capacity L (L)						
Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.	
Order No. supplement required, see page 2/57							Order No. supplement required, see page 2/57						
						kg							kg
B	3VL27 06-2DK3□-....	1	1 unit	113	2.200	B	3VL27 06-3DK3□-....	1	1 unit	113	2.200	2.200	
B	3VL27 10-2DK3□-....	1	1 unit	113	2.200	B	3VL27 10-3DK3□-....	1	1 unit	113	2.200	2.200	
B	3VL27 16-2DK3□-....	1	1 unit	113	2.200	B	3VL27 16-3DK3□-....	1	1 unit	113	2.200	2.200	
B	3VL37 25-2DK3□-....	1	1 unit	113	2.300	B	3VL37 25-3DK3□-....	1	1 unit	113	2.300	2.300	
3 6						3 6							
B	3VL47 20-2DK36-....	1	1 unit	113	5.700	B	3VL47 20-3DK36-....	1	1 unit	113	5.700	5.700	
B	3VL47 25-2DK36-....	1	1 unit	113	5.700	B	3VL47 25-3DK36-....	1	1 unit	113	5.700	5.700	
B	3VL47 31-2DK36-....	1	1 unit	113	5.700	B	3VL47 31-3DK36-....	1	1 unit	113	5.700	5.700	
B	3VL57 31-2DK36-....	1	1 unit	113	9.000	B	3VL57 31-3DK36-....	1	1 unit	113	9.000	9.000	
B	3VL57 50-2DK36-....	1	1 unit	113	9.000	B	3VL57 50-3DK36-....	1	1 unit	113	9.000	9.000	
3 6						3 6							
B	3VL17 10-2DE3□-....	1	1 unit	113	2.000	--	--	--	--	--	--	--	
B	3VL17 16-2DE3□-....	1	1 unit	113	2.000	--	--	--	--	--	--	--	
B	3VL27 10-2DE3□-....	1	1 unit	113	2.200	B	3VL27 10-3DE3□-....	1	1 unit	113	2.200	2.200	
B	3VL27 16-2DE3□-....	1	1 unit	113	2.200	B	3VL27 16-3DE3□-....	1	1 unit	113	2.200	2.200	
B	3VL37 25-2DE3□-....	1	1 unit	113	2.300	B	3VL37 25-3DE3□-....	1	1 unit	113	2.300	2.300	
3 6						3 6							
B	3VL47 40-2DE36-....	1	1 unit	113	5.700	B	3VL47 40-3DE36-....	1	1 unit	113	5.700	5.700	
B	3VL57 63-2DE36-....	1	1 unit	113	9.000	B	3VL57 63-3DE36-....	1	1 unit	113	9.000	9.000	
B	3VL67 80-2DE36-....	1	1 unit	113	15.700	B	3VL67 80-3DE36-....	1	1 unit	113	15.700	15.700	
B	3VL77 12-2DE36-....	1	1 unit	113	23.500	B	3VL77 12-3DE36-....	1	1 unit	113	23.500	23.500	
B	3VL87 16-2DE30-....	1	1 unit	113	29.800	B	3VL87 16-3DE30-....	1	1 unit	113	29.800	29.800	

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### 3-pole

Order No. supplement (for complete Order No., see pages 2/12 to 2/28) <b>3VL.7 ... □□3-....</b>	Switching capacity	Type	Rated current $I_n$											
		<b>VL160</b> 3VL2	<b>VL250</b> 3VL3			<b>VL400</b> 3VL4		<b>VL630</b> 3VL5		<b>VL800</b> 3VL6		<b>VL1250</b> 3VL7		<b>VL1600</b> 3VL8
		63 A	100 A	160 A	200 A	250 A	315 A	400 A	500 A	630 A	800 A	1000 A	1250 A	1600 A
<b>Releases</b>														
<b>Price</b>														
ETU10	<b>S B</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU10	<b>M B</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU10	<b>L B</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU12	<b>S L</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU12	<b>M L</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU12	<b>S F</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU12	<b>M F</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU20	<b>S E</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU20	<b>M E</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU20	<b>L E</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU22	<b>S G</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU22	<b>M G</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU42	<b>C L</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU42	<b>C M</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU22	<b>S H</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU22	<b>M H</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU40	<b>C H</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ Available  
-- Not available

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

3-pole

Order No. supplement (for complete Order No., see pages 2/12 to 2/28) 3VL.7 ..- □□3.-....	Switching capacity	Type	VL160			VL250		VL400		VL630		VL800		VL1250		VL1600	
		3VL2	3VL3			3VL4		3VL5		3VL6		3VL7		3VL8			
Releases		Rated current I <sub>n</sub>															
		63 A	100 A	160 A	200 A	250 A	315 A	400 A	500 A	630 A	800 A	1000 A	1250 A	1600 A			
<b>Price</b>																	
ETU10M <b>SP</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU10M <b>MP</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU30M <b>SS</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU30M <b>MS</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU30M <b>LS</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU40M <b>CP</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ Available  
 -- Not available

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

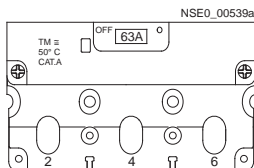
2

4-pole

### Selection and ordering data

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases $I_R$	Operating current of the instantaneous short-circuit releases $I_i$	DT **	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N See "Overview".						
	A	A	A			Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
						Order No. supplement required, see page 2/57					

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



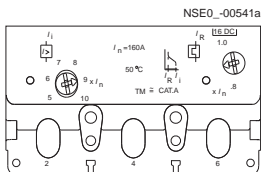
#### System protection, TM, LI function

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

VL160X/3VL1	$I_n$	$I_R$	$I_i$	DT	Order No.	Basic price per PU	PU	PS*/P. unit	PG	Weight per PU approx. kg
	16	16	300	B	3VL17 96-1EH4□-....		1	1 unit	113	2.300
	20	20	300	B	3VL17 02-1EH4□-....		1	1 unit	113	2.300
	25	25	300	B	3VL17 25-1EH4□-....		1	1 unit	113	2.500
	32	32	300	B	3VL17 03-1EH4□-....		1	1 unit	113	2.500
	40	40	600	B	3VL17 04-1EH4□-....		1	1 unit	113	2.500
	50	50	600	B	3VL17 05-1EH4□-....		1	1 unit	113	2.500
	63	63	600	B	3VL17 06-1EH4□-....		1	1 unit	113	2.500
	80	80	1000	B	3VL17 08-1EH4□-....		1	1 unit	113	2.500
	100	100	1000	B	3VL17 10-1EH4□-....		1	1 unit	113	2.500
	125	125	1000	B	3VL17 12-1EH4□-....		1	1 unit	113	2.500
	160	160	1500	B	3VL17 16-1EH4□-....		1	1 unit	113	2.500

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

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



#### System protection, TM, LI function

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

VL160/3VL2	$I_n$	$I_R$	$I_i$	DT	Order No.	Basic price per PU	PU	PS*/P. unit	PG	Weight per PU approx. kg
	50	40 ... 50	300 ... 600	B	3VL27 05-1EJ4□-....		1	1 unit	113	3.000
	63	50 ... 63	300 ... 600	B	3VL27 06-1EJ4□-....		1	1 unit	113	3.000
	80	63 ... 80	400 ... 800	B	3VL27 08-1EJ4□-....		1	1 unit	113	3.000
	100	80 ... 100	500 ... 1000	B	3VL27 10-1EJ4□-....		1	1 unit	113	3.000
	125	100 ... 125	625 ... 1250	B	3VL27 12-1EJ4□-....		1	1 unit	113	3.000
	160	125 ... 160	800 ... 1600	B	3VL27 16-1EJ4□-....		1	1 unit	113	3.000
VL250/3VL3	200	160 ... 200	1000 ... 2000	B	3VL37 20-1EJ4□-....		1	1 unit	113	3.200
	250	200 ... 250	1250 ... 2500	B	3VL37 25-1EJ4□-....		1	1 unit	113	3.200

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

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

VL400/3VL4	$I_n$	$I_R$	$I_i$	DT	Order No.	Basic price per PU	PU	PS*/P. unit	PG	Weight per PU approx. kg
	200	160 ... 200	1000 ... 2000	B	3VL47 20-1EJ46-....		1	1 unit	113	7.400
	250	200 ... 250	1250 ... 2500	B	3VL47 25-1EJ46-....		1	1 unit	113	7.400
	315	250 ... 315	1575 ... 3150	B	3VL47 31-1EJ46-....		1	1 unit	113	7.400
	400	320 ... 400	2000 ... 4000	B	3VL47 40-1EJ46-....		1	1 unit	113	7.400
VL630/3VL5	315	250 ... 315	1575 ... 3150	B	3VL57 31-1EJ46-....		1	1 unit	113	11.200
	400	320 ... 400	2000 ... 4000	B	3VL57 40-1EJ46-....		1	1 unit	113	11.200
	500	400 ... 500	2500 ... 5000	B	3VL57 50-1EJ46-....		1	1 unit	113	11.200
	630	500 ... 630	3150 ... 6300	B	3VL57 63-1EJ46-....		1	1 unit	113	11.200

\*\* Delivery time class A for Order No. supplement "0AA0", see page 2/57.

\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

4-pole

2

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

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

3  
6

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

3  
63  
6

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

\*\* Delivery time class A for Order No. supplement "0AA0", see page 2/57.

# Molded Case Circuit Breakers

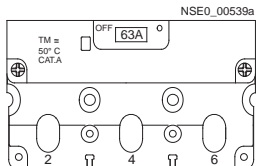
## 3VL Molded Case Circuit Breakers up to 1600 A

2

### 4-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases "L" $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_i$	DT **	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N See "Overview".						
	A	A	A			Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
						Order No. supplement required, see page 2/57					kg

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



#### System protection, TM, LIN function

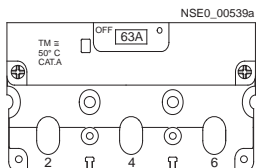
With non-adjustable thermal overcurrent releases, non-adjustable short-circuit releases, with "N" overcurrent and short-circuit release

N protection = 100 %

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

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

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



#### System protection, TM, LIN function

With non-adjustable thermal overcurrent releases, non-adjustable short-circuit releases, with "N" overcurrent and short-circuit release

N protection = 60 %

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

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

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

\*\* Delivery time class A for Order No. supplement "OAA0", see page 2/57.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

4-pole

2

DT **	$I_{cu}$ up to 70 kA at 415 V, high switching capacity H					(H)	DT **	$I_{cu}$ up to 100 kA at 415 V, very high switching capacity L					(L)
	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
	Order No. supplement required, see page 2/57							Order No. supplement required, see page 2/57					

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

3  
6

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

3  
6

\*\* Delivery time class A for Order No. supplement "0AA0", see page 2/57.

# Molded Case Circuit Breakers

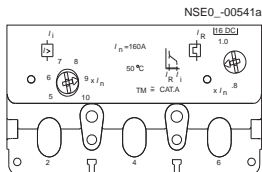
## 3VL Molded Case Circuit Breakers up to 1600 A

2

### 4-pole

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

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



#### System protection, TM, LIN function

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

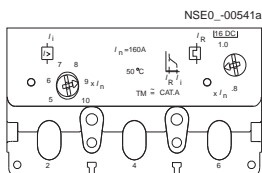
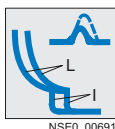
VL160/3VL2	50	40 ... 50	300 ... 600	B	3VL27 05-1EM4□-....	1	1 unit	113	3.000
	63	50 ... 63	300 ... 600	B	3VL27 06-1EM4□-....	1	1 unit	113	3.000
	80	63 ... 80	400 ... 800	B	3VL27 08-1EM4□-....	1	1 unit	113	3.000
	100	80 ... 100	500 ... 1000	B	3VL27 10-1EM4□-....	1	1 unit	113	3.000
	125	100 ... 125	625 ... 1250	B	3VL27 12-1EM4□-....	1	1 unit	113	3.000
VL250/3VL3	160	125 ... 160	800 ... 1600	B	3VL27 16-1EM4□-....	1	1 unit	113	3.000
	200	160 ... 200	1000 ... 2000	B	3VL37 20-1EM4□-....	1	1 unit	113	3.200
	250	200 ... 250	1250 ... 2500	B	3VL37 25-1EM4□-....	1	1 unit	113	3.200

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

- Connection with box terminal
- Connection with screw terminal

3  
6

VL400/3VL4	200	160 ... 200	1000 ... 2000	B	3VL47 20-1EM46-....	1	1 unit	113	7.400
	250	200 ... 250	1250 ... 2500	B	3VL47 25-1EM46-....	1	1 unit	113	7.400
	315	250 ... 315	1575 ... 3150	B	3VL47 31-1EM46-....	1	1 unit	113	7.400
	400	320 ... 400	2000 ... 4000	B	3VL47 40-1EM46-....	1	1 unit	113	7.400
VL630/3VL5	315	250 ... 315	1575 ... 3150	B	3VL57 31-1EM46-....	1	1 unit	113	11.200
	400	320 ... 400	2000 ... 4000	B	3VL57 40-1EM46-....	1	1 unit	113	11.200
	500	400 ... 500	2500 ... 5000	B	3VL57 50-1EM46-....	1	1 unit	113	11.200
	630	500 ... 630	3150 ... 6300	B	3VL57 63-1EM46-....	1	1 unit	113	11.200



#### System protection, TM, LIN function

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

VL160/3VL2	125	100 ... 125	625 ... 1250	B	3VL27 12-1EC4□-....	1	1 unit	113	3.000
	160	125 ... 160	800 ... 1600	B	3VL27 16-1EC4□-....	1	1 unit	113	3.000
VL250/3VL3	200	160 ... 200	1000 ... 2000	B	3VL37 20-1EC4□-....	1	1 unit	113	3.200
	250	200 ... 250	1250 ... 2500	B	3VL37 25-1EC4□-....	1	1 unit	113	3.200

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

- Connection with box terminal
- Connection with screw terminal

3  
6

VL400/3VL4	200	160 ... 200	1000 ... 2000	B	3VL47 20-1EC46-....	1	1 unit	113	7.400
	250	200 ... 250	1250 ... 2500	B	3VL47 25-1EC46-....	1	1 unit	113	7.400
	315	250 ... 315	1575 ... 3150	B	3VL47 31-1EC46-....	1	1 unit	113	7.400
	400	320 ... 400	2000 ... 4000	B	3VL47 40-1EC46-....	1	1 unit	113	7.400
VL630/3VL5	315	250 ... 315	1575 ... 3150	B	3VL57 31-1EC46-....	1	1 unit	113	11.200
	400	320 ... 400	2000 ... 4000	B	3VL57 40-1EC46-....	1	1 unit	113	11.200
	500	400 ... 500	2500 ... 5000	B	3VL57 50-1EC46-....	1	1 unit	113	11.200
	630	500 ... 630	3150 ... 6300	B	3VL57 63-1EC46-....	1	1 unit	113	11.200

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

4-pole

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

B	3VL27 05-2EM4□-....	1	1 unit	113	3.000	B	3VL27 05-3EM4□-....	1	1 unit	113	3.000
B	3VL27 06-2EM4□-....	1	1 unit	113	3.000	B	3VL27 06-3EM4□-....	1	1 unit	113	3.000
B	3VL27 08-2EM4□-....	1	1 unit	113	3.000	B	3VL27 08-3EM4□-....	1	1 unit	113	3.000
B	3VL27 10-2EM4□-....	1	1 unit	113	3.000	B	3VL27 10-3EM4□-....	1	1 unit	113	3.000
B	3VL27 12-2EM4□-....	1	1 unit	113	3.000	B	3VL27 12-3EM4□-....	1	1 unit	113	3.000
B	3VL27 16-2EM4□-....	1	1 unit	113	3.000	B	3VL27 16-3EM4□-....	1	1 unit	113	3.000
B	3VL37 20-2EM4□-....	1	1 unit	113	3.200	B	3VL37 20-3EM4□-....	1	1 unit	113	3.200
B	3VL37 25-2EM4□-....	1	1 unit	113	3.200	B	3VL37 25-3EM4□-....	1	1 unit	113	3.200

3  
6

3  
6

B	3VL47 20-2EM46-....	1	1 unit	113	7.400	B	3VL47 20-3EM46-....	1	1 unit	113	7.400
B	3VL47 25-2EM46-....	1	1 unit	113	7.400	B	3VL47 25-3EM46-....	1	1 unit	113	7.400
B	3VL47 31-2EM46-....	1	1 unit	113	7.400	B	3VL47 31-3EM46-....	1	1 unit	113	7.400
B	3VL47 40-2EM46-....	1	1 unit	113	7.400	B	3VL47 40-3EM46-....	1	1 unit	113	7.400
B	3VL57 31-2EM46-....	1	1 unit	113	11.200	B	3VL57 31-3EM46-....	1	1 unit	113	11.200
B	3VL57 40-2EM46-....	1	1 unit	113	11.200	B	3VL57 40-3EM46-....	1	1 unit	113	11.200
B	3VL57 50-2EM46-....	1	1 unit	113	11.200	B	3VL57 50-3EM46-....	1	1 unit	113	11.200
B	3VL57 63-2EM46-....	1	1 unit	113	11.200	B	3VL57 63-3EM46-....	1	1 unit	113	11.200

B	3VL27 12-2EC4□-....	1	1 unit	113	3.000	B	3VL27 12-3EC4□-....	1	1 unit	113	3.000
B	3VL27 16-2EC4□-....	1	1 unit	113	3.000	B	3VL27 16-3EC4□-....	1	1 unit	113	3.000
B	3VL37 20-2EC4□-....	1	1 unit	113	3.200	B	3VL37 20-3EC4□-....	1	1 unit	113	3.200
B	3VL37 25-2EC4□-....	1	1 unit	113	3.200	B	3VL37 25-3EC4□-....	1	1 unit	113	3.200

3  
6

3  
6

B	3VL47 20-2EC46-....	1	1 unit	113	7.400	B	3VL47 20-3EC46-....	1	1 unit	113	7.400
B	3VL47 25-2EC46-....	1	1 unit	113	7.400	B	3VL47 25-3EC46-....	1	1 unit	113	7.400
B	3VL47 31-2EC46-....	1	1 unit	113	7.400	B	3VL47 31-3EC46-....	1	1 unit	113	7.400
B	3VL47 40-2EC46-....	1	1 unit	113	7.400	B	3VL47 40-3EC46-....	1	1 unit	113	7.400
B	3VL57 31-2EC46-....	1	1 unit	113	11.200	B	3VL57 31-3EC46-....	1	1 unit	113	11.200
B	3VL57 40-2EC46-....	1	1 unit	113	11.200	B	3VL57 40-3EC46-....	1	1 unit	113	11.200
B	3VL57 50-2EC46-....	1	1 unit	113	11.200	B	3VL57 50-3EC46-....	1	1 unit	113	11.200
B	3VL57 63-2EC46-....	1	1 unit	113	11.200	B	3VL57 63-3EC46-....	1	1 unit	113	11.200

\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

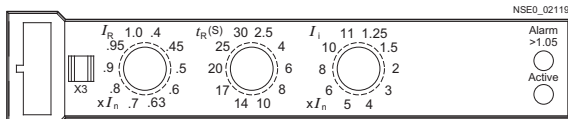
## 3VL Molded Case Circuit Breakers up to 1600 A

2

### 4-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases "L" $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_i$	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)				
	A	A	A		Order No. Order No. supplement required, see page 2/57	For price see page 2/54	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg

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



#### ETU10, LI function

With adjustable overcurrent releases, adjustable short-circuit releases

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

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

- Connection with box terminal
- Connection with screw terminal

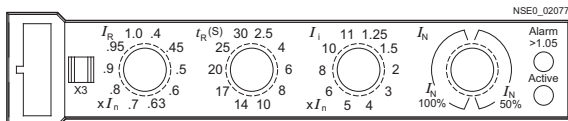
3  
6

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

- Without communication preparation
- With communication preparation

TB  
NB

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



#### ETU10, LIN function

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

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

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

- Without communication preparation
- With communication preparation
- Marine engineering-certified LRS, DNV and GL (not communication-ready)

TA  
NA  
LA

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

# 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 <span style="float: right;">(H)</span>						DT	$I_{cu}$ up to 100 kA at 415 V, very high switching capacity L <span style="float: right;">(L)</span>					
	Order No. Order No. supplement required, see page 2/57	For price see page 2/54	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg		Order No. Order No. supplement required, see page 2/57	For price see page 2/54	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg

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

3						3					
6						6					

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

TB						TB					
NB						NB					

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

3						3					
6						6					

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

TA						TA					
NA						NA					
LA						LA					

Communication:

• For accessories, see page 2/98.

• For more information see also chapters "Measuring Devices and E-Counters" and "Software".

\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

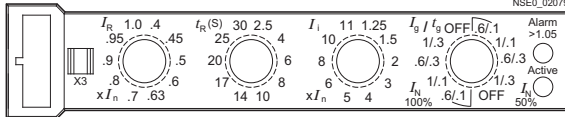
### 2 4-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases "L" $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_i$	Ground-fault protection "G" $I_g$	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N See "Overview".					(N)	
	A	A	A	A		Order No. Order No. supplement required, see page 2/57	For price see page 2/54	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.	kg

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



NSE0\_00693



NSE0\_02079

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

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

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

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

- Without communication preparation
- With communication preparation

TN  
NN

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

### Communication:

- For accessories, see page 2/98.
- For more information see also chapters "Measuring Devices and E-Counters" and "Software".

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

4-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high switching capacity H						(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	For price see page 2/54	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg		Order No.	For price see page 2/54	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg		

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

3  
63  
6

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

TN  
NNTN  
NN

# Molded Case Circuit Breakers

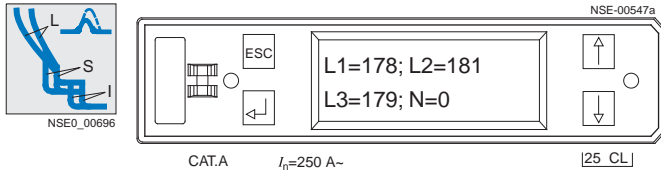
## 3VL Molded Case Circuit Breakers up to 1600 A

2

### 4-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed over-current releases "L" $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_i$	S function short-circuit protection (short-time delayed) S	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)				
	A	A	A	A		Order No. Order No. supplement required, see page 2/57	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg

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



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

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

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

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

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

<sup>2)</sup> N = 100 % protection for  $I_n \leq 100$  A.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

4-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high switching capacity H						(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.		
	Order No. supplement required, see page 2/57					kg		Order No. supplement required, see page 2/57					kg		

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

3  
63  
6

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

# Molded Case Circuit Breakers

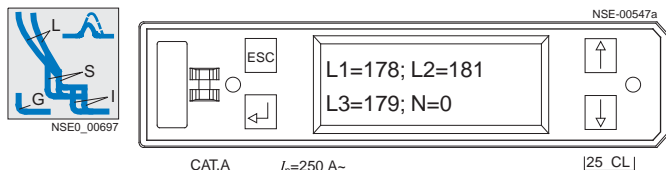
## 3VL Molded Case Circuit Breakers up to 1600 A

2

### 4-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases "L" $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_I$	S function short-circuit protection (short-time delayed) "S"	Ground-fault protection "G" $I_g$	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N see "Overview" (N)	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
	A	A	A	A	A			Order No. supplement required, see page 2/57					kg

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



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

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

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

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

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

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

4-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high switching capacity H						(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.		Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.		
	Order No. supplement required, see page 2/57					kg		Order No. supplement required, see page 2/57					kg		

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

3  
63  
6

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

# Molded Case Circuit Breakers

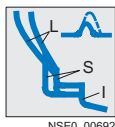
## 3VL Molded Case Circuit Breakers up to 1600 A

2

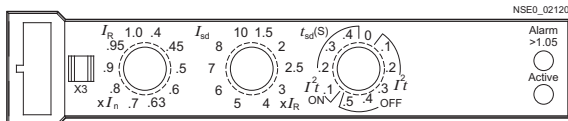
### 4-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed over-current releases "L" $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_i$	S function short-circuit protection (short-time delayed) <b>S</b>	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)				
	A	A	A	A		Order No. required, see page 2/57	For price see page 2/54	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg

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



NSE0\_00692



NSE0\_02120

#### ETU20, LSI function for time-based discrimination

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

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

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

- Connection with box terminal
- Connection with screw terminal

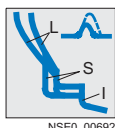
3  
6

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

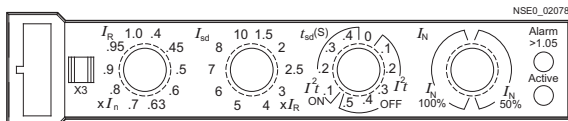
- Without communication preparation
- With communication preparation

TE  
NE

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



NSE0\_00692



NSE0\_02078

#### ETU20, LSIN function for time-based discrimination

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

VL160/3VL2	63	0.4 ... $1.0 \times I_n$	$11 \times I_n$	1.5 ... $10 \times I_R$ B	<b>3VL27 06-1□□4□-....</b>	1	1 unit	113	3.100
	100	0.4 ... $1.0 \times I_n$	$11 \times I_n$	1.5 ... $10 \times I_R$ B	<b>3VL27 10-1□□4□-....</b>	1	1 unit	113	3.100
	160	0.4 ... $1.0 \times I_n$	$11 \times I_n$	1.5 ... $10 \times I_R$ B	<b>3VL27 16-1□□4□-....</b>	1	1 unit	113	3.100
VL250/3VL3	200	0.4 ... $1.0 \times I_n$	$11 \times I_n$	1.5 ... $10 \times I_R$ B	<b>3VL37 20-1□□4□-....</b>	1	1 unit	113	3.300
	250	0.4 ... $1.0 \times I_n$	$11 \times I_n$	1.5 ... $10 \times I_R$ B	<b>3VL37 25-1□□4□-....</b>	1	1 unit	113	3.300

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

- Without communication preparation
- With communication preparation
- Marine engineering-certified LRS, DNV and GL (not communication-ready)

TF  
NF  
LF

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

- For accessories, see page 2/98.
- For more information see also chapters "Measuring Devices and E-Counters" and "Software".

#### Communication:

\* You can order this quantity or a multiple thereof.

# 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 <span style="float: right;">(H)</span>						DT $I_{cu}$ up to 100 kA at 415 V, very high switching capacity L <span style="float: right;">(L)</span>					
Order No.	For price see page 2/54	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg	Order No.	For price see page 2/54	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg

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



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



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



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



\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

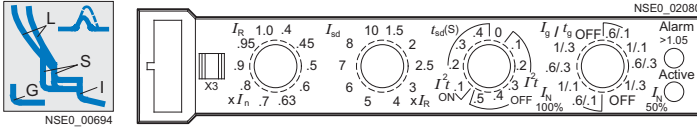
## 3VL Molded Case Circuit Breakers up to 1600 A

2

### 4-pole

Type	Rated current $I_n$	Current setting of the inverse-time delayed overcurrent releases "L" $I_R$	Operating current of the instantaneous short-circuit releases "I" $I_I$	S function short-circuit protection (short-time delayed) $S$	Ground-fault protection "G" $I_g$	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)				
	A	A	A	A	A		Order No.	For price see page 2/54	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
							Order No. supplement required, see page 2/57					kg

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



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

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

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

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

- Without communication preparation
- With communication preparation

TH  
NH

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

#### Communication:

- For accessories, see page 2/98.
- For more information see also chapters "Measuring Devices and E-Counters" and "Software".

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

4-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high switching capacity H					(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high switching capacity L					(L)
	Order No. Order No. supplement required, see page 2/57	For price see page 2/54	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.  kg		Order No. Order No. supplement required, see page 2/57	For price see page 2/54	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.  kg

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

3  
63  
6

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

TH  
NHTH  
NH

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### 4-pole

Type	Rated current $I_n$	Operating current of the instantaneous short-circuit releases "I" $I_i$	DT	$I_{cu}$ up to 55 kA at 415 V, standard switching capacity N see "Overview"	(N)				
				Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
				Order No. supplement required, see page 2/57					kg

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



### Non-automatic molded case circuit breakers<sup>1)</sup>, I function

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

VL160X/3VL1	100 160	1800 1800	B B	<b>3VL17 10-1EE4□-....</b> <b>3VL17 16-1EE4□-....</b>	1 1	1 unit 1 unit	113 113	2.500 2.500
VL160/3VL2	100 160	2500 2500	B B	<b>3VL27 10-1EE4□-....</b> <b>3VL27 16-1EE4□-....</b>	1 1	1 unit 1 unit	113 113	3.000 3.000
VL250/3VL3	250	3500	B	<b>3VL37 25-1EE4□-....</b>	1	1 unit	113	3.200
				Connection type can be selected through the 12th position of the Order No.				
				• Connection with box terminal	3			
				• Connection with screw terminal not in conjunction with RCD module at 3VL1	6			
VL400/3VL4	400	4000	B	<b>3VL47 40-1EE46-....</b>	1	1 unit	113	7.400
VL630/3VL5	630	6300	B	<b>3VL57 63-1EE46-....</b>	1	1 unit	113	11.200
VL800/3VL6	800	6500	B	<b>3VL67 80-1EE46-....</b>	1	1 unit	113	19.900
VL1250/3VL7	1250	12000	B	<b>3VL77 12-1EE46-....</b>	1	1 unit	113	31.000
VL1600/3VL8 <sup>2)</sup>	1600	14400	B	<b>3VL87 16-1EE40-....</b>	1	1 unit	113	38.300

1) See also "Switch Disconnectors" chapter. 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.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

4-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high switching capacity H						(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high switching capacity L						(L)
	Order No. Order No. supplement required, see page 2/57	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.  kg		Order No. Order No. supplement required, see page 2/57	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.  kg		

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

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### 4-pole

Order No. supplement (for complete Order No., see pages 2/40 to 2/50) 3VL.7 ..- □□4.-....		Switching capacity	Type											
			VL160 3VL2			VL250 3VL3		VL400 3VL4		VL630 3VL5		VL800 3VL6	VL1250 3VL7	
Releases		Rated current $I_n$												
		Price												
		63 A	100 A	160 A	200 A	250 A	315 A	400 A	630 A	800 A	1000 A	1250 A	1600 A	
ETU10	<b>T B</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU10	<b>N B</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU10	<b>T A</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU10	<b>N A</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU10	<b>L A</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU12	<b>T N</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU12	<b>N N</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU40	<b>C J</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU42	<b>C N</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU20	<b>T E</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU20	<b>N E</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU20	<b>T F</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU20	<b>N F</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU20	<b>L F</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU22	<b>T H</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
ETU22	<b>N H</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

✓ Available

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### Selection and ordering data

When ordering, add **"-Z"** to the complete Order No. and add the relevant order code(s). Order No. with **"-Z"**  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16  
**3VL** . . . . . -Z  
and additional order code(s)  
  + . . . + . . . Additional price

		Code for further versions <b>-Z</b>	
<b>For fixed-mounted circuit breakers (wired in factory)</b>			
<b>Prewired internal accessories</b> Connecting cables (3 m long) brought out at the rear This option "L02" can be selected only in combination with internal accessories (page 2/57).	For VL160X to VL1600 (3VL1 to 3VL8)	<b>L 0 2</b>	✓
<b>Prewired connecting cables for motorized operating mechanisms</b> Connecting cables on the circuit breaker for motorized operating mechanisms (3 m long). On VL160X to VL400 brought out at the top. On VL630 to VL1600 brought out on the right. Motorized operating mechanism <u>must</u> be ordered separately, see page 2/66. This option "L12" can be selected only in combination with motorized operating mechanisms (see page 2/66).	For VL160X to VL1600 (3VL1 to 3VL8)	<b>L 1 2</b>	✓
<b>Motorized operating mechanisms with stored energy mechanisms for synchronization tasks (24 V DC)</b> Motorized operating mechanism <u>not</u> prewired; if prewiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must <u>not</u> be specified in addition.	available with VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3)	<b>M 2 4</b>	✓
	VL400 (3VL4)		✓
	VL630, VL800 (3VL5, 3VL6)		✓
<b>Motorized operating mechanisms for synchronization tasks (42 ... 48 V AC/DC)</b> Motorized operating mechanism <u>not</u> prewired; if prewiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must <u>not</u> be specified in addition.	available with VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3)	<b>M 4 2</b>	✓
	VL400 (3VL4)		✓
	VL630, VL800 (3VL5, 3VL6)		✓
<b>Motorized operating mechanisms for synchronization tasks (60 V AC/DC)</b> Motorized operating mechanism <u>not</u> prewired; if prewiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must <u>not</u> be specified in addition.	available with VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3)	<b>M 6 0</b>	✓
	VL400 (3VL4)		✓
	VL630, VL800 (3VL5, 3VL6)		✓
<b>Motorized operating mechanisms for synchronization tasks (110 ... 127 V AC/DC)</b> Motorized operating mechanism <u>not</u> prewired; if prewiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must <u>not</u> be specified in addition.	available with VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3)	<b>M 1 1</b>	✓
	VL400 (3VL4)		✓
	VL630, VL800 (3VL5, 3VL6)		✓
<b>Motorized operating mechanisms for synchronization tasks (220 ... 250 V AC/DC)</b> Motorized operating mechanism <u>not</u> prewired; if prewiring for the motorized operating mechanism is wanted, please specify "L12" in addition. If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must <u>not</u> be specified in addition.	available with VL160X, VL160, VL250 (3VL1, 3VL2, 3VL3)	<b>M 2 2</b>	✓
	VL400 (3VL4)		✓
	VL630, VL800 (3VL5, 3VL6)		✓

✓ Additional price

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Options

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

Order No. with "-Z"





1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16  
 3VL . . . . . -Z  
 and additional order code(s)

+ . . . + . . .

Additional price

Code for further versions -Z

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

<b>Pre-mounted motorised operating mechanisms (24 V DC) on circuit breaker, not synchronizable</b> If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must <u>not</u> be specified in addition.	Available with VL160X (3VL1)	M 2 5		✓
	VL160, VL250 (3VL2, 3VL3)			✓
	VL400 (3VL4)			✓
	VL630, VL800 (3VL5, 3VL6)			✓
	VL1250, VL1600 (3VL7, 3VL8)			✓
<b>Pre-mounted motorized operating mechanisms (42 ... 60 V AC/DC) on circuit breakers, not synchronizable</b> If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must <u>not</u> be specified in addition.	Available with VL160X (3VL1)	M 4 3		✓
	VL160, VL250 (3VL2, 3VL3)			✓
	VL400 (3VL4)			✓
	VL630, VL800 (3VL5, 3VL6)			✓
	VL1250, VL1600 (3VL7, 3VL8)			✓
<b>Pre-mounted motorized operating mechanisms (110 ... 127 V AC/DC) on circuit breakers, not synchronizable</b> If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must <u>not</u> be specified in addition.	Available with VL160X (3VL1)	M 1 2		✓
	VL160, VL250 (3VL2, 3VL3)			✓
	VL400 (3VL4)			✓
	VL630, VL800 (3VL5, 3VL6)			✓
	VL1250, VL1600 (3VL7, 3VL8)			✓
<b>Pre-mounted motorized operating mechanisms (220 ... 250 V AC/DC) on circuit breakers, not synchronizable</b> If internal accessories are provided, the prewiring option "L02" for internal accessories is already included. In this case "L02" must <u>not</u> be specified in addition.	Available with VL160X (3VL1)	M 2 3		✓
	VL160, VL250 (3VL2, 3VL3)			✓
	VL400 (3VL4)			✓
	VL630, VL800 (3VL5, 3VL6)			✓
	VL1250, VL1600 (3VL7, 3VL8)			✓

✓ Additional price

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

Options

2

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

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

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

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

✓ Additional price

-- Not available

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

2) With mounting adapter up to 3 HS.

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

4) Not feasible for use of SENTRON VL160 and VL250 with LCD ETU or marine engineering ETU and additional use of shunt and undervoltage releases.

When using a communication-capable ETU, the accessory compartment X2 is fitted with an auxiliary switch and an alarm switch. The combination of 1st and 2nd Order No. supplement is only possible with restrictions. It is recommended to use the configurator in the Mall for selection purposes.

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

# Molded Case Circuit Breakers

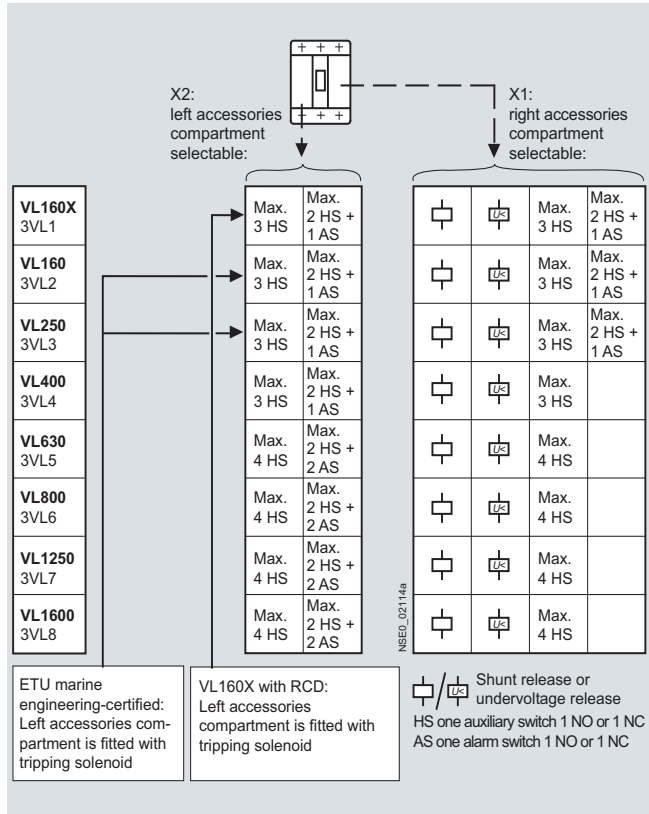
## 3VL Molded Case Circuit Breakers up to 1600 A

2

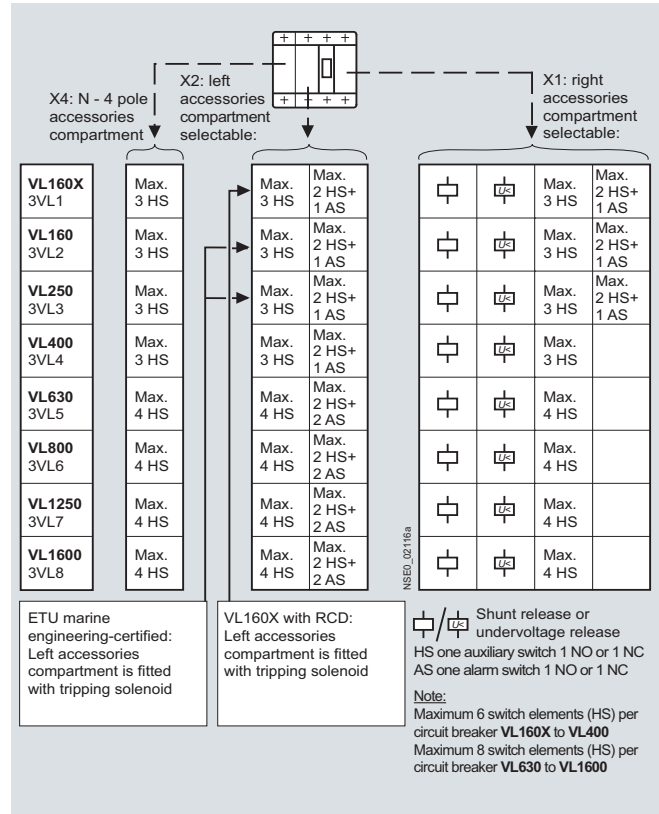
### Options

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

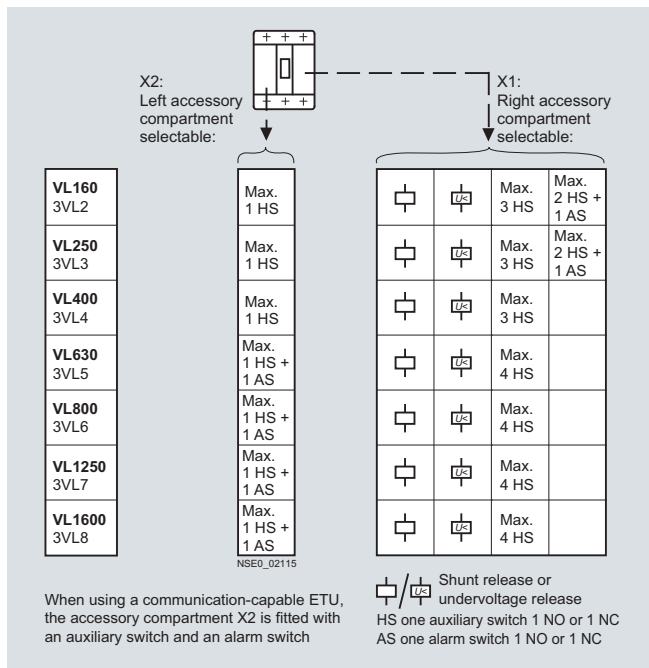
##### 3-pole circuit breakers without communication preparation



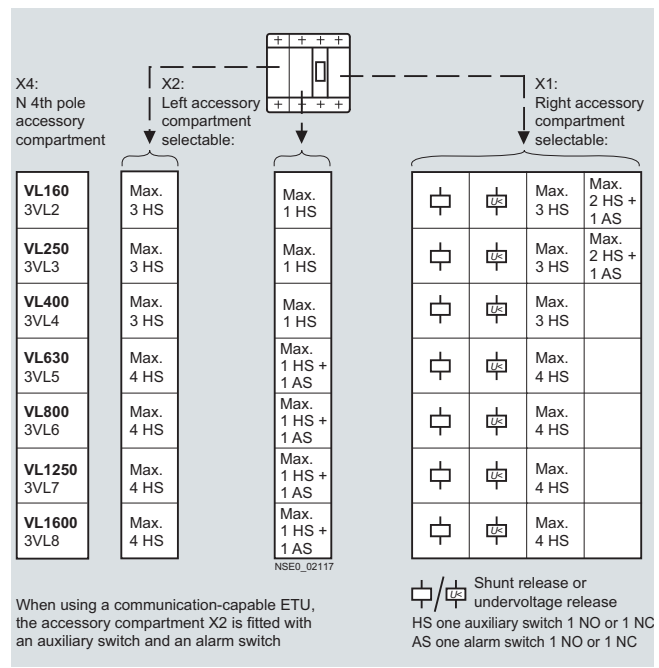
##### 4-pole circuit breakers without communication preparation



##### 3-pole circuit breakers with communication preparation



##### 4-pole circuit breakers with communication preparation



**Note:**

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

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

2

## Selection and ordering data

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

## Auxiliary switches and auxiliary releases

## 3- or 4-pole

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

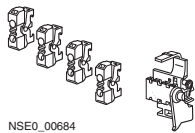
## Auxiliary switches (HS) and alarm switches (AS)

For retrofitting

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

Additional auxiliary switch/alarm switch combinations

See page 2/61.



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3VL9 400-2A.00

Shunt releases<sup>2)</sup>

For retrofitting

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

## Undervoltage release

For retrofitting

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

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

Rated control supply voltage  $U_s$ 

220 ... 250 V AC

Delay time &gt; 200 ms

		A	<b>3TX4 701-0AN1</b>	1	1 unit	101	0.170
--	--	---	----------------------	---	--------	-----	-------

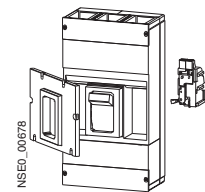
## Storage devices for shunt releases (208 ... 277 V AC/220 ... 250 V DC)

Rated control supply voltage  $U_s$ 

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

Storage time 5 min

		B	<b>3WL9 111-0BA14-0AA0</b>	1	1 unit	103	0.520
--	--	---	----------------------------	---	--------	-----	-------



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

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

<sup>2)</sup> Shunt releases with disconnection contact (3SB3 for ON/OFF position) not floating (see Technical Information at [www.siemens.com/lowvoltage/support](http://www.siemens.com/lowvoltage/support)).

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

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

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

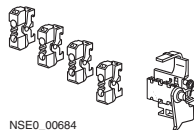
#### Auxiliary switches and auxiliary releases

##### 3- or 4-pole

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

##### Auxiliary switches (HS) and alarm switches (AS)

For retrofitting



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3VL9 800-2A.00

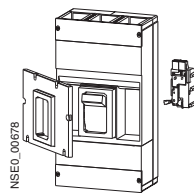
Assembly kits	Mounting side					
2 HS (1 NO + 1 NC)	N, left, right	--				
4 HS (2 NO + 2 NC)	N, left, right	A	<b>3VL9 800-2AC00</b>	1	1 unit	113 0.058
2 HS (1 NC + 1 NO) + 1 AS (1 NO) (assembly kit)	Left, right Left	A	<b>3VL9 800-2AE00</b>	1	1 unit	113 0.060

Additional auxiliary switch/alarm switch combinations

See page 2/61.

##### Shunt releases<sup>1)</sup>

For retrofitting



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3VL9 800-1S.00,  
3VL9 800-1U.00

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

##### Undervoltage release

For retrofitting

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

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

Rated control supply voltage  $U_s$   
220 ... 250 V AC

Delay time > 200 ms	A	<b>3TX4 701-0AN1</b>	1	1 unit	101	0.170
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##### Storage devices for shunt releases (208 ... 277 V AC/220 ... 250 V DC)

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

Storage time 5 min	B	<b>3WL9 111-0BA14-0AA0</b>	1	1 unit	103	0.520
--------------------	---	----------------------------	---	--------	-----	-------

<sup>1)</sup> Shunt releases with disconnection contact (3SB3 for ON/OFF position) not floating (see Technical Information at [www.siemens.com/lowvoltage/support](http://www.siemens.com/lowvoltage/support)).

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts

2

For circuit breakers	Maximum combination of auxiliary switches (HS) and alarm switches (AS)	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
<b>3SB adapters and 3SB contact blocks</b>								
<b>Mounting adapters for auxiliary and alarm switch combinations</b>								
<b>For installation in the N pole of the circuit breaker</b>								
VL160X, VL160, VL250, VL400 (3VL1 to 3VL4)	Up to 3 HS <sup>1)</sup>	A	<b>3VL9 400-2AH00</b>		1	1 unit	113	0.009
	2 HS + 1 AS <sup>1)2)</sup>		--					
VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8)	Up to 4 HS	A	<b>3VL9 816-2AL00</b>		1	1 unit	113	0.075
	2 HS + 2 AS		--					
<b>For installation in the left pole of the circuit breaker</b>								
VL160X, VL160, VL250, VL400 (3VL1 to 3VL4)	Up to 3 HS <sup>1)</sup>	A	<b>3VL9 400-2AH00</b>		1	1 unit	113	0.009
	2 HS + 1 AS <sup>1)2)</sup>	A	<b>3VL9 400-2AJ10</b>		1	1 unit	113	0.001
VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8)	Up to 4 HS	A	<b>3VL9 816-2AL00</b>		1	1 unit	113	0.075
	2 HS + 2 AS	A	<b>3VL9 816-2AN10</b>		1	1 unit	113	0.072
<b>For installation in the right pole of the circuit breaker</b>								
VL160X, VL160, VL250, VL400 (3VL1 to 3VL4) <sup>2)</sup>	Up to 3 HS <sup>1)</sup>	A	<b>3VL9 400-2AH00</b>		1	1 unit	113	0.009
	2 HS + 1 AS <sup>1)2)</sup>	A	<b>3VL9 400-2AJ20</b>		1	1 unit	113	0.001
VL630, VL800, VL1250, VL1600 (3VL5 to 3VL8)	Up to 4 HS	A	<b>3VL9 816-2AL00</b>		1	1 unit	113	0.075
	2 HS + 2 AS		--					

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

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

For auxiliary/alarm switches	DT	Circuit breakers Type	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
		<b>VL160X to VL1600 (3VL1 to 3VL8)</b>				
		Order No.	Price per PU			kg
<b>Switching blocks for auxiliary and alarm switch combinations</b>						
1 NO	B	<b>3SB34 00-0J</b>		1	1 unit	102
1 NC	B	<b>3SB34 00-0K</b>		1	1 unit	102

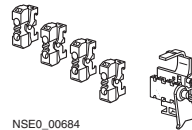
For auxiliary switch or alarm switch combinations not included in the kits provided as standard, the mounting adapters specified can be ordered separately together with the required contact blocks:

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

#### Note:

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

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



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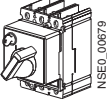
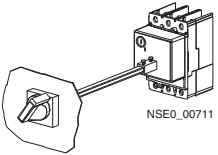
For retrofitting/possible complement see Technical Information at [www.siemens.com/lowvoltage/support](http://www.siemens.com/lowvoltage/support).

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

Version	DT	For VL160X to VL250 (3VL1 to 3VL3) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.  kg
<b>Operating mechanisms</b>							
<b>3- or 4-pole</b>							
<b>Front-operated rotary operating mechanisms<sup>1)</sup></b>							
For direct mounting on the circuit breaker, without leading auxiliary switch, degree of protection IP30 <sup>2)</sup> , black, max. 3 padlocks							
	A	<b>3VL9 300-3HA00</b>		1	1 unit	113	0.362
3VL9 .00-3H.00	A	<b>3VL9 300-3HC00</b>		1	1 unit	113	0.362
<u>EMERGENCY-STOP version</u>							
Red knob, yellow indicator plate							
Safety locks for installation by the customer For installation see pages 2/84 to 2/88.							
<b>Front rotary operating mechanisms with shaft end, without knob<sup>1)</sup></b>							
Without leading auxiliary switch, for auxiliary switches see below							
A		<b>3VL9 300-3HE00</b>		1	1 unit	113	0.267
<b>Door-coupling rotary operating mechanisms, complete<sup>1)</sup></b>							
<b>Installation in doors and covers</b>							
Degree of protection IP65, including handle ti-grey, with masking plate, indicator plate, detachable door coupling (die cast with reduced tolerance compensation), extension shaft (8 x 8 mm), length 300 mm and front-operated rotary operating mechanism for the respective circuit breaker, lockable with up to 3 padlocks, with door interlocking							
	A	<b>3VL9 300-3HF05</b>		1	1 unit	113	0.970
3VL9 .00-3H.05	A	<b>3VL9 300-3HG05</b>		1	1 unit	113	0.980
<u>EMERGENCY-STOP version</u>							
Red knob, yellow indicator plate, without leading auxiliary switch							
Safety locks for installation by the customer For installation see pages 2/84 to 2/88.							
<b>Leading auxiliary switches</b>							
<b>For installation in a front-operated rotary operating mechanism, door-coupling rotary operating mechanism or side panel rotary operating mechanism</b>							
Standard or EMERGENCY-STOP version							
<u>"OFF after ON"</u>							
Leading auxiliary switches when switching on							
1 changeover contact with 1.5 m long cables	A	<b>3VL9 300-3AS10</b>		1	1 unit	113	0.080
2 changeover contacts with 1.5 m long cables	A	<b>3VL9 300-3AT10</b>		1	1 unit	113	0.130
<u>"ON after OFF"</u>							
Leading auxiliary switches when switching off							
1 changeover contact with 1.5 m long cables	A	<b>3VL9 300-3AU10</b>		1	1 unit	113	0.080
2 changeover contacts with 1.5 m long cables	A	<b>3VL9 300-3AW10</b>		1	1 unit	113	0.130
<b>Side panel rotary operating mechanisms, complete<sup>1)</sup></b>							
Degree of protection IP65, including black knob with masking plate, indicator plate, Bowden wire, lockable with up to 3 padlocks							
- With 600 mm Bowden wire	A	<b>3VL9 300-3HR10</b>		1	1 unit	113	1.400
- With 1000 mm Bowden wire	A	<b>3VL9 300-3HR20</b>		1	1 unit	113	1.400
- With 1500 mm Bowden wire	A	<b>3VL9 300-3HR30</b>		1	1 unit	113	1.400
<b>Side panel rotary operating mechanisms, complete<sup>1)</sup></b>							
<u>EMERGENCY-STOP version</u>							
Degree of protection IP65, including red knob with masking plate, yellow indicator plate, Bowden wire, lockable with up to 3 padlocks							
- With 600 mm Bowden wire	A	<b>3VL9 300-3HR11</b>		1	1 unit	113	1.400
- With 1000 mm Bowden wire	A	<b>3VL9 300-3HR21</b>		1	1 unit	113	1.400
- With 1500 mm Bowden wire	A	<b>3VL9 300-3HR31</b>		1	1 unit	113	1.400
<b>Retaining brackets, suitable for matching door-coupling rotary operating mechanisms, complete</b>							
Retaining bracket is mounted on the operating mechanism, recommended for extension shafts >250 mm, with locking device for max. 3 padlocks							
- for 6 mm shaft	A	<b>3VL9 300-3HP00</b>		1	1 unit	113	0.253
X		<b>3VL9 300-3HP02</b>		1	1 unit	113	0.435

Additional accessories and components for door-coupling rotary operating mechanism, see 2/67 and 2/69.

<sup>1)</sup> Not possible on VL160X with RCD module.

<sup>2)</sup> IP40 with additional masking frame mounted on the door cutout.

\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts

2

DT	For VL400 (3VL4)				DT	For VL630 (3VL5)							
	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit		PG	Weight per PU approx. kg	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
A	<b>3VL9 400-3HA00</b>		1	1 unit	113	0.725	A	<b>3VL9 600-3HA00</b>		1	1 unit	113	0.834
A	<b>3VL9 400-3HC00</b>		1	1 unit	113	0.725	A	<b>3VL9 600-3HC00</b>		1	1 unit	113	0.834
A	<b>3VL9 400-3HE00</b>		1	1 unit	113	0.267	A	<b>3VL9 600-3HE00</b>		1	1 unit	113	0.755
A	<b>3VL9 400-3HF05</b>		1	1 unit	113	0.970	A	<b>3VL9 600-3HF05</b>		1	1 unit	113	2.465
A	<b>3VL9 400-3HG05</b>		1	1 unit	113	1.100	A	<b>3VL9 600-3HG05</b>		1	1 unit	113	2.460
A	<b>3VL9 400-3AS10</b>		1	1 unit	113	0.080	A	<b>3VL9 600-3AS10</b>		1	1 unit	113	0.080
A	<b>3VL9 400-3AT10</b>		1	1 unit	113	0.130	A	<b>3VL9 600-3AT10</b>		1	1 unit	113	0.130
A	<b>3VL9 400-3AU10</b>		1	1 unit	113	0.080	A	<b>3VL9 600-3AU10</b>		1	1 unit	113	0.080
A	<b>3VL9 400-3AW10</b>		1	1 unit	113	0.130	A	<b>3VL9 600-3AW10</b>		1	1 unit	113	0.130
A	<b>3VL9 400-3HR10</b>		1	1 unit	113	2.000	A	<b>3VL9 500-3HR10</b>		1	1 unit	113	2.400
A	<b>3VL9 400-3HR20</b>		1	1 unit	113	2.000	A	<b>3VL9 500-3HR20</b>		1	1 unit	113	2.400
A	<b>3VL9 400-3HR30</b>		1	1 unit	113	2.000	A	<b>3VL9 500-3HR30</b>		1	1 unit	113	2.400
A	<b>3VL9 400-3HR11</b>		1	1 unit	113	2.000	A	<b>3VL9 500-3HR11</b>		1	1 unit	113	2.400
A	<b>3VL9 400-3HR21</b>		1	1 unit	113	2.000	A	<b>3VL9 500-3HR21</b>		1	1 unit	113	2.400
A	<b>3VL9 400-3HR31</b>		1	1 unit	113	2.000	A	<b>3VL9 500-3HR31</b>		1	1 unit	113	2.400
A	<b>3VL9 400-3HP00</b>		1	1 unit	113	0.379	A	<b>3VL9 600-3HP00</b>		1	1 unit	113	0.437
--													

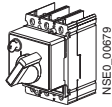
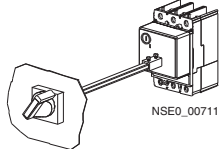
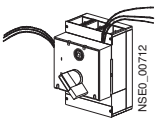
\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

Version	DT	For VL800 (3VL6)	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.
		Order No.	Price per PU			kg
<b>Operating mechanisms</b>						
<b>3- or 4-pole</b>						
 NSE0_00679 3VL9 .00-3H.00	<b>Front-operated rotary operating mechanisms</b> For direct mounting on the circuit breaker, without leading auxiliary switch, degree of protection IP30 <sup>1)</sup> , <u>black</u> , max. 3 padlocks		A	<b>3VL9 600-3HA00</b>	1	1 unit 113 0.834
	<b>EMERGENCY-STOP version</b> Red knob, yellow indicator plate		A	<b>3VL9 600-3HC00</b>	1	1 unit 113 0.834
	<a href="#">Safety locks for installation by the customer</a> <a href="#">For installation see pages 2/84 to 2/88.</a>					
 NSE0_00711 3VL9 .00-3H.05	<b>Front rotary operating mechanisms with shaft stub, without knob</b> Without leading auxiliary switch, <a href="#">for auxiliary switches see below</a>		A	<b>3VL9 600-3HE00</b>	1	1 unit 113 0.755
	<b>Door-coupling rotary operating mechanisms, complete, installation in doors and covers</b> Degree of protection IP65, including handle, ti-grey, with masking frame, indicator plate, detachable door coupling (die cast, for VL800 (3VL6) with reduced tolerance compensation), extension shaft (8 × 8 mm for VL800 (3VL6), 12 × 12 mm for VL1250 (3VL7) and VL1600 (3VL8), length 300 mm and front rotary operating mechanism for the respective circuit breaker, lockable with max. 3 padlocks, with door interlocking		A	<b>3VL9 600-3HF05</b>	1	1 unit 113 2.465
	<b>EMERGENCY-STOP version,</b> Red knob, yellow indicator plate, without leading auxiliary switch		A	<b>3VL9 600-3HG05</b>	1	1 unit 113 2.460
<a href="#">Safety locks for installation by the customer</a> <a href="#">For installation see pages 2/84 to 2/88.</a>						
 NSE0_00712 3VL9 .00-3A.10	<b>Leading auxiliary switches</b> <b>For installation in a front-operated rotary operating mechanism or door-coupling rotary operating mechanism</b> Standard or EMERGENCY-STOP version					
	<b>"OFF after ON"</b> Leading auxiliary switches when switching on		A	<b>3VL9 600-3AS10</b>	1	1 unit 113 0.080
	1 changeover contact with 1.5 m long cables		A	<b>3VL9 600-3AT10</b>	1	1 unit 113 0.130
	2 changeover contacts with 1.5 m long cables					
	<b>"ON after OFF"</b> Leading auxiliary switches when switching off		A	<b>3VL9 600-3AU10</b>	1	1 unit 113 0.080
1 changeover contact with 1.5 m long cables		A	<b>3VL9 600-3AW10</b>	1	1 unit 113 0.130	
2 changeover contacts with 1.5 m long cables						
<b>Retaining brackets suitable for matching door-coupling rotary operating mechanisms, complete</b> Retaining bracket is mounted on the operating mechanism, recommended for extension shafts >250 mm, with locking device for max. 3 padlocks		A	<b>3VL9 600-3HP00</b>	1	1 unit 113 0.437	

Additional accessories and components for door-coupling rotary operating mechanism, see 2/67 and 2/69.

<sup>1)</sup> IP40 with additional masking frame mounted on the door cutout.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

**Accessories and spare parts**
**2**

DT	For VL1250 to VL1600 (3VL7 to 3VL8) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.  kg
----	---	-----------------	-------------------------	-----------------	----	---------------------------------------

A	<b>3VL9 800-3HA00</b>		1	1 unit	113	2.831
---	-----------------------	--	---	--------	-----	-------

A	<b>3VL9 800-3HC00</b>		1	1 unit	113	2.831
---	-----------------------	--	---	--------	-----	-------

A	<b>3VL9 800-3HE00</b>		1	1 unit	113	2.175
---	-----------------------	--	---	--------	-----	-------

A	<b>3VL9 800-3HF05</b>		1	1 unit	113	4.102
---	-----------------------	--	---	--------	-----	-------

A	<b>3VL9 800-3HG05</b>		1	1 unit	113	4.100
---	-----------------------	--	---	--------	-----	-------

A	<b>3VL9 800-3AS20</b>		1	1 unit	113	0.080
---	-----------------------	--	---	--------	-----	-------

A	<b>3VL9 800-3AT20</b>		1	1 unit	113	0.130
---	-----------------------	--	---	--------	-----	-------

A	<b>3VL9 800-3AU10</b>		1	1 unit	113	0.080
---	-----------------------	--	---	--------	-----	-------

A	<b>3VL9 800-3AW10</b>		1	1 unit	113	0.130
---	-----------------------	--	---	--------	-----	-------

A	<b>3VL9 800-3HP00</b>		1	1 unit	113	0.529
---	-----------------------	--	---	--------	-----	-------

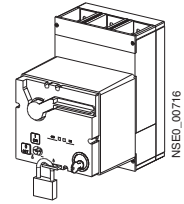
# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

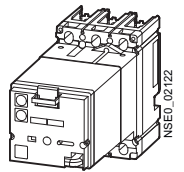
2

### Accessories and spare parts

Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
<b>Motorized operating mechanisms</b>							
<b>3- or 4-pole</b>							
<b>Motorized operating mechanisms with stored energy mechanisms for synchronization tasks<sup>1)2)</sup></b>		<b>For VL160X to VL250 (3VL1 to 3VL3)</b>					
Degree of protection IP30, with locking device for 3 padlocks							
50/60 Hz V AC	V DC						
--	24	A	<b>3VL9 300-3MJ00</b>	1	1 unit	113	2.140
42 ... 48	42 ... 48	A	<b>3VL9 300-3ML00</b>	1	1 unit	113	2.140
60	60	A	<b>3VL9 300-3MS00</b>	1	1 unit	113	2.140
110 ... 127	110 ... 127	A	<b>3VL9 300-3MN00</b>	1	1 unit	113	2.140
220 ... 250	220 ... 250	A	<b>3VL9 300-3MQ00</b>	1	1 unit	113	2.140
• Toggle handle extensions		--					
			<b>For VL400 (3VL4)</b>				
50/60 Hz V AC	V DC						
--	24	A	<b>3VL9 400-3MJ00</b>	1	1 unit	113	3.910
42 ... 48	42 ... 48	A	<b>3VL9 400-3ML00</b>	1	1 unit	113	3.910
60	60	A	<b>3VL9 400-3MS00</b>	1	1 unit	113	3.910
110 ... 127	110 ... 127	A	<b>3VL9 400-3MN00</b>	1	1 unit	113	3.910
220 ... 250	220 ... 250	A	<b>3VL9 400-3MQ00</b>	1	1 unit	113	3.910
• Toggle handle extensions		A	<b>3VL9 400-3HN00</b>	1	1 unit	113	0.100
			<b>For VL630 to VL800 (3VL5 to 3VL6)</b>				
50/60 Hz V AC	V DC						
--	24	A	<b>3VL9 600-3MJ00</b>	1	1 unit	113	4.800
42 ... 48	42 ... 48	A	<b>3VL9 600-3ML00</b>	1	1 unit	113	4.800
60	60	A	<b>3VL9 600-3MS00</b>	1	1 unit	113	4.800
110 ... 127	110 ... 127	A	<b>3VL9 600-3MN00</b>	1	1 unit	113	4.800
220 ... 250	220 ... 250	A	<b>3VL9 600-3MQ00</b>	1	1 unit	113	4.800
• Toggle handle extensions		C	<b>3VL9 600-3HN00</b>	1	1 unit	113	0.140
<b>Motorized operating mechanisms<sup>2)</sup></b>		<b>For VL160X (3VL1)</b>					
Degree of protection IP30, with locking device for 3 padlocks							
50/60 Hz V AC	V DC						
--	24	B	<b>3VL9 100-3MA10</b>	1	1 unit	113	1.000
42 ... 60	42 ... 60	B	<b>3VL9 100-3MC10</b>	1	1 unit	113	1.000
110 ... 127	110 ... 127	B	<b>3VL9 100-3MD10</b>	1	1 unit	113	1.000
220 ... 250	220 ... 250	B	<b>3VL9 100-3ME10</b>	1	1 unit	113	1.000
			<b>For VL160 and VL250 (3VL2 and 3VL3)</b>				
50/60 Hz V AC	V DC						
--	24	B	<b>3VL9 300-3MA10</b>	1	1 unit	113	1.000
42 ... 60	42 ... 60	B	<b>3VL9 300-3MC10</b>	1	1 unit	113	1.000
110 ... 127	110 ... 127	B	<b>3VL9 300-3MD10</b>	1	1 unit	113	1.000
220 ... 250	220 ... 250	B	<b>3VL9 300-3ME10</b>	1	1 unit	113	1.000
			<b>For VL400 (3VL4)</b>				
50/60 Hz V AC	V DC						
--	24	B	<b>3VL9 400-3MA10</b>	1	1 unit	113	1.000
42 ... 60	42 ... 60	B	<b>3VL9 400-3MC10</b>	1	1 unit	113	1.000
110 ... 127	110 ... 127	B	<b>3VL9 400-3MD10</b>	1	1 unit	113	1.000
220 ... 250	220 ... 250	B	<b>3VL9 400-3ME10</b>	1	1 unit	113	1.000
			<b>For VL630 and VL800 (3VL5 and 3VL6)</b>				
50/60 Hz V AC	V DC						
--	24	B	<b>3VL9 600-3MA10</b>	1	1 unit	113	1.000
42 ... 60	42 ... 60	B	<b>3VL9 600-3MC10</b>	1	1 unit	113	1.000
110 ... 127	110 ... 127	B	<b>3VL9 600-3MD10</b>	1	1 unit	113	1.000
220 ... 250	220 ... 250	B	<b>3VL9 600-3ME10</b>	1	1 unit	113	1.000
			<b>For VL1250 and VL1600 (3VL7 and 3VL8)</b>				
50/60 Hz V AC	V DC						
--	24	B	<b>3VL9 800-3MA10</b>	1	1 unit	113	1.000
42 ... 60	42 ... 60	B	<b>3VL9 800-3MC10</b>	1	1 unit	113	1.000
110 ... 127	110 ... 127	B	<b>3VL9 800-3MD10</b>	1	1 unit	113	1.000
220 ... 250	220 ... 250	B	<b>3VL9 800-3ME10</b>	1	1 unit	113	1.000



3VL9 .00-3M.00



3VL9 .00-3M.10

<sup>1)</sup> Not possible on VL160X with RCD module.




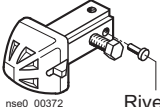


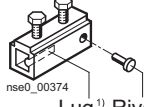
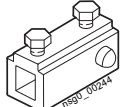
<sup>2)</sup> For safety lock as an assembly kit for retrofitting see pages 2/84 to 2/88.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts

2

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

1) Non-interchangeability features.

2) Shortened coupling driver with reduced tolerance compensation.



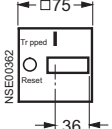


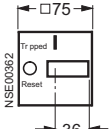


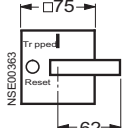


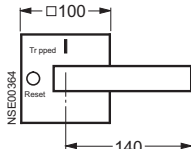
3) Standard: Ti-grey handle, light-gray masking plate;  
EMERGENCY-STOP: Red handle, yellow masking plate.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

Switching device	Rated current	Cross-section of the actuating shaft	Torque	Rotary operating mechanisms	Illustrated: Handle, masking plate	
<b>8UC Door-Coupling Rotary Operating Mechanisms</b>						
<b>8UC71 - 3VL circuit breakers</b>						
 	3VL1	16 ... 160	6 × 6	4	1	
	3VL2	50 ... 160	6 × 6	4		
	3VL3	200... 250	6 × 6	4		
 	3VL1	16 ... 160	8 × 8	4	1	
	3VL2	50 ... 160	8 × 8	4		
	3VL3	200... 250	8 × 8	4		
(Supplied with door coupling rotary operating mechanism, complete 3VL9 300-3H.05)						
<b>8UC72 - 3VL circuit breakers</b>						
 	3VL4	200 ... 400	8 × 8	9	2	
	3VL5	315 ... 600	8 × 8	9		
	3VL6	320 ... 800	8 × 8	9		
<b>8UC73 - 3VL circuit breakers</b>						
 	3VL7	400 ... 1250	12 × 12	25	3	
	3VL8	640 ... 1600	12 × 12	25		

<sup>1)</sup> Requires in addition a front-operated rotary operating mechanism with shaft stub for direct mounting to the circuit breaker. For ordering the complete operating mechanism see pages 2/62 to 2/65.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts

2

Version	DT	Rotary operating mechanisms, complete <sup>1)</sup>	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.	Individual parts of the rotary operating mechanism				
							Order No.	Price per PU	Handle with masking plate	Coupling drivers	Extension shaft (length 300 mm)
Standard: TI-grey handle, light-gray masking plate; <b>EMERGENCY-STOP:</b> Red handle, yellow masking plate							kg	Order No.	Order No.	Order No.	Order No.
Standard EMERGENCY-STOP (coupling driver made of plastic)	C	<b>8UC71 11-6BD15</b>	1	1 unit	103	0.200	8UC71 10-6BD	□ 6 mm 8UC70 11-2AA	□ 6 mm 8UC60 31	□ 8 mm by 6 mm 8UC70 58	
	C	<b>8UC71 21-8BD15</b>	1	1 unit	103	0.200	8UC71 20-8BD	8UC70 11-2AA	8UC60 31	8UC70 58	
Standard EMERGENCY-STOP (Die-cast coupling driver with reduced tolerance compensation)	C	<b>8UC71 62-6BD22</b>	1	1 unit	103	0.200	8UC71 10-6BD	□ 8 mm 8UC60 17-2AA	□ 8 mm 8UC60 32	□ 8 mm by 8 mm 8UC60 22	
	C	<b>8UC71 72-8BD22</b>	1	1 unit	103	0.200	8UC71 20-8BD	8UC60 17-2AA	8UC60 32	8UC60 22	
Standard EMERGENCY-STOP (Die-cast coupling driver with reduced tolerance compensation)	C	<b>8UC72 62-6BD26</b>	1	1 unit	103	0.200	8UC72 10-6BD	□ 8 mm 8UC60 17-2AA	□ 8 mm 8UC60 32	□ 12 mm by 8 mm 8UC70 50	
	C	<b>8UC72 62-8BD26</b>	1	1 unit	103	0.200	8UC72 20-8BD	8UC60 17-2AA	8UC60 32	8UC70 50	
Standard EMERGENCY-STOP (Die-cast coupling driver)	C	<b>8UC73 14-6BD44</b>	1	1 unit	103	0.200	8UC73 10-6BD	□ 12 mm 8UC60 14	□ 12 mm 8UC60 34	□ 12 mm by 12 mm 8UC60 24	
	C	<b>8UC73 24-8BD44</b>	1	1 unit	103	0.200	8UC73 20-8BD	8UC60 14	8UC60 34	8UC60 24	

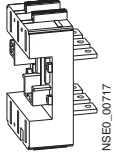
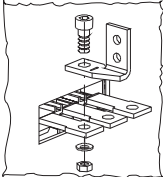
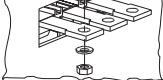
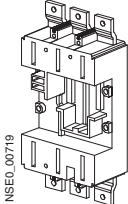
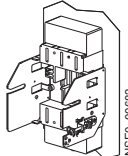
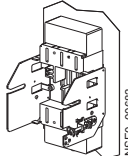
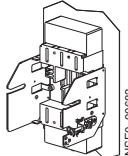
\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

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

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

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts

2

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

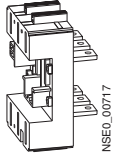
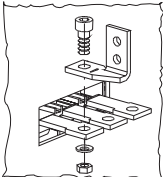
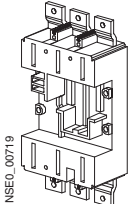
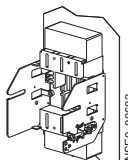
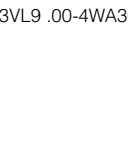
\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

Version	DT	For VL400 (3VL4) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	
<b>Plug-in versions/withdrawable versions</b>								
<b>3- or 4-pole</b>								
<b>Plug-in base assembly kits</b>								
Base, blade contacts for circuit breakers, terminal covers for degree of protection IP20, fixing screws, trip pin								
<b>Rear terminals</b>								
 NSE0_00717 3VL9 .00-4PA30		3-pole	A	<b>3VL9 400-4PA30</b> -- <sup>1)</sup>	1	1 unit	113	5.869
		3-pole with RCD module	A	<b>3VL9 400-4PA40</b>	1	1 unit	113	8.008
		4-pole	A	<b>3VL9 400-4PB40</b>	1	1 unit	113	10.100
		4-pole with RCD module	A	<b>3VL9 400-4PB40</b>	1	1 unit	113	10.100
<b>90° angle connecting adapters</b>								
For rear connection, 3-pole								
For rear connection, 4-pole								
<b>Front-accessible terminals</b>								
 NSE00581 3VL9 .00-4PE30		3-pole	A	<b>3VL9 400-4PC30</b> -- <sup>1)</sup>	1	1 unit	113	5.424
		3-pole with RCD module	A	<b>3VL9 400-4PC40</b>	1	1 unit	113	7.408
		4-pole	A	<b>3VL9 400-4PD40</b>	1	1 unit	113	9.500
		4-pole with RCD module	A	<b>3VL9 400-4PD40</b>	1	1 unit	113	9.500
<b>Withdrawable version assembly kits</b>								
Upgrade of the plug-in base assembly kit to								
 NSE0_00719 3VL9 .00-4WF30		Withdrawable version 3-pole	A	<b>3VL9 400-4WF30</b> -- <sup>1)</sup>	1	1 unit	113	3.400
		including side panels 3-pole with RCD	A	<b>3VL9 400-4WF40</b>	1	1 unit	113	3.600
		and racking mechanism. 4-pole	A	<b>3VL9 400-4WF40</b>	1	1 unit	113	3.800
		4-pole with RCD	A	<b>3VL9 400-4WG40</b>	1	1 unit	113	3.800
<b>Withdrawable version</b>								
Same as plug-in base assembly kit, with additional side panels and racking mechanism								
<b>Rear terminals<sup>3)</sup></b>								
 NSE0_00683 3VL9 .00-4WA30		3-pole	A	<b>3VL9 400-4WA30</b> -- <sup>1)</sup>	1	1 unit	113	8.769
		3-pole with RCD module	A	<b>3VL9 400-4WA40</b>	1	1 unit	113	11.549
		4-pole	A	<b>3VL9 400-4WB40</b>	1	1 unit	113	13.200
		4-pole with RCD module	A	<b>3VL9 400-4WB40</b>	1	1 unit	113	13.200
<b>Front-accessible terminals</b>								
 NSE0_00683 3VL9 .00-4WC30		3-pole	A	<b>3VL9 400-4WC30</b> -- <sup>1)</sup>	1	1 unit	113	8.324
		3-pole with RCD module	A	<b>3VL9 400-4WC40</b>	1	1 unit	113	10.949
		4-pole	A	<b>3VL9 400-4WD40</b>	1	1 unit	113	12.600
		4-pole with RCD module	A	<b>3VL9 400-4WD40</b>	1	1 unit	113	12.600
<b>Blade contacts</b>								
As replacement for converting fixed-mounted circuit breakers into plug-in/withdrawable circuit breakers, including trip pin								
1 set = 6 units 3-pole								
1 set = 8 units 4-pole								
			A	<b>3VL9 400-4PS30</b>	1	1 unit	113	0.720
			A	<b>3VL9 400-4PS40</b>	1	1 unit	113	0.960
<b>Trip pins and springs</b>								
As replacement for plug-in/withdrawable circuit breaker								
			A	<b>3VL9 400-4PF00</b>	1	1 unit	113	0.015
<b>Auxiliary circuit plug connections for plug-in bases</b>								
Accessory connections for plug-in circuit breakers (factory-wired connectors) and for plug-in bases or withdrawable version (coupling with screw terminal)								
2)								
		8 terminals	A	<b>3VL9 400-4PJ00</b>	1	1 unit	113	0.144
<b>Position signaling switches</b>								
(connected/disconnected position)								
For plug-in/withdrawable base, 1 CO, max. 2 signaling switches possible								
			A	<b>3VL9 000-4WL00</b>	1	1 unit	113	0.019

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

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

<sup>3)</sup> With VL800 (3VL6) to VL1600 (3VL8) as vertical connection.

# Molded Case Circuit Breakers

## 3VL9 Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts

2

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

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

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

<sup>1)</sup> With VL800 (3VL6) to VL1600 (3VL8) as vertical connection.

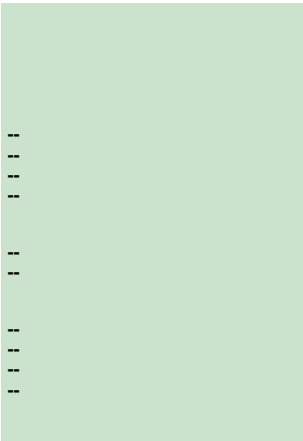
<sup>2)</sup> It is recommended to use a maximum of 3 auxiliary circuit plug-in systems per circuit breaker (24 terminals).

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

**Accessories and spare parts**
**2**

DT	For VL1600 (3VL8) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.  kg
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A	<b>3VL9 800-4WA30</b>		1	1 unit	113	39.996
A	<b>3VL9 800-4WA40</b>		1	1 unit	113	47.148
A	<b>3VL9 800-4WC30</b>		1	1 unit	113	40.608
A	<b>3VL9 800-4WC40</b>		1	1 unit	113	47.964

A	<b>3VL9 800-4PS30</b>		1	1 unit	113	2.000
A	<b>3VL9 800-4PS40</b>		1	1 unit	113	2.660

A	<b>3VL9 800-4PF00</b>		1	1 unit	113	0.030
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A	2) <b>3VL9 800-4PJ00</b>		1	1 unit	113	0.144
A	<b>3VL9 000-4WL00</b>		1	1 unit	113	0.019

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

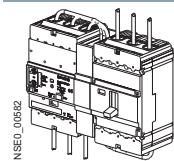
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### Accessories and spare parts

Circuit breakers for system protection, <b>only for TM, starters, disconnectors</b>	Rated current $I_n$	Residual currents $I$ adjustable	Delay time $t_d$ adjustable	Rated operational voltage $U_e$	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
	A	A	s	V AC							kg

#### RCD modules

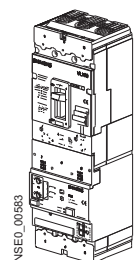
##### 3-pole



SENTRON VL160X with RCD module mounted laterally on the circuit breaker (on left side)

VL160X (3VL1)		0.03	Instantaneous								
Bottom mounting <sup>1)3)</sup>	160	0.10	0.06	127 ... 480	A	<b>3VL9 112-5GA30</b>		1	1 unit	113	1.340
Mounting kit for left side, without RCD <sup>1)2)3)</sup>		0.30	0.10								
		0.50	0.25		A	<b>3VL9 112-5GB30</b>		1	1 unit	113	1.525
		1.00	0.50								
		3.00	1.00								
VL160 (3VL2)	160			127 ... 480	A	<b>3VL9 216-5GC30</b>		1	1 unit	113	1.320
				230 ... 690	A	<b>3VL9 216-5GD30</b>		1	1 unit	113	1.320
VL250 (3VL3)	250			127 ... 480	A	<b>3VL9 325-5GE30</b>		1	1 unit	113	1.400
				230 ... 690	A	<b>3VL9 325-5GF30</b>		1	1 unit	113	1.400
VL400 (3VL4)	400			127 ... 480	--						
				230 ... 690	--						

##### 4-pole



SENTRON VL160X up to VL400 with RCD module mounted below the circuit breaker

VL160X (3VL1)		0.03	Instantaneous								
Bottom mounting <sup>1)3)</sup>	160	0.10	0.06	127 ... 480	A	<b>3VL9 112-5GA40</b>		1	1 unit	113	1.590
Mounting kit for left side, without RCD <sup>1)2)3)</sup>		0.30	0.10								
		0.50	0.25		A	<b>3VL9 112-5GB40</b>		1	1 unit	113	1.824
		1.00	0.50								
		3.00	1.00								
VL160 (3VL2)	160			127 ... 480	A	<b>3VL9 216-5GC40</b>		1	1 unit	113	1.570
				230 ... 690	A	<b>3VL9 216-5GD40</b>		1	1 unit	113	1.570
VL250 (3VL3)	250			127 ... 480	A	<b>3VL9 325-5GE40</b>		1	1 unit	113	1.650
				230 ... 690	A	<b>3VL9 325-5GF40</b>		1	1 unit	113	1.650
VL400 (3VL4)	400			127 ... 480	A	<b>3VL9 440-5GG40</b>		1	1 unit	113	2.980
				230 ... 690	A	<b>3VL9 440-5GH40</b>		1	1 unit	113	2.980

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

#### Circuit breakers with RCD module

##### 3 and 4-pole

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

✓ Additional price

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

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

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
















\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts

2

Version	DT	For VL160X (3VL1) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		
<b>Connection methods for fixed-mounted circuit breakers</b>									
<b>3- or 4-pole</b>									
<b>Front connecting bars<sup>1)</sup></b> Phase barriers included.									
Standard									
 NSE0_00702 3VL9 .00-4EC40		1 set = 3 units	3-pole	A	<b>3VL9 216-4EC30</b>	1	1 unit	113	0.198
		1 set = 4 units	4-pole	A	<b>3VL9 216-4EC40</b>	1	1 unit	113	0.198
For increased pole spacing									
 NSE0_00722 3VL9 .00-4ED40		1 set = 3 units	3-pole	A	<b>3VL9 216-4ED30</b>	1	1 unit	113	0.189
		1 set = 4 units	4-pole	A	<b>3VL9 216-4ED40</b>	1	1 unit	113	0.252
<b>Rear terminals</b>									
Short terminal (1 unit)									
 NSE0_00723 3VL9 .00-4RA00, 3VL9 .00-4RB00		1 unit		A	<b>3VL9 100-4RA00</b>	1	1 unit	113	0.126
		1 unit		A	<b>3VL9 100-4RB00</b>	1	1 unit	113	0.229
Terminal kit (2 short + 1 long)									
 NSE0_00724 3VL9 .00-4RK00, 3VL9 .00-4RL00		1 set = 3 units	3-pole	A	<b>3VL9 100-4RC30</b>	1	1 unit	113	0.481
		1 set = 4 units	4-pole	A	<b>3VL9 100-4RC40</b>	1	1 unit	113	0.711
Short flat connector (1 unit)									
 NSE0_00724 3VL9 .00-4RK00, 3VL9 .00-4RL00		1 unit		A	<b>3VL9 100-4RF40</b>	1	1 unit	113	0.711
		1 unit		A	<b>3VL9 100-4RK00</b>	1	1 unit	113	0.104
Long flat connector (1 unit)									
 NSE0_00724 3VL9 .00-4RK00, 3VL9 .00-4RL00		1 unit		A	<b>3VL9 100-4RL00</b>	1	1 unit	113	0.200
		1 unit		A	<b>3VL9 100-4RM30</b>	1	1 unit	113	0.408
Flat connector kit (2 short + 1 long)									
 NSE0_00724 3VL9 .00-4RK00, 3VL9 .00-4RL00		1 set = 3 units	3-pole	A	<b>3VL9 100-4RM30</b>	1	1 unit	113	0.408
		1 set = 4 units	4-pole	A	<b>3VL9 100-4RN40</b>	1	1 unit	113	0.608
Flat connector kit (2 short + 2 long)									
 NSE0_00700 3VL9 .00-4TC.0		1 set = 3 units		A	<b>3VL9 100-4TC30</b>	1	1 unit	113	0.084
		1 set = 4 units		A	<b>3VL9 100-4TC40</b>	1	1 unit	113	0.112
<b>Box terminals</b> For connection for flexible flat copper busbar or cable, see <a href="http://www.siemens.com/lowvoltage/support">Technical Information at www.siemens.com/lowvoltage/support</a> .									
Circular conductor terminals									
Only for cables (Al or Cu)									
Aluminum terminal (tinned)									
 NSE0_01529 3VL9 .00-4TD.0		1 set = 3 units		C	<b>3VL9 100-4TD30</b>	1	1 unit	113	0.041
		1 set = 4 units		C	<b>3VL9 100-4TD40</b>	1	1 unit	113	0.055
<b>Circular conductor terminal with terminal covers for cable (Al or Cu)</b> 									
 NSE0_01529 3VL9 .00-4TD.0		1 set = 3 units		B	<b>3VL9 115-4TD30</b>	1	1 unit	113	0.150
		1 set = 4 units		B	<b>3VL9 115-4TD40</b>	1	1 unit	113	0.150
<b>Auxiliary conductor terminals</b> For box terminals/circular conductor terminals									
 NSE0_00701 3VL9 .00-4TA.0		1 set = 10 units		A	<b>3VL9 200-3TN00</b>	1	1 unit	113	0.130
		1 set = 3 units		A	<b>3VL9 116-4TA30</b>	1	1 unit	113	0.055
<b>Terminals with screw connection - metric thread</b> With insulator (for rear) for use with busbars and cable lugs, see <a href="http://www.siemens.com/lowvoltage/support">Technical Information at www.siemens.com/lowvoltage/support</a> .									
 NSE0_00701 3VL9 .00-4TA.0		1 set = 4 units		A	<b>3VL9 116-4TA40</b>	1	1 unit	113	0.070
		1 set = 2 units		A	<b>3VL9 300-8CA30</b>	1	1 unit	113	0.204
<b>Connection covers (terminal covers) for circuit breakers</b> Degree of protection IP30 for main connections									
1 set = 2 units									
 NSE0_00730 3VL9 .00-3CB.0		Extended	3-pole	A	<b>3VL9 300-8CA30</b>	1	1 unit	113	0.204
		Standard	3-pole	A	<b>3VL9 300-8CB30</b>	1	1 unit	113	0.053
		Extended	4-pole	A	<b>3VL9 300-8CA40</b>	1	1 unit	113	0.264
		Standard	4-pole	A	<b>3VL9 300-8CB40</b>	1	1 unit	113	0.071
<b>Phase barriers for circuit breakers, fixed-mounted, plug-in or withdrawable versions</b>									
 NSE0_00731 3VL9 .00-8CE00		1 set = 2 units		A	<b>3VL9 300-8CE00</b>	1	1 unit	113	0.023

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



# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts

2

DT	For VL250 (3VL3)	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg	DT	For VL400 (3VL4)	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
A	<b>3VL9 300-4EC30</b>		1	1 unit	113	0.256	A	<b>3VL9 400-4EC30</b>		1	1 unit	113	0.889
A	<b>3VL9 300-4EC40</b>		1	1 unit	113	0.345	A	<b>3VL9 400-4EC40</b>		1	1 unit	113	1.193
A	<b>3VL9 300-4ED30</b>		1	1 unit	113	0.256	A	<b>3VL9 400-4ED30</b>		1	1 unit	113	0.916
A	<b>3VL9 300-4ED40</b>		1	1 unit	113	0.345	A	<b>3VL9 400-4ED40</b>		1	1 unit	113	1.229
A	<b>3VL9 300-4RA00</b>		1	1 unit	113	0.126	A	<b>3VL9 400-4RA00</b>		1	1 unit	113	0.219
A	<b>3VL9 300-4RB00</b>		1	1 unit	113	0.229	A	<b>3VL9 400-4RB00</b>		1	1 unit	113	0.377
A	<b>3VL9 300-4RC30</b>		1	1 unit	113	0.481	A	<b>3VL9 400-4RC30</b>		1	1 unit	113	0.816
A	<b>3VL9 300-4RF40</b>		1	1 unit	113	0.711	A	<b>3VL9 400-4RF40</b>		1	1 unit	113	1.192
A	<b>3VL9 300-4RK00</b>		1	1 unit	113	0.104	A	<b>3VL9 400-4RK00</b>		1	1 unit	113	0.343
A	<b>3VL9 300-4RL00</b>		1	1 unit	113	0.200	A	<b>3VL9 400-4RL00</b>		1	1 unit	113	0.502
A	<b>3VL9 300-4RM30</b>		1	1 unit	113	0.408	A	<b>3VL9 400-4RM30</b>		1	1 unit	113	1.190
A	<b>3VL9 300-4RN40</b>		1	1 unit	113	0.608	A	<b>3VL9 400-4RN40</b>		1	1 unit	113	1.690
A	<b>3VL9 300-4TC30</b>		1	1 unit	113	0.192	A	<b>3VL9 400-4TC30</b>		1	1 unit	113	0.423
A	<b>3VL9 300-4TC40</b>		1	1 unit	113	0.256	A	<b>3VL9 400-4TC40</b>		1	1 unit	113	0.573
C	<b>3VL9 300-4TD30</b>		1	1 unit	113	0.159	C	<b>3VL9 400-4TD30</b>		1	1 unit	113	0.260
C	<b>3VL9 300-4TD40</b>		1	1 unit	113	0.212	C	<b>3VL9 400-4TD40</b>		1	1 unit	113	0.340
B	<b>3VL9 324-4TD30</b>		1	1 unit	113	0.150	--	--					
B	<b>3VL9 324-4TD40</b>		1	1 unit	113	0.150	--	--					
--	--						C	<b>3VL9 400-4TF30</b>		1	1 unit	113	0.420
--	--						C	<b>3VL9 400-4TF40</b>		1	1 unit	113	0.560
--	--						B	<b>3VL9 460-4TF30</b>		1	1 unit	113	0.150
--	--						B	<b>3VL9 460-4TF40</b>		1	1 unit	113	0.150
A	<b>3VL9 300-3TN00</b>		1	1 unit	113	0.150	A	<b>3VL9 400-3TN00</b>		1	1 unit	113	0.140
A	<b>3VL9 300-4TA30</b>		1	1 unit	113	0.090	A	<b>3VL9 400-4TA30</b>		1	1 unit	113	0.112
A	<b>3VL9 300-4TA40</b>		1	1 unit	113	0.120	A	<b>3VL9 400-4TA40</b>		1	1 unit	113	0.149
A	<b>3VL9 300-8CA30</b>		1	1 unit	113	0.204	A	<b>3VL9 400-8CA30</b>		1	1 unit	113	0.450
A	<b>3VL9 300-8CB30</b>		1	1 unit	113	0.053	A	<b>3VL9 400-8CB30</b>		1	1 unit	113	0.120
A	<b>3VL9 300-8CA40</b>		1	1 unit	113	0.264	A	<b>3VL9 400-8CA40</b>		1	1 unit	113	0.594
A	<b>3VL9 300-8CB40</b>		1	1 unit	113	0.071	A	<b>3VL9 400-8CB40</b>		1	1 unit	113	0.164
A	<b>3VL9 300-8CE00</b>		1	1 unit	113	0.023	A	<b>3VL9 600-8CE00</b>		1	1 unit	113	0.042













\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

Version	DT	For VL630 (3VL5) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	
<b>Connection components for fixed-mounted circuit breakers</b>								
<b>3- or 4-pole</b>								
	<b>Front connecting bars</b> Phase barriers included.							
NSE0_00702 3VL9 .00-4EC40	Standard							
	1 set = 3 units	3-pole	A	<b>3VL9 500-4EC30</b>	1	1 unit	113	1.028
	1 set = 4 units	4-pole	A	<b>3VL9 500-4EC40</b>	1	1 unit	113	1.371
	For increased pole spacing							
NSE0_00722 3VL9 .00-4ED40	Standard							
	1 set = 3 units	3-pole	A	<b>3VL9 500-4ED30</b>	1	1 unit	113	1.059
	1 set = 4 units	4-pole	A	<b>3VL9 500-4ED40</b>	1	1 unit	113	1.412
	<b>Rear terminals</b>							
	Short terminal (1 unit)							
	Long terminal (1 unit)							
NSE0_00723 3VL9 .00-4RA00, 3VL9 .00-4RB00	Terminal kit (2 short + 1 long) 3-pole							
	Terminal kit (2 short + 2 long) 4-pole							
	Short flat connector (1 unit)							
	Long flat connector (1 unit)							
NSE0_00724 3VL9 .00-4RK00, 3VL9 .00-4RL00	Flat connector kit (2 short + 1 long) 3-pole							
	Flat connector kit (2 short + 2 long) 4-pole							
	Flat connecting bar (1 unit)							
	Flat connecting bar							
	Set = 3 units, 3-pole		A	<b>3VL9 500-4RG00</b>	1	1 unit	113	0.358
	Set = 4 units, 4-pole		A	<b>3VL9 500-4RH30</b>	1	1 unit	113	1.075
			A	<b>3VL9 500-4RH40</b>	1	1 unit	113	1.433
	<b>Multiple feed-in terminals</b> Only for cables (Al or Cu) Aluminum terminal (tinned)							
	1 set = 3 units							
	1 set = 4 units							
NSE0_00725 3VL9 .00-4RG00	C							
	C							
	C							
	C							
	<b>Auxiliary conductor terminals</b> For multiple feed-in terminals							
	1 set = 10 units							
NSE0_01542 3VL9 .00-4TF.0	A							
	<b>Terminal plates<sup>1)</sup></b> Connection for flexible flat copper busbar with auxiliary conductor connection 0.5 – 4 mm <sup>2</sup> (extended terminal covers or phase barriers required)							
	1 set = 3 units							
	1 set = 4 units							
NSE0_01544 3VL9 .00-4TG.0	A							
	A							
	<b>Terminals with screw connection - metric thread</b> With insulator (for rear) for use with busbars and cable lugs, see <a href="http://www.siemens.com/lowvoltage/support">Technical Information at www.siemens.com/lowvoltage/support</a> .							
	1 set = 3 units							
	1 set = 4 units							
NSE0_015 0 3VL9 .00-4TT.0	C							
	C							
	<b>Connection covers (terminal covers) for circuit breakers</b> Degree of protection IP30 for main connections 1 set = 2 units							
	Extended							
	Standard							
	Extended							
	Standard							
NSE0_00701 3VL9 .00-4TA.0	3-pole							
	3-pole							
	4-pole							
	4-pole							
	A							
	A							
	A							
	A							
	<b>Phase barriers for circuit breakers, fixed-mounted, plug-in or withdrawable versions<sup>2)</sup></b>							
	1 set = 2 units							
NSE0_00730 3VL9 .00-3CB.0	A							
								
NSE0_00731 3VL9 .00-8CE00								

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

# Molded Case Circuit Breakers

## 3VL9 Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts

2

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











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

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

Version	DT	For VL1600 (3VL8) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	
<b>Connection components for fixed-mounted circuit breakers</b>								
<b>3- or 4-pole</b>								
<b>Front connecting bars</b>								
Phase barriers included.								
Standard								
 NSE0_00702 3VL9 .00-4EC40	1 set = 3 units	3-pole	C	<b>3VL9 800-4EC30</b>	1	1 unit	113	3.313 <sup>1)</sup>
	1 set = 4 units	4-pole	C	<b>3VL9 800-4EC40</b>	1	1 unit	113	4.438 <sup>1)</sup>
 NSE0_00722 3VL9 .00-4ED40	For increased pole spacing							
	1 set = 3 units	3-pole		--				
	1 set = 4 units	4-pole		--				
<b>Rear terminals</b>								
 NSE0_00723 3VL9 .00-4RA00, 3VL9 .00-4RB00	Short terminal (1 unit)			--				
	Long terminal (1 unit)			--				
	Terminal kit (2 short + 1 long)	3-pole		--				
	Terminal kit (2 short + 2 long)	4-pole		--				
 NSE0_00724 3VL9 .00-4RK00, 3VL9 .00-4RL00	Short flat connector (1 unit)			--				
	Long flat connector (1 unit)			--				
	Flat connector kit (2 short + 1 long)	3-pole		--				
	Flat connector kit (2 short + 2 long)	4-pole		--				
 NSE0_00725 3VL9 .00-4RG00	Flat connecting bar (1 unit)		A	<b>3VL9 800-4RG00</b>	1	1 unit	113	1.527
	Flat connecting bar	Set = 3 units, 3-pole	A	<b>3VL9 800-4RH30</b>	1	1 unit	113	4.581
	Flat connecting bar	Set = 4 units, 4-pole	A	<b>3VL9 800-4RH40</b>	1	1 unit	113	6.108
<b>Box terminals</b>								
For connection for flexible flat copper busbar or cable, see <a href="http://www.siemens.com/lowvoltage/support">Technical Information at www.siemens.com/lowvoltage/support</a> .								
 NSE0_00700 3VL9 .00-4TC.0	1 set = 3 units			--				
	1 set = 4 units			--				
<b>Multiple feed-in terminals</b>								
Only for cables (Al or Cu)								
<u>Aluminum terminal (tinned)</u>								
 NSE0_01544 3VL9 .00-4TG.0	1 set = 3 units			--				
	1 set = 4 units			--				
<b>Auxiliary conductor terminals</b>								
For box terminals/aluminum terminals								
<b>Terminals with screw connection - metric thread</b>								
With insulator (for rear) for use with busbars and cable lugs, see <a href="http://www.siemens.com/lowvoltage/support">Technical Information at www.siemens.com/lowvoltage/support</a> .								
 NSE0_00701 3VL9 .00-4TA.0	1 set = 3 units		C	<b>3VL9 800-4TA30</b>	1	1 unit	113	0.319
	1 set = 4 units		C	<b>3VL9 800-4TA40</b>	1	1 unit	113	0.426
<b>Connection covers (terminal covers) for circuit breakers</b>								
Degree of protection IP30 for main connections								
1 set = 2 units								
 NSE0_00730 3VL9 .00-3CB.0	Extended	3-pole	A	<b>3VL9 800-8CA30</b>	1	1 unit	113	1.060
	Standard	3-pole	A	<b>3VL9 800-8CB30</b>	1	1 unit	113	0.360
	Extended	4-pole	A	<b>3VL9 800-8CA40</b>	1	1 unit	113	1.326
	Standard	4-pole	A	<b>3VL9 800-8CB40</b>	1	1 unit	113	0.470
 NSE0_00731 3VL9 .00-8CE00	<b>Phase barriers for fixed-mounted circuit breakers</b>							
	1 set = 2 units		C	<b>3VL9 800-8CE00</b>	1	1 unit	113	0.130

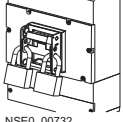
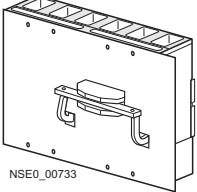
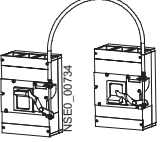
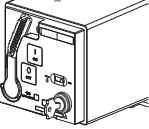
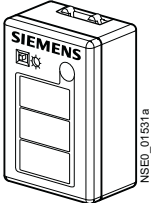
<sup>1)</sup> In scope of supply of circuit breaker.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts

2

Version	DT	For VL160X (3VL1) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	
<b>Interlocks</b>								
<b>3- or 4-pole</b>								
 <p>NSE0_00732 3VL9 .00-3HL00</p>		<b>Locking devices for toggle levers</b> 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)	C	<b>3VL9 300-3HL00</b>	1	1 unit	113	0.052
	<b>Rear interlocking modules</b> 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)							
 <p>NSE0_00733 3VL9 .00-8L.00</p>		Fixed-mounted circuit breakers	C	<b>3VL9 300-8LC00</b>	1	1 unit	113	0.215
		Plug-in/withdrawable circuit breakers	C	<b>3VL9 300-8LD00</b>	1	1 unit	113	0.223
<b>Interlocking modules for Bowden wire interlocking<sup>1)</sup></b> For the mechanical interlocking of two circuit breakers. Interlocking module for one circuit breaker								
 <p>NSE0_00734 3VL9 .00-8LA00</p>		Combination with next size up possible (see Order No.)	C	<b>3VL9 300-8LA00</b>	1	1 unit	113	0.174
	<b>Bowden wires</b> for Bowden wire interlocking <sup>1)</sup>							
		Wire length 0.5 m	C	<b>3VL9 000-8LH10</b>	1	1 unit	113	0.206
		Wire length 1.0 m	C	<b>3VL9 000-8LH20</b>	1	1 unit	113	0.298
	Wire length 1.5 m	C	<b>3VL9 000-8LH30</b>	1	1 unit	113	0.412	
<b>Safety lock assembly kits</b> Key can be removed with the circuit breaker in the "OFF" position <u>For front-operated rotary operating mechanisms</u> Lock types								
 <p>NSE0_00680 3VL9 ...-8HA00</p>		Ronis	A	<b>3VL9 715-8HA00</b>	1	1 unit	113	0.309
	<u>For motorized operating mechanism with stored energy mechanism</u> Lock types							
	Ronis		--					
	Filli Giussani	A	<b>3VL9 321-8HA00</b>	1	1 unit	113	0.053	
<b>Sets of fixing screws (metric thread)</b> 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	<b>3VL9 300-8SA40</b>	1	1 unit	113	0.030	
<b>Transparent covers for releases, sealable</b> To prevent access by unqualified personnel and unauthorized changes to settings (seal not included) Electronic releases								
			--					
	Thermal-magnetic	A	<b>3VL9 300-8BM00</b>	1	1 unit	113	0.015	
 <p>NSE0_01631a 3VL9 000-8AP01</p>		<b>Battery power supply for activating/parameterizing the LCD ETU release, with test function for all IEC and UL ETUs</b> (two 9 V blocks are required in addition)		--				

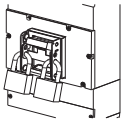
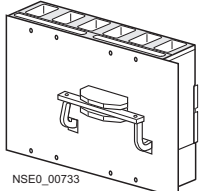
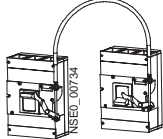
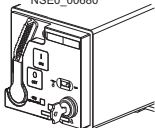
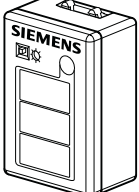
<sup>1)</sup> Two interlocking modules and one Bowden wire are required. Cannot be used in conjunction with motorized operating mechanism and withdrawable version.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

Version	DT	For VL160 (3VL2) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
<b>Interlocks</b>							
<b>3- or 4-pole</b>							
 NSE0_00732 3VL9 .00-3HL00		<b>Locking devices for toggle levers</b> 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)	C	<b>3VL9 300-3HL00</b>	1	1 unit	113 0.052
 NSE0_00733 3VL9 .00-8L.00		<b>Rear interlocking modules</b> 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 Plug-in/withdrawable circuit breakers	C C	<b>3VL9 300-8LC00</b> <b>3VL9 300-8LD00</b>	1 1	1 unit 1 unit	113 0.215 113 0.223
		<b>Interlocking modules for Bowden wire interlocking<sup>1)</sup></b> For the mechanical interlocking of two circuit breakers. Interlocking module for one circuit breaker	C	<b>3VL9 300-8LA00</b>	1	1 unit	113 0.174
		<b>Bowden wires</b> for Bowden wire interlocking <sup>1)</sup> Wire length 0.5 m Wire length 1.0 m Wire length 1.5 m	C C C	<b>3VL9 000-8LH10</b> <b>3VL9 000-8LH20</b> <b>3VL9 000-8LH30</b>	1 1 1	1 unit 1 unit 1 unit	113 0.206 113 0.298 113 0.412
 NSE0_00734 3VL9 .00-8LA00		<b>Safety lock assembly kits</b> Key can be removed with the circuit breaker in the "OFF" position For front-operated rotary operating mechanisms Lock types Ronis	A	<b>3VL9 715-8HA00</b>	1	1 unit	113 0.309
 NSE0_00680 3VL9 ...-8HA00		For motorized operating mechanism with stored energy mechanism Lock types Ronis Filli Giussani	A	<b>3VL9 321-8HA00</b>	1	1 unit	113 0.053
		<b>Sets of fixing screws (metric thread)</b> 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	<b>3VL9 300-8SA40</b>	1	1 unit	113 0.030
		<b>Transparent covers for releases, sealable</b> To prevent access by unqualified personnel and unauthorized changes to settings (seal not included) Electronic releases Thermal-magnetic	C A	<b>3VL9 700-8BL00</b> <b>3VL9 300-8BM00</b>	1 1	1 unit 1 unit	113 0.002 113 0.015
 NSE0_01531a 3VL9 000-8AP01		<b>Battery power supply for activating/parameterizing the LCD ETU release, with test function for all IEC and UL ETUs</b> (two 9 V blocks are required in addition)	B	<b>3VL9 000-8AP01</b>	1	1 unit	113 0.605

<sup>1)</sup> Two interlocking modules and one Bowden wire are required. Cannot be used in conjunction with motorized operating mechanism and withdrawable version.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts

2

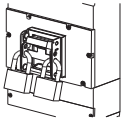
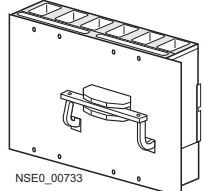
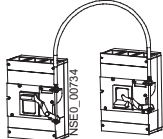
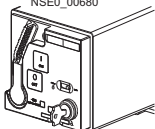
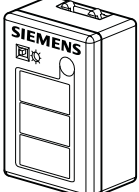
DT	For VL250 (3VL3) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg	DT	For VL400 (3VL4) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
C	<b>3VL9 300-3HL00</b>		1	1 unit	113	0.052	C	<b>3VL9 400-3HL00</b>		1	1 unit	113	0.122
C	<b>3VL9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

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

Version	DT	For VL630 (3VL5) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
<b>Interlocks</b>							
<b>3- or 4-pole</b>							
 NSE0_00732 3VL9_00-3HL00		<b>Locking devices for toggle levers</b> 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)	C	<b>3VL9 600-3HL00</b>	1	1 unit	113 0.130
 NSE0_00733 3VL9_00-8L00		<b>Rear interlocking modules</b> 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)	C	<b>3VL9 600-8LC00</b>	1	1 unit	113 1.499
		Fixed-mounted circuit breakers	C	<b>3VL9 600-8LD00</b>	1	1 unit	113 5.076
		Plug-in/withdrawable circuit breakers	C				
		<b>Interlocking modules for Bowden wire interlocking<sup>1)</sup></b> For the mechanical interlocking of two circuit breakers. Interlocking module for one circuit breaker	C	<b>3VL9 600-8LA00</b>	1	1 unit	113 0.244
		<b>Bowden wires</b> for Bowden wire interlocking <sup>1)</sup> Wire length 0.5 m	C	--	1	1 unit	113 0.298
 NSE0_00734 3VL9_00-8LA00		Wire length 1.0 m	C	<b>3VL9 000-8LH20</b>	1	1 unit	113 0.298
		Wire length 1.5 m	C	<b>3VL9 000-8LH30</b>	1	1 unit	113 0.412
		<b>Safety lock assembly kits</b> Key can be removed with the circuit breaker in the "OFF" position For front-operated rotary operating mechanisms					
		Lock types					
		Ronis	A	<b>3VL9 715-8HA00</b>	1	1 unit	113 0.309
 NSE0_00680 3VL9 ...-8HA00		For motorized operating mechanism with stored energy mechanism					
		Lock types					
		Ronis	A	<b>3VL9 715-8HA00</b>	1	1 unit	113 0.309
		Filli Giussani		--			
		<b>Sets of fixing screws (metric thread)</b> Including the screws, washers and nuts required to secure a 3- or 4-pole circuit breaker to a prepared surface					
		Set with 4 screws	C	<b>3VL9 500-8SA40</b>	1	1 unit	113 0.090
		<b>Transparent covers for releases, sealable</b> To prevent access by unqualified personnel and unauthorized changes to settings (seal not included)					
		Electronic releases	C	<b>3VL9 700-8BL00</b>	1	1 unit	113 0.002
		Thermal-magnetic	C	<b>3VL9 600-8BM00</b>	1	1 unit	113 0.019
 NSE0_01831a 3VL9 000-8AP01		<b>Battery power supply for activating/parameterizing the LCD ETU release, with test function for all IEC and UL ETUs</b> (two 9 V blocks are required in addition)	B	<b>3VL9 000-8AP01</b>	1	1 unit	113 0.605

<sup>1)</sup> Two interlocking modules and one Bowden wire are required.  
Cannot be used in conjunction with motorized operating mechanism and withdrawable version.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts

2

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

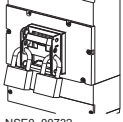
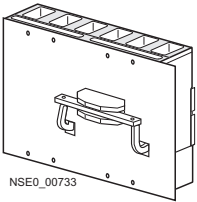
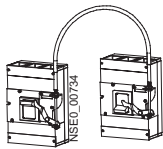
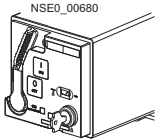
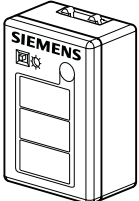
\* You can order this quantity or a multiple thereof.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

Version	DT	For VL1600 (3VL8) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
<b>Interlocks</b>							
<b>3- or 4-pole</b>							
 NSE0_00732 3VL9 .00-3HL00		<b>Locking devices for toggle levers</b> 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)	C	<b>3VL9 800-3HL00</b>	1	1 unit	113 0.238
 NSE0_00733 3VL9 .00-8L.00		<b>Rear interlocking modules</b> For the mechanical interlocking of two adjacent circuit breakers. The circuit breakers must be of the same installation type and size.	C	<b>3VL9 800-8LC00</b>	1	1 unit	113 2.935
		Circuit breakers, fixed-mounted <sup>1)</sup> Plug-in/withdrawable circuit breakers	C	<b>3VL9 800-8LD00</b>	1	1 unit	113 3.825
		<b>Interlocking modules for Bowden wire interlocking<sup>2)</sup></b> For the mechanical interlocking of two circuit breakers. Interlocking module for one circuit breaker	C	<b>3VL9 800-8LA00</b>	1	1 unit	113 0.283
 NSE0_00734 3VL9 .00-8LA00		<b>Bowden wires</b> for Bowden wire interlocking <sup>2)</sup> Wire length 0.5 m		--			
		Wire length 1.0 m		--			
		Wire length 1.5 m	C	<b>3VL9 000-8LH30</b>	1	1 unit	113 0.412
 NSE0_00680 3VL9 ...-8HA00		<b>Safety lock assembly kits</b> Key can be removed with the circuit breaker in the "OFF" position <u>For front-operated rotary operating mechanisms</u> Lock types	A	<b>3VL9 715-8HA00</b>	1	1 unit	113 0.309
		<u>For motorized operating mechanisms</u> Lock types	A	<b>3VL9 715-8HA00</b>	1	1 unit	113 0.309
		Ronis Filli Giussani		--			
		<b>Sets of fixing screws (metric thread)</b> 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	<b>3VL9 800-8SA40</b>	1	1 unit	113 0.090
		<b>Transparent covers for releases, sealable</b> To prevent access by unqualified personnel and unauthorized changes to settings (seal not included)					
		Electronic releases	C	<b>3VL9 700-8BL00</b>	1	1 unit	113 0.002
		Thermal-magnetic		--			
 NSE0_015318 3VL9 000-8AP01		<b>Battery power supply for activating/parameterizing the LCD ETU release, with test function for all IEC and UL ETUs</b> (two 9 V blocks are required in addition)	B	<b>3VL9 000-8AP01</b>	1	1 unit	113 0.605

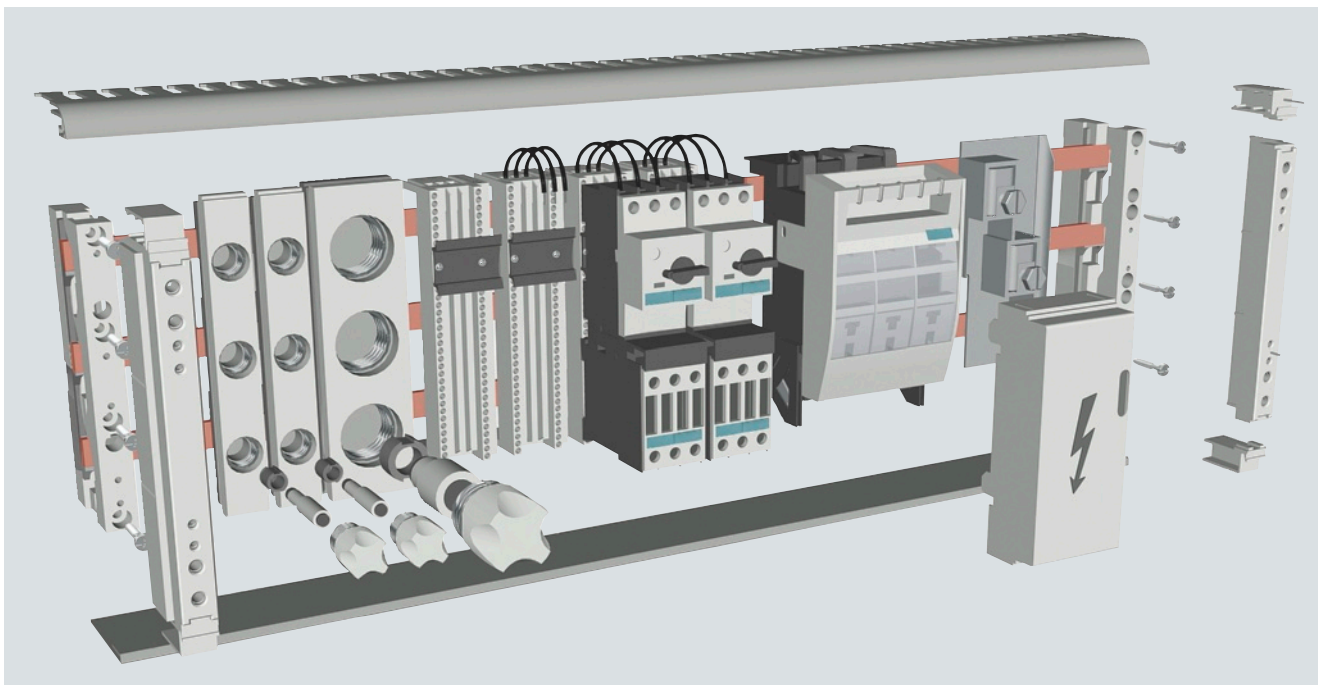
<sup>1)</sup> Mounting plate not included in scope of supply.

<sup>2)</sup> Two interlocking modules and one Bowden wire are required.  
Cannot be used in conjunction with motorized operating mechanism and withdrawable version.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts



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

See also "Busbar Systems" chapter.

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

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

**Up to 160 A**  
**Busbar adapters**, length 175 mm  
 With plug connection tags at top, 3-pole  
 With terminal cover (degree of protection IP10)<sup>1)</sup>  
 For one VL160X (3VL1) circuit breaker<sup>2)</sup>  
 108 mm wide

A	<b>8US10 11-4SL01</b>	1	1 unit	143	0.585
---	-----------------------	---	--------	-----	-------

<sup>1)</sup> For degree of protection IP30, the terminal covers from [page 2/77 to 2/82](#) should be ordered.

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

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
---------	----	-----------	--------------	-------------------	-------------	----	-----------------------

kg

#### 60 mm busbar adapter systems

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

##### Up to 160 A

**Busbar adapters**, length 175 mm  
With plug connection tags at top, 3-pole  
With terminal cover (degree of protection IP10)<sup>1)</sup>

For one VL160X/VL160 (3VL1, 3VL2) 108 mm wide A circuit breaker<sup>2)</sup>

8US12 11-4SL01

1 1 unit 143 0.597



8US12 11-4SL01

##### Up to 250 A

**Busbar adapters**, length 175 mm  
With plug connection tags at top, 3-pole  
With terminal cover (degree of protection IP10)<sup>1)</sup>

For one VL250 (3VL3) circuit breaker 108 mm wide A

8US12 11-4SL00

1 1 unit 143 0.662

##### Up to 400 A

**Busbar adapters**, length 320 mm  
With threaded inserts M4, M6 and M8  
For various types of switching devices, 3-pole  
Without connecting cables,  
with M10 terminal screws at top and bottom<sup>1)</sup>

**Adapter** 185 mm wide A

8US12 10-4AF00

1 1 unit 143 2.769

##### Mounting plates for 8US12 10-4AF00

For VL400 (3VL4) circuit breakers  
(also for VL160X+RCD, VL160, VL250 circuit breakers (3VL1 + RCD, 3VL2, 3VL3))

A

8US19 27-4AF01

1 1 unit 143 0.575

For VL630 (3VL5) circuit breakers  
( $I_{n\max} = 580\text{ V}$ )

A

8US12 13-4AF00

1 1 unit 143 2.880



8US12 10-4AF00

The connecting cable between adapter and switching device should be manufactured in accordance with the rated current as a round cable, e.g. H07V-R, with a cable lug or as a flat conductor for bolt-type connection M10 (adapter).

<sup>1)</sup> For degree of protection IP30, the terminal covers from [page 2/77 to 2/82](#) should be ordered.

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

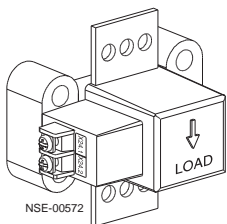
Type	Rated current $I_n$	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
------	---------------------	----	-----------	--------------	-------------------	-------------	----	-----------------------

A

kg

#### Further accessories

**Current transformers (-T6) for N conductor/grounded neutral point of the transformer for ground-fault protection in 4-wire three-phase systems<sup>1)</sup>**



NSE-00572

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

<sup>1)</sup> Please note the rated current of the circuit breaker.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

Accessories and spare parts

2

### General criteria for the selection of current transformers for measurement purposes



4NC53 current transformers

<b>Standards</b>	EN 60044-1
<b>Window-type current transformers</b>	The conductor to be measured (busbar or cable) is passed through the window opening and constitutes the primary circuit of the window-type current transformer. Pin-wound transformers: An economical solution especially for small primary currents of 5 ... 75 A is achieved when the conductor to be measured is pin-wound several times.
<b>Rated primary current <math>I_{pn}</math></b>	Current transformers can be continuously loaded with 1.3 times the rated primary current ( $I_{pn}$ ).
<b>Rated secondary current <math>I_{sn}</math></b> 1 A 5 A	Particularly suitable for longer measuring leads. Cable losses of only 4 % in contrast to 5 A current transformers. 5 A current transformers generate 25 times the power losses on measuring leads as compared with 1 A current transformers. These stray losses result in higher power in the case of long cables. Only recommended for use with short measuring leads.
<b>Accuracy class</b> Class 1 Class 3	Operation measurement, internal metering Current error $\pm 1\%$ at $1 \times I_{pn}$ and $1.2 \times I_{pn}$ Coarse measurement Current error $\pm 3\%$ at $0.5 \times I_{pn}$ and $1.2 \times I_{pn}$
<b>Rated power <math>P_n</math></b>	The rated power of transformers is specified in VA. The actual load rating should be similar to the rated power; a lower actual load rating (underburden) increases the overcurrent factor and measuring devices may be damaged in case of a short-circuit, a higher actual load rating (overburden) has a negative effect on the accuracy. With a frequency of 60 Hz the rated power increases to 1.2 times. With $16^{2/3}$ Hz the output power decreases to $1/3$ of the rated power.
<b>Maximum voltage for equipment <math>U_m</math></b>	This is the rms value of the maximum voltage between the conductors of a system. For this voltage the insulation must be rated at normal operating conditions. 4NC5 current transformers are suitable for 720 V.
<b>Overcurrent limiting factor FS</b>	The overcurrent limiting factor is expressed using the characters FS and a factor, e.g. FS5 or FS10. When a short-circuit current flows through the primary winding of a current transformer, the load on the measuring devices connected to the current transformer is the lower the smaller the overcurrent limiting factor is.
<b>Rated short-time thermal current <math>I_{th}</math></b>	The rated short-time thermal current $I_{th}$ is the rms value of the primary current with a duration of one second, whose heat effect the current transformer can resist without being damaged in the event of a short-circuited secondary winding.
<b>Rated impulse current <math>I_{dyn}</math></b>	The rated impulse current $I_{dyn}$ is the highest instantaneous value of the current after a short-circuit whose force the current transformer can resist without being damaged. The rated impulse current is specified as peak value.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

#### 4NC current transformers for measuring purposes

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



4NC51 12-0BC20



4NC51 17-0CC20



4NC52 22-0CE20



4NC53 25-0CE20








4NC54 31-0CH20

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts

2

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

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

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

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



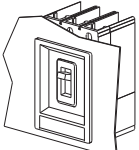
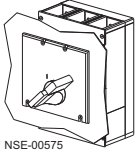
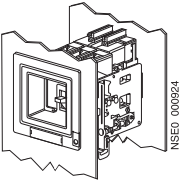
4NC51 used as pin-wound transformer

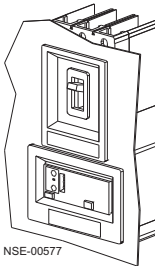
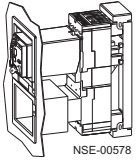
# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

Version	DT	For VL160X (3VL1) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
<b>Further accessories</b>							
<b>3- or 4-pole</b>							
<b>Masking frames (cover frames) for door cutouts</b>							
 NSE-00574 Masking frame A	<b>A</b> <b>IP40</b>	Fixed-mounted or plug-in circuit breaker	A	<b>3VL9 300-8BC00</b>	1	1 unit	113 0.038
	<b>B<sup>1)</sup></b> <b>IP40</b>	Fixed-mounted, plug-in or withdrawable circuit breaker with front-operated rotary operating mechanism or motorized operating mechanism	A	<b>3VL9 300-8BG00</b>	1	1 unit	113 0.099
	<b>C</b> <b>IP20</b>	Withdrawable circuit breaker with toggle lever actuation. Assembly kit contains masking frame and extended escutcheon (cannot be used together with a motorized operating mechanism/rotary operating mechanism)		--			
 NSE-00575 Masking frame B	<b>D</b> <b>IP40</b>	Fixed-mounted circuit breaker or plug-in circuit breaker RCD circuit breaker masking frame	A	<b>3VL9 300-8BD00</b>	1	1 unit	113 0.034
		RCD masking frame	A	<b>3VL9 300-8BD00</b>	1	1 unit	113 0.034
 NSE02_000924 Masking frame C	<b>E<sup>1)</sup></b> <b>IP40</b>	Circuit breaker with RCD module and front-operated rotary operating mechanism. Assembly kit contains masking frame and extended escutcheon  Circuit breaker with RCD module and motorized operating mechanism. Assembly kit contains masking frame and extended escutcheon		--  --			

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

1) For withdrawable version IP20.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

### Accessories and spare parts

2

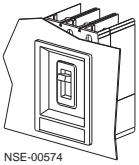
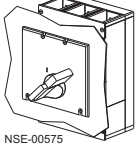
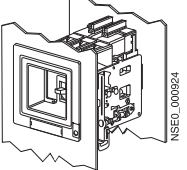
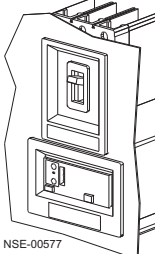
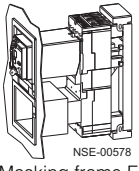
DT	For VL160 (3VL2)	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.	DT	For VL250 (3VL3)	Price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
	Order No.					kg		Order No.					kg
A	3VL9 300-8BC00		1	1 unit	113	0.038	A	3VL9 300-8BC00		1	1 unit	113	0.038
A	3VL9 300-8BG00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

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

Version	DT	For VL1250 (3VL7) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
<b>Further accessories</b>							
<b>3- or 4-pole</b>							
<b>Masking frames (cover frames) for door cutouts</b>							
 <p>NSE-00574 Masking frame A</p>	<b>A</b> <b>IP40</b>	Fixed-mounted or plug-in circuit breaker	A	<b>3VL9 800-8BC00</b>	1	1 unit	113 0.043
 <p>NSE-00575 Masking frame B</p>	<b>B<sup>1)</sup></b> <b>IP40</b>	Fixed-mounted, plug-in or withdrawable circuit breaker with front-operated rotary operating mechanism or motorized operating mechanism	A	<b>3VL9 800-8BG00</b>	1	1 unit	113 0.192
 <p>NSE0_000924 Masking frame C</p>	<b>C</b> <b>IP20</b>	Withdrawable circuit breaker with toggle lever actuation. Assembly kit contains masking frame and extended escutcheon (cannot be used together with a motorized operating mechanism/rotary operating mechanism)	A	<b>3VL9 800-8BH00</b>	1	1 unit	113 0.531
 <p>NSE-00577 Masking frame D</p>	<b>D</b> <b>IP40</b>	Fixed-mounted circuit breaker or plug-in circuit breaker RCD circuit breaker masking frame RCD masking frame	-- --				
 <p>NSE-00578 Masking frame E</p>	<b>E<sup>1)</sup></b> <b>IP40</b>	Circuit breaker with RCD module and front-operated rotary operating mechanism. Assembly kit contains masking frame and extended escutcheon  Circuit breaker with RCD module and motorized operating mechanism. Assembly kit contains masking frame and extended escutcheon	-- --				

<sup>1)</sup> For withdrawable version IP20.

# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

**Accessories and spare parts**
**2**

DT	For VL1600 (3VL8) Order No.	Price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg
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A	<b>3VL9 800-8BC00</b>		1	1 unit	113	0.043
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A	<b>3VL9 800-8BG00</b>		1	1 unit	113	0.192
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A	<b>3VL9 800-8BH00</b>		1	1 unit	113	0.531
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# Molded Case Circuit Breakers

## 3VL Molded Case Circuit Breakers up to 1600 A

2

### Accessories and spare parts

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

<sup>1)</sup> A 24 V DC power supply unit is required.

#### Communication:

- For molded case circuit breakers with communication function see pages 2/12 to 2/28 and 2/40 to 2/50.
- For more information see also chapters "Measuring Devices and E-Counters" and "Software".

#### More information

##### Manual for the SENTRON 3VL circuit breakers

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

The manual and operating instructions are available in PDF format at: [www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals)

##### SENTRON manual for communication solutions

Free download from [www.siemens.com/lowvoltage/manuals](http://www.siemens.com/lowvoltage/manuals)

See also "3WL Air Circuit Breakers/Non-Automatic Air Circuit Breakers up to 6300 A (AC)", "Accessories and spare parts".