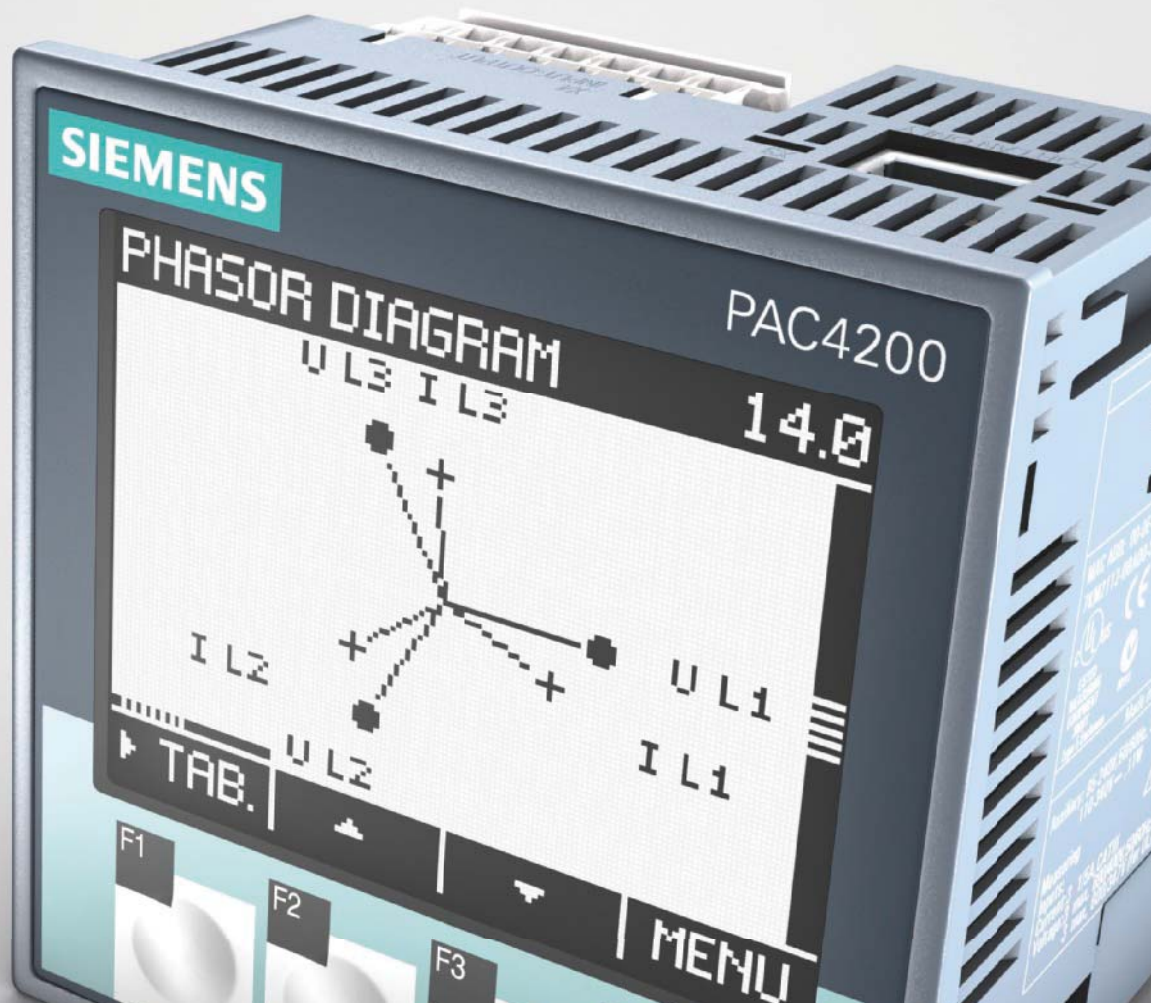


# Low-Voltage Power Distribution and Electrical Installation Technology

Protection, Switching, Measuring and Monitoring Devices

Catalog LV 10.1 · 2012



## SENTRON

Answers for infrastructure.

**SIEMENS**

# Molded Case Circuit Breakers



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

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Options

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Accessories and spare parts

Ch. 12

**3KC ATC5300 transfer control device****Technical information**

can be found at

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

under Product List:

- Technical specifications

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- Downloads
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- Configurators






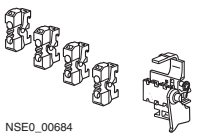
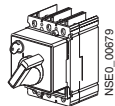
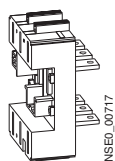
# Molded Case Circuit Breakers

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

2

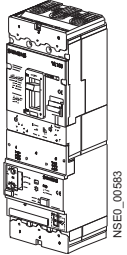

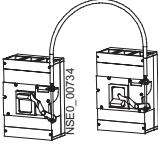

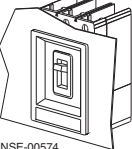
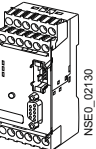
### Introduction

#### Overview

Devices	Page	Applications/individual components	Standards	Used in		
				Non-residential buildings	Residential buildings	Industry
	<a href="#">2/10 ...</a> <a href="#">2/25,</a> <a href="#">2/34 ...</a> <a href="#">2/51</a>	The overload and short-circuit releases are designed for the protection of cables, leads and non-motor loads.	IEC 60947-1, EN 60947-1, IEC 60947-2, EN 60947-2.	✓	✓	✓
	<a href="#">2/26 ...</a> <a href="#">2/29</a>	Circuit breakers for motor protection are specifically designed for the characteristic curve of the motor, and have additional function such as phase failure detection and adjustable trip class.	IEC 60947-1, EN 60947-1, IEC 60947-2, EN 60947-2.	✓	✓	✓
		The overload and short-circuit releases can be used for optimized protection of generators.				
	<a href="#">2/30,</a> <a href="#">2/31</a>	Starter combinations consist of: Motor starter protector + contactor + overload relay. The motor starter protector provides short-circuit protection and the isolating function. The task of the contactor is the operational switching of the feeder. The overload relay provides overload protection, which is specifically designed for the motor.	IEC 60947-1, EN 60947-1, IEC 60947-2, EN 60947-2.	✓	✓	✓
	<a href="#">2/30,</a> <a href="#">2/31,</a> <a href="#">2/52,</a> <a href="#">2/53</a>	These circuit breakers are used as feeder circuit breakers, main control switches or disconnectors without overload protection. They have fixed short-circuit releases.	IEC 60947-1, EN 60947-1, IEC 60947-2, EN 60947-2.  Isolating features acc. to IEC 60947-2 and EN 60947-2.	✓	✓	✓
 NSE0_00684	<a href="#">2/59,</a> <a href="#">2/60</a>	Auxiliary switches, alarm switches, undervoltage releases and shunt releases	As for circuit breakers	✓	✓	✓
 NSE0_00679	<a href="#">2/62 ...</a> <a href="#">2/69</a>	The manual operating mechanisms are available in two versions: <ul style="list-style-type: none"> <li>• Front-operated rotary operating mechanisms,</li> <li>• Door-coupling rotary operating mechanism</li> </ul> In the case of the motorized operating mechanisms there are also two versions: <ul style="list-style-type: none"> <li>• MO for standard applications</li> <li>• SEO for network synchronization tasks</li> </ul>	As for circuit breakers	✓	✓	✓
 NSE0_00717	<a href="#">2/70 ...</a> <a href="#">2/75</a>	Assembly in plug-in and withdrawable versions allows the 3VL molded case circuit breaker to be replaced quickly without accessing the terminals.	As for circuit breakers	✓	✓	✓

# Molded Case Circuit Breakers

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

Devices	Page	Applications/individual components	Standards	Used in		
				Non-residential buildings	Residential buildings	Industry
 <p>NSE0_00583</p>	2/76	Protection of plant and personnel against damage or injury caused by residual currents and insulation faults.	As for circuit breakers	✓	✓	✓
 <p>NSE0_00702</p>	2/77 ... 2/82	Front connecting bars, rear terminals, box terminals, circular conductor terminals, multiple feed-in terminals, auxiliary conductor terminals, terminal plates, connections with screw terminals, terminal covers for circuit breakers, phase barriers for circuit breakers	As for circuit breakers	✓	✓	✓
 <p>NSE0_00734</p>	2/83 ... 2/88	Locking devices for toggle levers, rear interlocking modules, interlocking modules for Bowden wire interlocking	As for circuit breakers	✓	✓	✓
	2/89, 2/90	Busbar adapters	As for circuit breakers	✓	✓	✓
 <p>NSE-00574</p>	2/94 ... 2/97	Masking frames (cover frames) for door cutouts, to increase degree of protection	As for circuit breakers	✓	✓	✓
 <p>NSE0_02130</p>	2/98	Data transmission through COM20, COM21: COM20 (PROFIBUS) for releases with communication function, COM21 (MODBUS) for releases with communication function, Switch ES Power parameterization software	As for circuit breakers	✓	✓	✓

# Molded Case Circuit Breakers

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

2

### Introduction

### Overview



Type		VL160X/3VL1	VL160/3VL2	VL250/3VL3	VL400/3VL4			
<b>Molded Case Circuit Breakers</b>								
<b>3VL molded case circuit breakers up to 1600 A</b>								
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			
Rated operational voltage $U_e$ 50/60 Hz AC DC <sup>1)</sup>	V	690	690	690	690			
	V	500	500	600	600			
<b>Electronic Trip Units</b>								
Thermal-magnetic		✓	✓	✓	✓			
Electronic Trip Unit LCD/ETU		--	--	✓	✓			
PROFIBUS module COM20		--	--	✓	✓			
<b>Dimensions</b>								
	A	mm	105	139	105	139	139	183
	B	mm	157	157	175	175	175	279
	C	mm	81	81	81	81	81	102
	D	mm	107	107	107	107	107	138
<b>Breaking capacity <math>I_{cu}/I_{cs}</math> RMS value acc. to IEC 60947-2</b>								
<b>Standard breaking capacity N<sup>2)</sup></b>								
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	--	--	--	--			
<b>NEMA breaking capacity<sup>5)</sup></b>								
Up to 480 V AC	kA	25	25	25	35			
Up to 600 V AC	kA	8 <sup>3)</sup>	12	12	20			
<b>High breaking capacity H<sup>2)</sup></b>								
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	--	--	--	--			
<b>NEMA breaking capacity<sup>5)</sup></b>								
Up to 480 V AC	kA	42	50	50	50			
Up to 600 V AC	kA	12 <sup>3)</sup>	12	12	20			
<b>Very high breaking capacity L<sup>2)</sup></b>								
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			
<b>NEMA breaking capacity<sup>5)</sup></b>								
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 LV16](#).

# Molded Case Circuit Breakers

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

Introduction

2



VL630/3VL5



VL800/3VL6



VL1250/3VL7



VL1600/3VL8



ATC5300

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

### Transfer control devices

### 3KC ATC5300 transfer control device

see chapter "Monitoring devices".

315 ... 630

800

1000 ... 1250

1600

3

4

3

4

3

4

3

4

690  
600690  
600

--

--

690  
--690  
--690  
--690  
--

✓

✓

✓

✓

✓

✓

✓

✓

190  
279  
102  
138253  
279  
102  
138190  
406  
114  
151253  
406  
114  
151229  
406  
152  
207305  
406  
152  
207229  
406  
152  
207305  
406  
152  
20765/65  
55/55  
35/26  
25/20  
20/10  
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2065/65  
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--200/100  
100/50  
75/50  
50/38  
35/17  
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--65  
3565  
3565  
3565  
35

<sup>2)</sup> 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.

<sup>3)</sup> Rated current  $I_n \geq 25$  A.

<sup>4)</sup> 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.

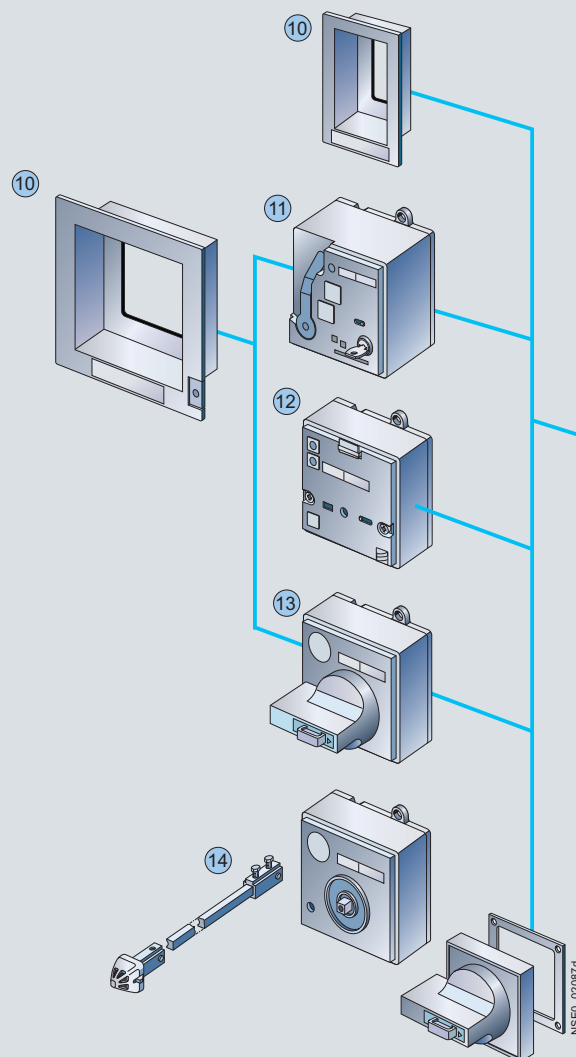
<sup>5)</sup> The NEMA breaking capacity can be found on the rating plate of each IEC circuit breaker.

# Molded Case Circuit Breakers

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

### 2

#### Introduction

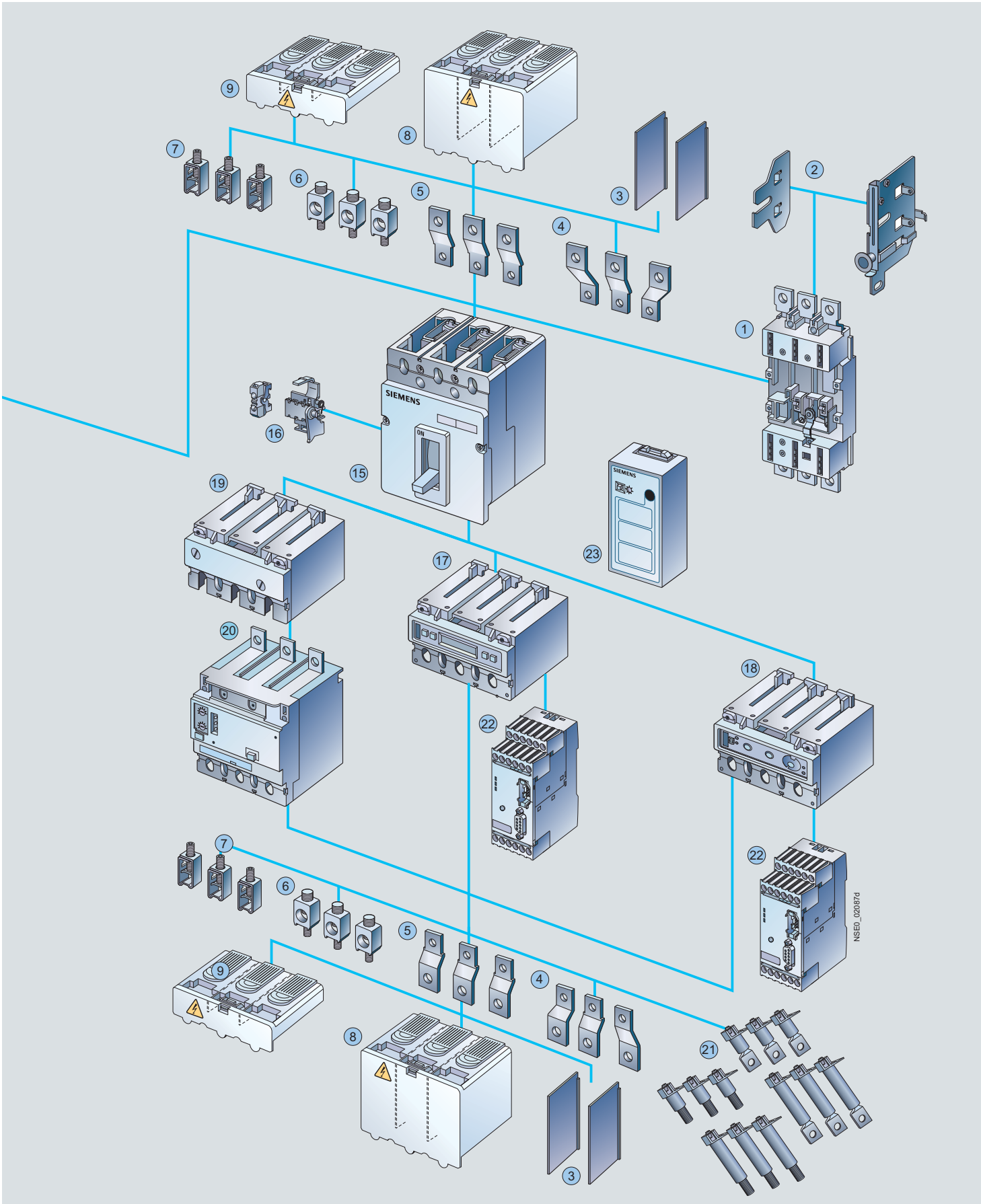


- ① Withdrawable/plug-in bases (pages 2/72 to 2/77)
- ② Side walls of withdrawable unit (pages 2/72 to 2/77)
- ③ Phase barriers (pages 2/79 to 2/84)
- ④ Flared front busbar connecting bars (pages 2/79 to 2/84)
- ⑤ Straight connecting bars (pages 2/79 to 2/84)
- ⑥ Circular conductor terminals for Al/Cu (pages 2/79 to 2/81)
- ⑦ Box terminals for Cu (pages 2/79 to 2/84)
- ⑧ Extended connection covers (terminal covers) (pages 2/79 to 2/84)
- ⑨ Standard connection covers (terminal covers) (pages 2/79 to 2/84)
- ⑩ Masking frames/cover frames for door cutout (pages 2/94 to 2/97)
- ⑪ Motorized operating mechanisms with stored energy mechanism (SEO) (pages 2/68)
- ⑫ Motorized operating mechanism MO (pages 2/68)
- ⑬ Front-operated rotary operating mechanisms (pages 2/64 to 2/67)
- ⑭ Door-coupling rotary operating mechanisms (pages 2/64 to 2/67)
- ⑮ 3VL molded case circuit breakers (pages 2/12 to 2/55)
- ⑯ Internal accessories (pages 2/57, 2/58, 2/61 to 2/63)
- ⑰ Electronic Trip Unit LCD ETU (pages 2/22, 2/26, 2/30, 2/46 and 2/48)
- ⑱ Electronic Trip Units with communication function (pages 2/14 to 2/30, 2/42 to 2/52)
- ⑲ Thermal/magnetic overcurrent releases (pages 2/12 to 2/14, 2/32, 2/36 to 2/40, 2/54)
- ⑳ RCD modules (page 2/78)
- ㉑ Rear terminals – flat and round (pages 2/79 to 2/84)
- ㉒ COM20/21 communication modules to the PROFIBUS DP/MODBUS (page 2/93)
- ㉓ Battery power supplies with test function for Electronic Trip Units (pages 2/86 to 2/90)

# Molded Case Circuit Breakers

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

### Introduction





# Molded Case Circuit Breakers

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

### Introduction

#### Benefits

- The compact design of the 3VL molded case 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 1,600 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 2/14 to 2/30, 2/42 to 2/52.
- For accessories, see page 2/93.
- For more information see also chapters "Measuring Devices and Power Management" and "Software".

#### Applications

The different versions of 3VL molded case 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 3VL molded case 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 Trip Units operate with a microprocessor.

3. For starter combinations (in 3-pole version)  
These circuit breakers are used both for short-circuit protection as well as for isolating functions, which may be required in starter combinations consisting of circuit breakers, overload relays and motor contactors. These circuit breakers exclusively feature adjustable, instantaneous short-circuit releases.
4. As non-automatic air 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.

#### Breaking capacity

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

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

#### Standards and specifications

3VL molded case circuit breakers comply with:

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

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

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

The 3VL molded case 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 Trip Units of the circuit breakers for motor protection also fulfill IEC 60947-4-1, DIN VDE 0660, Part 102.

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

The 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 3VL molded case 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).

# Molded Case Circuit Breakers

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

### RCD modules

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

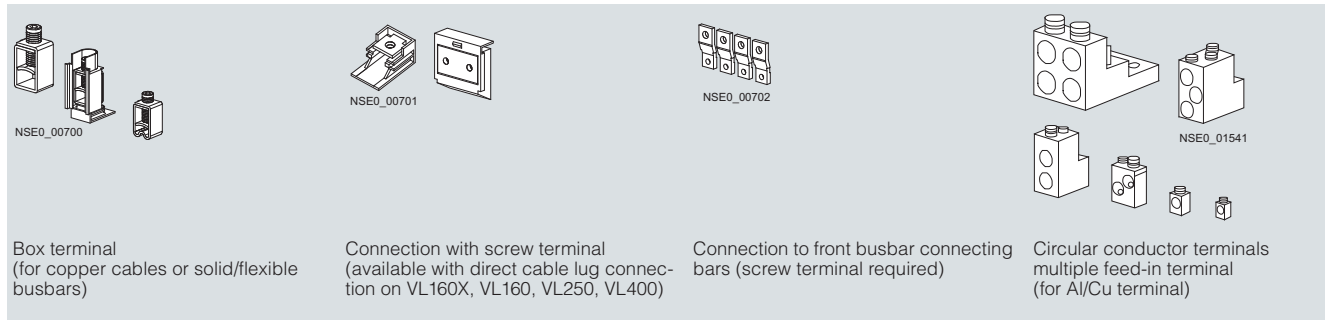
The combination of 3VL molded case circuit breaker and RCD module can be fed from the top or bottom.

All 3VL molded case 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 (for conductor cross-sections [see below](#))

Circuit breaker	Connection overview and further options				
	Box terminals	Screw terminals with metric thread for flat connection	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	O

O 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	Copper only	mm <sup>2</sup> 2.5 ... 95	2.5 ... 95	25 ... 185	50 ... 300	--	--	--	--
• Finely stranded with end sleeve		mm <sup>2</sup> 2.5 ... 50	2.5 ... 50	25 ... 120	50 ... 240	--	--	--	--
• Flexible busbar		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	Cu or Al	mm <sup>2</sup> 16 ... 70	16 ... 70	25 ... 185	50 ... 300	--	--	--	--
- with terminal cover	Cu or Al	mm <sup>2</sup> 16 ... 150	16 ... 150	120 ... 240	--	--	--	--	--
• Finely stranded with end sleeve		mm <sup>2</sup> 10 ... 50	10 ... 50	25 ... 120	50 ... 240	--	--	--	--
Multiple feed-in terminal <sup>1)</sup>									
• Solid or stranded cable	Cu or Al	mm <sup>2</sup> --	--	--	2 units 50 ... 120	2 units 50 ... 240	3 units 50 ... 240	4 units 50 ... 240	--
- with terminal cover	Cu or Al	mm <sup>2</sup> --	--	--	2 units 70 ... 300	--	--	--	--
• Finely stranded with end sleeve		mm <sup>2</sup> --	--	--	2 units 50 ... 95	2 units 50 ... 185	3 units 50 ... 185	4 units 50 ... 185	--
• Direct connection of busbars	Cu or Al	mm 17 x 7	22 x 7	24 x 7	32 x 10	40 x 10	2 x 40 x 10	2 x 50 x 10	3 x 60 x 10
• Screw for connection with screw terminal		M6	M6	M8	M8	M6	M8	M8	--
<b>Conductor cross-sections for control circuits with terminal connection</b>									
Screw terminals									
• Solid		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	0.75 ... 1.5
• Finely stranded with end sleeve		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	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

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

2

### Introduction

#### VL160 to VL1600 Electronic Trip Units – 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]	$I_f = \times I_n$	$I_g = \times I_n$	$t_g$ [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/EL	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	--	--
UP	LCD ETU40M <sup>3)</sup>	--	--	✓	--	--	LI	0.4 ... 1	--	--	1.25 ... 11	--	--
UH	LCD ETU40	--	✓	--	--	--	LI, LS, LSI	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	--	--
UJ	LCD ETU40	--	✓	--	--	--	LI, LSI, LIN, LSIN	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	--	--
UL	LCD ETU42	--	✓	--	--	--	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	0.4 ... 1	0.1 ... 0.5
UM	LCD ETU42	--	✓	--	--	--	LSIG	0.4 ... 1	1.5 ... 10	0 ... 0.5	1.25 ... 11	0.4 ... 1	0.1 ... 0.5
UN	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.

# Molded Case Circuit Breakers

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

## Introduction

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 Trip Unit	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/EL	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	--	--	--	✓	--
UP	LCD ETU40M <sup>3)</sup>	✓	5 ... 50 % $I_R$	✓ <sup>4)</sup>	--	3	--	✓	5, 10, 15, 20, 30	--	--	--	✓	✓
UH	LCD ETU40	✓	--	✓ <sup>4)</sup>	--	3	--	✓	--	2.5 ... 30	--	--	✓	✓
UJ	LCD ETU40	✓	--	✓ <sup>4)</sup>	--	4	50 ... 100 %, OFF	✓	--	2.5 ... 30	--	--	✓	✓
UL	LCD ETU42	✓	--	✓ <sup>4)</sup>	①	3	--	✓	--	2.5 ... 30	--	--	✓	✓
UM	LCD ETU42	✓	--	✓ <sup>4)</sup>	①/③	3	--	✓	--	2.5 ... 30	--	--	✓	✓
UN	LCD ETU42	✓	--	✓ <sup>4)</sup>	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, IEC

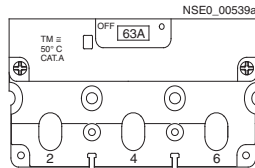
2

3-pole

### Selection and ordering data

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" $I_f$	DT **	$I_{cu}$ up to 55 kA at 415 V, standard breaking 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 2/59					

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



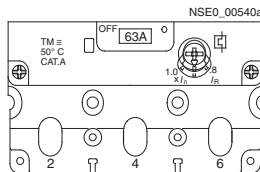
#### System protection, TM, LI function

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

VL160X/3VL1	16	16	300	B	3VL17 96-1DA3□-....	1	1 unit	113	1.900
	20	20	300	B	3VL17 02-1DA3□-....	1	1 unit	113	1.900
	25	25	300	B	3VL17 25-1DA3□-....	1	1 unit	113	2.000
	32	32	300	B	3VL17 03-1DA3□-....	1	1 unit	113	2.000
	40	40	600	B	3VL17 04-1DA3□-....	1	1 unit	113	2.000
	50	50	600	B	3VL17 05-1DA3□-....	1	1 unit	113	2.000
	63	63	600	B	3VL17 06-1DA3□-....	1	1 unit	113	2.000
	80	80	1000	B	3VL17 08-1DA3□-....	1	1 unit	113	2.000
	100	100	1000	B	3VL17 10-1DA3□-....	1	1 unit	113	2.000
	125	125	1000	B	3VL17 12-1DA3□-....	1	1 unit	113	2.000
	160	160	1500	B	3VL17 16-1DA3□-....	1	1 unit	113	2.000

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

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



#### System protection, TM, LI function

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

VL160X/3VL1	20	16 ... 20	300	B	3VL17 02-1DD3□-....	1	1 unit	113	1.900
	32	25 ... 32	300	B	3VL17 03-1DD3□-....	1	1 unit	113	2.000
	40	32 ... 40	600	B	3VL17 04-1DD3□-....	1	1 unit	113	2.000
	50	40 ... 50	600	B	3VL17 05-1DD3□-....	1	1 unit	113	2.000
	63	50 ... 63	600	B	3VL17 06-1DD3□-....	1	1 unit	113	2.000
	80	63 ... 80	1000	B	3VL17 08-1DD3□-....	1	1 unit	113	2.000
	100	80 ... 100	1000	B	3VL17 10-1DD3□-....	1	1 unit	113	2.000
	125	100 ... 125	1000	B	3VL17 12-1DD3□-....	1	1 unit	113	2.000
	160	125 ... 160	1500	B	3VL17 16-1DD3□-....	1	1 unit	113	2.000

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

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

\*\* Delivery time class A for Order No. supplement "0AA0", see page 2/59.

# Molded Case Circuit Breakers

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

3-pole

2

DT **	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H						DT **	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity 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 96-2DA3□-....		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 2/59.

# Molded Case Circuit Breakers

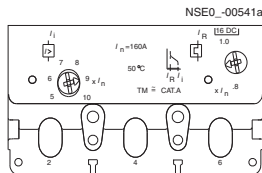
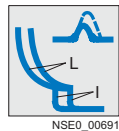
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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 breaking capacity N See "Overview".					
	A	A	A		Order No.	Basic price per PU see also page 2/34	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
					Order No. supplement required, see page 2/59					

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



#### System protection, TM, LI function

With adjustable thermal overcurrent releases, adjustable short-circuit releases

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

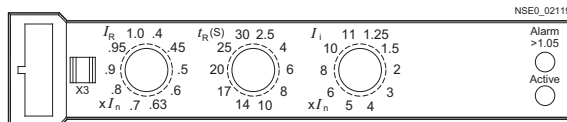
Connection type can be selected by assignment of the 12th position of Order No.

- Connection with box terminal
- Connection with screw terminal

3  
6

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

#### 3-pole, fixed-mounted, for system protection, 63 A to 1600 A, Electronic Trip Units 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□□3□-....	1	1 unit	113	2.400
	100	40 ... 100	1.25 ... 11 × $I_n$	B	3VL27 10-1□□3□-....	1	1 unit	113	2.400
	160	64 ... 160	1.25 ... 11 × $I_n$	B	3VL27 16-1□□3□-....	1	1 unit	113	2.400
VL250/3VL3	200	80 ... 200	1.25 ... 11 × $I_n$	B	3VL37 20-1□□3□-....	1	1 unit	113	2.500
	250	100 ... 250	1.25 ... 11 × $I_n$	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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

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

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 2/93.
- For more information see also chapters "Measuring Devices and Power Management" and "Software".

# Molded Case Circuit Breakers

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

3-pole

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H						(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking 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, <a href="#">see page 2/59</a>	<a href="#">see also page 2/34</a>				kg		Order No. supplement required, <a href="#">see page 2/59</a>	<a href="#">see also page 2/34</a>				kg		

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

3  
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

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



# Molded Case Circuit Breakers

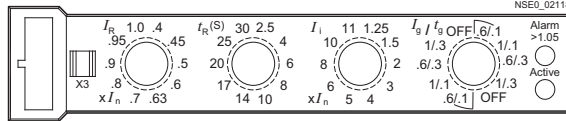
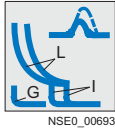
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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 breaking capacity N See "Overview".					
	A	A	A	A		Order No.	Price see page 2/34	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
						Order No. supplement required, see page 2/59					

#### 3-pole, fixed-mounted, for system protection, 63 A to 1600 A, Electronic Trip Units LIG



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

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

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

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

- Connection with box terminal
- Connection with screw terminal

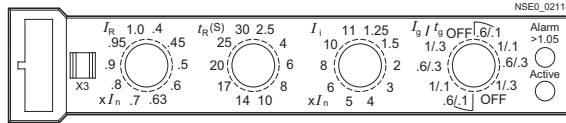
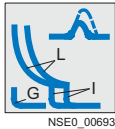
3  
6

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

- Without communication preparation
- With communication preparation

SL  
ML

#### 3-pole, fixed-mounted, for system protection, 63 A to 1600 A, Electronic Trip Units LIG



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

With adjustable overcurrent releases, adjustable short-circuit releases, vectorial summation current formation, external current transformers required in addition, see page 2/92.

Ground fault delay  $t_g = 0.1 \dots 0.3$  s, ground fault function (G) can be switched off.

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

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

- Without communication preparation
- With communication preparation

SF  
MF

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

# Molded Case Circuit Breakers

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

3-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H						(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L						(L)
	Order No.	Price see page 2/34	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg		Order No.	Price see page 2/34	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg		
	Order No. supplement required, see page 2/59								Order No. supplement required, see page 2/59						

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

SL  
MLSL  
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  
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

SF  
MFSF  
MF

Communication:

• For accessories, see page 2/93.

• For more information see also chapters "Measuring Devices and Power Management" and "Software".

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

# Molded Case Circuit Breakers

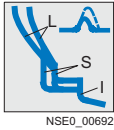
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

2

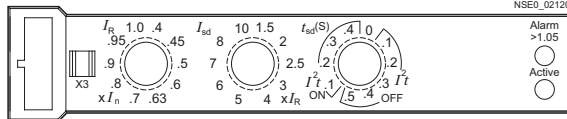
### 3-pole

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 breaking capacity N see "Overview".					
	A	A	A	A		Order No. Order No. supplement required, see page 2/59	Price see page 2/34	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 Trip Units 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 **3**
- Connection with screw terminal **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, GL and BV (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 2/93.
- For more information see also chapters "Measuring Devices and Power Management" and "Software".

# Molded Case Circuit Breakers

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

3-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H <span style="float: right;">(H)</span>						DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L <span style="float: right;">(L)</span>					
	Order No.	Price see page 2/34	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg		Order No.	Price see page 2/34	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg

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

3  
63  
6

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

SE  
ME  
LESE  
ME  
LE

# Molded Case Circuit Breakers

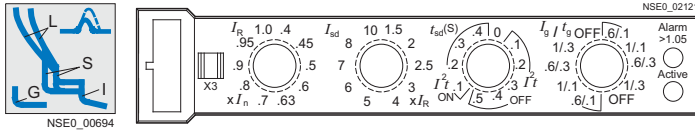
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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 breaking capacity N see "Overview"					
	A	A	A	A	A		Order No. Order No. supplement required, see page 2/59	Price see page 2/34	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 Trip Units LSIG



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

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

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

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

- Without communication preparation
- With communication preparation

SG  
MG

<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 2/93.
- For more information see also chapters "Measuring Devices and Power Management" and "Software".

# Molded Case Circuit Breakers

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

3-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H <span style="float: right;">(H)</span>						DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L <span style="float: right;">(L)</span>					
	Order No.	Price see page 2/34	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.		Order No.	Price see page 2/34	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
	Order No. supplement required, see page 2/59					kg		Order No. supplement required, see page 2/59					kg

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

3  
63  
6

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

SG  
MGSG  
MG

# Molded Case Circuit Breakers

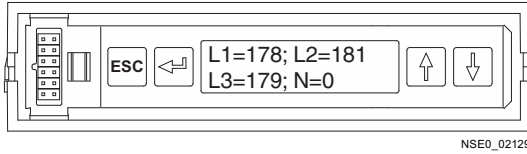
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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 breaking capacity N see "Overview"	(N)				
	A	A	A	A	A		Order No. Order No. supplement required, see page 2/59	Basic price per PU	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 Trip Units 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 formation, ground fault delay  $t_g = 0.1 \dots 0.5$  s, short-circuit delay  $t_{sd} = 0 \dots 0.5$  s

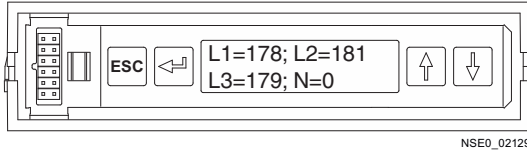
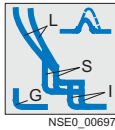
VL160/3VL2	63	25 ... 63	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	NEW B	3VL27 06-1UL3□-....	1	1 unit	113	2.400
	100	40 ... 100	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	B	3VL27 10-1UL3□-....	1	1 unit	113	2.400
	160	64 ... 160	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	B	3VL27 16-1UL3□-....	1	1 unit	113	2.400
VL250/3VL3	200	80 ... 200	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	NEW B	3VL37 20-1UL3□-....	1	1 unit	113	2.500
	250	100 ... 250	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	B	3VL37 25-1UL3□-....	1	1 unit	113	2.500

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

- Connection with box terminal
- Connection with screw terminal

3  
6

VL400/3VL4	315	128 ... 315	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	NEW B	3VL47 31-1UL36-....	1	1 unit	113	5.900
	400	160 ... 400	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	B	3VL47 40-1UL36-....	1	1 unit	113	5.900
VL630/3VL5	630	252 ... 630	$10 \times I_n$	1.5 ...	$9 \times I_R$	0.4 ...	$1 \times I_n$	NEW B	3VL57 63-1UL36-....	1	1 unit	113	9.300
VL800/3VL6	800	320 ... 800	$8 \times I_n$	1.5 ...	$7 \times I_R$	0.4 ...	$1 \times I_n$	NEW B	3VL67 80-1UL36-....	1	1 unit	113	16.000
VL1250/3VL7	1000	400 ... 1000	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	NEW B	3VL77 10-1UL36-....	1	1 unit	113	25.000
	1250	500 ... 1250	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	B	3VL77 12-1UL36-....	1	1 unit	113	25.000
VL1600/3VL8 <sup>1)</sup>	1600	640 ... 1600	$9 \times I_n$	1.5 ...	$8 \times I_R$	0.4 ...	$1 \times I_n$	NEW B	3VL87 16-1UL30-....	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 page 2/92.  
Vectorial summation current formation, 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 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	NEW B	3VL27 06-1UM3□-....	1	1 unit	113	2.400
	100	40 ... 100	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	B	3VL27 10-1UM3□-....	1	1 unit	113	2.400
	160	64 ... 160	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	B	3VL27 16-1UM3□-....	1	1 unit	113	2.400
VL250/3VL3	200	80 ... 200	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	NEW B	3VL37 20-1UM3□-....	1	1 unit	113	2.500
	250	100 ... 250	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	B	3VL37 25-1UM3□-....	1	1 unit	113	2.500

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

- Connection with box terminal
- Connection with screw terminal

3  
6

VL400/3VL4	315	128 ... 315	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	NEW B	3VL47 31-1UM36-....	1	1 unit	113	5.900
	400	160 ... 400	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	B	3VL47 40-1UM36-....	1	1 unit	113	5.900
VL630/3VL5	630	252 ... 630	$10 \times I_n$	1.5 ...	$9 \times I_R$	0.4 ...	$1 \times I_n$	NEW B	3VL57 63-1UM36-....	1	1 unit	113	9.300
VL800/3VL6	800	320 ... 800	$8 \times I_n$	1.5 ...	$7 \times I_R$	0.4 ...	$1 \times I_n$	NEW B	3VL67 80-1UM36-....	1	1 unit	113	16.000
VL1250/3VL7	1000	400 ... 1000	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	NEW B	3VL77 10-1UM36-....	1	1 unit	113	25.000
	1250	500 ... 1250	$11 \times I_n$	1.5 ...	$10 \times I_R$	0.4 ...	$1 \times I_n$	B	3VL77 12-1UM36-....	1	1 unit	113	25.000
VL1600/3VL8 <sup>1)</sup>	1600	640 ... 1600	$9 \times I_n$	1.5 ...	$8 \times I_R$	0.4 ...	$1 \times I_n$	NEW B	3VL87 16-1UM30-....	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, IEC

3-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H						DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity 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, <a href="#">see page 2/59</a>					kg		Order No. supplement required, <a href="#">see page 2/59</a>					kg

NEW

B	3VL27 06-2UL3□-....		1	1 unit	113	2.400	B	3VL27 06-3UL3□-....		1	1 unit	113	2.400
B	3VL27 10-2UL3□-....		1	1 unit	113	2.400	B	3VL27 10-3UL3□-....		1	1 unit	113	2.400
B	3VL27 16-2UL3□-....		1	1 unit	113	2.400	B	3VL27 16-3UL3□-....		1	1 unit	113	2.400
B	3VL37 20-2UL3□-....		1	1 unit	113	2.500	B	3VL37 20-3UL3□-....		1	1 unit	113	2.500
B	3VL37 25-2UL3□-....		1	1 unit	113	2.500	B	3VL37 25-3UL3□-....		1	1 unit	113	2.500

3  
63  
6

B	3VL47 31-2UL36-....		1	1 unit	113	5.900	B	3VL47 31-3UL36-....		1	1 unit	113	5.900
B	3VL47 40-2UL36-....		1	1 unit	113	5.900	B	3VL47 40-3UL36-....		1	1 unit	113	5.900
B	3VL57 63-2UL36-....		1	1 unit	113	9.300	B	3VL57 63-3UL36-....		1	1 unit	113	9.300
B	3VL67 80-2UL36-....		1	1 unit	113	16.000	B	3VL67 80-3UL36-....		1	1 unit	113	16.000
B	3VL77 10-2UL36-....		1	1 unit	113	25.000	B	3VL77 10-3UL36-....		1	1 unit	113	25.000
B	3VL77 12-2UL36-....		1	1 unit	113	25.000	B	3VL77 12-3UL36-....		1	1 unit	113	25.000
B	3VL87 16-2UL30-....		1	1 unit	113	31.300	B	3VL87 16-3UL30-....		1	1 unit	113	31.300

NEW

B	3VL27 06-2UM3□-....		1	1 unit	113	2.400	B	3VL27 06-3UM3□-....		1	1 unit	113	2.400
B	3VL27 10-2UM3□-....		1	1 unit	113	2.400	B	3VL27 10-3UM3□-....		1	1 unit	113	2.400
B	3VL27 16-2UM3□-....		1	1 unit	113	2.400	B	3VL27 16-3UM3□-....		1	1 unit	113	2.400
B	3VL37 20-2UM3□-....		1	1 unit	113	2.500	B	3VL37 20-3UM3□-....		1	1 unit	113	2.500
B	3VL37 25-2UM3□-....		1	1 unit	113	2.500	B	3VL37 25-3UM3□-....		1	1 unit	113	2.500

3  
63  
6

B	3VL47 31-2UM36-....		1	1 unit	113	5.900	B	3VL47 31-3UM36-....		1	1 unit	113	5.900
B	3VL47 40-2UM36-....		1	1 unit	113	5.900	B	3VL47 40-3UM36-....		1	1 unit	113	5.900
B	3VL57 63-2UM36-....		1	1 unit	113	9.300	B	3VL57 63-3UM36-....		1	1 unit	113	9.300
B	3VL67 80-2UM36-....		1	1 unit	113	16.000	B	3VL67 80-3UM36-....		1	1 unit	113	16.000
B	3VL77 10-2UM36-....		1	1 unit	113	25.000	B	3VL77 10-3UM36-....		1	1 unit	113	25.000
B	3VL77 12-2UM36-....		1	1 unit	113	25.000	B	3VL77 12-3UM36-....		1	1 unit	113	25.000
B	3VL87 16-2UM30-....		1	1 unit	113	31.300	B	3VL87 16-3UM30-....		1	1 unit	113	31.300



# Molded Case Circuit Breakers

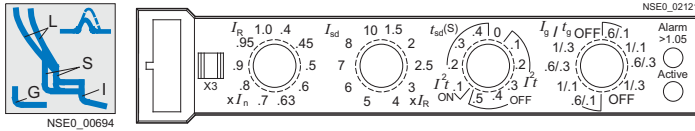
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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 breaking capacity N see "Overview".	(N)				
	A	A	A	A	A		Order No. Order No. supplement required, see page 2/59	Price see page 2/34	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.

3-pole, fixed-mounted, for system protection - generator protection, 63 A to 1600 A, Electronic Trip Units 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 2/92. Ground fault delay  $t_g = 0.1 \dots 0.3$  s, short-circuit delay  $t_{sd} = 0 \dots 0.5$  s, ground-fault protection (G) can be switched off

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

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

- Connection with box terminal
- Connection with screw terminal

3  
6

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

- Without communication preparation
- With communication preparation

SH  
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 2/93.
- For more information see also chapters "Measuring Devices and Power Management" and "Software".

# Molded Case Circuit Breakers

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

3-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H <span style="float: right;">(H)</span>					DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L <span style="float: right;">(L)</span>						
	Order No. Order No. supplement required, <a href="#">see page 2/59</a>	Price <a href="#">see page 2/34</a>	PU (UNIT, SET, M)	PS* / P. unit	PG	Weight per PU approx.  kg		Order No. Order No. supplement required, <a href="#">see page 2/59</a>	Price <a href="#">see page 2/34</a>	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

SH  
MHSH  
MH

# Molded Case Circuit Breakers

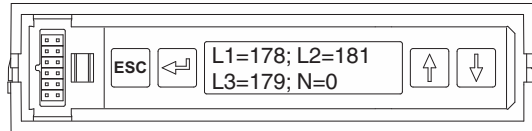
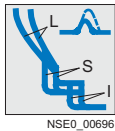
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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	DT	$I_{cu}$ up to 55 kA at 415 V, standard breaking capacity N see "Overview".	(N)				
	A	A	A	A		Order No. Order No. supplement required, see page 2/59	Basic price per PU	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 Trip Units LI, LS, LSI



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

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

VL160/3VL2	63	25 ... 63	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	B	<b>3VL27 06-1UH3</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 10-1UH3</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 16-1UH3</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 20-1UH3</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 25-1UH3</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 31-1UH36</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 40-1UH36</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 63-1UH36</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 80-1UH36</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 10-1UH36</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 12-1UH36</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 16-1UH30</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, IEC

3-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H <span style="float: right;">(H)</span>						DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L <span style="float: right;">(L)</span>					
	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

NEW

B	<b>3VL27 06-2UH3□-....</b>		1	1 unit	113	2.400	B	<b>3VL27 06-3UH3□-....</b>		1	1 unit	113	2.400
B	<b>3VL27 10-2UH3□-....</b>		1	1 unit	113	2.400	B	<b>3VL27 10-3UH3□-....</b>		1	1 unit	113	2.400
B	<b>3VL27 16-2UH3□-....</b>		1	1 unit	113	2.400	B	<b>3VL27 16-3UH3□-....</b>		1	1 unit	113	2.400
B	<b>3VL37 20-2UH3□-....</b>		1	1 unit	113	2.500	B	<b>3VL37 20-3UH3□-....</b>		1	1 unit	113	2.500
B	<b>3VL37 25-2UH3□-....</b>		1	1 unit	113	2.500	B	<b>3VL37 25-3UH3□-....</b>		1	1 unit	113	2.500

NEW

3  
63  
6

B	<b>3VL47 31-2UH36-....</b>		1	1 unit	113	5.900	B	<b>3VL47 31-3UH36-....</b>		1	1 unit	113	5.900
B	<b>3VL47 40-2UH36-....</b>		1	1 unit	113	5.900	B	<b>3VL47 40-3UH36-....</b>		1	1 unit	113	5.900
B	<b>3VL57 63-2UH36-....</b>		1	1 unit	113	9.300	B	<b>3VL57 63-3UH36-....</b>		1	1 unit	113	9.300
B	<b>3VL67 80-2UH36-....</b>		1	1 unit	113	16.000	B	<b>3VL67 80-3UH36-....</b>		1	1 unit	113	16.000
B	<b>3VL77 10-2UH36-....</b>		1	1 unit	113	25.000	B	<b>3VL77 10-3UH36-....</b>		1	1 unit	113	25.000
B	<b>3VL77 12-2UH36-....</b>		1	1 unit	113	25.000	B	<b>3VL77 12-3UH36-....</b>		1	1 unit	113	25.000
B	<b>3VL87 16-2UH30-....</b>		1	1 unit	113	31.300	B	<b>3VL87 16-3UH30-....</b>		1	1 unit	113	31.300

# Molded Case Circuit Breakers

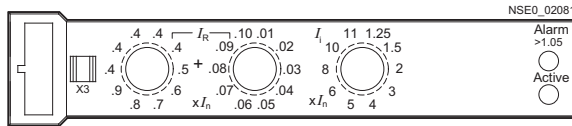
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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 breaking capacity N see "Overview"					
	A	A	A		Order No.	Price see page 2/34	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
					Order No. supplement required, see page 2/59					

3-pole, fixed-mounted, for motor protection, 63 A to 500 A, Electronic Trip Units LI



#### ETU10M, LI function

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

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

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

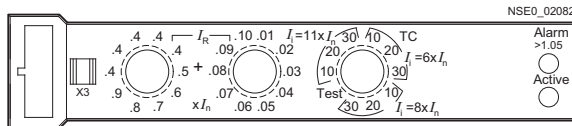
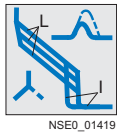
- Connection with box terminal
- Connection with screw terminal

3  
6

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

- Without communication preparation
- With communication preparation

SP  
MP



#### ETU30M, LI function

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

VL160/3VL2	63	25 ... 63	$6/8/11 \times I_n$	B	3VL27 06-1□□3□-....	1	1 unit	113	2.400
	100	40 ... 100	$6/8/11 \times I_n$	B	3VL27 10-1□□3□-....	1	1 unit	113	2.400
	160	64 ... 160	$6/8/11 \times I_n$	B	3VL27 16-1□□3□-....	1	1 unit	113	2.400
VL250/3VL3	200	80 ... 200	$6/8/11 \times I_n$	B	3VL37 20-1□□3□-....	1	1 unit	113	2.500
	250	100 ... 250	$6/8/11 \times I_n$	B	3VL37 25-1□□3□-....	1	1 unit	113	2.500

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

- Connection with box terminal
- Connection with screw terminal

3  
6

VL400/3VL4	315	125 ... 315	$6/8/11 \times I_n$	B	3VL47 31-1□□36-....	1	1 unit	113	5.900
VL630/3VL5	500	200 ... 500	$6/8/12.5 \times I_n$	B	3VL57 50-1□□36-....	1	1 unit	113	9.300

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

SS  
MS  
LS

Communication:

- For accessories, see page 2/93.
- For more information see also chapters "Measuring Devices and Power Management" and "Software".

# Molded Case Circuit Breakers

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

3-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H <span style="float: right;">(H)</span>						DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L <span style="float: right;">(L)</span>					
	Order No.	Price see page 2/34	PU (UNIT, SET, M)	PS* / P. unit	PG	Weight per PU approx. kg		Order No.	Price see page 2/34	PU (UNIT, SET, M)	PS* / P. unit	PG	Weight per PU approx. kg

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

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

SP  
MPSP  
MP

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

SS  
MS  
LSSS  
MS  
LS

# Molded Case Circuit Breakers

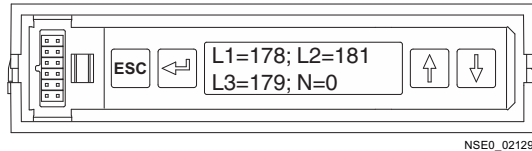
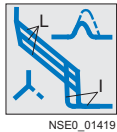
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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 breaking 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.
					Order No. supplement required, see page 2/59					kg

3-pole, fixed-mounted, for motor protection,  
63 A to 500 A, Electronic Trip Units LI



#### LCD-ETU40M, LI function

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

VL160/3VL2	63	25 ... 63	1.25 ... 11 × $I_n$	NEW	B	3VL27 06-1UP3□-....	1	1 unit	113	2.400
	100	40 ... 100	1.25 ... 11 × $I_n$	NEW	B	3VL27 10-1UP3□-....	1	1 unit	113	2.400
	160	64 ... 160	1.25 ... 11 × $I_n$	NEW	B	3VL27 16-1UP3□-....	1	1 unit	113	2.400
VL250/3VL3	200	80 ... 200	1.25 ... 11 × $I_n$	NEW	B	3VL37 20-1UP3□-....	1	1 unit	113	2.500
	250	100 ... 250	1.25 ... 11 × $I_n$	NEW	B	3VL37 25-1UP3□-....	1	1 unit	113	2.500

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

- Connection with box terminal
- Connection with screw terminal

3  
6

VL400/3VL4	315	128 ... 315	1.25 ... 11 × $I_n$	NEW	B	3VL47 31-1UP36-....	1	1 unit	113	5.900
VL630/3VL5	500	250 ... 500	1.25 ... 11 × $I_n$	NEW	B	3VL57 50-1UP36-....	1	1 unit	113	9.300

# Molded Case Circuit Breakers

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

3-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H <span style="float: right;">(H)</span>						DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L <span style="float: right;">(L)</span>					
	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, <a href="#">see page 2/59</a>					kg		Order No. supplement required, <a href="#">see page 2/59</a>					kg

NEW

B	3VL27 06-2UP3□-....		1	1 unit	113	2.400	B	3VL27 06-3UP3□-....		1	1 unit	113	2.400
B	3VL27 10-2UP3□-....		1	1 unit	113	2.400	B	3VL27 10-3UP3□-....		1	1 unit	113	2.400
B	3VL27 16-2UP3□-....		1	1 unit	113	2.400	B	3VL27 16-3UP3□-....		1	1 unit	113	2.400
B	3VL37 20-2UP3□-....		1	1 unit	113	2.500	B	3VL37 20-3UP3□-....		1	1 unit	113	2.500
B	3VL37 25-2UP3□-....		1	1 unit	113	2.500	B	3VL37 25-3UP3□-....		1	1 unit	113	2.500

NEW

3  
63  
6

B	3VL47 31-2UP36-....		1	1 unit	113	5.900	B	3VL47 31-3UP36-....		1	1 unit	113	5.900
B	3VL57 50-2UP36-....		1	1 unit	113	9.300	B	3VL57 50-3UP36-....		1	1 unit	113	9.300



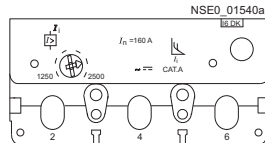
# Molded Case Circuit Breakers

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

### 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 breaking capacity N see "Overview".					(N)
	A			Order No. Order No. supplement required, see page 2/59	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg

#### 3-pole, fixed-mounted, for starter protection, 63 A to 500 A, magnetic trip unit



#### 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

- 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 trip unit



#### 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 2/14 to 2/30.

<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, IEC

3-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H <span style="float: right;">(H)</span>						DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L <span style="float: right;">(L)</span>					
	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, <a href="#">see page 2/59</a>					kg		Order No. supplement required, <a href="#">see page 2/59</a>					kg

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

3  
63  
6

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

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

3  
63  
6


















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

# Molded Case Circuit Breakers

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

2

### 3-pole

Order No. supplement (for complete Order No., see pages 2/14 to 2/30) 3VL7 ... □□3-...	Breaking capacity	Type VL160 3VL2	VL250 3VL3		VL400 3VL4		VL630 3VL5		VL800 3VL6		VL1250 3VL7		VL1600 3VL8			
			Rated current $I_n$													
Releases			63 A	100 A	160 A	200 A	250 A	315 A	400 A	500 A	630 A	800 A	1000 A	1250 A	1600 A	
			Price													
ETU10	<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>U L</b>		✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓	
ETU42	<b>U M</b>		✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓	
ETU22	<b>S H</b>		✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓	
ETU22	<b>M H</b>		✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓	
ETU40	<b>U H</b>		✓	✓	✓	✓	✓	✓	✓	--	✓	✓	✓	✓	✓	

✓ Available







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# Molded Case Circuit Breakers

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

3-pole

2

Order No. supplement (for complete Order No., see pages 2/14 to 2/30) 3VL7 ... □□3-...	Breaking capacity	Type	VL160		VL250		VL400		VL630		VL800		VL1250		VL1600	
		3VL2	3VL3		3VL4		3VL5		3VL6		3VL7		3VL8			
Releases		Rated current $I_n$														
		63 A	100 A	160 A	200 A	250 A	315 A	400 A	500 A	630 A	800 A	1000 A	1250 A	1600 A		
<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>UP</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ Available

-- Not available

# Molded Case Circuit Breakers

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

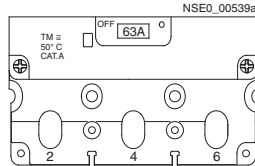
2

4-pole

### Selection and ordering data

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 breaking 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

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



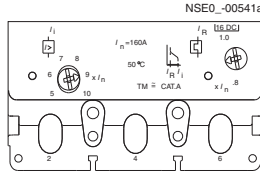
#### System protection, TM, LI function

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

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

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

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



#### System protection, TM, LI function

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

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

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

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

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

\*\* Delivery time class A for Order No. supplement "0AA0", see page 2/59.

# Molded Case Circuit Breakers

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

4-pole

2

DT **	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H						(H)	DT **	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L						(L)
	Order No. Order No. supplement required, see page 2/59	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 2/59	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 2/59.

# Molded Case Circuit Breakers

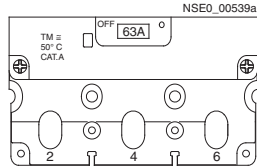
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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 breaking capacity N See "Overview".					
	A	A	A		Order No. Order No. supplement required, see page 2/59	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg

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



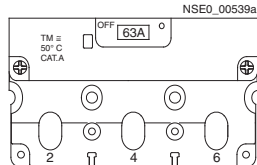
#### System protection, TM, LIN function

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

VL160X/3VL1	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	125	125	1000	B	3VL17 12-1EA4□-....		1	1 unit	113	2.500
	160	160	1500	B	3VL17 16-1EA4□-....		1	1 unit	113	2.500

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

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

\*\* Delivery time class A for Order No. supplement "0AA0", see page 2/59.

# Molded Case Circuit Breakers

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

4-pole

2

DT **	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H						(H)	DT **	$I_{cu}$ up to 100 kA at 415 V, very high breaking 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, <a href="#">see page 2/59</a>					kg		Order No. supplement required, <a href="#">see page 2/59</a>					kg		

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

3  
6

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

3  
6

\*\* Delivery time class A for Order No. supplement "0AA0", [see page 2/59](#).



# Molded Case Circuit Breakers

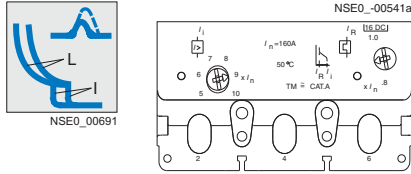
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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 breaking 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

4-pole, fixed-mounted, for system protection, 16 A to 630 A, thermal-magnetic trip units 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 %

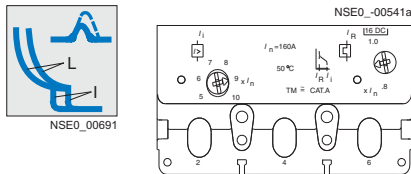
VL160/3VL2	50	40 ... 50	300 ... 600	B	3VL27 05-1EM4□-....	1	1 unit	113	3.000
	63	50 ... 63	300 ... 600	B	3VL27 06-1EM4□-....	1	1 unit	113	3.000
	80	63 ... 80	400 ... 800	B	3VL27 08-1EM4□-....	1	1 unit	113	3.000
	100	80 ... 100	500 ... 1000	B	3VL27 10-1EM4□-....	1	1 unit	113	3.000
	125	100 ... 125	625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

- 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, IEC

### 4-pole

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H						DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity 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						3					
6						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						3					
6						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

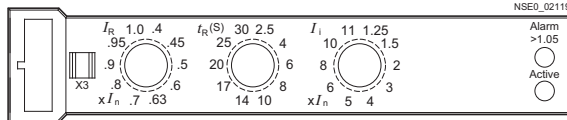
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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 breaking capacity N see "Overview"	(N)
	A	A	A		Order No. Price see page 2/56	PU (UNIT, SET, M)
					Order No. supplement required, see page 2/59	PS*/P. unit
						PG
						Weight per PU approx. kg

4-pole, fixed-mounted, for system protection, 63 A to 1600 A, Electronic Trip Units 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

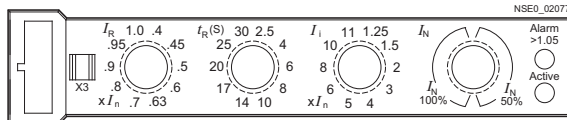
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VL400/3VL4	315	128 ... 315	1.25 ... 11 × $I_n$	B	3VL47 31-1□□46-....	1	1 unit	113	7.600
	400	160 ... 400	1.25 ... 11 × $I_n$	B	3VL47 40-1□□46-....	1	1 unit	113	7.600
VL630/3VL5	630	252 ... 630	1.25 ... 10 × $I_n$	B	3VL57 63-1□□46-....	1	1 unit	113	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 Trip Units 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, GL and BV (not communication-)

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, IEC

4-pole

2

DT $I_{cu}$ up to 70 kA at 415 V, high breaking capacity H (H)							DT $I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L (L)						
Order No.	Price see page 2/56	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg	Order No.	Price see page 2/56	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 6						3 6							
B 3VL47 31-2□□46-....		1	1 unit	113	7.600	B 3VL47 31-3□□46-....		1	1 unit	113	7.600		
B 3VL47 40-2□□46-....		1	1 unit	113	7.600	B 3VL47 40-3□□46-....		1	1 unit	113	7.600		
B 3VL57 63-2□□46-....		1	1 unit	113	11.700	B 3VL57 63-3□□46-....		1	1 unit	113	11.700		
B 3VL67 80-2□□46-....		1	1 unit	113	20.500	B 3VL67 80-3□□46-....		1	1 unit	113	20.500		
B 3VL77 10-2□□46-....		1	1 unit	113	33.500	B 3VL77 10-3□□46-....		1	1 unit	113	33.500		
B 3VL77 12-2□□46-....		1	1 unit	113	33.500	B 3VL77 12-3□□46-....		1	1 unit	113	33.500		
B 3VL87 16-2□□40-....		1	1 unit	113	40.800	B 3VL87 16-3□□40-....		1	1 unit	113	40.800		
TB NB						TB 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 6						3 6							
B 3VL47 31-2□□46-....		1	1 unit	113	7.600	B 3VL47 31-3□□46-....		1	1 unit	113	7.600		
B 3VL47 40-2□□46-....		1	1 unit	113	7.600	B 3VL47 40-3□□46-....		1	1 unit	113	7.600		
B 3VL57 63-2□□46-....		1	1 unit	113	11.700	B 3VL57 63-3□□46-....		1	1 unit	113	11.700		
B 3VL67 80-2□□46-....		1	1 unit	113	20.500	B 3VL67 80-3□□46-....		1	1 unit	113	20.500		
B 3VL77 10-2□□46-....		1	1 unit	113	33.500	B 3VL77 10-3□□46-....		1	1 unit	113	33.500		
B 3VL77 12-2□□46-....		1	1 unit	113	33.500	B 3VL77 12-3□□46-....		1	1 unit	113	33.500		
B 3VL87 16-2□□40-....		1	1 unit	113	40.800	B 3VL87 16-3□□40-....		1	1 unit	113	40.800		
TA NA LA						TA NA LA							

Communication:

• For accessories, see page 2/93.

• For more information see also chapters "Measuring Devices and Power Management" and "Software".

# Molded Case Circuit Breakers

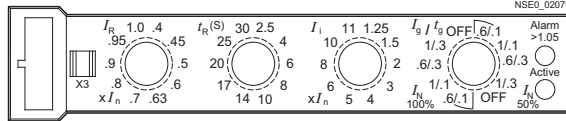
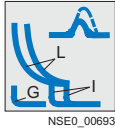
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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 breaking capacity N See "Overview".					
	A	A	A	A		Order No.	Price see page 2/56	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 Trip Units LING



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

With adjustable overcurrent releases, adjustable short-circuit releases, vectorial summation current formation, 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 2/93.
- For more information see also chapters "Measuring Devices and Power Management" and "Software".

# Molded Case Circuit Breakers

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

4-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H <span style="float: right;">(H)</span>					DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L <span style="float: right;">(L)</span>						
	Order No.	Price see page 2/56	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg		Order No.	Price see page 2/56	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

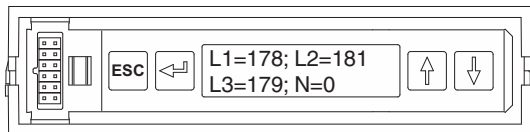
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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) <b>S</b>	DT	$I_{cu}$ up to 55 kA at 415 V, standard breaking capacity N see "Overview"					
	A	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 2/59					

4-pole, fixed-mounted, for system protection - generator protection, 63 A to 1600 A, Electronic Trip Units 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> 100 <sup>2)</sup> 160	25 ... 63 40 ... 100 64 ... 160	1.25 ... 11 × $I_n$ 1.25 ... 11 × $I_n$ 1.25 ... 11 × $I_n$	1.5 ... 10 × $I_R$ 1.5 ... 10 × $I_R$ 1.5 ... 10 × $I_R$	NEW NEW NEW	B B B	3VL27 06-1UJ4□-.... 3VL27 10-1UJ4□-.... 3VL27 16-1UJ4□-....	1 1 1	1 unit 1 unit 1 unit	113 113 113	3.100 3.100 3.100
VL250/3VL3	200 250	80 ... 200 100 ... 250	1.25 ... 11 × $I_n$ 1.25 ... 11 × $I_n$	1.5 ... 10 × $I_R$ 1.5 ... 10 × $I_R$	NEW NEW	B B	3VL37 20-1UJ4□-.... 3VL37 25-1UJ4□-....	1 1	1 unit 1 unit	113 113	3.300 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	315 400	128 ... 315 160 ... 400	1.25 ... 11 × $I_n$ 1.25 ... 11 × $I_n$	1.5 ... 10 × $I_R$ 1.5 ... 10 × $I_R$	NEW NEW	B B	3VL47 31-1UJ46-.... 3VL47 40-1UJ46-....	1 1	1 unit 1 unit	113 113	7.600 7.600
VL630/3VL5	630	252 ... 630	1.25 ... 10 × $I_n$	1.5 ... 9 × $I_R$	NEW	B	3VL57 63-1UJ46-....	1	1 unit	113	11.700
VL800/3VL6	800	320 ... 800	1.25 ... 8 × $I_n$	1.5 ... 7 × $I_R$	NEW	B	3VL67 80-1UJ46-....	1	1 unit	113	20.500
VL1250/3VL7	1000 1250	400 ... 1000 500 ... 1250	1.25 ... 11 × $I_n$ 1.25 ... 11 × $I_n$	1.5 ... 10 × $I_R$ 1.5 ... 10 × $I_R$	NEW NEW	B B	3VL77 10-1UJ46-.... 3VL77 12-1UJ46-....	1 1	1 unit 1 unit	113 113	33.500 33.500
VL1600/3VL8 <sup>1)</sup>	1600	640 ... 1600	1.25 ... 9 × $I_n$	1.5 ... 8 × $I_R$	NEW	B	3VL87 16-1UJ40-....	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, IEC

4-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H <span style="float: right;">(H)</span>						DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L <span style="float: right;">(L)</span>					
	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, <a href="#">see page 2/59</a>					kg		Order No. supplement required, <a href="#">see page 2/59</a>					kg

NEW

B	<b>3VL27 06-2UJ4</b> □-....		1	1 unit	113	3.100	B	<b>3VL27 06-3UJ4</b> □-....		1	1 unit	113	3.100
B	<b>3VL27 10-2UJ4</b> □-....		1	1 unit	113	3.100	B	<b>3VL27 10-3UJ4</b> □-....		1	1 unit	113	3.100
B	<b>3VL27 16-2UJ4</b> □-....		1	1 unit	113	3.100	B	<b>3VL27 16-3UJ4</b> □-....		1	1 unit	113	3.100
B	<b>3VL37 20-2UJ4</b> □-....		1	1 unit	113	3.300	B	<b>3VL37 20-3UJ4</b> □-....		1	1 unit	113	3.300
B	<b>3VL37 25-2UJ4</b> □-....		1	1 unit	113	3.300	B	<b>3VL37 25-3UJ4</b> □-....		1	1 unit	113	3.300

NEW

3  
63  
6

B	<b>3VL47 31-2UJ46</b> -....		1	1 unit	113	7.600	B	<b>3VL47 31-3UJ46</b> -....		1	1 unit	113	7.600
B	<b>3VL47 40-2UJ46</b> -....		1	1 unit	113	7.600	B	<b>3VL47 40-3UJ46</b> -....		1	1 unit	113	7.600
B	<b>3VL57 63-2UJ46</b> -....		1	1 unit	113	11.700	B	<b>3VL57 63-3UJ46</b> -....		1	1 unit	113	11.700
B	<b>3VL67 80-2UJ46</b> -....		1	1 unit	113	20.500	B	<b>3VL67 80-3UJ46</b> -....		1	1 unit	113	20.500
B	<b>3VL77 10-2UJ46</b> -....		1	1 unit	113	33.500	B	<b>3VL77 10-3UJ46</b> -....		1	1 unit	113	33.500
B	<b>3VL77 12-2UJ46</b> -....		1	1 unit	113	33.500	B	<b>3VL77 12-3UJ46</b> -....		1	1 unit	113	33.500
B	<b>3VL87 16-2UJ40</b> -....		1	1 unit	113	40.800	B	<b>3VL87 16-3UJ40</b> -....		1	1 unit	113	40.800



# Molded Case Circuit Breakers

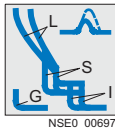
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

2

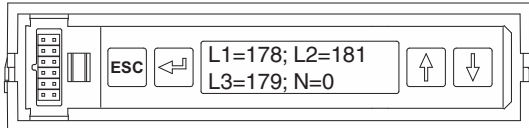
### 4-pole

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 breaking capacity N see "Overview"	(N)				
	A	A	A	A	A		Order No. Order No. supplement required, see page 2/59	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 Trip Units LSIG, LSING



NSE0\_00697



NSE0\_02129

### 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

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	Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
VL160/3VL2	63	25 ... 63	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	<b>3VL27 06-1UN4</b> □-....	1	1 unit	113	3.100	
	100	40 ... 100	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	<b>3VL27 10-1UN4</b> □-....	1	1 unit	113	3.100	
	160	64 ... 160	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	<b>3VL27 16-1UN4</b> □-....	1	1 unit	113	3.100	
VL250/3VL3	200	80 ... 200	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	<b>3VL37 20-1UN4</b> □-....	1	1 unit	113	3.300	
	250	100 ... 250	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	<b>3VL37 25-1UN4</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	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	<b>3VL47 31-1UN46</b> -....	1	1 unit	113	7.600	
	400	160 ... 400	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	<b>3VL47 40-1UN46</b> -....	1	1 unit	113	7.600	
VL630/3VL5	630	252 ... 630	1.25 ... $10 \times I_n$	1.5 ... $9 \times I_R$	0.4 ... $1 \times I_n$	B	<b>3VL57 63-1UN46</b> -....	1	1 unit	113	11.700	
VL800/3VL6	800	320 ... 800	1.25 ... $8 \times I_n$	1.5 ... $7 \times I_R$	0.4 ... $1 \times I_n$	B	<b>3VL67 80-1UN46</b> -....	1	1 unit	113	20.500	
VL1250/3VL7	1000	400 ... 1000	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	<b>3VL77 10-1UN46</b> -....	1	1 unit	113	33.500	
	1250	500 ... 1250	1.25 ... $11 \times I_n$	1.5 ... $10 \times I_R$	0.4 ... $1 \times I_n$	B	<b>3VL77 12-1UN46</b> -....	1	1 unit	113	33.500	
VL1600/3VL8 <sup>1)</sup>	1600	640 ... 1600	1.25 ... $9 \times I_n$	1.5 ... $8 \times I_R$	0.4 ... $1 \times I_n$	B	<b>3VL87 16-1UN40</b> -....	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, IEC

4-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H						DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity 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, <a href="#">see page 2/59</a>					kg		Order No. supplement required, <a href="#">see page 2/59</a>					kg

NEW

B	3VL27 06-2UN4□-....		1	1 unit	113	3.100	B	3VL27 06-3UN4□-....		1	1 unit	113	3.100
B	3VL27 10-2UN4□-....		1	1 unit	113	3.100	B	3VL27 10-3UN4□-....		1	1 unit	113	3.100
B	3VL27 16-2UN4□-....		1	1 unit	113	3.100	B	3VL27 16-3UN4□-....		1	1 unit	113	3.100
B	3VL37 20-2UN4□-....		1	1 unit	113	3.300	B	3VL37 20-3UN4□-....		1	1 unit	113	3.300
B	3VL37 25-2UN4□-....		1	1 unit	113	3.300	B	3VL37 25-3UN4□-....		1	1 unit	113	3.300

3  
63  
6

B	3VL47 31-2UN46-....		1	1 unit	113	7.600	B	3VL47 31-3UN46-....		1	1 unit	113	7.600
B	3VL47 40-2UN46-....		1	1 unit	113	7.600	B	3VL47 40-3UN46-....		1	1 unit	113	7.600
B	3VL57 63-2UN46-....		1	1 unit	113	11.700	B	3VL57 63-3UN46-....		1	1 unit	113	11.700
B	3VL67 80-2UN46-....		1	1 unit	113	20.500	B	3VL67 80-3UN46-....		1	1 unit	113	20.500
B	3VL77 10-2UN46-....		1	1 unit	113	33.500	B	3VL77 10-3UN46-....		1	1 unit	113	33.500
B	3VL77 12-2UN46-....		1	1 unit	113	33.500	B	3VL77 12-3UN46-....		1	1 unit	113	33.500
B	3VL87 16-2UN40-....		1	1 unit	113	40.800	B	3VL87 16-3UN40-....		1	1 unit	113	40.800

# Molded Case Circuit Breakers

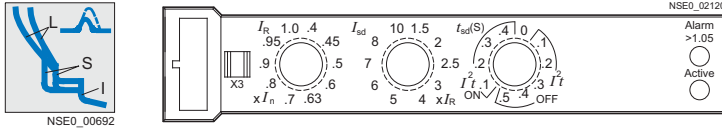
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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	DT	$I_{cu}$ up to 55 kA at 415 V, standard breaking capacity N see "Overview"						
	A	A	A	A			Order No.	Price see page 2/56	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx. kg
							Order No. supplement required, see page 2/59					

#### 4-pole, fixed-mounted, for system protection - generator protection, 63 A to 1600 A, Electronic Trip Units LSI



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

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

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

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

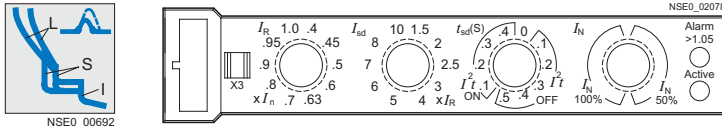
- Connection with box terminal 3
- Connection with screw terminal 6

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

- Without communication preparation
- With communication preparation

TE  
NE

#### 4-pole, fixed-mounted, for system protection - generator protection, 63 A to 1600 A, Electronic Trip Units LSIN



#### 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 ... $10xI_R$ B	3VL27 06-1□□4□-....	1	1 unit	113	3.100
	100	0.4 ... $1.0 \times I_n$	$11 \times I_n$	1.5 ... $10xI_R$ B	3VL27 10-1□□4□-....	1	1 unit	113	3.100
	160	0.4 ... $1.0 \times I_n$	$11 \times I_n$	1.5 ... $10xI_R$ B	3VL27 16-1□□4□-....	1	1 unit	113	3.100
VL250/3VL3	200	0.4 ... $1.0 \times I_n$	$11 \times I_n$	1.5 ... $10xI_R$ B	3VL37 20-1□□4□-....	1	1 unit	113	3.300
	250	0.4 ... $1.0 \times I_n$	$11 \times I_n$	1.5 ... $10xI_R$ B	3VL37 25-1□□4□-....	1	1 unit	113	3.300

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

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

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

- Without communication preparation
- With communication preparation
- Marine engineering-certified LRS, DNV, GL and BV (not communic.-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 2/93.

• For more information see also chapters "Measuring Devices and Power Management" and "Software".

Communication:

# Molded Case Circuit Breakers

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

4-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H						(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L						(L)
	Order No.	Price see page 2/56	PU (UNIT, SET, M)	PS* / P. unit	PG	Weight per PU approx.		Order No.	Price see page 2/56	PU (UNIT, SET, M)	PS* / P. unit	PG	Weight per PU approx.		
	Order No. supplement required, see page 2/59					kg		Order No. supplement required, see page 2/59					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	

TE  
NETE  
NE

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

3  
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	

TF  
NF  
LFTF  
NF  
LF

# Molded Case Circuit Breakers

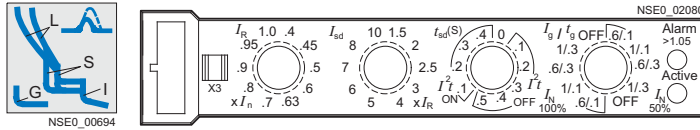
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

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) <b>S</b>	Ground-fault protection "G" $I_g$	DT	$I_{cu}$ up to 55 kA at 415 V, standard breaking capacity N see "Overview"	(N)				
	A	A	A	A	A		Order No.	Price see page 2/56	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
							Order No. supplement required, see page 2/59					kg

#### 4-pole, fixed-mounted, for system protection - generator protection, 63 A to 1600 A, Electronic Trip Units 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	<b>3VL27 06-1□□4□-....</b>	1	1 unit	113	3.100
	100	40 ... 100	$11 \times I_n$	1.5 ... $10 \times I_R$	0.6 ... $1 \times I_n$	OFF B	<b>3VL27 10-1□□4□-....</b>	1	1 unit	113	3.100
	160	64 ... 160	$11 \times I_n$	1.5 ... $10 \times I_R$	0.6 ... $1 \times I_n$	OFF B	<b>3VL27 16-1□□4□-....</b>	1	1 unit	113	3.100
VL250/3VL3	200	80 ... 200	$11 \times I_n$	1.5 ... $10 \times I_R$	0.6 ... $1 \times I_n$	OFF B	<b>3VL37 20-1□□4□-....</b>	1	1 unit	113	3.300
	250	100 ... 250	$11 \times I_n$	1.5 ... $10 \times I_R$	0.6 ... $1 \times I_n$	OFF 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 ... $10 \times I_R$	0.6 ... $1 \times I_n$	OFF B	<b>3VL47 31-1□□46-....</b>	1	1 unit	113	7.600
	400	160 ... 400	$11 \times I_n$	1.5 ... $10 \times I_R$	0.6 ... $1 \times I_n$	OFF B	<b>3VL47 40-1□□46-....</b>	1	1 unit	113	7.600
VL630/3VL5	630	252 ... 630	$10 \times I_n$	1.5 ... $9 \times I_R$	0.6 ... $1 \times I_n$	OFF B	<b>3VL57 63-1□□46-....</b>	1	1 unit	113	11.700
VL800/3VL6	800	320 ... 800	$8 \times I_n$	1.5 ... $7 \times I_R$	0.6 ... $1 \times I_n$	OFF B	<b>3VL67 80-1□□46-....</b>	1	1 unit	113	20.500
VL1250/3VL7	1000	400 ... 1000	$11 \times I_n$	1.5 ... $10 \times I_R$	0.6 ... $1 \times I_n$	OFF B	<b>3VL77 10-1□□46-....</b>	1	1 unit	113	33.500
	1250	500 ... 1250	$11 \times I_n$	1.5 ... $10 \times I_R$	0.6 ... $1 \times I_n$	OFF 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 ... $8 \times I_R$	0.6 ... $1 \times I_n$	OFF B	<b>3VL87 16-1□□40-....</b>	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 2/93.
- For more information see also chapters "Measuring Devices and Power Management" and "Software".

# Molded Case Circuit Breakers

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

2

4-pole

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H						(H)	DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L						(L)
	Order No. Order No. supplement required, <a href="#">see page 2/59</a>	Price <a href="#">see page 2/56</a>	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx.  kg		Order No. Order No. supplement required, <a href="#">see page 2/59</a>	Price <a href="#">see page 2/56</a>	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, IEC

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 breaking capacity N <a href="#">see "Overview"</a>					(N)
				Order No.	Basic price per PU	PU (UNIT, SET, M)	PS*/P. unit	PG	Weight per PU approx.
				Order No. supplement required, <a href="#">see page 2/59</a>					kg

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



NSE0\_00708

#### 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

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

3

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, IEC

4-pole

2

DT	$I_{cu}$ up to 70 kA at 415 V, high breaking capacity H <span style="float: right;">(H)</span>						DT	$I_{cu}$ up to 100 kA at 415 V, very high breaking capacity L <span style="float: right;">(L)</span>					
	Order No. Order No. supplement required, <a href="#">see page 2/59</a>	Basic price per PU	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PU approx. kg		Order No. Order No. supplement required, <a href="#">see page 2/59</a>	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

3  
63  
6

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, IEC

2

### 4-pole

Order No. supplement (for complete Order No., see pages 2/42 to 2/52) 3VL.7 ... □□4-....	Breaking capacity	Type	VL160		VL250		VL400		VL630	VL800	VL1250	VL1600		
			3VL2		3VL3		3VL4		3VL5	3VL6	3VL7	3VL8		
			Rated current $I_n$											
Releases			63 A	100 A	160 A	200 A	250 A	315 A	400 A	630 A	800 A	1000 A	1250 A	1600 A
			Price											
ETU10	<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>U J</b>		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ETU42	<b>U 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, IEC

Options

2

### 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 -Z

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

#### 3- or 4-pole

<b>Prewired internal accessories</b> Connecting cables (3 m long) brought out at the rear This option "L02" can be selected <u>only</u> in combination with internal accessories (page 2/59).	For VL160X to VL1600 (3VL1 to 3VL8)	L 0 2	✓
<b>Prewired connecting cables for motorized operating mechanisms with stored energy mechanisms (SEO)</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 and VL800 brought out on the right. Option "L12" can <u>only</u> be selected in combination with motorized operating mechanisms (order codes "M24", "M42", "M60", "M11" and "M22").	For VL160X to VL800 (3VL1 to 3VL6)	L 1 2	✓
<b>Motorized operating mechanisms with stored energy mechanisms for synchronization tasks (24 V DC)</b> Motorized operating mechanism <u>not</u> prewired; if wiring 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) VL400 (3VL4) VL630, VL800 (3VL5, 3VL6)	M 2 4	✓ ✓ ✓
<b>Motorized operating mechanisms with stored energy mechanisms for synchronization tasks (42 ... 48 V AC/DC)</b> Motorized operating mechanism <u>not</u> prewired; if wiring 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) VL400 (3VL4) VL630, VL800 (3VL5, 3VL6)	M 4 2	✓ ✓ ✓
<b>Motorized operating mechanisms with stored energy mechanisms for synchronization tasks (60 V AC/DC)</b> Motorized operating mechanism <u>not</u> prewired; if wiring 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) VL400 (3VL4) VL630, VL800 (3VL5, 3VL6)	M 6 0	✓ ✓ ✓
<b>Motorized operating mechanisms with stored energy mechanisms for synchronization tasks (110 ... 127 V AC/DC)</b> Motorized operating mechanism <u>not</u> prewired; if wiring 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) VL400 (3VL4) VL630, VL800 (3VL5, 3VL6)	M 1 1	✓ ✓ ✓
<b>Motorized operating mechanisms with stored energy mechanisms for synchronization tasks (220 ... 250 V AC/DC)</b> Motorized operating mechanism <u>not</u> prewired; if wiring 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) VL400 (3VL4) VL630, VL800 (3VL5, 3VL6)	M 2 2	✓ ✓ ✓

✓ Additional price

# Molded Case Circuit Breakers

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

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)

##### 3- or 4-pole

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

✓ Additional price

# Molded Case Circuit Breakers

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

Options

2

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

Rated control supply voltage $U_c$ /frequency	Order No. supplement	Circuit breakers Type	
50/60 Hz AC DC	3VL.....-...- <input type="checkbox"/> <input type="checkbox"/> ..	VL160X to VL400/ 3VL1 to 3VL4	VL630 to VL1600/ 3VL5 to 3VL8
		Additional price	Additional price
<b>3- or 4-pole</b>			
<b>Without auxiliary release</b>		<b>0 A</b>	None
<b>With undervoltage releases</b> Only right pole			
V AC	V DC		
--	12	<b>2 N</b>	✓
--	24	<b>2 P</b>	✓
--	48	<b>2 U</b>	✓
--	60	<b>2 V</b>	✓
--	110 ... 127	<b>2 R</b>	✓
--	220 ... 250	<b>2 S</b>	✓
24	--	<b>2 D</b>	✓
110 ... 127	--	<b>2 G</b>	✓
220 ... 250	--	<b>2 H</b>	✓
208	--	<b>2 M</b>	✓
277	--	<b>2 Q</b>	✓
380 ... 415	--	<b>2 J</b>	✓
440 ... 480	--	<b>2 K</b>	✓
500 ... 525	--	<b>2 L</b>	✓
<b>With shunt releases</b> Only right pole			
V AC	V DC		
24	24	<b>8 C</b>	✓
--	48 ... 60	<b>8 J</b>	✓
--	110 ... 127	<b>8 K</b>	✓
--	220 ... 250	<b>8 Q</b>	✓
48 ... 60	--	<b>8 M</b>	✓
110 ... 127	--	<b>8 R</b>	✓
208 ... 277	--	<b>8 T</b>	✓
380 ... 600	--	<b>8 V</b>	✓

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

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

✓ Additional price

-- Not available

- 1) Except for installation in the left accessory compartment of the VL160X molded case 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 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

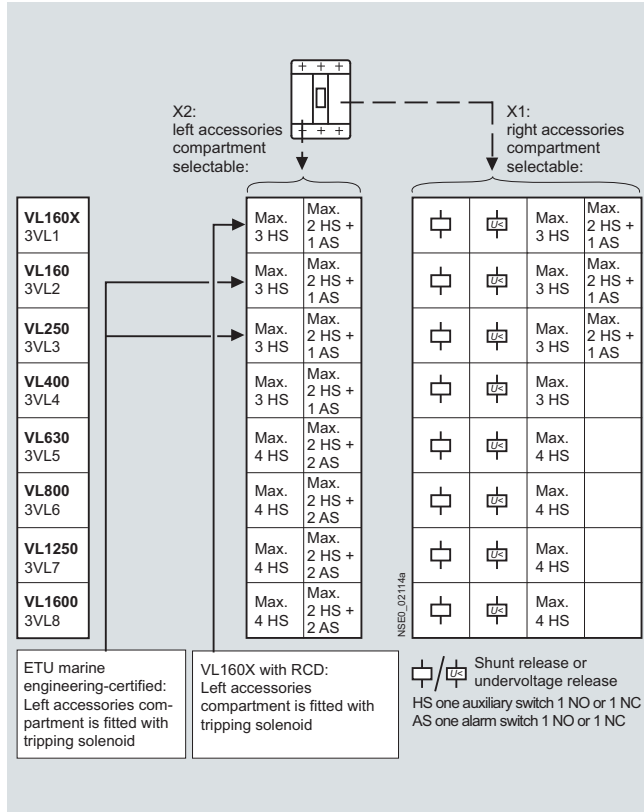
## 3VL Molded Case Circuit Breakers up to 1600 A, IEC

2

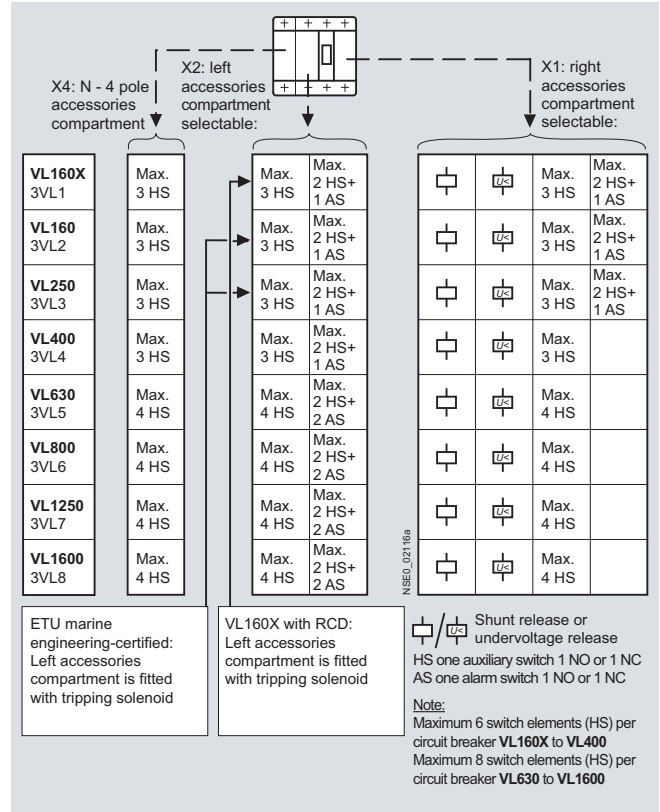
### Options

#### Equipment options for the insulated accessory compartments in the 3VL molded case circuit breakers

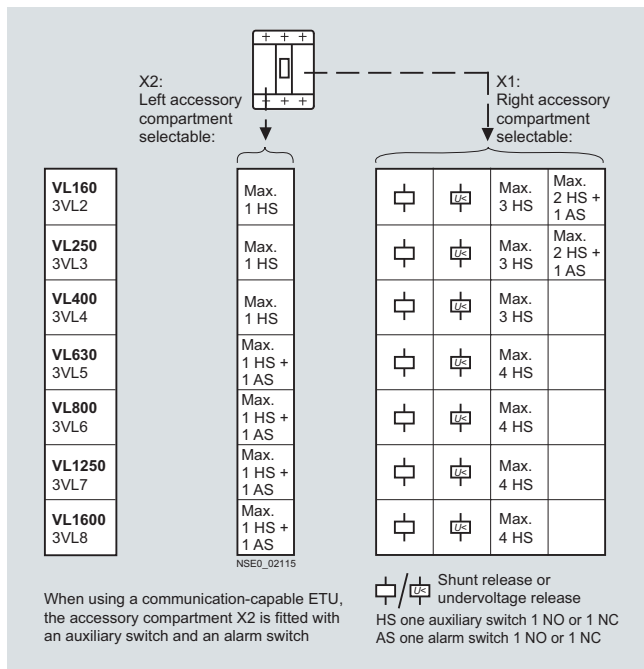
##### 3-pole circuit breakers without communication preparation



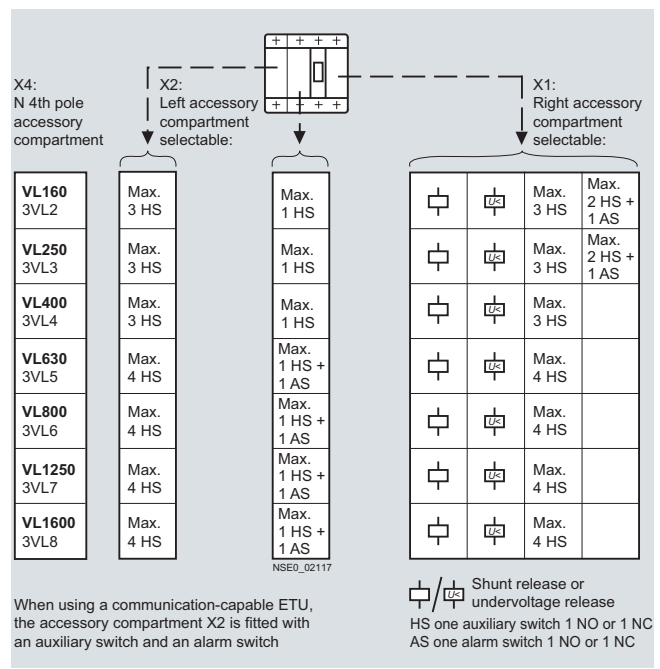
##### 4-pole circuit breakers without communication preparation



##### 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.