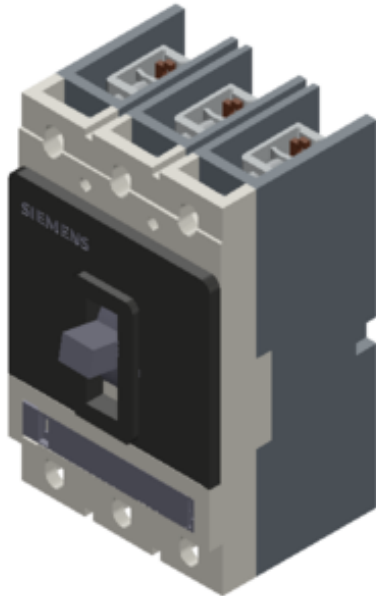


CIRCUIT-BREAKER VL 160N STANDARD BREAKING CAPACITY  
 ICU=55KA / 415 V AC 3 POLE, LINE PROTECTION  
 OVERCURRENT RELEASE TM, LI IN=63A, RATED CURRENT  
 IR=50-63A, OVERLOAD II=300-600A, SHORT CIRCUIT



Model	
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	TM
General technical data	
Number of poles	3
Size of the circuit-breaker	3VL2
Electrical endurance (switching cycles) / typical	10 000
Usage category	A
Performance class for circuit breaker	N
Mechanical service life (switching cycles) / typical	20 000
Equipment marking / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750	Q
Operating frequency / maximum	120 1/s
Voltage	
Rated operational voltage Ue / max.	690 V
Insulation voltage	
• rated value	800 V
• at AC / rated value	800 V

Surge voltage resistance / rated value	8 kV
<b>Protection class</b>	
Protection class IP	IP20
Protective function of the overcurrent release	LI
<b>Dissipation</b>	
Power loss [W]	
• maximum	21 W
<b>Electricity</b>	
Operating current / at 45 °C / rated value	63 A
Continuous current / rated value	63 A
Derating temperature / for the rated value of the continuous current	50 °C
<b>Adjustable pick-up value current</b>	
• of the current-dependent overload release / Full-scale value	63 A
• of instantaneous short-circuit trip unit / initial value	315 A
• of instantaneous short-circuit trip unit / Full-scale value	630 A
<b>Main circuit</b>	
<b>Operating frequency</b>	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz
<b>Operating voltage</b>	
• rated value / maximum	690 V
• for main current circuit / at AC / at 50 Hz / maximum	690 V
• for main current circuit / at AC / at 60 Hz / maximum	690 V
• for main current circuit / at DC / maximum	500 V
<b>Operating current</b>	
• at 40 °C / rated value	63 A
• at 50 °C / rated value	63 A
• at 55 °C / rated value	58.6 A
• at 60 °C / rated value	58.6 A
• at 65 °C / rated value	54.2 A
• at 70 °C / rated value	54.2 A
<b>Suitability</b>	
Suitability for use	system protection
<b>Adjustable parameters</b>	

Adjustable pick-up value current / of the current-dependent overload release / initial value	50 A
--	------

### Product details

<b>Product component</b>	
• Trip indicator	No
• Auxiliary switch	Yes
• Voltage trigger	No
• undervoltage release	No
• undervoltage release with leading contact	No
Product extension / optional / motor drive	Yes

### Product function

<b>Product function</b>	
• of thermal overload trip unit	adjustable
• Ground fault protection	No
• for neutral conductors / Short-circuit and overload proof	No
• Overload protection	Yes

### Short circuit

<b>Operational short-circuit current breaking capacity (Ics)</b>	
• at 240 V / rated value	65 kA
• at 415 V / rated value	55 kA
• at 500 V / rated value	20 kA
• at 690 V / rated value	6 kA
<b>Maximum short-circuit current breaking capacity (Icu)</b>	
• at 240 V / rated value	65 kA
• at 415 V / rated value	55 kA
• at 440 V / rated value	25 kA
• at 480 V / acc. to NEMA / rated value	25 kA
• at 500 V / rated value	25 kA
• at 600 V / acc. to NEMA / rated value	12 kA
• at 690 V / rated value	12 kA

### Connections

Arrangement of electrical connectors / for main current circuit	front side
Type of electrical connection / for main current circuit	box terminals

### Mechanical Design

<b>Height</b>	174.5 mm
<b>Width</b>	104.5 mm
<b>Depth</b>	106.5 mm
<b>Mounting type</b>	fixed mounting

## Environmental conditions

### Ambient temperature

- |                              |        |
|------------------------------|--------|
| • during operation / minimum | 0 °C   |
| • during operation / maximum | 70 °C  |
| • during storage / minimum   | -40 °C |
| • during storage / maximum   | 80 °C  |

## Certificates

**Certificate of suitability** IEC, standard switching capacity (N)

**Equipment marking**  
• acc. to DIN EN 61346-2 Q

<b>General Product Approval</b>	<b>EMC</b>	<b>Declaration of Conformity</b>
---------------------------------	------------	----------------------------------



CCC

[Miscellaneous](#)

[TSE](#)

[KC](#)



C-Tick



EG-Konf.

**Test Certificates**

**Shipping Approval**

[Special Test Certificate](#)



ABS



BUREAU VERITAS

Lloyd's Register

LRS



PRS



RINA

**Shipping Approval**

**other**



RMRS

[Confirmation](#)

[Environmental Confirmations](#)

[Miscellaneous](#)

## Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**

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

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VL2706-1DC33-0AB1>

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3VL2706-1DC33-0AB1>

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL2706-1DC33-0AB1](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL2706-1DC33-0AB1)

**CAX-Online-Generator**

<http://www.siemens.com/cax>

**Tender specifications**

<http://www.siemens.com/specifications>

