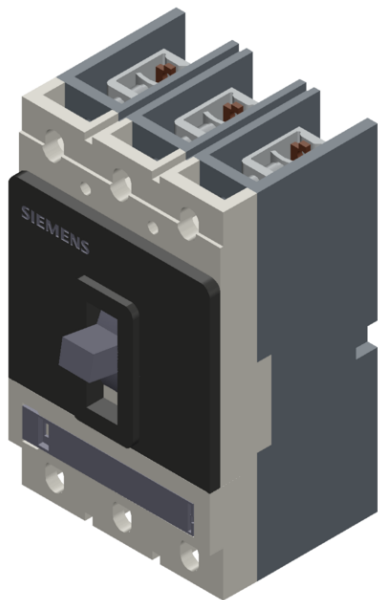


Circuit breaker VL160N Standard switching capacity  $I_{cu}=55 \text{ kA}$ , 415V  
AC 3-pole, non-automatic air circuit breaker Overcurrent release  
magnetic  $I_n=160 \text{ A}$ , Rated current  $I_l=2500 \text{ A}$ , short-circuit protection



Model	
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	M

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
Reference code / 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 U <sub>e</sub> / max.	690 V
Insulation voltage	
• rated value	800 V
• at AC / rated value	800 V
Surge voltage resistance / rated value	8 kV

Protection class	
Protection class IP	IP20
Protective function of the overcurrent release	I

Electricity	
Operating current / at 45 °C / rated value	160 A
Continuous current / rated value	160 A
Derating temperature / for the rated value of the continuous current	50 °C
Adjustable pick-up value current	
• of instantaneous short-circuit trip unit / initial value	2 500 A
• of instantaneous short-circuit trip unit / Full-scale value	2 500 A

Main circuit	
Operating frequency	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz
Operating voltage	
• rated value / maximum	690 V
• for main current circuit / at AC / at 50 Hz / maximum	690 V

<ul style="list-style-type: none"> <li>• for main current circuit / at AC / at 60 Hz / maximum</li> </ul>	690 V
<ul style="list-style-type: none"> <li>• for main current circuit / at DC / maximum</li> </ul>	500 V
Operating current	
<ul style="list-style-type: none"> <li>• at 40 °C / rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at 50 °C / rated value</li> </ul>	160 A
<ul style="list-style-type: none"> <li>• at 55 °C / rated value</li> </ul>	148.8 A
<ul style="list-style-type: none"> <li>• at 60 °C / rated value</li> </ul>	148.8 A
<ul style="list-style-type: none"> <li>• at 65 °C / rated value</li> </ul>	137.6 A
<ul style="list-style-type: none"> <li>• at 70 °C / rated value</li> </ul>	137.6 A

Auxiliary circuit	
Number of CO contacts / for auxiliary contacts	0
Number of NC contacts / for auxiliary contacts	0
Number of NO contacts / for auxiliary contacts	0

Suitability	
Suitability for use	non-automatic circuit-breakers

Product details	
Product component	
<ul style="list-style-type: none"> <li>• Trip indicator</li> </ul>	No
<ul style="list-style-type: none"> <li>• Auxiliary switch</li> </ul>	No
<ul style="list-style-type: none"> <li>• Voltage trigger</li> </ul>	No
<ul style="list-style-type: none"> <li>• undervoltage release</li> </ul>	No
<ul style="list-style-type: none"> <li>• undervoltage release with leading contact</li> </ul>	No
Product extension / optional / motor drive	Yes

Product function	
Product function	
<ul style="list-style-type: none"> <li>• of thermal overload trip unit</li> </ul>	without
<ul style="list-style-type: none"> <li>• Ground fault protection</li> </ul>	No
<ul style="list-style-type: none"> <li>• for neutral conductors / Short-circuit and overload proof</li> </ul>	No
<ul style="list-style-type: none"> <li>• Overload protection</li> </ul>	No

Short circuit	
Operational short-circuit current breaking capacity (Ics)	
<ul style="list-style-type: none"> <li>• at 240 V / rated value</li> </ul>	65 kA
<ul style="list-style-type: none"> <li>• at 415 V / rated value</li> </ul>	55 kA
<ul style="list-style-type: none"> <li>• at 500 V / rated value</li> </ul>	20 kA
<ul style="list-style-type: none"> <li>• at 690 V / rated value</li> </ul>	6 kA
Maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> <li>• at 240 V / rated value</li> </ul>	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
<b>Type of connectable conductor cross-sections</b>	
• for main contacts / with flexible busbar	12 x 10 mm
• for main contacts / solid	2.5 ... 95 mm <sup>2</sup>
• for main contacts / finely stranded / with core end processing	2.5 ... 50 mm <sup>2</sup>
• for main contacts / stranded	2.5 ... 95 mm <sup>2</sup>
• for auxiliary contacts / solid	0.75 ... 1.5 mm <sup>2</sup>
• for auxiliary contacts / finely stranded / with core end processing	0,75 ... 1.0 mm <sup>2</sup>
Type of electrical connection / for main current circuit	box terminals

## Mechanical Design

Height	174.5 mm
Width	104.5 mm
Depth	106.5 mm
Mounting type	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)
Reference code	
• acc. to DIN EN 61346-2	Q

General Product Approval	EMC	Declaration of Conformity
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CCC

[Miscellaneous](#)

[TSE](#)

[KC](#)



C-Tick



EG-Konf.

Test Certificates	Shipping Approval
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[Special Test Certificate](#)



ABS



BUREAU VERITAS



LRS



PRS



RINA

Shipping Approval	other
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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=3VL2716-1DE33-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL2716-1DE33-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL2716-1DE33-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL2716-1DE33-0AA0)

##### CAX-Online-Generator

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

##### Tender specifications

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