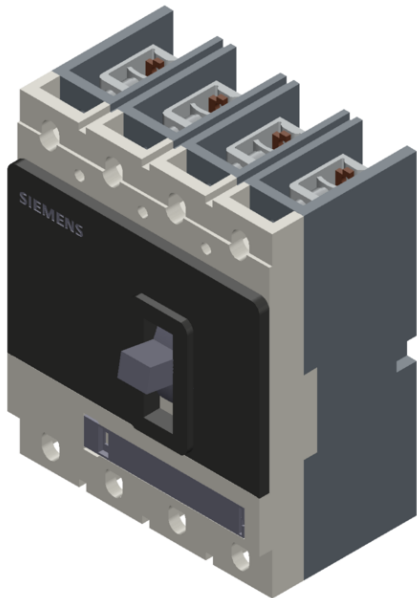


CIRCUIT-BREAKER VL 160N STANDARD BREAKING CAPACITY  
ICU=55KA / 415 V AC 4 POLE, LINE PROTECTION  
OVERCURRENT RELEASE TM, LI IN=100A, RATED CURRENT  
IR=80-100A, OVERLOAD II=500-1000A, SHORT CIRCUIT N NOT  
PROTECTED



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

General technical data	
Number of poles	4
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 identifier / 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 $U_e$ / 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	LI

Dissipation	
Power loss [W]	
• maximum	27 W

Electricity	
Operating current / at 45 °C / rated value	100 A
Continuous current / rated value	100 A
Derating temperature / for the rated value of the continuous current	50 °C
Adjustable pick-up value current	
• of the current-dependent overload release / Full-scale value	100 A
• of instantaneous short-circuit trip unit / initial value	500 A
• of instantaneous short-circuit trip unit / Full-scale value	1 000 A

Main circuit	
<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	100 A
• at 50 °C / rated value	100 A
• at 55 °C / rated value	93 A
• at 60 °C / rated value	93 A
• at 65 °C / rated value	86 A
• at 70 °C / rated value	86 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	80 A

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

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

<b>Short circuit</b>	
Operational short-circuit current breaking capacity (Ics)	
• 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

Maximum short-circuit current breaking capacity (Icu)	
<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 440 V / rated value</li> </ul>	25 kA
<ul style="list-style-type: none"> <li>• at 480 V / acc. to NEMA / rated value</li> </ul>	25 kA
<ul style="list-style-type: none"> <li>• at 500 V / rated value</li> </ul>	25 kA
<ul style="list-style-type: none"> <li>• at 600 V / acc. to NEMA / rated value</li> </ul>	12 kA
<ul style="list-style-type: none"> <li>• at 690 V / rated value</li> </ul>	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

Height	174.5 mm
Width	139.5 mm
Depth	106.5 mm
Mounting type	fixed mounting

### Certificates

Certificate of suitability	IEC, standard switching capacity (N)
Reference identifier	
<ul style="list-style-type: none"> <li>• acc. to DIN EN 61346-2</li> </ul>	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

Lloyd's Register

LRS



PRS



RINA

Shipping Approval	other
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RMRS

[Environmental Confirmations](#)

[Confirmation](#)

[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=3VL2710-1EJ43-8TD1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL2710-1EJ43-8TD1>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL2710-1EJ43-8TD1](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL2710-1EJ43-8TD1)

##### CAX-Online-Generator

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

##### Tender specifications

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