

circuit breaker VL160N standard breaking capacity I<sub>cu</sub>=55kA, 415V AC 4-pole, non-auto. air circ. br. Electronic Trip Unit magnetic I<sub>n</sub>=100A, rated current I<sub>I</sub>=2500A, short-circuit protection without auxiliary release Auxiliary/alarm switch mounting kit 2 AUX (1 NO+1 NC)+1 AS (1 NO)

Model	
type of the driving mechanism motor drive	No
design of the overcurrent release	M
General technical data	
number of poles	4
size of the circuit-breaker	3VL2
mechanical service life (operating cycles) typical	20 000
electrical endurance (operating cycles) typical	10 000
utilization category	A
performance class for circuit breaker	N
reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750	Q
operating frequency maximum	120 1/s
Voltage	
Rated operational voltage U <sub>e</sub> max.	690 V
<ul style="list-style-type: none"> <li>insulation voltage rated value</li> <li>insulation voltage (U<sub>i</sub>) at AC rated value</li> </ul>	800 V
surge voltage resistance rated value	8 kV
operating voltage <ul style="list-style-type: none"> <li>rated value maximum</li> <li>for main current circuit at AC at 50 Hz maximum</li> <li>for main current circuit at AC at 60 Hz maximum</li> <li>for main current circuit at DC maximum</li> </ul>	690 V 690 V 690 V 500 V
Protection class	
protection class IP	IP20
protection function of the overcurrent release	I
Main circuit	
operating frequency <ul style="list-style-type: none"> <li>1 rated value</li> <li>2 rated value</li> </ul>	50 Hz 60 Hz
Auxiliary circuit	
number of CO contacts for auxiliary contacts	0
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	2
Suitability	
suitability for use	non-automatic circuit-breakers
Product details	
product component <ul style="list-style-type: none"> <li>trip indicator</li> <li>auxiliary switch</li> <li>voltage trigger</li> <li>undervoltage release</li> <li>undervoltage release with leading contact</li> </ul>	Yes Yes No No No
product extension optional motor drive	Yes
Product function	
product function <ul style="list-style-type: none"> <li>of thermal overload trip unit</li> <li>grounding protection</li> </ul>	without No

• for neutral conductors short-circuit and overload proof	No
• overload protection	No

### Short circuit

operating 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)	
• at 240 V rated value	65 kA
• at 415 V rated value	55 kA
• at 440 V rated value	25 kA
• at 480 V according to NEMA rated value	25 kA
• at 500 V rated value	25 kA
• at 600 V according 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 connectable conductor cross-sections for main contacts	
• with flexible busbar	12 x 10 mm
• solid	2.5 ... 95 mm <sup>2</sup>
• finely stranded with core end processing	2.5 ... 50 mm <sup>2</sup>
• stranded	2.5 ... 95 mm <sup>2</sup>
type of connectable conductor cross-sections for auxiliary contacts	
• solid	0.75 ... 1.5 mm <sup>2</sup>
• finely stranded with core end processing	0,75 ... 1.0 mm <sup>2</sup>
type of electrical connection for main current circuit	box terminal

### Mechanical Design

height	174.5 mm
width	139.5 mm
depth	106.5 mm
fastening method	fixed mounting

### Environmental conditions

ambient temperature during operation	
• minimum	0 °C
• maximum	70 °C
ambient temperature during storage	
• minimum	-40 °C
• maximum	80 °C

### Approvals Certificates

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

[Confirmation](#)

[Miscellaneous](#)



[KC](#)



<b>Declaration of Conformity</b>	<b>Test Certificates</b>	<b>Marine / Shipping</b>
----------------------------------	--------------------------	--------------------------



[Special Test Certificate](#)



<b>Marine / Shipping</b>	<b>other</b>	<b>Environment</b>
--------------------------	--------------	--------------------



[Miscellaneous](#)

[Confirmation](#)

[Miscellaneous](#)

[Environmental Con-  
firmations](#)

#### Further information

**Siemens has decided to exit the Russian market (see here).**

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

**Siemens is working on the renewal of the current EAC certificates.**

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

**Information on the packaging**

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

**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=3VL2710-1EE43-0AD1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL2710-1EE43-0AD1>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL2710-1EE43-0AD1](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL2710-1EE43-0AD1)

**CAx-Online-Generator**

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

**Tender specifications**

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

---

last modified:

3/12/2020

