

CIRCUIT-BREAKER VL160X N STANDARD  
 BREAKING CAPACITY ICU=55KA / 415 V AC 3 POLE,  
 NON-AUTOMATIC OVERCURRENT RELEASE  
 MAGNETIC IN=100A, RATED CURRENT II=1800A,  
 SHORT CIRCUIT WITH SCREW CONNECTION

**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		3VL1
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	1/s	120

**Voltage**

Rated operational voltage Ue / max.	V	690
Insulation voltage		
• rated value	V	800
• at AC / rated value	V	800

Surge voltage resistance / rated value	kV	8
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### Protection class

<b>Protection class IP</b>		IP20
<b>Protective function of the overcurrent release</b>		I

### Electricity

Continuous current / rated value	A	100
Derating temperature / for the rated value of the continuous current	°C	50
<b>Adjustable response value current</b>		
• of the instantaneous short-circuit release / initial value	A	1 800
• of the instantaneous short-circuit release / Full-scale value	A	1 800

### Main circuit

<b>Operating frequency</b>		
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
<b>Operating voltage</b>		
• for main current circuit / at AC / at 50 Hz / maximum	V	690
• for main current circuit / at AC / at 60 Hz / maximum	V	690
• for main current circuit / at DC / maximum	V	500
<b>Operating current</b>		
• at 40 °C / rated value	A	100
• at 50 °C / rated value	A	100
• at 55 °C / rated value	A	93
• at 60 °C / rated value	A	93
• at 65 °C / rated value	A	86
• at 70 °C / rated value	A	86

### Auxiliary circuit

Number of CO contacts / for auxiliary contacts		0
<b>Number of NC contacts / for auxiliary contacts</b>		0
<b>Number of NO contacts / for auxiliary contacts</b>		0

### Suitability

<b>Suitability for use</b>		non-automatic circuit-breakers
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### Product details

<b>Product component</b>		
• Trip indicator		No
• Auxiliary switch		No
• Voltage trigger		No

• undervoltage release		No
• undervoltage release with leading contact		No
Product expansion / optional / motor drive		Yes

### Product function

<b>Product function</b>		
• of the thermal overload release		without
• Ground fault protection		No
• for neutral conductors / Short-circuit and overload proof		No
• Overload protection		No

### Short circuit

<b>Operational short-circuit current breaking capacity (Ics)</b>		
• at 240 V / rated value	kA	65
• at 415 V / rated value	kA	55
• at 500 V / rated value	kA	14
• at 690 V / rated value	kA	4
<b>Maximum short-circuit current breaking capacity (Icu)</b>		
• at 240 V / rated value	kA	65
• at 415 V / rated value	kA	55
• at 440 V / rated value	kA	25
• at 480 V / acc. to NEMA / rated value	kA	25
• at 500 V / rated value	kA	18
• at 600 V / acc. to NEMA / rated value	kA	8
• at 690 V / rated value	kA	8

### 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>
• 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		screw-type terminals

### Mechanical Design

<b>Height</b>	mm	157.5
<b>Width</b>	mm	104.5




Depth	mm	106.5
Mounting type		fixed mounting

### Environmental conditions

<b>Ambient temperature</b>		
• during operation / minimum	°C	0
• during operation / maximum	°C	70
• during storage / minimum	°C	-40
• during storage / maximum	°C	80

### Certificates

<b>Certificate of suitability</b>		IEC, standard switching capacity (N)
<b>Equipment marking</b>		Q
• acc. to DIN EN 61346-2		

General Product Approval	EMC	Declaration of Conformity	Test Certificates
<a href="#">sonstig</a> 	<a href="#">TSE</a>  C-TICK	 EG-Konf.	<a href="#">spezielle Prüfbescheinigung</a> <a href="#">n</a>

### Shipping Approval



### Shipping Approval

other



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[Bestätigungen](#)

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### Further information

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

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

**Industry Mall (Online ordering system)**

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VL17101DE360AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VL17101DE360AA0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3VL17101DE360AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VL17101DE360AA0)

**CAX-Online-Generator**

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

**Tender specifications**

<http://ausschreibungstexte.siemens.com/tiplv>

last modified:

28.12.2015