

circuit breaker VL800L w/o Electronic Trip Unit very high breaking capacity I<sub>cu</sub>=100kA/415V AC, 3-pole I<sub>n</sub>≤ 800A, rated current without auxiliary release with screw terminal connections for switching unit and ETU

Model	
Type of the driving mechanism / motor drive	No
General technical data	
Number of poles	3
Size of the circuit-breaker	3VL6
Electrical endurance (switching cycles) / typical	3 000
Usage category	A
Performance class for circuit breaker	N
Mechanical service life (switching cycles) / typical	10 000
Reference code / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750	Q
Operating frequency / maximum	60 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

Operating voltage	
<ul style="list-style-type: none"> <li>• rated value / maximum</li> </ul>	690 V
<ul style="list-style-type: none"> <li>• for main current circuit / at AC / at 50 Hz / maximum</li> </ul>	690 V
<ul style="list-style-type: none"> <li>• for main current circuit / at AC / at 60 Hz / maximum</li> </ul>	690 V

Protection class	
Protection class IP	IP20

Current	
Operating current / at 45 °C / rated value	800 A
Continuous current / rated value	800 A
Derating temperature / for the rated value of the continuous current	50 °C
<ul style="list-style-type: none"> <li>• acc. to UL 489</li> </ul>	40 °C

Main circuit	
Operating frequency	
<ul style="list-style-type: none"> <li>• 1 / rated value</li> </ul>	50 Hz
<ul style="list-style-type: none"> <li>• 2 / rated value</li> </ul>	60 Hz
Operating current	
<ul style="list-style-type: none"> <li>• at 40 °C / rated value</li> </ul>	800 A
<ul style="list-style-type: none"> <li>• at 50 °C / rated value</li> </ul>	800 A
<ul style="list-style-type: none"> <li>• at 55 °C / rated value</li> </ul>	744 A
<ul style="list-style-type: none"> <li>• at 60 °C / rated value</li> </ul>	744 A
<ul style="list-style-type: none"> <li>• at 65 °C / rated value</li> </ul>	688 A
<ul style="list-style-type: none"> <li>• at 70 °C / rated value</li> </ul>	688 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

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

- Ground fault protection No
- for neutral conductors / Short-circuit and overload proof No
- Overload protection No

### Short circuit

Operational short-circuit current breaking capacity (Ics)	
• at 240 V / rated value	150 kA
• at 415 V / rated value	75 kA
• at 500 V / rated value	38 kA
• at 690 V / rated value	10 kA
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V / rated value	200 kA
• at 415 V / rated value	100 kA
• at 440 V / rated value	75 kA
• at 480 V / acc. to NEMA / rated value	65 kA
• at 500 V / rated value	50 kA
• at 600 V / acc. to NEMA / rated value	35 kA
• at 690 V / rated value	20 kA

### Connections

Arrangement of electrical connectors / for main current circuit	front side
Type of electrical connection / for main current circuit	screw-type terminals

### Mechanical Design




Height	406.5 mm
Width	190 mm
Depth	176.5 mm
Mounting type	fixed mounting

### Environmental conditions

Ambient temperature / during operation	
• minimum	-25 °C
• maximum	70 °C
Ambient temperature / during storage	
• minimum	-40 °C
• maximum	80 °C

### Certificates

Certificate of suitability	IEC, very high switching capacity (L)
Reference code	
• acc. to DIN EN 61346-2	Q

General Product Approval				EMC	Test Certificates
 CCC	 CSA	<a href="#">Miscellaneous</a>	<a href="#">TSE</a>	 C-Tick	<a href="#">Special Test Certificate</a>

Shipping Approval					other
 ABS	 BUREAU VERITAS	 PRS	 RINA	 RMRS	<a href="#">Confirmation</a>

other		
<a href="#">Environmental Conformations</a>	<a href="#">Miscellaneous</a>	<a href="#">Manufacturer Declaration</a>

## 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=3VL6780-3AA36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL6780-3AA36-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL6780-3AA36-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL6780-3AA36-0AA0)

### CAX-Online-Generator

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

### Tender specifications

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

