

circuit breaker VL800N standard breaking capacity I<sub>cu</sub>=55kA, 415V AC 4-pole, non-auto. air circ. br. trip unit magnetic I<sub>n</sub>=800A, rated current I<sub>I</sub>=6500A, short-circuit protection without auxiliary release without auxiliary/alarm switch

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	3VL6
mechanical service life (operating cycles) typical	10 000
electrical endurance (operating cycles) typical	3 000
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	60 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	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> <li>auxiliary switch</li> <li>voltage trigger</li> <li>undervoltage release</li> <li>undervoltage release with leading contact</li> </ul>	No No 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> <li>for neutral conductors short-circuit and overload proof</li> </ul>	without No No

- overload protection

No

### Short circuit

operating short-circuit current breaking capacity (Ics)	
<ul style="list-style-type: none"> <li>• at 240 V rated value</li> <li>• at 415 V rated value</li> <li>• at 500 V rated value</li> <li>• at 690 V rated value</li> </ul>	<p>65 kA</p> <p>55 kA</p> <p>20 kA</p> <p>10 kA</p>
maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> <li>• at 240 V rated value</li> <li>• at 415 V rated value</li> <li>• at 440 V rated value</li> <li>• at 480 V according to NEMA rated value</li> <li>• at 500 V rated value</li> <li>• at 600 V according to NEMA rated value</li> <li>• at 690 V rated value</li> </ul>	<p>65 kA</p> <p>55 kA</p> <p>35 kA</p> <p>25 kA</p> <p>25 kA</p> <p>20 kA</p> <p>20 kA</p>

### Connections

arrangement of electrical connectors for main current circuit	front side
type of connectable conductor cross-sections for auxiliary contacts	
<ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing</li> </ul>	<p>0.75 ... 1.5 mm<sup>2</sup></p> <p>0,75 ... 1.0 mm<sup>2</sup></p>
type of electrical connection for main current circuit	screw-type terminals

### Mechanical Design

height	406.5 mm
width	253.5 mm
depth	176.5 mm
fastening method	fixed mounting

### Environmental conditions

ambient temperature during operation	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	<p>0 °C</p> <p>70 °C</p>
ambient temperature during storage	
<ul style="list-style-type: none"> <li>• minimum</li> <li>• maximum</li> </ul>	<p>-40 °C</p> <p>80 °C</p>

### Approvals Certificates

#### General Product Approval



[Confirmation](#)



General Product Approval

other

Environment



[Miscellaneous](#)

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[Environmental Confirmations](#)

### Further information

#### 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=3VL6780-1EE46-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL6780-1EE46-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL6780-1EE46-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL6780-1EE46-0AA0)

#### CAX-Online-Generator

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

#### Tender specifications

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