

CIRCUIT-BREAKER VL 800N STANDARD BREAKING CAPACITY
ICU=55KA / 415 V AC 3 POLE, NON-AUTOMATIC OVERCURRENT
RELEASE MAGNETIC IN=800A, RATED CURRENT II=6500A,
SHORT CIRCUIT

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	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
Equipment marking / 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 _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	I
Dissipation	
Power loss [W]	
• maximum	250 W
Electricity	
Continuous current / rated value	800 A
Derating temperature / for the rated value of the continuous current	50 °C
Adjustable pick-up value current	
• of instantaneous short-circuit trip unit / initial value	6 500 A

- of instantaneous short-circuit trip unit / Full-scale value

6 500 A

Main circuit

Operating frequency

- 1 / rated value
- 2 / rated value

50 Hz
60 Hz

Operating voltage

- for main current circuit / at AC / at 50 Hz / maximum
- for main current circuit / at AC / at 60 Hz / maximum
- for main current circuit / at DC / maximum

690 V
690 V
500 V

Operating current

- at 40 °C / rated value
- at 50 °C / rated value
- at 55 °C / rated value
- at 60 °C / rated value
- at 65 °C / rated value
- at 70 °C / rated value

800 A
800 A
744 A
744 A
688 A
688 A

Suitability

Suitability for use

non-automatic circuit-breakers

Product details

Product component

- Trip indicator
- Auxiliary switch
- Voltage trigger
- undervoltage release
- undervoltage release with leading contact

No
No
No
No
No

Product extension / optional / motor drive

Yes

Product function

Product function

- of thermal overload trip unit
- Ground fault protection
- for neutral conductors / Short-circuit and overload proof
- Overload protection

without
No
No
No

Short circuit

Operational short-circuit current breaking capacity (Ics)

- at 240 V / rated value
- at 415 V / rated value

65 kA
55 kA

• at 500 V / rated value	20 kA
• at 690 V / rated value	10 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	35 kA
• at 480 V / acc. to NEMA / rated value	25 kA
• at 500 V / rated value	25 kA
• at 600 V / acc. to NEMA / rated value	20 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	0 °C
• during operation / maximum	70 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C

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

General Product Approval	EMC
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Declaration of Conformity	Test Certificates	Shipping Approval
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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/3VL6780-1DE36-0AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VL6780-1DE36-0AA0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL6780-1DE36-0AA0

CAX-Online-Generator

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

Tender specifications

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