



CIRCUIT-BREAKER VL 800N STANDARD BREAKING
CAPACITY ICU=55KA / 415 V AC 3 POLE, LINE
PROTECTION ELECTRONIC TRIP UNIT ETU20, LSI
IN=800A, RATED CURRENT IR=320-800A,
OVERLOAD ISD=1,5TO7XIR, II=8XIN SHORT-
CIRCUIT

Model		
Type of the driving mechanism / motor drive		No
Design of the overcurrent release		ETU20
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	1/s	60
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
Protection class		
Protection class IP		IP20
Protective function of the overcurrent release		LSI
Dissipation		
Power loss [W]		
• maximum	W	250
Electricity		
Continuous current / rated value	A	800
Derating temperature / for the rated value of the continuous current	°C	50
Adjustable pick-up value current		
• of the current-dependent overload release / Full-scale value	A	800
• of instantaneous short-circuit trip unit / initial value	A	6 400
• of instantaneous short-circuit trip unit / Full-scale value	A	6 400
Main circuit		
Operating frequency		
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
Operating voltage		
• for main current circuit / at AC / at 50 Hz / maximum	V	690
• for main current circuit / at AC / at 60 Hz / maximum	V	690
Operating current		
• at 40 °C / rated value	A	800
• at 50 °C / rated value	A	800
• at 55 °C / rated value	A	760
• at 60 °C / rated value	A	760
• at 65 °C / rated value	A	640
• at 70 °C / rated value	A	640
Auxiliary circuit		
Number of CO contacts / for auxiliary contacts		0
Number of NC contacts / for auxiliary contacts		2
Number of NO contacts / for auxiliary contacts		2
Suitability		
Suitability for use		system/generator protection

Adjustable parameters

Adjustable pick-up value current / of the current-dependent overload release / initial value	A	320
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Product details

Product component

• Trip indicator	No
• Auxiliary switch	Yes
• Voltage trigger	No
• undervoltage release	No
• undervoltage release with leading contact	No

Product extension / optional / motor drive	Yes
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Product function

Product function

• of thermal overload trip unit	adjustable
• Ground fault protection	No
• for neutral conductors / Short-circuit and overload proof	No
• Overload protection	Yes

Short circuit

Operational short-circuit current breaking capacity (Ics)

• at 240 V / rated value	kA	65
• at 415 V / rated value	kA	55
• at 500 V / rated value	kA	20
• at 690 V / rated value	kA	10

Maximum short-circuit current breaking capacity (Icu)

• at 240 V / rated value	kA	65
• at 415 V / rated value	kA	55
• at 440 V / rated value	kA	35
• at 480 V / acc. to NEMA / rated value	kA	25
• at 500 V / rated value	kA	25
• at 600 V / acc. to NEMA / rated value	kA	20
• at 690 V / rated value	kA	20

Connections

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

Height	mm	406.5
Width	mm	190
Depth	mm	176.5

Mounting type	fixed mounting
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Environmental conditions

Ambient temperature

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

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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[TSE](#)



Declaration of Conformity

Test Certificates

Shipping Approval



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DNV



GL



RINA



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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/3VL6780-1SE36-0AC1>

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

<http://support.automation.siemens.com/WW/view/en/3VL6780-1SE36-0AC1/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL6780-1SE36-0AC1

CAX-Online-Generator

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

Tender specifications

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

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