

CIRCUIT-BREAKER VL 800L VERY HIGH BREAKING CAPACITY
ICU=100KA / 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	
Design of the operating mechanism	toggle handle
Type of the driving mechanism / motor drive	Yes
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	60 1/s
Voltage	
Rated operational voltage Ue / 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	LSI
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 the current-dependent overload release / Full-scale value	800 A

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

6 400 A
6 400 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

690 V
690 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
760 A
760 A
640 A
640 A

Suitability

Suitability for use

system/generator protection

Adjustable parameters

Adjustable pick-up value current / of the current-dependent overload release / initial value

320 A

Product details

Product component

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

No
Yes
No
Yes
No

Product extension / optional / motor drive

No

Product function

Product function

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

adjustable
No
No
Yes

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

Certificates

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

General Product Approval				EMC	Declaration of Conformity
 CCC	 CSA	sonstig	TSE	 C-Tick	 EG-Konf.

Test Certificates	Shipping Approval		other		
spezielle Prüfbescheinigungen n	 RINA	 RMRS	sonstig	Bestätigungen	Umweltbestätigung

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=3VL6780-3SE36-2JC1-Z M22>

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

<http://support.automation.siemens.com/WW/view/en/3VL6780-3SE36-2JC1-Z M22/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL6780-3SE36-2JC1-Z M22

CAX-Online-Generator

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

Tender specifications

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