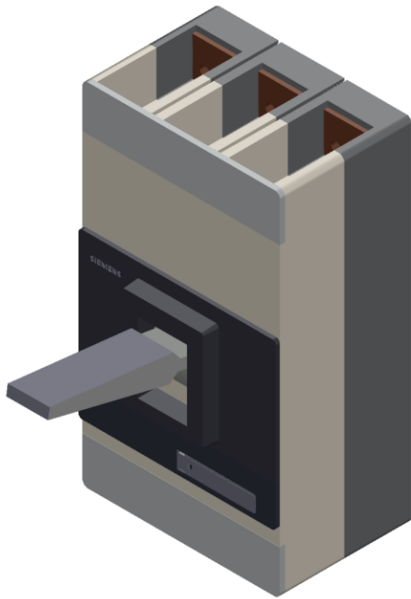


circuit breaker VL1600L very high breaking capacity $I_{cu}=100\text{kA}$, 415V AC 3-pole, line protection trip unit ETU22, LSIG 3 phases/3 lines $I_n=1600\text{A}$, rated current $I_R=640\dots1600\text{A}$, overload protection, $ISD=1.5$ to $8\times I_R$, $II=9\times I_n$ short-circuit protection without auxiliary release ETU communication-capable without auxiliary/alarm switch



Model	
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	ETU22
General technical data	
number of poles	3
Size of the circuit-breaker	3VL8
Electrical endurance (switching cycles) / typical	1 500

Usage category	A
Performance class for circuit breaker	N
Mechanical service life (switching cycles) / typical	3 000
Reference code / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750	Q
Operating frequency / maximum	30 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
Operating voltage	
• rated value / maximum	690 V
• for main current circuit / at AC / at 50 Hz / maximum	690 V
• for main current circuit / at AC / at 60 Hz / maximum	690 V

Protection class

Protection class IP	IP20
protection function of the overcurrent release	LSIG

Current

Continuous current / rated value	1 600 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	1 600 A
• of instantaneous short-circuit trip unit / initial value	14 400 A
• of instantaneous short-circuit trip unit / Full-scale value	14 400 A

Main circuit

Operating frequency	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz
Operating current	
• at 40 °C / rated value	1 600 A
• at 50 °C / rated value	1 600 A
• at 55 °C / rated value	1 520 A
• at 60 °C / rated value	1 520 A
• at 65 °C / rated value	1 280 A

- at 70 °C / rated value

1 280 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

Suitability

suitability for use	system/generator protection
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Adjustable parameters

adjustable pick-up value current / of the short-time delayed short-circuit release / Full-scale value	12 800 A
adjustable pick-up value current / of the current-dependent overload release / initial value	640 A

Product details

Product component	
<ul style="list-style-type: none"> • Trip indicator • Auxiliary switch • Voltage trigger • undervoltage release • undervoltage release with leading contact 	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
Product extension / optional / motor drive	Yes

Product function

Product function	
<ul style="list-style-type: none"> • of thermal overload trip unit • Ground fault protection • for neutral conductors / Short-circuit and overload proof • Overload protection 	<p>adjustable</p> <p>Yes</p> <p>No</p> <p>Yes</p>

Short circuit

Operational short-circuit current breaking capacity (Ics)	
<ul style="list-style-type: none"> • at 240 V / rated value • at 415 V / rated value • at 500 V / rated value • at 690 V / rated value 	<p>100 kA</p> <p>50 kA</p> <p>38 kA</p> <p>17 kA</p>
Maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> • at 240 V / rated value • at 415 V / rated value • at 440 V / rated value • at 480 V / acc. to NEMA / rated value • at 500 V / rated value 	<p>200 kA</p> <p>100 kA</p> <p>75 kA</p> <p>65 kA</p> <p>50 kA</p>

- at 600 V / acc. to NEMA / rated value 30 kA
- at 690 V / rated value 35 kA

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"> • solid 0.75 ... 1.5 mm² • finely stranded / with core end processing 0,75 ... 1.0 mm² 	
Type of electrical connection / for main current circuit	without connection accessoires

Mechanical Design





Height	406.5 mm
Width	228.5 mm
Depth	333.5 mm
Mounting type	fixed mounting


Environmental conditions

Ambient temperature / during operation	
<ul style="list-style-type: none"> • minimum -25 °C • maximum 70 °C 	
Ambient temperature / during storage	
<ul style="list-style-type: none"> • minimum -40 °C • maximum 80 °C 	

Certificates

certificate of suitability	IEC, very high switching capacity (L)
<ul style="list-style-type: none"> • reference code / acc. to DIN EN 61346-2 Q 	

General Product Approval	EMC	Test Certificates	Shipping Approval
 CCC Miscellaneous	 C-Tick TSE	 Special Test Certificate	 RINA

Shipping Approval	other
 RMRS	Miscellaneous Confirmation Environmental Confirmations Manufacturer Declaration

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=3VL8716-3MG30-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL8716-3MG30-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL8716-3MG30-0AA0

CAX-Online-Generator

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

Tender specifications

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