

circuit breaker VL1600H w/o Electronic Trip Unit high breaking capacity Icu=70kA/415V AC, 3-pole In=< 1600A, rated current without auxiliary release with screw terminal connections for switching unit and ETU

Model	
Type of the driving mechanism / motor drive	No
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 <sub>e</sub> / 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
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### Current

Operating current / at 45 °C / rated value	1 600 A
Continuous current / rated value	1 600 A
Derating temperature / for the rated value of the continuous current	50 °C
• acc. to UL 489	40 °C

### 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	1 488 A
• at 60 °C / rated value	1 488 A
• at 65 °C / rated value	1 376 A
• at 70 °C / rated value	1 376 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

### Product details

Product component	
• Trip indicator	No
• Auxiliary switch	No
• Voltage trigger	No
• undervoltage release	No
• undervoltage release with leading contact	No
Product extension / optional / motor drive	Yes

### Product function

Product function	
• of thermal overload trip unit	without
• Ground fault protection	No
• for neutral conductors / Short-circuit and overload proof	No
• Overload protection	No

### Short circuit

Operational short-circuit current breaking capacity (Ics)	
• at 240 V / rated value	50 kA
• at 415 V / rated value	35 kA
• at 500 V / rated value	30 kA
• at 690 V / rated value	15 kA
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V / rated value	100 kA
• at 415 V / rated value	70 kA
• at 440 V / rated value	50 kA
• at 480 V / acc. to NEMA / rated value	50 kA
• at 500 V / rated value	40 kA
• at 600 V / acc. to NEMA / rated value	30 kA
• at 690 V / rated value	30 kA

### Connections





Arrangement of electrical connectors / for main current circuit	front side
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
• during operation	-25 ... +70 °C
• during storage	-40 ... +80 °C

## Certificates





Certificate of suitability	IEC, high switching capacity (H)
Reference code	Q
• acc. to DIN EN 61346-2	

General Product Approval	EMC	Test Certificates	Shipping Approval
 CCC	 C-Tick	 Special Test Certificate	 ABS

[Miscellaneous](#)

[TSE](#)

[Special Test Certificate](#)

Shipping Approval	other
 BUREAU VERITAS	 PRS
 RINA	 RMRS
	<a href="#">Confirmation</a> <a href="#">Environmental Confirmations</a>

other
<a href="#">Manufacturer Declaration</a> <a href="#">Miscellaneous</a>

## 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=3VL8716-2AA30-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL8716-2AA30-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL8716-2AA30-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL8716-2AA30-0AA0)

### CAX-Online-Generator

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

### Tender specifications

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

