

CIRCUIT-BREAKER VL 1600N STANDARD BREAKING CAPACITY
ICU=55KA / 415 V AC 3 POLE, NON-AUTOMATIC OVERCURRENT
RELEASE MAGNETIC IN=1600A, RATED CURRENT II=14400A,
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	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
Equipment marking / 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 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	I
Dissipation	
Power loss [W]	
• maximum	260 W
Electricity	
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 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 voltage	
• for main current circuit / at AC / at 50 Hz / maximum	690 V
• for main current circuit / at AC / at 60 Hz / maximum	690 V
• for main current circuit / at DC / maximum	500 V
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
Suitability	
Suitability for use	non-automatic circuit-breakers
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	35 kA
• at 415 V / rated value	28 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	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 / 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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[TSE](#)



Declaration of Conformity

Test Certificates

Shipping Approval



[spezielle Prüfbescheinigung](#)
[n](#)



Shipping Approval

other



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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/3VL8716-1DE30-0AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VL8716-1DE30-0AA0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL8716-1DE30-0AA0

CAX-Online-Generator

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

Tender specifications

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