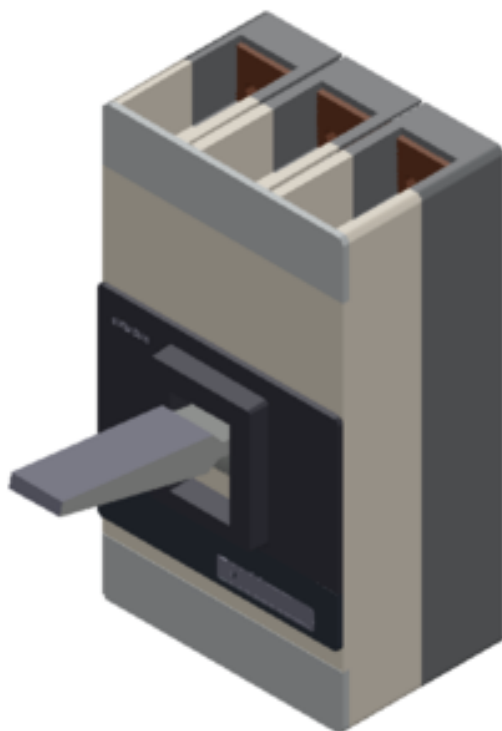




CIRCUIT-BREAKER VL 1600N STANDARD
 BREAKING CAPACITY ICU=55KA / 415 V AC 3 POLE,
 NON-AUTOMATIC OVERCURRENT RELEASE
 MAGNETIC IN=1600A, RATED CURRENT II=14400A,
 SHORT CIRCUIT

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	1/s	30
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		I
Dissipation		
Power loss [W]		
• maximum	W	260
Electricity		
Continuous current / rated value	A	1 600
Derating temperature / for the rated value of the continuous current	°C	50
Adjustable response value current		
• of the instantaneous short-circuit release / initial value	A	14 400
• of the instantaneous short-circuit release / Full-scale value	A	14 400
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
• for main current circuit / at DC / maximum	V	500
Operating current		
• at 40 °C / rated value	A	1 600
• at 50 °C / rated value	A	1 600
• at 55 °C / rated value	A	1 488
• at 60 °C / rated value	A	1 488
• at 65 °C / rated value	A	1 376
• at 70 °C / rated value	A	1 376
Auxiliary circuit		
Number of CO contacts / for auxiliary contacts		0
Number of NC contacts / for auxiliary contacts		1
Number of NO contacts / for auxiliary contacts		2
Suitability		
Suitability for use		non-automatic circuit-breakers
Product details		

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

Product function

Product function		
• of the thermal overload release		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	kA	35
• at 415 V / rated value	kA	28
• 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
Type of connectable conductor cross-sections		
• for auxiliary contacts		
— solid		0.75 ... 1.5 mm ²
— finely stranded / with core end processing		0,75 ... 1.0 mm ²
Type of electrical connection / for main current circuit		without connection accessoires

Mechanical Design

Height	mm	406.5
Width	mm	228.5
Depth	mm	333.5

Mounting type	fixed mounting
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Environmental conditions

Ambient temperature		
• during operation / minimum	°C	0
• 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	Q
• acc. to DIN EN 61346-2	

General Product Approval	EMC
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Declaration of Conformity	Test Certificates	Shipping Approval
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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/3VL87161DE302HE1>

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

<http://support.automation.siemens.com/WW/view/en/3VL87161DE302HE1/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL87161DE302HE1

CAX-Online-Generator

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

Tender specifications

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

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