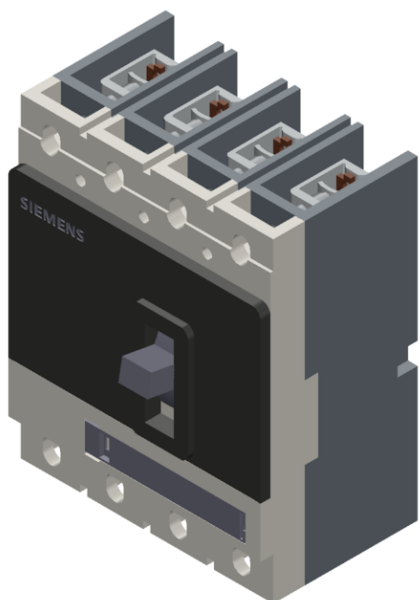


CIRCUIT-BREAKER VL 160H HIGH BREAKING CAPACITY
ICU=70KA / 415 V AC 4 POLE, LINE PROTECTION
OVERCURRENT RELEASE TM, LI IN=50A, RATED CURRENT
IR=40-50A, OVERLOAD II=300-600A, SHORT CIRCUIT N
PROTECTED



Model	
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	TM

General technical data	
Number of poles	4
Size of the circuit-breaker	3VL2
Electrical endurance (switching cycles) / typical	10 000
Usage category	A
Performance class for circuit breaker	N
Mechanical service life (switching cycles) / typical	20 000
Reference identifier / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750	Q
Operating frequency / maximum	120 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

Protection class	
Protection class IP	IP20
Protective function of the overcurrent release	LIN

Dissipation	
Power loss [W]	
• maximum	16 W

Electricity	
Operating current / at 45 °C / rated value	50 A
Continuous current / rated value	50 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	50 A
• of instantaneous short-circuit trip unit / initial value	300 A
• of instantaneous short-circuit trip unit / Full-scale value	600 A

Main circuit	
Operating frequency	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz

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
• for main current circuit / at DC / maximum	500 V
Operating current	
• at 40 °C / rated value	50 A
• at 50 °C / rated value	50 A
• at 55 °C / rated value	46.5 A
• at 60 °C / rated value	46.5 A
• at 65 °C / rated value	43 A
• at 70 °C / rated value	43 A
Suitability	
Suitability for use	system protection
Adjustable parameters	
Adjustable pick-up value current / of the current-dependent overload release / initial value	40 A
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	adjustable
• Ground fault protection	No
• for neutral conductors / Short-circuit and overload proof	Yes
• Overload protection	Yes
Short circuit	
Operational short-circuit current breaking capacity (Ics)	
• at 240 V / rated value	75 kA
• at 415 V / rated value	70 kA
• at 500 V / rated value	30 kA
• at 690 V / rated value	6 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	12 kA
• at 690 V / rated value	12 kA

Connections

Arrangement of electrical connectors / for main current circuit	front side
Type of electrical connection / for main current circuit	box terminals

Mechanical Design

Height	174.5 mm
Width	139.5 mm
Depth	106.5 mm
Mounting type	fixed mounting

Certificates

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

General Product Approval	EMC	Declaration of Conformity
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[Miscellaneous](#)

[TSE](#)

[KC](#)



Test Certificates	Shipping Approval	other
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[Special Test Certificate](#)



[Confirmation](#)

[Miscellaneous](#)

other

[Environmental Confirmations](#)

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?mfb=3VL2705-2EM43-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL2705-2EM43-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VL2705-2EM43-0AA0

CAX-Online-Generator

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

Tender specifications

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