



Circuit breaker VL160H High switching capacity $I_{cu}=70$ kA, 415V AC 4-pole, system protection Overcurrent release ETU20, LSI $I_n=100$ A, Rated current $I_r=40\ldots100$ A, Overload protection, $ISD=1.5$ to $10 \times I_r$, $II=11 \times I_n$ Short-circuit protection N protected without auxiliary release

Model	
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	ETU20
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	LSIN
Dissipation	
Power loss [W]	
• maximum	16 W
Electricity	
Operating current / at 45 °C / rated value	100 A
Continuous current / rated value	100 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	100 A
• of instantaneous short-circuit trip unit / initial value	1 100 A
• of instantaneous short-circuit trip unit / Full-scale value	1 100 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	100 A
• at 50 °C / rated value	100 A
• at 55 °C / rated value	95 A
• at 60 °C / rated value	95 A
• at 65 °C / rated value	80 A
• at 70 °C / rated value	80 A
Suitability	
Suitability for use	system/generator protection
Adjustable parameters	

Adjustable pick-up value current / of the short-time delayed short-circuit release / Full-scale value	1 000 A
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	Test Certificates
--------------------------	-----	---------------------------	-------------------



CCC

[Miscellaneous](#)

[TSE](#)



C-Tick



EG-Konf.

[Special Test Certificate](#)

Shipping Approval	other
-------------------	-------



RINA



RMRS

[Environmental Confirmations](#)

[Confirmation](#)

[Miscellaneous](#)

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=3VL2710-2TF43-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL2710-2TF43-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL2710-2TF43-0AA0

CAX-Online-Generator

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

Tender specifications

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