

circuit breaker VL160N standard breaking capacity Icu=55kA, 415V AC 4-pole, line protection Electronic Trip Unit ETU22, LSIG In=160A, rated current IR=64...160A, overload protection, ISD=1.5 to 10xIR, II=11xIN short-circuit protection N protected with screw terminals without auxiliary release without auxiliary/alarm switch

Model	
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	ETU22
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 code / 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 Ue / 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
• for main current circuit / at DC / maximum	500 V
Protection class	
Protection class IP	IP20
Protective function of the overcurrent release	LSING
Current	
Operating current / at 45 °C / rated value	160 A
Continuous current / rated value	160 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	160 A
• of instantaneous short-circuit trip unit / initial value	1 760 A
• of instantaneous short-circuit trip unit / Full-scale value	1 760 A

Main circuit

Operating frequency	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz
Operating current	
• at 40 °C / rated value	160 A
• at 50 °C / rated value	160 A
• at 55 °C / rated value	152 A
• at 60 °C / rated value	152 A
• at 65 °C / rated value	128 A
• at 70 °C / rated value	128 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

Suitability

Suitability for use	system/generator protection
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Adjustable parameters

Adjustable pick-up value current / of the short-time delayed short-circuit release / Full-scale value	1 600 A
Adjustable pick-up value current / of the current-dependent overload release / initial value	64 A

Product details

Product component	
• Trip indicator	No
• Auxiliary switch	No
• Voltage trigger	No
• undervoltage release	No
• undervoltage release with leading contact	No

Product function

Product function	
• of thermal overload trip unit	adjustable

- Ground fault protection
- for neutral conductors / Short-circuit and overload proof
- Overload protection

Yes
Yes
Yes

Short circuit

Operational short-circuit current breaking capacity (Ics)

- at 240 V / rated value
- at 415 V / rated value
- at 500 V / rated value
- at 690 V / rated value

65 kA
55 kA
20 kA
6 kA

Maximum short-circuit current breaking capacity (Icu)

- at 240 V / rated value
- at 415 V / rated value
- at 440 V / rated value
- at 480 V / acc. to NEMA / rated value
- at 500 V / rated value
- at 600 V / acc. to NEMA / rated value
- at 690 V / rated value

65 kA
55 kA
25 kA
25 kA
25 kA
12 kA
12 kA

Connections

Arrangement of electrical connectors / for main current circuit

front side

Type of electrical connection / for main current circuit

screw-type terminals

Mechanical Design

Height

174.5 mm

Width

139.5 mm

Depth

106.5 mm

Mounting type

fixed mounting

Environmental conditions

Ambient temperature / during operation

- minimum
- maximum

-25 °C
70 °C

Ambient temperature / during storage

- minimum
- maximum

-40 °C
80 °C

Certificates

Certificate of suitability

IEC, standard switching capacity (N)

Reference code

- acc. to DIN EN 61346-2

Q

General Product Approval		EMC	Declaration of Conformity	Test Certificates
	Miscellaneous			Special Test Certificate
CCC		C-Tick	EG-Konf.	

Shipping Approval		other			
		Environmental Confirmations	Confirmation	Manufacturer Declaration	Miscellaneous
RINA	RMRS				

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=3VL2716-1TH46-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL2716-1TH46-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL2716-1TH46-0AA0

CAX-Online-Generator

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

Tender specifications

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