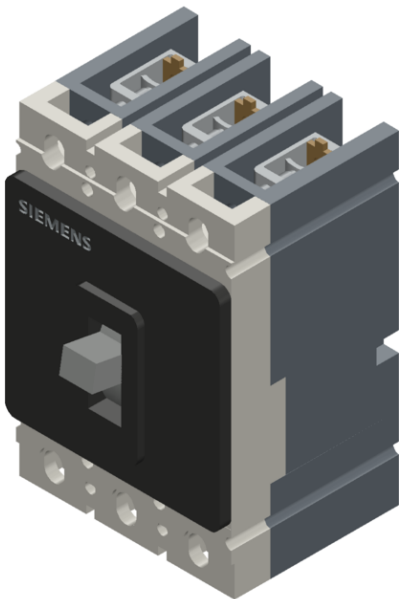


circuit breaker VL160X N standard breaking capacity Icu=55kA, 415V
AC 3-pole, line protection Electronic Trip Unit TM, LI In=125A, rated
current Ir=125A, overload protection II=1000A, short-circuit prot.
Shunt release 208...277 V AC without auxiliary/alarm switch



Model	
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	TM
General technical data	
Number of poles	3
Size of the circuit-breaker	3VL1
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 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	LI

Electricity

Operating current / at 45 °C / rated value	125 A
Continuous current / rated value	125 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	125 A
• of instantaneous short-circuit trip unit / initial value	1 000 A
• of instantaneous short-circuit trip unit / Full-scale value	1 000 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	125 A
• at 50 °C / rated value	125 A
• at 55 °C / rated value	116.3 A

• at 60 °C / rated value	116.3 A
• at 65 °C / rated value	107.5 A
• at 70 °C / rated value	107.5 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 protection
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Adjustable parameters

Adjustable pick-up value current / of the current-dependent overload release / initial value	125 A
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Product details

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

Product function

Product function	
• of thermal overload trip unit	fixed
• Ground fault protection	No
• for neutral conductors / Short-circuit and overload proof	No
• Overload protection	Yes

Short circuit

Operational short-circuit current breaking capacity (Ics)	
• at 240 V / rated value	65 kA
• at 415 V / rated value	55 kA
• at 500 V / rated value	14 kA
• at 690 V / rated value	4 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	25 kA
• at 480 V / acc. to NEMA / rated value	25 kA
• at 500 V / rated value	18 kA

- at 600 V / acc. to NEMA / rated value
- at 690 V / rated value

8 kA

8 kA

Connections

Arrangement of electrical connectors / for main current circuit

front side

Type of connectable conductor cross-sections

- for main contacts / with flexible busbar
- for main contacts / solid
- for main contacts / finely stranded / with core end processing
- for main contacts / stranded
- for auxiliary contacts / solid
- for auxiliary contacts / finely stranded / with core end processing

12 x 10 mm

2.5 ... 95 mm²2.5 ... 50 mm²2.5 ... 95 mm²0.75 ... 1.5 mm²0,75 ... 1.0 mm²

Type of electrical connection / for main current circuit

box terminal

Mechanical Design

Height

157.5 mm

Width

104.5 mm

Depth

106.5 mm

Mounting type

fixed mounting

Environmental conditions

Ambient temperature

0 ... 70 °C

-40 ... +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
	Miscellaneous	TSE	KC		
CCC				C-Tick	EG-Konf.

Test Certificates	Shipping Approval				
Special Test Certificate					
	ABS	BUREAU VERITAS	LRS	PRS	RINA

Shipping Approval	other			
	Environmental Conformations	Confirmation	Manufacturer Declaration	Miscellaneous
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=3VL1712-1DA33-8TA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL1712-1DA33-8TA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL1712-1DA33-8TA0

CAX-Online-Generator

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

Tender specifications

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