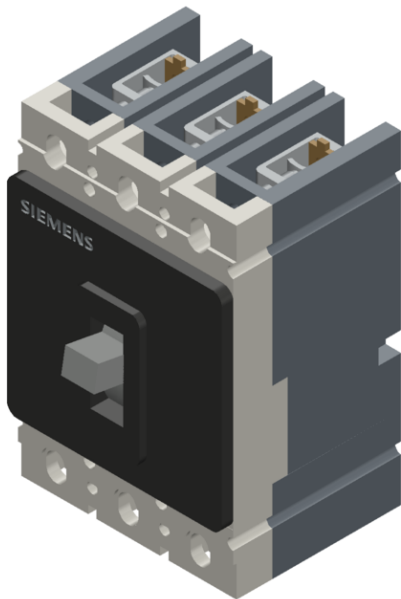


circuit breaker VL160X N standard breaking capacity I<sub>cu</sub>=55kA, 415V AC 3-pole, line protection Electronic Trip Unit TM, LI I<sub>n</sub>=160A, rated current I<sub>r</sub>=125...160A, overload prot. II=1500A, short-circuit prot. Undervoltage release 220...250 V DC Auxiliary/alarm switch mounting kit 2 AUX (1 NO+1 NC)+1 AS (1 NO)



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
mechanical service life (switching cycles) / typical	20 000

electrical endurance (switching cycles) / typical	10 000
usage category	A
performance class for circuit breaker	N
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 <sub>e</sub> / 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
protection function of the overcurrent release	LI

### Current

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	1 500 A
• of instantaneous short-circuit trip unit / full-scale value	1 500 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	148.8 A
• at 60 °C / rated value	148.8 A

- at 65 °C / rated value 137.6 A
- at 70 °C / rated value 137.6 A

### 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	system protection
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### Adjustable parameters

adjustable pick-up value current / of the current-dependent overload release / initial value	128 A
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### Product details

product component	
• trip indicator	Yes
• auxiliary switch	Yes
• voltage trigger	No
• undervoltage release	Yes
• 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	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	8 kA

- at 690 V / rated value

8 kA

## Connections

arrangement of electrical connectors / for main current circuit	front side
type of connectable conductor cross-sections / for main contacts	
<ul style="list-style-type: none"> <li>• with flexible busbar</li> </ul>	12 x 10 mm
<ul style="list-style-type: none"> <li>• solid</li> </ul>	2.5 ... 95 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• finely stranded / with core end processing</li> </ul>	2.5 ... 50 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• stranded</li> </ul>	2.5 ... 95 mm <sup>2</sup>
type of connectable conductor cross-sections / for auxiliary contacts	
<ul style="list-style-type: none"> <li>• solid</li> </ul>	0.75 ... 1.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• finely stranded / with core end processing</li> </ul>	0,75 ... 1.0 mm <sup>2</sup>
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 / during operation	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	0 °C
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	70 °C
ambient temperature / during storage	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	-40 °C
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	80 °C

## Certificates

certificate of suitability	IEC, standard switching capacity (N)
reference code	
<ul style="list-style-type: none"> <li>• acc. to DIN EN 61346-2</li> </ul>	Q

General Product Approval	EMC	Declaration of Conformity
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CCC

[Miscellaneous](#)

[TSE](#)

[KC](#)



C-Tick



EG-Konf.

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



ABS



BUREAU VERITAS



LRS



PRS



RINA

Shipping Approval	other
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RMRS

[Environmental Confirmations](#)

[Confirmation](#)

[Manufacturer Declaration](#)

[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=3VL1716-1DD33-2SD1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL1716-1DD33-2SD1>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL1716-1DD33-2SD1](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL1716-1DD33-2SD1)

### CAX-Online-Generator

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

### Tender specifications

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