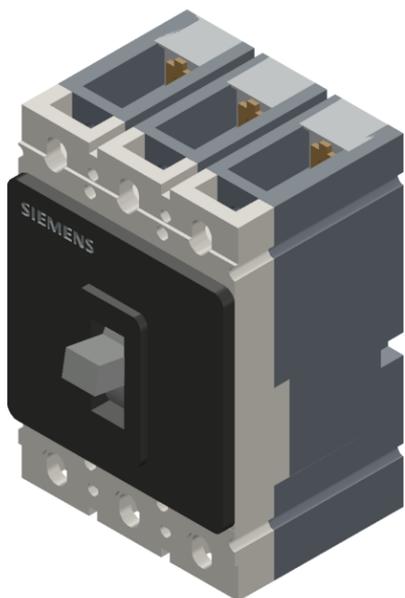


circuit breaker VL160X H high breaking capacity $I_{cu}=70\text{kA}$, 415V AC
3-pole, line protection Electronic Trip Unit TM, LI $I_n=80\text{A}$, rated
current $I_r=80\text{A}$, overload protection $I_l=1000\text{A}$, short-circuit prot. with
screw terminals without auxiliary release without auxiliary/alarm
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
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 _e / 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	80 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	80 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 current	
• at 40 °C / rated value	80 A
• at 50 °C / rated value	80 A
• at 55 °C / rated value	74.4 A
• at 60 °C / rated value	74.4 A

- at 65 °C / rated value 68.8 A
- at 70 °C / rated value 68.8 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	80 A
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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	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	75 kA
• at 415 V / rated value	70 kA
• at 500 V / rated value	23 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	42 kA
• at 480 V / acc. to NEMA / rated value	42 kA
• at 500 V / rated value	30 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 connectable conductor cross-sections / for main contacts	
<ul style="list-style-type: none"> • with flexible busbar 	12 x 10 mm
<ul style="list-style-type: none"> • solid 	2.5 ... 95 mm ²
<ul style="list-style-type: none"> • finely stranded / with core end processing 	2.5 ... 50 mm ²
<ul style="list-style-type: none"> • stranded 	2.5 ... 95 mm ²
type of connectable conductor cross-sections / for auxiliary contacts	
<ul style="list-style-type: none"> • solid 	0.75 ... 1.5 mm ²
<ul style="list-style-type: none"> • finely stranded / with core end processing 	0,75 ... 1.0 mm ²
type of electrical connection / for main current circuit	screw-type terminals

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"> • minimum 	0 °C
<ul style="list-style-type: none"> • maximum 	70 °C
ambient temperature / during storage	
<ul style="list-style-type: none"> • minimum 	-40 °C
<ul style="list-style-type: none"> • maximum 	80 °C

Certificates

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

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

Shipping Approval	other
 BUREAU VERITAS LRS	 Lloyd's Register LRS
 PRS	 RINA
 RMRS	Confirmation

other
Environmental Conformations
Miscellaneous
Manufacturer Declaration

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=3VL1708-2DA36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL1708-2DA36-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL1708-2DA36-0AA0

CAX-Online-Generator

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

Tender specifications

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