

circuit breaker VL160X N standard breaking capacity I<sub>cu</sub>=55kA, 415V AC 3-pole, line protection Trip Unit TM, LI I<sub>n</sub>=125A, rated current I<sub>r</sub>=100...125A, overload prot. II=1000A, 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 (operating cycles) typical	20 000
electrical endurance (operating cycles) typical	10 000
utilization category	A
performance class for circuit breaker	N
reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750	Q
operating frequency maximum	120 1/s
Voltage	
Rated operational voltage U <sub>e</sub> max.	690 V
<ul style="list-style-type: none"> <li>insulation voltage rated value</li> <li>insulation voltage (U<sub>i</sub>) at AC rated value</li> </ul>	800 V
surge voltage resistance rated value	8 kV
operating voltage <ul style="list-style-type: none"> <li>rated value maximum</li> <li>for main current circuit at AC at 50 Hz maximum</li> <li>for main current circuit at AC at 60 Hz maximum</li> <li>for main current circuit at DC maximum</li> </ul>	690 V 690 V 690 V 500 V
Protection class	
protection class IP	IP20
protection function of the overcurrent release	LI
Main circuit	
operating frequency <ul style="list-style-type: none"> <li>1 rated value</li> <li>2 rated value</li> </ul>	50 Hz 60 Hz
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
Adjustable parameters	
adjustable current response value current of the current-dependent overload release initial value	100 A
Product details	
product component <ul style="list-style-type: none"> <li>trip indicator</li> <li>auxiliary switch</li> <li>voltage trigger</li> <li>undervoltage release</li> <li>undervoltage release with leading contact</li> </ul>	No No No No No
product extension optional motor drive	Yes
Product function	
product function	

- of thermal overload trip unit
- grounding protection
- for neutral conductors short-circuit and overload proof
- overload protection

adjustable  
No  
No  
Yes

#### Short circuit

operating 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 according to NEMA rated value 25 kA
- at 500 V rated value 18 kA
- at 600 V according 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

- with flexible busbar 12 x 10 mm
- solid 2.5 ... 95 mm<sup>2</sup>
- finely stranded with core end processing 2.5 ... 50 mm<sup>2</sup>
- stranded 2.5 ... 95 mm<sup>2</sup>

type of connectable conductor cross-sections for auxiliary contacts

- solid 0.75 ... 1.5 mm<sup>2</sup>
- finely stranded with core end processing 0,75 ... 1.0 mm<sup>2</sup>

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

fastening method fixed mounting

#### Environmental conditions

ambient temperature during operation

- minimum 0 °C
- maximum 70 °C

ambient temperature during storage

- minimum -40 °C
- maximum 80 °C

#### Approvals Certificates

General Product Approval

Test Certificates

other

[Confirmation](#)



[Special Test Certificate](#)

[Confirmation](#)

other

Environment

[Miscellaneous](#)

[Miscellaneous](#)

[Environmental Confirmations](#)

[Environmental Confirmations](#)

#### Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3VL1712-1DD36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL1712-1DD36-0AA0>

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

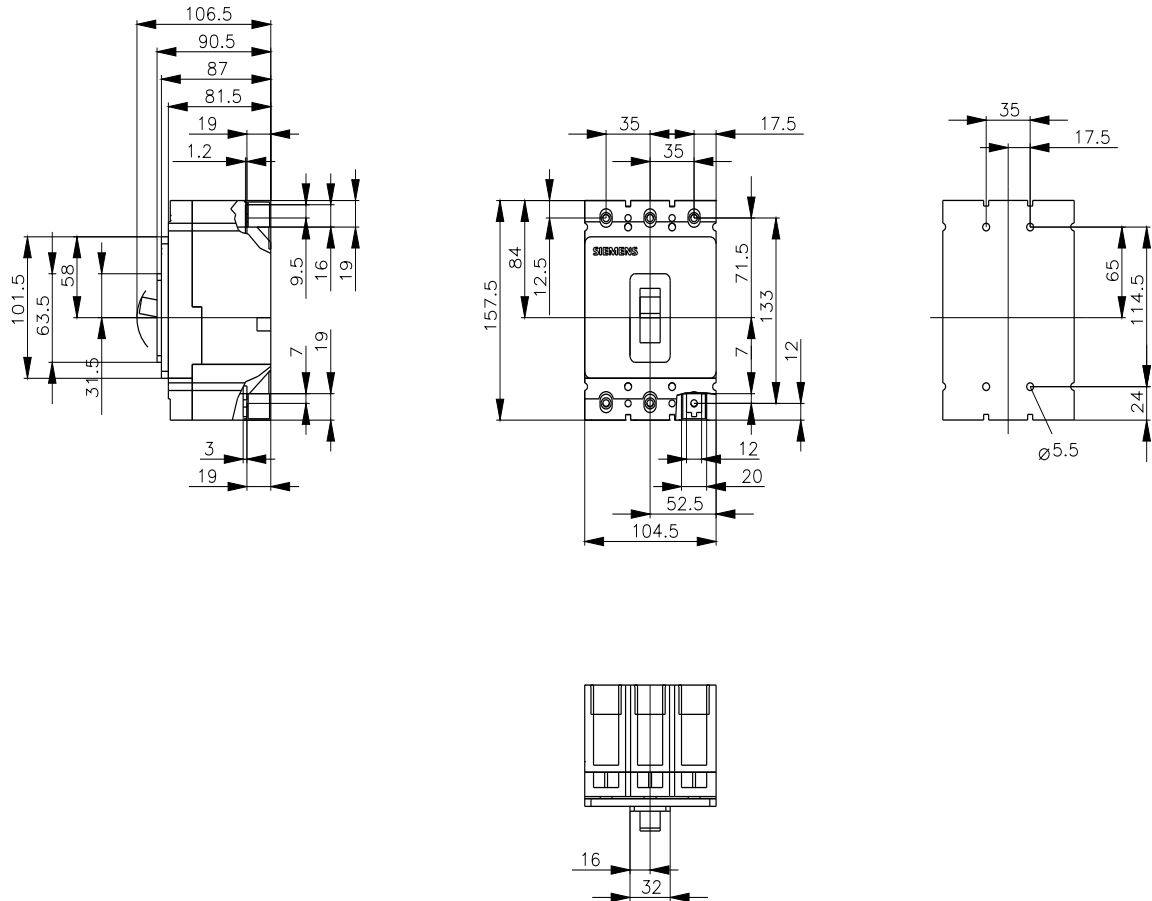
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL1712-1DD36-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL1712-1DD36-0AA0)

CAX-Online-Generator

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

Tender specifications

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



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