## **SIEMENS**

## **Data sheet**

3VL1710-1DA33-0AA0

circuit breaker VL160X N standard breaking capacity Icu=55kA, 415V AC 3-pole, line protection Electronic Trip Unit TM, LI In=100A, rated current Ir=100A, overload protection II=1000A, short-circuit prot. without auxiliary release without auxiliary/alarm switch

type of the driving mechanism motor drive design of the overcurrent release TM  General technical data  number of poles 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 operating frequency maximum 120 1/s  Voltage  Rated operational voltage Ue max. 690 V insulation voltage rated value 800 V insulation voltage (U) 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 AC at 60 Hz maximum 690 V • for main current circuit at AC at 60 Hz maximum 690 V • for main current circuit at AC at 60 Hz maximum 690 V • for main current circuit at AC at 60 Hz maximum 690 V • for main current circuit at AC at 60 Hz maximum 690 V • for main current circuit at AC at 60 Hz maximum 690 V • for main current circuit at AC at 60 Hz maximum 690 V • for main current circuit at AC at 60 Hz maximum 690 V • for main current circuit at AC at 60 Hz maximum 690 V • for main current circuit at AC at 60 Hz maximum 690 V • for main current circuit at AC at 60 Hz maximum 690 V • for according to the overcurrent release LI  Current  operational current • at 40 °C rated value 100 A • at 40 °C rated value 100 A • at 50 °C rated value 93 A	
number of poles size of the circuit-breaker mechanical service life (operating cycles) typical electrical endurance (operating cycles) typical 10 000 utilization category performance class for circuit breaker reference code according to DIN 40719 extended according to IEC 204-2 according to IEC 750 operating frequency maximum 120 1/s  Voltage  Rated operational voltage Ue max. insulation voltage rated value insulation voltage (Ui) at AC rated value surge voltage resistance rated value operating voltage rated value maximum for main current circuit at AC at 50 Hz maximum of or main current circuit at AC at 60 Hz maximum of or main current circuit at DC maximum for main current circuit at DC maximum  For main current circuit at DC maximum of or main current circuit at DC maximum of or main current circuit at DC maximum of at 40 °C rated value at 45 °C rated value at 45 °C rated value at 45 °C rated value at 50 °C rated value	
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insulation voltage (Ui) at AC rated value  surge voltage resistance rated value  operating voltage  in rated value maximum  for main current circuit at AC at 50 Hz maximum  for main current circuit at AC at 60 Hz maximum  for main current circuit at DC maximum  for main current release  LI  Current  operational current  in at 40 °C rated value  for at 40 °C rated value  for at 45 °C rated value	
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for main current circuit at AC at 60 Hz maximum     for main current circuit at DC maximum     for main current release    IP20	
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Current  operational current  • at 40 °C rated value  • at 45 °C rated value  • at 50 °C rated value  • at 50 °C rated value  • at 55 °C rated value  93 A	
operational current  • at 40 °C rated value  • at 45 °C rated value  • at 50 °C rated value  • at 55 °C rated value  93 A	
<ul> <li>at 40 °C rated value</li> <li>at 45 °C rated value</li> <li>at 50 °C rated value</li> <li>at 55 °C rated value</li> <li>at 55 °C rated value</li> <li>93 A</li> </ul>	
<ul> <li>at 45 °C rated value</li> <li>at 50 °C rated value</li> <li>at 55 °C rated value</li> <li>30 A</li> <li>30 A</li> <li>40 A</li> <li>93 A</li> </ul>	
<ul> <li>at 50 °C rated value</li> <li>at 55 °C rated value</li> <li>93 A</li> </ul>	
• at 55 °C rated value 93 A	
at 60 °C rated value	
WOTT	
• at 65 °C rated value 86 A	
• at 70 °C rated value 86 A	
continuous current rated value 100 A	
derating temperature for the rated value of the continuous 50 °C current	
adjustable current response value current	
<ul> <li>of the current-dependent overload release full-scale value</li> </ul>	
• of instantaneous short-circuit trip unit minimum 1 000 A	
of instantaneous short-circuit trip unit maximum     1 000 A	
Main circuit	
operating frequency	
• 1 rated value 50 Hz	
2 rated value     60 Hz	
Auxiliary circuit	
number of CO contacts for auxiliary contacts 0	
number of NC contacts for auxiliary contacts	

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	
trip indicator	No
auxiliary switch	No
<ul> <li>voltage trigger</li> </ul>	No
<ul> <li>undervoltage release</li> </ul>	No
<ul> <li>undervoltage release with leading contact</li> </ul>	No
product extension optional motor drive	Yes
Product function	
product function	
of thermal overload trip unit	fixed
grounding protection	No
for neutral conductors short-circuit and overload	No
proof	
overload protection	Yes
Short circuit	
operating short-circuit current breaking capacity (lcs)	
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)	
<ul> <li>at 240 V rated value</li> </ul>	65 kA
<ul> <li>at 415 V rated value</li> </ul>	55 kA
<ul> <li>at 440 V rated value</li> </ul>	25 kA
<ul> <li>at 480 V according to NEMA rated value</li> </ul>	25 kA
<ul> <li>at 500 V rated value</li> </ul>	18 kA
<ul> <li>at 600 V according to NEMA rated value</li> </ul>	8 kA
<ul><li>at 690 V rated value</li></ul>	8 kA
Connections	
arrangement of electrical connectors for main current	front side
circuit type of connectable conductor cross-sections for main	
contacts	
<ul> <li>with flexible busbar</li> </ul>	12 x 10 mm
• solid	2.5 95 mm <sup>2</sup>
<ul> <li>finely stranded with core end processing</li> </ul>	2.5 50 mm <sup>2</sup>
• stranded	2.5 95 mm²
type of connectable conductor cross-sections for auxiliary contacts	
• solid	0.75 1.5 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0,75 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
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
General Product Approval	

Confirmation



<u>TSE</u>



**EMC** 

**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping

<u>KC</u>







Special Test Certificate





Marine / Shipping











Confirmation

other

other

Environmental Confirmations **Miscellaneous** 

**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=3VL1710-1DA33-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VL1710-1DA33-0AA0

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

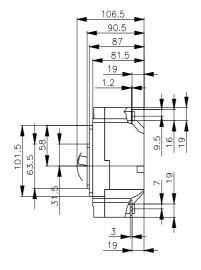
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VL1710-1DA33-0AA0

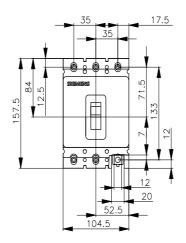
**CAx-Online-Generator** 

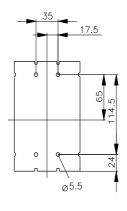
http://www.siemens.com/cax

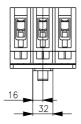
**Tender specifications** 

http://www.siemens.com/specifications









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