## Data sheet 3VL4731-1DC36-0AA0

circuit breaker VL400N standard breaking capacity Icu=55kA, 415V AC 3-pole, line protection Electronic Trip Unit TM, LI In=315A, rated current IR=250...315A, overload protection, II=1575...3150A, short-circuit protection 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	3VL4
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 Ue max.	690 V
insulation voltage rated value	800 V
<ul> <li>insulation voltage (Ui) at AC rated value</li> </ul>	800 V
surge voltage resistance rated value	8 kV
operating voltage	
<ul> <li>rated value maximum</li> </ul>	690 V
<ul> <li>for main current circuit at AC at 50 Hz maximum</li> </ul>	690 V
<ul> <li>for main current circuit at AC at 60 Hz maximum</li> </ul>	690 V
<ul> <li>for main current circuit at DC maximum</li> </ul>	500 V
Protection class	
protection class IP	IP20
protection function of the overcurrent release	LI
Current	
operational current	
<ul> <li>at 40 °C rated value</li> </ul>	315 A
<ul> <li>at 45 °C rated value</li> </ul>	315 A
<ul> <li>at 50 °C rated value</li> </ul>	315 A
<ul> <li>at 55 °C rated value</li> </ul>	293 A
<ul> <li>at 60 °C rated value</li> </ul>	293 A
<ul> <li>at 65 °C rated value</li> </ul>	270.9 A
<ul> <li>at 70 °C rated value</li> </ul>	270.9 A
continuous current rated value	315 A
derating temperature for the rated value of the continuous current	50 °C
adjustable current response value current	
<ul> <li>of the current-dependent overload release full-scale value</li> </ul>	315 A
of instantaneous short-circuit trip unit minimum	1 575 A
of instantaneous short-circuit trip unit maximum	3 150 A
Main circuit	
operating frequency	
• 1 rated value	50 Hz
2 rated value	60 Hz
	00112
Auxiliary circuit	
Auxiliary circuit number of CO contacts for auxiliary contacts number of NC contacts for auxiliary contacts	0 0

number of NO contacts for auxiliary contacts	0	
Suitability		
suitability for use	system protection	
Adjustable parameters	System protestion	_
adjustable current response value current of the current-	252 A	
dependent overload release initial value	252 A	
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	165	_
product function	- 414-1-1-	
of thermal overload trip unit	adjustable	
grounding protection	No	
<ul> <li>for neutral conductors short-circuit and overload proof</li> </ul>	No	
overload protection	Yes	
Short circuit		
operating short-circuit current breaking capacity (Ics)	OF ItA	
at 240 V rated value	65 kA	
at 415 V rated value	55 kA	
at 500 V rated value	20 kA	
at 690 V rated value	8 kA	
maximum short-circuit current breaking capacity (Icu)	0.51.4	
at 240 V rated value	65 kA	
at 415 V rated value	55 kA	
• at 440 V rated value	35 kA	
<ul> <li>at 480 V according to NEMA rated value</li> </ul>	35 kA	
at 500 V rated value	25 kA	
<ul> <li>at 600 V according to NEMA rated value</li> </ul>	20 kA	
at 690 V rated value	15 kA	
Connections		
arrangement of electrical connectors for main current	front side	
circuit		
type of connectable conductor cross-sections for main contacts		
with flexible busbar	25 x 10	
solid	50 300 mm <sup>2</sup>	
	50 240 mm <sup>2</sup>	
<ul><li>finely stranded with core end processing</li><li>stranded</li></ul>	50 300 mm²	
type of connectable conductor cross-sections for auxiliary	30 300 Hilli	
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	279.5 mm	
width	139 mm	
depth	163.5 mm	
fastening method	fixed mounting	
Environmental conditions	incoming in the second	
ambient temperature during operation	0.00	
• minimum	0 °C	
• maximum	70 °C	
ambient temperature during storage	40.00	
• minimum	-40 °C	
• maximum	80 °C	
General Product Approval		EMC



**Miscellaneous** 

Confirmation

<u>KC</u>





**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping





Special Test Certificate







Marine / Shipping

other









Miscellaneous

Confirmation

other

Environmental Confirmations

## 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=3VL4731-1DC36-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VL4731-1DC36-0AA0

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

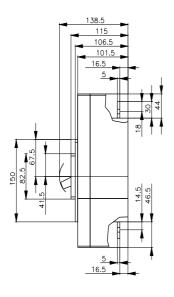
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3VL4731-1DC36-0AA0

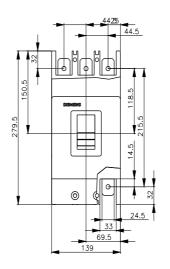
**CAx-Online-Generator** 

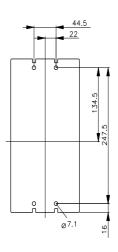
http://www.siemens.com/cax

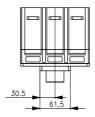
**Tender specifications** 

http://www.siemens.com/specifications









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