Data sheet



circuit breaker VL160L very high breaking capacity lcu=100kA, 415V AC 3-pole, starter combination Electronic Trip Unit magnetic In=100A, rated current II=750...1500A, short-circuit protection without auxiliary release without auxiliary/alarm switch

Model	
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	M
General technical data	
Number of poles	3
Size of the circuit-breaker	3VL2
Electrical endurance (switching cycles) / typical	10 000
Usage category	Α
Performance class for circuit breaker	N
Mechanical service life (switching cycles) / typical	20 000
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 Ue / max.	690 V
Insulation voltage	
• rated value	800 V
• at AC / rated value	800 V

Surge voltage resistance / rated value	8 kV
Protection class	
Protection class IP	IP20
Protective function of the overcurrent release	L
Electricity	400.4
Operating current / at 45 °C / rated value	100 A
Continuous current / rated value	100 A 50 °C
Derating temperature / for the rated value of the continuous current	50 C
Adjustable pick-up value current	
of instantaneous short-circuit trip unit / initial	700 A
value	
of instantaneous short-circuit trip unit / Full-	1 500 A
scale value	
Main circuit	
Operating frequency	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz
Operating power / at AC-3	
• at 230 V / rated value	18.4 kW
• at 400 V / rated value	55.4 kW
Operating voltage	
• rated value / maximum	690 V
• for main current circuit / at AC / at 50 Hz /	690 V
maximum	
• for main current circuit / at AC / at 60 Hz /	690 V
maximum	
• for main current circuit / at DC / maximum	500 V
Operating current	
• at 40 °C / rated value	100 A
• at 50 °C / rated value	100 A
• at 55 °C / rated value	93 A
• at 60 °C / rated value	93 A
• at 65 °C / rated value	86 A
• at 70 °C / rated value	86 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	Charles made disc
Suitability for use	Starter protection

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		

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without • of thermal overload trip unit No Ground fault protection No • for neutral conductors / Short-circuit and

overload proof Overload protection

No

Operational short-circuit current breaking capacity	y
(lcs)	

150 kA • at 240 V / rated value 75 kA • at 415 V / rated value 38 kA • at 500 V / rated value 6 kA • at 690 V / rated value

Maximum short-circuit current breaking capacity (Icu)

200 kA • at 240 V / rated value 100 kA • at 415 V / rated value • at 440 V / rated value 75 kA 75 kA • at 480 V / acc. to NEMA / rated value • at 500 V / rated value 50 kA 12 kA • at 600 V / acc. to NEMA / rated value

• at 690 V / rated value

front side

12 kA

Connections

Arrangement of electrical connectors / for main current circuit

Type of connectable conductor cross-sections

• for main contacts / with flexible busbar 12 x 10 mm 2.5 ... 95 mm² • for main contacts / solid • for main contacts / finely stranded / with core 2.5 ... 50 mm² end processing

2.5 ... 95 mm² • for main contacts / stranded 0.75 ... 1.5 mm² • for auxiliary contacts / solid

 for auxiliary contacts / finely stranded / with core end processing 	0,75 1.0 mm²
Type of electrical connection / for main current circuit	box terminal
Mechanical Design	
Height	174.5 mm
Width	104.5 mm
Depth	106.5 mm
Mounting type	fixed mounting
Environmental conditions	
Ambient temperature	
during operation / minimum	0 °C
during operation / maximum	70 °C
during storage / minimum	-40 °C
• during storage / maximum	80 °C
Certificates	
Certificate of suitability	IEC, very high switching capacity (L)
Reference code	
• acc. to DIN EN 61346-2	Q

Waste electronic equipment must not be disposed as unsorted municipal waste, e.g. household waste. For disposing the waste electronic equipment it is necessary to observe the current local national/international regulations.



General Product Approval EMC Declaration of Conformity



Miscellaneous

TSE

KC





Test Certificates

Shipping Approval

Type Test Certificates/Test Report

Special Test Certificate









Shipping Approval

other



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=3VL2710-3DK33-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VL2710-3DK33-0AA0

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL2710-3DK33-0AA0

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications