

circuit breaker VL800 UL type MG (cat no. LMX3K800) non-interchangeable frame, with circuit breaker approval acc. to UL 489 very high breaking capacity 3-pole; NEMA rating 100kA/480V and 50kA/600V (molded case circuit breaker) trip unit LCD ETU, LSIG-G with alarm TA=40°C 3 phases/4 lines In=800A, rated current ISD=1.25-10xIR, II=8xIN short-circuit protection IR=300-800A ETU for line protection without auxiliary release without auxiliary/alarm switch



Model	
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	LCD ETU576
General technical data	
Number of poles	3
Size of the circuit-breaker	3VL6 UL
Electrical endurance (switching cycles) / typical	3 000

Usage category	A
Performance class for circuit breaker	N
Mechanical service life (switching cycles) / typical	10 000
Reference code / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750	Q
Operating frequency / maximum	60 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 / acc. to UL 489 / maximum	600 V
• for main current circuit / at AC / at 50 Hz / maximum	690 V
• for main current circuit / at AC / at 60 Hz / acc. to UL 489 / maximum	600 V
• for main current circuit / at AC / at 60 Hz / maximum	690 V

Protection class

Protection class IP	IP20
Protective function of the overcurrent release	LSIG

Current

Operating current / at 45 °C / rated value	760 A
Continuous current / rated value	800 A
Derating temperature / for the rated value of the continuous current	
• acc. to UL 489	40 °C

Main circuit

Operating frequency	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz
Operating current	
• at 40 °C / rated value	800 A
• at 50 °C / rated value	760 A
• at 55 °C / rated value	640 A
• at 60 °C / rated value	640 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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Product details

Product component	
<ul style="list-style-type: none"> • Trip indicator • Auxiliary switch • Voltage trigger • undervoltage release • undervoltage release with leading contact 	<p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
Product extension / optional / motor drive	Yes

Product function

Product function	
<ul style="list-style-type: none"> • of thermal overload trip unit • Ground fault protection • for neutral conductors / Short-circuit and overload proof • Overload protection 	<p>adjustable</p> <p>No</p> <p>No</p> <p>Yes</p>

Short circuit





Operational short-circuit current breaking capacity (Ics)	
<ul style="list-style-type: none"> • at 240 V / rated value • at 415 V / rated value • at 690 V / rated value 	<p>150 kA</p> <p>75 kA</p> <p>10 kA</p>
Maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> • at 240 V / rated value • at 415 V / rated value • at 480 V / acc. to NEMA / rated value • at 600 V / acc. to NEMA / rated value • at 690 V / rated value 	<p>200 kA</p> <p>100 kA</p> <p>100 kA</p> <p>50 kA</p> <p>20 kA</p>


Connections

Arrangement of electrical connectors / for main current circuit	front side
Type of connectable conductor cross-sections	
<ul style="list-style-type: none"> • for main contacts / with flexible busbar • for auxiliary contacts / solid • for auxiliary contacts / finely stranded / with core end processing 	<p>2 x 40 x 10 mm</p> <p>0.75 ... 1.5 mm²</p> <p>0,75 ... 1.0 mm²</p>
Type of electrical connection / for main current circuit	without connection accessoires

Mechanical Design	
Height	406.5 mm
Width	190 mm
Depth	176.5 mm
Mounting type	fixed mounting
<ul style="list-style-type: none"> during operation during storage 	-25 ... +70 °C -40 ... +80 °C

Certificates	
Certificate of suitability	UL very high switching capacity (L), non-interchangeable
Reference code	Q
<ul style="list-style-type: none"> acc. to DIN EN 61346-2 	

General Product Approval	EMC	Declaration of Conformity	Test Certificates
 CSA Miscellaneous	 UL	 C-Tick	 EG-Konf. Special Test Certificate

Shipping Approval	other
 RMRS	Environmental Conformations Miscellaneous Confirmation 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=3VL6180-3VJ30-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL6180-3VJ30-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL6180-3VJ30-0AA0

CAX-Online-Generator

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

Tender specifications

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