

circuit breaker VL800 UL type MG (cat no. HMX3G800) non-interchangeable frame, with circuit breaker approval acc. to UL 489 high breaking capacity 3-pole; NEMA rating 65kA/480V and 35kA/600V (molded case circuit breaker) trip unit LCD ETU, LSIG 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"> <li>• Trip indicator</li> <li>• Auxiliary switch</li> <li>• Voltage trigger</li> <li>• undervoltage release</li> <li>• undervoltage release with leading contact</li> </ul>	<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"> <li>• of thermal overload trip unit</li> <li>• Ground fault protection</li> <li>• for neutral conductors / Short-circuit and overload proof</li> <li>• Overload protection</li> </ul>	<p>adjustable</p> <p>Yes</p> <p>No</p> <p>Yes</p>

### Short circuit





Operational short-circuit current breaking capacity (Ics)	
<ul style="list-style-type: none"> <li>• at 240 V / rated value</li> <li>• at 415 V / rated value</li> <li>• at 690 V / rated value</li> </ul>	<p>75 kA</p> <p>70 kA</p> <p>10 kA</p>
Maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> <li>• at 240 V / rated value</li> <li>• at 415 V / rated value</li> <li>• at 480 V / acc. to NEMA / rated value</li> <li>• at 600 V / acc. to NEMA / rated value</li> <li>• at 690 V / rated value</li> </ul>	<p>100 kA</p> <p>70 kA</p> <p>65 kA</p> <p>35 kA</p> <p>20 kA</p>


### Connections

Arrangement of electrical connectors / for main current circuit	front side
<b>Type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>• for main contacts / with flexible busbar</li> <li>• for auxiliary contacts / solid</li> <li>• for auxiliary contacts / finely stranded / with core end processing</li> </ul>	<p>2 x 40 x 10 mm</p> <p>0.75 ... 1.5 mm<sup>2</sup></p> <p>0,75 ... 1.0 mm<sup>2</sup></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"> <li>during operation</li> <li>during storage</li> </ul>	-25 ... +70 °C -40 ... +80 °C

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

General Product Approval	EMC	Declaration of Conformity	Test Certificates
 CSA <a href="#">Miscellaneous</a>	 UL	 C-Tick	 EG-Konf. <a href="#">Special Test Certificate</a>

Shipping Approval	other
 RMRS	<a href="#">Environmental Conformations</a> <a href="#">Miscellaneous</a> <a href="#">Confirmation</a> <a href="#">Manufacturer Declaration</a>

### 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=3VL6180-2VM30-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL6180-2VM30-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL6180-2VM30-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL6180-2VM30-0AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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