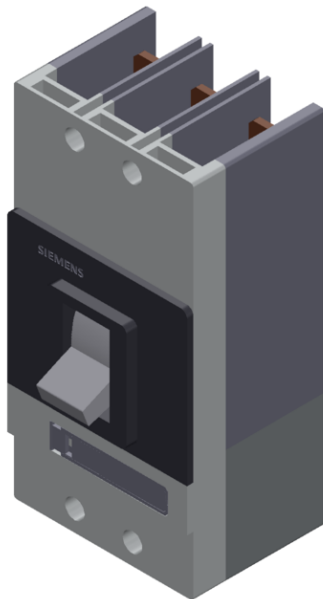


circuit breaker VL400X UL; type LG (cat no. HLM3Y600) non-interchangeable frame, with circuit breaker approval acc. to UL 489 high breaking capacity 3-pole, NEMA rating 65kA/480V and 18kA/600V (motor starter protector) trip unit magnetic TA=40°C In=< 600A, rated current II=2750..5500A short-circuit protection starter combination without connection accessories 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	3VL4X UL
Electrical endurance (switching cycles) / typical	10 000

Usage category	A
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 $U_e$ / 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
• for main current circuit / at DC / acc. to UL 489 / maximum	500 V

### Protection class

Protection class IP	IP20
protection function of the overcurrent release	I

### Current

Operating current / at 45 °C / rated value	558 A
Continuous current / rated value	600 A
Derating temperature / for the rated value of the continuous current	
• acc. to UL 489	40 °C
Adjustable pick-up value current	
• of instantaneous short-circuit trip unit / initial value	2 750 A
• of instantaneous short-circuit trip unit / Full-scale value	5 500 A

### Main circuit

Operating frequency	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz

Operating power / at AC-3	
<ul style="list-style-type: none"> <li>• at 230 V / rated value</li> <li>• at 400 V / rated value</li> </ul>	<p>110.4 kW</p> <p>332.5 kW</p>
Operating current	
<ul style="list-style-type: none"> <li>• at 40 °C / rated value</li> <li>• at 50 °C / rated value</li> <li>• at 55 °C / rated value</li> <li>• at 60 °C / rated value</li> </ul>	<p>600 A</p> <p>558 A</p> <p>516 A</p> <p>516 A</p>

#### 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	Starter 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>without</p> <p>No</p> <p>No</p> <p>No</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>8 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> </ul>	<p>100 kA</p> <p>70 kA</p> <p>65 kA</p> <p>18 kA</p>

- at 690 V / rated value

15 kA

## Connections

Arrangement of electrical connectors / for main current circuit	front side
Type of connectable conductor cross-sections / for main contacts	
<ul style="list-style-type: none"> <li>• with flexible busbar</li> </ul>	32 x 10 mm
Type of connectable conductor cross-sections / for auxiliary contacts	
<ul style="list-style-type: none"> <li>• solid</li> </ul>	0.75 ... 1.5 mm <sup>2</sup>
<ul style="list-style-type: none"> <li>• finely stranded / with core end processing</li> </ul>	0,75 ... 1.0 mm <sup>2</sup>
Type of electrical connection / for main current circuit	without connection accessoires

## Mechanical Design

Height	279.5 mm
Width	139.5 mm
Depth	163.5 mm
Mounting type	fixed mounting

## Environmental conditions

Ambient temperature / during operation	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	0 °C
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	70 °C
Ambient temperature / during storage	
<ul style="list-style-type: none"> <li>• minimum</li> </ul>	-40 °C
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	80 °C

## Certificates

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

General Product Approval	EMC	Declaration of Conformity
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CCC



CSA

[Miscellaneous](#)



UL



C-Tick



EG-Konf.

Test Certificates	Shipping Approval	other			
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[Special Test Certificate](#)



RMRS

[Miscellaneous](#)

[Environmental Confirmations](#)

[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=3VL4860-2KK30-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL4860-2KK30-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL4860-2KK30-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL4860-2KK30-0AA0)

### CAX-Online-Generator

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

### Tender specifications

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