

circuit breaker VL400H high breaking capacity  $I_{cu}=70\text{kA}$ , 415V AC 4-pole, non-auto. air circ. br. trip unit magnetic  $I_n=400\text{A}$ , rated current  $I_l=4000\text{A}$ , short-circuit protection Undervoltage release 48V DC 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	4
Size of the circuit-breaker	3VL4
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 / maximum	690 V
• for main current circuit / at AC / at 60 Hz / maximum	690 V
• for main current circuit / at DC / maximum	500 V

### Protection class

Protection class IP	IP20
Protective function of the overcurrent release	I

### Current

Operating current / at 45 °C / rated value	400 A
Continuous current / rated value	400 A
Derating temperature / for the rated value of the continuous current	50 °C
Adjustable pick-up value current	
• of instantaneous short-circuit trip unit / initial value	4 000 A
• of instantaneous short-circuit trip unit / Full-scale value	4 000 A

### Main circuit

Operating frequency	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz
Operating current	
• at 40 °C / rated value	400 A
• at 50 °C / rated value	400 A
• at 55 °C / rated value	372 A
• at 60 °C / rated value	372 A
• at 65 °C / rated value	344 A

- at 70 °C / rated value

344 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	non-automatic circuit-breakers
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### Product details

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

### Product function

Product function	
<ul style="list-style-type: none"> <li>• of thermal overload trip unit</li> </ul>	without
<ul style="list-style-type: none"> <li>• Ground fault protection</li> </ul>	No
<ul style="list-style-type: none"> <li>• for neutral conductors / Short-circuit and overload proof</li> </ul>	No
<ul style="list-style-type: none"> <li>• Overload protection</li> </ul>	No

### Short circuit

Operational short-circuit current breaking capacity (Ics)	
<ul style="list-style-type: none"> <li>• at 240 V / rated value</li> </ul>	75 kA
<ul style="list-style-type: none"> <li>• at 415 V / rated value</li> </ul>	70 kA
<ul style="list-style-type: none"> <li>• at 500 V / rated value</li> </ul>	30 kA
<ul style="list-style-type: none"> <li>• at 690 V / rated value</li> </ul>	8 kA
Maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> <li>• at 240 V / rated value</li> </ul>	100 kA
<ul style="list-style-type: none"> <li>• at 415 V / rated value</li> </ul>	70 kA
<ul style="list-style-type: none"> <li>• at 440 V / rated value</li> </ul>	50 kA
<ul style="list-style-type: none"> <li>• at 480 V / acc. to NEMA / rated value</li> </ul>	50 kA
<ul style="list-style-type: none"> <li>• at 500 V / rated value</li> </ul>	40 kA
<ul style="list-style-type: none"> <li>• at 600 V / acc. to NEMA / rated value</li> </ul>	20 kA
<ul style="list-style-type: none"> <li>• at 690 V / rated value</li> </ul>	15 kA



### Connections

Arrangement of electrical connectors / for main current circuit	front side
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<b>Type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>• for main contacts / with flexible busbar</li> <li>• for main contacts / solid</li> <li>• for main contacts / finely stranded / with core end processing</li> <li>• for main contacts / stranded</li> <li>• for auxiliary contacts / solid</li> <li>• for auxiliary contacts / finely stranded / with core end processing</li> </ul>	<p>25 x 10</p> <p>50 ... 300 mm<sup>2</sup></p> <p>50 ... 240 mm<sup>2</sup></p> <p>50 ... 300 mm<sup>2</sup></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	screw-type terminals

Mechanical Design	
Height	279.5 mm
Width	183.5 mm
Depth	163.5 mm
Mounting type	fixed mounting
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul>	<p>0 ... 70 °C</p> <p>-40 ... +80 °C</p>

Certificates	
Certificate of suitability	IEC, high switching capacity (H)
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	Shipping Approval
<a href="#">Miscellaneous</a>	<a href="#">KC</a>	 <p>C-Tick</p>	<a href="#">Special Test Certificate</a>	 <p>ABS</p>

Shipping Approval	other
    	<a href="#">Confirmation</a>

other
<a href="#">Miscellaneous</a>
<a href="#">Environmental Confirmations</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=3VL4740-2EE46-2UA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL4740-2EE46-2UA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL4740-2EE46-2UA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL4740-2EE46-2UA0)

**CAX-Online-Generator**

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

**Tender specifications**

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