

circuit breaker VL250 UL; type FG (cat no. NFX3W100) non-interchangeable frame, with circuit breaker approval acc. to UL 489 standard breaking capacity 3-pole, NEMA rating 35kA/480V, (molded case circuit breaker) Electronic Trip Unit ETU, LIG TA=40°C 3 phases/4 lines In=100A, rated current II=1.25 to 11xIN, short-circuit protection IR=40-100A Electronic Trip Unit for line protection without connection accessories without auxiliary release without auxiliary/alarm switch

Model	
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	ETU545
General technical data	
Number of poles	3
Size of the circuit-breaker	3VL3 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

### Protection class

Protection class IP	IP20
Protective function of the overcurrent release	LIG

### Current

Operating current / at 45 °C / rated value	100 A
Continuous current / rated value	100 A
Derating temperature / for the rated value of the continuous current	50 °C
• 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	100 A
• at 50 °C / rated value	100 A
• at 55 °C / rated value	95 A
• at 60 °C / rated value	95 A
• at 65 °C / rated value	80 A
• at 70 °C / rated value	80 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
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>	<ul style="list-style-type: none"> <li>No</li> <li>No</li> <li>No</li> <li>No</li> <li>No</li> </ul>
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>	<ul style="list-style-type: none"> <li>adjustable</li> <li>Yes</li> <li>No</li> <li>Yes</li> </ul>
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>	<ul style="list-style-type: none"> <li>65 kA</li> <li>40 kA</li> <li>6 kA</li> </ul>
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>	<ul style="list-style-type: none"> <li>65 kA</li> <li>40 kA</li> <li>35 kA</li> <li>18 kA</li> <li>12 kA</li> </ul>
Connections	
Arrangement of electrical connectors / for main current circuit	front side
Type of electrical connection / for main current circuit	without connection accessoires
Mechanical Design	
Height	185.5 mm
Width	104.5 mm

Depth	106.5 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 standard switching capacity (N), 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	Shipping Approval
 CCC	<a href="#">Miscellaneous</a>  C-Tick	 EG-Konf.	<a href="#">Special Test Certificate</a>	 RMRS

## other

[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=3VL3110-1PD30-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL3110-1PD30-0AA0>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL3110-1PD30-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL3110-1PD30-0AA0)

### CAX-Online-Generator

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

### Tender specifications

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