

circuit breaker VL250 UL; type FG (cat no. NFX3B175) 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 TM, LI TA=40°C IIn=< 175A, rated current II=1000...2000A short-circuit protection IR=175A
 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	TM
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
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	LI

Current

Operating current / at 45 °C / rated value	162.8 A
Continuous current / rated value	175 A
Derating temperature / for the rated value of the continuous current	50 °C
• acc. to UL 489	40 °C
Adjustable pick-up value current	
• of the current-dependent overload release / Full-scale value	175 A
• of instantaneous short-circuit trip unit / initial value	1 000 A
• of instantaneous short-circuit trip unit / Full-scale value	2 000 A

Main circuit

Operating frequency	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz
Operating current	
• at 40 °C / rated value	175 A

• at 50 °C / rated value	162.8 A
• at 55 °C / rated value	150.5 A
• at 60 °C / rated value	150.5 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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Adjustable parameters

Adjustable pick-up value current / of the current-dependent overload release / initial value	175 A
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Product details

Product component	
• Trip indicator	No
• Auxiliary switch	No
• Voltage trigger	No
• undervoltage release	No
• undervoltage release with leading contact	No
Product extension / optional / motor drive	Yes

Product function

Product function	
• of thermal overload trip unit	fixed
• Ground fault protection	No
• for neutral conductors / Short-circuit and overload proof	No
• Overload protection	Yes

Short circuit

Operational short-circuit current breaking capacity (Ics)	
• at 240 V / rated value	65 kA
• at 415 V / rated value	40 kA
• at 690 V / rated value	6 kA
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V / rated value	65 kA
• at 415 V / rated value	40 kA
• at 480 V / acc. to NEMA / rated value	35 kA
• at 600 V / acc. to NEMA / rated value	18 kA
• at 690 V / rated value	12 kA

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

Certificates

Certificate of suitability	UL standard switching capacity (N), 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
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[Miscellaneous](#)



[Special Test Certificate](#)

Shipping Approval	other
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[Environmental Confirmations](#)

[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=3VL3117-1KN30-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL3117-1KN30-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL3117-1KN30-0AA0

CAX-Online-Generator

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

Tender specifications

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