

CIRCUIT BREAKER VL 150X UL, TYPE CG (CAT NO. NCX3B020)
NON-INTERCHANGEABLE FRAME W/APPROVAL CIRCUIT
BREAKER TO UL489 HIGH BREAKING CAPACITY 3-POLE, NEMA
RATING 65KA/480V (MOLDED CASE CIRCUIT BREAKER)
OVERCURRENT RELEASE TM, LI FUNCTION TU=40DEGR
CELSIUS IN=<20A RATED CURRENT II=300A SHORT-CIRCUIT
PROT. IR=20A OVERCURRENT RELEASE FOR SYSTEM
PROTECTION W/O CONNECTION ACCESSORIES

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	3VL1 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
Equipment marking / 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 Ue / max.	690 V
Insulation voltage	
• rated value	800 V
• at AC / rated value	800 V
Surge voltage resistance / rated value	8 kV
Protection class	
Protection class IP	IP20
Protective function of the overcurrent release	LI
Electricity	
Continuous current / rated value	20 A
Derating temperature / for the rated value of the continuous current	
• acc. to UL 489	40 °C
Adjustable pick-up value current	
• of the current-dependent overload release / Full-scale value	20 A

• of instantaneous short-circuit trip unit / initial value	300 A
• of instantaneous short-circuit trip unit / Full-scale value	300 A

Main circuit

Operating frequency

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

Operating voltage

• 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	250 V

Operating current

• at 40 °C / rated value	20 A
• at 50 °C / rated value	18.6 A
• at 55 °C / rated value	17.2 A
• at 60 °C / rated value	17.2 A

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	20 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
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Product function

Product function

• of thermal overload trip unit	fixed
• Ground fault protection	No

- for neutral conductors / Short-circuit and overload proof
- Overload protection

No

Yes

Short circuit

Operational short-circuit current breaking capacity (Ics)

- at 240 V / rated value 75 kA
- at 415 V / rated value 70 kA
- at 690 V / rated value 5 kA

Maximum short-circuit current breaking capacity (Icu)

- at 240 V / rated value 100 kA
- at 415 V / rated value 70 kA
- at 480 V / acc. to NEMA / rated value 65 kA
- at 600 V / acc. to NEMA / rated value 10 kA
- at 690 V / rated value 10 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	157.5 mm
Width	104.5 mm
Depth	106.5 mm
Mounting type	fixed mounting

Environmental conditions

Ambient temperature

- during operation / minimum 0 °C
- during operation / maximum 70 °C
- during storage / minimum -40 °C
- during storage / maximum 80 °C

Certificates

Certificate of suitability UL high switching capacity (H), non-interchangeable

Equipment marking

- acc. to DIN EN 61346-2 Q

General Product Approval	EMC
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Declaration of Conformity	Test Certificates	Shipping Approval	other
	spezielle Prüfbescheinigungen n		Bestätigungen sonstig Umweltbestätigung

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VL1102-2KM30-0AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VL1102-2KM30-0AA0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL1102-2KM30-0AA0

CAX-Online-Generator

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

Tender specifications

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