

CIRCUIT-BREAKER VL 150 UL TYPE DG (CAT NO. NDK3B100)
NON-INTERCHANGEABLE FRAME W. APPROBATION CIRCUIT-
BREAKER ACC. UL489 STANDARD BREAKING CAPACITY 3-
POLE, NEMA RATING 35KA@480V AND 18KA@600/347V
(MOLDED CASE CIRCUIT BREAKER) OVERCURRENT RELEASE
TM, LI TU= 40 DEGR. CELSIUS IN=100A, RATED CURRENT II=
500...1000A SHORT-CIRCUIT PROTECTION IR= 100A
OVERCURRENT RELEASE F. PLANT 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	3VL2 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	
Operating current / at 45 °C / rated value	93 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
Adjustable pick-up value current	

• of the current-dependent overload release / Full-scale value	100 A
• of instantaneous short-circuit trip unit / initial value	500 A
• of instantaneous short-circuit trip unit / Full-scale value	1 000 A

Main circuit

Operating frequency

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

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

Operating current

• at 40 °C / rated value	100 A
• at 50 °C / rated value	93 A
• at 55 °C / rated value	86 A
• at 60 °C / rated value	86 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	100 A
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Product details

Product component

• Trip indicator	No
• Auxiliary switch	Yes
• Voltage trigger	Yes
• 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
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- Ground fault protection
- for neutral conductors / Short-circuit and overload proof
- Overload protection

No
No
Yes

Short circuit

Operational short-circuit current breaking capacity (Ics)

- at 240 V / rated value

65 kA

Maximum short-circuit current breaking capacity (Icu)

- at 240 V / rated value
- at 480 V / acc. to NEMA / rated value

65 kA
35 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

174.5 mm

Width

104.5 mm

Depth

106.5 mm

Mounting type

fixed mounting

Environmental conditions

Ambient temperature

- during operation / minimum
- during operation / maximum
- during storage / minimum
- during storage / maximum

0 °C
70 °C
-40 °C
80 °C

Certificates

Certificate of suitability

UL standard switching capacity (N), non-interchangeable

Equipment marking

- acc. to DIN EN 61346-2

Q

General Product Approval			EMC	Declaration of Conformity	
 CCC	 CSA	Miscellaneous	 UL	 C-Tick	 EG-Konf.

Test Certificates	Shipping Approval	other		
Special Test Certificate	 RMRS	Miscellaneous	Environmental Confirmations	Confirmation

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=3VL2510-1KN30-8TB1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL2510-1KN30-8TB1>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL2510-1KN30-8TB1

CAX-Online-Generator

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

Tender specifications

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