



CIRCUIT-BREAKER VL 160N STANDARD BREAKING CAPACITY
ICU=55KA / 415 V AC 3 POLE, STARTER COMBINATION
PROTECTION OVERCURRENT RELEASE MAGNETIC IN=63A,
RATED CURRENT II=450-900A, SHORT CIRCUIT WITH SCREW
CONNECTION

Model	
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	M
General technical data	
Number of poles	3
Size of the circuit-breaker	3VL2
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 U_e / 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	I
Dissipation	
Power loss [W]	
• maximum	7 W
Electricity	
Continuous current / rated value	63 A
Derating temperature / for the rated value of the continuous current	50 °C
Adjustable pick-up value current	
• of the current-dependent overload release / Full-scale value	63 A
• of instantaneous short-circuit trip unit / initial value	441 A
• of instantaneous short-circuit trip unit / Full-scale value	945 A
Main circuit	
Operating frequency	
• 1 / rated value	50 Hz
• 2 / rated value	60 Hz
Operating power / at AC-3	
• at 230 V / rated value	11.6 kW
• at 400 V / rated value	34.9 kW
Operating voltage	
• 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
Operating current	
• at 40 °C / rated value	63 A
• at 50 °C / rated value	63 A
• at 55 °C / rated value	58.6 A
• at 60 °C / rated value	58.6 A
• at 65 °C / rated value	54.2 A
• at 70 °C / rated value	54.2 A
Suitability	
Suitability for use	Starter protection
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	without
• Ground fault protection	No
• for neutral conductors / Short-circuit and overload proof	No
• Overload protection	No

Short circuit

Operational short-circuit current breaking capacity (Ics)	
• at 240 V / rated value	65 kA
• at 415 V / rated value	55 kA
• at 500 V / rated value	20 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	55 kA
• at 440 V / rated value	25 kA
• at 480 V / acc. to NEMA / rated value	25 kA
• at 500 V / rated value	25 kA
• at 600 V / acc. to NEMA / rated value	12 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	screw-type terminals

Mechanical Design

Height	174.5 mm
Width	104.5 mm
Depth	106.5 mm
Mounting type	fixed mounting

Environmental conditions

Ambient temperature	
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- during operation / minimum
- during operation / maximum
- during storage / minimum
- during storage / maximum

0 °C
70 °C
-40 °C
80 °C

Certificates

Certificate of suitability

IEC, standard switching capacity (N)

Equipment marking

- acc. to DIN EN 61346-2

Q

General Product Approval

EMC

Declaration of Conformity

Test Certificates



CCC

[Miscellaneous](#)

[TSE](#)



C-Tick



EG-Konf.

[Special Test
Certificate](#)

Shipping Approval



ABS



BUREAU
VERITAS



LRS



PRS



RINA



RMRS

other

[Miscellaneous](#)

[Confirmation](#)

[Environmental
Confirmations](#)

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=3VL2706-1DK36-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VL2706-1DK36-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL2706-1DK36-0AA0

CAX-Online-Generator

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

Tender specifications

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