

CIRCUIT-BREAKER VL160X N STANDARD
 BREAKING CAPACITY ICU=55KA / 415 V AC 3 POLE,
 LINE PROTECTION OVERCURRENT RELEASE TM, LI
 IN=160A, RATED CURRENT IR=160A, OVERLOAD
 II=1500A, SHORT-CIRCUIT WITH SCREW
 CONNECTION

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
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	1/s	120
Voltage		
Rated operational voltage Ue / max.	V	690
Insulation voltage		
• rated value	V	800
• at AC / rated value	V	800
Surge voltage resistance / rated value	kV	8
Protection class		
Protection class IP		IP20
Protective function of the overcurrent release		LI
Electricity		
Continuous current / rated value	A	160
Derating temperature / for the rated value of the continuous current	°C	50
Adjustable pick-up value current		
• of the current-dependent overload release / Full-scale value	A	160
• of instantaneous short-circuit trip unit / initial value	A	1 500

- of instantaneous short-circuit trip unit / Full-scale value

A 1 500

Main circuit

Operating frequency

- 1 / rated value
- 2 / rated value

Hz 50
Hz 60

Operating voltage

- for main current circuit / at AC / at 50 Hz / maximum
- for main current circuit / at AC / at 60 Hz / maximum
- for main current circuit / at DC / maximum

V 690
V 690
V 500

Operating current

- at 40 °C / rated value
- at 50 °C / rated value
- at 55 °C / rated value
- at 60 °C / rated value
- at 65 °C / rated value
- at 70 °C / rated value

A 160
A 160
A 148.8
A 148.8
A 137.6
A 137.6

Auxiliary circuit

Number of CO contacts / for auxiliary contacts

0

Number of NC contacts / for auxiliary contacts

1

Number of NO contacts / for auxiliary contacts

1

Suitability

Suitability for use

system protection

Adjustable parameters

Adjustable pick-up value current / of the current-dependent overload release / initial value

A 160

Product details

Product component

- Trip indicator
- Auxiliary switch
- Voltage trigger
- undervoltage release
- undervoltage release with leading contact

No
Yes
No
No
No

Product extension / optional / motor drive

Yes

Product function

Product function

- of thermal overload trip unit
- Ground fault protection

fixed
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	kA	65
• at 415 V / rated value	kA	55
• at 500 V / rated value	kA	14
• at 690 V / rated value	kA	4

Maximum short-circuit current breaking capacity (Icu)

• at 240 V / rated value	kA	65
• at 415 V / rated value	kA	55
• at 440 V / rated value	kA	25
• at 480 V / acc. to NEMA / rated value	kA	25
• at 500 V / rated value	kA	18
• at 600 V / acc. to NEMA / rated value	kA	8
• at 690 V / rated value	kA	8

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	mm	157.5
Width	mm	104.5
Depth	mm	106.5
Mounting type		fixed mounting

Environmental conditions

Ambient temperature

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

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
sonstig 	TSE  C-Tick	 EG-Konf.	spezielle Prüfbescheinigungen n

Shipping Approval					
 ABS	 BUREAU VERITAS	 LRS	 PRS	 RINA	 RMRS

other		
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/3VL1716-1DA36-0AB1>

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

<http://support.automation.siemens.com/WW/view/en/3VL1716-1DA36-0AB1/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL1716-1DA36-0AB1

CAX-Online-Generator

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

Tender specifications

<http://ausschreibungstexte.siemens.com/tiplv>

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