

CIRCUIT-BREAKER VL 160N STANDARD BREAKING CAPACITY ICU=55KA / 415 V AC 3 POLE, LINE PROTECTION OVERCURRENT RELEASE TM, LI IN=160A, RATED CURRENT IR=125-160A, OVERLOAD II=800-1600A, SHORT CIRCUIT

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
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	800
• of instantaneous short-circuit trip unit / Full-scale value	A	1 600

Main circuit		
<b>Operating frequency</b>		
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
<b>Operating voltage</b>		
• for main current circuit / at AC / at 50 Hz / maximum	V	690
• for main current circuit / at AC / at 60 Hz / maximum	V	690
• for main current circuit / at DC / maximum	V	500
<b>Operating current</b>		
• at 40 °C / rated value	A	160
• at 50 °C / rated value	A	160
• at 55 °C / rated value	A	148.8
• at 60 °C / rated value	A	148.8
• at 65 °C / rated value	A	137.6
• at 70 °C / rated value	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	128
Product details		
<b>Product component</b>		
• Trip indicator		No
• Auxiliary switch		Yes
• Voltage trigger		No
• undervoltage release		No
• undervoltage release with leading contact		No
Product extension / optional / motor drive		Yes
Product function		
<b>Product function</b>		
• of thermal overload trip unit		adjustable
• 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
- at 415 V / rated value
- at 500 V / rated value
- at 690 V / rated value

kA	65
kA	55
kA	20
kA	6

#### Maximum short-circuit current breaking capacity (Icu)

- at 240 V / rated value
- at 415 V / rated value
- at 440 V / rated value
- at 480 V / acc. to NEMA / rated value
- at 500 V / rated value
- at 600 V / acc. to NEMA / rated value
- at 690 V / rated value

kA	65
kA	55
kA	25
kA	25
kA	25
kA	12
kA	12

### Connections

Arrangement of electrical connectors / for main current circuit

front side

Type of electrical connection / for main current circuit

box terminals

### Mechanical Design

Height

mm 174.5

Width

mm 104.5

Depth

mm 106.5

Mounting type

fixed mounting

### Environmental conditions

#### Ambient temperature

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

°C	0
°C	70
°C	-40
°C	80

### Certificates

Certificate of suitability

IEC, standard switching capacity (N)

Equipment marking

- acc. to DIN EN 61346-2

Q

General Product Approval	EMC
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Declaration of Conformity	Test Certificates	Shipping Approval
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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/3VL2716-1DC33-0AB1>

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

<http://support.automation.siemens.com/WW/view/en/3VL2716-1DC33-0AB1/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL2716-1DC33-0AB1](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL2716-1DC33-0AB1)

**CAX-Online-Generator**

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

**Tender specifications**

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

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