

CIRCUIT-BREAKER VL 160N STANDARD BREAKING CAPACITY
ICU= 55KA, 415V AC 3-POLE, MOTOR PROTECTION
ELECTRONIC TRIP UNIT ETU30M, LI IR= 63...160A, OVERLOAD
PROTECTION, TC= 10A ... 30, II= 6 / 8 / 11 X IN, SHORT-CIRCUIT
PROTECTION W/O AUXILIARY RELEASE MARINE APPROVAL
FOR LRS, DNV AND GL

Model	
Type of the driving mechanism / motor drive	No
Design of the overcurrent release	ETU30M
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 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	160 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	160 A
• of instantaneous short-circuit trip unit / initial value	960 A

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

1 760 A

Main circuit

Operating frequency

- 1 / rated value
- 2 / rated value

50 Hz
60 Hz

Operating power / at AC-3

- at 230 V / rated value
- at 400 V / rated value

29.4 kW
88.7 kW

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

690 V
690 V
500 V

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

160 A
160 A
152 A
152 A
128 A
128 A

Suitability

Suitability for use

Motor Protection

Adjustable parameters

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

64 A

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
- for neutral conductors / Short-circuit and overload proof

adjustable
No
No

- Overload protection

Yes

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
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Type of electrical connection / for main current circuit	box terminals
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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 | -25 °C |
| • during operation / maximum | 70 °C |
| • during storage / minimum | -40 °C |
| • during storage / maximum | 80 °C |

Certificates

Certificate of suitability	IEC, standard switching capacity (N)
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Equipment marking

- | | |
|--------------------------|---|
| • acc. to DIN EN 61346-2 | Q |
|--------------------------|---|

General Product Approval		EMC	Declaration of Conformity	Test Certificates
	sonstig	TSE		spezielle Prüfbescheinigungen
CCC		C-Tick	EG-Konf.	n

Shipping Approval			other		
			Bestätigungen	sonstig	Umweltbestätigung
LRS	RINA	RMRS			

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=3VL2716-1LS33-0AB1>

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

<http://support.automation.siemens.com/WW/view/en/3VL2716-1LS33-0AB1/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL2716-1LS33-0AB1

CAX-Online-Generator

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

Tender specifications

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