

CIRCUIT-BREAKER VL 160N WITHOUT ELECTRONIC TRIP UNIT STANDARD BREAKING CAPACITY ICU= 55KA / 415 V AC, 4-POLE IN= < 160 A, RATED CURRENT WITHOUT AUXILIARY RELEASE WITH BOX TERMINALS FOR CONTACT UNIT AND ELECTRONIC TRIP UNIT

Model		
Type of the driving mechanism / motor drive		No
General technical data		
Number of poles		4
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
Electricity		
Continuous current / rated value	A	160
Derating temperature / for the rated value of the continuous current	°C	50
• acc. to UL 489	°C	40
Main circuit		
Operating frequency		
• 1 / rated value	Hz	50
• 2 / rated value	Hz	60
Operating voltage		
• for main current circuit / at AC / at 50 Hz / maximum	V	690
• for main current circuit / at AC / at 60 Hz / maximum	V	690
Operating current		
• 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		0
Number of NO contacts / for auxiliary contacts		0
Product details		
Product component		
• Trip indicator		No
• Auxiliary switch		No
• Voltage trigger		No
• undervoltage release		No
• undervoltage release with leading contact		No
Product expansion / optional / motor drive		Yes
Product function		
Product function		
• of the thermal overload release		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	kA	65
• at 415 V / rated value	kA	55
• at 500 V / rated value	kA	20
• at 690 V / rated value	kA	6

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	25
• at 600 V / acc. to NEMA / rated value	kA	12
• at 690 V / rated value	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	139.5
Depth	mm	106.5
Mounting type		fixed mounting

Environmental conditions

Ambient temperature

• during operation / minimum	°C	-25
• 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
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General Product Approval		EMC	Declaration of Conformity
 CCC	sonstig	 EAC	TSE
		 C-TICK	 EG-Konf.

Test Certificates	Shipping Approval				
spezielle Prüfbescheinigung n	 ABS	 BUREAU VERITAS	 DNV	 GL	 PRS

Shipping Approval	other		
 RINA	 RMRS	Bestätigungen	Umweltbestätigung sonstig

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/3VL27161AA430AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VL27161AA430AA0/all>

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

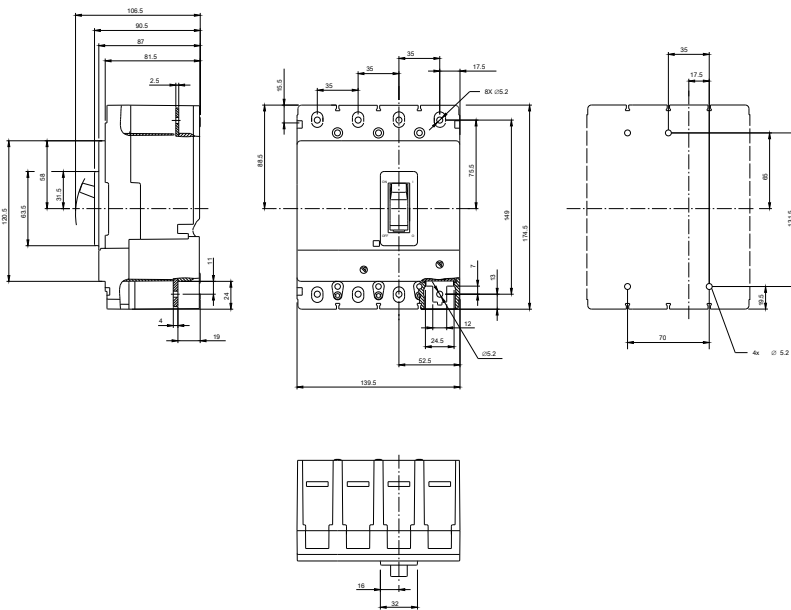
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL27161AA430AA0

CAX-Online-Generator

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

Tender specifications

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



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