

Model		
Type of the driving mechanism / motor drive		No
Design of the overcurrent release		TM

General technical data		
Number of poles		3
Tripping characteristics / Upper tolerance band		AK_VL250_TM_I_u.txt
Tripping characteristics / Lower tolerance band		AK_VL160x_TM_I_o.txt
Size of the circuit-breaker		3VL3 UL
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 $U_e$ / max.	V	690
Insulation voltage		

• Rated value	V	800
• at AC / Rated value	V	800
Surge voltage resistance / Rated value	kV	8

#### Protection class

<b>Protection class IP</b>		IP20
<b>Protective function of the overcurrent release</b>		LI

#### Dissipation

<b>Active power loss</b>		
• maximum	W	80

#### Electricity

Continuous current / Rated value	A	200
Derating temperature / for the rated value of the continuous current		
• acc. to UL 489	°C	40
<b>Adjustable response value current</b>		
• of the current-dependent overload release / Full-scale value	A	200
• of the instantaneous short-circuit release / initial value	A	1 000
• of the instantaneous short-circuit release / Full-scale value	A	2 000

#### 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 / acc. to UL 489 / maximum	V	600
• for main current circuit / at AC / at 50 Hz / maximum	V	690
• for main current circuit / at AC / at 60 Hz / acc. to UL 489 / maximum	V	600
• for main current circuit / at AC / at 60 Hz / maximum	V	690
• for main current circuit / at DC / acc. to UL 489 / maximum	V	500
<b>Operating current</b>		
• at 40 °C / Rated value	A	200
• at 50 °C / Rated value	A	186
• at 55 °C / Rated value	A	172
• at 60 °C / Rated value	A	172

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

Suitability		
Suitability for use		system protection

Adjustable parameters		
Adjustable response value current / of the current-dependent overload release / initial value	A	200

Product details		
<b>Product component</b>		
• 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		
<b>Product function</b>		
• of the thermal overload release		fixed
• Ground fault protection		No
• for neutral conductors / Short-circuit and overload proof		No
• overload protection		Yes

Short circuit		
<b>Operational short-circuit current breaking capacity (Ics)</b>		
• at 240 V / Rated value	kA	75
• at 415 V / Rated value	kA	70
• at 690 V / Rated value	kA	6
<b>Maximum short-circuit current breaking capacity (Icu)</b>		
• at 240 V / Rated value	kA	100
• at 415 V / Rated value	kA	70
• at 480 V / acc. to NEMA / Rated value	kA	65
• at 600 V / acc. to NEMA / Rated value	kA	20
• at 690 V / Rated value	kA	12

Connections		
Arrangement of electrical connectors / for main current circuit		front side
Type of connectable conductor cross-section		

- for main contacts
  - with flexible busbar
  - solid
  - stranded
- for auxiliary contacts
  - solid
  - finely stranded / with core end processing

	24 x 7 mm
	35 ... 120 mm <sup>2</sup>
	35 ... 120 mm <sup>2</sup>
	0.75 ... 1.5 mm <sup>2</sup>
	0,75 ... 1.0 mm <sup>2</sup>
Type of electrical connection / for main current circuit	without connection accessoires

### Mechanical Design

Height	mm	185.5
Width	mm	104.5
Depth	mm	106.5
Mounting type		fixed mounting

### Environmental conditions

<b>Ambient temperature</b>		
• during operation / minimum	°C	0
• during operation / maximum	°C	70
• during storage / minimum	°C	-40
• during storage / maximum	°C	80

### Certificates

Certificate of suitability		UL high switching capacity (H), non-interchangeable
Equipment marking		Q
• acc. to DIN EN 61346-2		

<b>General Product Approval</b>	<b>EMC</b>	<b>Declaration of Conformity</b>
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<b>Test Certificates</b>	<b>Shipping Approval</b>	<b>other</b>
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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/3VL31202KN300AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VL31202KN300AA0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VL31202KN300AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VL31202KN300AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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

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