



Figure similar

CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS N ICU=25KA @ 415 V 3-POLE, LINE PROTECTION TM240, ATAM, IN=160A OVERLOAD PROTECTION IR=112A ...160A SHORT CIRCUIT PROTECTION II=5...10 X IN BUSBAR CONNECTION

Model		
product brand name		SENTRON
Product designation		Molded case circuit breaker
<b>Design of the product</b>		Line protection
<b>Product variations</b>		General Applications
<b>Ground fault monitoring version</b>		Without
<b>Design of the auxiliary release</b>		Without auxiliary release
<b>Design of the auxiliary switch</b>		Without
<b>Design of the operating mechanism</b>		toggle handle
<b>Type of the driving mechanism / motor drive</b>		No
<b>Design of the overcurrent release</b>		TM240
General technical data		
<b>Number of poles</b>		3
<b>Trip class / of the L-trip / with I<sup>2</sup>t characteristic / initial value</b>		1
<b>Trip class / of the L-trip / with I<sup>2</sup>t characteristic / Full-scale value</b>		1
<b>Electrical endurance (switching cycles)</b>		8 000
• at AC-1 / at 380/415 V / at 50/60 Hz		
<b>circuit-breaker / Design</b>		3VA
<b>Mechanical service life (switching cycles) / typical</b>		15 000
Voltage		
<b>Insulation voltage</b>		
• Rated value	V	800

Protection class		
<b>Protective function of the overcurrent release</b>		LI
Switching capacity		
<b>Switching capacity class of the circuit breaker</b>		N
Dissipation		
<b>Active power loss</b>		
• maximum	W	38
Electricity		
Operating current / at 45 °C / Rated value	A	160
Continuous current / Rated value / maximum	A	160
<b>Continuous current</b>		
• Rated value	A	160
<b>Adjustable response value current</b>		
• of the current-dependent overload release / Full-scale value	A	1
• of the instantaneous short-circuit release / initial value	A	5
<b>Net weight</b>	g	900
Main circuit		
<b>Operating voltage</b>		
• with AC / at 50/60 Hz / Rated value	V	690
• for DC / Rated value	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	158
• at 60 °C / Rated value	A	155
• at 65 °C / Rated value	A	153
• at 70 °C / Rated value	A	150
Auxiliary circuit		
<b>Number of CO contacts</b>		
• for auxiliary contacts		0
Suitability		
• <b>Suitability for use</b>		system protection
Adjustable parameters		
<b>Adjustable response value current</b>		
• of I-trip / Full-scale value	A	10
• for N-conductor protection / initial value	A	0
• for N-conductor protection / Full-scale value	A	0

Adjustable response value current / of the current-dependent overload release / initial value	A	0.7
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## Appearance

### Product details

<b>Product component</b>		
• Trip indicator		No
• display		No
• Voltage trigger		No
• undervoltage release		No
• undervoltage release with leading contact		No
<b>Product property</b>		
• for neutral conductors / upgradeable/retrofitable / Short-circuit and overload proof		No
<b>Product expansion</b>		
• optional		
— motor drive		Yes

### Product function

<b>Product function</b>		
• Intrinsic device protection		Yes
• communication function		No
• Phase failure detection		No
• other measurement function		No

## Accessories

Manufacturer article number / of the supplied basic switch		3VA1116-3EF32-0AA0
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## Short circuit

<b>Operational short-circuit current breaking capacity (Ics)</b>		
• at 240 V / Rated value	kA	36
• at 415 V / Rated value	kA	25
• at 440 V / Rated value	kA	16
• at 500 V / Rated value	kA	8
• at 690 V / Rated value	kA	5
<b>Maximum short-circuit current breaking capacity (Icu)</b>		
• at 240 V / Rated value	kA	36
• at 415 V / Rated value	kA	25
• at 440 V / Rated value	kA	16
• at 500 V / Rated value	kA	8
• at 690 V / Rated value	kA	7
<b>Short-circuit current making capacity (Icm)</b>		

- at 240 V / Rated value
- at 415 V / Rated value
- at 690 V / Rated value

kA	75.6
kA	52.5
kA	7.5

### Connections

<b>Arrangement of electrical connectors</b>		Front terminal
<ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>		
<b>Type of connectable conductor cross-section</b>		
<ul style="list-style-type: none"> <li>• for flat-bar terminal connection / minimum</li> <li>• for flat-bar terminal connection / maximum</li> </ul>		12 x 0 17 x 6.5
<b>Design of the electrical connection</b>		Lug terminal
<ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>		

### Mechanical Design

<b>Height</b>	mm	130
<b>Width</b>	mm	76.2
<b>Depth</b>	mm	70
<b>Mounting type</b>		fixed mounting

### Environmental conditions

<b>Ambient temperature</b>		
<ul style="list-style-type: none"> <li>• during operation / minimum</li> <li>• during operation / maximum</li> <li>• during storage / minimum</li> <li>• during storage / maximum</li> </ul>	°C	-25 70 -40 80

### Certificates

<b>Reference code</b>		
<ul style="list-style-type: none"> <li>• acc. to DIN EN 61346-2</li> <li>• acc. to DIN EN 81346-2</li> </ul>		Q Q

<b>General Product Approval</b>	<b>EMC</b>	<b>Declaration of Conformity</b>	<b>Shipping Approval</b>	<b>other</b>
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CCC



other



EG-Konf.



GL

other

### Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**

<http://www.siemens.com/lowvoltage/catalogs>

**Industry Mall (Online ordering system)**

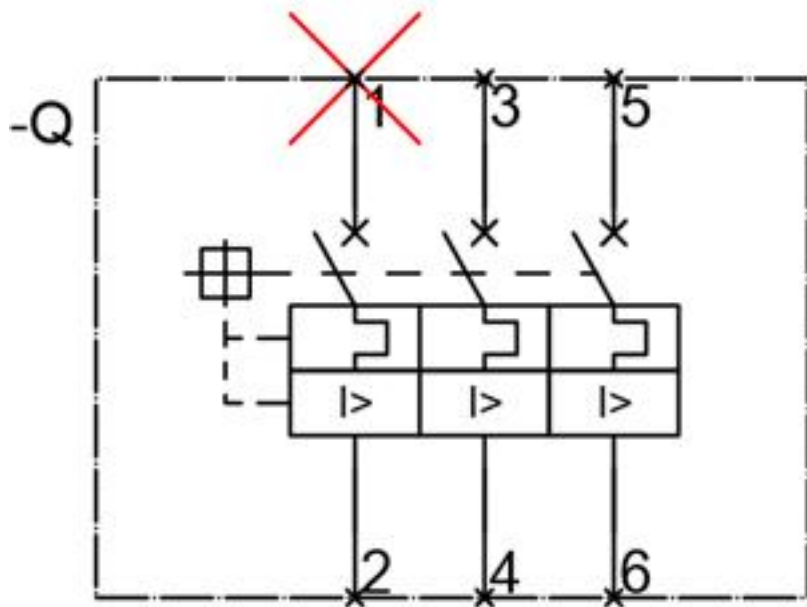
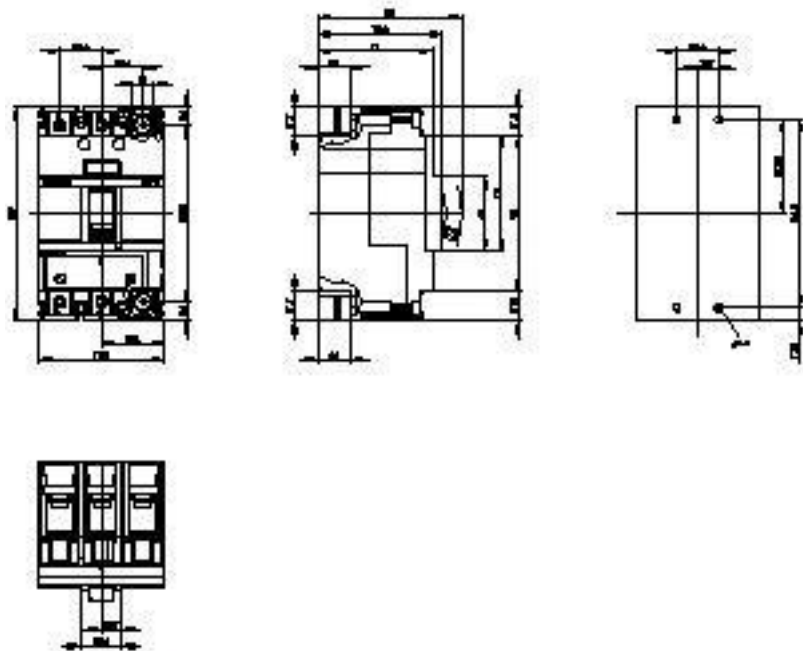
<https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA11163EF320AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA11163EF320AA0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA11163EF320AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11163EF320AA0)



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