



Figure similar

CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 3-POLE, LINE PROTECTION TM210, FTFM, IN=100A OVERLOAD PROTECTION IR=100A FIXED SHORT CIRCUIT PROTECTION II=10 X IN CABLE CONNECTION

Model		
product brand name		SENTRON
Product designation		Molded case circuit breaker
Design of the product		Line protection
Product variations		General Applications
Ground fault monitoring version		Without
Design of the auxiliary release		Without auxiliary release
Design of the auxiliary switch		Without
Design of the operating mechanism		toggle handle
Type of the driving mechanism / motor drive		No
Design of the overcurrent release		TM210
General technical data		
Number of poles		3
Trip class / of the L-trip / with I <sup>2</sup> t characteristic / initial value		1
Trip class / of the L-trip / with I <sup>2</sup> t characteristic / Full-scale value		1
Mechanical service life (switching cycles) / typical		15 000
Voltage		
Insulation voltage / Rated value	V	800
Protection class		
Protection class IP		IP40
Protection class IP / on the front		IP40
Protective function of the overcurrent release		LI

Switching capacity		
<b>Switching capacity class of the circuit breaker</b>		S
Dissipation		
<b>Active power loss</b>		
• maximum	W	25
Electricity		
<b>Continuous current / Rated value / maximum</b>	A	160
Continuous current / Rated value	A	100
<b>Adjustable response value current</b>		
• of the current-dependent overload release / Full-scale value	A	100
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	100
• at 50 °C / Rated value	A	100
• at 55 °C / Rated value	A	98
• at 60 °C / Rated value	A	96
• at 65 °C / Rated value	A	94
• at 70 °C / Rated value	A	91
Auxiliary circuit		
Number of CO contacts / for auxiliary contacts		0
Suitability		
<b>Suitability for use</b>		system protection
Adjustable parameters		
<b>Adjustable response value current</b>		
• of S-trip / with standard characteristic / initial value	A	1 000
• of S-trip / with standard characteristic / Full-scale value	A	1 000
• for N-conductor protection / initial value	A	0
• for N-conductor protection / Full-scale value	A	0
<b>Adjustable response value current / of the current-dependent overload release / initial value</b>	A	100
Product details		
<b>Product component</b>		
• Trip indicator		No
• display		No

<ul style="list-style-type: none"> <li>• Voltage trigger</li> </ul>	No
<ul style="list-style-type: none"> <li>• undervoltage release</li> </ul>	No
<ul style="list-style-type: none"> <li>• undervoltage release with leading contact</li> </ul>	No
<b>Product property</b>	
<ul style="list-style-type: none"> <li>• for neutral conductors / upgradeable/retrofitable / Short-circuit and overload proof</li> </ul>	No
Product expansion / optional / motor drive	Yes

### Product function

<b>Product function</b>	
<ul style="list-style-type: none"> <li>• Intrinsic device protection</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• communication function</li> </ul>	No
<ul style="list-style-type: none"> <li>• Phase failure detection</li> </ul>	No
<ul style="list-style-type: none"> <li>• other measurement function</li> </ul>	No

### Accessories

<b>Manufacturer article number / of the supplied basic switch</b>	<a href="#">3VA1110-4ED36-0AA0</a>
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### Short circuit

<b>Operational short-circuit current breaking capacity (Ics)</b>		
<ul style="list-style-type: none"> <li>• at 240 V / Rated value</li> </ul>	kA	55
<ul style="list-style-type: none"> <li>• at 415 V / Rated value</li> </ul>	kA	36
<ul style="list-style-type: none"> <li>• at 440 V / Rated value</li> </ul>	kA	25
<ul style="list-style-type: none"> <li>• at 500 V / Rated value</li> </ul>	kA	15
<ul style="list-style-type: none"> <li>• at 690 V / Rated value</li> </ul>	kA	5
<b>Maximum short-circuit current breaking capacity (Icu)</b>		
<ul style="list-style-type: none"> <li>• at 240 V / Rated value</li> </ul>	kA	55
<ul style="list-style-type: none"> <li>• at 415 V / Rated value</li> </ul>	kA	36
<ul style="list-style-type: none"> <li>• at 440 V / Rated value</li> </ul>	kA	25
<ul style="list-style-type: none"> <li>• at 500 V / Rated value</li> </ul>	kA	16
<ul style="list-style-type: none"> <li>• at 690 V / Rated value</li> </ul>	kA	7
<b>Short-circuit current making capacity (Icm)</b>		
<ul style="list-style-type: none"> <li>• at 240 V / Rated value</li> </ul>	kA	121
<ul style="list-style-type: none"> <li>• at 415 V / Rated value</li> </ul>	kA	75.6
<ul style="list-style-type: none"> <li>• at 440 V / Rated value</li> </ul>	kA	52.5
<ul style="list-style-type: none"> <li>• at 690 V / Rated value</li> </ul>	kA	7.5

### Connections

Arrangement of electrical connectors / for main current circuit	Front terminal
Type of connectable conductor cross-section	
<ul style="list-style-type: none"> <li>• of the round conductor terminal / stranded</li> </ul>	1 x (1.5 - 70 mm <sup>2</sup> )

Type of electrical connection / for main current circuit		Box terminal
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### Mechanical Design

Height	mm	130
Width	mm	76.2
Depth	mm	70
Mounting type		fixed mounting
Net weight	g	900

### Environmental conditions

<b>Ambient temperature</b>		
• during operation / minimum	°C	-25
• during operation / maximum	°C	70
• during storage / minimum	°C	-40
• during storage / maximum	°C	80

### Certificates

<b>Equipment marking</b>		
• acc. to DIN EN 61346-2		Q
• acc. to DIN EN 81346-2		Q

<b>General Product Approval</b>	<b>EMC</b>	<b>Declaration of Conformity</b>	<b>Test Certificates</b>	<b>Shipping Approval</b>
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[other](#)



[Type Test Certificates/Test Report](#)



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<b>Shipping Approval</b>	<b>other</b>
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[other](#)



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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/3VA11104ED360AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA11104ED360AA0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA11104ED360AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA11104ED360AA0)

**CAX-Online-Generator**

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



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