



CIRCUIT BREAKER 3VA1 IEC FRAME 160 BREAKING CAPACITY CLASS N ICU=25KA @ 415 V 3-POLE, LINE PROTECTION TM210, FTFM, IN=50A OVERLOAD PROTECTION IR=50A FIXED SHORT CIRCUIT PROTECTION II=10 X IN CABLE CONNECTION

Figure similar

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 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 I2t characteristic / initial value		1
Trip class / of the L-trip / with I2t characteristic / Full-scale value		1
Electrical endurance (switching cycles)		
• at AC-1 / at 380/415 V / at 50/60 Hz		8 000
Mechanical service life (switching cycles) / typical		15 000

Voltage		
Insulation voltage / Rated value	V	800
Protection class		
<b>Protection class IP</b>		IP40
Protection class IP / on the front		IP40
<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	14.6
Electricity		
<b>Continuous current / Rated value / maximum</b>	A	160
Continuous current / Rated value	A	50
<b>Adjustable response value current</b>		
• of the current-dependent overload release / Full-scale value	A	50
• of the instantaneous short-circuit release / initial value	A	500
Main circuit		
<b>Operating voltage</b>		
• at AC / at 50/60 Hz / Rated value	V	690
• at DC / Rated value	V	500
<b>Operating current</b>		
• at 40 °C / Rated value	A	50
• at 50 °C / Rated value	A	50
• at 55 °C / Rated value	A	49
• at 60 °C / Rated value	A	48
• at 65 °C / Rated value	A	46
• at 70 °C / Rated value	A	45
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 I-trip / Full-scale value	A	500
• 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	50
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### Product details

<b>Product component</b>		
<ul style="list-style-type: none"> <li>display</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>other measurement function</li> </ul>		No

### 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	36
<ul style="list-style-type: none"> <li>at 415 V / Rated value</li> </ul>	kA	25
<ul style="list-style-type: none"> <li>at 440 V / Rated value</li> </ul>	kA	16
<ul style="list-style-type: none"> <li>at 500 V / Rated value</li> </ul>	kA	8
<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	36
<ul style="list-style-type: none"> <li>at 415 V / Rated value</li> </ul>	kA	25
<ul style="list-style-type: none"> <li>at 440 V / Rated value</li> </ul>	kA	16
<ul style="list-style-type: none"> <li>at 500 V / Rated value</li> </ul>	kA	8
<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	75.6
<ul style="list-style-type: none"> <li>at 415 V / Rated value</li> </ul>	kA	52.5
<ul style="list-style-type: none"> <li>at 440 V / Rated value</li> </ul>	kA	32
<ul style="list-style-type: none"> <li>at 500 V / Rated value</li> </ul>	kA	13.6
<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 electrical connection / for main current circuit		Box terminal

### Mechanical Design

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

### 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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EG-Konf.

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DNV



GL

<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/3VA11503ED360AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA11503ED360AA0/all>

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

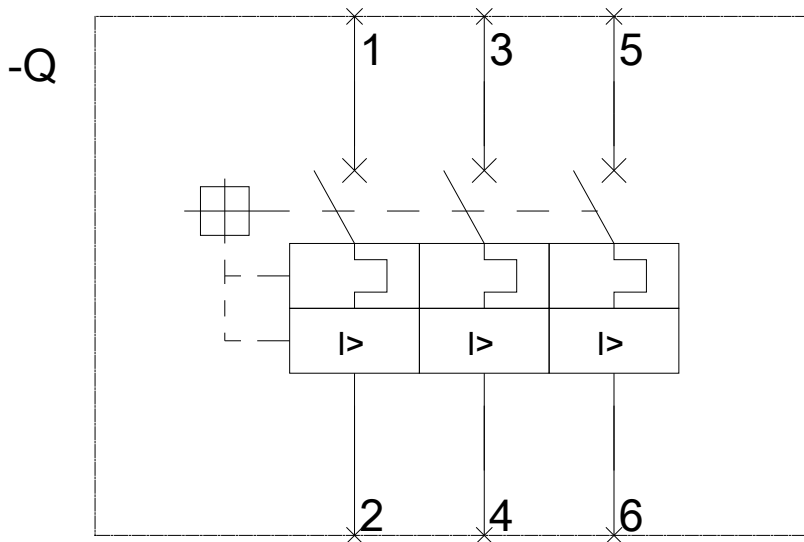
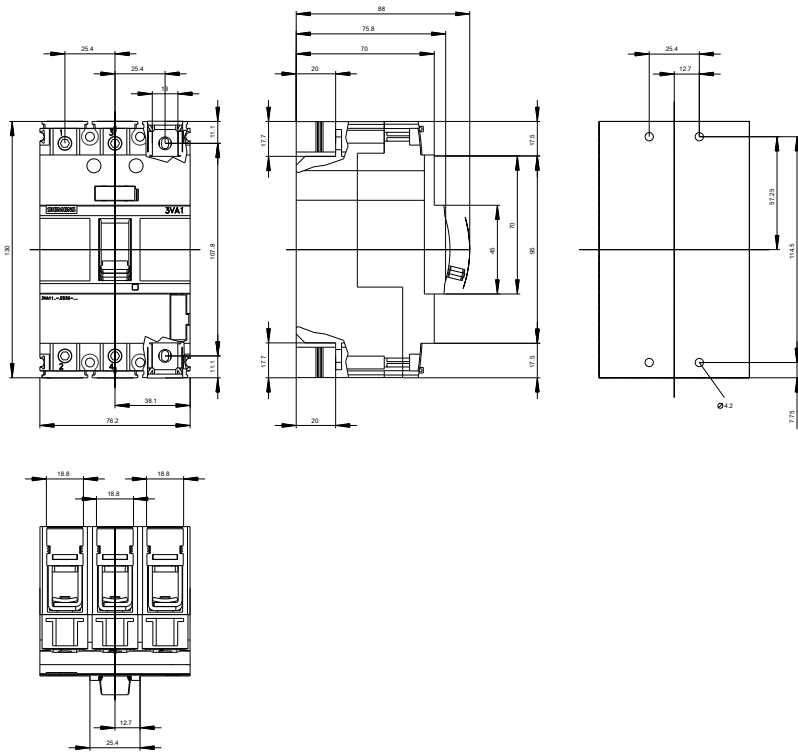
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3VA11503ED360AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA11503ED360AA0)

**CAX-Online-Generator**

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

**Tender specifications**

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



last modified:

20.07.2015