



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 4POLE, LINE PROTECTION ETU350, LSI, IN=160A OVERLOAD PROTECTION IR=64A ...160A SHORT CIRCUIT PROTECTION ISD=1,5... 10 X IR, II=10 X IN NEUTRAL PROTECTION ADJUSTABLE(OFF,50%,100%) 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>		Selective 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>		ETU350
General technical data		
<b>Number of poles</b>		4
<b>Trip class / of the L-trip / with I<sup>2</sup>t characteristic / initial value</b>		0.5
<b>Trip class / of the L-trip / with I<sup>2</sup>t characteristic / Full-scale value</b>		17
<b>Electrical endurance (switching cycles)</b>		12 000
• 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>		20 000
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>		LSI

### Switching capacity

<b>Switching capacity class of the circuit breaker</b>		C
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### Dissipation

<b>Active power loss</b>		
<ul style="list-style-type: none"> <li>• maximum</li> </ul>	W	25.5

### Electricity

<b>Continuous current / Rated value / maximum</b>	A	160
Continuous current / Rated value	A	160
Adjustable response value current / of the instantaneous short-circuit release / initial value	A	10

### Main circuit

<b>Operating voltage</b>		
<ul style="list-style-type: none"> <li>• with AC / at 50/60 Hz / Rated value</li> </ul>	V	690
<b>Operating current</b>		
<ul style="list-style-type: none"> <li>• at 40 °C / Rated value</li> <li>• at 50 °C / Rated value</li> <li>• at 60 °C / Rated value</li> <li>• at 65 °C / Rated value</li> <li>• at 70 °C / Rated value</li> </ul>	A	160
	A	160
	A	160
	A	160
	A	160

### Auxiliary circuit

<b>Number of NC contacts / for auxiliary contacts</b>		0
<b>Number of NO contacts / for auxiliary contacts</b>		0

### Suitability

<b>Suitability for use</b>		system protection
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### Adjustable parameters

<b>Adjustable response value current</b>		
<ul style="list-style-type: none"> <li>• of I-trip / Full-scale value</li> <li>• of the short-time delayed short-circuit release / initial value</li> <li>• of the short-time delayed short-circuit release / Full-scale value</li> </ul>	A	10
	A	1.5
	A	10
<b>Adjustable delay time</b>		
<ul style="list-style-type: none"> <li>• of S-trip / with I<sub>2t</sub> characteristic / initial value</li> <li>• of S-trip / with I<sub>2t</sub> characteristic / Full-scale value</li> </ul>	s	0.02
	s	0.4
<b>Adjustable response value current / of the current-dependent overload release / initial value</b>	A	0.394

## Product details

<b>Product component</b>		
• Trip indicator		No
• display		No
• undervoltage release		No
<b>Product property</b>		
• for neutral conductors / upgradeable/retrofitable / Short-circuit and overload proof		No
Product expansion / 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

<b>Manufacturer article number / of the supplied basic switch</b>		<a href="#">3VA2116-7HN42-0AA0</a>
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## Short circuit

<b>Operational short-circuit current breaking capacity (Ics)</b>		
• at 240 V / Rated value	kA	150
• at 415 V / Rated value	kA	110
• at 440 V / Rated value	kA	110
• at 500 V / Rated value	kA	85
• at 690 V / Rated value	kA	2.5
<b>Maximum short-circuit current breaking capacity (Icu)</b>		
• at 240 V / Rated value	kA	150
• at 415 V / Rated value	kA	110
• at 440 V / Rated value	kA	110
• at 500 V / Rated value	kA	85
• at 690 V / Rated value	kA	2.5
<b>Short-circuit current making capacity (Icm)</b>		
• at 240 V / Rated value	kA	330
• at 415 V / Rated value	kA	242
• at 440 V / Rated value	kA	242
• at 500 V / Rated value	kA	187
• at 690 V / Rated value	kA	3.75






## Connections


Arrangement of electrical connectors / for main current circuit		Front terminal
Type of connectable conductor cross-section		13 x 1 mm
<ul style="list-style-type: none"> <li>• for flat-bar terminal connection / minimum</li> <li>• for flat-bar terminal connection / maximum</li> </ul>		25 x 8.5
Type of electrical connection / for main current circuit		Lug terminal

Mechanical Design		
Height	mm	181
Width	mm	140
Depth	mm	107
Mounting type		fixed mounting

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

Certificates		
Equipment marking		
<ul style="list-style-type: none"> <li>• acc. to DIN EN 61346-2</li> </ul>		Q
<ul style="list-style-type: none"> <li>• acc. to DIN EN 81346-2</li> </ul>		Q

General Product Approval	EMC	Declaration of Conformity	Shipping Approval
 CCC  VDE  EAC	<a href="#">other</a>	 CE EG-Konf.	 DNV

Shipping Approval	other  <a href="#">other</a>   GL
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Further information
<b>Information- and Downloadcenter (Catalogs, Brochures,...)</b> <a href="http://www.siemens.com/lowvoltage/catalogs">http://www.siemens.com/lowvoltage/catalogs</a>
<b>Industry Mall (Online ordering system)</b> <a href="https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA21167HN420AA0">https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3VA21167HN420AA0</a>
<b>Service&amp;Support (Manuals, Certificates, Characteristics, FAQs,...)</b> <a href="http://support.automation.siemens.com/WW/view/en/3VA21167HN420AA0/all">http://support.automation.siemens.com/WW/view/en/3VA21167HN420AA0/all</a>

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

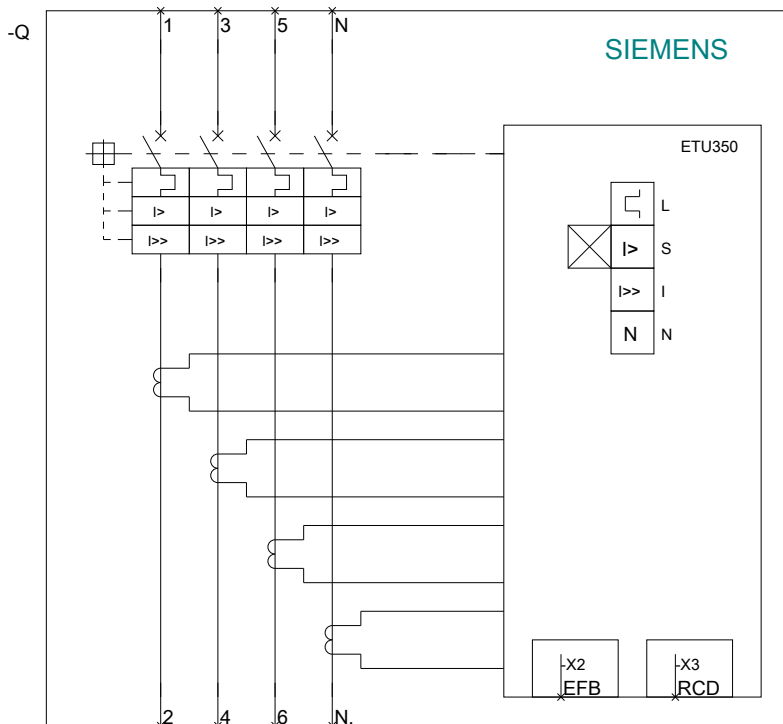
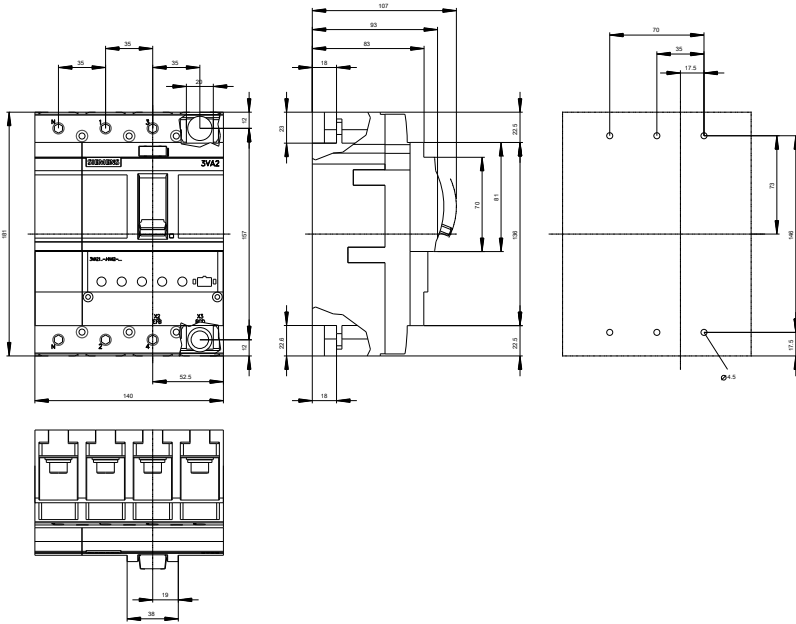
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA21167HN420AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA21167HN420AA0)

CAx-Online-Generator

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

Tender specifications

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



**last modified:**

11.03.2015