



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS M ICU=55KA @ 415 V 3-POLE, LINE PROTECTION ETU320, LI, IN=100A OVERLOAD PROTECTION IR=40A ...100A SHORT CIRCUIT PROTECTION II=1,5... 12 X IN BUSBAR CONNECTION UNDERVOLTAGE RELEASE (UVR) 120-127 V AC 50/60 HZ 2 AUXILIARY SWITCH HQ 1 TRIP ALARM SWITCH HQ 1 ELECTRICAL ALARM SWITCH HQ

Model	
product brandname	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Line protection
Design of the overcurrent release	ETU320
Protective function of the overcurrent release	LI
Number of poles	3
Design of the auxiliary release	Undervoltage release (UVR)
Design of the auxiliary switch	2 auxiliary switches + 1 trip alarm switch + 1 electrical alarm switch HQ

General technical data	
Tension assignée d'isolement Ui	800 V
Max. rated operational voltage Ue with AC 50/60Hz	690 V
Active power loss / for rated value of the current / at AC / in hot operating state / per device	12.5 W
Mechanical service life (switching cycles) / typical	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	12 000
Neutral conductors / upgradeable/retrofitable	No

Ground fault monitoring version	Without
Product function	
• communication function	No
• Phase failure detection	No
• other measurement function	No
Net weight	2.52 kg

### Electricity

Max. rated operational voltage of the size of the circuit-breaker	160 A
Courant permanent assigné lu	100 A
Operating current	
• at 40 °C	100 A
• at 45 °C	100 A
• at 50 °C	100 A
• at 55 °C	96.25 A
• at 60 °C	92.5 A
• at 65 °C	88.75 A
• at 70 °C	85 A

### Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	M
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	2.5 kA
Operational short-circuit current breaking capacity (Ics)	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	2.5 kA
Short-circuit current making capacity (Icm)	
• at 240 V	187 kA
• at 415 V	121 kA
• at 440 V	121 kA
• at 500 V	79 kA
• at 690 V	4.25 kA

### Adjustable parameters

Adjustable response value current / I <sub>g</sub> min.	40 A
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Adjustable response value current / I <sub>g</sub> min.	100 A
Adjustable response value current / I <sub>g</sub> min.	0.5
Adjustable response value current / I <sub>g</sub> min.	17
Short-term delayed / tripping switchable / I <sub>2t</sub> =ON/OFF	No
Adjustable response value current / I <sub>i</sub> min.	150 A
Adjustable response value current / I <sub>i</sub> max.	1 200 A

### Mechanical Design

Height	181 mm
Width	105 mm
Depth	86 mm

### Connections

Arrangement of electrical connectors / for main current circuit	Front terminal
Type of electrical connection / for main current circuit	Lug terminal
Type of connectable conductor cross-section, connection screw, width x thickness , min.	13 x 1 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	25 x 8.5

### Auxiliary circuit

Product component	
<ul style="list-style-type: none"> <li>• undervoltage release</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Voltage trigger</li> </ul>	No
<ul style="list-style-type: none"> <li>• undervoltage release with leading contact</li> </ul>	No
<ul style="list-style-type: none"> <li>• Trip indicator</li> </ul>	Yes
Number of CO contacts / for auxiliary contacts	4

### Accessories

Product extension / optional / motor drive	Yes
Manufacturer's article number	
<ul style="list-style-type: none"> <li>• of the supplied basic switch</li> </ul>	<a href="#">3VA2110-5HL32-0AA0</a>
<ul style="list-style-type: none"> <li>• of the integrated auxiliary switch/alarm switch</li> </ul>	<a href="#">3VA9988-0AA12</a>
<ul style="list-style-type: none"> <li>• of the integrated auxiliary switch/alarm switch</li> </ul>	<a href="#">3VA9988-0AB12</a>
<ul style="list-style-type: none"> <li>• of the integrated auxiliary switch/alarm switch</li> </ul>	<a href="#">3VA9988-0AB22</a>
<ul style="list-style-type: none"> <li>• of the integrated auxiliary trip</li> </ul>	<a href="#">3VA9608-0BB24</a>

### Environmental conditions

Protection class IP / on the front	IP40
Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation / minimum</li> </ul>	-25 °C
<ul style="list-style-type: none"> <li>• during operation / maximum</li> </ul>	70 °C
<ul style="list-style-type: none"> <li>• during storage / minimum</li> </ul>	-40 °C
<ul style="list-style-type: none"> <li>• during storage / maximum</li> </ul>	80 °C

## Certificates

Equipment marking / acc. to DIN EN 81346-2

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### General Product Approval

### EMC

### Declaration of Conformity



CCC



VDE



[sonstig](#)



RCM



EG-Konf.

### Test Certificates

### Shipping Approval

[Typprüfbescheinigung/Werkszeugnis](#)

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ABS



BUREAU  
VERITAS



GL



LRS

### Shipping Approval

### other

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RMRS

## 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/3VA2110-5HL32-0CL0>

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

<http://support.automation.siemens.com/WW/view/en/3VA2110-5HL32-0CL0/all>

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

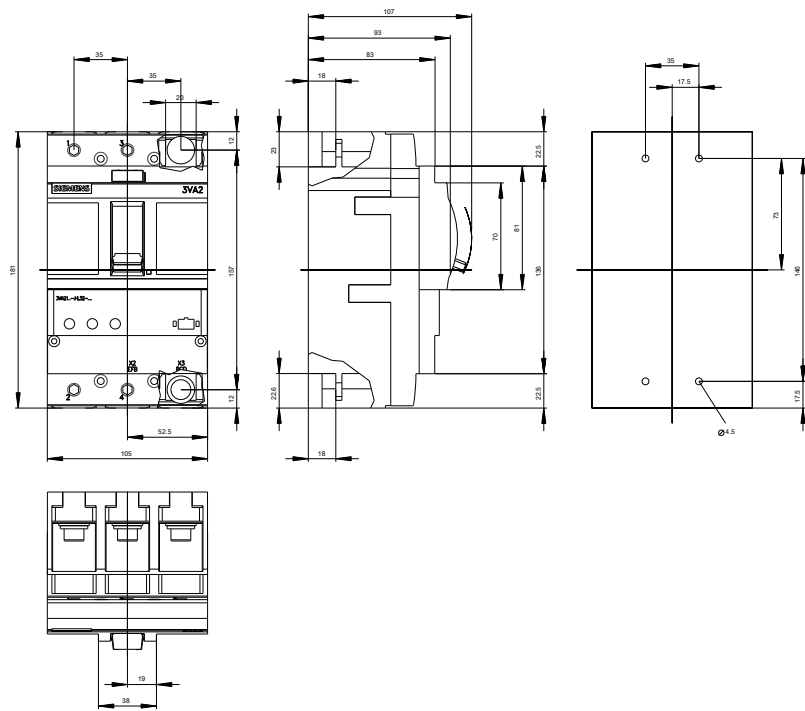
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2110-5HL32-0CL0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2110-5HL32-0CL0)

### CAX-Online-Generator

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

### Tender specifications

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



**last modified:**

10/29/2016