



CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS C ICU=110KA @ 415 V 3POLE, LINE PROTECTION ETU560, LSIG, IN=40A OVERLOAD PROTECTION IR=16A ...40A SHORT CIRCUIT PROTECTION ISD=0,6..10X IN, II=1,5..12X IN NEUTRAL PROTECTION OPTIONAL WITH EXT. CT,UPTO 160% GROUNDFAULT, SWITCHABLE IG=0,4... 1 X IN, TG=0,05-0,8S BUSBAR CONNECTION UNDERVOLTAGE RELEASE (LNO) 24 V DC 2 AUXILIARY SWITCH 1 TRIP ALARM SWITCH

Model	
product brandname	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Line protection
Design of the overcurrent release	ETU560
Protective function of the overcurrent release	LSIG
Number of poles	3
Design of the auxiliary release	Undervoltage release with leading NO contacts (UVR(LNO))
Design of the auxiliary switch	2 auxiliary switches + 1 trip 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	2 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
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	1 000

Neutral conductors / upgradeable/retrofitable	Yes
Ground fault monitoring version	Summation current formation L-conductor
Product function	
• communication function	Yes
• Phase failure detection	No
• other measurement function	No
Net weight	2 290 g

### Electricity

Max. rated operational voltage of the size of the circuit-breaker	160 A
Courant permanent assigné I <sub>u</sub>	40 A
Operating current	
• at 40 °C	40 A
• at 45 °C	40 A
• at 50 °C	40 A
• at 55 °C	38.5 A
• at 60 °C	37 A
• at 65 °C	35.5 A
• at 70 °C	34 A

### Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	C
Maximum short-circuit current breaking capacity (I <sub>cu</sub> )	
• at 240 V	150 kA
• at 415 V	110 kA
• at 690 V	2.5 kA
Operational short-circuit current breaking capacity (I <sub>cs</sub> )	
• at 240 V	150 kA
• at 415 V	110 kA
• at 690 V	2.5 kA
Short-circuit current making capacity (I <sub>cm</sub> )	
• at 240 V	330 kA
• at 415 V	242 kA
• at 690 V	3.75 kA

### Adjustable parameters

Adjustable response value current / I <sub>g</sub> min.	0.4 A
Adjustable response value current / I <sub>g</sub> min.	1 A
Adjustable response value current / I <sub>g</sub> min.	0.5
Adjustable response value current / I <sub>g</sub> min.	25
Adjustable response value current / I <sub>g</sub> min.	0.6 A
Adjustable response value current / I <sub>g</sub> min.	10 A

Short-term delayed / tripping switchable / I2t=ON/OFF	Yes
Adjustable response value current / I <sub>g</sub> min.	0.05 s
Adjustable response value current / I <sub>g</sub> min.	0.5 s
Adjustable response value current / I <sub>g</sub> min.	0.05 s
Adjustable response value current / I <sub>g</sub> min.	0.5 s
Adjustable response value current / I <sub>i</sub> min.	1.5 A
Ground fault protection can be switched ON/OFF	Yes
Adjustable response value current / I <sub>g</sub> min.	0.4 A
Adjustable response value current / I <sub>g</sub> max.	1 A
Adjustable response value current / t <sub>g</sub> min.	0.05 s
Adjustable response value current / I <sub>g</sub> min.	0.8 s
Adjustable response value current / for G-tripping / with I2t characteristic / min.	0.4 A
Adjustable response value current / for G-tripping / with I2t characteristic / max.	1 A

### Mechanical Design

Height	181 mm
Width	105 mm
Depth	107 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>	No
<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>	Yes
<ul style="list-style-type: none"> <li>• Trip indicator</li> </ul>	Yes
Number of CO contacts / for auxiliary contacts	3

### 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="#">3VA2140-7JQ32-0AA0</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 trip</li> </ul>	<a href="#">3VA9908-0BC11</a>

## Environmental conditions

Protection class IP / on the front	IP40
Ambient temperature	
• during operation / minimum	-25 °C
• during operation / maximum	70 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C

## Certificates

Equipment marking / acc. to DIN EN 81346-2	Q
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General Product Approval		EMC	Declaration of Conformity	
 CCC	 VDE	 EAC	 RCM	 EG-Konf.
		<a href="#">sonstig</a>		

Test Certificates	Shipping Approval		
<a href="#">Typprüfbescheinigung/Werkszeugnis</a>	<a href="#">sonstig</a>		
 ABS	 BUREAU VERITAS	 GL	 LRS

Shipping Approval	other
 RMRS	<a href="#">sonstig</a>

## 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/3VA2140-7JQ32-0EH0>

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

<http://support.automation.siemens.com/WW/view/en/3VA2140-7JQ32-0EH0/all>

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

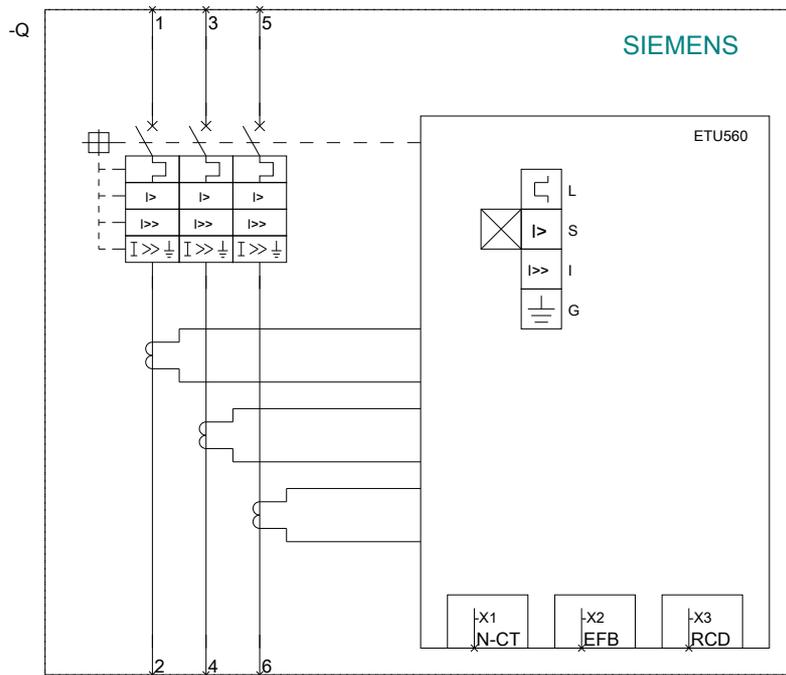
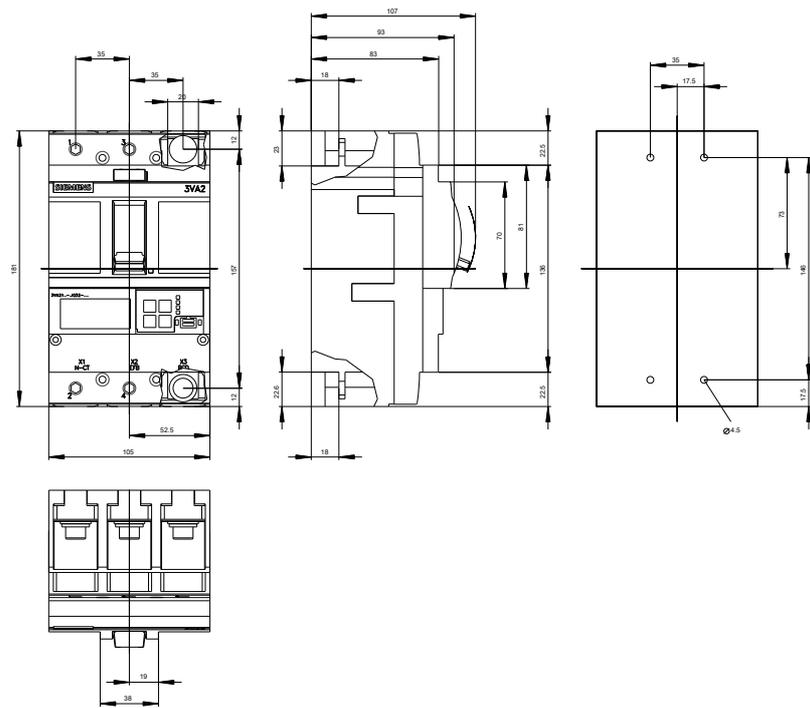
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3VA2140-7JQ32-0EH0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA2140-7JQ32-0EH0)

CAX-Online-Generator

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

Tender specifications

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



**last modified:**

10/29/2016