

CIRCUIT BREAKER 3VA2 IEC FRAME 160 BREAKING CAPACITY CLASS S ICU=36KA @ 415 V 3POLE, LINE PROTECTION ETU330, LIG, IN=160A OVERLOAD PROTECTION IR=63A ...160A SHORT CIRCUIT PROTECTION II=1,5...12 X IN GROUNDFAULTPROTECTION IG=0,2... 1 X IN, TG=0,1/0,3S BUSBAR CONNECTION



Model	
product brandname	SENTRON
Product designation	Molded case circuit breaker
Design of the product	Line protection
Type of load switch / according to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
Design of the overcurrent release	ETU330
Protective function of the overcurrent release	LIG
Number of poles	3

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 pole	0 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	Summation current formation L-conductor
Product function	
<ul style="list-style-type: none"> <li>• communication function</li> <li>• other measurement function</li> </ul>	No
Net weight	2.3 kg

### Electricity

Marking / according to UL 489 / 100%-rated breaker	No
Max. rated operational voltage of the size of the circuit-breaker	160 A
Courant permanent assigné Iu	160 A
Operating current	
<ul style="list-style-type: none"> <li>• at 40 °C</li> <li>• at 45 °C</li> <li>• at 50 °C</li> <li>• at 55 °C</li> <li>• at 60 °C</li> <li>• at 65 °C</li> <li>• at 70 °C</li> </ul>	160 A
	160 A
	160 A
	160 A
	160 A
	160 A
	160 A

### Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	S
Maximum short-circuit current breaking capacity (Icu)	
<ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	55 kA
	36 kA
	36 kA
	25 kA
	2.5 kA
Operational short-circuit current breaking capacity (Ics)	
<ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	55 kA
	36 kA
	36 kA
	25 kA
	2.5 kA
Short-circuit current making capacity (Icm)	
<ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 415 V</li> <li>• at 440 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>	121 kA
	76 kA
	76 kA
	53 kA
	3.8 kA

### Adjustable parameters

Adjustable response value current / I <sub>g</sub> min.	63 A
---	------

Adjustable response value current / I <sub>g</sub> min.	160 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.	240 A
Adjustable response value current / I <sub>i</sub> max.	1 600 A
Ground fault protection can be switched ON/OFF	No
Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF	Yes
Adjustable response value current / I <sub>g</sub> min.	32 A
Adjustable response value current / I <sub>g</sub> max.	160 A
Adjustable response value current / t <sub>g</sub> min.	0.1 s
Adjustable response value current / I <sub>g</sub> min.	0.3 s
Adjustable response value current / for G-tripping / with I <sub>2t</sub> characteristic / min.	0 A
Adjustable response value current / for G-tripping / with I <sub>2t</sub> characteristic / max.	0 A

### Mechanical Design

Height [in]	7.1 in
Height	181 mm
Width [in]	4.1 in
Width	105 mm
Depth [in]	4.2 in
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

### Auxiliary circuit

Number of CO contacts / for auxiliary contacts	0
--	---

### Accessories

Product extension / optional / motor drive	Yes
--	-----

### Environmental conditions

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

## Certificates

Equipment marking / acc. to DIN EN 81346-2	Q
Certificate of suitability / as approval for NAVAL (no combat vessels) / Supplement SB	No

General Product Approval	EMC	Declaration of Conformity	Test Certificates	other
--------------------------	-----	---------------------------	-------------------	-------



EG-Konf.

[Typprüfbescheinigung/Werkszeugnis](#)

[sonstig](#)

[sonstig](#)

## 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/3VA2116-4HM32-0AA0>

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

<http://support.automation.siemens.com/WW/view/en/3VA2116-4HM32-0AA0/all>

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

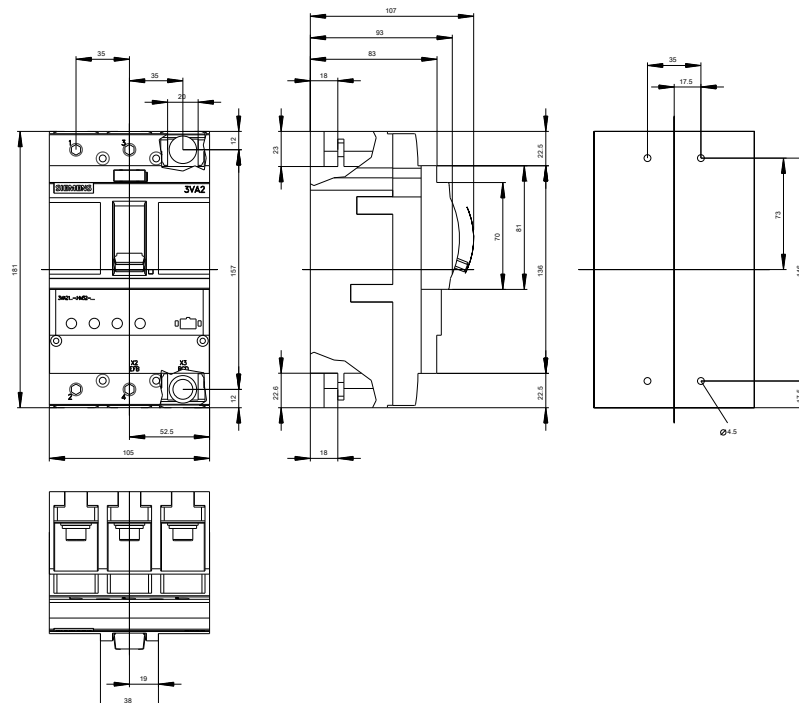
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2116-4HM32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2116-4HM32-0AA0)

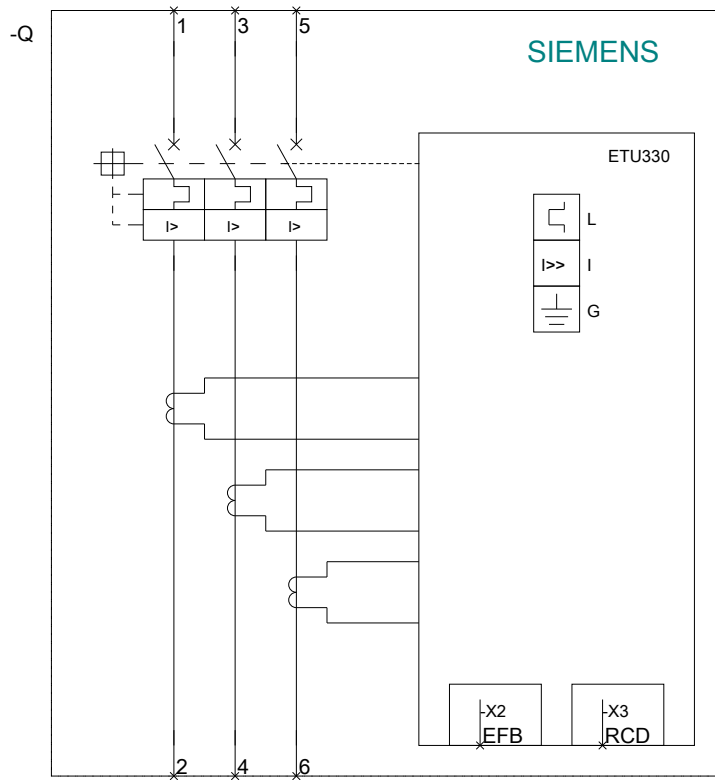
### CAX-Online-Generator

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

### Tender specifications

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





last modified:

10/29/2016