



circuit breaker 3VA2 IEC frame 250 breaking capacity class M  
 $I_{cu}=55kA @ 415V$  4-pole, line protection ETU320, LI,  $I_n=250A$   
 overload protection  $I_r=100A...250A$  short-circuit protection  $I_i=1.5...10$   
 $\times I_n$  N conductor protection adjustable (OFF, 50%, 100%) nut keeper  
 kit undervoltage release (UVR) 208-230V AC 50/60Hz 2 auxiliary  
 switches HQ 1 trip alarm switch HQ

Model	
Product brand name	SENTRON
Product designation	Molded case circuit breaker
Product version	Line protection
Design of the overcurrent release	ETU320
Protective function of the overcurrent release	LI
Number of poles	4
Design of the auxiliary release	Undervoltage release (UVR)
Auxiliary contact version	2 auxiliary switches + 1 trip alarm switch HQ
General technical data	
Rated insulation voltage $U_i$	800 V
Max. rated operational voltage $U_e$ with AC 50/60Hz	690 V
Power loss [W] / maximum	50.5 W
Latching - endurance	20 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	10 000
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	3.29 kg

### Current

Max. rated operational current of the frame size	250 A
Rated continuous current I <sub>u</sub>	250 A
Operating current	
• at 40 °C	250 A
• at 45 °C	250 A
• at 50 °C	250 A
• at 55 °C	241 A
• at 60 °C	232 A
• at 65 °C	222 A
• at 70 °C	213 A

### Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	M
Maximum short-circuit current breaking capacity (I <sub>cu</sub> )	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	3 kA
Operational short-circuit current breaking capacity (I <sub>cs</sub> )	
• at 240 V	85 kA
• at 415 V	55 kA
• at 440 V	55 kA
• at 500 V	36 kA
• at 690 V	3 kA
Short-circuit current making capacity (I <sub>cm</sub> )	
• at 240 V	187 kA
• at 415 V	121 kA
• at 440 V	121 kA
• at 500 V	79 kA
• at 690 V	5.1 kA

### Adjustable parameters

Adjustable response value current / I <sub>r</sub> min.	100 A
Adjustable response value current / I <sub>r</sub> max.	250 A
Adjustable response value time / t <sub>r</sub> min.	0.5
Adjustable response value time / t <sub>r</sub> max.	15

Short-term delayed / tripping switchable / I <sub>2t</sub> =ON/OFF	No
Adjustable response value current / I <sub>i</sub> min.	375 A
Adjustable response value current / I <sub>i</sub> max.	2 500 A

### Mechanical Design

Height	181 mm
Width	140 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> <li>• Voltage trigger</li> <li>• undervoltage release with leading contact</li> <li>• Trip indicator</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>No</li> <li>No</li> <li>Yes</li> </ul>
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> <li>• of the integrated auxiliary switch/alarm switch</li> <li>• of the integrated auxiliary switch/alarm switch</li> <li>• of the integrated auxiliary trip</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">3VA2225-5HL42-0AA0</a></li> <li><a href="#">3VA9988-0AA12</a></li> <li><a href="#">3VA9988-0AB12</a></li> <li>3VA9608-0BB25</li> </ul>

### 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

Reference code / acc. to DIN EN 81346-2	Q
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General Product Approval	EMC
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CCC



VDE

**CB**

CB

[Miscellaneous](#)

**EAC**



RCM

Declaration of Conformity	Test Certificates	Shipping Approval
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EG-Konf.

[Type Test Certificates/Test Report](#)

[Miscellaneous](#)

[Special Test Certificate](#)



ABS



BUREAU VERITAS

Shipping Approval	other
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LRS



RMRS

[CCS / China Classification Society](#)

[Manufacturer Declaration](#)

[Miscellaneous](#)

### Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**

<http://www.siemens.com/lowvoltage/catalogs>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA2225-5HL42-0DH0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2225-5HL42-0DH0>

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

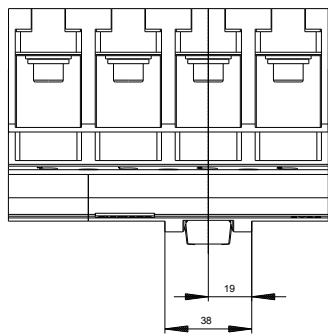
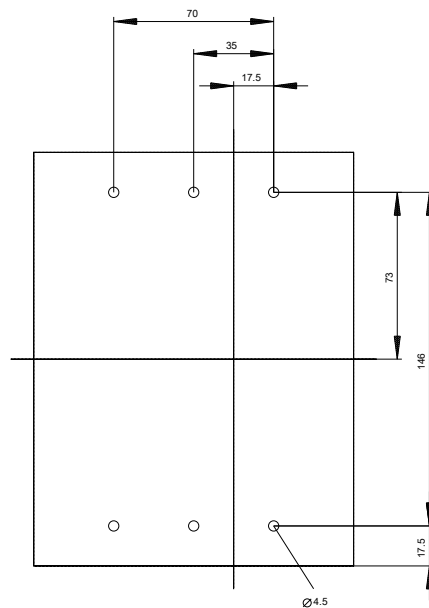
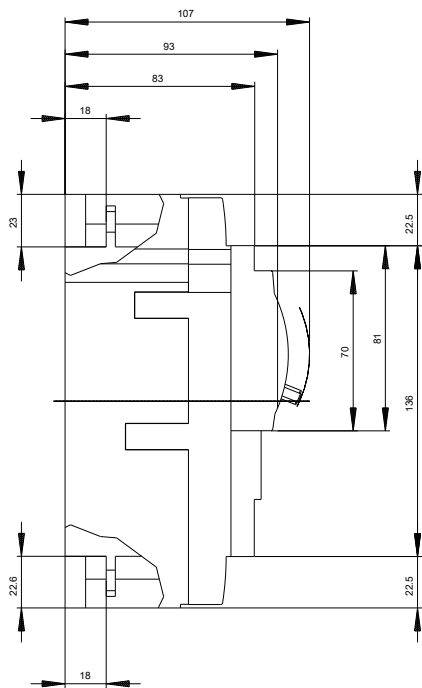
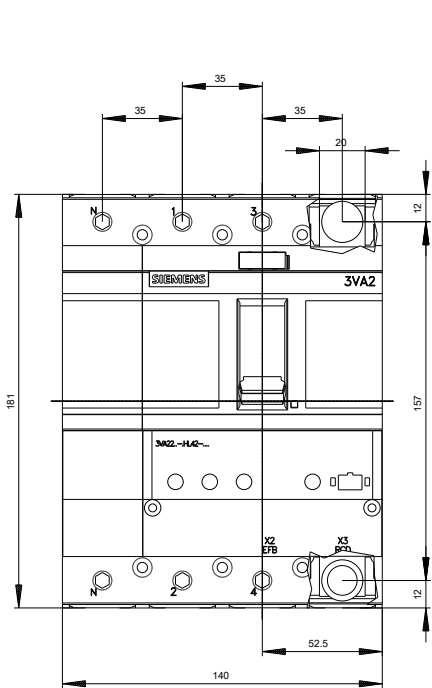
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA2225-5HL42-0DH0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2225-5HL42-0DH0)

**CAX-Online-Generator**

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

**Tender specifications**

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



**last modified:**

09/13/2019