

circuit breaker 3VA1 IEC frame 1000 breaking capacity class H  
 $I_{cu}=70\text{kA}$  @ 415V 3-pole, starter protection TM120M, AM,  $I_n=630\text{A}$   
 without overload protection short-circuit protection  $I_i=8\dots 15 \times I_n$  nut  
 keeper kit



Model	
Product brand name	SENTRON
Product designation	Molded case circuit breaker
Product version	Starter protection
Design of the overcurrent release	TM120M
Protective function of the overcurrent release	I
Number of poles	3

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	132 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	44 W
Mechanical service life (switching cycles) / typical	10 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	4 600
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	3 200
Neutral conductors / upgradeable/retrofittable	No

Ground fault monitoring version	Without
Product function	
• communication function	No
• Phase failure detection	No
• other measurement function	No

### Current

Max. rated operational current of the frame size	1 000 A
Rated continuous current I <sub>u</sub>	630 A
Operating current	
• at 40 °C	630 A
• at 45 °C	630 A
• at 50 °C	630 A
• at 55 °C	613 A
• at 60 °C	597 A
• at 65 °C	581 A
• at 70 °C	565 A

### Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	H
Maximum short-circuit current breaking capacity (I <sub>cu</sub> )	
• at 240 V	100 kA
• at 415 V	70 kA
• at 440 V	70 kA
• at 500 V	55 kA
• at 690 V	35 kA
Operational short-circuit current breaking capacity (I <sub>cs</sub> )	
• at 240 V	100 kA
• at 415 V	70 kA
• at 440 V	70 kA
• at 500 V	55 kA
• at 690 V	19 kA
Short-circuit current making capacity (I <sub>cm</sub> )	
• at 240 V	220 kA
• at 415 V	154 kA
• at 440 V	154 kA
• at 500 V	121 kA
• at 690 V	74 kA

### Adjustable parameters

Adjustable response value current / I <sub>i</sub> min.	5 040 A
Adjustable response value current / I <sub>i</sub> max.	9 450 A

Ground fault protection / tripping switchable / I2t=ON/OFF	No
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### Mechanical Design

Height [in]	12.6 in
Height	320 mm
Width [in]	8.3 in
Width	210 mm
Depth [in]	4.7 in
Depth	120 mm

### Connections

Arrangement of electrical connectors / for main current circuit	Front terminal
Type of connectable conductor cross-section, connection screw, width x thickness , min.	20 x 4 mm

### Auxiliary circuit

Number of CO contacts / for auxiliary contacts	0
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### Accessories





Product extension / optional / motor drive	Yes
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### 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>	-25 °C 70 °C -40 °C 80 °C

### Certificates

Reference code / acc. to DIN EN 81346-2	Q
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General Product Approval	EMC	Declaration of Conformity	Test Certificates	Shipping Approval
<a href="#">Miscellaneous</a> 	 RCM	 EG-Konf.	<a href="#">Miscellaneous</a>  LRS	

### other

[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?mfb=3VA1563-6MH32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1563-6MH32-0AA0>

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

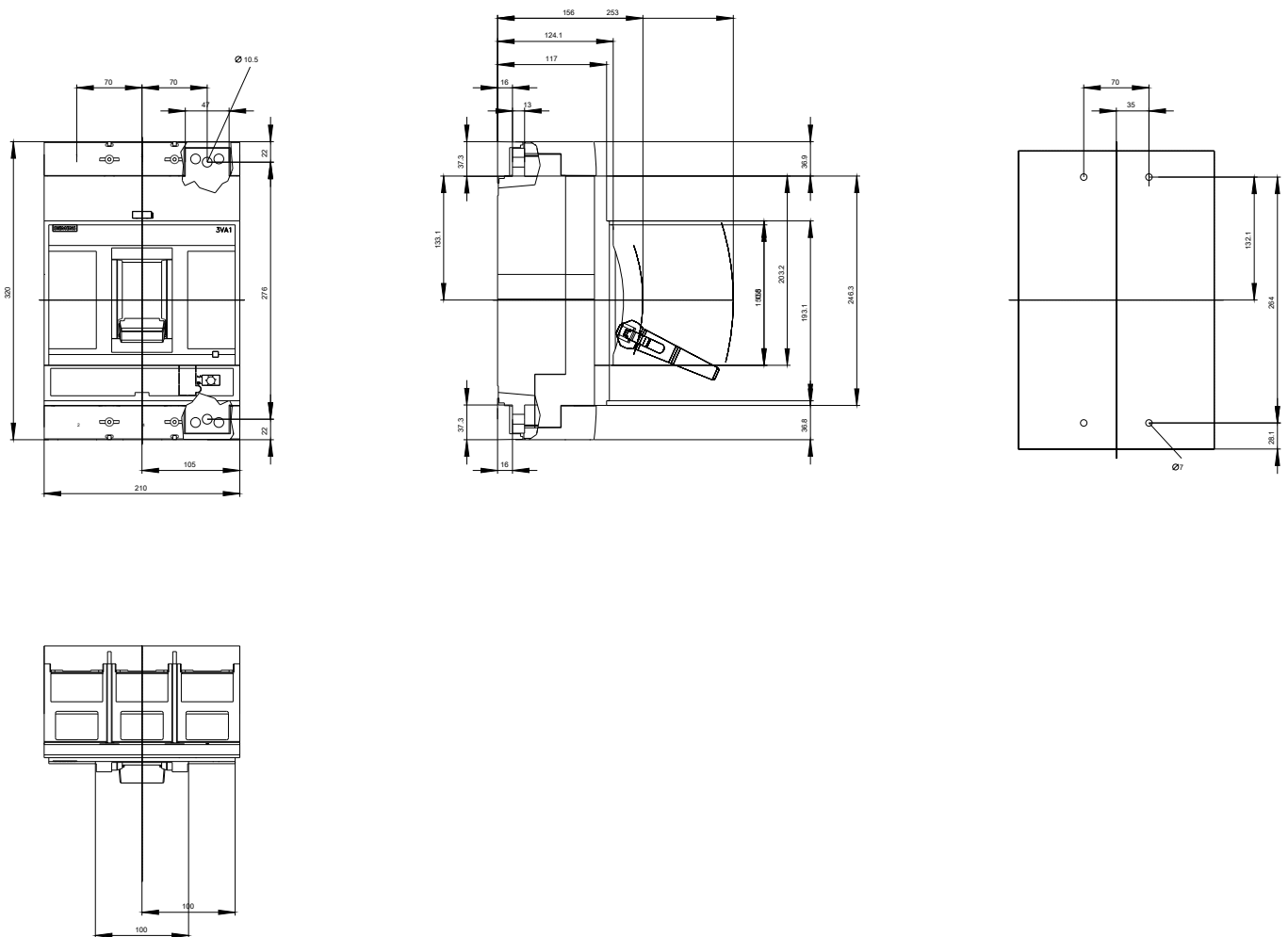
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3VA1563-6MH32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA1563-6MH32-0AA0)

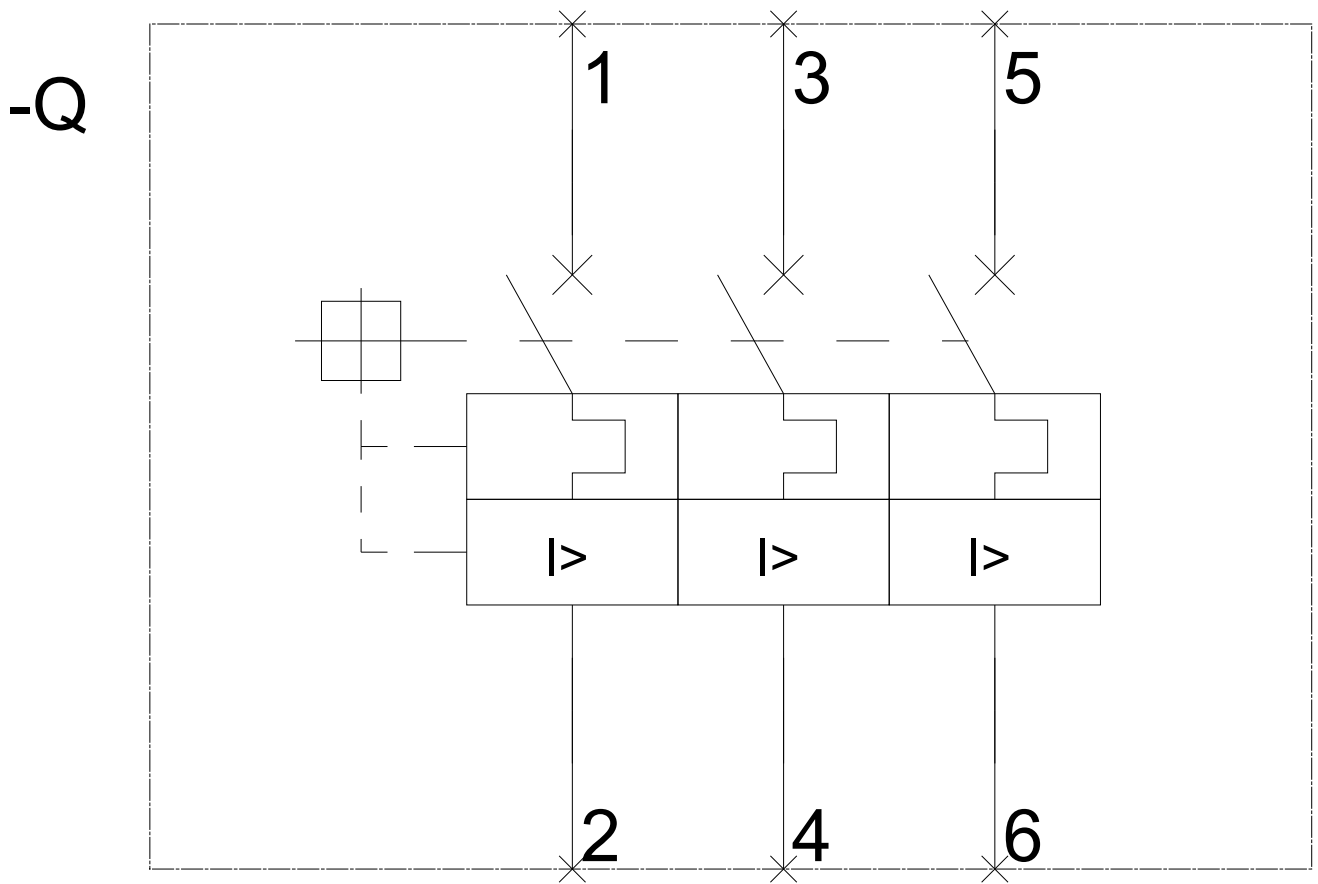
### CAX-Online-Generator

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

### Tender specifications

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





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