

circuit breaker 3VA1 IEC frame 630 breaking capacity class M  
 $I_{cu}=55kA @ 415V$  3-pole, line protection TM240, ATAM,  $I_n=500A$   
 overload protection  $I_r=350A...500A$  short-circuit protection  $I_i=5...10 \times I_n$   
 In nut keeper kit



Model	
Product brand name	SENTRON
Product designation	Molded case circuit breaker
Product version	Line protection
Design of the overcurrent release	TM240
Protective function of the overcurrent release	LI
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
Max. rated operational voltage $U_e$ with DC	500 V
Power loss [W] / maximum	122.7 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	40.9 W
Latching - endurance	15 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	4 000
Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	2 700

Neutral conductors / upgradeable/retrofitable	No
Ground fault monitoring version	Without
Product function	
• communication function	No
• other measurement function	No
Net weight	3.9 kg

Current	
Max. rated operational current of the frame size	630 A
Rated continuous current I <sub>u</sub>	500 A
Operating current	
• at 40 °C	500 A
• at 45 °C	500 A
• at 50 °C	500 A
• at 55 °C	488 A
• at 60 °C	476 A
• at 65 °C	464 A
• at 70 °C	452 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	7 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	5 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	76 kA
• at 690 V	11.9 kA
Design of short-circuit protection	For switching power values in DC networks, see the 3VA molded case circuit breaker device manual; link to be found under Service & Support in the last chapter

### Adjustable parameters

Adjustable response value current / I <sub>r</sub> min.	350 A
Adjustable response value current / I <sub>r</sub> max.	500 A
Adjustable response value current / I <sub>i</sub> min.	2 500 A
Adjustable response value current / I <sub>i</sub> max.	5 000 A
Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF	No

### Mechanical Design

Height [in]	9.8 in
Height	248 mm
Width [in]	5.4 in
Width	138 mm
Depth [in]	4.3 in
Depth	110 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 1
Type of connectable conductor cross-section, connection screw, width x thickness , max.	35 x 10

### 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	
• during operation / minimum	-25 °C
• during operation / maximum	70 °C
• during storage / minimum	-40 °C
• during storage / maximum	80 °C

### Certificates

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



VDE

[Miscellaneous](#)



RCM



EG-Konf.

Test Certificates	Shipping Approval	other
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)



LRS

[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=3VA1450-5EF32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA1450-5EF32-0AA0>

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

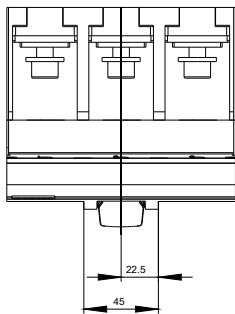
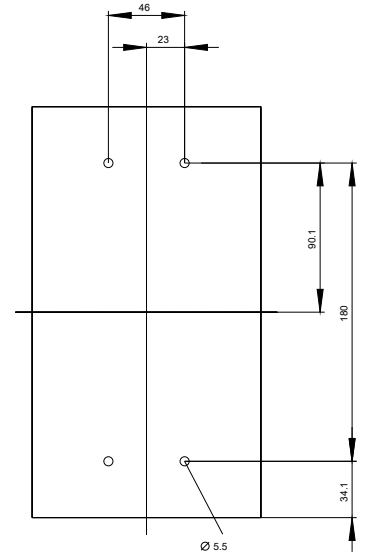
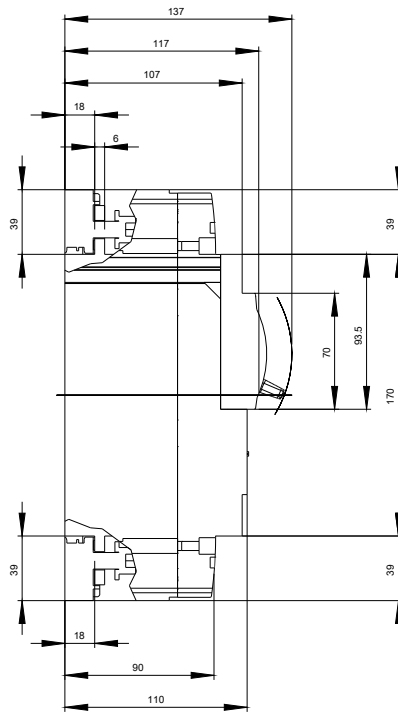
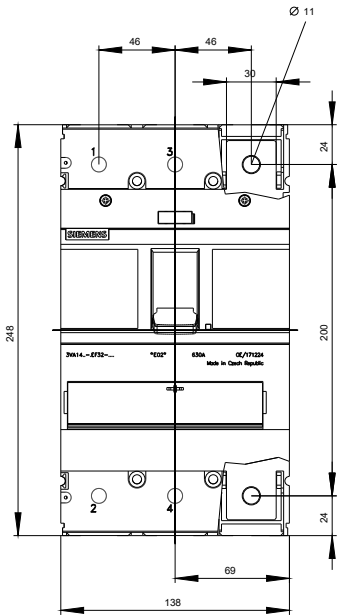
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA1450-5EF32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA1450-5EF32-0AA0)

### CAX-Online-Generator

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

### Tender specifications

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





**last modified:**

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