

circuit breaker 3VA2 IEC frame 630 breaking capacity class C  
 $I_{cu}=110\text{kA @ }415\text{V}$  3-pole, line protection ETU850, LSI,  $I_n=500\text{A}$   
 overload protection  $I_r=200\text{A}...500\text{A}$  short-circuit protection  
 $I_{sd}=0.6..10 \times I_n$ ,  $I_i=1.5..14 \times I_n$  N conductor protection optionally with  
 external current transformer, up to 160% nut keeper kit



Model	
Product brand name	SENTRON
Product designation	Molded case circuit breaker
Product version	Line protection
Design of the overcurrent release	ETU850
Protective function of the overcurrent release	LSI
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	99 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	33 W
Mechanical service life (switching cycles) / typical	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	4 000
Neutral conductors / upgradeable/retrofitable	Yes

Ground fault monitoring version	Without
Product function	
• communication function	Yes
• other measurement function	Yes
Net weight	4.3 kg

### Current

Max. rated operational current of the frame size	630 A
Rated continuous current I <sub>u</sub>	500 A
Short-time withstand current (I <sub>cw</sub> )	
• at AC / limited to 0.5 s / rated value	6 kA
• limited to 1 s	6 kA
Operating current	
• at 40 °C	500 A
• at 45 °C	500 A
• at 50 °C	500 A
• at 55 °C	477 A
• at 60 °C	455 A
• at 65 °C	432 A
• at 70 °C	410 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 440 V	110 kA
• at 500 V	85 kA
• at 690 V	6 kA
Operational short-circuit current breaking capacity (I <sub>cs</sub> )	
• at 240 V	150 kA
• at 415 V	110 kA
• at 440 V	110 kA
• at 500 V	85 kA
• at 690 V	6 kA
Short-circuit current making capacity (I <sub>cm</sub> )	
• at 240 V	330 kA
• at 415 V	242 kA
• at 440 V	242 kA
• at 500 V	187 kA
• at 690 V	9 kA

### Adjustable parameters

Adjustable response value current / I <sub>r</sub> min.	200 A
Adjustable response value current / I <sub>r</sub> max.	500 A
Adjustable response value time / t <sub>r</sub> min.	0.5
Adjustable response value time / t <sub>r</sub> max.	20
Adjustable response value current / I <sub>sd</sub> min.	300 A
Adjustable response value current / I <sub>sd</sub> max.	5 000 A
Short-term delayed / tripping switchable / I <sub>2t</sub> =ON/OFF	Yes
Adjustable response value time / t <sub>sd</sub> min.	0.05 s
Adjustable response value time / t <sub>sd</sub> max.	0.5 s
Adjustable response value time / t <sub>sd</sub> min.	0.05 s
Adjustable response value time / t <sub>sd</sub> max.	0.5 s
Adjustable response value current / I <sub>i</sub> min.	750 A
Adjustable response value current / I <sub>i</sub> max.	7 000 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 electrical connection / for main current circuit	on both sides nut keeper kit
Type of connectable conductor cross-section, connection screw, width x thickness , min.	20 x 1 mm
Type of connectable conductor cross-section, connection screw, width x thickness , max.	35 x 10 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>	<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

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### General Product Approval

### EMC

### Declaration of Conformity



CCC



VDE

[Miscellaneous](#)



RCM



EG-Konf.

### Test Certificates

### Shipping Approval

[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



ABS



BUREAU  
VERITAS



LRS

### Shipping Approval

### other



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?mfb=3VA2450-7KP32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2450-7KP32-0AA0>

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

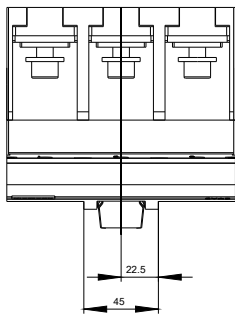
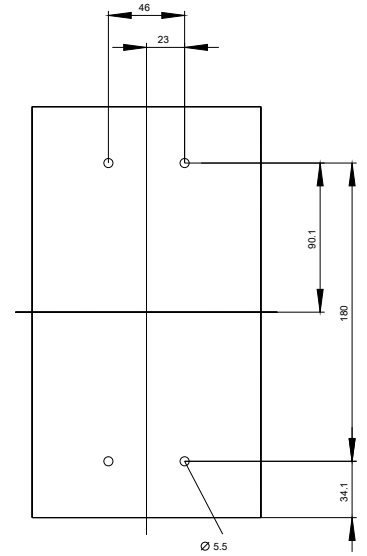
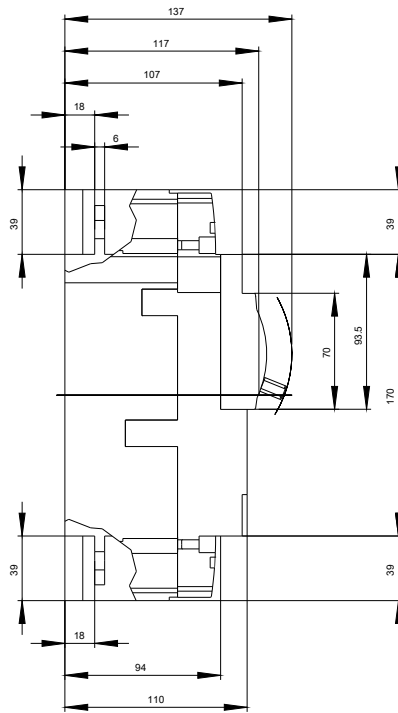
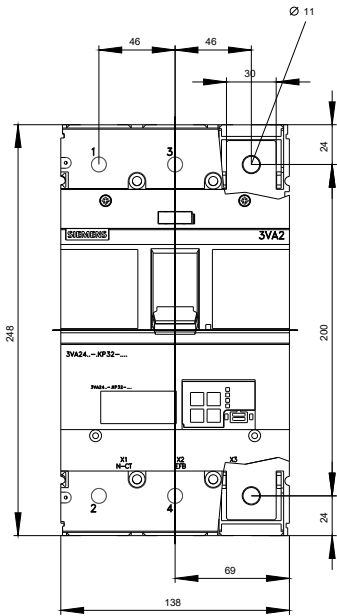
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mfb=3VA2450-7KP32-0AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mfb=3VA2450-7KP32-0AA0)

### CAX-Online-Generator

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

### Tender specifications

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





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