

circuit breaker 3VA5 UL frame 125 breaking capacity class S 25kA @ 480V 3-pole, line protection TM210, FTFM,  $I_n=100A$  overload protection  $I_r=100A$  fixed short-circuit protection  $I_i=10 \times I_n$  UL 489 SB (naval), 50° C without connection



Model	
Product brand name	SETRON
Product designation	Molded-case circuit breaker
Product designation / according to UL-File	SEAM
Product version	System protection
Design of the load switch / acc. to UL 489 / Heating, Air Conditioning, and Refrigeration circuit breaker (HACR Type)	Yes
Design of the overcurrent release	TM210
Protective function of the overcurrent release	LI
Number of poles	3
General technical data	
Power loss [W] / maximum	22.8 W
Active power loss / for rated value of the current / at AC / in hot operating state / per pole	7.6 W
Latching - endurance	15 000
Electrical endurance (switching cycles) / at AC-1 / at 380/415 V 50/60 Hz	8 000

Electrical endurance (switching cycles) / at AC-1 / at 690 V 50/60 Hz	4 000
Electrical endurance (switching cycles) / at 480 V / at 50/60 Hz	8 000
Electrical endurance (switching cycles) / at 600 V / at 50/60 Hz	4 000
Neutral conductors / upgradeable/retrofitable	No
Ground fault monitoring version	Without
Product function	
• communication function	No
• other measurement function	No

### Electricity

Marking / acc. to UL 489 / 100%-rated breaker	No
Max. rated operational voltage of the size of the circuit-breaker	125 A
Rated continuous current I <sub>u</sub>	100 A
Operating current	
• at 40 °C	100 A
• at 45 °C	100 A
• at 50 °C	100 A
• at 55 °C	96.7 A
• at 60 °C	94.7 A
• at 65 °C	92.7 A
• at 70 °C	90.8 A

### Switching capacity according to IEC 60947

Switching capacity class of the circuit breaker	S
Design of short-circuit protection	For breaking capacity values in DC networks, see the 3VA Molded Case Circuit Breaker Manual; link available under Service & Support in the last chapter

### Switching capacity according to UL 489

Breaking capacity current	
• at 240 V	65 kA
• at 480 V	25 kA
• at 600 Y/347 V	14 kA

### Adjustable parameters

Ground fault protection / tripping switchable / I <sub>2t</sub> =ON/OFF	No
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### Mechanical Design

Height [in]	5.5 in
Height	140 mm
Width [in]	3 in
Width	76.2 mm

Depth [in]	3 in
Depth	76.5 mm

### Connections

Arrangement of electrical connectors / for main current circuit	Without connection
Type of electrical connection / for main current circuit	Without

### 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
Certificate of suitability / as approval for NAVAL (no combat vessels) / Supplement SB	Yes

<b>General Product Approval</b>	<b>EMC</b>	<b>Test Certificates</b>
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[Miscellaneous](#)

<b>Shipping Approval</b>	<b>other</b>
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[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=3VA5110-4ED31-1AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA5110-4ED31-1AA0>

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

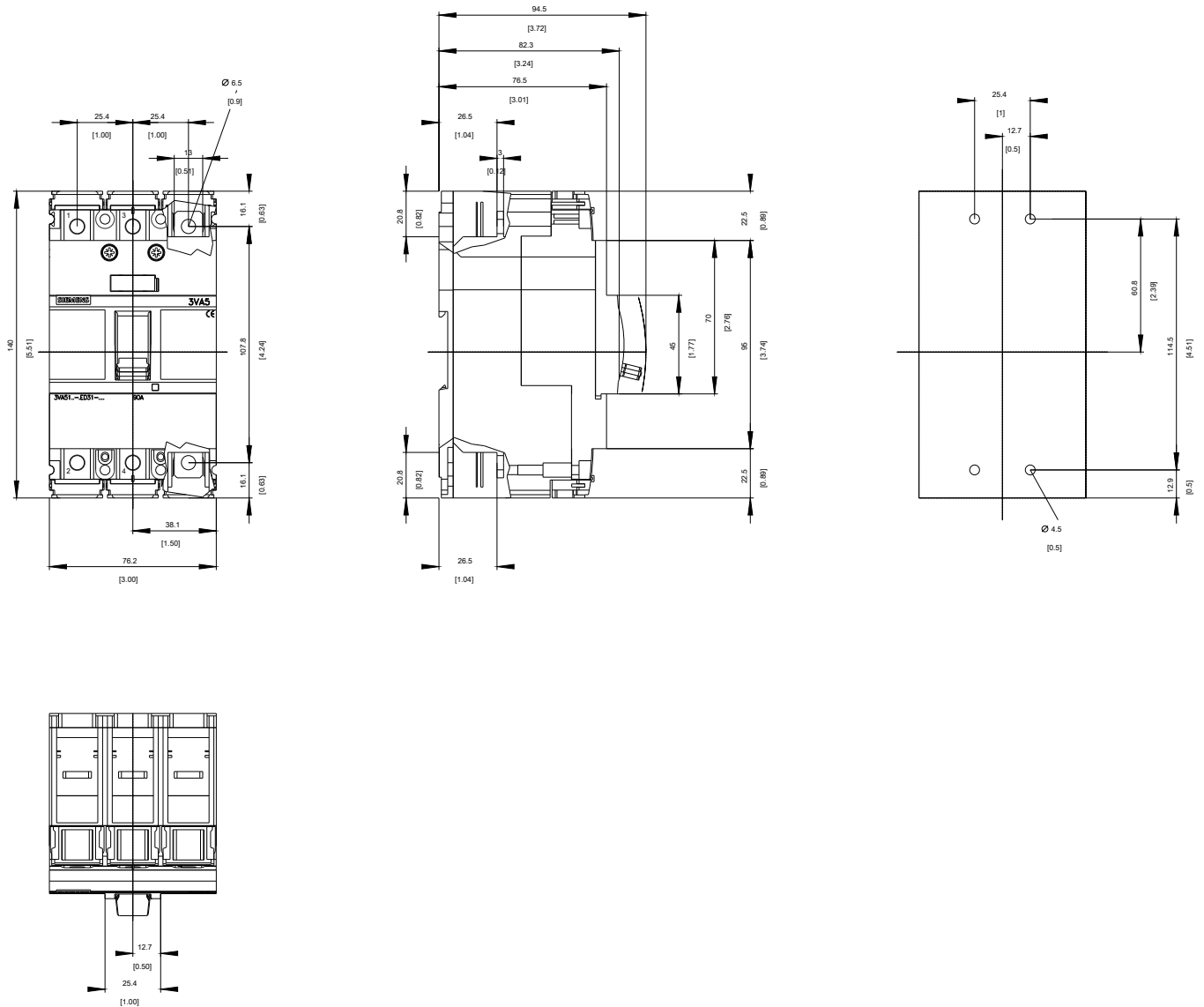
[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3VA5110-4ED31-1AA0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA5110-4ED31-1AA0)

CAx-Online-Generator

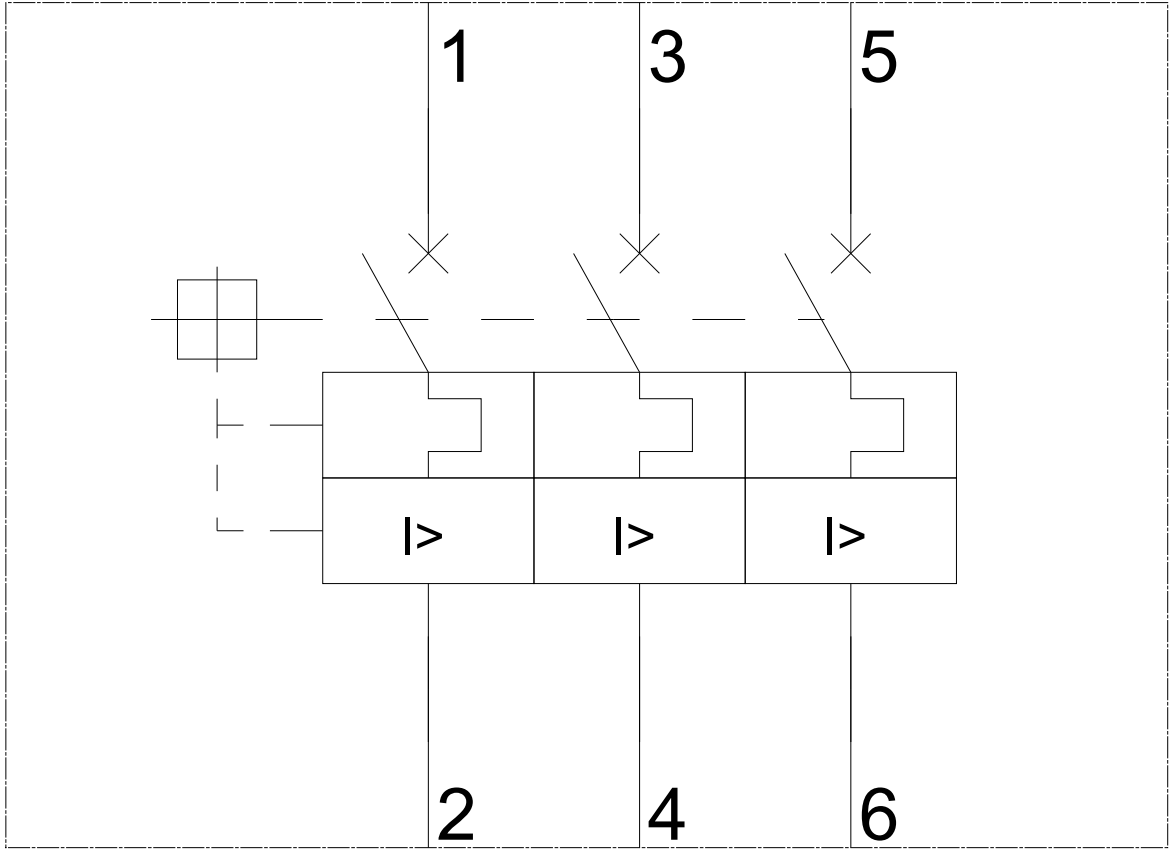
<http://www.siemens.com/cax>

Tender specifications

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

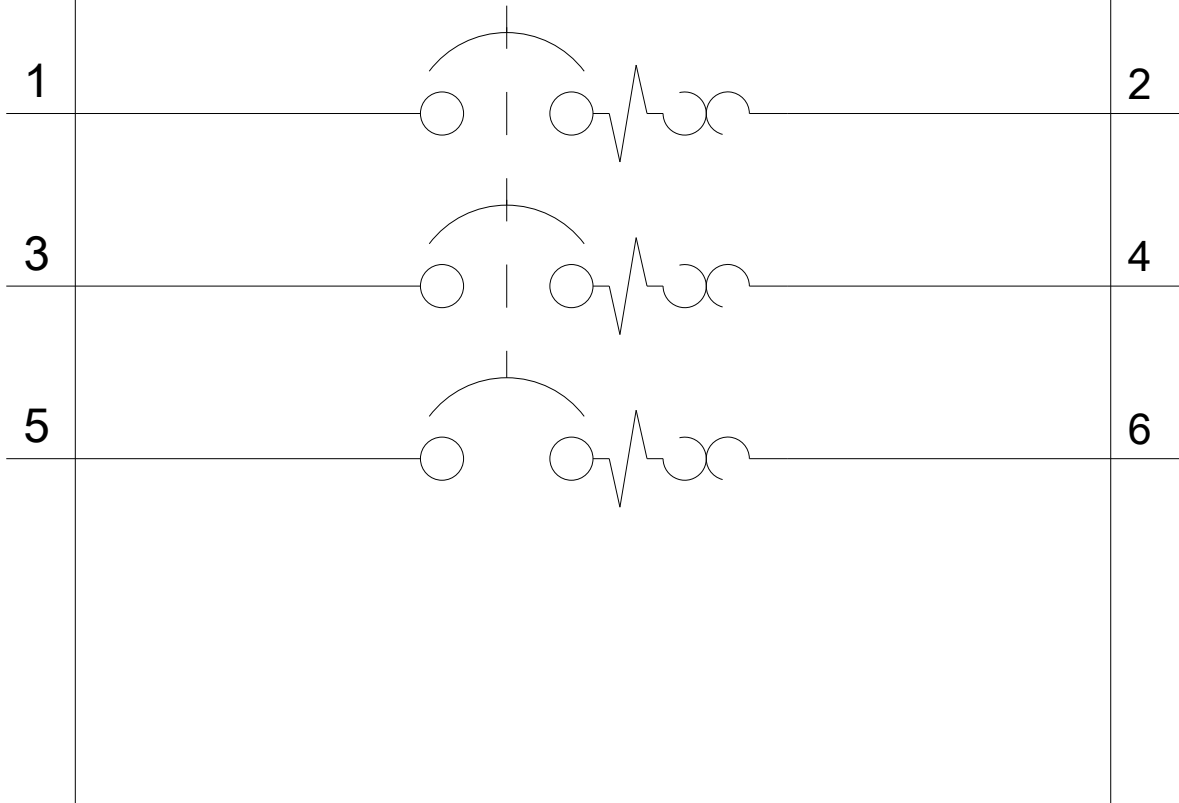


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